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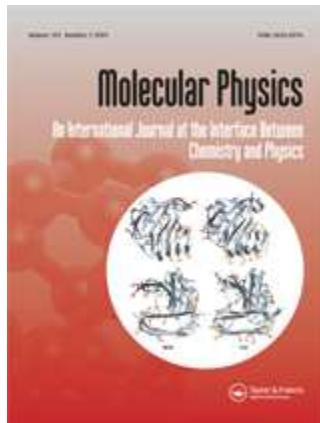
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The far-infrared spectrum of 12C2HD

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7 The far-infrared spectrum of $^{12}\text{C}_2\text{HD}$
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Abstract

The infrared spectrum of $^{12}\text{C}_2\text{HD}$ has been studied using synchrotron radiation at the far-infrared beamline, Canadian Light Source, Saskatoon, Canada. The spectra were recorded at a resolution of 0.00096 cm^{-1} in the 60 to 360 cm^{-1} range using a Bruker IFS125 Fourier transform spectrometer. Altogether, 821 vibration rotation lines were observed and assigned to $P(J)$, $Q(J)$ and $R(J)$ transitions of the $v_5 \leftarrow v_4$ difference band and associated hot bands with J'' up to 35 and $(v_4 + v_5)$ up to 3. These new transitions were analyzed together with 4518 transitions involving bending states with $(v_4 + v_5)$ up to 3 available in the literature. The spectroscopic parameters obtained from the fit reproduce 4909 transitions with a standard deviation standard deviation of 0.00028 cm^{-1} . The $v_5 \leftarrow v_4$ bands of the $^{13}\text{CH}^{12}\text{CD}$ and $^{12}\text{CH}^{13}\text{CD}$ molecules were also detected and analyzed.

1 2 3 4 5 **1. Introduction**

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7 Before its detection in the Titan atmosphere by the Composite Infrared Spectrometer (CIRS)
8 instrument mounted on CASSINI spacecraft [1] monodeuterated acetylene ($^{12}\text{C}_2\text{HD}$) has never been
9 considered a molecule of astrophysical interest. Prior to this finding, deuterated species of methane
10 and hydrogen have been identified in the atmospheric spectra of Titan, where methane is considered
11 to be the main reservoir of deuterium. The discovery of monodeuterated acetylene in Titan's
12 atmosphere and inconsistencies in the H/D ratio retrieved from analysis of different vibrational
13 bands of methane, have prompted a thorough investigation of the infrared intensities of $^{12}\text{C}_2\text{HD}$ in
14 the range 400 - 2000 cm^{-1} [2], with particular emphasis on the bending fundamentals, whose strong
15 features could be useful for the evaluation of the H/D ratio in Titan's atmosphere.
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18 Although the spectroscopy of this molecule in the infrared (IR) is very well known [3-9] the
19 only observations reported so far in the far-IR refer to the pure rotational spectrum in the ground
20 and in a few low lying vibrational states [10-12]. Monodeuterated acetylene has two doubly
21 degenerate bending vibrations at 518.38 cm^{-1} (ν_4) and 677.86 cm^{-1} (ν_5). The spectral signatures of
22 both these vibrations were observed in Titan's atmospheric spectra. From a spectroscopic point of
23 view, it is expected that the difference band $\nu_5 \leftarrow \nu_4$ will appear near 159.48 cm^{-1} , as observed in
24 normal acetylene at 116.28 cm^{-1} [13-16]. In addition, a large number of hot bands accompanying
25 the difference band should appear in the same region. Synchrotron light offers a significant
26 advantage compared to a thermal source over most of the far-infrared region and was adopted as
27 source in our experiment in order to improve the S/N in the recorded spectra.
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30 **2. Experimental details**

31 Two spectra were acquired during separate experiments involving a Bruker IFS 125 Fourier
32 transform (FT) spectrometer located at the far-infrared beamline, Canadian Light Source,
33 Saskatoon, Canada. The spectra were recorded in the 60 - 360 cm^{-1} range at an unapodized
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resolution of 0.00096 cm^{-1} . Optimum instrumental performance was achieved using a synchrotron source, a 2 mm Mylar beam splitter, and a Si bolometer detector. The spectrometer aperture was set to 2 mm. A scanner velocity of 80 kHz was used with analog electronic filters set for a low band pass of 5 kHz. No optical filters were used. A boxcar apodization was used in the Fourier transform which leads to an instrumental linewidth of 0.61/optical path difference, full width at half maximum. A zerofilling factor of two, a Mertz phase correction, and a phase resolution of 1.0 were also used in the Fourier transforms.

A multipass coolable cell with a base of 2 m with wedged polypropylene windows adjusted for a 72 m pathlength contained the C₂HD sample. The sample was supplied by the Cambridge Isotope Laboratories and used without further purification. Isotopic purity was reported to be of 98%, but it turned out that C₂H₂ was more abundant than expected. In particular, transitions of the symmetric species interfere with the *P* branch of the $v_5 \leftarrow v_4$ band of C₂HD molecule. Nevertheless, due to the very high resolution, the number of overlapped lines is negligible. All far-infrared data of the C₂H₂ isotopologue, recorded under similar experimental conditions, are furthermore well known [16] and were easily identified in the spectra.

The two spectra were recorded at total gas pressures and temperatures of 750 mTorr and 298.35 K (I), and 3.026 Torr and 297.75 K (II). The gas pressure was measured using a 0-1 Torr and a 0-10 Torr Baratron gauge for spectrum (I) and (II), respectively. Rotational water lines [17, 18] were used to calibrate the wavenumber scale. Lines of the intense $v_5 \leftarrow v_4$ band were measured on spectrum (I), while lines of all the other hot bands and of the ¹³CH¹²CD and ¹²CH¹³CD molecules rely on spectrum (II).

3. Analysis

The position of the lines expected in the investigated spectral range was calculated by means of the parameters derived from the analysis of the bending states up to $v_4 + v_5 = 3$ [4]. First, the intense $v_5 \leftarrow v_4$ band was investigated. The *P* and *R* branches could be assigned up to high *J* values,

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3 while the weak Q branch lines were observed up to $J = 13$. Figure 1 illustrates the $f \leftarrow e$ and $e \leftarrow f$
4 components of the Q branch. Subsequently, a systematic search of the lines belonging to all weak
5 hot bands involving states up to $v_{\text{tot}} = v_4 + v_5 = 3$ present in the recorded region was undertaken.
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7 All bands involving states with $v_{\text{tot}} = 2$ were identified, but, within the investigated range, only P
8 and Q branches of $2v_4 \leftarrow v_5$ ($\Sigma^+ \leftarrow \Pi$) band are present, while the expected P lines of the $\Delta \leftarrow \Pi$
9 component are too weak to be observed. These latter branches are at the upper wavenumber limit of
10 the spectrum which is characterized by a poor S/N. Of the transitions involving three quanta of the
11 bending modes only the $v_4 + 2v_5 \leftarrow 2v_4 + v_5$ ($\Phi \leftarrow \Phi$) and $2v_4 + v_5 \leftarrow 3v_4$ ($\Pi^1 \leftarrow \Pi$) bands have
12 been identified. After completing the assignment procedure a careful search of $\Delta(l_4 + l_5) = 2$
13 transitions was undertaken by means of a list of computed wavenumbers. Three such bands with
14 intensity slightly above the noise level of the spectrum were found with origins at 146.48, 161.78,
15 and 161.81 cm^{-1} . The assignment of the transitions was straightforward due to the accuracy of their
16 predicted positions. The analysed bands are listed in Table 1 together with the symmetry of the
17 vibrational states, the band centre, the J values of the P , Q , and R branches, the RMS value of the
18 residuals obtained from a simultaneous fit, and the number of lines assigned and retained in the
19 final cycle of the least-squares procedure.

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28 After having completed the assignments, a simultaneous fit of all the transitions involving
29 only excited states of the bending modes was performed. The data set includes: i) the presently
30 observed far-IR transitions, ii) the IR bands listed in Table 1 of Ref. [4] involving all the states with
31 $v_{\text{tot}} = 3$, with the exception of the $v_4 = 3$ Φ state which was not observed, iii) the $2v_4 + v_5 \leftarrow 2v_4$ (Π^1
32 $\leftarrow \Delta$) band reported in Ref. [2] and iv) the rotational lines in the ground and first excited bending
33 states $v_4 = 1$ and $v_5 = 1$ [11-12]. The model Hamiltonian adopted for the analysis has already been
34 described (see Ref [4], Eqs. 2 to 6). It contains the usual vibration and rotation terms for a linear
35 molecule with two bending modes, including the l -type interaction terms, both vibrational and
36 rotational, connecting levels of the same vibrational manifold.

The weight of the experimental data were chosen proportional to the inverse of their squared estimated uncertainties. An uncertainty of $5 \times 10^{-5} \text{ cm}^{-1}$ (1.66 MHz) was given to wavenumbers of the main band $v_5 \leftarrow v_4$, $1 \times 10^{-4} \text{ cm}^{-1}$ to those of the weak bands involving $v_{\text{tot}} = 2$, but $2v_4 \leftarrow v_5$ ($\Sigma^+ \leftarrow \Pi$) which is at the edge of the response curve of the bolometer. An uncertainty of $2 \times 10^{-4} \text{ cm}^{-1}$ was given to this band and to the remaining far-IR transitions with $v_{\text{tot}} = 3$. The uncertainty of the IR lines was estimated to be $2 \times 10^{-4} \text{ cm}^{-1}$, while that of the pure rotational lines was set to $1 \times 10^{-6} \text{ cm}^{-1}$ (30 kHz). Finally, all the transition wavenumbers that differed from their corresponding calculated values by more than 5 times their uncertainties were excluded from the data set in the final cycle of the analysis.

A total of 5339 transitions were fitted to 62 parameters listed in Table 2. Based on the criterion adopted for rejection, 4909 observed wavenumbers were reproduced with a standard deviation of the fit of $2.8 \times 10^{-4} \text{ cm}^{-1}$. The RMS error for each band presently analysed is reported in column 5 of Table 1. For the bands previously observed, the RMS errors are practically identical to the values obtained in the fit without the far-IR transitions [4].

The spectroscopic parameters in Table 2 can be compared to those listed in Table 2 of Ref. [4]. The same constants have been refined but δ_{45} (see Eq. 3 in [4]) resulted undetermined and was constrained to zero. The values of all the parameters are very similar, most of them being determined within one statistical error. Those presently obtained have smaller uncertainties, on the average about 20%, due to the high precision of the far-IR data and to the extension of pure rotational transitions measured with higher accuracy up to $J = 10$ [12].

Finally, transitions of the $v_5 \leftarrow v_4$ bands of the $^{13}\text{CH}^{12}\text{CD}$ and $^{12}\text{CH}^{13}\text{CD}$ molecules were identified and analysed in single band fits. The band characteristics are listed in Table 1. A table with the list of transition wavenumbers, assignments, and residuals from the simultaneous fit associated with all the analysed bands can be made available from the Bologna authors.

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4. Conclusions

The very high resolution far-IR spectrum of the monodeuterated acetylene molecule, $^{12}\text{C}_2\text{HD}$, has been recorded in the $60 - 360 \text{ cm}^{-1}$ region by FT spectroscopy and synchrotron radiation source. The analysis of the observed bands complements and improves previous investigation on the bending states of the molecule. A simultaneous fit of 5339 transitions, including all previously measured lines and those presently assigned, provided a set of 62 accurate spectroscopic parameters which reproduces 4909 transitions with a standard deviation of the fit equal to $2.8 \times 10^{-4} \text{ cm}^{-1}$.

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Table Captions

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6 Table 1. Bands of $^{12}\text{C}_2\text{HD}$, $^{12}\text{CH}^{13}\text{CD}$, and $^{13}\text{CH}^{12}\text{CD}$ analyzed in the far-IR spectrum.
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10 Table 2. Spectroscopic parameters (in cm^{-1}) for $^{12}\text{C}_2\text{HD}$ resulting from the simultaneous fit of all
11 transitions involving bending levels up to $v_4 + v_5 = 3$
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Figure Legend

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16 Figure 1. A section of the FIR spectrum illustrating the *Q* branch of the $v_5 \leftarrow v_4$ band of $^{12}\text{C}_2\text{HD}$.
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19 Experimental conditions: pressure, 3.026 Torr; path length, 72 m. **a:** $R(15)$ transition of $2v_5 \Sigma_g^+ \leftarrow$
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21 $(v_4 + v_5) \Sigma_u^+$ in $^{12}\text{C}_2\text{H}_2$. **b:** rotational transition in H_2O . **c:** $R(18)$ transition of $(v_4 + v_5) \Delta_u(e) \leftarrow 2v_4$
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23 $\Delta_g(e)$ in $^{12}\text{C}_2\text{H}_2$. **d:** $10_{4,6} \leftarrow 9_{4,5}$ rotational transition in HOD . **e:** $R(8)$ transition of $2v_5 \Sigma^+ \leftarrow (v_4 + v_5)$
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25 Σ^+ in $^{12}\text{C}_2\text{HD}$.
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Table 1. Bands of $^{12}\text{C}_2\text{HD}$, $^{12}\text{CH}^{13}\text{CD}$, and $^{13}\text{CH}^{12}\text{CD}$ analysed in the far-IR spectrum.

Vibrational transition	Symmetry	ν_c^a	$P, R, Q \{J_{\min}, J_{\max}\}$	$\sigma (\times 10^5)^b$	n. fitted/ assig. lines
$^{12}\text{C}_2\text{HD}$					
$\nu_5 \leftarrow \nu_4$	$\Pi \leftarrow \Pi$	159.4263	$P_{e-e} (2-33); R_{e-e} (1-35); Q_{f-e} (1-13)$ $P_{f-f} (2-34); R_{f-f} (1-35); Q_{f-e} (1-12)$	5	152/159
$2\nu_4 \leftarrow \nu_5$	$\Sigma^+ \leftarrow \Pi$	356.1275	$P_{e-e} (3-23); Q_{e-f} (2-23)$	26	42/43
$\nu_4 + \nu_5 \leftarrow 2\nu_4$	$\Sigma^+ \leftarrow \Sigma^+$	166.5628	$P_{e-e} (1-24); R_{e-e} (0-28)$	11	53/53
	$(\Sigma^+ \leftarrow \Delta)^c$	161.7773	$P_{e-e} (9-28); R_{e-e} (8-34)$	20	42/47
	$\Delta \leftarrow \Delta$	157.0286	$P_{e-e} (3-24); R_{e-e} (2-30); Q_{e-f} (2-11)$ $P_{f-f} (3-29); R_{f-f} (2-33); Q_{f-e} (2-14)$	13	129/133
	$(\Delta \leftarrow \Sigma^+)^c$	161.8141	$P_{e-e} (9-27); R_{e-e} (8-32)$	22	42/44
$2\nu_5 \leftarrow \nu_4 + \nu_5$	$\Sigma^+ \leftarrow \Sigma^+$	141.7283	$P_{e-e} (1-20); R_{e-e} (1-29)$	10	49/49
	$\Delta \leftarrow \Delta$	163.2996	$P_{e-e} (3-26); R_{e-e} (2-29); Q_{e-f} (2-11)$ $P_{f-f} (3-24); R_{f-f} (2-30); Q_{f-e} (2-12)$	13	119/124
	$(\Sigma^+ \leftarrow \Delta)^c$	146.4771	$P_{e-e} (12-19); R_{e-e} (15-29)$	14	20/23
$\nu_4 + 2\nu_5 \leftarrow 2\nu_4 + \nu_5$	$\Phi \leftarrow \Phi$	160.9732	$P_{e-e} (4-16); R_{e-e} (3-22); Q_{e-f} (3-8)$ $P_{f-f} (5-18); R_{f-f} (5-24); Q_{f-e} (3-10)$	25	71/77
$2\nu_4 + \nu_5 \leftarrow 3\nu_4$	${}^1\Pi \leftarrow \Pi$	171.3139	$P_{e-e} (3-20); R_{e-e} (1-19);$ $P_{f-f} (3-17); R_{f-f} (1-17); Q_{f-e} (1)$	22	63/69
$^{12}\text{CH}^{13}\text{CD}$					
$\nu_5 \leftarrow \nu_4$	$\Pi \leftarrow \Pi$	166.3566	$P_{e-e} (2-18); R_{e-e} (2-23)$ $P_{f-f} (3-21); R_{f-f} (1-25)$	22	72/81
$^{13}\text{CH}^{12}\text{CD}$					
$\nu_5 \leftarrow \nu_4$	$\Pi \leftarrow \Pi$	157.6795	$P_{e-e} (2-19); R_{e-e} (1-24)$ $P_{f-f} (3-18); R_{f-f} (1-24)$	22	76/82

^a $\nu_c = G_{v'}^0 - B_{v'} k^2 - D_{v'} k^4 - (G_{v''}^0 - B_{v''} k^2 - D_{v''} k^4).$

^b σ (in cm^{-1}) corresponds to the RMS value of the residuals for the various assigned lines resulting from the simultaneous fit (see text).

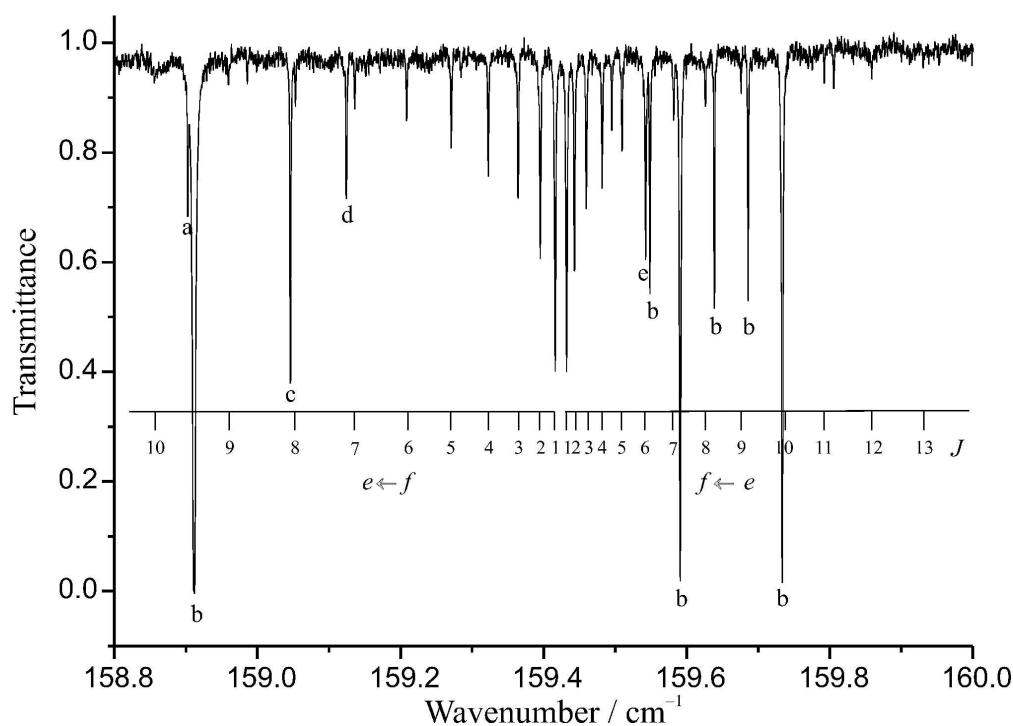
^c Perturbation allowed transition.

Table 2. Spectroscopic parameters (in cm^{-1}) for the bending states of $^{12}\text{C}_2\text{HD}$ resulting from the simultaneous fit of all transitions involving levels up to $v_4 + v_5 = 3$.^a

Parameter	Parameter
ω_4^0	517.400373 (268)
ω_5^0	676.1870743 (371)
x_{44}^0	-0.143558 (197)
x_{45}^0	0.7075504 (548)
x_{55}^0	-2.5974508 (266)
y_{444}^0	-0.0364024 (323)
y_{555}^0	0.03026340 (611)
y_{455}^0	0.0426422 (187)
y_{445}^0	0.0427599 (215)
g_{44}^0	2.117292 (210)
g_{45}^0	0.8521726 (394)
B_0	0.9915272623 (434)
$\alpha_4^0 \times 10^3$	-2.643371 (138)
$\alpha_5^0 \times 10^3$	-1.481912 (103)
$\gamma_{44} \times 10^3$	0.0313649 (561)
$\gamma_{45} \times 10^3$	-0.025949 (109)
$\gamma_{55} \times 10^3$	0.0236638 (383)
$\gamma^{44} \times 10^3$	-0.079675 (145)
$\gamma^{45} \times 10^3$	-0.003360 (151)
$\gamma^{55} \times 10^3$	-0.1187171 (855)
$D_0 \times 10^6$	1.133919 (183)
$\beta_4 \times 10^6$	0.0345719 (927)
$\beta_5 \times 10^6$	0.0167646 (773)
$\delta_{44} \times 10^9$	-0.9328 (301)
$H_0 \times 10^{12}$	0.5733 (943)
$h_4 \times 10^{12}$	0.2021 (330)
g_{55}^0	5.1618252 (245)
y_4^{44}	0.037851 (105)
y_4^{45}	-0.1020412 (223)
y_4^{55}	0.0218842 (201)
y_5^{44}	0.0398552 (309)
y_5^{45}	-0.0497324 (186)
y_5^{55}	0.01895520 (936)
r_{45}^0	1.557113 (195)
r_{445}	0.2380359 (560)
r_{455}	0.067199 (103)
$r_{45}^J \times 10^3$	-0.0246653 (746)
$\gamma_{445} \times 10^6$	2.0464 (460)
$\gamma_{455} \times 10^6$	0.2716 (367)
$\gamma_4^{44} \times 10^6$	-1.1851 (675)
$\gamma_4^{45} \times 10^6$	2.2258 (709)
$\gamma_4^{55} \times 10^6$	-0.3491 (279)
$\gamma_5^{44} \times 10^6$	-2.1443 (526)
$\gamma_5^{45} \times 10^6$	2.9576 (513)
$\gamma_5^{55} \times 10^6$	-2.3959 (331)
$\delta_{55} \times 10^9$	0.2737 (194)
$\delta^{44} \times 10^9$	2.1478 (575)
$\delta^{55} \times 10^9$	-2.0065 (302)
$h_5 \times 10^{12}$	0.1947 (237)

1	$q_4^0 \times 10^3$	4.3977317 (637)	$q_{55} \times 10^3$	0.0478092 (274)
2	$q_5^0 \times 10^3$	3.4783596 (639)	$q_4^J \times 10^6$	-0.0383910 (394)
3	$q_{44} \times 10^3$	0.0406380 (394)	$q_5^J \times 10^6$	-0.0221680 (437)
4	$q_{45} \times 10^3$	-0.0054381 (415)	$q_5^k \times 10^6$	-5.0948 (789)
5	$q_{54} \times 10^3$	0.0178707 (718)		
6	$\rho_4^0 \times 10^6$	-0.011018 (114)	$\rho_{55} \times 10^9$	5.490 (208)
7	$\rho_5^0 \times 10^6$	-0.012120 (447)	$\rho_{45}^0 \times 10^9$	-0.868 (258)
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^a Estimated uncertainties (1σ) are given in parentheses in units of the last figure quoted.



255x181mm (600 x 600 DPI)

Quantum number assignments, observed wavenumbers, residuals, and upper and lower state term values (in cm^{-1}) for the bands involving the bending states up to $v_{\text{tot}} = 3$ of $^{12}\text{C}_2\text{HD}$ a' (86 pp)

$v_4(\Pi) \leftarrow G.S. (\Sigma^+)$

v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	0	0	1	0	0	0	0	2	514.41615	0.00004	520.36524	5.94912
1	1	0	0	2	0	0	0	0	3	512.43467	0.00002	524.33282	11.89816
1	1	0	0	3	0	0	0	0	4	510.45392	-0.00011	530.28412	19.83009
1	1	0	0	4	0	0	0	0	5	508.47420	-0.00006	538.21906	29.74480
1	1	0	0	5	0	0	0	0	6	506.49535	-0.00003	548.13753	41.64214
1	1	0	0	6	0	0	0	0	7	504.51737	-0.00004	560.03938	55.52197
1	1	0	0	7	0	0	0	0	8	502.54048	0.00010	573.92447	71.38408
1	1	0	0	8	0	0	0	0	9	500.56423	-0.00008	589.79258	89.22827
1	1	0	0	9	0	0	0	0	10	498.58920	-0.00002	607.64350	109.05428
1	1	0	0	10	0	0	0	0	11	496.61513	-0.00001	627.47699	130.86184
1	1	0	0	11	0	0	0	0	12	494.64209	0.00000	649.29275	154.65066
1	1	0	0	12	0	0	0	0	13	492.67012	0.00002	673.09051	180.42041
1	1	0	0	13	0	0	0	0	14	490.69922	0.00004	698.86991	208.17072
1	1	0	0	14	0	0	0	0	15	488.72938	0.00001	726.63060	237.90124
1	1	0	0	15	0	0	0	0	16	486.76069	0.00002	756.37220	269.61154
1	1	0	0	16	0	0	0	0	17	484.79270	-0.00041	788.09430	303.30118
1	1	0	0	17	0	0	0	0	18	482.82675	0.00003	821.79644	338.96972
1	1	0	0	18	0	0	0	0	19	480.86156	0.00005	857.47816	376.61665
1	1	0	0	19	0	0	0	0	20	478.89752	0.00002	895.13897	416.24147
1	1	0	0	20	0	0	0	0	21	476.93475	0.00003	934.77834	457.84362
1	1	0	0	21	0	0	0	0	22	474.97318	0.00000	976.39572	501.42254
1	1	0	0	22	0	0	0	0	23	473.01294	0.00004	1019.99053	546.97764
1	1	0	0	23	0	0	0	0	24	471.05389	-0.00001	1065.56217	594.50827
1	1	0	0	24	0	0	0	0	25	469.09614	-0.00005	1113.10999	644.01380
1	1	0	0	25	0	0	0	0	26	467.13988	0.00007	1162.63334	695.49354
1	1	0	0	26	0	0	0	0	27	465.18470	-0.00006	1214.13154	748.94678
1	1	0	0	27	0	0	0	0	28	463.23119	0.00014	1267.60385	804.37280
1	1	0	0	28	0	0	0	0	29	461.27873	0.00001	1323.04955	861.77083
1	1	0	0	29	0	0	0	0	30	459.32778	0.00001	1380.46786	921.14009
1	1	0	0	30	0	0	0	0	31	457.37839	0.00017	1439.85797	982.47976
1	1	0	0	31	0	0	0	0	32	455.43011	0.00003	1501.21907	1045.78899
1	1	0	0	32	0	0	0	0	33	453.48309	-0.00029	1564.55030	1111.06693
1	1	0	0	33	0	0	0	0	34	451.53811	-0.00001	1629.85078	1178.31267
1	1	0	0	2	0	0	0	0	1	522.34972	-0.00005	524.33282	1.98305
1	1	0	0	3	0	0	0	0	2	524.33499	-0.00001	530.28412	5.94912
1	1	0	0	4	0	0	0	0	3	526.32074	-0.00015	538.21906	11.89816
1	1	0	0	5	0	0	0	0	4	528.30739	-0.00004	548.13753	19.83009
1	1	0	0	6	0	0	0	0	5	530.29452	-0.00007	560.03938	29.74480
1	1	0	0	7	0	0	0	0	6	532.28226	-0.00006	573.92447	41.64214
1	1	0	0	8	0	0	0	0	7	534.27056	-0.00005	589.79258	55.52197
1	1	0	0	9	0	0	0	0	8	536.25933	-0.00009	607.64350	71.38408
1	1	0	0	10	0	0	0	0	9	538.24864	-0.00008	627.47699	89.22827
1	1	0	0	11	0	0	0	0	10	540.23839	-0.00009	649.29275	109.05428
1	1	0	0	12	0	0	0	0	11	542.22859	-0.00007	673.09051	130.86184
1	1	0	0	13	0	0	0	0	12	544.21916	-0.00009	698.86991	154.65066
1	1	0	0	14	0	0	0	0	13	546.21000	-0.00020	726.63060	180.42041
1	1	0	0	15	0	0	0	0	14	548.20138	-0.00010	756.37220	208.17072
1	1	0	0	16	0	0	0	0	15	550.19297	-0.00009	788.09430	237.90124
1	1	0	0	17	0	0	0	0	16	552.18481	-0.00009	821.79644	269.61154
1	1	0	0	18	0	0	0	0	17	554.17689	-0.00009	857.47816	303.30118
1	1	0	0	19	0	0	0	0	18	556.16913	-0.00012	895.13897	338.96972
1	1	0	0	20	0	0	0	0	19	558.16155	-0.00014	934.77834	376.61665
1	1	0	0	21	0	0	0	0	20	560.15411	-0.00014	976.39572	416.24147
1	1	0	0	22	0	0	0	0	21	562.14677	-0.00014	1019.99053	457.84362
1	1	0	0	23	0	0	0	0	22	564.13948	-0.00014	1065.56217	501.42254
1	1	0	0	24	0	0	0	0	23	566.13220	-0.00016	1113.10999	546.97764

1	1	0	0	25	0	0	0	0	24	568.12491	-0.00016	1162.63334	594.50827	
1	1	0	0	26	0	0	0	0	25	570.11757	-0.00017	1214.13154	644.01380	
2	1	1	0	0	27	0	0	0	0	26	572.11013	-0.00019	1267.60385	695.49354
3	1	1	0	0	28	0	0	0	0	27	574.10258	-0.00019	1323.04955	748.94678
4	1	1	0	0	29	0	0	0	0	28	576.09482	-0.00023	1380.46786	804.37280
5	1	1	0	0	30	0	0	0	0	29	578.08688	-0.00026	1439.85797	861.77083
6	1	1	0	0	31	0	0	0	0	30	580.07867	-0.00031	1501.21907	921.14009
7	1	-1	0	0	2	0	0	0	0	2	518.41029	-0.00003	524.35945	5.94912
8	1	-1	0	0	3	0	0	0	0	3	518.43915	-0.00006	530.33737	11.89816
9	1	-1	0	0	4	0	0	0	0	4	518.47766	-0.00006	538.30781	19.83009
10	1	-1	0	0	5	0	0	0	0	5	518.52579	-0.00006	548.27064	29.74480
11	1	-1	0	0	6	0	0	0	0	6	518.58351	-0.00007	560.22573	41.64214
12	1	-1	0	0	7	0	0	0	0	7	518.65084	-0.00008	574.17289	55.52197
13	1	-1	0	0	8	0	0	0	0	8	518.72778	-0.00008	590.11194	71.38408
14	1	-1	0	0	9	0	0	0	0	9	518.81431	-0.00006	608.04264	89.22827
15	1	-1	0	0	10	0	0	0	0	10	518.91034	-0.00012	627.96474	109.05428
16	1	-1	0	0	11	0	0	0	0	11	519.01603	-0.00008	649.87795	130.86184
17	1	-1	0	0	12	0	0	0	0	12	519.13120	-0.00010	673.78196	154.65066
18	1	-1	0	0	13	0	0	0	0	13	519.25592	-0.00010	699.67642	180.42041
19	1	-1	0	0	14	0	0	0	0	14	519.39014	-0.00010	727.56097	208.17072
20	1	-1	0	0	15	0	0	0	0	15	519.53387	-0.00009	757.43520	237.90124
21	1	-1	0	0	16	0	0	0	0	16	519.68701	-0.00015	789.29869	269.61154
22	1	-1	0	0	17	0	0	0	0	17	519.84968	-0.00012	823.15099	303.30118
23	1	-1	0	0	18	0	0	0	0	18	520.02173	-0.00015	858.99160	338.96972
24	1	-1	0	0	19	0	0	0	0	19	520.20320	-0.00016	896.82001	376.61665
25	1	-1	0	0	20	0	0	0	0	20	520.39423	0.00001	936.63569	416.24147
26	1	-1	0	0	21	0	0	0	0	21	520.59426	-0.00017	978.43806	457.84362
27	1	-1	0	0	22	0	0	0	0	22	520.80381	-0.00016	1022.22652	501.42254
28	1	-1	0	0	23	0	0	0	0	23	521.02263	-0.00018	1068.00045	546.97764
29	1	-1	0	0	24	0	0	0	0	24	521.25070	-0.00022	1115.75919	594.50827
30	1	-1	0	0	25	0	0	0	0	25	521.48805	-0.00022	1165.50207	644.01380
31	1	-1	0	0	26	0	0	0	0	26	521.73461	-0.00021	1217.22835	695.49354
32	1	-1	0	0	27	0	0	0	0	27	521.99033	-0.00021	1270.93732	748.94678
33	1	-1	0	0	28	0	0	0	0	28	522.25513	-0.00026	1326.62819	804.37280
34	1	-1	0	0	29	0	0	0	0	29	522.52961*	0.00026	1384.30018	861.77083
35	1	-1	0	0	30	0	0	0	0	30	522.81237	0.00001	1443.95245	921.14009
36	1	-1	0	0	31	0	0	0	0	31	523.10413	-0.00027	1505.58415	982.47976
37	1	-1	0	0	32	0	0	0	0	32	523.40523	-0.00019	1569.19441	1045.78899
38	1	-1	0	0	33	0	0	0	0	33	523.71526	-0.00012	1634.78230	1111.06693
39	1	-1	0	0	34	0	0	0	0	34	524.03419	-0.00005	1702.34690	1178.31267
40	1	-1	0	0	35	0	0	0	0	35	524.36186	-0.00009	1771.88724	1247.52529
41	1	-1	0	0	36	0	0	0	0	36	524.69852	0.00005	1843.40231	1318.70384
42	1	-1	0	0	37	0	0	0	0	37	525.04382	0.00007	1916.89110	1391.84735
43	1	-1	0	0	38	0	0	0	0	38	525.39796	0.00021	1992.35257	1466.95482
44	1	-1	0	0	39	0	0	0	0	39	525.76002	-0.00039	2069.78561	1544.02520
45	1	-1	0	0	40	0	0	0	0	40	526.13208	0.00039	2149.18914	1623.05745
46	1	-1	0	0	41	0	0	0	0	41	526.51080	-0.00074	2230.56202	1704.05048

rms = 0.00016 cm⁻¹

^a Observed wavenumbers identified by an asterisk have not been included in the fit.
 Transitions identified by a W have been discarded because they do not satisfy the rejection limit criterion (see text).

v₅(Π) ← G.S.(Σ⁺)

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''
0	0	1	1	1	0	0	0	0	2	673.84111	0.00018	679.79005	5.94912
0	0	1	1	2	0	0	0	0	3	671.85671	0.00025	683.75462	11.89816
0	0	1	1	3	0	0	0	0	4	669.87155	0.00024	689.70140	19.83009
0	0	1	1	4	0	0	0	0	5	667.88580	0.00028	697.63032	29.74480
0	0	1	1	5	0	0	0	0	6	665.89937	0.00026	707.54126	41.64214
0	0	1	1	6	0	0	0	0	7	663.91232	0.00020	719.43409	55.52197
0	0	1	1	7	0	0	0	0	8	661.92480	0.00025	733.30864	71.38408
0	0	1	1	8	0	0	0	0	9	659.93670	-0.00025	749.16472	89.22827

1	0	0	1	1	9	0	0	0	0	10	657.94806	0.00022	767.00212	109.05428
2	0	0	1	1	10	0	0	0	0	11	655.95896	0.00021	786.82059	130.86184
3	0	0	1	1	11	0	0	0	0	12	653.96947	0.00028	808.61985	154.65066
4	0	0	1	1	12	0	0	0	0	13	651.97944	0.00023	832.39961	180.42041
5	0	0	1	1	13	0	0	0	0	14	649.98908	0.00027	858.15954	208.17072
6	0	0	1	1	14	0	0	0	0	15	647.99820	0.00016	885.89928	237.90124
7	0	0	1	1	15	0	0	0	0	16	646.00712	0.00021	915.61845	269.61154
8	0	0	1	1	16	0	0	0	0	17	644.01571	0.00025	947.31664	303.30118
9	0	0	1	1	17	0	0	0	0	18	642.02392	0.00022	980.99342	338.96972
10	0	0	1	1	18	0	0	0	0	19	640.03191	0.00025	1016.64832	376.61665
11	0	0	1	1	19	0	0	0	0	20	638.03958	0.00020	1054.28084	416.24147
12	0	0	1	1	20	0	0	0	0	21	636.04711	0.00025	1093.89049	457.84362
13	0	0	1	1	21	0	0	0	0	22	634.05434	0.00019	1135.47669	501.42254
14	0	0	1	1	22	0	0	0	0	23	632.06096	-0.00030	1179.03889	546.97764
15	0	0	1	1	23	0	0	0	0	24	630.06812	-0.00010	1224.57649	594.50827
16	0	0	1	1	24	0	0	0	0	25	628.07548	0.00043	1272.08885	644.01380
17	0	0	1	1	25	0	0	0	0	26	626.08161	-0.00018	1321.57533	695.49354
18	0	0	1	1	26	0	0	0	0	27	624.08834	-0.00011	1373.03523	748.94678
19	0	0	1	1	27	0	0	0	0	28	622.09499	-0.00007	1426.46786	804.37280
20	0	0	1	1	28	0	0	0	0	29	620.10156	-0.00009	1481.87248	861.77083
21	0	0	1	1	29	0	0	0	0	30	618.10818	-0.00005	1539.24832	921.14009
22	0	0	1	1	30	0	0	0	0	31	616.11474	-0.00011	1598.59460	982.47976
23	0	0	1	1	31	0	0	0	0	32	614.12136	-0.00015	1659.91050	1045.78899
24	0	0	1	1	32	0	0	0	0	33	612.12816	-0.00009	1723.19517	1111.06693
25	0	0	1	1	33	0	0	0	0	34	610.13498	-0.00010	1788.44775	1178.31267
26	0	0	1	1	34	0	0	0	0	35	608.14172	-0.00032	1855.66733	1247.52529
27	0	0	1	1	35	0	0	0	0	36	606.14904	-0.00011	1924.85299	1318.70384
28	0	0	1	1	36	0	0	0	0	37	604.15614	-0.00029	1996.00378	1391.84735
29	0	0	1	1	37	0	0	0	0	38	602.16369	-0.00022	2069.11873	1466.95482
30	0	0	1	1	38	0	0	0	0	39	600.17150	-0.00011	2144.19682	1544.02520
31	0	0	1	1	39	0	0	0	0	40	598.17914	-0.00042	2221.23702	1623.05745
32	0	0	1	1	40	0	0	0	0	41	596.18725	-0.00054	2300.23827	1704.05048
33	0	0	1	1	1	0	0	0	0	0	679.79030	0.00025	679.79005	0.00000
34	0	0	1	1	2	0	0	0	0	1	681.77184	0.00027	683.75462	1.98305
35	0	0	1	1	3	0	0	0	0	2	683.75250	0.00022	689.70140	5.94912
36	0	0	1	1	4	0	0	0	0	3	685.73249	0.00034	697.63032	11.89816
37	0	0	1	1	5	0	0	0	0	4	687.71144	0.00027	707.54126	19.83009
38	0	0	1	1	6	0	0	0	0	5	689.68954	0.00025	719.43409	29.74480
39	0	0	1	1	7	0	0	0	0	6	691.66676	0.00027	733.30864	41.64214
40	0	0	1	1	8	0	0	0	0	7	693.64303	0.00028	749.16472	55.52197
41	0	0	1	1	9	0	0	0	0	8	695.61830	0.00026	767.00212	71.38408
42	0	0	1	1	10	0	0	0	0	9	697.59251	0.00019	786.82059	89.22827
43	0	0	1	1	11	0	0	0	0	10	699.56583	0.00026	808.61985	109.05428
44	0	0	1	1	12	0	0	0	0	11	701.53804	0.00027	832.39961	130.86184
45	0	0	1	1	13	0	0	0	0	12	703.50909	0.00021	858.15954	154.65066
46	0	0	1	1	14	0	0	0	0	13	705.47913	0.00026	885.89928	180.42041
47	0	0	1	1	15	0	0	0	0	14	707.44796	0.00024	915.61845	208.17072
48	0	0	1	1	16	0	0	0	0	15	709.41565	0.00025	947.31664	237.90124
49	0	0	1	1	17	0	0	0	0	16	711.38212	0.00024	980.99342	269.61154
50	0	0	1	1	18	0	0	0	0	17	713.34741	0.00028	1016.64832	303.30118
51	0	0	1	1	19	0	0	0	0	18	715.31136	0.00023	1054.28084	338.96972
52	0	0	1	1	20	0	0	0	0	19	717.27415	0.00032	1093.89049	376.61665
53	0	0	1	1	21	0	0	0	0	20	719.23547	0.00025	1135.47669	416.24147
54	0	0	1	1	22	0	0	0	0	21	721.19557	0.00030	1179.03889	457.84362
55	0	0	1	1	23	0	0	0	0	22	723.15417	0.00023	1224.57649	501.42254
56	0	0	1	1	24	0	0	0	0	23	725.11146	0.00025	1272.08885	546.97764
57	0	0	1	1	25	0	0	0	0	24	727.06734	0.00028	1321.57533	594.50827
58	0	0	1	1	26	0	0	0	0	25	729.02172	0.00028	1373.03523	644.01380
59	0	0	1	1	27	0	0	0	0	26	730.97458	0.00025	1426.46786	695.49354
60	0	0	1	1	28	0	0	0	0	27	732.92596	0.00026	1481.87248	748.94678
	0	0	1	1	29	0	0	0	0	28	734.87592	0.00040	1539.24832	804.37280
	0	0	1	1	30	0	0	0	0	29	736.82395	0.00018	1598.59460	861.77083
	0	0	1	1	31	0	0	0	0	30	738.77077	0.00036	1659.91050	921.14009
	0	0	1	1	32	0	0	0	0	31	740.71567	0.00025	1723.19517	982.47976
	0	0	1	1	33	0	0	0	0	32	742.65859	-0.00017	1788.44775	1045.78899
	0	0	1	1	34	0	0	0	0	33	744.60030	-0.00010	1855.66733	1111.06693
	0	0	1	1	35	0	0	0	0	34	746.54021	-0.00012	1924.85299	1178.31267
	0	0	1	1	36	0	0	0	0	35	748.47835	-0.00015	1996.00378	1247.52529
	0	0	1	1	37	0	0	0	0	36	750.41467	-0.00022	2069.11873	1318.70384

1	0	0	1	1	38	0	0	0	0	37	752.34918	-0.00028	2144.19682	1391.84735
2	0	0	1	1	39	0	0	0	0	38	754.28190	-0.00030	2221.23702	1466.95482
3	0	0	1	1	40	0	0	0	0	39	756.21267	-0.00040	2300.23827	1544.02520
4	0	0	1	1	41	0	0	0	0	40	758.14173	-0.00031	2381.19949	1623.05745
5	0	0	1	1	42	0	0	0	0	41	760.06846	-0.00062	2464.11956	1704.05048
6	0	0	1	1	43	0	0	0	0	42	761.99359	-0.00057	2548.99734	1787.00318
7	0	0	1	-1	1	0	0	0	0	1	677.81436	0.00031	679.79710	1.98305
8	0	0	1	-1	2	0	0	0	0	2	677.82690	0.00025	683.77578	5.94912
9	0	0	1	-1	3	0	0	0	0	3	677.84578	0.00023	689.74371	11.89816
10	0	0	1	-1	4	0	0	0	0	4	677.87103	0.00029	697.70083	19.83009
11	0	0	1	-1	5	0	0	0	0	5	677.90247	0.00024	707.64702	29.74480
12	0	0	1	-1	6	0	0	0	0	6	677.94020	0.00020	719.58215	41.64214
13	0	0	1	-1	7	0	0	0	0	7	677.98431	0.00025	733.50603	55.52197
14	0	0	1	-1	8	0	0	0	0	8	678.03461	0.00020	749.41849	71.38408
15	0	0	1	-1	9	0	0	0	0	9	678.09119	0.00016	767.31930	89.22827
16	0	0	1	-1	10	0	0	0	0	10	678.15410	0.00018	787.20820	109.05428
17	0	0	1	-1	11	0	0	0	0	11	678.22324	0.00016	809.08492	130.86184
18	0	0	1	-1	12	0	0	0	0	12	678.29867	0.00017	832.94916	154.65066
19	0	0	1	-1	13	0	0	0	0	13	678.38036	0.00020	858.80057	180.42041
20	0	0	1	-1	14	0	0	0	0	14	678.46821	0.00014	886.63880	208.17072
21	0	0	1	-1	15	0	0	0	0	15	678.56235	0.00013	916.46345	237.90124
22	0	0	1	-1	16	0	0	0	0	16	678.66276	0.00018	948.27412	269.61154
23	0	0	1	-1	17	0	0	0	0	17	678.76928	0.00011	982.07035	303.30118
24	0	0	1	-1	18	0	0	0	0	18	678.88210	0.00015	1017.85167	338.96972
25	0	0	1	-1	19	0	0	0	0	19	679.00107	0.00014	1055.61759	376.61665
26	0	0	1	-1	20	0	0	0	0	20	679.12617	0.00007	1095.36757	416.24147
27	0	0	1	-1	21	0	0	0	0	21	679.25752	0.00009	1137.10105	457.84362
28	0	0	1	-1	22	0	0	0	0	22	679.39502	0.00011	1180.81746	501.42254
29	0	0	1	-1	23	0	0	0	0	23	679.53860	0.00006	1226.51618	546.97764
30	0	0	1	-1	24	0	0	0	0	24	679.68838	0.00008	1274.19657	594.50827
31	0	0	1	-1	25	0	0	0	0	25	679.84420	0.00003	1323.85797	644.01380
32	0	0	1	-1	26	0	0	0	0	26	680.00618	0.00004	1375.49968	695.49354
33	0	0	1	-1	27	0	0	0	0	27	680.17421	0.00002	1429.12098	748.94678
34	0	0	1	-1	28	0	0	0	0	28	680.34829	-0.00002	1484.72111	804.37280
35	0	0	1	-1	29	0	0	0	0	29	680.52854	0.00006	1542.29931	861.77083
36	0	0	1	-1	30	0	0	0	0	30	680.71486	0.00018	1601.85477	921.14009
37	0	0	1	-1	31	0	0	0	0	31	680.90680	-0.00009	1663.38664	982.47976
38	0	0	1	-1	32	0	0	0	0	32	681.10504	-0.00005	1726.89408	1045.78899
39	0	0	1	-1	33	0	0	0	0	33	681.30943	0.00015	1792.37620	1111.06693
40	0	0	1	-1	34	0	0	0	0	34	681.51943	0.00002	1859.83208	1178.31267
41	0	0	1	-1	35	0	0	0	0	35	681.73531	-0.00017	1929.26077	1247.52529
42	0	0	1	-1	36	0	0	0	0	36	681.95726	-0.00021	2000.66131	1318.70384
43	0	0	1	-1	37	0	0	0	0	37	682.18521	-0.00014	2074.03270	1391.84735
44	0	0	1	-1	38	0	0	0	0	38	682.41903	-0.00006	2149.37391	1466.95482
45	0	0	1	-1	39	0	0	0	0	39	682.65870	0.00001	2226.68389	1544.02520
46	0	0	1	-1	40	0	0	0	0	40	682.90410	-0.00001	2305.96156	1623.05745
47	0	0	1	-1	41	0	0	0	0	41	683.15891*	0.00358	2387.20581	1704.05048W
48	0	0	1	-1	42	0	0	0	0	42	683.41237	0.00004	2470.41551	1787.00318

rms = 0.00023 cm⁻¹2v₄(Σ⁺) ← v₄(Π)

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''
2	0	0	0	0	1	1	0	0	1	513.57016	0.00010	1033.93529	520.36524
2	0	0	0	1	1	1	0	0	2	511.59606	-0.00029	1035.92917	524.33282
2	0	0	0	2	1	1	0	0	3	509.63244	-0.00023	1039.91679	530.28412
2	0	0	0	3	1	1	0	0	4	507.67859	-0.00024	1045.89789	538.21906
2	0	0	0	4	1	1	0	0	5	505.73440	-0.00017	1053.87209	548.13753
2	0	0	0	5	1	1	0	0	6	503.79939	-0.00010	1063.83887	560.03938
2	0	0	0	6	1	1	0	0	7	501.87302	-0.00010	1075.79759	573.92447
2	0	0	0	7	1	1	0	0	8	499.95487	-0.00002	1089.74746	589.79258
2	0	0	0	8	1	1	0	0	9	498.04403	-0.00008	1105.68761	607.64350
2	0	0	0	9	1	1	0	0	10	496.13998	-0.00005	1123.61701	627.47699
2	0	0	0	10	1	1	0	0	11	494.24184	0.00003	1143.53456	649.29275
2	0	0	0	11	1	1	0	0	12	1URL: http://mc.manuscriptcentral.com/ndf/tmpb65.43907	0.00004	1163.52853	673.09051

1	2	0	0	0	12	1	1	0	0	13	490.45938	0.00004	1189.32925	698.86991
2	2	0	0	0	13	1	1	0	0	14	488.57331	0.00012	1215.20380	726.63060
3	2	0	0	0	14	1	1	0	0	15	486.68930	0.00013	1243.06138	756.37220
4	2	0	0	0	15	1	1	0	0	16	484.80654	0.00019	1272.90065	788.09430
5	2	0	0	0	16	1	1	0	0	17	482.92403	0.00014	1304.72033	821.79644
6	2	0	0	0	17	1	1	0	0	18	481.04215*	0.00113	1338.51918	857.47816W
7	2	0	0	0	18	1	1	0	0	19	479.15700	-0.00007	1374.29604	895.13897
8	2	0	0	0	19	1	1	0	0	20	477.27158	0.00008	1412.04985	934.77834
9	2	0	0	0	20	1	1	0	0	21	475.38368	-0.00022	1451.77962	976.39572
10	2	0	0	0	21	1	1	0	0	22	473.49399	0.00003	1493.48450	1019.99053
11	2	0	0	0	22	1	1	0	0	23	471.60127	-0.00024	1537.16368	1065.56217
12	2	0	0	0	23	1	1	0	0	24	469.70656	0.00009	1582.81646	1113.10999
13	2	0	0	0	24	1	1	0	0	25	467.80886	0.00002	1630.44219	1162.63334
14	2	0	0	0	25	1	1	0	0	26	465.90856	-0.00015	1680.04024	1214.13154
15	2	0	0	0	26	1	1	0	0	27	464.00624	0.00004	1731.61005	1267.60385
16	2	0	0	0	27	1	1	0	0	28	462.10154	0.00005	1785.15104	1323.04955
17	2	0	0	0	28	1	1	0	0	29	460.19509	0.00031	1840.66263	1380.46786
18	2	0	0	0	2	1	1	0	0	1	519.55138	-0.00017	1039.91679	520.36524
19	2	0	0	0	3	1	1	0	0	2	521.56481	-0.00026	1045.89789	524.33282
20	2	0	0	0	4	1	1	0	0	3	523.58776	-0.00021	1053.87209	530.28412
21	2	0	0	0	5	1	1	0	0	4	525.62059*	0.00077	1063.83887	538.21906
22	2	0	0	0	6	1	1	0	0	5	527.66020	0.00014	1075.79759	548.13753
23	2	0	0	0	7	1	1	0	0	6	529.70794	-0.00014	1089.74746	560.03938
24	2	0	0	0	8	1	1	0	0	7	531.76300	-0.00014	1105.68761	573.92447
25	2	0	0	0	9	1	1	0	0	8	533.82436	-0.00007	1123.61701	589.79258
26	2	0	0	0	10	1	1	0	0	9	535.89097	-0.00009	1143.53456	607.64350
27	2	0	0	0	11	1	1	0	0	10	537.96178	-0.00030	1165.43907	627.47699
28	2	0	0	0	12	1	1	0	0	11	540.03642	-0.00008	1189.32925	649.29275
29	2	0	0	0	13	1	1	0	0	12	542.11327	-0.00002	1215.20380	673.09051
30	2	0	0	0	14	1	1	0	0	13	544.19143	-0.00004	1243.06138	698.86991
31	2	0	0	0	15	1	1	0	0	14	546.27009	0.00004	1272.90065	726.63060
32	2	0	0	0	16	1	1	0	0	15	548.34808	-0.00005	1304.72033	756.37220
33	2	0	0	0	17	1	1	0	0	16	550.42483	-0.00006	1338.51918	788.09430
34	2	0	0	0	18	1	1	0	0	17	552.49948	-0.00012	1374.29604	821.79644
35	2	0	0	0	19	1	1	0	0	18	554.57157	-0.00011	1412.04985	857.47816
36	2	0	0	0	20	1	1	0	0	19	556.64051	-0.00014	1451.77962	895.13897
37	2	0	0	0	21	1	1	0	0	20	558.70603	-0.00012	1493.48450	934.77834
38	2	0	0	0	22	1	1	0	0	21	560.76774	-0.00022	1537.16368	976.39572
39	2	0	0	0	23	1	1	0	0	22	562.82574	-0.00019	1582.81646	1019.99053
40	2	0	0	0	24	1	1	0	0	23	564.87987	-0.00015	1630.44219	1065.56217
41	2	0	0	0	25	1	1	0	0	24	566.93002	-0.00023	1680.04024	1113.10999
42	2	0	0	0	26	1	1	0	0	25	568.97644	-0.00027	1731.61005	1162.63334
43	2	0	0	0	27	1	1	0	0	26	571.01927	-0.00023	1785.15104	1214.13154
44	2	0	0	0	28	1	1	0	0	27	573.05848	-0.00030	1840.66263	1267.60385
45	2	0	0	0	29	1	1	0	0	28	575.09438	-0.00032	1898.14425	1323.04955
46	2	0	0	0	30	1	1	0	0	29	577.12699	-0.00043	1957.59528	1380.46786
47	2	0	0	0	31	1	1	0	0	30	579.15688	-0.00025	2019.01510	1439.85797
48	2	0	0	0	9	1	-1	0	0	9	515.57459	0.00022	1123.61701	608.04264
49	2	0	0	0	10	1	-1	0	0	10	515.56960	-0.00022	1143.53456	627.96474
50	2	0	0	0	11	1	-1	0	0	11	515.56096	-0.00016	1165.43907	649.87795
51	2	0	0	0	12	1	-1	0	0	12	515.54738	0.00009	1189.32925	673.78196
52	2	0	0	0	13	1	-1	0	0	13	515.52751	0.00013	1215.20380	699.67642
53	2	0	0	0	14	1	-1	0	0	14	515.50221*	0.00180	1243.06138	727.56097W
54	2	0	0	0	15	1	-1	0	0	15	515.46543	-0.00002	1272.90065	757.43520
55	2	0	0	0	16	1	-1	0	0	16	515.42171	0.00007	1304.72033	789.29869
56	2	0	0	0	17	1	-1	0	0	17	515.36829	0.00009	1338.51918	823.15099
57	2	0	0	0	18	1	-1	0	0	18	515.30499	0.00054	1374.29604	858.99160
58	2	0	0	0	19	1	-1	0	0	19	515.22996	0.00012	1412.04985	896.82001
59	2	0	0	0	20	1	-1	0	0	20	515.14403	0.00009	1451.77962	936.63569
60	2	0	0	0	21	1	-1	0	0	21	515.04638	-0.00006	1493.48450	978.43806
	2	0	0	0	22	1	-1	0	0	22	514.93728	0.00012	1537.16368	1022.22652
	2	0	0	0	23	1	-1	0	0	23	514.81637	0.00036	1582.81646	1068.00045
	2	0	0	0	24	1	-1	0	0	24	514.68452*	0.00153	1630.44219	1115.75919W
	2	0	0	0	25	1	-1	0	0	25	514.53836	0.00018	1680.04024	1165.50207
	2	0	0	0	26	1	-1	0	0	26	514.38214	0.00044	1731.61005	1217.22835
	2	0	0	0	27	1	-1	0	0	27	514.21309*	-0.00063	1785.15104	1270.93732
	2	0	0	0	28	1	-1	0	0	28	514.03654*	0.00210	1840.66263	1326.62819W
	2	0	0	0	29	1	-1	0	0	29	513.84560*	0.00153	1898.14425	1384.30018W

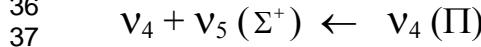
rms = 0.00019 cm⁻¹2v₄(Δ) ← v₄(Π)

	v _{4'}	l _{4'}	V _{5'}	l _{5'}	J'	v _{4''}	l _{4''}	v _{5''}	l _{5''}	J''	OBS	OBS - CALC	E'	E''
2	2	0	0	2	1	1	0	0	3	514.41615	-0.00032	1044.70059	530.28412	
2	2	0	0	3	1	1	0	0	4	512.46105	-0.00048	1050.68059	538.21906	
2	2	0	0	4	1	1	0	0	5	510.51694	0.00021	1058.65425	548.13753	
2	2	0	0	5	1	1	0	0	6	508.58229	-0.00019	1068.62187	560.03938	
2	2	0	0	6	1	1	0	0	7	506.65911	-0.00022	1080.58379	573.92447	
2	2	0	0	7	1	1	0	0	8	504.74800	0.00012	1094.54045	589.79258	
2	2	0	0	8	1	1	0	0	9	502.84866	-0.00018	1110.49234	607.64350	
2	2	0	0	9	1	1	0	0	10	500.96297	-0.00003	1128.43999	627.47699	
2	2	0	0	10	1	1	0	0	11	499.09116	-0.00008	1148.38399	649.29275	
2	2	0	0	11	1	1	0	0	12	497.23441	-0.00006	1170.32497	673.09051	
2	2	0	0	12	1	1	0	0	13	495.39365	-0.00001	1194.26357	698.86991	
2	2	0	0	13	1	1	0	0	14	493.56976	-0.00003	1220.20039	726.63060	
2	2	0	0	14	1	1	0	0	15	491.76390	0.00007	1248.13603	756.37220	
2	2	0	0	15	1	1	0	0	16	489.97645	-0.00026	1278.07100	788.09430	
2	2	0	0	16	1	1	0	0	17	488.20926	-0.00004	1310.00574	821.79644	
2	2	0	0	17	1	1	0	0	18	486.46295*	0.00057	1343.94054	857.47816	
2	2	0	0	18	1	1	0	0	19	484.73704	0.00042	1379.87559	895.13897	
2	2	0	0	19	1	1	0	0	20	483.03248	-0.00010	1417.81092	934.77834	
2	2	0	0	2	1	1	0	0	1	524.33499*	-0.00036	1044.70059	520.36524	
2	2	0	0	3	1	1	0	0	2	526.34786	0.00009	1050.68059	524.33282	
2	2	0	0	4	1	1	0	0	3	528.37005	-0.00008	1058.65425	530.28412	
2	2	0	0	5	1	1	0	0	4	530.40278	-0.00003	1068.62187	538.21906	
2	2	0	0	6	1	1	0	0	5	532.44618	-0.00009	1080.58379	548.13753	
2	2	0	0	7	1	1	0	0	6	534.50103	-0.00004	1094.54045	560.03938	
2	2	0	0	8	1	1	0	0	7	536.56775	-0.00012	1110.49234	573.92447	
2	2	0	0	9	1	1	0	0	8	538.64732	-0.00009	1128.43999	589.79258	
2	2	0	0	10	1	1	0	0	9	540.74038	-0.00011	1148.38399	607.64350	
2	2	0	0	11	1	1	0	0	10	542.84786	-0.00013	1170.32497	627.47699	
2	2	0	0	12	1	1	0	0	11	544.97065	-0.00016	1194.26357	649.29275	
2	2	0	0	13	1	1	0	0	12	547.10979	-0.00009	1220.20039	673.09051	
2	2	0	0	14	1	1	0	0	13	549.26598	-0.00014	1248.13603	698.86991	
2	2	0	0	15	1	1	0	0	14	551.44033	-0.00007	1278.07100	726.63060	
2	2	0	0	16	1	1	0	0	15	553.63079*	-0.00274	1310.00574	756.37220W	
2	2	0	0	17	1	1	0	0	16	555.84616	-0.00009	1343.94054	788.09430	
2	2	0	0	18	1	1	0	0	17	558.07905	-0.00010	1379.87559	821.79644	
2	2	0	0	19	1	1	0	0	18	560.33285	0.00009	1417.81092	857.47816	
2	2	0	0	20	1	1	0	0	19	562.60731	-0.00011	1457.74639	895.13897	
2	2	0	0	21	1	1	0	0	20	564.90329	-0.00009	1499.68172	934.77834	
2	2	0	0	22	1	1	0	0	21	567.22108	0.00031	1543.61649	976.39572	
2	2	0	0	23	1	1	0	0	22	569.55980	0.00019	1589.55014	1019.99053	
2	2	0	0	24	1	1	0	0	23	571.91974	-0.00008	1637.48199	1065.56217	
2	2	0	0	25	1	1	0	0	24	574.30121	-0.00007	1687.41127	1113.10999	
2	2	0	0	5	1	-1	0	0	5	520.35150	0.00027	1068.62187	548.27064	
2	2	0	0	6	1	-1	0	0	6	520.35803	-0.00004	1080.58379	560.22573	
2	2	0	0	7	1	-1	0	0	7	520.36614*	-0.00142	1094.54045	574.17289W	
2	2	0	0	8	1	-1	0	0	8	520.38031	-0.00009	1110.49234	590.11194	
2	2	0	0	9	1	-1	0	0	9	520.39423*	-0.00311	1128.43999	608.04264W	
2	2	0	0	10	1	-1	0	0	10	520.41921	-0.00004	1148.38399	627.96474	
2	2	0	0	11	1	-1	0	0	11	520.44706	0.00004	1170.32497	649.87795	
2	2	0	0	12	1	-1	0	0	12	520.48128	-0.00033	1194.26357	673.78196	
2	2	0	0	13	1	-1	0	0	13	520.52394	-0.00003	1220.20039	699.67642	
2	2	0	0	14	1	-1	0	0	14	520.57508	0.00002	1248.13603	727.56097	
2	2	0	0	15	1	-1	0	0	15	520.63575	-0.00005	1278.07100	757.43520	
2	2	0	0	16	1	-1	0	0	16	520.70705	0.00001	1310.00574	789.29869	
2	2	0	0	17	1	-1	0	0	17	520.78959	0.00003	1343.94054	823.15099	
2	2	0	0	18	1	-1	0	0	18	520.88403	0.00003	1379.87559	858.99160	
2	2	0	0	19	1	-1	0	0	19	520.99102	0.00011	1417.81092	896.82001	
2	2	0	0	20	1	-1	0	0	20	521.11086	0.00016	1457.74639	936.63569	
2	2	0	0	21	1	-1	0	0	21	521.24384	0.00017	1499.68172	978.43806	
2	2	0	0	22	1	-1	0	0	22	521.61649	1022.22652			

1 - URL: http://mc.massey.ac.nz/central.com/taadf/tmp543.61649

1	2	2	0	0	23	1	-1	0	0	23	521.54998	0.00029	1589.55014	1068.00045
2	2	2	0	0	24	1	-1	0	0	24	521.72305	0.00025	1637.48199	1115.75919
3	2	2	0	0	25	1	-1	0	0	25	521.90941	0.00020	1687.41127	1165.50207
4	2	2	0	0	26	1	-1	0	0	26	522.10905	0.00029	1739.33712	1217.22835
5	2	2	0	0	27	1	-1	0	0	27	522.32149	0.00021	1793.25860	1270.93732
6	2	2	0	0	28	1	-1	0	0	28	522.54670	0.00016	1849.17473	1326.62819
7	2	2	0	0	29	1	-1	0	0	29	522.78567*	0.00137	1907.08448	1384.30018W
8	2	2	0	0	30	1	-1	0	0	30	523.03812*	0.00379	1966.98678	1443.95245W
9	2	2	0	0	31	1	-1	0	0	31	523.29666	0.00029	2028.88052	1505.58415
10	2	2	0	0	32	1	-1	0	0	32	523.56820*	-0.00198	2092.76459	1569.19441W
11	2	2	0	0	33	1	-1	0	0	33	523.85561	0.00008	2158.63783	1634.78230
12	2	2	0	0	34	1	-1	0	0	34	524.15173	-0.00045	2226.49908	1702.34690
13	2	-2	0	0	2	1	-1	0	0	3	514.36336	0.00024	1044.70049	530.33737
14	2	-2	0	0	3	1	-1	0	0	4	512.37218	-0.00009	1050.68009	538.30781
15	2	-2	0	0	4	1	-1	0	0	5	510.38520*	0.00310	1058.65275	548.27064W
16	2	-2	0	0	5	1	-1	0	0	6	508.39359*	0.00096	1068.61835	560.22573
17	2	-2	0	0	6	1	-1	0	0	7	506.40382	-0.00005	1080.57677	574.17289
18	2	-2	0	0	7	1	-1	0	0	8	504.41588	0.00001	1094.52781	590.11194
19	2	-2	0	0	8	1	-1	0	0	9	502.42868	0.00004	1110.47128	608.04264
20	2	-2	0	0	9	1	-1	0	0	10	500.44210	-0.00011	1128.40695	627.96474
21	2	-2	0	0	10	1	-1	0	0	11	498.45649	-0.00012	1148.33456	649.87795
22	2	-2	0	0	11	1	-1	0	0	12	496.47180	-0.00006	1170.25382	673.78196
23	2	-2	0	0	12	1	-1	0	0	13	494.48785	-0.00014	1194.16442	699.67642
24	2	-2	0	0	13	1	-1	0	0	14	492.50490	-0.00013	1220.06599	727.56097
25	2	-2	0	0	14	1	-1	0	0	15	490.52291	-0.00007	1247.95819	757.43520
26	2	-2	0	0	15	1	-1	0	0	16	488.54187	-0.00002	1277.84059	789.29869
27	2	-2	0	0	16	1	-1	0	0	17	486.56453*	0.00275	1309.71276	823.15099W
28	2	-2	0	0	17	1	-1	0	0	18	484.58274	0.00008	1343.57425	858.99160
29	2	-2	0	0	18	1	-1	0	0	19	482.60456	0.00000	1379.42457	896.82001
30	2	-2	0	0	19	1	-1	0	0	20	480.62721	-0.00029	1417.26319	936.63569
31	2	-2	0	0	20	1	-1	0	0	21	478.65149	-0.00002	1457.08957	978.43806
32	2	-2	0	0	21	1	-1	0	0	22	476.67660	-0.00001	1498.90313	1022.22652
33	2	-2	0	0	22	1	-1	0	0	23	474.70260	-0.00021	1542.70326	1068.00045
34	2	-2	0	0	23	1	-1	0	0	24	472.72996	-0.00019	1588.48935	1115.75919
35	2	-2	0	0	24	1	-1	0	0	25	470.75823	-0.00041	1636.26071	1165.50207
36	2	-2	0	0	25	1	-1	0	0	26	468.78810	-0.00021	1686.01666	1217.22835
37	2	-2	0	0	26	1	-1	0	0	27	466.81927	0.00011	1737.75648	1270.93732
38	2	-2	0	0	27	1	-1	0	0	28	464.85113	-0.00011	1791.47943	1326.62819
39	2	-2	0	0	28	1	-1	0	0	29	462.88434	-0.00020	1847.18472	1384.30018
40	2	-2	0	0	2	1	-1	0	0	1	524.32641	0.00003	1044.70049	520.37411
41	2	-2	0	0	3	1	-1	0	0	2	526.32074	0.00010	1050.68009	524.35945
42	2	-2	0	0	4	1	-1	0	0	3	528.31523	-0.00014	1058.65275	530.33737
43	2	-2	0	0	5	1	-1	0	0	4	530.31045	-0.00009	1068.61835	538.30781
44	2	-2	0	0	6	1	-1	0	0	5	532.30606	-0.00006	1080.57677	548.27064
45	2	-2	0	0	7	1	-1	0	0	6	534.30198	-0.00010	1094.52781	560.22573
46	2	-2	0	0	8	1	-1	0	0	7	536.29827	-0.00012	1110.47128	574.17289
47	2	-2	0	0	9	1	-1	0	0	8	538.29490	-0.00011	1128.40695	590.11194
48	2	-2	0	0	10	1	-1	0	0	9	540.29173	-0.00019	1148.33456	608.04264
49	2	-2	0	0	11	1	-1	0	0	10	542.28859	-0.00049	1170.25382	627.96474
50	2	-2	0	0	12	1	-1	0	0	11	544.28633	-0.00013	1194.16442	649.87795
51	2	-2	0	0	13	1	-1	0	0	12	546.28388	-0.00016	1220.06599	673.78196
52	2	-2	0	0	14	1	-1	0	0	13	548.28162	-0.00015	1247.95819	699.67642
53	2	-2	0	0	15	1	-1	0	0	14	550.27932	-0.00030	1277.84059	727.56097
54	2	-2	0	0	16	1	-1	0	0	15	552.27754	-0.00002	1309.71276	757.43520
55	2	-2	0	0	17	1	-1	0	0	16	554.27532	-0.00024	1343.57425	789.29869
56	2	-2	0	0	18	1	-1	0	0	17	556.27329	-0.00029	1379.42457	823.15099
57	2	-2	0	0	19	1	-1	0	0	18	558.27132	-0.00027	1417.26319	858.99160
58	2	-2	0	0	20	1	-1	0	0	19	560.26933	-0.00023	1457.08957	896.82001
59	2	-2	0	0	21	1	-1	0	0	20	562.26726	-0.00018	1498.90313	936.63569
60	2	-2	0	0	22	1	-1	0	0	21	564.26503	-0.00018	1542.70326	978.43806
	2	-2	0	0	23	1	-1	0	0	22	566.26247	-0.00036	1588.48935	1022.22652
	2	-2	0	0	24	1	-1	0	0	23	568.26005	-0.00021	1636.26071	1068.00045
	2	-2	0	0	25	1	-1	0	0	24	570.25672	-0.00075	1686.01666	1115.75919
	2	-2	0	0	26	1	-1	0	0	25	572.25426	-0.00016	1737.75648	1165.50207
	2	-2	0	0	27	1	-1	0	0	26	574.25095	-0.00013	1791.47943	1217.22835
	2	-2	0	0	28	1	-1	0	0	27	576.24705	-0.00035	1847.18472	1270.93732
	2	-2	0	0	29	1	-1	0	0	28	578.24298	-0.00038	1904.87155	1326.62819
	2	-2	0	0	30	1	-1	0	0	29	580.23856	-0.00035	1964.53909	1384.30018
	2	-2	0	0	3	1	1	0	0	0	520.30423*	-0.00174	1050.68009	530.28412W

1	2	-2	0	0	4	1	1	0	0	4	520.43359	-0.00010	1058.65275	538.21906
2	2	-2	0	0	5	1	1	0	0	5	520.48128*	0.00045	1068.61835	548.13753
3	2	-2	0	0	6	1	1	0	0	6	520.53726	-0.00012	1080.57677	560.03938
4	2	-2	0	0	7	1	1	0	0	7	520.60322	-0.00012	1094.52781	573.92447
5	2	-2	0	0	8	1	1	0	0	8	520.67860	-0.00010	1110.47128	589.79258
6	2	-2	0	0	9	1	1	0	0	9	520.76335	-0.00010	1128.40695	607.64350
7	2	-2	0	0	10	1	1	0	0	10	520.85741	-0.00017	1148.33456	627.47699
8	2	-2	0	0	11	1	1	0	0	11	520.96092	-0.00015	1170.25382	649.29275
9	2	-2	0	0	12	1	1	0	0	12	521.07380	-0.00011	1194.16442	673.09051
10	2	-2	0	0	13	1	1	0	0	13	521.19586	-0.00023	1220.06599	698.86991
11	2	-2	0	0	14	1	1	0	0	14	521.32736	-0.00022	1247.95819	726.63060
12	2	-2	0	0	15	1	1	0	0	15	521.46814	-0.00024	1277.84059	756.37220
13	2	-2	0	0	16	1	1	0	0	16	521.61823	-0.00024	1309.71276	788.09430
14	2	-2	0	0	17	1	1	0	0	17	521.77752	-0.00029	1343.57425	821.79644
15	2	-2	0	0	18	1	1	0	0	18	521.94611	-0.00029	1379.42457	857.47816
16	2	-2	0	0	19	1	1	0	0	19	522.12397	-0.00024	1417.26319	895.13897
17	2	-2	0	0	20	1	1	0	0	20	522.31132	0.00010	1457.08957	934.77834
18	2	-2	0	0	21	1	1	0	0	21	522.50689	-0.00051	1498.90313	976.39572
19	2	-2	0	0	22	1	1	0	0	22	522.71249	-0.00024	1542.70326	1019.99053
20	2	-2	0	0	23	1	1	0	0	23	522.92665	-0.00053	1588.48935	1065.56217
21	2	-2	0	0	24	1	1	0	0	24	523.15036	-0.00036	1636.26071	1113.10999
22	2	-2	0	0	25	1	1	0	0	25	523.38309	-0.00023	1686.01666	1162.63334
23	2	-2	0	0	26	1	1	0	0	26	523.62473	-0.00022	1737.75648	1214.13154
24	2	-2	0	0	27	1	1	0	0	27	523.87561	0.00004	1791.47943	1267.60385
25	2	-2	0	0	28	1	1	0	0	28	524.13522	0.00005	1847.18472	1323.04955
26	2	-2	0	0	29	1	1	0	0	29	524.40347	-0.00023	1904.87155	1380.46786
27	2	-2	0	0	30	1	1	0	0	30	524.68072	-0.00040	1964.53909	1439.85797
28	2	-2	0	0	31	1	1	0	0	31	524.96735	-0.00005	2026.18647	1501.21907
29	2	-2	0	0	32	1	1	0	0	32	525.26337*	0.00087	2089.81280	1564.55030
30	2	-2	0	0	33	1	1	0	0	33	525.56635	-0.00003	2155.41717	1629.85078
31	2	-2	0	0	34	1	1	0	0	34	525.87939	0.00038	2222.99862	1697.11961
32	2	-2	0	0	35	1	1	0	0	35	526.20087	0.00054	2292.55617	1766.35584
33	2	-2	0	0	36	1	1	0	0	36	526.53095	0.00063	2364.08883	1837.55852

rms = 0.00022 cm⁻¹

40	v _{4'}	$\ell_{4'}$	v _{5'}	$\ell_{5'}$	J'	v _{4''}	$\ell_{4''}$	v _{5''}	$\ell_{5''}$	J''	OBS	OBS-CALC	E'	E''
41	1	1	1	-1	0	1	1	0	0	1	680.13284	-0.00002	1200.49810	520.36524
42	1	1	1	-1	1	1	1	0	0	2	678.15740*	0.00122	1202.48900	524.33282W
43	1	1	1	-1	2	1	1	0	0	3	676.18675	0.00001	1206.47085	530.28412
44	1	1	1	-1	3	1	1	0	0	4	674.22527	0.00056	1212.44377	538.21906
45	1	1	1	-1	4	1	1	0	0	5	672.27034	-0.00002	1220.40789	548.13753
46	1	1	1	-1	5	1	1	0	0	6	670.32404	-0.00001	1230.36343	560.03938
47	1	1	1	-1	6	1	1	0	0	7	668.38613	-0.00005	1242.31065	573.92447
48	1	1	1	-1	7	1	1	0	0	8	666.45724	-0.00002	1256.24984	589.79258
49	1	1	1	-1	8	1	1	0	0	9	664.53777	-0.00010	1272.18137	607.64350
50	1	1	1	-1	9	1	1	0	0	10	662.62945	0.00083	1290.10561	627.47699
51	1	1	1	-1	10	1	1	0	0	11	660.73006	-0.00017	1310.02298	649.29275
52	1	1	1	-1	11	1	1	0	0	12	658.84328	-0.00015	1331.93393	673.09051
53	1	1	1	-1	12	1	1	0	0	13	656.96884	-0.00016	1355.83891	698.86991
54	1	1	1	-1	13	1	1	0	0	14	655.10773	-0.00001	1381.73835	726.63060
55	1	1	1	-1	14	1	1	0	0	15	653.26030	-0.00017	1409.63267	756.37220
56	1	1	1	-1	15	1	1	0	0	16	651.42783	-0.00012	1439.52224	788.09430
57	1	1	1	-1	16	1	1	0	0	17	649.61076	-0.00018	1471.40738	821.79644
58	1	1	1	-1	17	1	1	0	0	18	647.80992	-0.00020	1505.28829	857.47816
59	1	1	1	-1	18	1	1	0	0	19	646.02583	-0.00030	1541.16510	895.13897
60	1	1	1	-1	19	1	1	0	0	20	644.25923	-0.00025	1579.03782	934.77834
	1	1	1	-1	20	1	1	0	0	21	642.51045	-0.00018	1618.90635	976.39572
	1	1	1	-1	21	1	1	0	0	22	640.77962	-0.00030	1660.77045	1019.99053
	1	1	1	-1	22	1	1	0	0	23	639.06739	-0.00021	1704.62977	1065.56217
	1	1	1	-1	23	1	1	0	0	24	637.37364	-0.00020	1750.48383	1113.10999
	1	1	1	-1	24	1	1	0	0	25	635.69752	-0.00119	1798.33206	1162.63334W
	1	1	1	-1	25	1	1	0	0	26	634.04240	0.00016	1848.17378	1214.13154
	1	1	1	-1	26	1	1	0	0	27	URL: http://mc.manuscriptcentral.com/af/tmp00.00824		1267.60385	

1	1	1	-1	2	1	1	0	0	1	686.10525	-0.00037	1206.47085	520.36524
2	1	1	-1	3	1	1	0	0	2	688.11096	0.00001	1212.44377	524.33282
3	1	1	-1	4	1	1	0	0	3	690.12374	-0.00003	1220.40789	530.28412
4	1	1	-1	5	1	1	0	0	4	692.14437	0.00000	1230.36343	538.21906
5	1	1	-1	6	1	1	0	0	5	694.17304	-0.00008	1242.31065	548.13753
6	1	1	-1	7	1	1	0	0	6	696.21040	-0.00006	1256.24984	560.03938
7	1	1	-1	8	1	1	0	0	7	698.25687	-0.00003	1272.18137	573.92447
8	1	1	-1	9	1	1	0	0	8	700.31294	-0.00009	1290.10561	589.79258
9	1	1	-1	10	1	1	0	0	9	702.37938	-0.00010	1310.02298	607.64350
10	1	1	-1	11	1	1	0	0	10	704.45689	-0.00006	1331.93393	627.47699
11	1	1	-1	12	1	1	0	0	11	706.54607	-0.00008	1355.83891	649.29275
12	1	1	-1	13	1	1	0	0	12	708.64771	-0.00013	1381.73835	673.09051
13	1	1	-1	14	1	1	0	0	13	710.76266	-0.00010	1409.63267	698.86991
14	1	1	-1	15	1	1	0	0	14	712.89403*	0.00239	1439.52224	726.63060W
15	1	1	-1	16	1	1	0	0	15	715.03507	-0.00010	1471.40738	756.37220
16	1	1	-1	17	1	1	0	0	16	717.19394	-0.00005	1505.28829	788.09430
17	1	1	-1	18	1	1	0	0	17	719.36852	-0.00014	1541.16510	821.79644
18	1	1	-1	19	1	1	0	0	18	721.55951	-0.00015	1579.03782	857.47816
19	1	1	-1	20	1	1	0	0	19	723.76720	-0.00018	1618.90635	895.13897
20	1	1	-1	21	1	1	0	0	20	725.99194	-0.00017	1660.77045	934.77834
21	1	1	-1	22	1	1	0	0	21	728.23398	-0.00006	1704.62977	976.39572
22	1	1	-1	23	1	1	0	0	22	730.49311	-0.00018	1750.48383	1019.99053
23	1	1	-1	24	1	1	0	0	23	732.77052	0.00063	1798.33206	1065.56217
24	1	1	-1	25	1	1	0	0	24	735.06331	-0.00048	1848.17378	1113.10999
25	1	1	-1	26	1	1	0	0	25	737.37451	-0.00039	1900.00824	1162.63334
26	1	1	-1	27	1	1	0	0	26	739.70363	0.00056	1953.83461	1214.13154
27	1	1	-1	28	1	1	0	0	27	742.04820	0.00007	2009.65198	1267.60385
28	1	1	-1	29	1	-1	0	0	3	682.10764*	0.00125	1212.44377	530.33737W
29	1	1	-1	30	1	-1	0	0	4	682.10764*	0.00756	1220.40789	538.30781W
30	1	1	-1	31	1	-1	0	0	5	682.09284	0.00005	1230.36343	548.27064
31	1	1	-1	32	1	-1	0	0	6	682.08585*	0.00093	1242.31065	560.22573
32	1	1	-1	33	1	-1	0	0	7	682.07647	-0.00048	1256.24984	574.17289
33	1	1	-1	34	1	-1	0	0	8	682.07055*	0.00112	1272.18137	590.11194W
34	1	1	-1	35	1	-1	0	0	9	682.06270*	-0.00026	1290.10561	608.04264
35	1	1	-1	36	1	-1	0	0	10	682.05702*	-0.00122	1310.02298	627.96474W
36	1	1	-1	37	1	-1	0	0	11	682.05702*	0.00104	1331.93393	649.87795W
37	1	1	-1	38	1	-1	0	0	12	682.05702*	0.00007	1355.83891	673.78196
38	1	1	-1	39	1	-1	0	0	13	682.06280	0.00087	1381.73835	699.67642
39	1	1	-1	40	1	-1	0	0	14	682.07055*	-0.00115	1409.63267	727.56097W
40	1	1	-1	41	1	-1	0	0	15	682.08655	-0.00049	1439.52224	757.43520
41	1	1	-1	42	1	-1	0	0	16	682.10835	-0.00033	1471.40738	789.29869
42	1	1	-1	43	1	-1	0	0	17	682.13774	0.00044	1505.28829	823.15099
43	1	1	-1	44	1	-1	0	0	18	682.17338	-0.00012	1541.16510	858.99160
44	1	1	-1	45	1	-1	0	0	19	682.21763	-0.00018	1579.03782	896.82001
45	1	1	-1	46	1	-1	0	0	20	682.27050	-0.00017	1618.90635	936.63569
46	1	1	-1	47	1	-1	0	0	21	682.33226	-0.00014	1660.77045	978.43806
47	1	1	-1	48	1	-1	0	0	22	682.40284	-0.00041	1704.62977	1022.22652
48	1	1	-1	49	1	-1	0	0	23	682.48332	-0.00006	1750.48383	1068.00045
49	1	1	-1	50	1	-1	0	0	24	682.57274	-0.00012	1798.33206	1115.75919
50	1	1	-1	51	1	-1	0	0	25	682.67162	-0.00010	1848.17378	1165.50207
51	1	1	-1	52	1	-1	0	0	26	682.77985	-0.00004	1900.00824	1217.22835
52	1	1	-1	53	1	-1	0	0	27	682.89730	0.00001	1953.83461	1270.93732
53	1	1	-1	54	1	-1	0	0	28	683.02381	0.00002	2009.65198	1326.62819
54	1	1	-1	55	1	-1	0	0	29	683.15891	-0.00033	2067.45942	1384.30018
55	1	1	-1	56	1	-1	0	0	30	683.30210	-0.00137	2127.25592	1443.95245W
56	1	1	-1	57	1	-1	0	0	31	683.45782	0.00151	2189.04046	1505.58415W
57	1	1	-1	58	1	-1	0	0	32	683.61804	0.00048	2252.81197	1569.19441
58	1	1	-1	59	1	-1	0	0	33	683.78820*	0.00114	2318.56937	1634.78230W
59	1	1	-1	60	1	-1	0	0	34	683.96525	0.00063	2386.31153	1702.34690
60	rms = 0.00029 cm ⁻¹				684.15010*	0.00003	2456.03731	1771.88724					

$v_4 + v_5 (\Sigma^-) \leftarrow v_4 (\Pi)$

URL: <http://mc.manuscriptcentral.com/tandf/tmph>

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	-1	1	1	0	1	-1	0	0	1	675.78894	0.00012	1196.16293	520.37411
2	1	-1	1	1	1	1	-1	0	0	2	673.79458	0.00009	1198.15393	524.35945
3	1	-1	1	1	2	1	-1	0	0	3	671.79870	0.00016	1202.13592	530.33737
4	1	-1	1	1	3	1	-1	0	0	4	669.80111	0.00007	1208.10885	538.30781
5	1	-1	1	1	4	1	-1	0	0	5	667.80214	0.00010	1216.07268	548.27064
6	1	-1	1	1	5	1	-1	0	0	6	665.80164	0.00003	1226.02734	560.22573
7	1	-1	1	1	6	1	-1	0	0	7	663.79988	0.00003	1237.97275	574.17289
8	1	-1	1	1	7	1	-1	0	0	8	661.79692	0.00006	1251.90880	590.11194
9	1	-1	1	1	8	1	-1	0	0	9	659.79277	0.00005	1267.83537	608.04264
10	1	-1	1	1	9	1	-1	0	0	10	657.78755	-0.00002	1285.75232	627.96474
11	1	-1	1	1	10	1	-1	0	0	11	655.78150	-0.00003	1305.65948	649.87795
12	1	-1	1	1	11	1	-1	0	0	12	653.77462	-0.00008	1327.55666	673.78196
13	1	-1	1	1	12	1	-1	0	0	13	651.76721	-0.00002	1351.44366	699.67642
14	1	-1	1	1	13	1	-1	0	0	14	649.75914	-0.00010	1377.32021	727.56097
15	1	-1	1	1	14	1	-1	0	0	15	647.75072	-0.00013	1405.18605	757.43520
16	1	-1	1	1	15	1	-1	0	0	16	645.74208	-0.00009	1435.04086	789.29869
17	1	-1	1	1	16	1	-1	0	0	17	643.73313	-0.00017	1466.88429	823.15099
18	1	-1	1	1	17	1	-1	0	0	18	641.72417	-0.00017	1500.71593	858.99160
19	1	-1	1	1	18	1	-1	0	0	19	639.71519	-0.00016	1536.53536	896.82001
20	1	-1	1	1	19	1	-1	0	0	20	637.70632	-0.00010	1574.34210	936.63569
21	1	-1	1	1	20	1	-1	0	0	21	635.69752	-0.00006	1614.13563	978.43806
22	1	-1	1	1	21	1	-1	0	0	22	633.68871	-0.00017	1655.91539	1022.22652
23	1	-1	1	1	22	1	-1	0	0	23	631.68020	-0.00014	1699.68079	1068.00045
24	1	-1	1	1	23	1	-1	0	0	24	629.67193	-0.00007	1745.43120	1115.75919
25	1	-1	1	1	24	1	-1	0	0	25	627.66377	-0.00010	1793.16594	1165.50207
26	1	-1	1	1	25	1	-1	0	0	26	625.65593	-0.00003	1842.88432	1217.22835
27	1	-1	1	1	26	1	-1	0	0	27	623.64839	0.00010	1894.58561	1270.93732
28	1	-1	1	1	27	1	-1	0	0	28	621.64086	0.00002	1948.26904	1326.62819
29	1	-1	1	1	28	1	-1	0	0	29	619.63365	0.00000	2003.93383	1384.30018
30	1	-1	1	1	29	1	-1	0	0	30	617.62776	0.00106	2061.57915	1443.95245W
31	1	-1	1	1	30	1	-1	0	0	31	615.62011	0.00010	2121.20417	1505.58415
32	1	-1	1	1	31	1	-1	0	0	32	613.61327	-0.00032	2182.80800	1569.19441
33	1	-1	1	1	32	1	-1	0	0	33	611.60770	0.00026	2246.38975	1634.78230
34	1	-1	1	1	2	1	-1	0	0	1	681.76230*	0.00050	1202.13592	520.37411
35	1	-1	1	1	3	1	-1	0	0	2	683.75093*	0.00153	1208.10885	524.35945W
36	1	-1	1	1	4	1	-1	0	0	3	685.73430*	-0.00100	1216.07268	530.33737W
37	1	-1	1	1	5	1	-1	0	0	4	687.71871	-0.00082	1226.02734	538.30781
38	1	-1	1	1	6	1	-1	0	0	5	689.70207	-0.00003	1237.97275	548.27064
39	1	-1	1	1	7	1	-1	0	0	6	691.68301	-0.00006	1251.90880	560.22573
40	1	-1	1	1	8	1	-1	0	0	7	693.66245	-0.00002	1267.83537	574.17289
41	1	-1	1	1	9	1	-1	0	0	8	695.64035	-0.00002	1285.75232	590.11194
42	1	-1	1	1	10	1	-1	0	0	9	697.61678	-0.00005	1305.65948	608.04264
43	1	-1	1	1	11	1	-1	0	0	10	699.59192	0.00000	1327.55666	627.96474
44	1	-1	1	1	12	1	-1	0	0	11	701.56559	-0.00011	1351.44366	649.87795
45	1	-1	1	1	13	1	-1	0	0	12	703.53818	-0.00007	1377.32021	673.78196
46	1	-1	1	1	14	1	-1	0	0	13	705.50949	-0.00014	1405.18605	699.67642
47	1	-1	1	1	15	1	-1	0	0	14	707.47978	-0.00011	1435.04086	727.56097
48	1	-1	1	1	16	1	-1	0	0	15	709.44896	-0.00012	1466.88429	757.43520
49	1	-1	1	1	17	1	-1	0	0	16	711.41711	-0.00013	1500.71593	789.29869
50	1	-1	1	1	18	1	-1	0	0	17	713.38418	-0.00020	1536.53536	823.15099
51	1	-1	1	1	19	1	-1	0	0	18	715.35035	-0.00016	1574.34210	858.99160
52	1	-1	1	1	20	1	-1	0	0	19	717.31552	-0.00010	1614.13563	896.82001
53	1	-1	1	1	21	1	-1	0	0	20	719.27965	-0.00006	1655.91539	936.63569
54	1	-1	1	1	22	1	-1	0	0	21	721.24259	-0.00015	1699.68079	978.43806
55	1	-1	1	1	23	1	-1	0	0	22	723.20460	-0.00008	1745.43120	1022.22652
56	1	-1	1	1	24	1	-1	0	0	23	725.16538	-0.00011	1793.16594	1068.00045
57	1	-1	1	1	25	1	-1	0	0	24	727.12510	-0.00003	1842.88432	1115.75919
58	1	-1	1	1	26	1	-1	0	0	25	729.08352	-0.00002	1894.58561	1165.50207
59	1	-1	1	1	27	1	-1	0	0	26	731.04042	-0.00026	1948.26904	1217.22835
60	1	-1	1	1	28	1	-1	0	0	27	732.99654	0.00003	2003.93383	1270.93732
	1	-1	1	1	29	1	-1	0	0	28	734.95102	0.00006	2061.57915	1326.62819
	1	-1	1	1	30	1	-1	0	0	29	736.90417	0.00018	2121.20417	1384.30018
	1	-1	1	1	31	1	-1	0	0	30	738.85577	0.00022	2182.80800	1443.95245
	1	-1	1	1	32	1	-1	0	0	31	740.80585	0.00026	2246.38975	1505.58415
	1	-1	1	1	33	1	-1	0	0	32	742.75432	0.00025	2311.94848	1569.19441
	1	-1	1	1	34	1	-1	0	0	33	744.70136	0.00043	2379.48324	1634.78230
	1	-1	1	1	35	1	-1	0	0	34	746.64660	0.00044	2418.99304	1702.34690

1	-1	1	1	36	1	-1	0	0	35	748.59023	0.00058	2520.47689	1771.88724
2	-1	1	1	37	1	-1	0	0	36	750.53210	0.00068	2593.93373	1843.40231
3	-1	1	1	1	1	1	0	0	1	677.78899	0.00029	1198.15393	520.36524
4	-1	1	1	2	1	1	0	0	2	677.80350	0.00040	1202.13592	524.33282
5	-1	1	1	4	1	1	0	0	4	677.85323	-0.00039	1216.07268	538.21906
6	-1	1	1	5	1	1	0	0	5	677.89006	0.00025	1226.02734	548.13753
7	-1	1	1	6	1	1	0	0	6	677.93270*	-0.00066	1237.97275	560.03938
8	-1	1	1	7	1	1	0	0	7	677.98370*	-0.00063	1251.90880	573.92447
9	-1	1	1	8	1	1	0	0	8	678.04298	0.00019	1267.83537	589.79258
10	-1	1	1	9	1	1	0	0	9	678.10872	-0.00009	1285.75232	607.64350
11	-1	1	1	10	1	1	0	0	10	678.18251	0.00002	1305.65948	627.47699
12	-1	1	1	11	1	1	0	0	11	678.26389	-0.00002	1327.55666	649.29275
13	-1	1	1	12	1	1	0	0	12	678.35317	0.00002	1351.44366	673.09051
14	-1	1	1	13	1	1	0	0	13	678.45031	0.00001	1377.32021	698.86991
15	-1	1	1	14	1	1	0	0	14	678.55675*	0.00130	1405.18605	726.63060W
16	-1	1	1	15	1	1	0	0	15	678.66770*	-0.00096	1435.04086	756.37220
17	-1	1	1	16	1	1	0	0	16	678.78989	-0.00010	1466.88429	788.09430
18	-1	1	1	17	1	1	0	0	17	678.91931	-0.00018	1500.71593	821.79644
19	-1	1	1	18	1	1	0	0	18	679.05700	-0.00020	1536.53536	857.47816
20	-1	1	1	19	1	1	0	0	19	679.20294	-0.00019	1574.34210	895.13897
21	-1	1	1	20	1	1	0	0	20	679.35710	-0.00019	1614.13563	934.77834
22	-1	1	1	21	1	1	0	0	21	679.51953	-0.00014	1655.91539	976.39572
23	-1	1	1	22	1	1	0	0	22	679.68780	-0.00246	1699.68079	1019.99053W
24	-1	1	1	23	1	1	0	0	23	679.86889	-0.00014	1745.43120	1065.56217
25	-1	1	1	24	1	1	0	0	24	680.05415	-0.00180	1793.16594	1113.10999W
26	-1	1	1	25	1	1	0	0	25	680.25092	-0.00005	1842.88432	1162.63334
27	-1	1	1	26	1	1	0	0	26	680.45397	-0.00010	1894.58561	1214.13154
28	-1	1	1	27	1	1	0	0	27	680.66502	-0.00016	1948.26904	1267.60385

rms = 0.00020 cm⁻¹ $v_4 + v_5 (\Delta) \leftarrow v_4 (\Pi)$

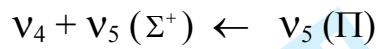
	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	1	1	1	2	1	1	0	0	1	681.35686	-0.00009	1201.72219	520.36524
2	1	1	1	1	3	1	1	0	0	2	683.36169	-0.00018	1207.69469	524.33282
3	1	1	1	1	4	1	1	0	0	3	685.37322	-0.00017	1215.65751	530.28412
4	1	1	1	1	5	1	1	0	0	4	687.39099	-0.00017	1225.61022	538.21906
5	1	1	1	1	6	1	1	0	0	5	689.41459	-0.00016	1237.55228	548.13753
6	1	1	1	1	7	1	1	0	0	6	691.44356	-0.00010	1251.48305	560.03938
7	1	1	1	1	8	1	1	0	0	7	693.47719	-0.00011	1267.40177	573.92447
8	1	1	1	1	9	1	1	0	0	8	695.51489	-0.00014	1285.30761	589.79258
9	1	1	1	1	10	1	1	0	0	9	697.55603	-0.00010	1305.19963	607.64350
10	1	1	1	1	11	1	1	0	0	10	699.59969	-0.00015	1327.07683	627.47699
11	1	1	1	1	12	1	1	0	0	11	701.64523	-0.00014	1350.93813	649.29275
12	1	1	1	1	13	1	1	0	0	12	703.69180	-0.00010	1376.78240	673.09051
13	1	1	1	1	14	1	1	0	0	13	705.73852	-0.00007	1404.60850	698.86991
14	1	1	1	1	15	1	1	0	0	14	707.78459	-0.00007	1434.41526	726.63060
15	1	1	1	1	17	1	1	0	0	16	711.87182	-0.00002	1499.96614	788.09430
16	1	1	1	1	18	1	1	0	0	17	713.91159	-0.00001	1535.70804	821.79644
17	1	1	1	1	19	1	1	0	0	18	715.94800	-0.00003	1573.42620	857.47816
18	1	1	1	1	20	1	1	0	0	19	717.98064	-0.00001	1613.11962	895.13897
19	1	1	1	1	21	1	1	0	0	20	720.00899	-0.00010	1654.78743	934.77834
20	1	1	1	1	22	1	1	0	0	21	722.03304	-0.00001	1698.42877	976.39572
21	1	1	1	1	23	1	1	0	0	22	724.05231	-0.00002	1744.04287	1019.99053
22	1	1	1	1	24	1	1	0	0	23	726.06684	0.00001	1791.62900	1065.56217
23	1	1	1	1	25	1	1	0	0	24	728.07647	-0.00001	1841.18647	1113.10999
24	1	1	1	1	26	1	1	0	0	25	730.08133	0.00005	1892.71462	1162.63334
25	1	1	1	1	27	1	1	0	0	26	732.08125	-0.00003	1946.21281	1214.13154
26	1	1	1	1	28	1	1	0	0	27	734.07656	0.00000	2001.68041	1267.60385
27	1	1	1	1	29	1	1	0	0	28	736.06719	-0.00004	2059.11678	1323.04955
28	1	1	1	1	30	1	1	0	0	29	738.05332	-0.00008	2118.52125	1380.46786
29	1	1	1	1	31	1	1	0	0	30	740.03515	-0.00006	2179.89318	1439.85797
30	1	1	1	1	32	1	1	0	0	31	742.01276	-0.00002	2243.23185	1501.21907
31	1	1	1	1	33	1	1	0	0	32	743.98624	-0.00002	2308.53656	1564.55030
32	1	1	1	1	34	1	1	0	0	33	747.00570	-0.00005	2365.80655	1629.85078

Molecular Physics

1	1	1	1	1	35	1	1	0	0	34	747.92134	-0.00010	2445.04104	1697.11961
1	1	1	1	1	36	1	1	0	0	35	749.88310	-0.00027	2516.23921	1766.35584
2	1	1	1	1	37	1	1	0	0	36	751.84140	-0.00029	2589.40020	1837.55852
3	1	1	1	1	2	1	1	0	0	3	671.43798	-0.00009	1201.72219	530.28412
4	1	1	1	1	3	1	1	0	0	4	669.47543	-0.00020	1207.69469	538.21906
5	1	1	1	1	4	1	1	0	0	5	667.51982	-0.00016	1215.65751	548.13753
6	1	1	1	1	5	1	1	0	0	6	665.57073	-0.00010	1225.61022	560.03938
7	1	1	1	1	6	1	1	0	0	7	663.62766	-0.00015	1237.55228	573.92447
8	1	1	1	1	7	1	1	0	0	8	661.69138	0.00091	1251.48305	589.79258
9	1	1	1	1	8	1	1	0	0	9	659.75813	-0.00014	1267.40177	607.64350
10	1	1	1	1	9	1	1	0	0	10	657.83053	-0.00009	1285.30761	627.47699
11	1	1	1	1	10	1	1	0	0	11	655.90678	-0.00010	1305.19963	649.29275
12	1	1	1	1	11	1	1	0	0	12	653.98620	-0.00012	1327.07683	673.09051
13	1	1	1	1	12	1	1	0	0	13	652.06858	0.00036	1350.93813	698.86991
14	1	1	1	1	13	1	1	0	0	14	650.15164	-0.00016	1376.78240	726.63060
15	1	1	1	1	14	1	1	0	0	15	648.23613	-0.00017	1404.60850	756.37220
16	1	1	1	1	15	1	1	0	0	16	646.32091	-0.00005	1434.41526	788.09430
17	1	1	1	1	16	1	1	0	0	17	644.40502	-0.00006	1466.20152	821.79644
18	1	1	1	1	17	1	1	0	0	18	642.48791	-0.00007	1499.96614	857.47816
19	1	1	1	1	18	1	1	0	0	19	640.56902	-0.00005	1535.70804	895.13897
20	1	1	1	1	19	1	1	0	0	20	638.64775	-0.00010	1573.42620	934.77834
21	1	1	1	1	20	1	1	0	0	21	636.72385	-0.00005	1613.11962	976.39572
22	1	1	1	1	21	1	1	0	0	22	634.79693	0.00003	1654.78743	1019.99053
23	1	1	1	1	22	1	1	0	0	23	632.86660	0.00000	1698.42877	1065.56217
24	1	1	1	1	23	1	1	0	0	24	630.93286	-0.00002	1744.04287	1113.10999
25	1	1	1	1	24	1	1	0	0	25	628.99564	-0.00001	1791.62900	1162.63334
26	1	1	1	1	25	1	1	0	0	26	627.05493	0.00000	1841.18647	1214.13154
27	1	1	1	1	26	1	1	0	0	27	625.11078	0.00001	1892.71462	1267.60385
28	1	1	1	1	27	1	1	0	0	28	623.16322	-0.00004	1946.21281	1323.04955
29	1	1	1	1	28	1	1	0	0	29	621.21256	0.00000	2001.68041	1380.46786
30	1	1	1	1	29	1	1	0	0	30	619.25875	-0.00005	2059.11678	1439.85797
31	1	1	1	1	30	1	1	0	0	31	617.30207	-0.00011	2118.52125	1501.21907
32	1	1	1	1	31	1	1	0	0	32	615.34289	0.00001	2179.89318	1564.55030
33	1	1	1	1	32	1	1	0	0	33	613.38075	-0.00032	2243.23185	1629.85078
34	1	1	1	1	33	1	1	0	0	34	611.41690	-0.00006	2308.53656	1697.11961
35	1	1	1	1	34	1	1	0	0	35	609.45004	-0.00067	2375.80655	1766.35584
36	1	1	1	1	2	1	-1	0	0	2	677.36257	-0.00017	1201.72219	524.35945
37	1	1	1	1	3	1	-1	0	0	3	677.35683	-0.00048	1207.69469	530.33737
38	1	1	1	1	4	1	-1	0	0	4	677.34963	-0.00007	1215.65751	538.30781
39	1	1	1	1	5	1	-1	0	0	5	677.33943	-0.00015	1225.61022	548.27064
40	1	1	1	1	6	1	-1	0	0	6	677.32642	-0.00013	1237.55228	560.22573
41	1	1	1	1	7	1	-1	0	0	7	677.30994	-0.00021	1251.48305	574.17289
42	1	1	1	1	8	1	-1	0	0	8	677.28983	0.00000	1267.40177	590.11194
43	1	1	1	1	9	1	-1	0	0	9	677.26485	-0.00011	1285.30761	608.04264
44	1	1	1	1	10	1	-1	0	0	10	677.23482	-0.00007	1305.19963	627.96474
45	1	1	1	1	11	1	-1	0	0	11	677.19890	0.00002	1327.07683	649.87795
46	1	1	1	1	12	1	-1	0	0	12	677.15609	-0.00008	1350.93813	673.78196
47	1	1	1	1	13	1	-1	0	0	13	677.10575	-0.00023	1376.78240	699.67642
48	1	1	1	1	14	1	-1	0	0	14	677.04754	0.00001	1404.60850	727.56097
49	1	1	1	1	15	1	-1	0	0	15	676.97959	-0.00047	1434.41526	757.43520
50	1	1	1	1	16	1	-1	0	0	16	676.90293	0.00011	1466.20152	789.29869
51	1	1	1	1	17	1	-1	0	0	17	676.81519	0.00004	1499.96614	823.15099
52	1	1	1	1	18	1	-1	0	0	18	676.71654	0.00009	1535.70804	858.99160
53	1	1	1	1	19	1	-1	0	0	19	676.60619	0.00000	1573.42620	896.82001
54	1	1	1	1	20	1	-1	0	0	20	676.48411	0.00017	1613.11962	936.63569
55	1	1	1	1	21	1	-1	0	0	21	676.34952	0.00015	1654.78743	978.43806
56	1	1	1	1	22	1	-1	0	0	22	676.20274	0.00049	1698.42877	1022.22652
57	1	1	1	1	23	1	-1	0	0	23	676.04260	0.00018	1744.04287	1068.00045
58	1	1	1	1	24	1	-1	0	0	24	675.86992	0.00012	1791.62900	1115.75919
59	1	1	1	1	25	1	-1	0	0	25	675.68453	0.00013	1841.18647	1165.50207
60	1	1	1	1	26	1	-1	0	0	26	675.48641	0.00014	1892.71462	1217.22835
1	-1	1	1	1	27	1	-1	0	0	27	675.27339*	-0.00210	1946.21281	1270.93732W
1	-1	1	1	1	28	1	-1	0	0	28	675.05233	0.00011	2001.68041	1326.62819
1	-1	1	1	1	29	1	-1	0	0	29	674.81644	-0.00016	2059.11678	1384.30018
1	-1	1	1	1	30	1	-1	0	0	30	674.56900	0.00020	2118.52125	1443.95245
1	-1	1	-1	1	2	1	-1	0	0	1	681.34796	-0.00019	1201.72226	520.37411
1	-1	1	-1	1	3	1	-1	0	0	2	683.33551	-0.00007	1207.69503	524.35945
1	-1	1	-1	1	4	1	-1	0	0	3	685.32106	-0.00010	1215.65854	530.33737
1	-1	1	-1	1	5	1	-1	0	0	4	687.30464	-0.00017	1225.61262	538.30781

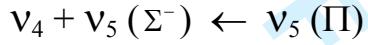
1	-1	1	-1	6	1	-1	0	0	5	689.28625	-0.00019	1237.55708	548.27064
2	-1	1	-1	7	1	-1	0	0	6	691.26584	-0.00012	1251.49169	560.22573
3	-1	1	-1	8	1	-1	0	0	7	693.24318	-0.00008	1267.41616	574.17289
4	-1	1	-1	9	1	-1	0	0	8	695.21846	0.00023	1285.33018	590.11194
5	-1	1	-1	10	1	-1	0	0	9	697.19063	-0.00013	1305.23340	608.04264
6	-1	1	-1	11	1	-1	0	0	10	699.16060	-0.00011	1327.12545	627.96474
7	-1	1	-1	12	1	-1	0	0	11	701.12797	0.00000	1351.00592	649.87795
8	-1	1	-1	13	1	-1	0	0	12	703.09238	-0.00003	1376.87436	673.78196
9	-1	1	-1	14	1	-1	0	0	13	705.05388	-0.00003	1404.73033	699.67642
10	-1	1	-1	15	1	-1	0	0	14	707.01236	-0.00001	1434.57334	727.56097
11	-1	1	-1	16	1	-1	0	0	15	708.96763	-0.00006	1466.40289	757.43520
12	-1	1	-1	17	1	-1	0	0	16	710.91986	0.00009	1500.21846	789.29869
13	-1	1	-1	18	1	-1	0	0	17	712.86852	-0.00003	1536.01954	823.15099
14	-1	1	-1	19	1	-1	0	0	18	714.81395	-0.00001	1573.80556	858.99160
15	-1	1	-1	20	1	-1	0	0	19	716.75581	-0.00015	1613.57597	896.82001
16	-1	1	-1	21	1	-1	0	0	20	718.69451	-0.00001	1655.33020	936.63569
17	-1	1	-1	22	1	-1	0	0	21	720.62953	-0.00006	1699.06765	978.43806
18	-1	1	-1	23	1	-1	0	0	22	722.56110	-0.00008	1744.78769	1022.22652
19	-1	1	-1	24	1	-1	0	0	23	724.48920	-0.00005	1792.48970	1068.00045
20	-1	1	-1	25	1	-1	0	0	24	726.41383	0.00001	1842.17301	1115.75919
21	-1	1	-1	26	1	-1	0	0	25	728.33473	-0.00014	1893.83694	1165.50207
22	-1	1	-1	27	1	-1	0	0	26	730.25217	-0.00023	1947.48076	1217.22835
23	-1	1	-1	28	1	-1	0	0	27	732.16640	-0.00002	2003.10374	1270.93732
24	-1	1	-1	2	1	-1	0	0	3	671.38949*	0.00460	1201.72226	530.33737W
25	-1	1	-1	3	1	-1	0	0	4	669.38704	-0.00018	1207.69503	538.30781
26	-1	1	-1	4	1	-1	0	0	5	667.38770	-0.00019	1215.65854	548.27064
27	-1	1	-1	5	1	-1	0	0	6	665.38613	-0.00076	1225.61262	560.22573
28	-1	1	-1	6	1	-1	0	0	7	663.38412	-0.00007	1237.55708	574.17289
29	-1	1	-1	7	1	-1	0	0	8	661.37959	-0.00016	1251.49169	590.11194
30	-1	1	-1	8	1	-1	0	0	9	659.38064	0.00713	1267.41616	608.04264W
31	-1	1	-1	9	1	-1	0	0	10	657.36530	-0.00013	1285.33018	627.96474
32	-1	1	-1	10	1	-1	0	0	11	655.35538	-0.00007	1305.23340	649.87795
33	-1	1	-1	11	1	-1	0	0	12	653.34339	-0.00010	1327.12545	673.78196
34	-1	1	-1	12	1	-1	0	0	13	651.32947	-0.00003	1351.00592	699.67642
35	-1	1	-1	13	1	-1	0	0	14	649.31334	-0.00006	1376.87436	727.56097
36	-1	1	-1	14	1	-1	0	0	15	647.29517	0.00004	1404.73033	757.43520
37	-1	1	-1	15	1	-1	0	0	16	645.27467	0.00002	1434.57334	789.29869
38	-1	1	-1	16	1	-1	0	0	17	643.25195	0.00005	1466.40289	823.15099
39	-1	1	-1	17	1	-1	0	0	18	641.22681	-0.00006	1500.21846	858.99160
40	-1	1	-1	18	1	-1	0	0	19	639.19807*	-0.00146	1536.01954	896.82001W
41	-1	1	-1	19	1	-1	0	0	20	637.16987	0.00000	1573.80556	936.63569
42	-1	1	-1	20	1	-1	0	0	21	635.13804	0.00012	1613.57597	978.43806
43	-1	1	-1	21	1	-1	0	0	22	633.10372	0.00004	1655.33020	1022.22652
44	-1	1	-1	22	1	-1	0	0	23	631.06687	-0.00033	1699.06765	1068.00045
45	-1	1	-1	23	1	-1	0	0	24	629.02889	0.00039	1744.78769	1115.75919
46	-1	1	-1	2	1	1	0	0	2	677.38932	-0.00012	1201.72226	524.33282
47	-1	1	-1	3	1	1	0	0	3	677.41080	-0.00011	1207.69503	530.28412
48	-1	1	-1	4	1	1	0	0	4	677.43937	-0.00011	1215.65854	538.21906
49	-1	1	-1	5	1	1	0	0	5	677.47490	-0.00020	1225.61262	548.13753
50	-1	1	-1	6	1	1	0	0	6	677.51751	-0.00019	1237.55708	560.03938
51	-1	1	-1	7	1	1	0	0	7	677.56695	-0.00027	1251.49169	573.92447
52	-1	1	-1	8	1	1	0	0	8	677.62345	-0.00013	1267.41616	589.79258
53	-1	1	-1	9	1	1	0	0	9	677.68651	-0.00016	1285.33018	607.64350
54	-1	1	-1	10	1	1	0	0	10	677.75629	-0.00013	1305.23340	627.47699
55	-1	1	-1	11	1	1	0	0	11	677.83315	0.00045	1327.12545	649.29275
56	-1	1	-1	12	1	1	0	0	12	677.91521	-0.00020	1351.00592	673.09051
57	-1	1	-1	13	1	1	0	0	13	678.00428	-0.00018	1376.87436	698.86991
58	-1	1	-1	14	1	1	0	0	14	678.09858	-0.00115	1404.73033	726.63060W
59	-1	1	-1	15	1	1	0	0	15	678.20159	0.00046	1434.57334	756.37220
60	-1	1	-1	16	1	1	0	0	16	678.30808	-0.00051	1466.40289	788.09430
1	-1	1	-1	17	1	1	0	0	17	678.42219	0.00017	1500.21846	821.79644
1	-1	1	-1	18	1	1	0	0	18	678.54133	-0.00004	1536.01954	857.47816
1	-1	1	-1	19	1	1	0	0	19	678.79759	-0.00004	1613.57597	934.77834
1	-1	1	-1	20	1	1	0	0	20	678.93429	-0.00019	1655.33020	976.39572
1	-1	1	-1	21	1	1	0	0	21	679.07687	-0.00024	1699.06765	1019.99053
1	-1	1	-1	22	1	1	0	0	22	679.22527	-0.00026	1744.78769	1065.56217
1	-1	1	-1	23	1	1	0	0	23	679.37952	-0.00019	1792.48970	1113.10999
1	-1	1	-1	24	1	1	0	0	24	679.53768*	-0.00199	1842.17301	1162.63334W
1	-1	1	-1	25	1	1	0	0	25	679.70615*	-0.00075	1893.83694	1214.13154

1	-1	1	-1	27	1	1	0	0	27	679.87651	-0.00039	1947.48076	1267.60385
1	-1	1	-1	28	1	1	0	0	28	680.05415	-0.00004	2003.10374	1323.04955
2	-1	1	-1	29	1	1	0	0	29	680.23685	-0.00041	2060.70512	1380.46786
3	-1	1	-1	30	1	1	0	0	30	680.42555	-0.00057	2120.28409	1439.85797
4	-1	1	-1	31	1	1	0	0	31	680.62012	-0.00064	2181.83983	1501.21907
5	-1	1	-1	32	1	1	0	0	32	680.82049	-0.00070	2245.37149	1564.55030
6	-1	1	-1	33	1	1	0	0	33	681.02584*	-0.00156	2310.87818	1629.85078W
7	-1	1	-1	34	1	1	0	0	34	681.23760*	-0.00179	2378.35899	1697.11961W
8	-1	1	-1	35	1	1	0	0	35	681.45344*	-0.00371	2447.81298	1766.35584W
9	-1	1	-1	36	1	1	0	0	36	681.67991	-0.00076	2519.23919	1837.55852
10	-1	1	-1	37	1	1	0	0	37	681.90919	-0.00076	2592.63660	1910.72665

rms = 0.00022 cm⁻¹

	v _{4'}	$\ell_{4'}$	v _{5'}	$\ell_{5'}$	J'	v _{4''}	$\ell_{4''}$	v _{5''}	$\ell_{5''}$	J''	OBS	OBS - CALC	E'	E''
1	1	1	1	-1	2	0	0	1	1	3	516.76965	0.00020	1206.47085	689.70140
2	1	1	1	-1	3	0	0	1	1	4	514.81360	0.00015	1212.44377	697.63032
3	1	1	1	-1	4	0	0	1	1	5	512.86658	-0.00005	1220.40789	707.54126
4	1	1	1	-1	5	0	0	1	1	6	510.92951	0.00017	1230.36343	719.43409
5	1	1	1	-1	6	0	0	1	1	7	509.00180	-0.00021	1242.31065	733.30864
6	1	1	1	-1	7	0	0	1	1	8	507.08696*	0.00184	1256.24984	749.16472W
7	1	1	1	-1	8	0	0	1	1	9	505.17916	-0.00008	1272.18137	767.00212
8	1	1	1	-1	9	0	0	1	1	10	503.28510	0.00008	1290.10561	786.82059
9	1	1	1	-1	10	0	0	1	1	11	501.40256	-0.00057	1310.02298	808.61985
10	1	1	1	-1	11	0	0	1	1	12	499.53248*	-0.00184	1331.93393	832.39961W
11	1	1	1	-1	12	0	0	1	1	13	497.67889	-0.00048	1355.83891	858.15954
12	1	1	1	-1	13	0	0	1	1	14	495.83905	-0.00002	1381.73835	885.89928
13	1	1	1	-1	14	0	0	1	1	15	494.01374	-0.00048	1409.63267	915.61845
14	1	1	1	-1	15	0	0	1	1	16	492.20539	-0.00021	1439.52224	947.31664
15	1	1	1	-1	16	0	0	1	1	17	490.41312	-0.00084	1471.40738	980.99342
16	1	1	1	-1	17	0	0	1	1	18	488.63970	-0.00027	1505.28829	1016.64832
17	1	1	1	-1	3	0	0	1	1	2	528.68897	-0.00018	1212.44377	683.75462
18	1	1	1	-1	4	0	0	1	1	3	530.70588	-0.00061	1220.40789	689.70140
19	1	1	1	-1	5	0	0	1	1	4	532.73346	0.00035	1230.36343	697.63032
20	1	1	1	-1	6	0	0	1	1	5	534.76910	-0.00029	1242.31065	707.54126
21	1	1	1	-1	7	0	0	1	1	6	536.81586	0.00010	1256.24984	719.43409
22	1	1	1	-1	8	0	0	1	1	7	538.87246	-0.00027	1272.18137	733.30864
23	1	1	1	-1	9	0	0	1	1	8	540.94185*	0.00097	1290.10561	749.16472
24	1	1	1	-1	10	0	0	1	1	9	543.02063	-0.00023	1310.02298	767.00212
25	1	1	1	-1	11	0	0	1	1	10	545.11322	-0.00012	1331.93393	786.82059
26	1	1	1	-1	12	0	0	1	1	11	547.21875	-0.00030	1355.83891	808.61985
27	1	1	1	-1	13	0	0	1	1	12	549.33872	-0.00002	1381.73835	832.39961
28	1	1	1	-1	14	0	0	1	1	13	551.47296	-0.00017	1409.63267	858.15954
29	1	1	1	-1	15	0	0	1	1	14	553.62310*	0.00013	1439.52224	885.89928
30	1	1	1	-1	16	0	0	1	1	15	555.78894	0.00001	1471.40738	915.61845
31	1	1	1	-1	17	0	0	1	1	16	557.97120	-0.00045	1505.28829	947.31664
32	1	1	1	-1	18	0	0	1	1	17	560.17126	-0.00042	1541.16510	980.99342
33	1	1	1	-1	19	0	0	1	1	18	562.38940	-0.00011	1579.03782	1016.64832
34	1	1	1	-1	20	0	0	1	1	19	564.62585	0.00034	1618.90635	1054.28084
35	1	1	1	-1	21	0	0	1	1	20	566.87921	-0.00076	1660.77045	1093.89049
36	1	1	1	-1	1	0	0	1	-1	1	522.69125	-0.00065	1202.48900	679.79710
37	1	1	1	-1	2	0	0	1	-1	2	522.69464	-0.00044	1206.47085	683.77578
38	1	1	1	-1	3	0	0	1	-1	3	522.70050	0.00045	1212.44377	689.74371
39	1	1	1	-1	4	0	0	1	-1	4	522.70715	0.00009	1220.40789	697.70083
40	1	1	1	-1	5	0	0	1	-1	5	522.71680	0.00039	1230.36343	707.64702
41	1	1	1	-1	7	0	0	1	-1	7	522.74374	-0.00007	1256.24984	733.50603
42	1	1	1	-1	8	0	0	1	-1	8	522.76326	0.00039	1272.18137	749.41849
43	1	1	1	-1	9	0	0	1	-1	9	522.78567	-0.00064	1290.10561	767.31930
44	1	1	1	-1	10	0	0	1	-1	10	522.81220*	-0.00258	1310.02298	787.20820W
45	1	1	1	-1	11	0	0	1	-1	11	522.84934	0.00033	1331.93393	809.08492
46	1	1	1	-1	12	0	0	1	-1	12	522.88953	-0.00022	1355.83891	832.94916
47	1	1	1	-1	13	0	0	1	-1	13	522.93769	-0.00009	1381.73835	858.80057
48	1	1	1	-1	14	0	0	1	-1	14	522.99343	-0.00044	1409.63267	886.63880
49	1	1	1	-1	15	0	0	1	-1	15	0 URL: http://mc.manuscriptcentral.com/tmpl439.52224		916.46345	

1	1	1	-1	16	0	0	1	-1	16	523.13311	-0.00015	1471.40738	948.27412
1	1	1	-1	17	0	0	1	-1	17	523.21788	-0.00006	1505.28829	982.07035
1	1	1	-1	18	0	0	1	-1	18	523.31388	0.00045	1541.16510	1017.85167
1	1	1	-1	19	0	0	1	-1	19	523.41996	-0.00028	1579.03782	1055.61759
1	1	1	-1	20	0	0	1	-1	20	523.53864	-0.00015	1618.90635	1095.36757
1	1	1	-1	21	0	0	1	-1	21	523.66934	-0.00006	1660.77045	1137.10105
1	1	1	-1	22	0	0	1	-1	22	523.81221	-0.00010	1704.62977	1180.81746
1	1	1	-1	23	0	0	1	-1	23	523.96738	-0.00027	1750.48383	1226.51618
1	1	1	-1	24	0	0	1	-1	24	524.13522	-0.00027	1798.33206	1274.19657
1	1	1	-1	25	0	0	1	-1	25	524.31573	-0.00008	1848.17378	1323.85797
1	1	1	-1	26	0	0	1	-1	26	524.50910	0.00054	1900.00824	1375.49968
1	1	1	-1	27	0	0	1	-1	27	524.71368	0.00005	1953.83461	1429.12098

rms = 0.00034 cm⁻¹

	$v_4' \ell_4' v_5' \ell_5' J'$	$v_4'' \ell_4'' v_5'' \ell_5'' J''$	OBS	OBS - CALC	E'	E''
1	-1 1 1 5	0 0 1 -1 6	506.44549	0.00030	1226.02734	719.58215
1	-1 1 1 6	0 0 1 -1 7	504.46677	0.00006	1237.97275	733.50603
1	-1 1 1 7	0 0 1 -1 8	502.49026	-0.00004	1251.90880	749.41849
1	-1 1 1 8	0 0 1 -1 9	500.51585	-0.00022	1267.83537	767.31930
1	-1 1 1 9	0 0 1 -1 10	498.54474	0.00063	1285.75232	787.20820
1	-1 1 1 10	0 0 1 -1 11	496.57474	0.00019	1305.65948	809.08492
1	-1 1 1 11	0 0 1 -1 12	494.60740	-0.00011	1327.55666	832.94916
1	-1 1 1 12	0 0 1 -1 13	492.64301	-0.00008	1351.44366	858.80057
1	-1 1 1 14	0 0 1 -1 15	488.72250	-0.00010	1405.18605	916.46345
1	-1 1 1 15	0 0 1 -1 16	486.76698	0.00024	1435.04086	948.27412
1	-1 1 1 17	0 0 1 -1 18	482.86634*	0.00208	1500.71593	1017.85167W
1	-1 1 1 18	0 0 1 -1 19	480.91766	-0.00011	1536.53536	1055.61759
1	-1 1 1 19	0 0 1 -1 20	478.97504	0.00050	1574.34210	1095.36757
1	-1 1 1 20	0 0 1 -1 21	477.03448	-0.00010	1614.13563	1137.10105
1	-1 1 1 4	0 0 1 -1 3	526.32955	0.00058	1216.07268	689.74371
1	-1 1 1 5	0 0 1 -1 4	528.32672	0.00021	1226.02734	697.70083
1	-1 1 1 6	0 0 1 -1 5	530.32538	-0.00034	1237.97275	707.64702
1	-1 1 1 7	0 0 1 -1 6	532.32611	-0.00054	1251.90880	719.58215
1	-1 1 1 8	0 0 1 -1 7	534.32947	0.00014	1267.83537	733.50603
1	-1 1 1 9	0 0 1 -1 8	536.33398	0.00016	1285.75232	749.41849
1	-1 1 1 10	0 0 1 -1 9	538.34006	-0.00012	1305.65948	767.31930
1	-1 1 1 11	0 0 1 -1 10	540.34851	0.00005	1327.55666	787.20820
1	-1 1 1 12	0 0 1 -1 11	542.35825	-0.00048	1351.44366	809.08492
1	-1 1 1 13	0 0 1 -1 12	544.37122	0.00016	1377.32021	832.94916
1	-1 1 1 14	0 0 1 -1 13	546.38525	-0.00024	1405.18605	858.80057
1	-1 1 1 15	0 0 1 -1 14	548.40186	-0.00021	1435.04086	886.63880
1	-1 1 1 17	0 0 1 -1 16	552.44185	0.00004	1500.71593	948.27412
1	-1 1 1 19	0 0 1 -1 18	556.49036	-0.00007	1574.34210	1017.85167
1	-1 1 1 20	0 0 1 -1 19	558.51750	-0.00054	1614.13563	1055.61759
1	-1 1 1 21	0 0 1 -1 20	560.54908*	0.00125	1655.91539	1095.36757W
1	-1 1 1 1	0 0 1 1 1	518.36328	-0.00060	1198.15393	679.79005
1	-1 1 1 2	0 0 1 1 2	518.38121	-0.00009	1202.13592	683.75462
1	-1 1 1 5	0 0 1 1 5	518.48587	-0.00021	1226.02734	707.54126
1	-1 1 1 6	0 0 1 1 6	518.53860	-0.00006	1237.97275	719.43409
1	-1 1 1 7	0 0 1 1 7	518.60002	-0.00014	1251.90880	733.30864
1	-1 1 1 8	0 0 1 1 8	518.67057	-0.00007	1267.83537	749.16472
1	-1 1 1 9	0 0 1 1 9	518.75029	0.00010	1285.75232	767.00212
1	-1 1 1 10	0 0 1 1 10	518.83870	-0.00019	1305.65948	786.82059
1	-1 1 1 11	0 0 1 1 11	518.93677	-0.00004	1327.55666	808.61985
1	-1 1 1 12	0 0 1 1 12	519.04390	-0.00014	1351.44366	832.39961
1	-1 1 1 13	0 0 1 1 13	519.16055	-0.00012	1377.32021	858.15954
1	-1 1 1 14	0 0 1 1 14	519.28679	0.00002	1405.18605	885.89928
1	-1 1 1 15	0 0 1 1 15	519.42182	-0.00059	1435.04086	915.61845
1	-1 1 1 16	0 0 1 1 16	519.56755	-0.00010	1466.88429	947.31664
1	-1 1 1 17	0 0 1 1 17	519.72247	-0.00004	1500.71593	980.99342
1	-1 1 1 18	0 0 1 1 18	519.88675	-0.00030	1536.53536	1016.64832
1	-1 1 1 19	0 0 1 1 19	520.05873*	-0.00253	1574.34210	1054.28084W
1	-1 1 1 20	0	URL: http://mc.manuscriptcentral.com/andf/tmp614.13563			1093.89049

1	-1	1	1	21	0	0	1	1	21	520.43840	-0.00030	1655.91539	1135.47669
1	-1	1	1	22	0	0	1	1	22	520.64148	-0.00042	1699.68079	1179.03889
1	-1	1	1	24	0	0	1	1	24	521.07764	0.00055	1793.16594	1272.08885

rms = 0.00029 cm⁻¹ $v_4 + v_5 (\Delta) \leftarrow v_5 (\Pi)$

v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	1	1	5	0	0	1	1	6	506.17606	-0.00007	1225.61022	719.43409
1	1	1	1	6	0	0	1	1	7	504.24359	-0.00005	1237.55228	733.30864
1	1	1	1	7	0	0	1	1	8	502.31816	-0.00016	1251.48305	749.16472
1	1	1	1	8	0	0	1	1	9	500.39950	-0.00015	1267.40177	767.00212
1	1	1	1	10	0	0	1	1	11	496.57977	-0.00001	1305.19963	808.61985
1	1	1	1	11	0	0	1	1	12	494.67699	-0.00023	1327.07683	832.39961
1	1	1	1	12	0	0	1	1	13	492.77880	0.00021	1350.93813	858.15954
1	1	1	1	13	0	0	1	1	14	490.88265	-0.00047	1376.78240	885.89928
1	1	1	1	14	0	0	1	1	15	488.99060	0.00055	1404.60850	915.61845
1	1	1	1	15	0	0	1	1	16	487.09850	-0.00012	1434.41526	947.31664
1	1	1	1	16	0	0	1	1	17	485.20832	0.00022	1466.20152	980.99342
1	1	1	1	17	0	0	1	1	18	483.31749	-0.00033	1499.96614	1016.64832
1	1	1	1	18	0	0	1	1	19	481.42714	-0.00006	1535.70804	1054.28084
1	1	1	1	19	0	0	1	1	20	479.53594	0.00023	1573.42620	1093.89049
1	1	1	1	20	0	0	1	1	21	477.64233*	-0.00060	1613.11962	1135.47669
1	1	1	1	21	0	0	1	1	22	475.74911	0.00057	1654.78743	1179.03889
1	1	1	1	22	0	0	1	1	23	473.85262	0.00034	1698.42877	1224.57649
1	1	1	1	23	0	0	1	1	24	471.95428	0.00026	1744.04287	1272.08885
1	1	1	1	24	0	0	1	1	25	470.05398	0.00031	1791.62900	1321.57533
1	1	1	1	2	0	0	1	1	1	521.93188	-0.00026	1201.72219	679.79005
1	1	1	1	3	0	0	1	1	2	523.93984	-0.00023	1207.69469	683.75462
1	1	1	1	5	0	0	1	1	4	527.97980	-0.00010	1225.61022	697.63032
1	1	1	1	6	0	0	1	1	5	530.01088	-0.00014	1237.55228	707.54126
1	1	1	1	7	0	0	1	1	6	532.04872	-0.00024	1251.48305	719.43409
1	1	1	1	8	0	0	1	1	7	534.09302	-0.00011	1267.40177	733.30864
1	1	1	1	9	0	0	1	1	8	536.14280	-0.00008	1285.30761	749.16472
1	1	1	1	10	0	0	1	1	9	538.19733	-0.00018	1305.19963	767.00212
1	1	1	1	11	0	0	1	1	10	540.25609	-0.00015	1327.07683	786.82059
1	1	1	1	12	0	0	1	1	11	542.31817	-0.00010	1350.93813	808.61985
1	1	1	1	13	0	0	1	1	12	544.38280	0.00001	1376.78240	832.39961
1	1	1	1	14	0	0	1	1	13	546.44899	0.00003	1404.60850	858.15954
1	1	1	1	15	0	0	1	1	14	548.51581	-0.00017	1434.41526	885.89928
1	1	1	1	16	0	0	1	1	15	550.58402*	0.00095	1466.20152	915.61845
1	1	1	1	17	0	0	1	1	16	552.64943	-0.00007	1499.96614	947.31664
1	1	1	1	18	0	0	1	1	17	554.71434	-0.00029	1535.70804	980.99342
1	1	1	1	19	0	0	1	1	18	556.77780	-0.00008	1573.42620	1016.64832
1	1	1	1	20	0	0	1	1	19	558.83895	0.00017	1613.11962	1054.28084
1	1	1	1	21	0	0	1	1	20	560.89679	-0.00015	1654.78743	1093.89049
1	1	1	1	22	0	0	1	1	21	562.95189	-0.00019	1698.42877	1135.47669
1	1	1	1	23	0	0	1	1	22	565.00379	-0.00018	1744.04287	1179.03889
1	1	1	1	24	0	0	1	1	23	567.05238	-0.00013	1791.62900	1224.57649
1	1	1	1	25	0	0	1	1	24	569.09741	-0.00021	1841.18647	1272.08885
1	1	1	1	26	0	0	1	1	25	571.13895	-0.00035	1892.71462	1321.57533
1	1	1	1	27	0	0	1	1	26	573.17737	-0.00021	1946.21281	1373.03523
1	1	1	1	28	0	0	1	1	27	575.21179	-0.00076	2001.68041	1426.46786
1	1	1	1	29	0	0	1	1	28	577.24390	-0.00040	2059.11678	1481.87248
1	1	1	1	30	0	0	1	1	29	579.27232	-0.00061	2118.52125	1539.24832
1	1	1	1	2	0	0	1	-1	2	517.94653	0.00011	1201.72219	683.77578
1	1	1	1	3	0	0	1	-1	3	517.95154*	0.00057	1207.69469	689.74371
1	1	1	1	4	0	0	1	-1	4	517.95671	0.00004	1215.65751	697.70083
1	1	1	1	5	0	0	1	-1	5	517.96295	-0.00024	1225.61022	707.64702
1	1	1	1	6	0	0	1	-1	6	517.96988	-0.00025	1237.55228	719.58215
1	1	1	1	7	0	0	1	-1	7	517.97662	-0.00039	1251.48305	733.50603
1	1	1	1	8	0	0	1	-1	8	517.98254	-0.00074	1267.40177	749.41849
1	1	1	1	9	0	0	1	-1	9	517.98900	0.00069	1285.30761	767.31930
1	1	1	1	10	0	0	1	-1	10	517.99137	-0.00006	1305.19963	787.20820
1	1	1	1	11	0	0	1	-1	11	0	URL: http://mc.manuscriptcentral.com/andtmp127.07683	809.08492	

1	1	1	1	12	0	0	1	-1	12	517.98900	0.00003	1350.93813	832.94916	
2	1	1	1	13	0	0	1	-1	13	517.98254	0.00070	1376.78240	858.80057	
3	1	1	1	14	0	0	1	-1	14	517.96988	0.00017	1404.60850	886.63880	
4	1	1	1	15	0	0	1	-1	15	517.95154	-0.00027	1434.41526	916.46345	
5	1	1	1	16	0	0	1	-1	16	517.92976*	0.00236	1466.20152	948.27412W	
6	1	1	1	17	0	0	1	-1	17	517.89472*	-0.00107	1499.96614	982.07035W	
7	1	1	1	20	0	0	1	-1	20	517.75232	0.00026	1613.11962	1095.36757	
8	1	-1	1	-1	3	0	0	1	-1	4	509.99356	-0.00064	1207.69503	697.70083
9	1	-1	1	-1	4	0	0	1	-1	5	508.01152	0.00001	1215.65854	707.64702
10	1	-1	1	-1	5	0	0	1	-1	6	506.03000	-0.00048	1225.61262	719.58215
11	1	-1	1	-1	6	0	0	1	-1	7	504.05111	0.00006	1237.55708	733.50603
12	1	-1	1	-1	8	0	0	1	-1	9	500.09674	-0.00012	1267.41616	767.31930
13	1	-1	1	-1	9	0	0	1	-1	10	498.12182	-0.00015	1285.33018	787.20820
14	1	-1	1	-1	10	0	0	1	-1	11	496.14835	-0.00013	1305.23340	809.08492
15	1	-1	1	-1	11	0	0	1	-1	12	494.17451*	-0.00179	1327.12545	832.94916W
16	1	-1	1	-1	12	0	0	1	-1	13	492.20539	0.00004	1351.00592	858.80057
17	1	-1	1	-1	13	0	0	1	-1	14	490.23538	-0.00019	1376.87436	886.63880
18	1	-1	1	-1	14	0	0	1	-1	15	488.26723	0.00035	1404.73033	916.46345
19	1	-1	1	-1	15	0	0	1	-1	16	486.29935	0.00013	1434.57334	948.27412
20	1	-1	1	-1	16	0	0	1	-1	17	484.33310	0.00056	1466.40289	982.07035
21	1	-1	1	-1	17	0	0	1	-1	18	482.36718	0.00039	1500.21846	1017.85167
22	1	-1	1	-1	18	0	0	1	-1	19	480.40191	-0.00004	1536.01954	1055.61759
23	1	-1	1	-1	19	0	0	1	-1	20	478.43808	0.00009	1573.80556	1095.36757
24	1	-1	1	-1	20	0	0	1	-1	21	476.47464	-0.00028	1613.57597	1137.10105
25	1	-1	1	-1	21	0	0	1	-1	22	474.51220	-0.00054	1655.33020	1180.81746
26	1	-1	1	-1	22	0	0	1	-1	23	472.55248	0.00101	1699.06765	1226.51618W
27	1	-1	1	-1	2	0	0	1	-1	1	521.92504	-0.00012	1201.72226	679.79710
28	1	-1	1	-1	3	0	0	1	-1	2	523.91880	-0.00045	1207.69503	683.77578
29	1	-1	1	-1	4	0	0	1	-1	3	525.91468	-0.00014	1215.65854	689.74371
30	1	-1	1	-1	5	0	0	1	-1	4	527.91045*	-0.00134	1225.61262	697.70083W
31	1	-1	1	-1	6	0	0	1	-1	5	529.91001	-0.00005	1237.55708	707.64702
32	1	-1	1	-1	7	0	0	1	-1	6	531.90955	0.00001	1251.49169	719.58215
33	1	-1	1	-1	8	0	0	1	-1	7	533.91007	-0.00005	1267.41616	733.50603
34	1	-1	1	-1	9	0	0	1	-1	8	535.91168	0.00000	1285.33018	749.41849
35	1	-1	1	-1	10	0	0	1	-1	9	537.91369	-0.00041	1305.23340	767.31930
36	1	-1	1	-1	11	0	0	1	-1	10	539.91719	-0.00006	1327.12545	787.20820
37	1	-1	1	-1	12	0	0	1	-1	11	541.92086	-0.00014	1351.00592	809.08492
38	1	-1	1	-1	13	0	0	1	-1	12	543.92518	-0.00003	1376.87436	832.94916
39	1	-1	1	-1	14	0	0	1	-1	13	545.92978	0.00002	1404.73033	858.80057
40	1	-1	1	-1	15	0	0	1	-1	14	547.93442	-0.00012	1434.57334	886.63880
41	1	-1	1	-1	16	0	0	1	-1	15	549.93941	-0.00003	1466.40289	916.46345
42	1	-1	1	-1	17	0	0	1	-1	16	551.94445	0.00011	1500.21846	948.27412
43	1	-1	1	-1	18	0	0	1	-1	17	553.94915	-0.00004	1536.01954	982.07035
44	1	-1	1	-1	19	0	0	1	-1	18	555.95381	-0.00008	1573.80556	1017.85167
45	1	-1	1	-1	20	0	0	1	-1	19	557.95846	0.00007	1613.57597	1055.61759
46	1	-1	1	-1	21	0	0	1	-1	20	559.96251	-0.00013	1655.33020	1095.36757
47	1	-1	1	-1	22	0	0	1	-1	21	561.96711	0.00051	1699.06765	1137.10105
48	1	-1	1	-1	23	0	0	1	-1	22	563.96995	-0.00029	1744.78769	1180.81746
49	1	-1	1	-1	24	0	0	1	-1	23	565.97343	-0.00009	1792.48970	1226.51618
50	1	-1	1	-1	25	0	0	1	-1	24	567.97620	-0.00024	1842.17301	1274.19657
51	1	-1	1	-1	26	0	0	1	-1	25	569.97821	-0.00076	1893.83694	1323.85797
52	1	-1	1	-1	27	0	0	1	-1	26	571.98059	-0.00049	1947.48076	1375.49968
53	1	-1	1	-1	28	0	0	1	-1	27	573.98235	-0.00042	2003.10374	1429.12098
54	1	-1	1	-1	29	0	0	1	-1	28	575.98386	-0.00015	2060.70512	1484.72111
55	1	-1	1	-1	30	0	0	1	-1	29	577.98474	-0.00004	2120.28409	1542.29931
56	1	-1	1	-1	4	0	0	1	1	4	518.02867	0.00045	1215.65854	697.63032
57	1	-1	1	-1	5	0	0	1	1	5	518.07129	-0.00007	1225.61262	707.54126
58	1	-1	1	-1	6	0	0	1	1	6	518.12285	-0.00015	1237.55708	719.43409
59	1	-1	1	-1	7	0	0	1	1	7	518.18282	-0.00023	1251.49169	733.30864
60	1	-1	1	-1	8	0	0	1	1	8	518.25139	-0.00004	1267.41616	749.16472
1	-1	1	-1	9	0	0	1	1	9	518.32794	-0.00011	1285.33018	767.00212	
1	-1	1	-1	11	0	0	1	1	11	518.50540	-0.00020	1327.12545	808.61985	
1	-1	1	-1	12	0	0	1	1	12	518.60644	0.00013	1351.00592	832.39961	
1	-1	1	-1	13	0	0	1	1	13	518.71498	0.00015	1376.87436	858.15954	
1	-1	1	-1	14	0	0	1	1	14	518.83108	0.00003	1404.73033	885.89928	
1	-1	1	-1	15	0	0	1	1	15	518.95496	0.00007	1434.57334	915.61845	
1	-1	1	-1	16	0	0	1	1	16	519.08854*	0.00229	1466.40289	947.31664W	
1	-1	1	-1	17	0	0	1	1	17	519.22498	-0.00007	1500.21846	980.99342	
1	-1	1	-1	18	0	0	1	1	18	519.37236*	-0.00114	1536.01954	1016.64832W	

1	-1	1	-1	19	0	0	1	1	19	519.52479	0.00007	1573.80556	1054.28084
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1 rms = 0.00029 cm⁻¹

2
3
4
5 **2v₅ (Σ^+) ← v₅ (Π)**

v _{4'}	$\ell_{4'}$	v _{5'}	$\ell_{5'}$	J'	v _{4''}	$\ell_{4''}$	v _{5''}	$\ell_{5''}$	J''	OBS	OBS-CALC	E'	E''
0	0	2	0	2	0	0	1	1	1	668.40380	-0.00006	1348.19391	679.79005
0	0	2	0	3	0	0	1	1	2	670.40655	-0.00005	1354.16122	683.75462
0	0	2	0	4	0	0	1	1	3	672.41598	-0.00005	1362.11743	689.70140
0	0	2	0	5	0	0	1	1	4	674.43171	-0.00031	1372.06234	697.63032
0	0	2	0	6	0	0	1	1	5	676.45450	0.00004	1383.99572	707.54126
0	0	2	0	7	0	0	1	1	6	678.48351	0.00030	1397.91730	719.43409
0	0	2	0	8	0	0	1	1	7	680.51817	0.00006	1413.82675	733.30864
0	0	2	0	9	0	0	1	1	8	682.55876	-0.00022	1431.72370	749.16472
0	0	2	0	10	0	0	1	1	9	684.60558	-0.00004	1451.60774	767.00212
0	0	2	0	11	0	0	1	1	10	686.65777	-0.00004	1473.47840	786.82059
0	0	2	0	12	0	0	1	1	11	688.71522	-0.00010	1497.33518	808.61985
0	0	2	0	13	0	0	1	1	12	690.77780	-0.00010	1523.17752	832.39961
0	0	2	0	14	0	0	1	1	13	692.84518	-0.00010	1551.00481	858.15954
0	0	2	0	15	0	0	1	1	14	694.91709	-0.00006	1580.81643	885.89928
0	0	2	0	16	0	0	1	1	15	696.99311	-0.00011	1612.61167	915.61845
0	0	2	0	17	0	0	1	1	16	699.07310	-0.00007	1646.38981	947.31664
0	0	2	0	18	0	0	1	1	17	701.15648	-0.00017	1682.15007	980.99342
0	0	2	0	19	0	0	1	1	18	703.24324	-0.00007	1719.89163	1016.64832
0	0	2	0	20	0	0	1	1	19	705.33265	-0.00013	1759.61363	1054.28084
0	0	2	0	21	0	0	1	1	20	707.42463	-0.00005	1801.31517	1093.89049
0	0	2	0	22	0	0	1	1	21	709.51849	-0.00013	1844.99532	1135.47669
0	0	2	0	23	0	0	1	1	22	711.61403	-0.00017	1890.65309	1179.03889
0	0	2	0	24	0	0	1	1	23	713.71086	-0.00015	1938.28750	1224.57649
0	0	2	0	25	0	0	1	1	24	715.80847	-0.00016	1987.89749	1272.08885
0	0	2	0	26	0	0	1	1	25	717.90651	-0.00015	2039.48198	1321.57533
0	0	2	0	27	0	0	1	1	26	720.00490*	0.00024	2093.03990	1373.03523
0	0	2	0	28	0	0	1	1	27	722.10204	-0.00020	2148.57010	1426.46786
0	0	2	0	29	0	0	1	1	28	724.19888	-0.00008	2206.07144	1481.87248
0	0	2	0	30	0	0	1	1	29	726.29429	-0.00014	2265.54275	1539.24832
0	0	2	0	31	0	0	1	1	30	728.38805	-0.00020	2326.98286	1598.59460
0	0	2	0	32	0	0	1	1	31	730.47977	-0.00027	2390.39054	1659.91050
0	0	2	0	33	0	0	1	1	32	732.56936	-0.00007	2455.76460	1723.19517
0	0	2	0	34	0	0	1	1	33	734.65565	-0.00041	2523.10381	1788.44775
0	0	2	0	35	0	0	1	1	34	736.73970	0.00011	2592.40692	1855.66733
0	0	2	0	36	0	0	1	1	35	738.81990	0.00018	2663.67271	1924.85299
0	0	2	0	6	0	0	1	-1	6	664.41003*	-0.00354	1383.99572	719.58215W
0	0	2	0	7	0	0	1	-1	7	664.41003*	-0.00123	1397.91730	733.50603W
0	0	2	0	8	0	0	1	-1	8	664.41003*	0.00177	1413.82675	749.41849W
0	0	2	0	9	0	0	1	-1	9	664.40551	0.00111	1431.72370	767.31930W
0	0	2	0	10	0	0	1	-1	10	664.40014	0.00060	1451.60774	787.20820
0	0	2	0	11	0	0	1	-1	11	664.39371	0.00023	1473.47840	809.08492
0	0	2	0	12	0	0	1	-1	12	664.38613	0.00011	1497.33518	832.94916
0	0	2	0	13	0	0	1	-1	13	664.37696	0.00001	1523.17752	858.80057
0	0	2	0	14	0	0	1	-1	14	664.36603	0.00001	1551.00481	886.63880
0	0	2	0	15	0	0	1	-1	15	664.35298	0.00000	1580.81643	916.46345
0	0	2	0	16	0	0	1	-1	16	664.33759	0.00004	1612.61167	948.27412
0	0	2	0	17	0	0	1	-1	17	664.31947	0.00001	1646.38981	982.07035
0	0	2	0	18	0	0	1	-1	18	664.29842	0.00002	1682.15007	1017.85167
0	0	2	0	19	0	0	1	-1	19	664.27404	0.00000	1719.89163	1055.61759
0	0	2	0	20	0	0	1	-1	20	664.24604	-0.00002	1759.61363	1095.36757
0	0	2	0	21	0	0	1	-1	21	664.21408	-0.00004	1801.31517	1137.10105
0	0	2	0	22	0	0	1	-1	22	664.17786	0.00000	1844.99532	1180.81746
0	0	2	0	23	0	0	1	-1	23	664.13690	-0.00002	1890.65309	1226.51618
0	0	2	0	24	0	0	1	-1	24	664.09085	-0.00008	1938.28750	1274.19657
0	0	2	0	25	0	0	1	-1	25	664.03953	0.00001	1987.89749	1323.85797
0	0	2	0	26	0	0	1	-1	26	663.98229	-0.00002	2039.48198	1375.49968
0	0	2	0	28	0	0	1	-1	28	663.84910	0.00012	2148.57010	1484.72111
0	0	2	0	29	0	0	1	-1	29	663.77215	0.00002	2206.07144	1542.29931
0	0	2	0	30	0	URL: http://mc.maccescriptcentral.com/and/tmp265.54275						1601.85477	

1	0	0	2	0	31	0	0	1	-1	31	663.59612	-0.00009	2326.98286	1663.38664
2	0	0	2	0	32	0	0	1	-1	32	663.49650	0.00004	2390.39054	1726.89408
3	0	0	2	0	34	0	0	1	-1	34	663.27184	0.00011	2523.10381	1859.83208
4	0	0	2	0	36	0	0	1	-1	36	663.01261	0.00121	2663.67271	2000.66131W
5	0	0	2	0	0	0	0	1	1	1	662.43662	0.00022	1342.22645	679.79005
6	0	0	2	0	1	0	0	1	1	2	660.46103	0.00003	1344.21562	683.75462
7	0	0	2	0	2	0	0	1	1	3	658.49257	0.00006	1348.19391	689.70140
8	0	0	2	0	3	0	0	1	1	4	656.53093	0.00003	1354.16122	697.63032
9	0	0	2	0	4	0	0	1	1	5	654.57609	-0.00008	1362.11743	707.54126
10	0	0	2	0	5	0	0	1	1	6	652.62820	-0.00005	1372.06234	719.43409
11	0	0	2	0	6	0	0	1	1	7	650.68700	-0.00008	1383.99572	733.30864
12	0	0	2	0	7	0	0	1	1	8	648.75247	-0.00010	1397.91730	749.16472
13	0	0	2	0	8	0	0	1	1	9	646.82458	-0.00005	1413.82675	767.00212
14	0	0	2	0	9	0	0	1	1	10	644.90304	-0.00007	1431.72370	786.82059
15	0	0	2	0	10	0	0	1	1	11	642.98782	-0.00007	1451.60774	808.61985
16	0	0	2	0	11	0	0	1	1	12	641.07866	-0.00013	1473.47840	832.39961
17	0	0	2	0	12	0	0	1	1	13	639.17555	-0.00009	1497.33518	858.15954
18	0	0	2	0	13	0	0	1	1	14	637.27816	-0.00008	1523.17752	885.89928
19	0	0	2	0	14	0	0	1	1	15	635.38631	-0.00006	1551.00481	915.61845
20	0	0	2	0	15	0	0	1	1	16	633.49969	-0.00010	1580.81643	947.31664
21	0	0	2	0	16	0	0	1	1	17	631.61809	-0.00017	1612.61167	980.99342
22	0	0	2	0	17	0	0	1	1	18	629.74133	-0.00017	1646.38981	1016.64832
23	0	0	2	0	18	0	0	1	1	19	627.86901	-0.00021	1682.15007	1054.28084
24	0	0	2	0	19	0	0	1	1	20	626.00102	-0.00012	1719.89163	1093.89049
25	0	0	2	0	20	0	0	1	1	21	624.13675	-0.00018	1759.61363	1135.47669
26	0	0	2	0	21	0	0	1	1	22	622.27612	-0.00015	1801.31517	1179.03889
27	0	0	2	0	22	0	0	1	1	23	620.41867	-0.00016	1844.99532	1224.57649
28	0	0	2	0	23	0	0	1	1	24	618.56404	-0.00020	1890.65309	1272.08885
29	0	0	2	0	24	0	0	1	1	25	616.71208	-0.00009	1938.28750	1321.57533
30	0	0	2	0	25	0	0	1	1	26	614.86220	-0.00005	1987.89749	1373.03523
31	0	0	2	0	26	0	0	1	1	27	613.01406	-0.00006	2039.48198	1426.46786
32	0	0	2	0	27	0	0	1	1	28	611.16709	-0.00033	2093.03990	1481.87248
33	0	0	2	0	28	0	0	1	1	29	609.32164	-0.00013	2148.57010	1539.24832
34	0	0	2	0	29	0	0	1	1	30	607.47688	0.00004	2206.07144	1598.59460
35	0	0	2	0	30	0	0	1	1	31	605.63219	-0.00006	2265.54275	1659.91050
36	0	0	2	0	31	0	0	1	1	32	603.78770	0.00002	2326.98286	1723.19517
37	0	0	2	0	32	0	0	1	1	33	601.94271	-0.00009	2390.39054	1788.44775
38	0	0	2	0	33	0	0	1	1	34	600.09780	0.00053	2455.76460	1855.66733

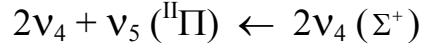
rms = 0.00015 cm⁻¹

41	2v ₅ (Δ) ← v ₅ (Π)													
42	v _{4'} l _{4'} v _{5'} l _{5'} J'	v _{4''} l _{4''} v _{5''} l _{5''} J''	OBS	OBS - CALC	E'	E''								
43	0	0	2	2	2	0	0	1	1	1	685.22346	-0.00008	1365.01359	679.79005
44	0	0	2	2	3	0	0	1	1	2	687.22343	-0.00010	1370.97815	683.75462
45	0	0	2	2	4	0	0	1	1	3	689.22933	-0.00011	1378.93084	689.70140
46	0	0	2	2	5	0	0	1	1	4	691.24119	-0.00012	1388.87163	697.63032
47	0	0	2	2	6	0	0	1	1	5	693.25915	-0.00007	1400.80048	707.54126
48	0	0	2	2	7	0	0	1	1	6	695.28312	-0.00011	1414.71732	719.43409
49	0	0	2	2	8	0	0	1	1	7	697.31330	-0.00014	1430.62208	733.30864
50	0	0	2	2	9	0	0	1	1	8	699.34989	-0.00008	1448.51470	749.16472
51	0	0	2	2	10	0	0	1	1	9	701.39287	-0.00008	1468.39508	767.00212
52	0	0	2	2	11	0	0	1	1	10	703.44237	-0.00016	1490.26312	786.82059
53	0	0	2	2	12	0	0	1	1	11	705.49873	-0.00014	1514.11873	808.61985
54	0	0	2	2	13	0	0	1	1	12	707.56206	-0.00010	1539.96178	832.39961
55	0	0	2	2	14	0	0	1	1	13	709.63245	-0.00015	1567.79214	858.15954
56	0	0	2	2	15	0	0	1	1	14	711.71031	-0.00010	1597.60969	885.89928
57	0	0	2	2	16	0	0	1	1	15	713.79574	-0.00007	1629.41426	915.61845
58	0	0	2	2	17	0	0	1	1	16	715.88901	-0.00006	1663.20571	947.31664
59	0	0	2	2	18	0	0	1	1	17	717.99034	-0.00009	1698.98385	980.99342
60	0	0	2	2	19	0	0	1	1	18	720.10010	-0.00008	1736.74850	1016.64832
	0	0	2	2	20	0	0	1	1	19	722.21858	-0.00003	1776.49946	1054.28084
	0	0	2	2	21	0	0	1	1	20	724.34595	-0.00007	1818.23651	1093.89049
	0	0	2	2	22	0	0	1	1	21	726.48262	-0.00010	1861.95941	1135.47669
	0	0	2	2	23	0	0	1	1	24	728.62009	0.00053	1903.03889	1179.03889

1	0	0	2	2	24	0	0	1	1	23	730.78522	-0.00004	1955.36175	1224.57649
2	0	0	2	2	25	0	0	1	1	24	732.95171	-0.00005	2005.04061	1272.08885
3	0	0	2	2	26	0	0	1	1	25	735.12884	-0.00001	2056.70417	1321.57533
4	0	0	2	2	27	0	0	1	1	26	737.31688	0.00002	2110.35209	1373.03523
5	0	0	2	2	28	0	0	1	1	27	739.51611	-0.00001	2165.98399	1426.46786
6	0	0	2	2	29	0	0	1	1	28	741.72699	0.00003	2223.59944	1481.87248
7	0	0	2	2	30	0	0	1	1	29	743.94972	0.00003	2283.19801	1539.24832
8	0	0	2	2	31	0	0	1	1	30	746.18476	0.00015	2344.77921	1598.59460
9	0	0	2	2	32	0	0	1	1	31	748.43230	0.00029	2408.34251	1659.91050
10	0	0	2	2	33	0	0	1	1	32	750.69230	0.00013	2473.88734	1723.19517
11	0	0	2	2	34	0	0	1	1	33	752.96550	0.00014	2541.41311	1788.44775
12	0	0	2	2	35	0	0	1	1	34	755.25230	0.00050	2610.91913	1855.66733
13	0	0	2	2	2	0	0	1	-1	2	681.23750*	-0.00032	1365.01359	683.77578
14	0	0	2	2	3	0	0	1	-1	3	681.23440*	-0.00003	1370.97815	689.74371
15	0	0	2	2	4	0	0	1	-1	4	681.23069	0.00068	1378.93084	697.70083
16	0	0	2	2	5	0	0	1	-1	5	681.22460	-0.00001	1388.87163	707.64702
17	0	0	2	2	6	0	0	1	-1	6	681.21846	0.00013	1400.80048	719.58215
18	0	0	2	2	7	0	0	1	-1	7	681.21127	-0.00001	1414.71732	733.50603
19	0	0	2	2	8	0	0	1	-1	8	681.20375	0.00016	1430.62208	749.41849
20	0	0	2	2	9	0	0	1	-1	9	681.19535	-0.00005	1448.51470	767.31930
21	0	0	2	2	10	0	0	1	-1	10	681.18651	-0.00037	1468.39508	787.20820
22	0	0	2	2	11	0	0	1	-1	11	681.17830	0.00010	1490.26312	809.08492
23	0	0	2	2	12	0	0	1	-1	12	681.16945	-0.00012	1514.11873	832.94916
24	0	0	2	2	13	0	0	1	-1	13	681.16149	0.00028	1539.96178	858.80057
25	0	0	2	2	14	0	0	1	-1	14	681.15295	-0.00040	1567.79214	886.63880
26	0	0	2	2	15	0	0	1	-1	15	681.14606	-0.00017	1597.60969	916.46345
27	0	0	2	2	16	0	0	1	-1	16	681.14100	0.00086	1629.41426	948.27412
28	0	0	2	2	17	0	0	1	-1	17	681.13540*	0.00004	1663.20571	982.07035
29	0	0	2	2	18	0	0	1	-1	18	681.13248*	0.00030	1698.98385	1017.85167
30	0	0	2	2	19	0	0	1	-1	19	681.13248*	0.00157	1736.74850	1055.61759W
31	0	0	2	2	20	0	0	1	-1	20	681.13248*	0.00059	1776.49946	1095.36757
32	0	0	2	2	21	0	0	1	-1	21	681.13540*	-0.00006	1818.23651	1137.10105
33	0	0	2	2	22	0	0	1	-1	22	681.14100*	-0.00095	1861.95941	1180.81746
34	0	0	2	2	23	0	0	1	-1	23	681.15295*	0.00121	1907.66792	1226.51618W
35	0	0	2	2	24	0	0	1	-1	24	681.16550*	0.00032	1955.36175	1274.19657
36	0	0	2	2	25	0	0	1	-1	25	681.18350*	0.00086	2005.04061	1323.85797
37	0	0	2	2	2	0	0	1	1	3	675.31216	-0.00003	1365.01359	689.70140
38	0	0	2	2	3	0	0	1	1	4	673.34771	-0.00012	1370.97815	697.63032
39	0	0	2	2	4	0	0	1	1	5	671.38949	-0.00009	1378.93084	707.54126
40	0	0	2	2	5	0	0	1	1	6	669.43747	-0.00007	1388.87163	719.43409
41	0	0	2	2	6	0	0	1	1	7	667.49174	-0.00010	1400.80048	733.30864
42	0	0	2	2	7	0	0	1	1	8	665.55254	-0.00005	1414.71732	749.16472
43	0	0	2	2	8	0	0	1	1	9	663.61990	-0.00006	1430.62208	767.00212
44	0	0	2	2	9	0	0	1	1	10	661.69138*	-0.00273	1448.51470	786.82059W
45	0	0	2	2	10	0	0	1	1	11	659.77509	-0.00013	1468.39508	808.61985
46	0	0	2	2	11	0	0	1	1	12	657.86337	-0.00014	1490.26312	832.39961
47	0	0	2	2	12	0	0	1	1	13	655.95741*	-0.00178	1514.11873	858.15954W
48	0	0	2	2	13	0	0	1	1	14	654.06237	-0.00013	1539.96178	885.89928
49	0	0	2	2	14	0	0	1	1	15	652.17356	-0.00013	1567.79214	915.61845
50	0	0	2	2	15	0	0	1	1	16	650.29294	-0.00011	1597.60969	947.31664
51	0	0	2	2	16	0	0	1	1	17	648.42075	-0.00009	1629.41426	980.99342
52	0	0	2	2	17	0	0	1	1	18	646.55727	-0.00012	1663.20571	1016.64832
53	0	0	2	2	18	0	0	1	1	19	644.70292	-0.00008	1698.98385	1054.28084
54	0	0	2	2	19	0	0	1	1	20	642.85787	-0.00014	1736.74850	1093.89049
55	0	0	2	2	20	0	0	1	1	21	641.02266	-0.00011	1776.49946	1135.47669
56	0	0	2	2	21	0	0	1	1	22	639.19807	0.00046	1818.23651	1179.03889
57	0	0	2	2	22	0	0	1	1	23	637.38284	-0.00008	1861.95941	1224.57649
58	0	0	2	2	23	0	0	1	1	24	635.57902	-0.00005	1907.66792	1272.08885
59	0	0	2	2	24	0	0	1	1	25	633.78627	-0.00015	1955.36175	1321.57533
60	0	0	2	2	25	0	0	1	1	26	632.00532	-0.00006	2005.04061	1373.03523
0	0	2	2	26	0	0	1	1	27	630.23643	0.00012	2056.70417	1426.46786	
0	0	2	2	27	0	0	1	1	28	628.47969	0.00008	2110.35209	1481.87248	
0	0	2	2	28	0	0	1	1	29	626.73545	-0.00021	2165.98399	1539.24832	
0	0	2	2	29	0	0	1	1	30	625.00530	0.00046	2223.59944	1598.59460	
0	0	2	2	30	0	0	1	1	31	623.28700	-0.00051	2283.19801	1659.91050	
0	0	2	-2	2	0	0	1	-1	1	685.21638	-0.00009	1365.01357	679.79710	
0	0	2	-2	3	0	0	1	-1	2	687.20221	-0.00007	1370.97805	683.77578	
0	0	2	-2	4	0	0	1	-1	3	689.18728	0.00043	1378.93057	689.74371	
0	0	2	-2	5	0	0	1	-1	4	691.17008	-0.00008	1388.87100	697.70083	

1	0	0	2	-2	6	0	0	1	-1	5	693.15212	-0.00006	1400.79921	707.64702
2	0	0	2	-2	7	0	0	1	-1	6	695.13324	0.00036	1414.71503	719.58215
3	0	0	2	-2	8	0	0	1	-1	7	697.11211	-0.00012	1430.61827	733.50603
4	0	0	2	-2	9	0	0	1	-1	8	699.09012	-0.00009	1448.50870	749.41849
5	0	0	2	-2	10	0	0	1	-1	9	701.06667	-0.00012	1468.38608	767.31930
6	0	0	2	-2	11	0	0	1	-1	10	703.04185	-0.00008	1490.25013	787.20820
7	0	0	2	-2	12	0	0	1	-1	11	705.01550	-0.00012	1514.10054	809.08492
8	0	0	2	-2	13	0	0	1	-1	12	706.98770	-0.00012	1539.93697	832.94916
9	0	0	2	-2	14	0	0	1	-1	13	708.95875	0.00025	1567.75907	858.80057
10	0	0	2	-2	15	0	0	1	-1	14	710.92743	-0.00022	1597.56645	886.63880
11	0	0	2	-2	16	0	0	1	-1	15	712.89525	0.00002	1629.35868	916.46345
12	0	0	2	-2	17	0	0	1	-1	16	714.86140	0.00019	1663.13533	948.27412
13	0	0	2	-2	18	0	0	1	-1	17	716.82541	-0.00015	1698.89591	982.07035
14	0	0	2	-2	19	0	0	1	-1	18	718.78826	-0.00001	1736.63994	1017.85167
15	0	0	2	-2	20	0	0	1	-1	19	720.74925	-0.00004	1776.36688	1055.61759
16	0	0	2	-2	21	0	0	1	-1	20	722.70863	0.00002	1818.07617	1095.36757
17	0	0	2	-2	22	0	0	1	-1	21	724.66621	0.00002	1861.76724	1137.10105
18	0	0	2	-2	23	0	0	1	-1	22	726.62206	0.00005	1907.43947	1180.81746
19	0	0	2	-2	24	0	0	1	-1	23	728.57607	0.00002	1955.09223	1226.51618
20	0	0	2	-2	25	0	0	1	-1	24	730.52519*	-0.00307	2004.72483	1274.19657W
21	0	0	2	-2	26	0	0	1	-1	25	732.47868	0.00005	2056.33660	1323.85797
22	0	0	2	-2	27	0	0	1	-1	26	734.42708	-0.00006	2109.92681	1375.49968
23	0	0	2	-2	28	0	0	1	-1	27	736.37379	0.00005	2165.49472	1429.12098
24	0	0	2	-2	29	0	0	1	-1	28	738.31841	-0.00001	2223.03953	1484.72111
25	0	0	2	-2	30	0	0	1	-1	29	740.26120	0.00006	2282.56045	1542.29931
26	0	0	2	-2	31	0	0	1	-1	30	742.20180	-0.00009	2344.05666	1601.85477
27	0	0	2	-2	32	0	0	1	-1	31	744.14062	-0.00001	2407.52727	1663.38664
28	0	0	2	-2	33	0	0	1	-1	32	746.07715	-0.00019	2472.97142	1726.89408
29	0	0	2	-2	34	0	0	1	-1	33	748.01210	0.00011	2540.38819	1792.37620
30	0	0	2	-2	2	0	0	1	1	2	681.25927	0.00032	1365.01357	683.75462
31	0	0	2	-2	3	0	0	1	1	3	681.27657	-0.00008	1370.97805	689.70140
32	0	0	2	-2	4	0	0	1	1	4	681.30016	-0.00009	1378.93057	697.63032
33	0	0	2	-2	5	0	0	1	1	5	681.32969	-0.00005	1388.87100	707.54126
34	0	0	2	-2	6	0	0	1	1	6	681.36504	-0.00008	1400.79921	719.43409
35	0	0	2	-2	7	0	0	1	1	7	681.40629	-0.00010	1414.71503	733.30864
36	0	0	2	-2	8	0	0	1	1	8	681.45344	-0.00010	1430.61827	749.16472
37	0	0	2	-2	9	0	0	1	1	9	681.50648	-0.00010	1448.50870	767.00212
38	0	0	2	-2	10	0	0	1	1	10	681.56538	-0.00011	1468.38608	786.82059
39	0	0	2	-2	11	0	0	1	1	11	681.63011	-0.00017	1490.25013	808.61985
40	0	0	2	-2	12	0	0	1	1	12	681.70082	-0.00011	1514.10054	832.39961
41	0	0	2	-2	13	0	0	1	1	13	681.77795*	0.00052	1539.93697	858.15954
42	0	0	2	-2	14	0	0	1	1	14	681.85964	-0.00015	1567.75907	885.89928
43	0	0	2	-2	15	0	0	1	1	15	681.94788	-0.00012	1597.56645	915.61845
44	0	0	2	-2	16	0	0	1	1	16	682.04205	0.00001	1629.35868	947.31664
45	0	0	2	-2	17	0	0	1	1	17	682.13774*	-0.00417	1663.13533	980.99342W
46	0	0	2	-2	18	0	0	1	1	18	682.24745	-0.00015	1698.89591	1016.64832
47	0	0	2	-2	19	0	0	1	1	19	682.35919	0.00009	1736.63994	1054.28084
48	0	0	2	-2	20	0	0	1	1	20	682.47650	0.00011	1776.36688	1093.89049
49	0	0	2	-2	21	0	0	1	1	21	682.59914	-0.00034	1818.07617	1135.47669
50	0	0	2	-2	22	0	0	1	1	22	682.72810	-0.00025	1861.76724	1179.03889
51	0	0	2	-2	23	0	0	1	1	23	682.86287	-0.00011	1907.43947	1224.57649
52	0	0	2	-2	24	0	0	1	1	24	683.00320	-0.00017	1955.09223	1272.08885
53	0	0	2	-2	25	0	0	1	1	25	683.14939	-0.00012	2004.72483	1321.57533
54	0	0	2	-2	26	0	0	1	1	26	683.30210	0.00073	2056.33660	1373.03523
55	0	0	2	-2	27	0	0	1	1	27	683.45782	-0.00113	2109.92681	1426.46786W
56	0	0	2	-2	28	0	0	1	1	28	683.62384*	0.00160	2165.49472	1481.87248W
57	0	0	2	-2	29	0	0	1	1	29	683.79127	0.00006	2223.03953	1539.24832
58	0	0	2	-2	30	0	0	1	1	30	683.96525	-0.00060	2282.56045	1598.59460
59	0	0	2	-2	31	0	0	1	1	31	684.14613	-0.00003	2344.05666	1659.91050
60	0	0	2	-2	32	0	0	1	1	32	684.33197	-0.00013	2407.52727	1723.19517
	0	0	2	-2	33	0	0	1	1	33	684.52349	-0.00019	2472.97142	1788.44775
	0	0	2	-2	34	0	0	1	1	34	684.72090	0.00004	2540.38819	1855.66733
	0	0	2	-2	35	0	0	1	1	35	684.92350	-0.00014	2609.77663	1924.85299
	0	0	2	-2	2	0	0	1	-1	3	675.26950*	-0.00036	1365.01357	689.74371
	0	0	2	-2	3	0	0	1	-1	4	673.27724	0.00002	1370.97805	697.70083
	0	0	2	-2	4	0	0	1	-1	5	671.28342	-0.00012	1378.93057	707.64702
	0	0	2	-2	5	0	0	1	-1	6	669.28873	-0.00012	1388.87100	719.58215
	0	0	2	-2	6	0	0	1	-1	7	667.29309	-0.00008	1400.79921	733.50603
	0	0	2	-2	7	0	0	1	-1	8	665.20635	-0.00018	1414.71503	749.41849

1	0	0	2	-2	8	0	0	1	-1	9	663.29887	-0.00010	1430.61827	767.31930
2	0	0	2	-2	9	0	0	1	-1	10	661.30043	-0.00007	1448.50870	787.20820
3	0	0	2	-2	10	0	0	1	-1	11	659.30111	-0.00005	1468.38608	809.08492
4	0	0	2	-2	11	0	0	1	-1	12	657.30093	-0.00005	1490.25013	832.94916
5	0	0	2	-2	12	0	0	1	-1	13	655.29987	-0.00010	1514.10054	858.80057
6	0	0	2	-2	13	0	0	1	-1	14	653.29810	-0.00008	1539.93697	886.63880
7	0	0	2	-2	15	0	0	1	-1	16	649.29229	-0.00004	1597.56645	948.27412
8	0	0	2	-2	16	0	0	1	-1	17	647.28807	-0.00026	1629.35868	982.07035
9	0	0	2	-2	18	0	0	1	-1	19	643.27831	-0.00001	1698.89591	1055.61759
10	0	0	2	-2	19	0	0	1	-1	20	641.27234	-0.00003	1736.63994	1095.36757
11	0	0	2	-2	20	0	0	1	-1	21	639.26582	-0.00001	1776.36688	1137.10105
12	0	0	2	-2	21	0	0	1	-1	22	637.25866	-0.00006	1818.07617	1180.81746
13	0	0	2	-2	22	0	0	1	-1	23	635.25107	0.00001	1861.76724	1226.51618
14	0	0	2	-2	23	0	0	1	-1	24	633.24290	0.00000	1907.43947	1274.19657
15	0	0	2	-2	24	0	0	1	-1	25	631.23432	0.00006	1955.09223	1323.85797
16	0	0	2	-2	25	0	0	1	-1	26	629.22529	0.00013	2004.72483	1375.49968
17	0	0	2	-2	26	0	0	1	-1	27	627.21571	0.00008	2056.33660	1429.12098
18	0	0	2	-2	27	0	0	1	-1	28	625.20588	0.00018	2109.92681	1484.72111
19	0	0	2	-2	28	0	0	1	-1	29	623.19524	-0.00016	2165.49472	1542.29931
20	0	0	2	-2	29	0	0	1	-1	30	621.18431	-0.00045	2223.03953	1601.85477
21	0	0	2	-2	30	0	0	1	-1	31	619.17380	-0.00001	2282.56045	1663.38664
22	0	0	2	-2	31	0	0	1	-1	32	617.16310	0.00053	2344.05666	1726.89408

rms = 0.00019 cm⁻¹

v _{4'}	l _{4'}	v _{5'}	l _{5'}	J'	v _{4''}	l _{4''}	v _{5''}	l _{5''}	J''	OBS	OBS - CALC	E'	E''
2	0	1	1	1	2	0	0	0	2	674.24970	-0.00059	1714.16707	1039.91679
31	2	0	1	1	2	2	0	0	3	672.26431	0.00002	1718.16218	1045.89789
32	2	0	1	1	3	2	0	0	4	670.28258	0.00005	1724.15462	1053.87209
33	2	0	1	1	4	2	0	0	5	668.30523	-0.00003	1732.14413	1063.83887
34	2	0	1	1	5	2	0	0	6	666.33271	-0.00005	1742.13035	1075.79759
35	2	0	1	1	6	2	0	0	7	664.36603*	0.00067	1754.11283	1089.74746
36	2	0	1	1	7	2	0	0	8	662.40327	-0.00012	1768.09099	1105.68761
37	2	0	1	1	8	2	0	0	9	660.44688	-0.00029	1784.06418	1123.61701
38	2	0	1	1	9	2	0	0	10	658.49700*	-0.00003	1802.03159	1143.53456
39	2	0	1	1	10	2	0	0	11	656.55297	-0.00028	1821.99232	1165.43907
40	2	0	1	1	11	2	0	0	12	654.61576	-0.00030	1843.94531	1189.32925
41	2	0	1	1	12	2	0	0	13	652.68526	-0.00032	1867.88938	1215.20380
42	2	0	1	1	13	2	0	0	14	650.76129	-0.00055	1893.82321	1243.06138
43	2	0	1	1	14	2	0	0	15	648.84435	-0.00033	1921.74533	1272.90065
44	2	0	1	1	15	2	0	0	16	646.93340	-0.00041	1951.65414	1304.72033
45	2	0	1	1	16	2	0	0	17	645.02870	-0.00005	1983.54793	1338.51918
46	2	0	1	1	17	2	0	0	18	643.12624*	-0.00260	2017.42488	1374.29604W
47	2	0	1	1	18	2	0	0	19	641.23295	-0.00031	2053.28311	1412.04985
48	2	0	1	1	19	2	0	0	20	639.34089	-0.00019	2091.12070	1451.77962
49	2	0	1	1	20	2	0	0	21	637.45100	-0.00027	2130.93576	1493.48450
50	2	0	1	1	21	2	0	0	22	635.56269	-0.00006	2172.72643	1537.16368
51	2	0	1	1	22	2	0	0	23	633.67227*	-0.00223	2216.49097	1582.81646W
52	2	0	1	1	23	2	0	0	24	631.78555	0.00002	2262.22772	1630.44219
53	2	0	1	1	1	2	0	0	0	680.23260	0.00082	1714.16707	1033.93529
54	2	0	1	1	2	2	0	0	1	682.23302	0.00001	1718.16218	1035.92917
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56	2	0	1	1	4	2	0	0	3	686.24653	0.00029	1732.14413	1045.89789
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7	2	0	1	1	22	2	0	0	0	21	723.00623	-0.00024	2216.49097	1493.48450
8	2	0	1	1	23	2	0	0	0	22	725.06382	-0.00022	2262.22772	1537.16368
9	2	0	1	1	24	2	0	0	0	23	727.11868	-0.00006	2309.93520	1582.81646
10	2	0	1	-1	1	2	0	0	0	1	678.23780*	0.00201	1714.16495	1035.92917W
11	2	0	1	-1	2	2	0	0	0	2	678.23780*	-0.00123	1718.15582	1039.91679W
12	2	0	1	-1	3	2	0	0	0	3	678.24388	-0.00012	1724.14189	1045.89789
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14	2	0	1	-1	5	2	0	0	0	5	678.25890*	-0.00076	1742.09853	1063.83887
15	2	0	1	-1	6	2	0	0	0	6	678.27102	0.00027	1754.06834	1075.79759
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38	2	0	1	-1	29	2	0	0	0	29	680.06910	-0.00007	2578.21342	1898.14425

rms = 0.00030 cm⁻¹2v₄ + v₅ (Φ) ← 2v₄ (Δ)

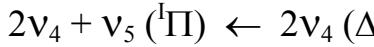
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Molecular Physics

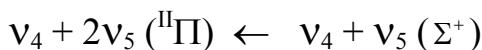
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22	2	-2	1	-1	26	2	-2	0	0	25	729.45016*	0.00012	2415.46670	1686.01666
23	2	-2	1	-1	27	2	-2	0	0	26	731.47436	0.00061	2469.23024	1737.75648
24	2	-2	1	-1	28	2	-2	0	0	27	733.49400	-0.00043	2524.97386	1791.47943
25	2	-2	1	-1	29	2	-2	0	0	28	735.51180	-0.00003	2582.69655	1847.18472
26	2	-2	1	-1	30	2	-2	0	0	29	737.52610	0.00036	2642.39729	1904.87155
27	2	2	1	1	3	2	-2	0	0	3	676.89195	-0.00111	1727.57314	1050.68009W
28	2	2	1	1	4	2	-2	0	0	4	676.90293*	-0.00104	1735.55671	1058.65275W
29	2	2	1	1	5	2	-2	0	0	5	676.91700*	-0.00070	1745.53606	1068.61835
30	2	2	1	1	6	2	-2	0	0	6	676.93430	-0.00004	1757.51111	1080.57677
31	2	2	1	1	7	2	-2	0	0	7	676.95460*	0.00062	1771.48179	1094.52781
32	2	2	1	1	8	2	-2	0	0	8	676.97959*	0.00282	1787.44806	1110.47128W
33	2	2	1	1	9	2	-2	0	0	9	677.00290	0.00001	1805.40985	1128.40695
34	2	2	1	1	10	2	-2	0	0	10	677.03269	0.00012	1825.36714	1148.33456
35	2	2	1	1	11	2	-2	0	0	11	677.06602	-0.00009	1847.31994	1170.25382
36	2	2	1	1	12	2	-2	0	0	12	677.10575*	0.00188	1871.26829	1194.16442W
37	2	2	1	1	13	2	-2	0	0	13	677.14626	-0.00002	1897.21228	1220.06599
38	2	2	1	1	14	2	-2	0	0	14	677.19420*	0.00034	1925.15205	1247.95819
39	2	2	1	1	15	2	-2	0	0	15	677.24754	0.00033	1955.08779	1277.84059
40	2	2	1	1	16	2	-2	0	0	16	677.30693	-0.00004	1987.01973	1309.71276
41	2	2	1	1	17	2	-2	0	0	17	677.37396	0.00010	2020.94812	1343.57425
42	2	2	1	1	18	2	-2	0	0	18	677.44928	0.00063	2056.87321	1379.42457
43	2	2	1	1	19	2	-2	0	0	19	677.53220	0.00013	2094.79526	1417.26319
44	2	2	1	1	20	2	-2	0	0	20	677.62345*	-0.00141	2134.71443	1457.08957W
45	2	2	1	1	21	2	-2	0	0	21	677.72819	0.00049	2176.63083	1498.90313
46	2	2	1	1	22	2	-2	0	0	22	677.84540*	0.00423	2220.54443	1542.70326W

rms = 0.00034 cm⁻¹

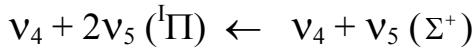
51	v _{4'}	l _{4'}	v _{5'}	l _{5'}	J'	v _{4''}	l _{4''}	v _{5''}	l _{5''}	J''	OBS	OBS - CALC	E'	E''
52	2	2	1	-1	1	2	2	0	0	2	679.76212	0.00014	1724.46257	1044.70059
53	2	2	1	-1	2	2	2	0	0	3	677.76478	0.00023	1728.44514	1050.68059
54	2	2	1	-1	3	2	2	0	0	4	675.76492	0.00013	1734.41904	1058.65425
55	2	2	1	-1	4	2	2	0	0	5	673.76265	0.00019	1742.38433	1068.62187
56	2	2	1	-1	5	2	2	0	0	6	671.75712	-0.00015	1752.34107	1080.58379
57	2	2	1	-1	6	2	2	0	0	7	669.74895	0.00007	1764.28934	1094.54045
58	2	2	1	-1	7	2	2	0	0	8	667.73661	-0.00031	1778.22926	1110.49234
59	2	2	1	-1	8	2	2	0	0	9	665.72083	-0.00012	1794.16094	1128.43999
60	2	2	1	-1	9	2	2	0	0	10	663.70024	-0.00029	1812.08452	1148.38399
	2	2	1	-1	10	2	2	0	0	11	661.67508	-0.00011	1832.00016	1170.32497
	2	2	1	-1	11	2	2	0	0	12	659.64442	-0.00004	1853.90802	1194.26357
	2	2	1	-1	12	2	2	0	0	13	657.60782	-0.00007	1877.80829	1220.20039
	2	2	1	-1	13	2	2	0	0	14	655.56507	-0.00003	1903.70113	1248.13603
	2	2	1	-1	14	2	2	0	0	15	653.51560	-0.00026	1931.58675	1278.07100

1	2	2	1	-1	7	2	2	0	0	6	697.64531	-0.00015	1778.22926	1080.58379
2	2	2	1	-1	9	2	2	0	0	8	701.59194	-0.00025	1812.08452	1110.49234
3	2	2	1	-1	10	2	2	0	0	9	703.55967	-0.00051	1832.00016	1128.43999
4	2	2	1	-1	11	2	2	0	0	10	705.52377	-0.00026	1853.90802	1148.38399
5	2	2	1	-1	3	2	-2	0	0	3	683.73882	-0.00014	1734.41904	1050.68009
6	2	2	1	-1	4	2	-2	0	0	4	683.73208	0.00050	1742.38433	1058.65275
7	2	2	1	-1	5	2	-2	0	0	5	683.72248	-0.00023	1752.34107	1068.61835
8	2	2	1	-1	6	2	-2	0	0	6	683.71382	0.00125	1764.28934	1080.57677W
9	2	2	1	-1	7	2	-2	0	0	7	683.70134	-0.00011	1778.22926	1094.52781
10	2	2	1	-1	8	2	-2	0	0	8	683.68970	0.00004	1794.16094	1110.47128
11	2	2	1	-1	9	2	-2	0	0	9	683.67713	-0.00044	1812.08452	1128.40695
12	2	2	1	-1	10	2	-2	0	0	10	683.66600	0.00040	1832.00016	1148.33456
13	2	2	1	-1	11	2	-2	0	0	11	683.65410	-0.00010	1853.90802	1170.25382
14	2	2	1	-1	12	2	-2	0	0	12	683.64393	0.00006	1877.80829	1194.16442
15	2	2	1	-1	13	2	-2	0	0	13	683.63542	0.00028	1903.70113	1220.06599
16	2	2	1	-1	14	2	-2	0	0	14	683.62746	-0.00110	1931.58675	1247.95819W
17	2	2	1	-1	15	2	-2	0	0	15	683.62336	-0.00138	1961.46532	1277.84059W
18	2	2	1	-1	16	2	-2	0	0	16	683.62336	-0.00091	1993.33703	1309.71276
19	2	2	1	-1	17	2	-2	0	0	17	683.62746	-0.00033	2027.20204	1343.57425
20	2	2	1	-1	18	2	-2	0	0	18	683.63542	-0.00049	2063.06048	1379.42457
21	2	2	1	-1	19	2	-2	0	0	19	683.64932	0.00005	2100.91245	1417.26319
22	2	-2	1	1	3	2	-2	0	0	4	675.82157	-0.00021	1734.47452	1058.65275
23	2	-2	1	1	4	2	-2	0	0	5	673.85823	-0.00021	1742.47680	1068.61835
24	2	-2	1	1	5	2	-2	0	0	6	671.90292	-0.00010	1752.47978	1080.57677
25	2	-2	1	1	6	2	-2	0	0	7	669.95577	0.00001	1764.48357	1094.52781
26	2	-2	1	1	7	2	-2	0	0	8	668.01738	0.00039	1778.48827	1110.47128
27	2	-2	1	1	8	2	-2	0	0	9	666.08699	-0.00006	1794.49400	1128.40695
28	2	-2	1	1	9	2	-2	0	0	10	664.16634	-0.00001	1812.50091	1148.33456
29	2	-2	1	1	10	2	-2	0	0	11	662.25555	0.00023	1832.50915	1170.25382
30	2	-2	1	1	11	2	-2	0	0	12	660.35411	-0.00035	1854.51888	1194.16442
31	2	-2	1	1	12	2	-2	0	0	13	658.46396	-0.00031	1878.53027	1220.06599
32	2	-2	1	1	13	2	-2	0	0	14	656.58529	-0.00002	1904.54349	1247.95819
33	2	-2	1	1	14	2	-2	0	0	15	654.71827	0.00014	1932.55872	1277.84059
34	2	-2	1	1	16	2	-2	0	0	17	651.02189	0.00033	1994.59581	1343.57425
35	2	-2	1	1	18	2	-2	0	0	19	647.37994	0.00054	2064.64259	1417.26319
36	2	-2	1	1	6	2	-2	0	0	5	695.86500	-0.00022	1764.48357	1068.61835
37	2	-2	1	1	8	2	-2	0	0	7	699.96612	-0.00007	1794.49400	1094.52781
38	2	-2	1	1	9	2	-2	0	0	8	702.02943	-0.00020	1812.50091	1110.47128
39	2	-2	1	1	10	2	-2	0	0	9	704.10182	-0.00037	1832.50915	1128.40695
40	2	-2	1	1	11	2	-2	0	0	10	706.18421	-0.00010	1854.51888	1148.33456
41	2	-2	1	1	12	2	-2	0	0	11	708.27624	-0.00020	1878.53027	1170.25382
42	2	-2	1	1	13	2	-2	0	0	12	710.37890	-0.00018	1904.54349	1194.16442
43	2	-2	1	1	14	2	-2	0	0	13	712.49285	0.00013	1932.55872	1220.06599
44	2	-2	1	1	15	2	-2	0	0	14	714.61794	0.00002	1962.57611	1247.95819
45	2	-2	1	1	16	2	-2	0	0	15	716.75586	0.00064	1994.59581	1277.84059
46	2	-2	1	1	17	2	-2	0	0	16	718.90467	-0.00051	2028.61794	1309.71276
47	2	-2	1	1	3	2	2	0	0	3	683.79199	-0.00194	1734.47452	1050.68059W
48	2	-2	1	1	4	2	2	0	0	4	683.82213	-0.00042	1742.47680	1058.65425
49	2	-2	1	1	5	2	2	0	0	5	683.85777	-0.00015	1752.47978	1068.62187
50	2	-2	1	1	6	2	2	0	0	6	683.89963	-0.00015	1764.48357	1080.58379
51	2	-2	1	1	7	2	2	0	0	7	683.94785	0.00004	1778.48827	1094.54045
52	2	-2	1	1	8	2	2	0	0	8	684.00153	-0.00013	1794.49400	1110.49234
53	2	-2	1	1	9	2	2	0	0	9	684.06054	-0.00038	1812.50091	1128.43999
54	2	-2	1	1	10	2	2	0	0	10	684.12512	-0.00004	1832.50915	1148.38399
55	2	-2	1	1	11	2	2	0	0	11	684.19380	-0.00010	1854.51888	1170.32497
56	2	-2	1	1	12	2	2	0	0	12	684.26647	-0.00023	1878.53027	1194.26357
57	2	-2	1	1	13	2	2	0	0	13	684.34298	-0.00012	1904.54349	1220.20039
58	2	-2	1	1	14	2	2	0	0	14	684.42224	-0.00045	1932.55872	1248.13603
59	2	-2	1	1	15	2	2	0	0	15	684.50487	-0.00024	1962.57611	1278.07100
60	2	-2	1	1	16	2	2	0	0	16	684.58989	-0.00018	1994.59581	1310.00574
	2	-2	1	1	17	2	2	0	0	17	684.67719	-0.00021	2028.61794	1343.94054
	2	-2	1	1	18	2	2	0	0	18	684.76680	-0.00019	2064.64259	1379.87559
	2	-2	1	1	19	2	2	0	0	19	684.85868	-0.00020	2102.66980	1417.81092
	2	-2	1	1	20	2	2	0	0	20	684.95303	-0.00016	2142.69958	1457.74639
	2	-2	1	1	21	2	2	0	0	21	685.04923	-0.00092	2184.73187	1499.68172
	2	-2	1	1	22	2	2	0	0	22	685.14963	-0.00042	2228.76654	1543.61649
	2	-2	1	1	23	2	2	0	0	23	685.25263	-0.00064	2274.80341	1589.55014
	2	-2	1	1	24	2	2	0	0	24	685.35076	-0.00044	2322.84219	1637.48199

2 -2 1 1 25	2 2 0 0 25	685.47074	-0.00053	2372.88254	1687.41127
2 -2 1 1 27	2 2 0 0 27	685.70587	-0.00165	2478.96612	1793.25860W

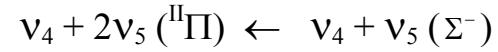
rms = 0.00032 cm⁻¹

$v_4' \ell_4' v_5' \ell_5' J'$	$v_4'' \ell_4'' v_5'' \ell_5'' J''$	OBS	OBS - CALC	E'	E''
1 -1 2 0 1	1 1 1 -1 1	661.36680	0.00037	1863.85543	1202.48900
1 -1 2 0 3	1 1 1 -1 3	661.39660	0.00008	1873.84028	1212.44377
1 -1 2 0 4	1 1 1 -1 4	661.42020	0.00020	1881.82789	1220.40789
1 -1 2 0 5	1 1 1 -1 5	661.44860	-0.00003	1891.81206	1230.36343
1 -1 2 0 6	1 1 1 -1 6	661.48180	-0.00011	1903.79255	1242.31065
1 -1 2 0 7	1 1 1 -1 7	661.51935	0.00009	1917.76910	1256.24984
1 -1 2 0 8	1 1 1 -1 8	661.55970	-0.00032	1933.74139	1272.18137
1 -1 2 0 9	1 1 1 -1 9	661.60305	-0.00039	1951.70905	1290.10561
1 -1 2 0 10	1 1 1 -1 10	661.64870	0.00001	1971.67167	1310.02298
1 -1 2 0 12	1 1 1 -1 12	661.74050	-0.00054	2017.57995	1355.83891
1 -1 2 0 13	1 1 1 -1 13	661.78590	-0.00033	2043.52458	1381.73835
1 -1 2 0 14	1 1 1 -1 14	661.82900	-0.00043	2071.46210	1409.63267
1 -1 2 0 15	1 1 1 -1 15	661.86930	-0.00036	2101.39190	1439.52224
1 -1 2 0 16	1 1 1 -1 16	661.90630	0.00036	2133.31332	1471.40738
1 -1 2 0 18	1 1 1 -1 18	661.96260	-0.00044	2203.12814	1541.16510
1 -1 2 0 19	1 1 1 -1 19	661.98150	-0.00072	2241.02004	1579.03782
1 -1 2 0 20	1 1 1 -1 20	661.99380	-0.00037	2280.90052	1618.90635
1 -1 2 0 21	1 1 1 -1 21	661.99760	-0.00069	2322.76874	1660.77045
1 -1 2 0 22	1 1 1 -1 22	661.99380	-0.00024	2366.62381	1704.62977

rms = 0.00038 cm⁻¹

$v_4' \ell_4' v_5' \ell_5' J'$	$v_4'' \ell_4'' v_5'' \ell_5'' J''$	OBS	OBS - CALC	E'	E''
1 -1 2 2 21	1 1 1 -1 22	637.90515	-0.00009	2342.53501	1704.62977
1 -1 2 2 20	1 1 1 -1 21	639.93638	0.00019	2300.70664	1660.77045
1 -1 2 2 19	1 1 1 -1 20	641.96329	-0.00029	2260.86993	1618.90635
1 -1 2 2 18	1 1 1 -1 19	643.98720	-0.00002	2223.02504	1579.03782
1 -1 2 2 17	1 1 1 -1 18	646.00624	-0.00075	2187.17209	1541.16510
1 -1 2 2 16	1 1 1 -1 17	648.02298	0.00011	2153.31116	1505.28829
1 -1 2 2 15	1 1 1 -1 16	650.03466	-0.00024	2121.44228	1471.40738
1 -1 2 2 14	1 1 1 -1 15	652.04313	-0.00010	2091.56547	1439.52224
1 -1 2 2 13	1 1 1 -1 14	654.04794	-0.00012	2063.68073	1409.63267
1 -1 2 2 12	1 1 1 -1 13	656.04965	-0.00003	2037.78803	1381.73835
1 -1 2 2 11	1 1 1 -1 12	658.04796	-0.00047	2013.88734	1355.83891
1 -1 2 2 10	1 1 1 -1 11	660.04454	-0.00014	1991.97861	1331.93393
1 -1 2 2 9	1 1 1 -1 10	662.03885	0.00004	1972.06179	1310.02298
1 -1 2 2 8	1 1 1 -1 9	664.03130	0.00008	1954.13683	1290.10561
1 -1 2 2 7	1 1 1 -1 8	666.02210	-0.00021	1938.20368	1272.18137
1 -1 2 2 6	1 1 1 -1 7	668.01274	0.00029	1924.26229	1256.24984
1 -1 2 2 5	1 1 1 -1 6	670.00188	-0.00009	1912.31262	1242.31065
1 -1 2 2 4	1 1 1 -1 5	671.99082	-0.00037	1902.35462	1230.36343
1 -1 2 2 3	1 1 1 -1 4	673.98038	0.00000	1894.38827	1220.40789
1 -1 2 2 2	1 1 1 -1 3	675.96960	-0.00016	1888.41352	1212.44377
1 -1 2 2 1	1 1 1 -1 2	677.95900	-0.00052	1884.43037	1206.47085
1 -1 2 2 1	1 1 1 -1 0	683.93240	0.00012	1884.43037	1200.49810
1 -1 2 2 2	1 1 1 -1 1	685.92452	0.00000	1888.41352	1202.48900
1 -1 2 2 3	1 1 1 -1 2	687.91711	-0.00030	1894.38827	1206.47085
1 -1 2 2 4	1 1 1 -1 3	689.91059	-0.00027	1902.35462	1212.44377
1 -1 2 2 5	1 1 1 -1 4	691.90459	-0.00014	1912.31262	1220.40789
1 -1 2 2 6	1 1 1 -1 5	693.89879	-0.00007	1924.26229	1230.36343
1 -1 2 2 7	1 1 1 -1 6	695.89280	-0.00023	1938.20368	1242.31065
1 -1 2 2 8	1 1 1 -1 7	697.88688	-0.00011	1954.13683	1256.24984

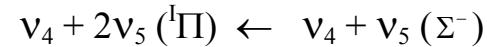
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2	-1	2	2	10	1	1	1	-1	9	701.87276	-0.00024	1991.97861	1290.10561	
3	-1	2	2	11	1	1	1	-1	10	703.86415	-0.00021	2013.88734	1310.02298	
4	-1	2	2	12	1	1	1	-1	11	705.85400	-0.00010	2037.78803	1331.93393	
5	-1	2	2	13	1	1	1	-1	12	707.84174	-0.00008	2063.68073	1355.83891	
6	-1	2	2	14	1	1	1	-1	13	709.82905*	0.00193	2091.56547	1381.73835W	
7	-1	2	2	15	1	1	1	-1	14	711.80961	0.00000	2121.44228	1409.63267	
8	-1	2	2	16	1	1	1	-1	15	713.78898	0.00007	2153.31116	1439.52224	
9	-1	2	2	17	1	1	1	-1	16	715.77282*	0.00810	2187.17209	1471.40738W	
10	-1	2	2	18	1	1	1	-1	17	717.73645	-0.00031	2223.02504	1505.28829	
11	-1	2	2	19	1	1	1	-1	18	719.70469	-0.00014	2260.86993	1541.16510	
12	-1	2	2	20	1	1	1	-1	19	721.66857	-0.00024	2300.70664	1579.03782	
13	-1	2	2	21	1	1	1	-1	20	723.62853	-0.00012	2342.53501	1618.90635	
14	-1	2	2	22	1	1	1	-1	21	725.58425	-0.00012	2386.35482	1660.77045	
15	-1	2	2	23	1	1	1	-1	22	727.53630	0.00025	2432.16581	1704.62977	
16	1	1	2	-2	3	1	1	1	-1	3	681.96444	-0.00007	1894.40827	1212.44377
17	1	1	2	-2	4	1	1	1	-1	4	681.97998	-0.00010	1902.38797	1220.40789
18	1	1	2	-2	5	1	1	1	-1	5	681.99913	-0.00009	1912.36265	1230.36343
19	1	1	2	-2	6	1	1	1	-1	6	682.02170	0.00000	1924.33235	1242.31065
20	1	1	2	-2	7	1	1	1	-1	7	682.04760	0.00033	1938.29711	1256.24984
21	1	1	2	-2	10	1	1	1	-1	10	682.14040*	0.00098	1992.16240	1310.02298
22	1	1	2	-2	11	1	1	1	-1	11	682.17345*	-0.00069	2014.10807	1331.93393
23	1	1	2	-2	12	1	1	1	-1	12	682.21036	0.00011	2038.04916	1355.83891
24	1	1	2	-2	13	1	1	1	-1	13	682.24740*	0.00000	2063.98575	1381.73835
25	1	1	2	-2	14	1	1	1	-1	14	682.28531	0.00003	2091.91795	1409.63267
26	1	1	2	-2	15	1	1	1	-1	15	682.32381	0.00022	2121.84584	1439.52224
27	1	1	2	-2	16	1	1	1	-1	16	682.35930*	-0.00283	2153.76950	1471.40738W
28	1	1	2	-2	17	1	1	1	-1	17	682.40290*	0.00215	2187.68903	1505.28829W
29	1	1	2	-2	18	1	1	1	-1	18	682.43945	0.00006	2223.60449	1541.16510
30	1	1	2	-2	19	1	1	1	-1	19	682.47660*	-0.00150	2261.51593	1579.03782W
31	1	1	2	-2	20	1	1	1	-1	20	682.51706	0.00004	2301.42338	1618.90635
32	1	1	2	-2	21	1	1	1	-1	21	682.55880*	0.00242	2343.32683	1660.77045W
33	1	1	2	-2	22	1	1	1	-1	22	682.59920*	0.00270	2387.22627	1704.62977W
34	1	1	2	-2	23	1	1	1	-1	23	682.63775	-0.00002	2433.12160	1750.48383
35	1	1	2	-2	24	1	1	1	-1	24	682.68028	-0.00037	2481.01271	1798.33206
36	1	1	2	-2	25	1	1	1	-1	25	682.72810*	0.00246	2530.89942	1848.17378W
37	1	1	2	-2	26	1	1	1	-1	26	682.77271	-0.00056	2582.78151	1900.00824
38	1	1	2	-2	27	1	1	1	-1	27	682.82386	-0.00023	2636.65870	1953.83461
39	1	1	2	-2	28	1	1	1	-1	28	682.87840	-0.00023	2692.53061	2009.65198

rms = 0.00023 cm⁻¹

45	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
46	1	-1	2	0	18	1	-1	1	1	19	628.78580	-0.00024	2203.12814	1574.34210
47	1	-1	2	0	17	1	-1	1	1	18	630.68986	-0.00042	2167.22564	1536.53536
48	1	-1	2	0	16	1	-1	1	1	17	632.59764	0.00025	2133.31332	1500.71593
49	1	-1	2	0	15	1	-1	1	1	16	634.50737	-0.00025	2101.39190	1466.88429
50	1	-1	2	0	14	1	-1	1	1	15	636.42075	-0.00049	2071.46210	1435.04086
51	1	-1	2	0	13	1	-1	1	1	14	638.33784	-0.00069	2043.52458	1405.18605
52	1	-1	2	0	12	1	-1	1	1	13	640.25940	-0.00034	2017.57995	1377.32021
53	1	-1	2	0	11	1	-1	1	1	12	642.18477	-0.00038	1993.62880	1351.44366
54	1	-1	2	0	10	1	-1	1	1	11	644.11461	-0.00040	1971.67167	1327.55666
55	1	-1	2	0	9	1	-1	1	1	10	646.04947	-0.00010	1951.70905	1305.65948
56	1	-1	2	0	8	1	-1	1	1	9	647.98960*	0.00052	1933.74139	1285.75232
57	1	-1	2	0	7	1	-1	1	1	8	649.93360	-0.00014	1917.76910	1267.83537
58	1	-1	2	0	6	1	-1	1	1	7	651.88332	-0.00044	1903.79255	1251.90880
59	1	-1	2	0	5	1	-1	1	1	6	653.83881	-0.00050	1891.81206	1237.97275
60	1	-1	2	0	4	1	-1	1	1	5	655.79995	-0.00060	1881.82789	1226.02734
1	-1	2	0	3	1	-1	1	1	4	657.76738	-0.00023	1873.84028	1216.07268	
1	-1	2	0	2	1	-1	1	1	3	659.74100	0.00043	1867.84942	1208.10885	
1	-1	2	0	1	1	-1	1	1	2	661.72060	0.00109	1863.85543	1202.13592W	
1	-1	2	0	1	1	-1	1	1	0	667.69530	0.00280	1863.85543	1196.16293W	
1	-1	2	0	6	1	-1	1	1	5	677.76475	-0.00046	1903.79255	1226.02734	
1	-1	2	0	7	1	-1	1	1	4	699.88022	-0.00023	1237.97275		

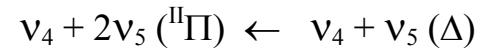
URL: <http://mc.manuscriptcentral.com/tmc17.76910>

1	-1	2	0	8	1	-1	1	1	7	681.83248	-0.00011	1933.74139	1251.90880	
2	-1	2	0	9	1	-1	1	1	8	683.87262*	-0.00106	1951.70905	1267.83537W	
3	-1	2	0	10	1	-1	1	1	9	685.91890	-0.00046	1971.67167	1285.75232	
4	-1	2	0	11	1	-1	1	1	10	687.96904	-0.00029	1993.62880	1305.65948	
5	-1	2	0	12	1	-1	1	1	11	690.02291	-0.00038	2017.57995	1327.55666	
6	-1	2	0	13	1	-1	1	1	12	692.08053	-0.00039	2043.52458	1351.44366	
7	-1	2	0	14	1	-1	1	1	13	694.14160	-0.00029	2071.46210	1377.32021	
8	-1	2	0	15	1	-1	1	1	14	696.21040*	0.00455	2101.39190	1405.18605W	
9	-1	2	0	16	1	-1	1	1	15	698.27200	-0.00046	2133.31332	1435.04086	
10	-1	2	0	17	1	-1	1	1	16	700.34098	-0.00038	2167.22564	1466.88429	
11	-1	2	0	18	1	-1	1	1	17	702.41190	-0.00031	2203.12814	1500.71593	
12	-1	2	0	19	1	-1	1	1	18	704.48445	-0.00023	2241.02004	1536.53536	
13	-1	2	0	20	1	-1	1	1	19	706.55813	-0.00029	2280.90052	1574.34210	
14	-1	2	0	21	1	-1	1	1	20	708.63273	-0.00038	2322.76874	1614.13563	
15	-1	2	0	22	1	-1	1	1	21	710.70813	-0.00029	2366.62381	1655.91539	
16	-1	2	0	23	1	-1	1	1	22	712.78380	-0.00024	2412.46483	1699.68079	
17	1	1	2	0	12	1	-1	1	1	12	665.70745	0.00096	2017.15015	1351.44366
18	1	1	2	0	13	1	-1	1	1	13	665.70410*	0.00112	2043.02319	1377.32021W
19	1	1	2	0	14	1	-1	1	1	14	665.69832	0.00077	2070.88360	1405.18605
20	1	1	2	0	15	1	-1	1	1	15	665.69066	0.00079	2100.73073	1435.04086
21	1	1	2	0	16	1	-1	1	1	16	665.68004	0.00043	2132.56390	1466.88429
22	1	1	2	0	17	1	-1	1	1	17	665.66711	0.00069	2166.38235	1500.71593
23	1	1	2	0	18	1	-1	1	1	18	665.65059	0.00066	2202.18530	1536.53536
24	1	1	2	0	19	1	-1	1	1	19	665.63010	0.00030	2239.97191	1574.34210
25	1	1	2	0	20	1	-1	1	1	20	665.60595	0.00030	2279.74129	1614.13563
26	1	1	2	0	21	1	-1	1	1	21	665.57760	0.00049	2321.49251	1655.91539
27	1	1	2	0	22	1	-1	1	1	22	665.54380*	0.00001	2365.22458	1699.68079
28	1	1	2	0	23	1	-1	1	1	23	665.50560	0.00032	2410.93648	1745.43120

rms = 0.00044 cm⁻¹

v ₄ '	l ₄ '	v ₅ '	l ₅ '	J'	v ₄ ''	l ₄ ''	v ₅ ''	l ₅ ''	J''	OBS	OBS - CALC	E'	E''	
1	1	2	-2	18	1	-1	1	1	19	649.26300	0.00061	2223.60449	1574.34210	
2	1	2	-2	17	1	-1	1	1	18	651.15408	0.00041	2187.68903	1536.53536	
3	1	2	-2	16	1	-1	1	1	17	653.05543*	0.00186	2153.76950	1500.71593W	
4	1	2	-2	15	1	-1	1	1	16	654.96817*	0.00662	2121.84584	1466.88429W	
5	1	2	-2	14	1	-1	1	1	15	656.87710	0.00001	2091.91795	1435.04086	
6	1	1	2	-2	13	1	-1	1	1	14	658.79958	-0.00012	2063.98575	1405.18605
7	1	1	2	-2	12	1	-1	1	1	13	660.73006	0.00111	2038.04916	1377.32021W
8	1	1	2	-2	11	1	-1	1	1	12	662.66451	0.00009	2014.10807	1351.44366
9	1	1	2	-2	10	1	-1	1	1	11	664.60555	-0.00019	1992.16240	1327.55666
10	1	1	2	-2	9	1	-1	1	1	10	666.55194	-0.00066	1972.21207	1305.65948
11	1	1	2	-2	8	1	-1	1	1	9	668.50450	-0.00018	1954.25700	1285.75232
12	1	1	2	-2	7	1	-1	1	1	8	670.46140	-0.00034	1938.29711	1267.83537
13	1	1	2	-2	6	1	-1	1	1	7	672.42352	-0.00003	1924.33235	1251.90880
14	1	1	2	-2	5	1	-1	1	1	6	674.38965	-0.00025	1912.36265	1237.97275
15	1	1	2	-2	4	1	-1	1	1	5	676.35957	-0.00106	1902.38797	1226.02734W
16	1	1	2	-2	3	1	-1	1	1	4	678.33560*	0.00001	1894.40827	1216.07268
17	1	1	2	-2	2	1	-1	1	1	3	680.31450	-0.00018	1888.42353	1208.10885
18	1	1	2	-2	1	1	-1	1	1	2	682.29810	0.00031	1884.43371	1202.13592
19	1	1	2	-2	1	1	-1	1	1	0	688.26980	-0.00098	1884.43371	1196.16293
20	1	1	2	-2	3	1	-1	1	1	2	692.27227	-0.00009	1894.40827	1202.13592
21	1	1	2	-2	4	1	-1	1	1	3	694.27875	-0.00037	1902.38797	1208.10885
22	1	1	2	-2	5	1	-1	1	1	4	696.28970	-0.00027	1912.36265	1216.07268
23	1	1	2	-2	6	1	-1	1	1	5	698.30480	-0.00021	1924.33235	1226.02734
24	1	1	2	-2	7	1	-1	1	1	6	700.32415	-0.00021	1938.29711	1237.97275
25	1	1	2	-2	8	1	-1	1	1	7	702.34799	-0.00021	1954.25700	1251.90880
26	1	1	2	-2	9	1	-1	1	1	8	704.37664	-0.00007	1972.21207	1267.83537
27	1	1	2	-2	10	1	-1	1	1	9	706.40985	-0.00024	1992.16240	1285.75232
28	1	1	2	-2	11	1	-1	1	1	10	708.44851	-0.00008	2014.10807	1305.65948
29	1	1	2	-2	12	1	-1	1	1	11	710.49246	-0.00004	2038.04916	1327.55666
30	1	1	2	-2	13	1	-1	1	1	12	712.54212	0.00002	2063.98575	1351.44366
31	1	1	2	-2	14	1	-1	1	1	13	714.59778	0.00004	2091.91795	1377.32021
32	1	1	2	-2	15	1	-1	1	1	14	717.64189	0.00001	2121.84584	1405.18605

1	1	2	-2	16	1	-1	1	1	15	718.72864	0.00000	2153.76950	1435.04086	
1	1	2	-2	17	1	-1	1	1	16	720.80510	0.00035	2187.68903	1466.88429	
2	1	1	2	-2	18	1	-1	1	1	17	722.88855	-0.00001	2223.60449	1500.71593
3	1	-1	2	2	6	1	-1	1	1	6	686.28904	-0.00050	1924.26229	1237.97275
4	1	-1	2	2	7	1	-1	1	1	7	686.29502	0.00014	1938.20368	1251.90880
5	1	-1	2	2	8	1	-1	1	1	8	686.30148	0.00002	1954.13683	1267.83537
6	1	-1	2	2	9	1	-1	1	1	9	686.30933	-0.00014	1972.06179	1285.75232
7	1	-1	2	2	10	1	-1	1	1	10	686.31918	0.00005	1991.97861	1305.65948
8	1	-1	2	2	11	1	-1	1	1	11	686.33045	-0.00023	2013.88734	1327.55666
9	1	-1	2	2	12	1	-1	1	1	12	686.34402	-0.00036	2037.78803	1351.44366
10	1	-1	2	2	13	1	-1	1	1	13	686.36018	-0.00034	2063.68073	1377.32021
11	1	-1	2	2	14	1	-1	1	1	14	686.37923	-0.00019	2091.56547	1405.18605
12	1	-1	2	2	15	1	-1	1	1	15	686.40130	-0.00012	2121.44228	1435.04086
13	1	-1	2	2	16	1	-1	1	1	16	686.42677	-0.00010	2153.31116	1466.88429
14	1	-1	2	2	17	1	-1	1	1	17	686.45610	-0.00006	2187.17209	1500.71593
15	1	-1	2	2	18	1	-1	1	1	18	686.48969	0.00001	2223.02504	1536.53536
16	1	-1	2	2	19	1	-1	1	1	19	686.52788	0.00005	2260.86993	1574.34210
17	1	-1	2	2	20	1	-1	1	1	20	686.57126	0.00025	2300.70664	1614.13563
18	1	-1	2	2	21	1	-1	1	1	21	686.62003	0.00042	2342.53501	1655.91539
19	1	-1	2	2	22	1	-1	1	1	22	686.67412	0.00009	2386.35482	1699.68079
20	1	-1	2	2	23	1	-1	1	1	23	686.73538	0.00077	2432.16581	1745.43120
21	1	-1	2	2	24	1	-1	1	1	24	686.80250	0.00079	2479.96765	1793.16594
22	1	-1	2	2	25	1	-1	1	1	25	686.87549	-0.00012	2529.75993	1842.88432
23	1	-1	2	2	26	1	-1	1	1	26	686.95665	0.00005	2581.54220	1894.58561
24	1	-1	2	2	27	1	-1	1	1	27	687.04465	-0.00025	2635.31393	1948.26904

rms = 0.00031 cm⁻¹

v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
1	1	2	0	18	1	1	1	1	19	628.75960	0.00050	2202.18530	1573.42620
1	1	2	0	17	1	1	1	1	18	630.67500	0.00070	2166.38235	1535.70804
1	1	2	0	16	1	1	1	1	17	632.59764	-0.00012	2132.56390	1499.96614
1	1	2	0	15	1	1	1	1	16	634.52937	0.00015	2100.73073	1466.20152
1	1	2	0	14	1	1	1	1	15	636.46890	0.00056	2070.88360	1434.41526
1	1	2	0	13	1	1	1	1	14	638.41478	0.00009	2043.02319	1404.60850
1	1	2	0	12	1	1	1	1	13	640.36803	0.00029	2017.15015	1376.78240
1	1	2	0	11	1	1	1	1	12	642.32733	0.00039	1993.26507	1350.93813
1	1	2	0	10	1	1	1	1	11	644.29153	-0.00014	1971.36850	1327.07683
1	1	2	0	9	1	1	1	1	10	646.26123	-0.00009	1951.46095	1305.19963
1	1	2	0	8	1	1	1	1	9	648.23613*	0.00087	1933.54287	1285.30761
1	1	2	0	7	1	1	1	1	8	650.21296	0.00006	1917.61467	1267.40177
1	1	2	0	6	1	1	1	1	7	652.19413	0.00047	1903.67670	1251.48305
1	1	2	0	5	1	1	1	1	6	654.17710	0.00009	1891.72929	1237.55228
1	1	2	0	4	1	1	1	1	5	656.16209	-0.00040	1881.77271	1225.61022
1	1	2	0	3	1	1	1	1	4	658.14961	-0.00005	1873.80717	1215.65751
1	1	2	0	2	1	1	1	1	3	660.13820	0.00003	1867.83286	1207.69469
1	1	2	0	1	1	1	1	1	2	662.12761	-0.00011	1863.84991	1201.72219
1	1	2	0	4	1	1	1	1	3	674.07820	0.00018	1881.77271	1207.69469
1	1	2	0	5	1	1	1	1	4	676.07210	0.00032	1891.72929	1215.65751
1	1	2	0	6	1	1	1	1	5	678.06601	-0.00047	1903.67670	1225.61022
1	1	2	0	7	1	1	1	1	6	680.06250*	0.00011	1917.61467	1237.55228
1	1	2	0	8	1	1	1	1	7	682.06020*	0.00037	1933.54287	1251.48305
1	1	2	0	9	1	1	1	1	8	684.06040*	0.00122	1951.46095	1267.40177W
1	1	2	0	10	1	1	1	1	9	686.06103	0.00013	1971.36850	1285.30761
1	1	2	0	11	1	1	1	1	10	688.06570	0.00026	1993.26507	1305.19963
1	1	2	0	12	1	1	1	1	11	690.07361	0.00029	2017.15015	1327.07683
1	1	2	0	13	1	1	1	1	12	692.08570	0.00064	2043.02319	1350.93813
1	1	2	0	14	1	1	1	1	13	694.10152	0.00032	2070.88360	1376.78240
1	1	2	0	15	1	1	1	1	14	696.12250	0.00027	2100.73073	1404.60850
1	1	2	0	16	1	1	1	1	15	698.14882	0.00018	2132.56390	1434.41526
1	1	2	0	17	1	1	1	1	16	700.18130	0.00047	2166.38235	1466.20152
1	1	2	0	18	1	1	1	1	17	702.21939	0.00023	2202.18530	1499.96614
1	1	2	0	19	1	1	1	1	18	704.26410	0.00024	2239.97191	1535.70804
1	1	2	0	20	1	1	1	1	19	707.74129	0.00025	2263.74260	1573.42620

1	1	2	0	21	1	1	1	1	20	708.37340	0.00052	2321.49251	1613.11962	
1	1	2	0	22	1	1	1	1	21	710.43780	0.00065	2365.22458	1654.78743	
2	1	-1	2	0	5	1	1	1	1	5	666.20169	-0.00015	1891.81206	1225.61022
3	1	-1	2	0	6	1	1	1	1	6	666.24014	-0.00013	1903.79255	1237.55228
4	1	-1	2	0	7	1	1	1	1	7	666.28568	-0.00038	1917.76910	1251.48305
5	1	-1	2	0	8	1	1	1	1	8	666.33953	-0.00009	1933.74139	1267.40177
6	1	-1	2	0	9	1	1	1	1	9	666.40125	-0.00019	1951.70905	1285.30761
7	1	-1	2	0	10	1	1	1	1	10	666.47188	-0.00016	1971.67167	1305.19963
8	1	-1	2	0	11	1	1	1	1	11	666.55194	-0.00004	1993.62880	1327.07683
9	1	-1	2	0	12	1	1	1	1	12	666.64141	-0.00042	2017.57995	1350.93813
10	1	-1	2	0	13	1	1	1	1	13	666.74170	-0.00048	2043.52458	1376.78240
11	1	-1	2	0	14	1	1	1	1	14	666.85300	-0.00060	2071.46210	1404.60850
12	1	-1	2	0	15	1	1	1	1	15	666.97630	-0.00034	2101.39190	1434.41526
13	1	-1	2	0	17	1	-1	1	-1	18	631.20650	0.00039	2167.22564	1536.01954
14	1	-1	2	0	16	1	-1	1	-1	17	633.09550	0.00065	2133.31332	1500.21846
15	1	-1	2	0	15	1	-1	1	-1	16	634.98900	-0.00002	2101.39190	1466.40289
16	1	-1	2	0	14	1	-1	1	-1	15	636.88880	0.00004	2071.46210	1434.57334
17	1	-1	2	0	13	1	-1	1	-1	14	638.79390	-0.00035	2043.52458	1404.73033
18	1	-1	2	0	12	1	-1	1	-1	13	640.70500	-0.00059	2017.57995	1376.87436
19	1	-1	2	0	11	1	-1	1	-1	12	642.62233	-0.00056	1993.62880	1351.00592
20	1	-1	2	0	10	1	-1	1	-1	11	644.54590	-0.00032	1971.67167	1327.12545
21	1	-1	2	0	9	1	-1	1	-1	10	646.47550	-0.00015	1951.70905	1305.23340
22	1	-1	2	0	8	1	-1	1	-1	9	648.41097	-0.00025	1933.74139	1285.33018
23	1	-1	2	0	7	1	-1	1	-1	8	650.35270	-0.00025	1917.76910	1267.41616
24	1	-1	2	0	6	1	-1	1	-1	7	652.30024	-0.00063	1903.79255	1251.49169
25	1	-1	2	0	5	1	-1	1	-1	6	654.25490	-0.00007	1891.81206	1237.55708
26	1	-1	2	0	4	1	-1	1	-1	5	656.21500	-0.00027	1881.82789	1225.61262
27	1	-1	2	0	3	1	-1	1	-1	4	658.18160	-0.00015	1873.84028	1215.65854
28	1	-1	2	0	2	1	-1	1	-1	3	660.15430	-0.00009	1867.84942	1207.69503
29	1	-1	2	0	1	1	-1	1	-1	2	662.13300	-0.00017	1863.85543	1201.72226
30	1	-1	2	0	3	1	-1	1	-1	2	672.11760	-0.00042	1873.84028	1201.72226
31	1	-1	2	0	5	1	-1	1	-1	4	676.15340	-0.00012	1891.81206	1215.65854
32	1	-1	2	0	7	1	-1	1	-1	6	680.21140	-0.00062	1917.76910	1237.55708
33	1	-1	2	0	9	1	-1	1	-1	8	684.29220	-0.00069	1951.70905	1267.41616
34	1	-1	2	0	11	1	-1	1	-1	10	688.39500	-0.00040	1993.62880	1305.23340
35	1	-1	2	0	12	1	-1	1	-1	11	690.45430	-0.00020	2017.57995	1327.12545
36	1	-1	2	0	13	1	-1	1	-1	12	692.51810	-0.00056	2043.52458	1351.00592
37	1	-1	2	0	14	1	-1	1	-1	13	694.58750	-0.00024	2071.46210	1376.87436
38	1	-1	2	0	15	1	-1	1	-1	14	696.66170	0.00013	2101.39190	1404.73033
39	1	-1	2	0	16	1	-1	1	-1	15	698.73940	-0.00058	2133.31332	1434.57334
40	1	-1	2	0	18	1	-1	1	-1	17	702.90990	0.00022	2203.12814	1500.21846
41	1	1	2	0	4	1	-1	1	-1	4	666.11430	0.00013	1881.77271	1215.65854
42	1	1	2	0	5	1	-1	1	-1	5	666.11430*	-0.00237	1891.72929	1225.61262W
43	1	1	2	0	6	1	-1	1	-1	6	666.11890	-0.00072	1903.67670	1237.55708
44	1	1	2	0	7	1	-1	1	-1	7	666.12270	-0.00028	1917.61467	1251.49169
45	1	1	2	0	8	1	-1	1	-1	8	666.12710	0.00038	1933.54287	1267.41616
46	1	1	2	0	9	1	-1	1	-1	9	666.13210*	0.00132	1951.46095	1285.33018W
47	1	1	2	0	10	1	-1	1	-1	10	666.13600	0.00090	1971.36850	1305.23340
48	1	1	2	0	11	1	-1	1	-1	11	666.13980	0.00018	1993.26507	1327.12545
49	1	1	2	0	12	1	-1	1	-1	12	666.14490	0.00067	2017.15015	1351.00592
50	1	1	2	0	13	1	-1	1	-1	13	666.14920	0.00038	2043.02319	1376.87436
51	1	1	2	0	14	1	-1	1	-1	14	666.15440*	0.00113	2070.88360	1404.73033W
52	1	1	2	0	15	1	-1	1	-1	15	666.15440*	-0.00299	2100.73073	1434.57334W

rms = 0.00038 cm⁻¹v₄ + 2v₅ (Φ) ← v₄ + v₅ (Δ)

v ₄ '	l ₄ '	v ₅ '	l ₅ '	J'	v ₄ ''	l ₄ ''	v ₅ ''	l ₅ ''	J''	OBS	OBS - CALC	E'	E''
1	1	2	2	21	1	1	1	1	22	638.19950	-0.00084	2336.62911	1698.42877
1	1	2	2	20	1	1	1	1	21	640.04900	0.00000	2294.83643	1654.78743
1	1	2	2	19	1	1	1	1	20	641.90910	0.00008	2255.02864	1613.11962
1	1	2	2	18	1	1	1	1	19	643.77985	-0.00031	2217.20636	1573.42620
1	1	2	2	17	1	1	1	1	18	645.66220	0.00004	2181.37021	1535.70804
1	1	2	2	16	1	1	1	1	17	647.51470	-0.00299	2100.73073	1499.96614

Molecular Physics

1	1	2	2	15	1	1	1	1	16	649.45690	-0.00040	2115.65882	1466.20152	
1	1	2	2	14	1	1	1	1	15	651.36960	0.00005	2085.78481	1434.41526	
2	1	1	2	2	13	1	1	1	1	14	653.29122	0.00031	2057.89941	1404.60850
3	1	1	2	2	12	1	1	1	1	13	655.22080	0.00001	2032.00319	1376.78240
4	1	1	2	2	11	1	1	1	1	12	657.15850	-0.00008	2008.09670	1350.93813
5	1	1	2	2	10	1	1	1	1	11	659.10393	0.00028	1986.18048	1327.07683
6	1	1	2	2	9	1	1	1	1	10	661.05531	-0.00007	1966.25501	1305.19963
7	1	1	2	2	8	1	1	1	1	9	663.01270	-0.00043	1948.32074	1285.30761
8	1	1	2	2	7	1	1	1	1	8	664.97600	-0.00033	1932.37810	1267.40177
9	1	1	2	2	6	1	1	1	1	7	666.94425	-0.00016	1918.42746	1251.48305
10	1	1	2	2	5	1	1	1	1	6	668.91740*	0.00054	1906.46914	1237.55228
11	1	1	2	2	4	1	1	1	1	5	670.89270	-0.00052	1896.50344	1225.61022
12	1	1	2	2	3	1	1	1	1	2	686.80845	0.00005	1888.53059	1201.72219
13	1	1	2	2	4	1	1	1	1	3	688.80839	-0.00036	1896.50344	1207.69469
14	1	1	2	2	5	1	1	1	1	4	690.81112	-0.00052	1906.46914	1215.65751
15	1	1	2	2	6	1	1	1	1	5	692.81604*	-0.00120	1918.42746	1225.61022W
16	1	1	2	2	7	1	1	1	1	6	694.82584	0.00002	1932.37810	1237.55228
17	1	1	2	2	8	1	1	1	1	7	696.83775	0.00005	1948.32074	1251.48305
18	1	1	2	2	9	1	1	1	1	8	698.85340	0.00016	1966.25501	1267.40177
19	1	1	2	2	10	1	1	1	1	9	700.87290	0.00003	1986.18048	1285.30761
20	1	1	2	2	11	1	1	1	1	10	702.89710	0.00003	2008.09670	1305.19963
21	1	1	2	2	12	1	1	1	1	11	704.92631	-0.00005	2032.00319	1327.07683
22	1	1	2	2	13	1	1	1	1	12	706.96157	0.00029	2057.89941	1350.93813
23	1	1	2	2	14	1	1	1	1	13	709.00232	-0.00009	2085.78481	1376.78240
24	1	1	2	2	15	1	1	1	1	14	711.05028	-0.00003	2115.65882	1404.60850
25	1	1	2	2	16	1	1	1	1	15	713.10539	-0.00017	2147.52082	1434.41526
26	1	1	2	2	17	1	1	1	1	16	715.16859	-0.00010	2181.37021	1466.20152
27	1	1	2	2	18	1	1	1	1	17	717.24025	0.00003	2217.20636	1499.96614
28	1	1	2	2	19	1	1	1	1	18	719.32057	-0.00003	2255.02864	1535.70804
29	1	1	2	2	20	1	1	1	1	19	721.41005	-0.00018	2294.83643	1573.42620
30	1	1	2	2	21	1	1	1	1	20	723.50946	-0.00003	2336.62911	1613.11962
31	1	1	2	2	22	1	1	1	1	21	725.61810	-0.00055	2380.40608	1654.78743
32	1	1	2	2	23	1	1	1	1	22	727.73800	0.00002	2426.16675	1698.42877
33	1	-1	2	-2	3	1	1	1	1	3	680.83599	0.00009	1888.53059	1207.69469
34	1	-1	2	-2	4	1	1	1	1	4	680.84552	-0.00041	1896.50344	1215.65751
35	1	-1	2	-2	5	1	1	1	1	5	680.85778	-0.00114	1906.46914	1225.61022W
36	1	-1	2	-2	6	1	1	1	1	6	680.87530	0.00014	1918.42744	1237.55228
37	1	-1	2	-2	7	1	1	1	1	7	680.89515	0.00014	1932.37805	1251.48305
38	1	-1	2	-2	8	1	1	1	1	8	680.91887	0.00001	1948.32063	1267.40177
39	1	-1	2	-2	9	1	1	1	1	9	680.94716	-0.00002	1966.25479	1285.30761
40	1	-1	2	-2	10	1	1	1	1	10	680.98053	0.00009	1986.18007	1305.19963
41	1	-1	2	-2	11	1	1	1	1	11	681.01925	0.00008	2008.09600	1327.07683
42	1	-1	2	-2	12	1	1	1	1	12	681.06387	-0.00002	2032.00201	1350.93813
43	1	-1	2	-2	13	1	1	1	1	13	681.11640*	0.00127	2057.89753	1376.78240W
44	1	-1	2	-2	17	1	1	1	1	17	681.39363	-0.00142	2181.36119	1499.96614W
45	1	-1	2	-2	18	1	1	1	1	18	681.48550	-0.00023	2217.19377	1535.70804
46	1	-1	2	-2	19	1	1	1	1	19	681.58490	-0.00031	2255.01141	1573.42620
47	1	-1	2	-2	20	1	1	1	1	20	681.69393	0.00032	2294.81323	1613.11962
48	1	-1	2	-2	21	1	1	1	1	21	681.81060	-0.00033	2336.59836	1654.78743
49	1	-1	2	-2	26	1	1	1	1	26	682.57630	0.04944	2575.24148	1892.71462W
50	1	-1	2	-2	21	1	-1	1	-1	22	637.53110	0.00039	2336.59836	1699.06765
51	1	-1	2	-2	20	1	-1	1	-1	21	639.48280	-0.00023	2294.81323	1655.33020
52	1	-1	2	-2	19	1	-1	1	-1	20	641.43570	0.00026	2255.01141	1613.57597
53	1	-1	2	-2	17	1	-1	1	-1	18	645.34130	-0.00035	2181.36119	1536.01954
54	1	-1	2	-2	16	1	-1	1	-1	17	647.29517	-0.00085	2147.51449	1500.21846
55	1	-1	2	-2	15	1	-1	1	-1	16	649.25181	0.00022	2115.65447	1466.40289
56	1	-1	2	-2	14	1	-1	1	-1	15	651.20852	-0.00005	2085.78191	1434.57334
57	1	-1	2	-2	13	1	-1	1	-1	14	653.16703	-0.00017	2057.89753	1404.73033
58	1	-1	2	-2	12	1	-1	1	-1	13	655.12711	-0.00054	2032.00201	1376.87436
59	1	-1	2	-2	11	1	-1	1	-1	12	657.09020	0.00012	2008.09600	1351.00592
60	1	-1	2	-2	10	1	-1	1	-1	11	659.05456	-0.00006	1986.18007	1327.12545
	1	-1	2	-2	9	1	-1	1	-1	10	661.02081	-0.00058	1966.25479	1305.23340
	1	-1	2	-2	8	1	-1	1	-1	9	662.99040	-0.00006	1948.32063	1285.33018
	1	-1	2	-2	7	1	-1	1	-1	8	664.96080	-0.00110	1932.37805	1267.41616W
	1	-1	2	-2	6	1	-1	1	-1	7	666.93605	0.00030	1918.42744	1251.49169
	1	-1	2	-2	5	1	-1	1	-1	6	668.91130	-0.00075	1906.46914	1237.55708
	1	-1	2	-2	4	1	-1	1	-1	5	670.89270	0.00188	1896.50344	1225.61262W
	1	-1	2	-2	3	1	-1	1	-1	4	672.87240	-0.00035	1888.53059	1215.65854

1	-1	2	-2	3	1	-1	1	-1	2	686.80845	0.00012	1888.53059	1201.72226
2	-1	2	-2	4	1	-1	1	-1	3	688.80839	-0.00002	1896.50344	1207.69503
3	-1	2	-2	5	1	-1	1	-1	4	690.81112	0.00052	1906.46914	1215.65854
4	-1	2	-2	6	1	-1	1	-1	5	692.81604	0.00122	1918.42744	1225.61262W
5	-1	2	-2	7	1	-1	1	-1	6	694.82118	0.00021	1932.37805	1237.55708
6	-1	2	-2	8	1	-1	1	-1	7	696.82904	0.00009	1948.32063	1251.49169
7	-1	2	-2	9	1	-1	1	-1	8	698.83869	0.00006	1966.25479	1267.41616
8	-1	2	-2	10	1	-1	1	-1	9	700.84995	0.00005	1986.18007	1285.33018
9	-1	2	-2	11	1	-1	1	-1	10	702.86259	-0.00001	2008.09600	1305.23340
10	-1	2	-2	12	1	-1	1	-1	11	704.87653	-0.00003	2032.00201	1327.12545
11	-1	2	-2	13	1	-1	1	-1	12	706.89118*	-0.00043	2057.89753	1351.00592
12	-1	2	-2	14	1	-1	1	-1	13	708.90757	0.00002	2085.78191	1376.87436
13	-1	2	-2	15	1	-1	1	-1	14	710.92743*	0.00329	2115.65447	1404.73033W
14	-1	2	-2	16	1	-1	1	-1	15	712.94109	-0.00006	2147.51449	1434.57334
15	-1	2	-2	17	1	-1	1	-1	16	714.95813	-0.00017	2181.36119	1466.40289
16	-1	2	-2	18	1	-1	1	-1	17	716.97542	0.00011	2217.19377	1500.21846
17	-1	2	-2	19	1	-1	1	-1	18	718.99202	0.00015	2255.01141	1536.01954
18	-1	2	-2	20	1	-1	1	-1	19	721.00745	-0.00022	2294.81323	1573.80556
19	-1	2	-2	21	1	-1	1	-1	20	723.02201	-0.00038	2336.59836	1613.57597
20	-1	2	-2	22	1	-1	1	-1	21	725.03738*	0.00170	2380.36588	1655.33020W
21	-1	2	-2	23	1	-1	1	-1	22	727.04738	0.00014	2426.11489	1699.06765
22	-1	2	-2	24	1	-1	1	-1	23	731.06500*	0.00108	2523.55362	1792.48970W
23	-1	2	-2	25	1	-1	1	-1	24	733.06760	-0.00087	2575.24148	1842.17301
24	-1	2	-2	26	1	-1	1	-1	25	735.07015	0.00001	2628.90708	1893.83694
25	-1	2	-2	27	1	-1	1	-1	26	737.06920	0.00048	2684.54948	1947.48076
26	-1	2	-2	28	1	-1	1	-1	27	739.06450	0.00049	2742.16775	2003.10374
27	-1	2	-2	29	1	-1	1	-1	28	680.83599	0.00043	1888.53059	1207.69503
28	-1	2	-2	3	1	-1	1	-1	3	680.84552	0.00062	1896.50344	1215.65854
29	-1	2	-2	4	1	-1	1	-1	4	680.85778	0.00126	1906.46914	1225.61262W
30	-1	2	-2	5	1	-1	1	-1	5	680.87071	0.00034	1918.42746	1237.55708
31	-1	2	-2	6	1	-1	1	-1	6	680.88624	-0.00017	1932.37810	1251.49169
32	-1	2	-2	7	1	-1	1	-1	7	680.90639*	0.00180	1948.32074	1267.41616W
33	-1	2	-2	8	1	-1	1	-1	8	680.92501	0.00018	1966.25501	1285.33018
34	-1	2	-2	9	1	-1	1	-1	9	680.94716	0.00008	1986.18048	1305.23340
35	-1	2	-2	10	1	-1	1	-1	10	680.97131	0.00006	2008.09670	1327.12545
36	-1	2	-2	11	1	-1	1	-1	11	680.99724	-0.00003	2032.00319	1351.00592
37	-1	2	-2	12	1	-1	1	-1	12	681.02584	0.00079	2057.89941	1376.87436
38	-1	2	-2	13	1	-1	1	-1	13	681.05457	0.00009	2085.78481	1404.73033
39	-1	2	-2	14	1	-1	1	-1	14	681.08554	0.00006	2115.65882	1434.57334
40	-1	2	-2	15	1	-1	1	-1	15	681.11640*	-0.00153	2147.52082	1466.40289W
41	-1	2	-2	16	1	-1	1	-1	16	681.33893	0.00050	2380.40608	1699.06765
42	-1	2	-2	17	1	-1	1	-1	17	681.37923	0.00018	2426.16675	1744.78769
43	-1	2	-2	18	1	-1	1	-1	18	681.42097	0.00012	2473.91055	1792.48970
44	-1	2	-2	19	1	-1	1	-1	19	681.46360	-0.00034	2523.63695	1842.17301
45	-1	2	-2	20	1	-1	1	-1	20	681.55470	-0.00004	2629.03550	1947.48076
46	-1	2	-2	21	1	-1	1	-1	21	681.60350	0.00056	2684.70668	2003.10374

rms = 0.00031 cm⁻¹3v₅ (Π) \leftarrow 2v₅ (Σ^+)

v ₄ '	ℓ_4'	v ₅ '	ℓ_5'	J'	v ₄ ''	ℓ_4''	v ₅ ''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
0	0	3	1	1	0	0	2	0	2	664.01500	0.00012	2012.20878	1348.19391
0	0	3	1	2	0	0	2	0	3	662.01720	-0.00009	2016.17851	1354.16122
0	0	3	1	3	0	0	2	0	4	660.01553	-0.00005	2022.13301	1362.11743
0	0	3	1	4	0	0	2	0	5	658.00937	-0.00048	2030.07218	1372.06234
0	0	3	1	5	0	0	2	0	6	655.99983	-0.00034	2039.99589	1383.99572
0	0	3	1	6	0	0	2	0	7	653.98620	-0.00045	2051.90395	1397.91730
0	0	3	1	7	0	0	2	0	8	651.97050	0.00108	2065.79617	1413.82675W
0	0	3	1	8	0	0	2	0	9	649.94859	0.00000	2081.67229	1431.72370
0	0	3	1	9	0	0	2	0	10	647.92414	-0.00016	2099.53204	1451.60774
0	0	3	1	10	0	0	2	0	11	645.89657	-0.00014	2119.37511	1473.47840
0	0	3	1	11	0	0	2	0	12	643.86585	-0.00013	2141.20116	1497.33518
0	0	3	1	12	0	0	2	0	13	641.83207	-0.00022	2165.00981	1523.17752
0	0	3	1	13	0	0	2	0	14	639.79560	-0.00022	2190.80064	1551.00481
0	0	3	1	14	0	0	2	0	15	OUR1: http://mc.maccorcentral.com/and/tmp218.57321	0.00000	1580.81643	

1	0	0	3	1	15	0	0	2	0	16	635.71504	-0.00033	2248.32704	1612.61167
2	0	0	3	1	16	0	0	2	0	17	633.67227	0.00046	2280.06163	1646.38981
3	0	0	3	1	17	0	0	2	0	18	631.62612	-0.00023	2313.77642	1682.15007
4	0	0	3	1	18	0	0	2	0	19	629.57900	-0.00021	2349.47084	1719.89163
5	0	0	3	1	19	0	0	2	0	20	627.53050	-0.00016	2387.14429	1759.61363
6	0	0	3	1	1	0	0	2	0	0	669.98210	-0.00023	2012.20878	1342.22645
7	0	0	3	1	2	0	0	2	0	1	671.96260	-0.00029	2016.17851	1344.21562
8	0	0	3	1	3	0	0	2	0	2	673.93907	-0.00003	2022.13301	1348.19391
9	0	0	3	1	4	0	0	2	0	3	675.90970*	-0.00126	2030.07218	1354.16122W
10	0	0	3	1	7	0	0	2	0	6	681.80037	-0.00008	2065.79617	1383.99572
11	0	0	3	1	9	0	0	2	0	8	685.70587	0.00058	2099.53204	1413.82675
12	0	0	3	1	10	0	0	2	0	9	687.65132	-0.00009	2119.37511	1431.72370
13	0	0	3	1	11	0	0	2	0	10	689.59329	-0.00013	2141.20116	1451.60774
14	0	0	3	1	12	0	0	2	0	11	691.53357*	0.00216	2165.00981	1473.47840W
15	0	0	3	1	13	0	0	2	0	12	693.46545	-0.00001	2190.80064	1497.33518
16	0	0	3	1	14	0	0	2	0	13	695.39523	-0.00046	2218.57321	1523.17752
17	0	0	3	1	15	0	0	2	0	14	697.32193	-0.00030	2248.32704	1551.00481
18	0	0	3	1	16	0	0	2	0	15	699.24483	-0.00037	2280.06163	1580.81643
19	0	0	3	1	17	0	0	2	0	16	701.16448	-0.00026	2313.77642	1612.61167
20	0	0	3	1	18	0	0	2	0	17	703.08081	-0.00022	2349.47084	1646.38981
21	0	0	3	1	19	0	0	2	0	18	704.99419	-0.00003	2387.14429	1682.15007
22	0	0	3	1	20	0	0	2	0	19	706.90423	-0.00027	2426.79612	1719.89163
23	0	0	3	1	21	0	0	2	0	20	708.81195	-0.00010	2468.42567	1759.61363
24	0	0	3	1	22	0	0	2	0	21	710.71687	-0.00020	2512.03224	1801.31517
25	0	0	3	1	23	0	0	2	0	22	712.61974	-0.00004	2557.61509	1844.99532
26	0	0	3	1	25	0	0	2	0	24	716.41910	0.00001	2654.70659	1938.28750
27	0	0	3	-1	1	0	0	2	0	1	668.00794	0.00029	2012.22327	1344.21562
28	0	0	3	-1	2	0	0	2	0	2	668.02778	-0.00028	2016.22197	1348.19391
29	0	0	3	-1	3	0	0	2	0	3	668.05867	-0.00003	2022.21993	1354.16122
30	0	0	3	-1	4	0	0	2	0	4	668.09953	-0.00008	2030.21704	1362.11743
31	0	0	3	-1	5	0	0	2	0	5	668.15068	-0.00014	2040.21315	1372.06234
32	0	0	3	-1	6	0	0	2	0	6	668.21223	-0.00015	2052.20810	1383.99572
33	0	0	3	-1	7	0	0	2	0	7	668.28423	-0.00013	2066.20166	1397.91730
34	0	0	3	-1	8	0	0	2	0	8	668.36612	-0.00070	2082.19357	1413.82675
35	0	0	3	-1	9	0	0	2	0	9	668.45983	-0.00003	2100.18356	1431.72370
36	0	0	3	-1	10	0	0	2	0	10	668.56360	0.00005	2120.17129	1451.60774
37	0	0	3	-1	11	0	0	2	0	11	668.67797	-0.00003	2142.15640	1473.47840
38	0	0	3	-1	12	0	0	2	0	12	668.80328	-0.00004	2166.13850	1497.33518
39	0	0	3	-1	13	0	0	2	0	13	668.93956	-0.00006	2192.11714	1523.17752
40	0	0	3	-1	14	0	0	2	0	14	669.08705	0.00003	2220.09184	1551.00481
41	0	0	3	-1	15	0	0	2	0	15	669.24578	0.00011	2250.06210	1580.81643
42	0	0	3	-1	16	0	0	2	0	16	669.41574	0.00006	2282.02735	1612.61167
43	0	0	3	-1	17	0	0	2	0	17	669.59727	0.00006	2315.98702	1646.38981
44	0	0	3	-1	18	0	0	2	0	18	669.79057	0.00018	2351.94046	1682.15007
45	0	0	3	-1	19	0	0	2	0	19	669.99540	0.00002	2389.88701	1719.89163
46	0	0	3	-1	20	0	0	2	0	20	670.21248	0.00016	2429.82595	1759.61363
47	0	0	3	-1	21	0	0	2	0	21	670.44138	0.00002	2471.75653	1801.31517
48	0	0	3	-1	22	0	0	2	0	22	670.68260	-0.00004	2515.67796	1844.99532
49	0	0	3	-1	23	0	0	2	0	23	670.93650	0.00020	2561.58939	1890.65309
50	0	0	3	-1	24	0	0	2	0	24	671.20260	0.00015	2609.48995	1938.28750
51	0	0	3	-1	25	0	0	2	0	25	671.48140	0.00017	2659.37872	1987.89749

rms = 0.00023 cm⁻¹

51

52

53

54

3v₅(Φ) ← 2v₅(Δ)

55

	v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''
58	0	0	3	3	3	0	0	2	-2	3	684.97659	-0.00002	2055.95466	1370.97805
59	0	0	3	3	4	0	0	2	-2	4	684.98421	-0.00023	2063.91501	1378.93057
60	0	0	3	3	5	0	0	2	-2	5	684.99384	-0.00045	2073.86528	1388.87100
	0	0	3	3	6	0	0	2	-2	6	685.00548	-0.00069	2085.80538	1400.79921
	0	0	3	3	7	0	0	2	-2	7	685.01897	-0.00117	2099.73517	1414.71503W
	0	0	3	3	8	0	0	2	-2	8	685.03270	-0.00354	2115.65451	1430.61827W
	0	0	3	3	9	0	0	2	-2	9	685.05440	-0.00011	2133.56322	1448.50870
	0	0	3	3	10	0	0	2	-2	10	685.07483	-0.00020	2153.46111	1468.38608
	0	0	3	3	11	0	0	2	-2	11	685.07883	-0.00017	2173.47757	1490.25013

1	0	0	3	3	12	0	0	2	-2	12	685.12418*	0.00115	2199.22357	1514.10054W
2	0	0	3	3	13	0	0	2	-2	13	685.14951*	-0.00115	2225.08763	1539.93697W
3	0	0	3	3	14	0	0	2	-2	14	685.18069	-0.00013	2252.93989	1567.75907
4	0	0	3	3	15	0	0	2	-2	15	685.21638*	0.00280	2282.78003	1597.56645W
5	0	0	3	3	16	0	0	2	-2	16	685.24967	0.00062	2314.60773	1629.35868
6	0	0	3	3	17	0	0	2	-2	17	685.28757	0.00025	2348.42264	1663.13533
7	0	0	3	3	18	0	0	2	-2	18	685.32844	-0.00003	2384.22439	1698.89591
8	0	0	3	3	19	0	0	2	-2	19	685.37322*	0.00059	2422.01257	1736.63994
9	0	0	3	3	20	0	0	2	-2	20	685.42006	0.00018	2461.78676	1776.36688
10	0	0	3	3	21	0	0	2	-2	21	685.47074	0.00039	2503.54652	1818.07617
11	0	0	3	3	22	0	0	2	-2	22	685.52442	0.00029	2547.29138	1861.76724
12	0	0	3	3	3	0	0	2	2	4	677.02460	0.00078	2055.95466	1378.93084
13	0	0	3	3	4	0	0	2	2	5	675.04450	0.00112	2063.91501	1388.87163W
14	0	0	3	3	5	0	0	2	2	6	673.06590	0.00109	2073.86528	1400.80048W
15	0	0	3	3	6	0	0	2	2	7	671.08850	0.00044	2085.80538	1414.71732
16	0	0	3	3	7	0	0	2	2	8	669.11240	-0.00069	2099.73517	1430.62208
17	0	0	3	3	8	0	0	2	2	9	667.13960	-0.00021	2115.65451	1448.51470
18	0	0	3	3	9	0	0	2	2	10	665.16820	0.00006	2133.56322	1468.39508
19	0	0	3	3	10	0	0	2	2	11	663.19785	-0.00014	2153.46111	1490.26312
20	0	0	3	3	11	0	0	2	2	12	661.22910	-0.00015	2175.34797	1514.11873
21	0	0	3	3	12	0	0	2	2	13	659.26205	0.00026	2199.22357	1539.96178
22	0	0	3	3	13	0	0	2	2	14	657.29610*	0.00061	2225.08763	1567.79214
23	0	0	3	3	14	0	0	2	2	15	655.33040	0.00020	2252.93989	1597.60969
24	0	0	3	3	15	0	0	2	2	16	653.36575	-0.00002	2282.78003	1629.41426
25	0	0	3	3	16	0	0	2	2	17	651.40200	-0.00002	2314.60773	1663.20571
26	0	0	3	3	17	0	0	2	2	18	649.43905	0.00026	2348.42264	1698.98385
27	0	0	3	3	18	0	0	2	2	19	647.47610	0.00021	2384.22439	1736.74850
28	0	0	3	3	19	0	0	2	2	20	645.51220	-0.00091	2422.01257	1776.49946
29	0	0	3	3	20	0	0	2	2	21	643.54990	-0.00035	2461.78676	1818.23651
30	0	0	3	3	21	0	0	2	2	22	690.94103*	-0.00004	2055.95466	1365.01359
31	0	0	3	3	22	0	0	2	2	23	692.93681*	-0.00005	2063.91501	1370.97815
32	0	0	3	3	23	0	0	2	2	24	694.93532	0.00088	2073.86528	1378.93084
33	0	0	3	3	24	0	0	2	2	25	696.93399	0.00024	2085.80538	1388.87163
34	0	0	3	3	25	0	0	2	2	26	698.93553	0.00084	2099.73517	1400.80048
35	0	0	3	3	26	0	0	2	2	27	700.93816	0.00097	2115.65451	1414.71732
36	0	0	3	3	27	0	0	2	2	28	702.94255	0.00141	2133.56322	1430.62208W
37	0	0	3	3	28	0	0	2	2	29	704.94628	-0.00013	2153.46111	1448.51470
38	0	0	3	3	29	0	0	2	2	30	706.95220	-0.00070	2175.34797	1468.39508
39	0	0	3	3	30	0	0	2	2	31	708.95875*	-0.00169	2199.22357	1490.26312W
40	0	0	3	3	31	0	0	2	2	32	710.96891	0.00001	2225.08763	1514.11873
41	0	0	3	3	32	0	0	2	2	33	712.97804	-0.00007	2252.93989	1539.96178
42	0	0	3	3	33	0	0	2	2	34	714.98795	0.00006	2282.78003	1567.79214
43	0	0	3	3	34	0	0	2	2	35	716.99805	0.00001	2314.60773	1597.60969
44	0	0	3	3	35	0	0	2	2	36	719.00870	0.00032	2348.42264	1629.41426
45	0	0	3	3	36	0	0	2	2	37	721.01849	-0.00019	2384.22439	1663.20571
46	0	0	3	3	37	0	0	2	2	38	723.02865	-0.00007	2422.01257	1698.98385
47	0	0	3	3	38	0	0	2	2	39	725.03738	-0.00088	2461.78676	1736.74850
48	0	0	3	3	39	0	0	2	2	40	684.97659	0.00007	2055.95466	1370.97815
49	0	0	3	3	40	0	0	2	2	41	684.98421	0.00004	2063.91501	1378.93084
50	0	0	3	3	41	0	0	2	2	42	684.99384	0.00019	2073.86528	1388.87163
51	0	0	3	3	42	0	0	2	2	43	685.01897	0.00111	2099.73518	1414.71732W
52	0	0	3	3	43	0	0	2	2	44	685.03520	0.00275	2115.65453	1430.62208W
53	0	0	3	3	44	0	0	2	2	45	685.04920*	0.00064	2133.56326	1448.51470
54	0	0	3	3	45	0	0	2	2	46	685.06606	-0.00005	2153.46119	1468.39508
55	0	0	3	3	46	0	0	2	2	47	685.08490	-0.00009	2175.34811	1490.26312
56	0	0	3	3	47	0	0	2	2	48	685.10496	-0.00011	2199.22379	1514.11873
57	0	0	3	3	48	0	0	2	2	49	685.12418*	-0.00204	2225.08800	1539.96178W
58	0	0	3	3	49	0	0	2	2	50	685.14951*	0.00120	2252.94045	1567.79214W
59	0	0	3	3	50	0	0	2	2	51	685.17102	-0.00017	2282.78088	1597.60969
60	0	0	3	3	51	0	0	2	2	52	685.19480	0.00009	2314.60898	1629.41426
	0	0	3	3	52	0	0	2	2	53	685.21638*	-0.00234	2348.42442	1663.20571W
	0	0	3	3	53	0	0	2	2	54	685.24268	-0.00035	2384.22688	1698.98385
	0	0	3	3	54	0	0	2	2	55	685.26742	-0.00008	2422.01600	1736.74850
	0	0	3	3	55	0	0	2	2	56	685.29220*	0.00024	2461.79141	1776.49946
	0	0	3	3	56	0	0	2	2	57	677.02460	0.00051	2055.95466	1378.93057
	0	0	3	3	57	0	0	2	2	58	675.04450	0.00049	2063.91501	1388.87100
	0	0	3	3	58	0	0	2	2	59	673.06590	-0.00018	2073.86528	1400.79921
	0	0	3	3	59	0	0	2	2	60	671.08850	-0.00186	2085.80538	1414.71503W

1	0	0	3	-3	7	0	0	2	-2	8	669.11650	-0.00041	2099.73518	1430.61827
2	0	0	3	-3	8	0	0	2	-2	9	667.14611	0.00029	2115.65453	1448.50870
3	0	0	3	-3	9	0	0	2	-2	10	665.17760	0.00042	2133.56326	1468.38608
4	0	0	3	-3	10	0	0	2	-2	11	663.21080	-0.00026	2153.46119	1490.25013
5	0	0	3	-3	11	0	0	2	-2	12	661.24800	0.00043	2175.34811	1514.10054
6	0	0	3	-3	12	0	0	2	-2	13	659.28711	0.00029	2199.22379	1539.93697
7	0	0	3	-3	13	0	0	2	-2	14	657.32855	-0.00038	2225.08800	1567.75907
8	0	0	3	-3	14	0	0	2	-2	15	655.37370	-0.00031	2252.94045	1597.56645
9	0	0	3	-3	15	0	0	2	-2	16	653.42220	0.00000	2282.78088	1629.35868
10	0	0	3	-3	16	0	0	2	-2	17	651.47305	-0.00060	2314.60898	1663.13533
11	0	0	3	-3	17	0	0	2	-2	18	649.52830	-0.00021	2348.42442	1698.89591
12	0	0	3	-3	18	0	0	2	-2	19	647.58680	-0.00014	2384.22688	1736.63994
13	0	0	3	-3	19	0	0	2	-2	20	645.64880	-0.00032	2422.01600	1776.36688
14	0	0	3	-3	20	0	0	2	-2	21	643.71710	0.00186	2461.79141	1818.07617W
15	0	0	3	-3	3	0	0	2	-2	2	690.94103*	-0.00006	2055.95466	1365.01357
16	0	0	3	-3	4	0	0	2	-2	3	692.93681*	-0.00014	2063.91501	1370.97805
17	0	0	3	-3	5	0	0	2	-2	4	694.93522*	0.00050	2073.86528	1378.93057
18	0	0	3	-3	6	0	0	2	-2	5	696.93399	-0.00040	2085.80538	1388.87100
19	0	0	3	-3	7	0	0	2	-2	6	698.93553	-0.00044	2099.73518	1400.79921
20	0	0	3	-3	8	0	0	2	-2	7	700.93816	-0.00134	2115.65453	1414.71503W
21	0	0	3	-3	9	0	0	2	-2	8	702.94840	0.00341	2133.56326	1430.61827W
22	0	0	3	-3	10	0	0	2	-2	9	704.95195*	-0.00054	2153.46119	1448.50870
23	0	0	3	-3	11	0	0	2	-2	10	706.96157	-0.00046	2175.34811	1468.38608
24	0	0	3	-3	12	0	0	2	-2	11	708.97403	0.00037	2199.22379	1490.25013
25	0	0	3	-3	13	0	0	2	-2	12	710.98753	0.00007	2225.08800	1514.10054
26	0	0	3	-3	14	0	0	2	-2	13	713.00340	-0.00008	2252.94045	1539.93697
27	0	0	3	-3	15	0	0	2	-2	14	715.02196	0.00015	2282.78088	1567.75907
28	0	0	3	-3	16	0	0	2	-2	15	717.04260	0.00007	2314.60898	1597.56645
29	0	0	3	-3	17	0	0	2	-2	16	719.06587	0.00013	2348.42442	1629.35868
30	0	0	3	-3	18	0	0	2	-2	17	721.09153	-0.00003	2384.22688	1663.13533
31	0	0	3	-3	19	0	0	2	-2	18	723.12004	-0.00005	2422.01600	1698.89591
32	0	0	3	-3	20	0	0	2	-2	19	725.15158	0.00011	2461.79141	1736.63994

rms = 0.00037 cm⁻¹2v₄(Σ⁺) ← G.S. (Σ⁺)

v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
2	0	0	0	0	0	0	0	0	1	1031.95232	0.00008	1033.93529	1.98305
2	0	0	0	1	0	0	0	0	2	1029.98007	0.00002	1035.92917	5.94912
2	0	0	0	2	0	0	0	0	3	1028.01865	0.00003	1039.91679	11.89816
2	0	0	0	3	0	0	0	0	4	1026.06784	0.00004	1045.89789	19.83009
2	0	0	0	4	0	0	0	0	5	1024.12740	0.00010	1053.87209	29.74480
2	0	0	0	5	0	0	0	0	6	1022.19676	0.00003	1063.83887	41.64214
2	0	0	0	6	0	0	0	0	7	1020.27562	0.00000	1075.79759	55.52197
2	0	0	0	7	0	0	0	0	8	1018.36336	-0.00002	1089.74746	71.38408
2	0	0	0	8	0	0	0	0	9	1016.45928	-0.00006	1105.68761	89.22827
2	0	0	0	9	0	0	0	0	10	1014.56300	0.00027	1123.61701	109.05428
2	0	0	0	10	0	0	0	0	11	1012.67264	-0.00008	1143.53456	130.86184
2	0	0	0	11	0	0	0	0	12	1010.78882	0.00041	1165.43907	154.65066
2	0	0	0	12	0	0	0	0	13	1008.90889	0.00004	1189.32925	180.42041
2	0	0	0	13	0	0	0	0	14	1007.03274	-0.00033	1215.20380	208.17072
2	0	0	0	14	0	0	0	0	15	1005.16006	-0.00008	1243.06138	237.90124
2	0	0	0	15	0	0	0	0	16	1003.28906	-0.00006	1272.90065	269.61154
2	0	0	0	16	0	0	0	0	17	1001.41927	0.00012	1304.72033	303.30118
2	0	0	0	17	0	0	0	0	18	999.54983	0.00037	1338.51918	338.96972
2	0	0	0	18	0	0	0	0	19	997.67965	0.00026	1374.29604	376.61665
2	0	0	0	19	0	0	0	0	20	995.80863	0.00025	1412.04985	416.24147
2	0	0	0	20	0	0	0	0	21	993.93637	0.00037	1451.77962	457.84362
2	0	0	0	21	0	0	0	0	22	992.06205	0.00010	1493.48450	501.42254
2	0	0	0	22	0	0	0	0	23	990.18639	0.00034	1537.16368	546.97764
2	0	0	0	23	0	0	0	0	24	988.30863	0.00044	1582.81646	594.50827
2	0	0	0	24	0	0	0	0	25	986.42873	0.00034	1630.44219	644.01380
2	0	0	0	25	0	0	0	0	26	984.54693	0.00022	1680.04024	695.49354
2	0	0	0	26	0	0	0	0	27	982.66306	-0.00021	1731.61005	748.94678
2	0	0	0	27	0	URL: http://mc.manuscriptcentral.com/tmp185.15104							804.37280

1	2	0	0	0	28	0	0	0	0	29	978.89241	0.00061	1840.66263	861.77083
2	2	0	0	0	29	0	0	0	0	30	977.00454	0.00038	1898.14425	921.14009
3	2	0	0	0	30	0	0	0	0	31	975.11600	0.00047	1957.59528	982.47976
4	2	0	0	0	31	0	0	0	0	32	973.22638	0.00027	2019.01510	1045.78899
5	2	0	0	0	32	0	0	0	0	33	971.33660	0.00048	2082.40305	1111.06693
6	2	0	0	0	33	0	0	0	0	34	969.44579	0.00004	2147.75842	1178.31267
7	2	0	0	0	34	0	0	0	0	35	967.55534	0.00014	2215.08048	1247.52529
8	2	0	0	0	35	0	0	0	0	36	965.66461	-0.00001	2284.36847	1318.70384
9	2	0	0	0	36	0	0	0	0	37	963.77415	-0.00005	2355.62155	1391.84735
10	2	0	0	0	37	0	0	0	0	38	961.88428	0.00021	2428.83889	1466.95482
11	2	0	0	0	38	0	0	0	0	39	959.99447	0.00008	2504.01959	1544.02520
12	2	0	0	0	39	0	0	0	0	40	958.10536	0.00010	2581.16271	1623.05745
13	2	0	0	0	40	0	0	0	0	41	956.21685	0.00003	2660.26730	1704.05048
14	2	0	0	0	41	0	0	0	0	42	954.32932	0.00017	2741.33234	1787.00318
15	2	0	0	0	42	0	0	0	0	43	952.44272	0.00035	2824.35679	1871.91441
16	2	0	0	0	43	0	0	0	0	44	950.55594	-0.00061	2909.33957	1958.78301
17	2	0	0	0	44	0	0	0	0	45	948.67206	0.00029	2996.27956	2047.60779
18	2	0	0	0	1	0	0	0	0	0	1035.92974	0.00057	1035.92917	0.00000
19	2	0	0	0	2	0	0	0	0	1	1037.93342	-0.00032	1039.91679	1.98305
20	2	0	0	0	3	0	0	0	0	2	1039.94854	-0.00023	1045.89789	5.94912
21	2	0	0	0	4	0	0	0	0	3	1041.97387	-0.00006	1053.87209	11.89816
22	2	0	0	0	5	0	0	0	0	4	1044.00877	-0.00001	1063.83887	19.83009
23	2	0	0	0	6	0	0	0	0	5	1046.05277	-0.00002	1075.79759	29.74480
24	2	0	0	0	7	0	0	0	0	6	1048.10554	0.00022	1089.74746	41.64214
25	2	0	0	0	8	0	0	0	0	7	1050.16568	0.00004	1105.68761	55.52197
26	2	0	0	0	9	0	0	0	0	8	1052.23303	0.00010	1123.61701	71.38408
27	2	0	0	0	10	0	0	0	0	9	1054.30601	-0.00028	1143.53456	89.22827
28	2	0	0	0	11	0	0	0	0	10	1056.38420	-0.00059	1165.43907	109.05428
29	2	0	0	0	12	0	0	0	0	11	1058.46730	-0.00011	1189.32925	130.86184
30	2	0	0	0	13	0	0	0	0	12	1060.55206	-0.00108	1215.20380	154.65066W
31	2	0	0	0	14	0	0	0	0	13	1062.64093	-0.00004	1243.06138	180.42041
32	2	0	0	0	15	0	0	0	0	14	1064.72946	-0.00047	1272.90065	208.17072
33	2	0	0	0	16	0	0	0	0	15	1066.81918	0.00008	1304.72033	237.90124
34	2	0	0	0	17	0	0	0	0	16	1068.90771	0.00006	1338.51918	269.61154
35	2	0	0	0	18	0	0	0	0	17	1070.99509	0.00023	1374.29604	303.30118
36	2	0	0	0	19	0	0	0	0	18	1073.08031	0.00018	1412.04985	338.96972
37	2	0	0	0	20	0	0	0	0	19	1075.16319	0.00022	1451.77962	376.61665
38	2	0	0	0	21	0	0	0	0	20	1077.24294	-0.00009	1493.48450	416.24147
39	2	0	0	0	22	0	0	0	0	21	1079.32048	0.00042	1537.16368	457.84362
40	2	0	0	0	23	0	0	0	0	22	1081.39403	0.00011	1582.81646	501.42254
41	2	0	0	0	24	0	0	0	0	23	1083.46457	0.00002	1630.44219	546.97764
42	2	0	0	0	25	0	0	0	0	24	1085.53209	0.00012	1680.04024	594.50827
43	2	0	0	0	26	0	0	0	0	25	1087.59617	-0.00009	1731.61005	644.01380
44	2	0	0	0	27	0	0	0	0	26	1089.65679	-0.00071	1785.15104	695.49354
45	2	0	0	0	28	0	0	0	0	27	1091.71584	-0.00001	1840.66263	748.94678
46	2	0	0	0	29	0	0	0	0	28	1093.77102	-0.00043	1898.14425	804.37280
47	2	0	0	0	30	0	0	0	0	29	1095.82428	-0.00017	1957.59528	861.77083
48	2	0	0	0	31	0	0	0	0	30	1097.87498	-0.00003	2019.01510	921.14009
49	2	0	0	0	32	0	0	0	0	31	1099.92333	0.00004	2082.40305	982.47976
50	2	0	0	0	33	0	0	0	0	32	1101.96945	0.00002	2147.75842	1045.78899
51	2	0	0	0	34	0	0	0	0	33	1104.01368	0.00012	2215.08048	1111.06693
52	2	0	0	0	35	0	0	0	0	34	1106.05596	0.00016	2284.36847	1178.31267
53	2	0	0	0	36	0	0	0	0	35	1108.09614	-0.00012	2355.62155	1247.52529
54	2	0	0	0	37	0	0	0	0	36	1110.13516	0.00011	2428.83889	1318.70384
55	2	0	0	0	38	0	0	0	0	37	1112.17232	0.00009	2504.01959	1391.84735
56	2	0	0	0	39	0	0	0	0	38	1114.20827	0.00037	2581.16271	1466.95482
57	2	0	0	0	40	0	0	0	0	39	1116.24244	0.00034	2660.26730	1544.02520
58	2	0	0	0	41	0	0	0	0	40	1118.27505	0.00016	2741.33234	1623.05745
59	2	0	0	0	42	0	0	0	0	41	1120.30694	0.00064	2824.35679	1704.05048
60	2	0	0	0	43	0	0	0	0	42	1122.33696	0.00058	2909.33957	1787.00318
	2	0	0	0	44	0	0	0	0	43	1124.36534	0.00019	2996.27956	1871.91441
	2	0	0	0	45	0	0	0	0	44	1126.39390	0.00128	3085.17563	1958.78301W

rms = 0.00027 cm⁻¹

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	2	2	0	0	41	0	0	0	0	42	970.08701	-0.00004	2757.09023	1787.00318
2	2	2	0	0	40	0	0	0	0	41	971.29577	-0.00087	2675.34712	1704.05048
3	2	2	0	0	39	0	0	0	0	40	972.52554	-0.00035	2595.58334	1623.05745
4	2	2	0	0	38	0	0	0	0	39	973.77464	-0.00035	2517.80019	1544.02520
5	2	2	0	0	37	0	0	0	0	38	975.04392	-0.00021	2441.99894	1466.95482
6	2	2	0	0	36	0	0	0	0	37	976.33353	0.00003	2368.18085	1391.84735
7	2	2	0	0	35	0	0	0	0	36	977.64303	-0.00029	2296.34716	1318.70384
8	2	2	0	0	34	0	0	0	0	35	978.97381	0.00001	2226.49908	1247.52529
9	2	2	0	0	33	0	0	0	0	34	980.32533	0.00016	2158.63783	1178.31267
10	2	2	0	0	32	0	0	0	0	33	981.69771	0.00004	2092.76459	1111.06693
11	2	2	0	0	31	0	0	0	0	32	983.09180	0.00027	2028.88052	1045.78899
12	2	2	0	0	30	0	0	0	0	31	984.50650	-0.00052	1966.98678	982.47976
13	2	2	0	0	29	0	0	0	0	30	985.94463	0.00024	1907.08448	921.14009
14	2	2	0	0	28	0	0	0	0	29	987.40396	0.00006	1849.17473	861.77083
15	2	2	0	0	27	0	0	0	0	28	988.88574	-0.00006	1793.25860	804.37280
16	2	2	0	0	26	0	0	0	0	27	990.39092	0.00059	1739.33712	748.94678
17	2	2	0	0	25	0	0	0	0	26	991.91716	-0.00057	1687.41127	695.49354
18	2	2	0	0	24	0	0	0	0	25	993.46851	0.00032	1637.48199	644.01380
19	2	2	0	0	23	0	0	0	0	24	995.04214	0.00027	1589.55014	594.50827
20	2	2	0	0	22	0	0	0	0	23	996.63934	0.00049	1543.61649	546.97764
21	2	2	0	0	21	0	0	0	0	22	998.25959	0.00041	1499.68172	501.42254
22	2	2	0	0	20	0	0	0	0	21	999.90292	0.00016	1457.74639	457.84362
23	2	2	0	0	19	0	0	0	0	20	1001.56977	0.00032	1417.81092	416.24147
24	2	2	0	0	18	0	0	0	0	19	1003.25939	0.00045	1379.87559	376.61665
25	2	2	0	0	17	0	0	0	0	18	1004.97088	0.00006	1343.94054	338.96972
26	2	2	0	0	16	0	0	0	0	17	1006.70505	0.00050	1310.00574	303.30118
27	2	2	0	0	15	0	0	0	0	16	1008.45969	0.00022	1278.07100	269.61154
28	2	2	0	0	14	0	0	0	0	15	1010.23523	0.00044	1248.13603	237.90124
29	2	2	0	0	13	0	0	0	0	14	1012.02998	0.00031	1220.20039	208.17072
30	2	2	0	0	12	0	0	0	0	13	1013.84333	0.00017	1194.26357	180.42041
31	2	2	0	0	11	0	0	0	0	12	1015.67454	0.00023	1170.32497	154.65066
32	2	2	0	0	10	0	0	0	0	11	1017.52243	0.00028	1148.38399	130.86184
33	2	2	0	0	9	0	0	0	0	10	1019.38624	0.00053	1128.43999	109.05428
34	2	2	0	0	8	0	0	0	0	9	1021.26446	0.00039	1110.49234	89.22827
35	2	2	0	0	7	0	0	0	0	8	1023.15649	0.00012	1094.54045	71.38408
36	2	2	0	0	6	0	0	0	0	7	1025.06227	0.00045	1080.58379	55.52197
37	2	2	0	0	5	0	0	0	0	6	1026.97990	0.00018	1068.62187	41.64214
38	2	2	0	0	5	0	0	0	0	4	1048.79270	0.00092	1068.62187	19.83009
39	2	2	0	0	6	0	0	0	0	5	1050.83957	0.00057	1080.58379	29.74480
40	2	2	0	0	7	0	0	0	0	6	1052.89812	-0.00019	1094.54045	41.64214
41	2	2	0	0	8	0	0	0	0	7	1054.97074	0.00037	1110.49234	55.52197
42	2	2	0	0	9	0	0	0	0	8	1057.05595	0.00005	1128.43999	71.38408
43	2	2	0	0	10	0	0	0	0	9	1059.15576	0.00004	1148.38399	89.22827
44	2	2	0	0	11	0	0	0	0	10	1061.27082	0.00012	1170.32497	109.05428
45	2	2	0	0	12	0	0	0	0	11	1063.40199	0.00027	1194.26357	130.86184
46	2	2	0	0	13	0	0	0	0	12	1065.55027	0.00054	1220.20039	154.65066
47	2	2	0	0	14	0	0	0	0	13	1067.71578	0.00016	1248.13603	180.42041
48	2	2	0	0	15	0	0	0	0	14	1069.90050	0.00022	1278.07100	208.17072
49	2	2	0	0	16	0	0	0	0	15	1072.10477	0.00027	1310.00574	237.90124
50	2	2	0	0	17	0	0	0	0	16	1074.32908	0.00007	1343.94054	269.61154
51	2	2	0	0	18	0	0	0	0	17	1076.57460	0.00019	1379.87559	303.30118
52	2	2	0	0	19	0	0	0	0	18	1078.84140	0.00020	1417.81092	338.96972
53	2	2	0	0	20	0	0	0	0	19	1081.12972	-0.00001	1457.74639	376.61665
54	2	2	0	0	21	0	0	0	0	20	1083.44043	0.00018	1499.68172	416.24147
55	2	2	0	0	22	0	0	0	0	21	1085.77319	0.00032	1543.61649	457.84362
56	2	2	0	0	23	0	0	0	0	22	1088.12771	0.00012	1589.55014	501.42254
57	2	2	0	0	24	0	0	0	0	23	1090.50457	0.00021	1637.48199	546.97764
58	2	2	0	0	25	0	0	0	0	24	1092.90327	0.00027	1687.41127	594.50827
59	2	2	0	0	26	0	0	0	0	25	1095.32340	0.00008	1739.33712	644.01380
60	2	2	0	0	27	0	0	0	0	26	1097.76528	0.00022	1793.25860	695.49354
	2	2	0	0	28	0	0	0	0	27	1100.22819	0.00024	1849.17473	748.94678
	2	2	0	0	29	0	0	0	0	28	1102.71194	0.00026	1907.08448	804.37280
	2	2	0	0	30	0	0	0	0	29	1105.21610	0.00015	1966.98678	861.77083
	2	2	0	0	31	0	0	0	0	30	1107.74054	0.00011	2028.88052	921.14009
	2	2	0	0	32	0	0	0	0	31	1110.28492	0.00008	2092.76459	982.47976
	2	2	0	0	33	0	0	0	0	32	1112.84898	0.00014	2158.63783	1045.78899
	2	2	0	0	34	0	0	0	0	33	URL: http://mc.manuscriptcentral.com/tmpa	0.00001	1111.06693	

1	2	2	0	0	35	0	0	0	0	34	1118.03439	-0.00010	2296.34716	1178.31267
2	2	2	0	0	36	0	0	0	0	35	1120.65547	-0.00009	2368.18085	1247.52529
3	2	2	0	0	37	0	0	0	0	36	1123.29498	-0.00012	2441.99894	1318.70384
4	2	2	0	0	38	0	0	0	0	37	1125.95271	-0.00013	2517.80019	1391.84735
5	2	2	0	0	39	0	0	0	0	38	1128.62817	-0.00036	2595.58334	1466.95482
6	2	2	0	0	40	0	0	0	0	39	1131.32173	-0.00019	2675.34712	1544.02520
7	2	2	0	0	41	0	0	0	0	40	1134.03242	-0.00036	2757.09023	1623.05745
8	2	2	0	0	42	0	0	0	0	41	1136.76096	0.00008	2840.81136	1704.05048
9	2	2	0	0	43	0	0	0	0	42	1139.50590	-0.00009	2926.50917	1787.00318

rms = 0.00031 cm⁻¹v₄ + v₅ (Σ^+) \leftarrow G.S. (Σ^+)

v _{4'}	$\ell_{4'}$	v _{5'}	$\ell_{5'}$	J'	v _{4''}	$\ell_{4''}$	v _{5''}	$\ell_{5''}$	J''	OBS	OBS - CALC	E'	E''
1	1	1	-1	0	0	0	0	0	1	1198.51557	0.00052	1200.49810	1.98305
1	1	1	-1	1	0	0	0	0	2	1196.54002	0.00014	1202.48900	5.94912
1	1	1	-1	2	0	0	0	0	3	1194.57270	0.00001	1206.47085	11.89816
1	1	1	-1	3	0	0	0	0	4	1192.61363	-0.00004	1212.44377	19.83009
1	1	1	-1	4	0	0	0	0	5	1190.66321	0.00012	1220.40789	29.74480
1	1	1	-1	5	0	0	0	0	6	1188.72140	0.00011	1230.36343	41.64214
1	1	1	-1	6	0	0	0	0	7	1186.78878	0.00010	1242.31065	55.52197
1	1	1	-1	7	0	0	0	0	8	1184.86581	0.00005	1256.24984	71.38408
1	1	1	-1	8	0	0	0	0	9	1182.95292	-0.00018	1272.18137	89.22827
1	1	1	-1	9	0	0	0	0	10	1181.05155	0.00022	1290.10561	109.05428
1	1	1	-1	10	0	0	0	0	11	1179.16124	0.00010	1310.02298	130.86184
1	1	1	-1	11	0	0	0	0	12	1177.28288	-0.00039	1331.93393	154.65066
1	1	1	-1	12	0	0	0	0	13	1175.41817	-0.00033	1355.83891	180.42041
1	1	1	-1	13	0	0	0	0	14	1173.56761	-0.00001	1381.73835	208.17072
1	1	1	-1	14	0	0	0	0	15	1171.73147	0.00004	1409.63267	237.90124
1	1	1	-1	15	0	0	0	0	16	1169.91054	-0.00017	1439.52224	269.61154
1	1	1	-1	16	0	0	0	0	17	1168.10622	0.00003	1471.40738	303.30118
1	1	1	-1	17	0	0	0	0	18	1166.31870	0.00013	1505.28829	338.96972
1	1	1	-1	18	0	0	0	0	19	1164.54858	0.00013	1541.16510	376.61665
1	1	1	-1	19	0	0	0	0	20	1162.79659	0.00023	1579.03782	416.24147
1	1	1	-1	20	0	0	0	0	21	1161.06281	0.00008	1618.90635	457.84362
1	1	1	-1	21	0	0	0	0	22	1159.34761	-0.00030	1660.77045	501.42254
1	1	1	-1	22	0	0	0	0	23	1157.65208	-0.00005	1704.62977	546.97764
1	1	1	-1	23	0	0	0	0	24	1155.97523	-0.00033	1750.48383	594.50827
1	1	1	-1	24	0	0	0	0	25	1154.31881	0.00055	1798.33206	644.01380
1	1	1	-1	25	0	0	0	0	26	1152.68002	-0.00023	1848.17378	695.49354
1	1	1	-1	26	0	0	0	0	27	1151.06137	-0.00009	1900.00824	748.94678
1	1	1	-1	27	0	0	0	0	28	1149.46205	0.00024	1953.83461	804.37280
1	1	1	-1	28	0	0	0	0	29	1147.88120	0.00005	2009.65198	861.77083
1	1	1	-1	29	0	0	0	0	30	1146.31963	0.00030	2067.45942	921.14009
1	1	1	-1	30	0	0	0	0	31	1144.77594	-0.00023	2127.25592	982.47976
1	1	1	-1	31	0	0	0	0	32	1143.25198	0.00051	2189.04046	1045.78899
1	1	1	-1	32	0	0	0	0	33	1141.74540	0.00035	2252.81197	1111.06693
1	1	1	-1	33	0	0	0	0	34	1140.25730	0.00060	2318.56937	1178.31267
1	1	1	-1	34	0	0	0	0	35	1138.78690	0.00066	2386.31153	1247.52529
1	1	1	-1	35	0	0	0	0	36	1137.33410	0.00063	2456.03731	1318.70384
1	1	1	-1	36	0	0	0	0	37	1135.89862	0.00042	2527.74555	1391.84735
1	1	1	-1	37	0	0	0	0	38	1134.48082	0.00056	2601.43508	1466.95482
1	1	1	-1	38	0	0	0	0	39	1133.07993	0.00045	2677.10468	1544.02520
1	1	1	-1	39	0	0	0	0	40	1131.69644	0.00076	2754.75313	1623.05745
1	1	1	-1	40	0	0	0	0	41	1130.32938	0.00067	2834.37920	1704.05048
1	1	1	-1	41	0	0	0	0	42	1128.97966	0.00123	2915.98161	1787.00318W
1	1	1	-1	42	0	0	0	0	43	1127.64639	0.00172	2999.55909	1871.91441W
1	1	1	-1	1	0	0	0	0	0	1202.48927	0.00027	1202.48900	0.00000
1	1	1	-1	2	0	0	0	0	1	1204.48768	-0.00012	1206.47085	1.98305
1	1	1	-1	3	0	0	0	0	2	1206.49404	-0.00060	1212.44377	5.94912
1	1	1	-1	4	0	0	0	0	3	1208.51003	0.00030	1220.40789	11.89816
1	1	1	-1	5	0	0	0	0	4	1210.53320	-0.00014	1230.36343	19.83009
1	1	1	-1	6	0	0	0	0	5	1212.56578	-0.00007	1242.31065	29.74480
1	1	1	-1	7	0	0	0	0	6	1214.60747	-0.00023	1256.24984	41.64214
1	1	1	-1	8	0	0	0	0	0	URL: http://mc.manuscriptcentral.com/af/tmp172.18137	55.52197		

1	1	1	1	-1	9	0	0	0	0	8	1218.72149	-0.00003	1290.10561	71.38408
1	1	1	1	-1	10	0	0	0	0	9	1220.79484	0.00013	1310.02298	89.22827
2	1	1	1	-1	11	0	0	0	0	10	1222.87941	-0.00024	1331.93393	109.05428
3	1	1	1	-1	12	0	0	0	0	11	1224.97715	0.00008	1355.83891	130.86184
4	1	1	1	-1	13	0	0	0	0	12	1227.08785	0.00016	1381.73835	154.65066
5	1	1	1	-1	14	0	0	0	0	13	1229.21226	-0.00001	1409.63267	180.42041
6	1	1	1	-1	15	0	0	0	0	14	1231.35122	-0.00030	1439.52224	208.17072
7	1	1	1	-1	16	0	0	0	0	15	1233.50595	-0.00019	1471.40738	237.90124
8	1	1	1	-1	17	0	0	0	0	16	1235.67679	0.00004	1505.28829	269.61154
9	1	1	1	-1	18	0	0	0	0	17	1237.86371	-0.00021	1541.16510	303.30118
10	1	1	1	-1	19	0	0	0	0	18	1240.06800	-0.00011	1579.03782	338.96972
11	1	1	1	-1	20	0	0	0	0	19	1242.28958	-0.00012	1618.90635	376.61665
12	1	1	1	-1	21	0	0	0	0	20	1244.52883	-0.00015	1660.77045	416.24147
13	1	1	1	-1	22	0	0	0	0	21	1246.78654	0.00040	1704.62977	457.84362
14	1	1	1	-1	23	0	0	0	0	22	1249.06108	-0.00020	1750.48383	501.42254
15	1	1	1	-1	24	0	0	0	0	23	1251.35374	-0.00068	1798.33206	546.97764
16	1	1	1	-1	25	0	0	0	0	24	1253.66481	-0.00070	1848.17378	594.50827
17	1	1	1	-1	26	0	0	0	0	25	1255.99446	0.00001	1900.00824	644.01380
18	1	1	1	-1	27	0	0	0	0	26	1258.34107	0.00000	1953.83461	695.49354
19	1	1	1	-1	28	0	0	0	0	27	1260.70550	0.00030	2009.65198	748.94678
20	1	1	1	-1	29	0	0	0	0	28	1263.08653	-0.00009	2067.45942	804.37280
21	1	1	1	-1	30	0	0	0	0	29	1265.48515	0.00006	2127.25592	861.77083
22	1	1	1	-1	31	0	0	0	0	30	1267.90077	0.00040	2189.04046	921.14009
23	1	1	1	-1	32	0	0	0	0	31	1270.33245	0.00023	2252.81197	982.47976
24	1	1	1	-1	33	0	0	0	0	32	1272.78072	0.00034	2318.56937	1045.78899
25	1	1	1	-1	34	0	0	0	0	33	1275.24474	0.00014	2386.31153	1111.06693
26	1	1	1	-1	35	0	0	0	0	34	1277.72482	0.00018	2456.03731	1178.31267
27	1	1	1	-1	36	0	0	0	0	35	1280.22075	0.00048	2527.74555	1247.52529
28	1	1	1	-1	37	0	0	0	0	36	1282.73185	0.00062	2601.43508	1318.70384
29	1	1	1	-1	38	0	0	0	0	37	1285.25731	-0.00001	2677.10468	1391.84735
30	1	1	1	-1	39	0	0	0	0	38	1287.79919	0.00087	2754.75313	1466.95482
31	1	1	1	-1	40	0	0	0	0	39	1290.35422	0.00022	2834.37920	1544.02520
32	1	1	1	-1	41	0	0	0	0	40	1292.92593	0.00177	2915.98161	1623.05745W
33	1	1	1	-1	42	0	0	0	0	41	1295.50788	-0.00073	2999.55909	1704.05048
34	1	1	1	-1	43	0	0	0	0	42	1298.10927	0.00212	3085.11033	1787.00318W
35	1	1	1	-1	44	0	0	0	0	43	1300.71869	-0.00090	3172.63400	1871.91441

rms = 0.00035 cm⁻¹

v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
1	1	1	1	6	0	0	0	0	7	1182.03050	0.00019	1237.55228	55.52197
1	1	1	1	7	0	0	0	0	8	1180.09780	-0.00116	1251.48305	71.38408W
1	1	1	1	8	0	0	0	0	9	1178.17399	0.00049	1267.40177	89.22827
1	1	1	1	9	0	0	0	0	10	1176.25360	0.00027	1285.30761	109.05428
1	1	1	1	10	0	0	0	0	11	1174.33778	-0.00001	1305.19963	130.86184
1	1	1	1	11	0	0	0	0	12	1172.42620	0.00003	1327.07683	154.65066
1	1	1	1	13	0	0	0	0	14	1168.61180	0.00012	1376.78240	208.17072
1	1	1	1	14	0	0	0	0	15	1166.70744	0.00017	1404.60850	237.90124
1	1	1	1	15	0	0	0	0	16	1164.80361	-0.00011	1434.41526	269.61154
1	1	1	1	16	0	0	0	0	17	1162.90033	0.00000	1466.20152	303.30118
1	1	1	1	17	0	0	0	0	18	1160.99595	-0.00047	1499.96614	338.96972
1	1	1	1	18	0	0	0	0	19	1159.09166	0.00027	1535.70804	376.61665
1	1	1	1	20	0	0	0	0	21	1155.27657	0.00057	1613.11962	457.84362
1	1	1	1	21	0	0	0	0	22	1153.36543	0.00055	1654.78743	501.42254
1	1	1	1	22	0	0	0	0	23	1151.45145	0.00032	1698.42877	546.97764
1	1	1	1	23	0	0	0	0	24	1149.53443	-0.00017	1744.04287	594.50827
1	1	1	1	24	0	0	0	0	25	1147.61553	0.00033	1791.62900	644.01380
1	1	1	1	25	0	0	0	0	26	1145.69338	0.00045	1841.18647	695.49354
1	1	1	1	26	0	0	0	0	27	1143.76780	-0.00004	1892.71462	748.94678
1	1	1	1	27	0	0	0	0	28	1141.83980	-0.00021	1946.21281	804.37280
1	1	1	1	28	0	0	0	0	29	1139.90971	0.00013	2001.68041	861.77083
1	1	1	1	29	0	0	0	0	30	1137.97694*	0.00025	2059.11678	921.14009
1	1	1	1	30	0	0	0	0	31	1136.04160	0.00010	2118.52125	982.47976
1	1	1	1	31	0	0	0	0	31	0	URL: http://mc.manuscriptcentral.com/tmph79.89318	1045.78899	

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1	1	1	1	1	32	0	0	0	0	33	1132.16488	-0.00005	2243.23185	1111.06693
1	1	1	1	1	33	0	0	0	0	34	1130.22399	0.00009	2308.53656	1178.31267
2	1	1	1	1	34	0	0	0	0	35	1128.28112	-0.00015	2375.80655	1247.52529
3	1	1	1	1	35	0	0	0	0	36	1126.33743	0.00023	2445.04104	1318.70384
4	1	1	1	1	36	0	0	0	0	37	1124.39114	-0.00072	2516.23921	1391.84735
5	1	1	1	1	37	0	0	0	0	38	1122.44525	-0.00014	2589.40020	1466.95482
6	1	1	1	1	38	0	0	0	0	39	1120.49751	-0.00042	2664.52313	1544.02520
7	1	1	1	1	39	0	0	0	0	40	1118.54960	-0.00002	2741.60707	1623.05745
8	1	1	1	1	5	0	0	0	0	4	1205.77960	-0.00053	1225.61022	19.83009
9	1	1	1	1	6	0	0	0	0	5	1207.80661	-0.00087	1237.55228	29.74480
10	1	1	1	1	7	0	0	0	0	6	1209.84157	0.00067	1251.48305	41.64214
11	1	1	1	1	8	0	0	0	0	7	1211.88018	0.00038	1267.40177	55.52197
12	1	1	1	1	9	0	0	0	0	8	1213.92367	0.00015	1285.30761	71.38408
13	1	1	1	1	10	0	0	0	0	9	1215.97159	0.00023	1305.19963	89.22827
14	1	1	1	1	11	0	0	0	0	10	1218.02260	0.00005	1327.07683	109.05428
15	1	1	1	1	12	0	0	0	0	11	1220.07627	-0.00001	1350.93813	130.86184
16	1	1	1	1	13	0	0	0	0	12	1222.13167	-0.00007	1376.78240	154.65066
17	1	1	1	1	14	0	0	0	0	13	1224.18824	0.00014	1404.60850	180.42041
18	1	1	1	1	15	0	0	0	0	14	1226.24459	0.00006	1434.41526	208.17072
19	1	1	1	1	16	0	0	0	0	15	1228.30047	0.00019	1466.20152	237.90124
20	1	1	1	1	17	0	0	0	0	16	1230.35460	-0.00001	1499.96614	269.61154
21	1	1	1	1	18	0	0	0	0	17	1232.40684	-0.00002	1535.70804	303.30118
22	1	1	1	1	19	0	0	0	0	18	1234.45659	0.00011	1573.42620	338.96972
23	1	1	1	1	20	0	0	0	0	19	1236.50291	-0.00006	1613.11962	376.61665
24	1	1	1	1	21	0	0	0	0	20	1238.54603	0.00007	1654.78743	416.24147
25	1	1	1	1	22	0	0	0	0	21	1240.58510	-0.00005	1698.42877	457.84362
26	1	1	1	1	23	0	0	0	0	22	1242.62043	0.00011	1744.04287	501.42254
27	1	1	1	1	24	0	0	0	0	23	1244.65129	-0.00007	1791.62900	546.97764
28	1	1	1	1	25	0	0	0	0	24	1246.67844	0.00024	1841.18647	594.50827
29	1	1	1	1	26	0	0	0	0	25	1248.70128	0.00046	1892.71462	644.01380
30	1	1	1	1	27	0	0	0	0	26	1250.71968	0.00040	1946.21281	695.49354
31	1	1	1	1	28	0	0	0	0	27	1252.73367	0.00004	2001.68041	748.94678
32	1	1	1	1	29	0	0	0	0	28	1254.74428	0.00031	2059.11678	804.37280
33	1	1	1	1	30	0	0	0	0	29	1256.75040	-0.00002	2118.52125	861.77083
34	1	1	1	1	31	0	0	0	0	30	1258.75325	0.00016	2179.89318	921.14009
35	1	1	1	1	32	0	0	0	0	31	1260.75209	-0.00001	2243.23185	982.47976
36	1	1	1	1	33	0	0	0	0	32	1262.74751	-0.00006	2308.53656	1045.78899
37	1	1	1	1	34	0	0	0	0	33	1264.73951	-0.00012	2375.80655	1111.06693
38	1	1	1	1	35	0	0	0	0	34	1266.72840	0.00002	2445.04104	1178.31267
39	1	1	1	1	36	0	0	0	0	35	1268.71377	-0.00015	2516.23921	1247.52529
40	1	1	1	1	37	0	0	0	0	36	1270.69603	-0.00033	2589.40020	1318.70384
41	1	1	1	1	38	0	0	0	0	37	1272.67546	-0.00032	2664.52313	1391.84735
42	1	1	1	1	39	0	0	0	0	38	1274.65131	-0.00094	2741.60707	1466.95482
43	1	1	1	1	40	0	0	0	0	39	1276.62495	-0.00090	2820.65105	1544.02520
44	1	1	1	1	41	0	0	0	0	40	1278.59590	-0.00073	2901.65408	1623.05745
45	1	1	1	1	42	0	0	0	0	41	1280.56340	-0.00126	2984.61514	1704.05048W
46	1	1	1	1	43	0	0	0	0	42	1282.52790	-0.00206	3069.53314	1787.00318W

46 rms = 0.00033 cm⁻¹
47
48
49
50 2v₅ (Σ^+) \leftarrow G.S. (Σ^+)
51

v _{4'}	l _{4'}	v _{5'}	l _{5'}	J'	v _{4''}	l _{4''}	v _{5''}	l _{5''}	J''	OBS	OBS - CALC	E'	E''
0	0	2	0	0	0	0	0	0	1	1340.24284	-0.00056	1342.22645	1.98305
0	0	2	0	1	0	0	0	0	2	1338.26627	-0.00023	1344.21562	5.94912
0	0	2	0	2	0	0	0	0	3	1336.29596	0.00022	1348.19391	11.89816
0	0	2	0	3	0	0	0	0	4	1334.33076	-0.00037	1354.16122	19.83009
0	0	2	0	4	0	0	0	0	5	1332.37226	-0.00037	1362.11743	29.74480
0	0	2	0	5	0	0	0	0	6	1330.42012	-0.00007	1372.06234	41.64214
0	0	2	0	6	0	0	0	0	7	1328.47316	-0.00059	1383.99572	55.52197
0	0	2	0	7	0	0	0	0	8	1326.53367	0.00046	1397.91730	71.38408
0	0	2	0	8	0	0	0	0	9	1324.59826	-0.00022	1413.82675	89.22827
0	0	2	0	9	0	0	0	0	10	1322.66920	-0.00022	1431.72370	109.05428
0	0	2	0	10	0	0	0	0	11	1320.74510	-0.00080	1451.60774	130.86184
0	0	2	0	11	0	0	0	0	12	1318.82715	-0.00059	1473.47840	154.65066
0	0	2	0	12	0	0	0	0	13	1315.88159	-0.00014	1493.82675	180.42041

1	0	0	2	0	13	0	0	0	0	14	1315.00640	-0.00039	1523.17752	208.17072
2	0	0	2	0	14	0	0	0	0	15	1313.10339	-0.00019	1551.00481	237.90124
3	0	0	2	0	15	0	0	0	0	16	1311.20464	-0.00026	1580.81643	269.61154
4	0	0	2	0	16	0	0	0	0	17	1309.31020	-0.00029	1612.61167	303.30118
5	0	0	2	0	17	0	0	0	0	18	1307.42005	-0.00004	1646.38981	338.96972
6	0	0	2	0	18	0	0	0	0	19	1305.53317	-0.00025	1682.15007	376.61665
7	0	0	2	0	19	0	0	0	0	20	1303.64991	-0.00025	1719.89163	416.24147
8	0	0	2	0	20	0	0	0	0	21	1301.76987	-0.00013	1759.61363	457.84362
9	0	0	2	0	21	0	0	0	0	22	1299.89261	-0.00001	1801.31517	501.42254
10	0	0	2	0	22	0	0	0	0	23	1298.01778	0.00010	1844.99532	546.97764
11	0	0	2	0	23	0	0	0	0	24	1296.14458	-0.00024	1890.65309	594.50827
12	0	0	2	0	24	0	0	0	0	25	1294.27375	0.00005	1938.28750	644.01380
13	0	0	2	0	25	0	0	0	0	26	1292.40389	-0.00006	1987.89749	695.49354
14	0	0	2	0	26	0	0	0	0	27	1290.53553	0.00033	2039.48198	748.94678
15	0	0	2	0	27	0	0	0	0	28	1288.66720	0.00010	2093.03990	804.37280
16	0	0	2	0	28	0	0	0	0	29	1286.79949	0.00023	2148.57010	861.77083
17	0	0	2	0	29	0	0	0	0	30	1284.93135	0.00000	2206.07144	921.14009
18	0	0	2	0	30	0	0	0	0	31	1283.06346	0.00046	2265.54275	982.47976
19	0	0	2	0	31	0	0	0	0	32	1281.19358	-0.00028	2326.98286	1045.78899
20	0	0	2	0	32	0	0	0	0	33	1279.32347	-0.00015	2390.39054	1111.06693
21	0	0	2	0	33	0	0	0	0	34	1277.45184	-0.00010	2455.76460	1178.31267
22	0	0	2	0	34	0	0	0	0	35	1275.57850	-0.00002	2523.10381	1247.52529
23	0	0	2	0	35	0	0	0	0	36	1273.70370	0.00062	2592.40692	1318.70384
24	0	0	2	0	36	0	0	0	0	37	1271.82519	-0.00017	2663.67271	1391.84735
25	0	0	2	0	37	0	0	0	0	38	1269.94570	0.00059	2736.89992	1466.95482
26	0	0	2	0	38	0	0	0	0	39	1268.06209	-0.00002	2812.08731	1544.02520
27	0	0	2	0	39	0	0	0	0	40	1266.17690	0.00073	2889.23362	1623.05745
28	0	0	2	0	40	0	0	0	0	41	1264.28727	0.00016	2968.33759	1704.05048
29	0	0	2	0	41	0	0	0	0	42	1262.39487	0.00009	3049.39796	1787.00318
30	0	0	2	0	42	0	0	0	0	43	1260.49900	-0.00006	3132.41347	1871.91441
31	0	0	2	0	43	0	0	0	0	44	1258.59967	-0.00017	3217.38286	1958.78301
32	0	0	2	0	44	0	0	0	0	45	1256.69720*	0.00015	3304.30484	2047.60779
33	0	0	2	0	45	0	0	0	0	46	1254.79059	-0.00004	3393.17815	2138.38752
34	0	0	2	0	46	0	0	0	0	47	1252.88035	-0.00019	3484.00150	2231.12097
35	0	0	2	0	1	0	0	0	0	0	1344.21505	-0.00057	1344.21562	0.00000
36	0	0	2	0	2	0	0	0	0	1	1346.21084	-0.00002	1348.19391	1.98305
37	0	0	2	0	3	0	0	0	0	2	1348.21176	-0.00034	1354.16122	5.94912
38	0	0	2	0	4	0	0	0	0	3	1350.21898	-0.00028	1362.11743	11.89816
39	0	0	2	0	5	0	0	0	0	4	1352.23207	-0.00018	1372.06234	19.83009
40	0	0	2	0	6	0	0	0	0	5	1354.25059	-0.00033	1383.99572	29.74480
41	0	0	2	0	7	0	0	0	0	6	1356.27461	-0.00054	1397.91730	41.64214
42	0	0	2	0	8	0	0	0	0	7	1358.30454	-0.00024	1413.82675	55.52197
43	0	0	2	0	9	0	0	0	0	8	1360.33883	-0.00079	1431.72370	71.38408
44	0	0	2	0	10	0	0	0	0	9	1362.37865	-0.00082	1451.60774	89.22827
45	0	0	2	0	11	0	0	0	0	10	1364.42402	-0.00010	1473.47840	109.05428
46	0	0	2	0	12	0	0	0	0	11	1366.47259	-0.00075	1497.33518	130.86184
47	0	0	2	0	13	0	0	0	0	12	1368.52652	-0.00034	1523.17752	154.65066
48	0	0	2	0	14	0	0	0	0	13	1370.58358	-0.00083	1551.00481	180.42041
49	0	0	2	0	15	0	0	0	0	14	1372.64488	-0.00083	1580.81643	208.17072
50	0	0	2	0	16	0	0	0	0	15	1374.70984	-0.00060	1612.61167	237.90124
51	0	0	2	0	17	0	0	0	0	16	1376.77785	-0.00043	1646.38981	269.61154
52	0	0	2	0	18	0	0	0	0	17	1378.84827	-0.00062	1682.15007	303.30118
53	0	0	2	0	19	0	0	0	0	18	1380.92119	-0.00072	1719.89163	338.96972
54	0	0	2	0	20	0	0	0	0	19	1382.99636	-0.00061	1759.61363	376.61665
55	0	0	2	0	21	0	0	0	0	20	1385.07340	-0.00030	1801.31517	416.24147
56	0	0	2	0	22	0	0	0	0	21	1387.15137	-0.00032	1844.99532	457.84362
57	0	0	2	0	23	0	0	0	0	22	1389.23004	-0.00051	1890.65309	501.42254
58	0	0	2	0	24	0	0	0	0	23	1391.30945	-0.00041	1938.28750	546.97764
59	0	0	2	0	25	0	0	0	0	24	1393.38936	0.00015	1987.89749	594.50827
60	0	0	2	0	26	0	0	0	0	25	1395.46809	-0.00010	2039.48198	644.01380
	0	0	2	0	27	0	0	0	0	26	1397.54600	-0.00036	2093.03990	695.49354
	0	0	2	0	28	0	0	0	0	27	1399.62348	0.00017	2148.57010	748.94678
	0	0	2	0	29	0	0	0	0	28	1401.69852	-0.00012	2206.07144	804.37280
	0	0	2	0	30	0	0	0	0	29	1403.77219	0.00027	2265.54275	861.77083
	0	0	2	0	31	0	0	0	0	30	1405.84292	0.00015	2326.98286	921.14009
	0	0	2	0	32	0	0	0	0	31	1407.91026	-0.00053	2390.39054	982.47976
	0	0	2	0	33	0	0	0	0	32	1409.97519	-0.00042	2455.76460	1045.78899
	0	0	2	0	34	0	0	0	0	33	1412.03708	0.00020	2523.10381	1111.06693
	0	0	2	0	35	0	0	0	0	34	1414.00440	-0.00014	2592.40692	1178.31267

1	0	0	2	0	36	0	0	0	0	35	1416.14781	0.00039	2663.67271	1247.52529
2	0	0	2	0	37	0	0	0	0	36	1418.19585	-0.00023	2736.89992	1318.70384
3	0	0	2	0	38	0	0	0	0	37	1420.24028	0.00032	2812.08731	1391.84735
4	0	0	2	0	39	0	0	0	0	38	1422.27934	0.00054	2889.23362	1466.95482
5	0	0	2	0	40	0	0	0	0	39	1424.31280	0.00041	2968.33759	1544.02520
6	0	0	2	0	41	0	0	0	0	40	1426.34049	-0.00002	3049.39796	1623.05745
7	0	0	2	0	42	0	0	0	0	41	1428.36324	0.00025	3132.41347	1704.05048
8	0	0	2	0	43	0	0	0	0	42	1430.37986	0.00019	3217.38286	1787.00318
9	0	0	2	0	44	0	0	0	0	43	1432.39049	0.00006	3304.30484	1871.91441
10	0	0	2	0	45	0	0	0	0	44	1434.39546	0.00032	3393.17815	1958.78301
11	0	0	2	0	46	0	0	0	0	45	1436.39346	-0.00025	3484.00150	2047.60779
12	0	0	2	0	47	0	0	0	0	46	1438.38575	-0.00033	3576.77361	2138.38752
13	0	0	2	0	48	0	0	0	0	47	1440.37228	0.00008	3671.49316	2231.12097
14	0	0	2	0	49	0	0	0	0	48	1442.35290	0.00088	3768.15887	2325.80685

rms = 0.00039 cm⁻¹2v₅ (Δ) \leftarrow G.S. (Σ^+)

	v _{4'}	$\ell_{4'}$	V _{5'}	$\ell_{5'}$	J'	v _{4''}	$\ell_{4''}$	v _{5''}	$\ell_{5''}$	J''	OBS	OBS - CALC	E'	E''
22	0	0	2	2	36	0	0	0	0	37	1290.55715	-0.00022	2682.40472	1391.84735
23	0	0	2	2	35	0	0	0	0	36	1292.21495	-0.00034	2610.91913	1318.70384
24	0	0	2	2	34	0	0	0	0	35	1293.88745	-0.00037	2541.41311	1247.52529
25	0	0	2	2	33	0	0	0	0	34	1295.57450	-0.00018	2473.88734	1178.31267
26	0	0	2	2	32	0	0	0	0	33	1297.27564	0.00006	2408.34251	1111.06693
27	0	0	2	2	31	0	0	0	0	32	1298.99043	0.00021	2344.77921	1045.78899
28	0	0	2	2	30	0	0	0	0	31	1300.71869	0.00043	2283.19801	982.47976
29	0	0	2	2	29	0	0	0	0	30	1302.46019*	0.00084	2223.59944	921.14009
30	0	0	2	2	28	0	0	0	0	29	1304.21313	-0.00002	2165.98399	861.77083
31	0	0	2	2	27	0	0	0	0	28	1305.97949	0.00020	2110.35209	804.37280
32	0	0	2	2	26	0	0	0	0	27	1307.75705	-0.00034	2056.70417	748.94678
33	0	0	2	2	25	0	0	0	0	26	1309.54732	0.00025	2005.04061	695.49354
34	0	0	2	2	24	0	0	0	0	25	1311.34818	0.00023	1955.36175	644.01380
35	0	0	2	2	23	0	0	0	0	24	1313.15970*	0.00005	1907.66792	594.50827
36	0	0	2	2	22	0	0	0	0	23	1314.98231	0.00054	1861.95941	546.97764
37	0	0	2	2	21	0	0	0	0	22	1316.81416	0.00020	1818.23651	501.42254
38	0	0	2	2	20	0	0	0	0	21	1318.65567	-0.00016	1776.49946	457.84362
39	0	0	2	2	19	0	0	0	0	20	1320.50720	0.00017	1736.74850	416.24147
40	0	0	2	2	18	0	0	0	0	19	1322.36719	-0.00001	1698.98385	376.61665
41	0	0	2	2	17	0	0	0	0	18	1324.23624	0.00025	1663.20571	338.96972
42	0	0	2	2	16	0	0	0	0	17	1326.11294	-0.00014	1629.41426	303.30118
43	0	0	2	2	15	0	0	0	0	16	1327.99810	-0.00005	1597.60969	269.61154
44	0	0	2	2	14	0	0	0	0	15	1329.89080	-0.00011	1567.79214	237.90124
45	0	0	2	2	13	0	0	0	0	14	1331.79069	-0.00036	1539.96178	208.17072
46	0	0	2	2	12	0	0	0	0	13	1333.69864	0.00032	1514.11873	180.42041
47	0	0	2	2	11	0	0	0	0	12	1335.61122*	-0.00124	1490.26312	154.65066W
48	0	0	2	2	10	0	0	0	0	11	1337.53270*	-0.00053	1468.39508	130.86184
49	0	0	2	2	9	0	0	0	0	10	1339.46075	0.00033	1448.51470	109.05428
50	0	0	2	2	8	0	0	0	0	9	1341.39406	0.00025	1430.62208	89.22827
51	0	0	2	2	11	0	0	0	0	10	1381.20929	0.00045	1490.26312	109.05428
52	0	0	2	2	12	0	0	0	0	11	1383.25721	0.00032	1514.11873	130.86184
53	0	0	2	2	13	0	0	0	0	12	1385.30944*	-0.00168	1539.96178	154.65066W
54	0	0	2	2	14	0	0	0	0	13	1387.37224	0.00050	1567.79214	180.42041
55	0	0	2	2	15	0	0	0	0	14	1389.43869	-0.00027	1597.60969	208.17072
56	0	0	2	2	16	0	0	0	0	15	1391.51329	0.00026	1629.41426	237.90124
57	0	0	2	2	17	0	0	0	0	16	1393.59490	0.00073	1663.20571	269.61154
58	0	0	2	2	18	0	0	0	0	17	1395.68405*	0.00138	1698.98385	303.30118W
59	0	0	2	2	19	0	0	0	0	18	1397.77965	0.00087	1736.74850	338.96972
60	0	0	2	2	20	0	0	0	0	19	1399.88274	-0.00006	1776.49946	376.61665
	0	0	2	2	21	0	0	0	0	20	1401.99518	0.00014	1818.23651	416.24147
	0	0	2	2	22	0	0	0	0	21	1404.11572	-0.00007	1861.95941	457.84362
	0	0	2	2	23	0	0	0	0	22	1406.24515	-0.00022	1907.66792	501.42254
	0	0	2	2	24	0	0	0	0	23	1408.38390	-0.00021	1955.36175	546.97764
	0	0	2	2	25	0	0	0	0	24	1410.53218	-0.00016	2005.04061	594.50827
	0	0	2	2	26	0	0	0	0	25	1412.69034	-0.00004	2056.70417	644.01380
	0	0	2	2	27	0	0	0	0	26	0	URL: http://mc.manuscriptcentral.com/tmph10.35209	695.49354	

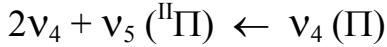
1	0	0	2	2	28	0	0	0	0	27	1417.03721	0.00001	2165.98399	748.94678
2	0	0	2	2	29	0	0	0	0	28	1419.22663	-0.00001	2223.59944	804.37280
3	0	0	2	2	30	0	0	0	0	29	1421.42732	0.00014	2283.19801	861.77083
4	0	0	2	2	31	0	0	0	0	30	1423.63929	0.00017	2344.77921	921.14009
5	0	0	2	2	32	0	0	0	0	31	1425.86258	-0.00017	2408.34251	982.47976
6	0	0	2	2	33	0	0	0	0	32	1428.09817	-0.00018	2473.88734	1045.78899
7	0	0	2	2	34	0	0	0	0	33	1430.34626	0.00008	2541.41311	1111.06693
8	0	0	2	2	35	0	0	0	0	34	1432.60666	0.00019	2610.91913	1178.31267
9	0	0	2	2	36	0	0	0	0	35	1434.87959	0.00016	2682.40472	1247.52529
10	0	0	2	2	37	0	0	0	0	36	1437.16535	0.00008	2755.86911	1318.70384
11	0	0	2	2	38	0	0	0	0	37	1439.46434	0.00019	2831.31150	1391.84735
12	0	0	2	2	39	0	0	0	0	38	1441.77620	-0.00002	2908.73104	1466.95482
13	0	0	2	2	40	0	0	0	0	39	1444.10126	-0.00034	2988.12680	1544.02520
14	0	0	2	2	41	0	0	0	0	40	1446.43998	-0.00040	3069.49783	1623.05745
15	0	0	2	2	42	0	0	0	0	41	1448.79278	0.00014	3152.84312	1704.05048
16	0	0	2	2	43	0	0	0	0	42	1451.15842	0.00000	3238.16161	1787.00318
17	0	0	2	2	44	0	0	0	0	43	1453.53840	0.00065	3325.45217	1871.91441

rms = 0.00029 cm⁻¹3v₄(Π) ← v₄(Π)

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''	
25	3	1	0	0	39	1	1	0	0	40	956.61880	0.00029	3098.63198	2142.01348
26	3	1	0	0	38	1	1	0	0	39	958.48954	-0.00006	3021.44478	2062.95519
27	3	1	0	0	37	1	1	0	0	38	960.36136	0.00003	2946.22055	1985.85922
28	3	1	0	0	36	1	1	0	0	37	962.23394	0.00027	2872.96032	1910.72665
29	3	1	0	0	35	1	1	0	0	36	964.10650	-0.00011	2801.66513	1837.55852
30	3	1	0	0	34	1	1	0	0	35	965.98039	0.00028	2732.33595	1766.35584
31	3	1	0	0	33	1	1	0	0	34	967.85387	-0.00030	2664.97378	1697.11961
32	3	1	0	0	32	1	1	0	0	33	969.72861	-0.00018	2599.57957	1629.85078
33	3	1	0	0	31	1	1	0	0	32	971.60381	-0.00016	2536.15427	1564.55030
34	3	1	0	0	30	1	1	0	0	31	973.47970	-0.00002	2474.69880	1501.21907
35	3	1	0	0	29	1	1	0	0	30	975.35610	0.00001	2415.21406	1439.85797
36	3	1	0	0	28	1	1	0	0	29	977.23306	-0.00005	2357.70096	1380.46786
37	3	1	0	0	27	1	1	0	0	28	979.11081	-0.00003	2302.16039	1323.04955
38	3	1	0	0	26	1	1	0	0	27	980.98929	-0.00009	2248.59323	1267.60385
39	3	1	0	0	25	1	1	0	0	26	982.86884	0.00004	2197.00034	1214.13154
40	3	1	0	0	24	1	1	0	0	25	984.74965	0.00040	2147.38259	1162.63334
41	3	1	0	0	23	1	1	0	0	24	986.63092	0.00007	2099.74084	1113.10999
42	3	1	0	0	22	1	1	0	0	23	988.51400	0.00023	2054.07593	1065.56217
43	3	1	0	0	21	1	1	0	0	22	990.39847	0.00028	2010.38873	1019.99053
44	3	1	0	0	20	1	1	0	0	21	992.28437	0.00003	1968.68006	976.39572
45	3	1	0	0	19	1	1	0	0	20	994.17275	0.00033	1928.95077	934.77834
46	3	1	0	0	18	1	1	0	0	19	996.06289	0.00018	1891.20168	895.13897
47	3	1	0	0	17	1	1	0	0	18	997.95526	-0.00020	1855.43362	857.47816
48	3	1	0	0	16	1	1	0	0	17	999.85096	0.00000	1821.64740	821.79644
49	3	1	0	0	15	1	1	0	0	16	1001.74967	0.00016	1789.84380	788.09430
50	3	1	0	0	14	1	1	0	0	15	1003.65120	-0.00021	1760.02361	756.37220
51	3	1	0	0	13	1	1	0	0	14	1005.55699	0.00001	1732.18758	726.63060
52	3	1	0	0	12	1	1	0	0	13	1007.46665	0.00011	1706.33645	698.86991
53	3	1	0	0	11	1	1	0	0	12	1009.38059	0.00020	1682.47090	673.09051
54	3	1	0	0	10	1	1	0	0	11	1011.29886	0.00000	1660.59161	649.29275
55	3	1	0	0	9	1	1	0	0	10	1013.22207	-0.00016	1640.69921	627.47699
56	3	1	0	0	8	1	1	0	0	9	1015.15089	0.00010	1622.79429	607.64350
57	3	1	0	0	7	1	1	0	0	8	1017.08510	0.00031	1606.87737	589.79258
58	3	1	0	0	6	1	1	0	0	7	1019.02461	0.00011	1592.94896	573.92447
59	3	1	0	0	5	1	1	0	0	6	1020.97014	0.00003	1581.00949	560.03938
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	3	1	0	0	3	1	1	0	0	4	1024.87975	-0.00002	1563.09883	538.21906
	3	1	0	0	2	1	1	0	0	3	1026.84444	0.00035	1557.12821	530.28412
	3	1	0	0	1	1	1	0	0	2	1028.81514	0.00026	1553.14769	524.33282
	3	1	0	0	2	1	1	0	0	1	1036.76290	-0.00007	1557.12821	520.36524
	3	1	0	0	3	1	1	0	0	2	1038.76610	0.00009	1563.09883	524.33282
	3	1	0	0	4	1	1	0	0	3	1040.77536	0.00014	1571.05934	530.28412
	3	1	0	0	5	1	1	1	0	0	1URL: http://amc.manuscriptcentral.com/tmpf81.00949	538.21906		

1	3	1	0	0	6	1	1	0	0	5	1044.81128	-0.00016	1592.94896	548.13753
2	3	1	0	0	7	1	1	0	0	6	1046.83774	-0.00025	1606.87737	560.03938
3	3	1	0	0	8	1	1	0	0	7	1048.87006	0.00024	1622.79429	573.92447
4	3	1	0	0	9	1	1	0	0	8	1050.90685	0.00021	1640.69921	589.79258
5	3	1	0	0	10	1	1	0	0	9	1052.94798	-0.00013	1660.59161	607.64350
6	3	1	0	0	11	1	1	0	0	10	1054.99298	-0.00094	1682.47090	627.47699
7	3	1	0	0	12	1	1	0	0	11	1057.04375	0.00006	1706.33645	649.29275
8	3	1	0	0	13	1	1	0	0	12	1059.09703	-0.00005	1732.18758	673.09051
9	3	1	0	0	14	1	1	0	0	13	1061.15356	-0.00014	1760.02361	698.86991
10	3	1	0	0	15	1	1	0	0	14	1063.21312	-0.00008	1789.84380	726.63060
11	3	1	0	0	16	1	1	0	0	15	1065.27535	0.00016	1821.64740	756.37220
12	3	1	0	0	17	1	1	0	0	16	1067.33917	-0.00016	1855.43362	788.09430
13	3	1	0	0	18	1	1	0	0	17	1069.40524	0.00000	1891.20168	821.79644
14	3	1	0	0	19	1	1	0	0	18	1071.47285	0.00025	1928.95077	857.47816
15	3	1	0	0	20	1	1	0	0	19	1073.54079	-0.00030	1968.68006	895.13897
16	3	1	0	0	21	1	1	0	0	20	1075.61021	-0.00017	2010.38873	934.77834
17	3	1	0	0	22	1	1	0	0	21	1077.68047	0.00026	2054.07593	976.39572
18	3	1	0	0	23	1	1	0	0	22	1079.75099	0.00069	2099.74084	1019.99053
19	3	1	0	0	24	1	1	0	0	23	1081.82027	-0.00015	2147.38259	1065.56217
20	3	1	0	0	25	1	1	0	0	24	1083.89040	0.00005	2197.00034	1113.10999
21	3	1	0	0	26	1	1	0	0	25	1085.95988	-0.00001	2248.59323	1162.63334
22	3	1	0	0	27	1	1	0	0	26	1088.02913	0.00027	2302.16039	1214.13154
23	3	1	0	0	28	1	1	0	0	27	1090.09742	0.00031	2357.70096	1267.60385
24	3	1	0	0	29	1	1	0	0	28	1092.16455	0.00004	2415.21406	1323.04955
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26	3	1	0	0	31	1	1	0	0	30	1096.29621	-0.00009	2536.15427	1439.85797
27	3	1	0	0	32	1	1	0	0	31	1098.36035	-0.00015	2599.57957	1501.21907
28	3	1	0	0	33	1	1	0	0	32	1100.42336	-0.00012	2664.97378	1564.55030
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35	3	-1	0	0	40	1	1	0	0	39	1114.82568	-0.00022	3177.78108	2062.95519
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37	3	-1	0	0	36	1	-1	0	0	37	965.74922	0.00004	2882.64028	1916.89110
38	3	-1	0	0	35	1	-1	0	0	36	967.56266	0.00048	2810.96449	1843.40231
39	3	-1	0	0	34	1	-1	0	0	35	969.36714	-0.00021	2741.25458	1771.88724
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41	3	-1	0	0	32	1	-1	0	0	33	972.95272	-0.00005	2607.73507	1634.78230
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46	3	-1	0	0	27	1	-1	0	0	28	981.77151	-0.00031	2308.40002	1326.62819
47	3	-1	0	0	26	1	-1	0	0	27	983.51447	-0.00025	2254.45204	1270.93732
48	3	-1	0	0	25	1	-1	0	0	26	985.25282	-0.00010	2202.48127	1217.22835
49	3	-1	0	0	24	1	-1	0	0	25	986.98769	-0.00005	2152.48980	1165.50207
50	3	-1	0	0	23	1	-1	0	0	24	988.72071	0.00009	2104.47982	1115.75919
51	3	-1	0	0	22	1	-1	0	0	23	990.45310	0.00002	2058.45353	1068.00045
52	3	-1	0	0	21	1	-1	0	0	22	992.18701	0.00038	2014.41315	1022.22652
53	3	-1	0	0	20	1	-1	0	0	21	993.92328	0.00049	1972.36084	978.43806
54	3	-1	0	0	19	1	-1	0	0	20	995.66344	0.00042	1932.29871	936.63569
55	3	-1	0	0	18	1	-1	0	0	19	997.40868	-0.00004	1894.22873	896.82001
56	3	-1	0	0	17	1	-1	0	0	18	999.16143	0.00026	1858.15277	858.99160
57	3	-1	0	0	16	1	-1	0	0	17	1000.92187	0.00028	1824.07257	823.15099
58	3	-1	0	0	15	1	-1	0	0	16	1002.69150	0.00045	1791.98975	789.29869
59	3	-1	0	0	14	1	-1	0	0	15	1004.47107	0.00051	1761.90576	757.43520
60	3	-1	0	0	13	1	-1	0	0	14	1006.26141	0.00041	1733.82197	727.56097
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	3	-1	0	0	10	1	-1	0	0	11	1011.70524	-0.00006	1661.58325	649.87795
	3	-1	0	0	9	1	-1	0	0	10	1013.54660	0.00016	1641.51118	627.96474
	3	-1	0	0	8	1	-1	0	0	9	1015.40187	0.00027	1623.44425	608.04264
	3	-1	0	0	7	1	-1	0	0	8	1017.27115	-0.00003	1607.38312	590.11194
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	3	-1	0	0	5	1	-1	0	0	6	1021.05500	0.00016	1581.28057	560.22573
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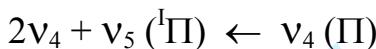
1	3	-1	0	0	3	1	-1	0	0	4	1024.89963	0.00016	1563.20728	538.30781
2	3	-1	0	0	2	1	-1	0	0	3	1026.84444	-0.00063	1557.18244	530.33737
3	3	-1	0	0	1	1	-1	0	0	2	1028.80635	0.00003	1553.16577	524.35945
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5	3	-1	0	0	3	1	-1	0	0	2	1038.84804	0.00020	1563.20728	524.35945
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9	3	-1	0	0	7	1	-1	0	0	6	1047.15747	0.00008	1607.38312	560.22573
10	3	-1	0	0	8	1	-1	0	0	7	1049.27133	-0.00002	1623.44425	574.17289
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12	3	-1	0	0	10	1	-1	0	0	9	1053.54068	0.00007	1661.58325	608.04264
13	3	-1	0	0	11	1	-1	0	0	10	1055.69513	0.00020	1683.65967	627.96474
14	3	-1	0	0	12	1	-1	0	0	11	1057.86183	0.00021	1707.73957	649.87795
15	3	-1	0	0	13	1	-1	0	0	12	1060.04031	0.00030	1733.82197	673.78196
16	3	-1	0	0	14	1	-1	0	0	13	1062.22939	0.00005	1761.90576	699.67642
17	3	-1	0	0	15	1	-1	0	0	14	1064.42904	0.00026	1791.98975	727.56097
18	3	-1	0	0	16	1	-1	0	0	15	1066.63799	0.00062	1824.07257	757.43520
19	3	-1	0	0	17	1	-1	0	0	16	1068.85441	0.00033	1858.15277	789.29869
20	3	-1	0	0	18	1	-1	0	0	17	1071.07830	0.00056	1894.22873	823.15099
21	3	-1	0	0	19	1	-1	0	0	18	1073.30744	0.00033	1932.29871	858.99160
22	3	-1	0	0	20	1	-1	0	0	19	1075.54118	0.00035	1972.36084	896.82001
23	3	-1	0	0	21	1	-1	0	0	20	1077.77801	0.00055	2014.41315	936.63569
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26	3	-1	0	0	24	1	-1	0	0	23	1084.48929	-0.00007	2152.48980	1068.00045
27	3	-1	0	0	25	1	-1	0	0	24	1086.72176	-0.00032	2202.48127	1115.75919
28	3	-1	0	0	26	1	-1	0	0	25	1088.94959	-0.00039	2254.45204	1165.50207
29	3	-1	0	0	27	1	-1	0	0	26	1091.17145	-0.00021	2308.40002	1217.22835
30	3	-1	0	0	28	1	-1	0	0	27	1093.38582	-0.00008	2364.32322	1270.93732
31	3	-1	0	0	29	1	-1	0	0	28	1095.59134	-0.00031	2422.21984	1326.62819
32	3	-1	0	0	30	1	-1	0	0	29	1097.78774	-0.00035	2482.08827	1384.30018
33	3	-1	0	0	31	1	-1	0	0	30	1099.97462	-0.00002	2543.92709	1443.95245
34	3	-1	0	0	32	1	-1	0	0	31	1102.15111	0.00019	2607.73507	1505.58415
35	3	-1	0	0	33	1	-1	0	0	32	1104.31673	-0.00006	2673.51120	1569.19441
36	3	-1	0	0	34	1	-1	0	0	33	1106.47251	0.00023	2741.25458	1634.78230
37	3	-1	0	0	35	1	-1	0	0	34	1108.61809	0.00050	2810.96449	1702.34690
38	3	-1	0	0	36	1	-1	0	0	35	1110.75320	0.00015	2882.64028	1771.88724
39	3	-1	0	0	37	1	-1	0	0	36	1112.87945	0.00039	2956.28137	1843.40231
40	3	-1	0	0	38	1	-1	0	0	37	1114.99596	-0.00013	3031.88720	1916.89110
41	3	-1	0	0	39	1	-1	0	0	38	1117.10400	-0.00066	3109.45722	1992.35257

rms = 0.00026 cm⁻¹

47	v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
48	2	0	1	1	32	1	1	0	0	33	1132.55670	-0.00009	2762.40757	1629.85078
49	2	0	1	1	31	1	1	0	0	32	1134.42210	0.00025	2698.97215	1564.55030
50	2	0	1	1	30	1	1	0	0	31	1136.28130	0.00046	2637.49992	1501.21907
51	2	0	1	1	29	1	1	0	0	30	1138.13406	0.00048	2577.99156	1439.85797
52	2	0	1	1	28	1	1	0	0	29	1139.97996	0.00003	2520.44778	1380.46786
53	2	0	1	1	27	1	1	0	0	28	1141.81995	0.00013	2464.86937	1323.04955
54	2	0	1	1	26	1	1	0	0	27	1143.65324	-0.00006	2411.25716	1267.60385
55	2	0	1	1	25	1	1	0	0	26	1145.48027	-0.00027	2359.61208	1214.13154
56	2	0	1	1	24	1	1	0	0	25	1147.30166	-0.00020	2309.93520	1162.63334
57	2	0	1	1	23	1	1	0	0	24	1149.11777	0.00004	2262.22772	1113.10999
58	2	0	1	1	22	1	1	0	0	23	1150.92873	-0.00007	2216.49097	1065.56217
59	2	0	1	1	21	1	1	0	0	22	1152.73571	-0.00019	2172.72643	1019.99053
60	2	0	1	1	20	1	1	0	0	21	1154.53996	-0.00008	2130.93576	976.39572
	2	0	1	1	19	1	1	0	0	20	1156.34226	-0.00010	2091.12070	934.77834
	2	0	1	1	18	1	1	0	0	19	1158.14395	-0.00019	2053.28311	895.13897
	2	0	1	1	17	1	1	0	0	18	1159.94658	-0.00014	2017.42488	857.47816
	2	0	1	1	16	1	1	0	0	17	1161.75113	-0.00036	1983.54793	821.79644
	2	0	1	1	15	1	1	0	0	16	1163.55954	-0.00031	1951.65414	788.09430
	2	0	1	1	14	1	1	0	0	15	11URL: http://mc.maheswaricentral.com/and/tmp/21.74533		756.37220	

1	2	0	1	1	13	1	1	0	0	14	1167.19243	-0.00018	1893.82321	726.63060
2	2	0	1	1	12	1	1	0	0	13	1169.01939	-0.00008	1867.88938	698.86991
3	2	0	1	1	11	1	1	0	0	12	1170.85464	-0.00016	1843.94531	673.09051
4	2	0	1	1	10	1	1	0	0	11	1172.69940	-0.00016	1821.99232	649.29275
5	2	0	1	1	9	1	1	0	0	10	1174.55457	-0.00003	1802.03159	627.47699
6	2	0	1	1	8	1	1	0	0	9	1176.42028	-0.00040	1784.06418	607.64350
7	2	0	1	1	7	1	1	0	0	8	1178.29833	-0.00008	1768.09099	589.79258
8	2	0	1	1	6	1	1	0	0	7	1180.18801	-0.00035	1754.11283	573.92447
9	2	0	1	1	5	1	1	0	0	6	1182.09089	-0.00008	1742.13035	560.03938
10	2	0	1	1	4	1	1	0	0	5	1184.00675	0.00014	1732.14413	548.13753
11	2	0	1	1	3	1	1	0	0	4	1185.93522	-0.00034	1724.15462	538.21906
12	2	0	1	1	2	1	1	0	0	3	1187.87752	-0.00054	1718.16218	530.28412
13	2	0	1	1	1	1	1	0	0	2	1189.83412	-0.00014	1714.16707	524.33282
14	2	0	1	1	4	1	1	0	0	3	1201.85970	-0.00031	1732.14413	530.28412
15	2	0	1	1	5	1	1	0	0	4	1203.91125	-0.00004	1742.13035	538.21906
16	2	0	1	1	6	1	1	0	0	5	1205.97506	-0.00024	1754.11283	548.13753
17	2	0	1	1	7	1	1	0	0	6	1208.05160	-0.00001	1768.09099	560.03938
18	2	0	1	1	8	1	1	0	0	7	1210.13969	-0.00002	1784.06418	573.92447
19	2	0	1	1	9	1	1	0	0	8	1212.23885	-0.00016	1802.03159	589.79258
20	2	0	1	1	10	1	1	0	0	9	1214.34907	0.00025	1821.99232	607.64350
21	2	0	1	1	11	1	1	0	0	10	1216.46830	-0.00002	1843.94531	627.47699
22	2	0	1	1	12	1	1	0	0	11	1218.59652	-0.00011	1867.88938	649.29275
23	2	0	1	1	13	1	1	0	0	12	1220.73240	-0.00030	1893.82321	673.09051
24	2	0	1	1	14	1	1	0	0	13	1222.87777*	0.00235	1921.74533	698.86991W
25	2	0	1	1	15	1	1	0	0	14	1225.02379	0.00025	1951.65414	726.63060
26	2	0	1	1	16	1	1	0	0	15	1227.17561	-0.00012	1983.54793	756.37220
27	2	0	1	1	17	1	1	0	0	16	1229.33044	-0.00014	2017.42488	788.09430
28	2	0	1	1	18	1	1	0	0	17	1231.48656	-0.00011	2053.28311	821.79644
29	2	0	1	1	19	1	1	0	0	18	1233.64246	-0.00008	2091.12070	857.47816
30	2	0	1	1	20	1	1	0	0	19	1235.79666	-0.00013	2130.93576	895.13897
31	2	0	1	1	21	1	1	0	0	20	1237.94787	-0.00022	2172.72643	934.77834
32	2	0	1	1	22	1	1	0	0	21	1240.09504	-0.00020	2216.49097	976.39572
33	2	0	1	1	23	1	1	0	0	22	1242.23701	-0.00018	2262.22772	1019.99053
34	2	0	1	1	24	1	1	0	0	23	1244.37301	-0.00003	2309.93520	1065.56217
35	2	0	1	1	25	1	1	0	0	24	1246.50212	0.00003	2359.61208	1113.10999
36	2	0	1	1	26	1	1	0	0	25	1248.62340	-0.00041	2411.25716	1162.63334
37	2	0	1	1	27	1	1	0	0	26	1250.73784	0.00001	2464.86937	1214.13154
38	2	0	1	1	28	1	1	0	0	27	1252.84430	0.00037	2520.44778	1267.60385
39	2	0	1	1	29	1	1	0	0	28	1254.94210	0.00009	2577.99156	1323.04955
40	2	0	1	1	30	1	1	0	0	29	1257.03263	0.00057	2637.49992	1380.46786
41	2	0	1	1	31	1	1	0	0	30	1259.11438	0.00020	2698.97215	1439.85797
42	2	0	1	1	32	1	1	0	0	31	1261.18903	0.00053	2762.40757	1501.21907
43	2	0	1	1	33	1	1	0	0	32	1263.25621*	0.00099	2827.80553	1564.55030
44	2	0	1	1	34	1	1	0	0	33	1265.31560	0.00103	2895.16535	1629.85078W
45	2	0	1	-1	17	1	-1	0	0	18	1158.18361	0.00056	2017.17464	858.99160
46	2	0	1	-1	16	1	-1	0	0	17	1160.16123	0.00049	1983.31173	823.15099
47	2	0	1	-1	15	1	-1	0	0	16	1162.13703	0.00037	1951.43535	789.29869
48	2	0	1	-1	14	1	-1	0	0	15	1164.11170	0.00063	1921.54628	757.43520
49	2	0	1	-1	13	1	-1	0	0	14	1166.08490	0.00058	1893.64529	727.56097
50	2	0	1	-1	12	1	-1	0	0	13	1168.05722	0.00049	1867.73315	699.67642
51	2	0	1	-1	11	1	-1	0	0	12	1170.02894	0.00024	1843.81066	673.78196
52	2	0	1	-1	10	1	-1	0	0	11	1172.00076	0.00016	1821.87855	649.87795
53	2	0	1	-1	9	1	-1	0	0	10	1173.97304	0.00020	1801.93758	627.96474
54	2	0	1	-1	8	1	-1	0	0	9	1175.94688*	0.00107	1783.98845	608.04264W
55	2	0	1	-1	7	1	-1	0	0	8	1177.91946	-0.00043	1768.03183	590.11194
56	2	0	1	-1	6	1	-1	0	0	7	1179.89509	-0.00035	1754.06834	574.17289
57	2	0	1	-1	5	1	-1	0	0	6	1181.87318	0.00038	1742.09853	560.22573
58	2	0	1	-1	4	1	-1	0	0	5	1183.85202	-0.00024	1732.12291	548.27064
59	2	0	1	-1	3	1	-1	0	0	4	1185.83385	-0.00023	1724.14189	538.30781
60	2	0	1	-1	2	1	-1	0	0	3	1187.81863	0.00019	1718.15582	530.33737
	2	0	1	-1	1	1	-1	0	0	2	1189.80620	0.00069	1714.16495	524.35945
	2	0	1	-1	2	1	-1	0	0	1	1197.78100	-0.00070	1718.15582	520.37411
	2	0	1	-1	3	1	-1	0	0	2	1199.78238	-0.00006	1724.14189	524.35945
	2	0	1	-1	4	1	-1	0	0	3	1201.78562	0.00009	1732.12291	530.33737
	2	0	1	-1	5	1	-1	0	0	4	1203.79063	-0.00009	1742.09853	538.30781
	2	0	1	-1	6	1	-1	0	0	5	1205.79770	0.00001	1754.06834	548.27064
	2	0	1	-1	7	1	-1	0	0	6	1207.80661	-0.00051	1768.03183	560.22573

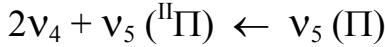
1	2	0	1	-1	8	1	-1	0	0	7	1209.81546	-0.00010	1783.98845	574.17289
2	2	0	1	-1	9	1	-1	0	0	8	1211.82581	0.00017	1801.93758	590.11194
3	2	0	1	-1	10	1	-1	0	0	9	1213.83628	0.00037	1821.87855	608.04264
4	2	0	1	-1	11	1	-1	0	0	10	1215.84619	0.00028	1843.81066	627.96474
5	2	0	1	-1	12	1	-1	0	0	11	1217.85563	0.00043	1867.73315	649.87795
6	2	0	1	-1	13	1	-1	0	0	12	1219.86353	0.00020	1893.64529	673.78196
7	2	0	1	-1	14	1	-1	0	0	13	1221.87042	0.00056	1921.54628	699.67642
8	2	0	1	-1	15	1	-1	0	0	14	1223.87454	0.00016	1951.43535	727.56097
9	2	0	1	-1	16	1	-1	0	0	15	1225.87753	0.00100	1983.31173	757.43520W
10	2	0	1	-1	17	1	-1	0	0	16	1227.87595	0.00000	2017.17464	789.29869

rms = 0.00029 cm⁻¹

	<i>v</i> _{4'}	<i>ℓ</i> _{4'}	<i>v</i> _{5'}	<i>ℓ</i> _{5'}	<i>J'</i>	<i>v</i> _{4''}	<i>ℓ</i> _{4''}	<i>v</i> _{5''}	<i>ℓ</i> _{5''}	<i>J''</i>	OBS	OBS - CALC	E'	E''
18	2	2	1	-1	1	1	1	0	0	2	1200.12959	-0.00016	1724.46257	524.33282
19	2	2	1	-1	2	1	1	0	0	3	1198.16117	0.00015	1728.44514	530.28412
20	2	2	1	-1	3	1	1	0	0	4	1196.19983	-0.00016	1734.41904	538.21906
21	2	2	1	-1	4	1	1	0	0	5	1194.24692	0.00012	1742.38433	548.13753
22	2	2	1	-1	5	1	1	0	0	6	1192.30180	0.00012	1752.34107	560.03938
23	2	2	1	-1	6	1	1	0	0	7	1190.36488	0.00001	1764.28934	573.92447
24	2	2	1	-1	7	1	1	0	0	8	1188.43675	0.00007	1778.22926	589.79258
25	2	2	1	-1	8	1	1	0	0	9	1186.51757	0.00013	1794.16094	607.64350
26	2	2	1	-1	9	1	1	0	0	10	1184.60749	-0.00005	1812.08452	627.47699
27	2	2	1	-1	10	1	1	0	0	11	1182.70766	0.00025	1832.00016	649.29275
28	2	2	1	-1	11	1	1	0	0	12	1180.81755	0.00003	1853.90802	673.09051
29	2	2	1	-1	12	1	1	0	0	13	1178.93847	0.00009	1877.80829	698.86991
30	2	2	1	-1	13	1	1	0	0	14	1177.07076	0.00023	1903.70113	726.63060
31	2	2	1	-1	14	1	1	0	0	15	1175.21458	0.00004	1931.58675	756.37220
32	2	2	1	-1	15	1	1	0	0	16	1173.37101	-0.00002	1961.46532	788.09430
33	2	2	1	-1	16	1	1	0	0	17	1171.54086	0.00027	1993.33703	821.79644
34	2	2	1	-1	17	1	1	0	0	18	1169.72400	0.00012	2027.20204	857.47816
35	2	2	1	-1	18	1	1	0	0	19	1167.92162	0.00011	2063.06048	895.13897
36	2	2	1	-1	19	1	1	0	0	20	1166.13443	0.00032	2100.91245	934.77834
37	2	2	1	-1	20	1	1	0	0	21	1164.36228	-0.00001	2140.75802	976.39572
38	2	2	1	-1	21	1	1	0	0	22	1162.60715	0.00050	2182.59718	1019.99053
39	2	2	1	-1	22	1	1	0	0	23	1160.86739	-0.00032	2226.42988	1065.56217
40	2	2	1	-1	23	1	1	0	0	24	1159.14621	0.00021	2272.25599	1113.10999
41	2	2	1	-1	24	1	1	0	0	25	1157.44200	0.00003	2320.07531	1162.63334
42	2	2	1	-1	25	1	1	0	0	26	1155.75585	-0.00016	2369.88754	1214.13154
43	2	2	1	-1	26	1	1	0	0	27	1154.08870	0.00024	2421.69231	1267.60385
44	2	2	1	-1	27	1	1	0	0	28	1152.43977	0.00017	2475.48915	1323.04955
45	2	2	1	-1	28	1	1	0	0	29	1150.80998	0.00033	2531.27750	1380.46786
46	2	2	1	-1	29	1	1	0	0	30	1149.19895	0.00020	2589.05673	1439.85797
47	2	2	1	-1	30	1	1	0	0	31	1147.60718	0.00016	2648.82609	1501.21907
48	2	2	1	-1	31	1	1	0	0	32	1146.03484	0.00034	2710.58480	1564.55030
49	2	2	1	-1	32	1	1	0	0	33	1144.48157	0.00039	2774.33196	1629.85078
50	2	2	1	-1	33	1	1	0	0	34	1142.94771	0.00068	2840.06664	1697.11961
51	2	2	1	-1	34	1	1	0	0	35	1141.43168	-0.00029	2907.78781	1766.35584
52	2	2	1	-1	35	1	1	0	0	36	1139.93768*	0.00178	2977.49442	1837.55852W
53	2	2	1	-1	2	1	1	0	0	1	1208.07982	-0.00009	1728.44514	520.36524
54	2	2	1	-1	3	1	1	0	0	2	1210.08618	-0.00005	1734.41904	524.33282
55	2	2	1	-1	4	1	1	0	0	3	1212.09988	-0.00033	1742.38433	530.28412
56	2	2	1	-1	5	1	1	0	0	4	1214.12187	-0.00014	1752.34107	538.21906
57	2	2	1	-1	6	1	1	0	0	5	1216.15167	-0.00014	1764.28934	548.13753
58	2	2	1	-1	7	1	1	0	0	6	1218.18967	-0.00020	1778.22926	560.03938
59	2	2	1	-1	8	1	1	0	0	7	1220.23659	0.00012	1794.16094	573.92447
60	2	2	1	-1	9	1	1	0	0	8	1222.29190	-0.00004	1812.08452	589.79258
	2	2	1	-1	10	1	1	0	0	9	1224.35665	-0.00001	1832.00016	607.64350
	2	2	1	-1	11	1	1	0	0	10	1226.43090	-0.00014	1853.90802	627.47699
	2	2	1	-1	12	1	1	0	0	11	1228.51550	-0.00003	1877.80829	649.29275
	2	2	1	-1	13	1	1	0	0	12	1230.61085	0.00023	1903.70113	673.09051
	2	2	1	-1	14	1	1	0	0	13	1232.71682	-0.00002	1931.58675	698.86991
	2	2	1	-1	15	1	1	0	0	14	1234.83463	-0.00009	1961.46532	726.63060
	2	2	1	-1	16	1	1	0	0	15	1237.33703	0.00000	1983.31173	756.37220

1	2	2	1	-1	17	1	1	0	0	16	1239.10814	0.00040	2027.20204	788.09430
2	2	2	1	-1	18	1	1	0	0	17	1241.26412	0.00008	2063.06048	821.79644
3	2	2	1	-1	19	1	1	0	0	18	1243.43455	0.00026	2100.91245	857.47816
4	2	2	1	-1	20	1	1	0	0	19	1245.61918	0.00014	2140.75802	895.13897
5	2	2	1	-1	21	1	1	0	0	20	1247.81903	0.00019	2182.59718	934.77834
6	2	2	1	-1	22	1	1	0	0	21	1250.03431	0.00015	2226.42988	976.39572
7	2	2	1	-1	23	1	1	0	0	22	1252.26578	0.00032	2272.25599	1019.99053
8	2	2	1	-1	24	1	1	0	0	23	1254.51347	0.00033	2320.07531	1065.56217
9	2	2	1	-1	25	1	1	0	0	24	1256.77744	-0.00011	2369.88754	1113.10999
10	2	2	1	-1	26	1	1	0	0	25	1259.05886	-0.00011	2421.69231	1162.63334
11	2	2	1	-1	27	1	1	0	0	26	1261.35747	-0.00014	2475.48915	1214.13154
12	2	2	1	-1	28	1	1	0	0	27	1263.67367	0.00002	2531.27750	1267.60385
13	2	2	1	-1	29	1	1	0	0	28	1266.00739	0.00022	2589.05673	1323.04955
14	2	2	1	-1	30	1	1	0	0	29	1268.35817	-0.00007	2648.82609	1380.46786
15	2	2	1	-1	31	1	1	0	0	30	1270.72710	0.00027	2710.58480	1439.85797
16	2	2	1	-1	32	1	1	0	0	31	1273.11302	0.00013	2774.33196	1501.21907
17	2	2	1	-1	33	1	1	0	0	32	1275.51386*	-0.00248	2840.06664	1564.55030W
18	2	2	1	-1	34	1	1	0	0	33	1277.93669	-0.00034	2907.78781	1629.85078
19	2	2	1	-1	35	1	1	0	0	34	1280.37462	-0.00019	2977.49442	1697.11961
20	2	2	1	-1	36	1	1	0	0	35	1282.82933	-0.00017	3049.18534	1766.35584
21	2	2	1	-1	37	1	1	0	0	36	1285.30140	0.00050	3122.85942	1837.55852
22	2	-2	1	1	1	1	-1	0	0	2	1200.11234	-0.00003	1724.47181	524.35945
23	2	-2	1	1	2	1	-1	0	0	3	1198.13551	0.00001	1728.47288	530.33737
24	2	-2	1	1	3	1	-1	0	0	4	1196.16691	0.00020	1734.47452	538.30781
25	2	-2	1	1	4	1	-1	0	0	5	1194.20625	0.00009	1742.47680	548.27064
26	2	-2	1	1	5	1	-1	0	0	6	1192.25393	-0.00013	1752.47978	560.22573
27	2	-2	1	1	6	1	-1	0	0	7	1190.31042	-0.00026	1764.48357	574.17289
28	2	-2	1	1	7	1	-1	0	0	8	1188.37645	0.00012	1778.48827	590.11194
29	2	-2	1	1	8	1	-1	0	0	9	1186.45152	0.00016	1794.49400	608.04264
30	2	-2	1	1	9	1	-1	0	0	10	1184.53635	0.00018	1812.50091	627.96474
31	2	-2	1	1	10	1	-1	0	0	11	1182.63121	0.00001	1832.50915	649.87795
32	2	-2	1	1	11	1	-1	0	0	12	1180.73722	0.00030	1854.51888	673.78196
33	2	-2	1	1	12	1	-1	0	0	13	1178.85376	-0.00009	1878.53027	699.67642
34	2	-2	1	1	13	1	-1	0	0	14	1176.98260	0.00008	1904.54349	727.56097
35	2	-2	1	1	14	1	-1	0	0	15	1175.12366	0.00014	1932.55872	757.43520
36	2	-2	1	1	15	1	-1	0	0	16	1173.27747	0.00005	1962.57611	789.29869
37	2	-2	1	1	16	1	-1	0	0	17	1171.44509	0.00026	1994.59581	823.15099
38	2	-2	1	1	17	1	-1	0	0	18	1169.62655	0.00021	2028.61794	858.99160
39	2	-2	1	1	18	1	-1	0	0	19	1167.82253	-0.00005	2064.64259	896.82001
40	2	-2	1	1	19	1	-1	0	0	20	1166.03447	0.00036	2102.66980	936.63569
41	2	-2	1	1	20	1	-1	0	0	21	1164.26188	0.00035	2142.69958	978.43806
42	2	-2	1	1	21	1	-1	0	0	22	1162.50560	0.00025	2184.73187	1022.22652
43	2	-2	1	1	22	1	-1	0	0	23	1160.76635	0.00026	2228.76654	1068.00045
44	2	-2	1	1	23	1	-1	0	0	24	1159.04423	0.00002	2274.80341	1115.75919
45	2	-2	1	1	24	1	-1	0	0	25	1157.34021	0.00009	2322.84219	1165.50207
46	2	-2	1	1	25	1	-1	0	0	26	1155.65473	0.00054	2372.88254	1217.22835
47	2	-2	1	1	26	1	-1	0	0	27	1153.98688	0.00018	2424.92402	1270.93732
48	2	-2	1	1	27	1	-1	0	0	28	1152.33860	0.00067	2478.96612	1326.62819
49	2	-2	1	1	28	1	-1	0	0	29	1150.70821	0.00016	2535.00823	1384.30018
50	2	-2	1	1	29	1	-1	0	0	30	1149.09739	0.00017	2593.04967	1443.95245
51	2	-2	1	1	30	1	-1	0	0	31	1147.50614	0.00061	2653.08968	1505.58415
52	2	-2	1	1	31	1	-1	0	0	32	1145.93293	-0.00010	2715.12743	1569.19441
53	2	-2	1	1	32	1	-1	0	0	33	1144.37967	-0.00005	2779.16202	1634.78230
54	2	-2	1	1	33	1	-1	0	0	34	1142.84539	-0.00018	2845.19248	1702.34690
55	2	-2	1	1	34	1	-1	0	0	35	1141.33020	-0.00034	2913.21778	1771.88724
56	2	-2	1	1	35	1	-1	0	0	36	1139.83450	-0.00003	2983.23684	1843.40231
57	2	-2	1	1	36	1	-1	0	0	37	1138.35607	-0.00136	3055.24854	1916.89110W
58	2	-2	1	1	37	1	-1	0	0	38	1136.89780	-0.00132	3129.25169	1992.35257W
59	2	-2	1	1	2	1	-1	0	0	1	1208.09875	-0.00001	1728.47288	520.37411
60	2	-2	1	1	3	1	-1	0	0	2	1210.11503	-0.00004	1734.47452	524.35945
	2	-2	1	1	4	1	-1	0	0	3	1212.13926	-0.00016	1742.47680	530.33737
	2	-2	1	1	5	1	-1	0	0	4	1214.17179	-0.00018	1752.47978	538.30781
	2	-2	1	1	6	1	-1	0	0	5	1216.21274	-0.00019	1764.48357	548.27064
	2	-2	1	1	7	1	-1	0	0	6	1218.26255	0.00001	1778.48827	560.22573
	2	-2	1	1	8	1	-1	0	0	7	1220.32096	-0.00015	1794.49400	574.17289
	2	-2	1	1	9	1	-1	0	0	8	1222.38891	-0.00006	1812.50091	590.11194
	2	-2	1	1	10	1	-1	0	0	9	1224.46671	0.00021	1832.50915	608.04264
	2	-2	1	1	11	1	-1	0	0	10	1226.55435	0.00022	1854.51888	627.96474
	2	-2	1	1	12	1	-1	0	0	11	1228.65237	-0.0005	1878.53027	649.87795

1	2	-2	1	1	13	1	-1	0	0	12	1230.76166	0.00013	1904.54349	673.78196
2	2	-2	1	1	14	1	-1	0	0	13	1232.88236	0.00006	1932.55872	699.67642
3	2	-2	1	1	15	1	-1	0	0	14	1235.01530	0.00016	1962.57611	727.56097
4	2	-2	1	1	16	1	-1	0	0	15	1237.16069	0.00008	1994.59581	757.43520
5	2	-2	1	1	17	1	-1	0	0	16	1239.31922	-0.00003	2028.61794	789.29869
6	2	-2	1	1	18	1	-1	0	0	17	1241.49161	0.00001	2064.64259	823.15099
7	2	-2	1	1	19	1	-1	0	0	18	1243.67828	0.00007	2102.66980	858.99160
8	2	-2	1	1	20	1	-1	0	0	19	1245.87952	-0.00005	2142.69958	896.82001
9	2	-2	1	1	21	1	-1	0	0	20	1248.09649	0.00031	2184.73187	936.63569
10	2	-2	1	1	22	1	-1	0	0	21	1250.32874	0.00025	2228.76654	978.43806
11	2	-2	1	1	23	1	-1	0	0	22	1252.57717	0.00028	2274.80341	1022.22652
12	2	-2	1	1	24	1	-1	0	0	23	1254.84204	0.00030	2322.84219	1068.00045
13	2	-2	1	1	25	1	-1	0	0	24	1257.12361	0.00026	2372.88254	1115.75919
14	2	-2	1	1	26	1	-1	0	0	25	1259.42274	0.00078	2424.92402	1165.50207
15	2	-2	1	1	27	1	-1	0	0	26	1261.73764	-0.00013	2478.96612	1217.22835
16	2	-2	1	1	28	1	-1	0	0	27	1264.07160	0.00069	2535.00823	1270.93732
17	2	-2	1	1	29	1	-1	0	0	28	1266.42230	0.00082	2593.04967	1326.62819
18	2	-2	1	1	30	1	-1	0	0	29	1268.78951	0.00000	2653.08968	1384.30018
19	2	-2	1	1	31	1	-1	0	0	30	1271.17511	0.00013	2715.12743	1443.95245
20	2	-2	1	1	32	1	-1	0	0	31	1273.57795	0.00008	2779.16202	1505.58415
21	2	-2	1	1	33	1	-1	0	0	32	1275.99802	-0.00005	2845.19248	1569.19441
22	2	-2	1	1	34	1	-1	0	0	33	1278.43511	-0.00036	2913.21778	1634.78230
23	2	-2	1	1	35	1	-1	0	0	34	1280.88994	0.00000	2983.23684	1702.34690
24	2	-2	1	1	36	1	-1	0	0	35	1283.36070	-0.00060	3055.24854	1771.88724
25	2	-2	1	1	37	1	-1	0	0	36	1285.84865	-0.00073	3129.25169	1843.40231
26	2	-2	1	1	38	1	-1	0	0	37	1288.35300	-0.00098	3205.24508	1916.89110
27	2	-2	1	1	39	1	-1	0	0	38	1290.87590*	0.00101	3283.22745	1992.35257W
28	2	-2	1	1	40	1	-1	0	0	39	1293.41160	-0.00030	3363.19751	2069.78561
29	2	-2	1	1	1	1	1	0	0	1	1204.10622	-0.00036	1724.47181	520.36524
30	2	-2	1	1	2	1	1	0	0	2	1204.14054	0.00048	1728.47288	524.33282
31	2	-2	1	1	3	1	1	0	0	3	1204.19054	0.00014	1734.47452	530.28412
32	2	-2	1	1	4	1	1	0	0	4	1204.25796	0.00022	1742.47680	538.21906
33	2	-2	1	1	5	1	1	0	0	5	1204.34188	-0.00038	1752.47978	548.13753
34	2	-2	1	1	6	1	1	0	0	6	1204.44430	0.00011	1764.48357	560.03938
35	2	-2	1	1	7	1	1	0	0	7	1204.56392	0.00012	1778.48827	573.92447
36	2	-2	1	1	8	1	1	0	0	8	1204.70127	-0.00015	1794.49400	589.79258
37	2	-2	1	1	9	1	1	0	0	9	1204.85717	-0.00024	1812.50091	607.64350
38	2	-2	1	1	10	1	1	0	0	10	1205.03204	-0.00012	1832.50915	627.47699
39	2	-2	1	1	11	1	1	0	0	11	1205.22620	0.00008	1854.51888	649.29275
40	2	-2	1	1	12	1	1	0	0	12	1205.43949	-0.00027	1878.53027	673.09051
41	2	-2	1	1	13	1	1	0	0	13	1205.67409	0.00051	1904.54349	698.86991

rms = 0.00027 cm⁻¹

47	v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
48	2	0	1	1	32	0	0	1	1	33	973.96004	0.00021	2762.40757	1788.44775
49	2	0	1	1	31	0	0	1	1	32	975.77739	0.00041	2698.97215	1723.19517
50	2	0	1	1	30	0	0	1	1	31	977.58954	0.00012	2637.49992	1659.91050
51	2	0	1	1	29	0	0	1	1	30	979.39711	0.00016	2577.99156	1598.59460
52	2	0	1	1	28	0	0	1	1	29	981.20080	0.00134	2520.44778	1539.24832W
53	2	0	1	1	27	0	0	1	1	28	982.99704	0.00015	2464.86937	1481.87248
54	2	0	1	1	26	0	0	1	1	27	984.78939	0.00010	2411.25716	1426.46786
55	2	0	1	1	25	0	0	1	1	26	986.57656	-0.00029	2359.61208	1373.03523
56	2	0	1	1	24	0	0	1	1	25	988.35979	-0.00009	2309.93520	1321.57533
57	2	0	1	1	23	0	0	1	1	24	990.13874	-0.00013	2262.22772	1272.08885
58	2	0	1	1	22	0	0	1	1	23	991.91484	0.00036	2216.49097	1224.57649
59	2	0	1	1	21	0	0	1	1	22	993.68709	-0.00045	2172.72643	1179.03889
60	2	0	1	1	20	0	0	1	1	21	995.45933	0.00026	2130.93576	1135.47669
	2	0	1	1	19	0	0	1	1	20	997.23013	-0.00009	2091.12070	1093.89049
	2	0	1	1	18	0	0	1	1	19	999.00244	0.00018	2053.28311	1054.28084
	2	0	1	1	17	0	0	1	1	18	1000.77573	-0.00083	2017.42488	1016.64832
	2	0	1	1	16	0	0	1	1	17	1002.55470	0.00019	1983.54793	980.99342
	2	0	1	1	15	0	0	1	1	16	1004.33755	0.00005	1951.65414	947.31664
	2	0	1	1	14	0	0	1	1	15	URL: http://mc.manuscriptcentral.com/andtmp1.74533			915.61845

1	2	0	1	1	13	0	0	1	1	14	1007.92414	0.00021	1893.82321	885.89928
2	2	0	1	1	12	0	0	1	1	13	1009.72990	0.00006	1867.88938	858.15954
3	2	0	1	1	11	0	0	1	1	12	1011.54596	0.00026	1843.94531	832.39961
4	2	0	1	1	10	0	0	1	1	11	1013.37294	0.00048	1821.99232	808.61985
5	2	0	1	1	9	0	0	1	1	10	1015.21137	0.00037	1802.03159	786.82059
6	2	0	1	1	8	0	0	1	1	9	1017.06239	0.00034	1784.06418	767.00212
7	2	0	1	1	7	0	0	1	1	8	1018.92641	0.00014	1768.09099	749.16472
8	2	0	1	1	6	0	0	1	1	7	1020.80443	0.00024	1754.11283	733.30864
9	2	0	1	1	5	0	0	1	1	6	1022.69618	-0.00009	1742.13035	719.43409
10	2	0	1	1	4	0	0	1	1	5	1024.60284	-0.00003	1732.14413	707.54126
11	2	0	1	1	3	0	0	1	1	4	1026.52426	-0.00004	1724.15462	697.63032
12	2	0	1	1	2	0	0	1	1	3	1028.46067	-0.00011	1718.16218	689.70140
13	2	0	1	1	1	0	0	1	1	2	1030.41270	0.00024	1714.16707	683.75462
14	2	0	1	1	2	0	0	1	1	3	1028.46111	0.00033	1718.16218	689.70140
15	2	0	1	1	4	0	0	1	1	3	1042.44313	0.00040	1732.14413	689.70140
16	2	0	1	1	6	0	0	1	1	5	1046.57140	-0.00017	1754.11283	707.54126
17	2	0	1	1	7	0	0	1	1	6	1048.65701	0.00010	1768.09099	719.43409
18	2	0	1	1	8	0	0	1	1	7	1050.75588	0.00034	1784.06418	733.30864
19	2	0	1	1	9	0	0	1	1	8	1052.86705	0.00018	1802.03159	749.16472
20	2	0	1	1	10	0	0	1	1	9	1054.99143	0.00124	1821.99232	767.00212W
21	2	0	1	1	11	0	0	1	1	10	1057.12539	0.00067	1843.94531	786.82059
22	2	0	1	1	12	0	0	1	1	11	1059.26965	0.00012	1867.88938	808.61985
23	2	0	1	1	13	0	0	1	1	12	1061.42407	0.00047	1893.82321	832.39961
24	2	0	1	1	14	0	0	1	1	13	1063.58605	0.00026	1921.74533	858.15954
25	2	0	1	1	15	0	0	1	1	14	1065.75547	0.00061	1951.65414	885.89928
26	2	0	1	1	16	0	0	1	1	15	1067.92962	0.00014	1983.54793	915.61845
27	2	0	1	1	17	0	0	1	1	16	1070.10833	0.00009	2017.42488	947.31664
28	2	0	1	1	18	0	0	1	1	17	1072.28994	0.00025	2053.28311	980.99342
29	2	0	1	1	19	0	0	1	1	18	1074.47238	-0.00001	2091.12070	1016.64832
30	2	0	1	1	20	0	0	1	1	19	1076.65486	-0.00006	2130.93576	1054.28084
31	2	0	1	1	21	0	0	1	1	20	1078.83659	0.00064	2172.72643	1093.89049
32	2	0	1	1	22	0	0	1	1	21	1081.01415	-0.00012	2216.49097	1135.47669
33	2	0	1	1	23	0	0	1	1	22	1083.18867	-0.00016	2262.22772	1179.03889
34	2	0	1	1	24	0	0	1	1	23	1085.35848	-0.00024	2309.93520	1224.57649
35	2	0	1	1	25	0	0	1	1	24	1087.52329	0.00006	2359.61208	1272.08885
36	2	0	1	1	26	0	0	1	1	25	1089.68217	0.00034	2411.25716	1321.57533
37	2	0	1	1	27	0	0	1	1	26	1091.83381	-0.00033	2464.86937	1373.03523
38	2	0	1	1	28	0	0	1	1	27	1093.98014	0.00022	2520.44778	1426.46786
39	2	0	1	1	29	0	0	1	1	28	1096.11965	0.00057	2577.99156	1481.87248
40	2	0	1	1	30	0	0	1	1	29	1098.25190	0.00031	2637.49992	1539.24832
41	2	0	1	1	31	0	0	1	1	30	1100.37808	0.00053	2698.97215	1598.59460
42	2	0	1	1	32	0	0	1	1	31	1102.49697	-0.00010	2762.40757	1659.91050
43	2	0	1	1	33	0	0	1	1	32	1104.61022	-0.00014	2827.80553	1723.19517
44	2	0	1	-1	33	0	0	1	-1	34	968.72249	-0.00003	2828.55460	1859.83208
45	2	0	1	-1	32	0	0	1	-1	33	970.62998	-0.00038	2763.00657	1792.37620
46	2	0	1	-1	31	0	0	1	-1	32	972.53862	-0.00043	2699.43313	1726.89408
47	2	0	1	-1	30	0	0	1	-1	31	974.44860	0.00010	2637.83514	1663.38664
48	2	0	1	-1	29	0	0	1	-1	30	976.35863	-0.00002	2578.21342	1601.85477
49	2	0	1	-1	28	0	0	1	-1	29	978.26773*	-0.00172	2520.56876	1542.29931W
50	2	0	1	-1	27	0	0	1	-1	28	980.18079	-0.00003	2464.90194	1484.72111
51	2	0	1	-1	26	0	0	1	-1	27	982.09262	-0.00010	2411.21370	1429.12098
52	2	0	1	-1	25	0	0	1	-1	26	984.00512	0.00001	2359.50479	1375.49968
53	2	0	1	-1	24	0	0	1	-1	25	985.91779	-0.00017	2309.77593	1323.85797
54	2	0	1	-1	23	0	0	1	-1	24	987.83159	0.00034	2262.02782	1274.19657
55	2	0	1	-1	22	0	0	1	-1	23	989.74495	-0.00005	2216.26118	1226.51618
56	2	0	1	-1	21	0	0	1	-1	22	991.65940	0.00016	2172.47670	1180.81746
57	2	0	1	-1	20	0	0	1	-1	21	993.57420	0.00016	2130.67509	1137.10105
58	2	0	1	-1	19	0	0	1	-1	20	995.48990	0.00040	2090.85706	1095.36757
59	2	0	1	-1	18	0	0	1	-1	19	997.40746*	0.00171	2053.02334	1055.61759W
60	2	0	1	-1	17	0	0	1	-1	18	999.32324	0.00027	2017.17464	1017.85167
	2	0	1	-1	16	0	0	1	-1	17	1001.24147	0.00009	1983.31173	982.07035
	2	0	1	-1	15	0	0	1	-1	16	1003.16151	0.00028	1951.43535	948.27412
	2	0	1	-1	14	0	0	1	-1	15	1005.08289	0.00007	1921.54628	916.46345
	2	0	1	-1	13	0	0	1	-1	14	1007.00668	0.00019	1893.64529	886.63880
	2	0	1	-1	12	0	0	1	-1	13	1008.93276	0.00017	1867.73315	858.80057
	2	0	1	-1	11	0	0	1	-1	12	1010.86168	0.00018	1843.81066	832.94916
	2	0	1	-1	10	0	0	1	-1	11	1012.79366	0.00003	1821.87855	809.08492
	2	0	1	-1	9	0	0	1	-1	10	1014.72971	0.00033	1801.93758	787.20820
	2	0	1	-1	8	0	0	1	-1	9	1016.66039	0.00024	1783.98845	767.31930

1	2	0	1	-1	7	0	0	1	-1	8	1018.61376	0.00042	1768.03183	749.41849
2	2	0	1	-1	6	0	0	1	-1	7	1020.56242	0.00012	1754.06834	733.50603
3	2	0	1	-1	5	0	0	1	-1	6	1022.51680	0.00042	1742.09853	719.58215
4	2	0	1	-1	4	0	0	1	-1	5	1024.47602	0.00014	1732.12291	707.64702
5	2	0	1	-1	3	0	0	1	-1	4	1026.44123	0.00018	1724.14189	697.70083
6	2	0	1	-1	2	0	0	1	-1	3	1028.41210	0.00000	1718.15582	689.74371
7	2	0	1	-1	1	0	0	1	-1	2	1030.38904	-0.00014	1714.16495	683.77578
8	2	0	1	-1	2	0	0	1	-1	1	1038.35840	-0.00031	1718.15582	679.79710
9	2	0	1	-1	3	0	0	1	-1	2	1040.36623	0.00012	1724.14189	683.77578
10	2	0	1	-1	4	0	0	1	-1	3	1042.37932	0.00013	1732.12291	689.74371
11	2	0	1	-1	5	0	0	1	-1	4	1044.39800	0.00030	1742.09853	697.70083
12	2	0	1	-1	6	0	0	1	-1	5	1046.42167	0.00036	1754.06834	707.64702
13	2	0	1	-1	7	0	0	1	-1	6	1048.44985	0.00017	1768.03183	719.58215
14	2	0	1	-1	8	0	0	1	-1	7	1050.48282	0.00040	1783.98845	733.50603
15	2	0	1	-1	9	0	0	1	-1	8	1052.51905	-0.00004	1801.93758	749.41849
16	2	0	1	-1	10	0	0	1	-1	9	1054.55926	0.00001	1821.87855	767.31930
17	2	0	1	-1	11	0	0	1	-1	10	1056.60286	0.00041	1843.81066	787.20820
18	2	0	1	-1	12	0	0	1	-1	11	1058.64829	0.00006	1867.73315	809.08492
19	2	0	1	-1	13	0	0	1	-1	12	1060.69646	0.00033	1893.64529	832.94916
20	2	0	1	-1	14	0	0	1	-1	13	1062.74579	0.00008	1921.54628	858.80057
21	2	0	1	-1	15	0	0	1	-1	14	1064.79640	-0.00015	1951.43535	886.63880
22	2	0	1	-1	16	0	0	1	-1	15	1066.84870	0.00042	1983.31173	916.46345
23	2	0	1	-1	17	0	0	1	-1	16	1068.90096	0.00044	2017.17464	948.27412
24	2	0	1	-1	18	0	0	1	-1	17	1070.95315	0.00016	2053.02334	982.07035
25	2	0	1	-1	19	0	0	1	-1	18	1073.00509	-0.00030	2090.85706	1017.85167
26	2	0	1	-1	20	0	0	1	-1	19	1075.05771	0.00021	2130.67509	1055.61759
27	2	0	1	-1	21	0	0	1	-1	20	1077.10930	0.00017	2172.47670	1095.36757
28	2	0	1	-1	23	0	0	1	-1	22	1081.21044	0.00008	2262.02782	1180.81746
29	2	0	1	-1	24	0	0	1	-1	23	1083.25948	-0.00027	2309.77593	1226.51618
30	2	0	1	-1	25	0	0	1	-1	24	1085.30814	-0.00008	2359.50479	1274.19657
31	2	0	1	-1	26	0	0	1	-1	25	1087.35567	-0.00006	2411.21370	1323.85797
32	2	0	1	-1	27	0	0	1	-1	26	1089.40234	0.00008	2464.90194	1375.49968
33	2	0	1	-1	28	0	0	1	-1	27	1091.44791	0.00013	2520.56876	1429.12098
34	2	0	1	-1	29	0	0	1	-1	28	1093.49208	-0.00022	2578.21342	1484.72111
35	2	0	1	-1	30	0	0	1	-1	29	1095.53565	-0.00018	2637.83514	1542.29931
36	2	0	1	-1	31	0	0	1	-1	30	1097.57806	-0.00030	2699.43313	1601.85477
37	2	0	1	-1	32	0	0	1	-1	31	1099.62013	0.00021	2763.00657	1663.38664
38	2	0	1	-1	33	0	0	1	-1	32	1101.66107	0.00056	2828.55460	1726.89408
39	2	0	1	-1	34	0	0	1	-1	33	1103.69995	-0.00020	2896.07636	1792.37620
40	2	0	1	-1	35	0	0	1	-1	34	1105.73866	-0.00019	2965.57093	1859.83208
41	2	0	1	-1	36	0	0	1	-1	35	1107.77717	0.00055	3037.03739	1929.26077
42	2	0	1	-1	37	0	0	1	-1	36	1109.81210	-0.00136	3110.47477	2000.66131W
43	2	0	1	-1	1	0	0	1	1	1	1034.37444	-0.00046	1714.16495	679.79005
44	2	0	1	-1	2	0	0	1	1	2	1034.40076	-0.00044	1718.15582	683.75462
45	2	0	1	-1	3	0	0	1	1	3	1034.44147	0.00098	1724.14189	689.70140
46	2	0	1	-1	4	0	0	1	1	4	1034.49228	-0.00031	1732.12291	697.63032
47	2	0	1	-1	5	0	0	1	1	5	1034.55749	0.00022	1742.09853	707.54126
48	2	0	1	-1	6	0	0	1	1	6	1034.63478	0.00053	1754.06834	719.43409
49	2	0	1	-1	7	0	0	1	1	7	1034.72272	-0.00047	1768.03183	733.30864
50	2	0	1	-1	8	0	0	1	1	8	1034.82393	0.00020	1783.98845	749.16472
51	2	0	1	-1	9	0	0	1	1	9	1034.93508	-0.00038	1801.93758	767.00212
52	2	0	1	-1	10	0	0	1	1	10	1035.06144*	0.00348	1821.87855	786.82059W
53	2	0	1	-1	11	0	0	1	1	11	1035.19080	0.00000	1843.81066	808.61985
54	2	0	1	-1	12	0	0	1	1	12	1035.33398	0.00044	1867.73315	832.39961
55	2	0	1	-1	13	0	0	1	1	13	1035.48572	-0.00003	1893.64529	858.15954
56	2	0	1	-1	14	0	0	1	1	14	1035.64690	-0.00010	1921.54628	885.89928
57	2	0	1	1	1	0	0	1	-1	1	1034.36973	-0.00024	1714.16707	679.79710
58	2	0	1	1	2	0	0	1	-1	2	1034.38646	0.00005	1718.16218	683.77578
59	2	0	1	1	3	0	0	1	-1	3	1034.41041	-0.00050	1724.15462	689.74371
60	2	0	1	1	4	0	0	1	-1	4	1034.44147	-0.00183	1732.14413	697.70083W
	2	0	1	1	5	0	0	1	-1	5	1034.48268	-0.00065	1742.13035	707.64702
	2	0	1	1	6	0	0	1	-1	6	1034.53026	-0.00042	1754.11283	719.58215
	2	0	1	1	7	0	0	1	-1	7	1034.58465	-0.00031	1768.09099	733.50603
	2	0	1	1	8	0	0	1	-1	8	1034.64852*	0.00284	1784.06418	749.41849W
	2	0	1	1	9	0	0	1	-1	9	1034.71240	0.00011	1802.03159	767.31930
	2	0	1	1	10	0	0	1	-1	10	1034.78427	0.00015	1821.99232	787.20820
	2	0	1	1	11	0	0	1	-1	11	1034.85980	-0.00059	1843.94531	809.08492

rms = 0.00030 cm⁻¹URL : <http://mc.manuscriptcentral.com/tandf/tmph>

1
2 $2v_4 + v_5 (^1\Pi) \leftarrow v_5 (\Pi)$
3
4

$v_4' \ell_4' v_5' \ell_5' J'$	$v_4'' \ell_4'' v_5'' \ell_5'' J''$	OBS	OBS - CALC	E'	E''
2 2 1 -1 1	0 0 1 1 2	1040.70753	-0.00042	1724.46257	683.75462
2 2 1 -1 2	0 0 1 1 3	1038.74394	0.00020	1728.44514	689.70140
2 2 1 -1 3	0 0 1 1 4	1036.78883	0.00010	1734.41904	697.63032
2 2 1 -1 4	0 0 1 1 5	1034.84317	0.00010	1742.38433	707.54126
2 2 1 -1 5	0 0 1 1 6	1032.90701	0.00003	1752.34107	719.43409
2 2 1 -1 6	0 0 1 1 7	1030.97875*	-0.00195	1764.28934	733.30864W
2 2 1 -1 7	0 0 1 1 8	1029.06476	0.00023	1778.22926	749.16472
2 2 1 -1 8	0 0 1 1 9	1027.15899	0.00017	1794.16094	767.00212
2 2 1 -1 9	0 0 1 1 10	1025.26412	0.00019	1812.08452	786.82059
2 2 1 -1 10	0 0 1 1 11	1023.38025	-0.00006	1832.00016	808.61985
2 2 1 -1 11	0 0 1 1 12	1021.50872	0.00031	1853.90802	832.39961
2 2 1 -1 12	0 0 1 1 13	1019.64812	-0.00063	1877.80829	858.15954
2 2 1 -1 13	0 0 1 1 14	1017.80151	-0.00034	1903.70113	885.89928
2 2 1 -1 14	0 0 1 1 15	1015.96852	0.00022	1931.58675	915.61845
2 2 1 -1 15	0 0 1 1 16	1014.14874	0.00006	1961.46532	947.31664
2 2 1 -1 16	0 0 1 1 17	1012.34336	-0.00026	1993.33703	980.99342
2 2 1 -1 17	0 0 1 1 18	1010.55439	0.00067	2027.20204	1016.64832
2 2 1 -1 18	0 0 1 1 19	1008.77960	-0.00004	2063.06048	1054.28084
2 2 1 -1 19	0 0 1 1 20	1007.02290*	0.00093	2100.91245	1093.89049
2 2 1 -1 20	0 0 1 1 21	1005.28124	-0.00009	2140.75802	1135.47669
2 2 1 -1 21	0 0 1 1 22	1003.55790	-0.00039	2182.59718	1179.03889
2 2 1 -1 22	0 0 1 1 23	1001.85311	-0.00028	2226.42988	1224.57649
2 2 1 -1 2	0 0 1 1 1	1048.65679*	0.00170	1728.44514	679.79005W
2 2 1 -1 3	0 0 1 1 2	1050.66415	-0.00028	1734.41904	683.75462
2 2 1 -1 4	0 0 1 1 3	1052.68306	0.00013	1742.38433	689.70140
2 2 1 -1 5	0 0 1 1 4	1054.71091	0.00016	1752.34107	697.63032
2 2 1 -1 6	0 0 1 1 5	1056.74866	0.00058	1764.28934	707.54126
2 2 1 -1 7	0 0 1 1 6	1058.79544	0.00027	1778.22926	719.43409
2 2 1 -1 8	0 0 1 1 7	1060.85235	0.00005	1794.16094	733.30864
2 2 1 -1 9	0 0 1 1 8	1062.92081	0.00101	1812.08452	749.16472W
2 2 1 -1 10	0 0 1 1 9	1064.99824	0.00020	1832.00016	767.00212
2 2 1 -1 11	0 0 1 1 10	1067.08697	-0.00046	1853.90802	786.82059
2 2 1 -1 12	0 0 1 1 11	1069.18840	-0.00003	1877.80829	808.61985
2 2 1 -1 13	0 0 1 1 12	1071.30168	0.00016	1903.70113	832.39961
2 2 1 -1 14	0 0 1 1 13	1073.42670	-0.00051	1931.58675	858.15954
2 2 1 -1 15	0 0 1 1 14	1075.56624	0.00020	1961.46532	885.89928
2 2 1 -1 16	0 0 1 1 15	1077.71863	0.00004	1993.33703	915.61845
2 2 1 -1 17	0 0 1 1 16	1079.88523	-0.00017	2027.20204	947.31664
2 2 1 -1 18	0 0 1 1 17	1082.06670	-0.00036	2063.06048	980.99342
2 2 1 -1 19	0 0 1 1 18	1084.26382	-0.00032	2100.91245	1016.64832
2 2 1 -1 20	0 0 1 1 19	1086.47264*	-0.00453	2140.75802	1054.28084W
2 2 1 -1 21	0 0 1 1 20	1088.70690	0.00021	2182.59718	1093.89049
2 2 1 -1 22	0 0 1 1 21	1090.95315	-0.00004	2226.42988	1135.47669
2 2 1 -1 23	0 0 1 1 22	1093.21701	-0.00009	2272.25599	1179.03889
2 2 1 -1 24	0 0 1 1 23	1095.49936	0.00054	2320.07531	1224.57649
2 2 1 -1 25	0 0 1 1 24	1097.79777	-0.00092	2369.88754	1272.08885
2 -2 1 1 1	0 0 1 -1 2	1040.69629	0.00025	1724.47181	683.77578
2 -2 1 1 2	0 0 1 -1 3	1038.72906	-0.00011	1728.47288	689.74371
2 -2 1 1 3	0 0 1 -1 4	1036.77372	0.00003	1734.47452	697.70083
2 -2 1 1 4	0 0 1 -1 5	1034.82979	0.00002	1742.47680	707.64702
2 -2 1 1 5	0 0 1 -1 6	1032.89797	0.00033	1752.47978	719.58215
2 -2 1 1 6	0 0 1 -1 7	1030.97856*	0.00102	1764.48357	733.50603W
2 -2 1 1 7	0 0 1 -1 8	1029.06992	0.00014	1778.48827	749.41849
2 -2 1 1 8	0 0 1 -1 9	1027.17460	-0.00010	1794.49400	767.31930
2 -2 1 1 9	0 0 1 -1 10	1025.29269	-0.00002	1812.50091	787.20820
2 -2 1 1 10	0 0 1 -1 11	1023.42437	0.00014	1832.50915	809.08492
2 -2 1 1 11	0 0 1 -1 12	1021.56985	0.00013	1854.51888	832.94916
2 -2 1 1 12	0 0 1 -1 13	1019.72964	-0.00006	1878.53027	858.80057
2 -2 1 1 13	0 0 1 -1 14	1017.90436	-0.00034	1904.54349	886.63880
2 -2 1 1 14	0 0 1 -1 15	1016.09528	0.00001	1932.55872	916.46345
2 -2 1 1 15	0 0 1 -1 16	1014.30173	-0.00026	1962.57611	948.27412

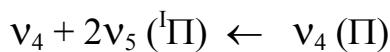
1	2	-2	1	1	16	0	0	1	-1	17	1012.52502	-0.00044	1994.59581	982.07035
2	2	-2	1	1	17	0	0	1	-1	18	1010.76651	0.00024	2028.61794	1017.85167
3	2	-2	1	1	18	0	0	1	-1	19	1009.02393*	-0.00107	2064.64259	1055.61759W
4	2	-2	1	1	19	0	0	1	-1	20	1007.30239	0.00015	2102.66980	1095.36757
5	2	-2	1	1	20	0	0	1	-1	21	1005.59893	0.00040	2142.69958	1137.10105
6	2	-2	1	1	21	0	0	1	-1	22	1003.91437	-0.00004	2184.73187	1180.81746
7	2	-2	1	1	22	0	0	1	-1	23	1002.25057	0.00021	2228.76654	1226.51618
8	2	-2	1	1	23	0	0	1	-1	24	1000.60690	0.00006	2274.80341	1274.19657
9	2	-2	1	1	24	0	0	1	-1	25	998.98450	0.00028	2322.84219	1323.85797
10	2	-2	1	1	25	0	0	1	-1	26	997.38329	0.00043	2372.88254	1375.49968
11	2	-2	1	1	2	0	0	1	-1	1	1048.67590*	0.00013	1728.47288	679.79710
12	2	-2	1	1	3	0	0	1	-1	2	1050.69845	-0.00030	1734.47452	683.77578
13	2	-2	1	1	4	0	0	1	-1	3	1052.73330	0.00021	1742.47680	689.74371
14	2	-2	1	1	5	0	0	1	-1	4	1054.77905	0.00010	1752.47978	697.70083
15	2	-2	1	1	6	0	0	1	-1	5	1056.83554	-0.00101	1764.48357	707.64702W
16	2	-2	1	1	7	0	0	1	-1	6	1058.90403*	-0.00209	1778.48827	719.58215W
17	2	-2	1	1	8	0	0	1	-1	7	1060.98816	0.00019	1794.49400	733.50603
18	2	-2	1	1	9	0	0	1	-1	8	1063.08280	0.00038	1812.50091	749.41849
19	2	-2	1	1	10	0	0	1	-1	9	1065.18997	0.00012	1832.50915	767.31930
20	2	-2	1	1	11	0	0	1	-1	10	1067.31048	-0.00020	1854.51888	787.20820
21	2	-2	1	1	12	0	0	1	-1	11	1069.44512	-0.00023	1878.53027	809.08492
22	2	-2	1	1	13	0	0	1	-1	12	1071.59453	0.00019	1904.54349	832.94916
23	2	-2	1	1	14	0	0	1	-1	13	1073.75790	-0.00025	1932.55872	858.80057
24	2	-2	1	1	15	0	0	1	-1	14	1075.93714	-0.00017	1962.57611	886.63880
25	2	-2	1	1	16	0	0	1	-1	15	1078.13201	-0.00035	1994.59581	916.46345
26	2	-2	1	1	17	0	0	1	-1	16	1080.34385	0.00003	2028.61794	948.27412
27	2	-2	1	1	18	0	0	1	-1	17	1082.57215	-0.00009	2064.64259	982.07035
28	2	-2	1	1	19	0	0	1	-1	18	1084.81830	0.00017	2102.66980	1017.85167
29	2	-2	1	1	20	0	0	1	-1	19	1087.08215	0.00016	2142.69958	1055.61759
30	2	-2	1	1	21	0	0	1	-1	20	1089.36457	0.00027	2184.73187	1095.36757
31	2	-2	1	1	22	0	0	1	-1	21	1091.66585	0.00036	2228.76654	1137.10105
32	2	-2	1	1	23	0	0	1	-1	22	1093.98605	0.00010	2274.80341	1180.81746
33	2	-2	1	1	24	0	0	1	-1	23	1096.32620	0.00019	2322.84219	1226.51618
34	2	-2	1	1	25	0	0	1	-1	24	1098.68644	0.00047	2372.88254	1274.19657
35	2	-2	1	1	26	0	0	1	-1	25	1101.06653	0.00048	2424.92402	1323.85797
36	2	-2	1	1	27	0	0	1	-1	26	1103.46654	0.00010	2478.96612	1375.49968
37	2	-2	1	1	28	0	0	1	-1	27	1105.88772	0.00047	2535.00823	1429.12098
38	2	-2	1	1	29	0	0	1	-1	28	1108.32827	-0.00029	2593.04967	1484.72111
39	2	-2	1	1	30	0	0	1	-1	29	1110.79052	0.00015	2653.08968	1542.29931
40	v ₄ + 2v ₅ (IIΠ) ← v ₄ (Π)	v ₄ ' l ₄ ' v ₅ ' l ₅ ' J'	v ₄ '' l ₄ '' v ₅ '' l ₅ '' J''	OBS	OBS - CALC	E'	E''							
41	1	1	2	0	1	1	1	0	0	2	1339.51684	-0.00025	1863.84991	524.33282
42	1	1	2	0	2	1	1	0	0	3	1337.54896	0.00022	1867.83286	530.28412
43	1	1	2	0	3	1	1	0	0	4	1335.58809	-0.00002	1873.80717	538.21906
44	1	1	2	0	4	1	1	0	0	5	1333.63526	0.00008	1881.77271	548.13753
45	1	1	2	0	5	1	1	0	0	6	1331.68968	-0.00023	1891.72929	560.03938
46	1	1	2	0	6	1	1	0	0	7	1329.75240	0.00016	1903.67670	573.92447
47	1	1	2	0	7	1	1	0	0	8	1327.82205	-0.00004	1917.61467	589.79258
48	1	1	2	0	8	1	1	0	0	9	1325.89933	-0.00004	1933.54287	607.64350
49	1	1	2	0	9	1	1	0	0	10	1323.98435	0.00038	1951.46095	627.47699
50	1	1	2	0	10	1	1	0	0	11	1322.07609	0.00034	1971.36850	649.29275
51	1	1	2	0	11	1	1	0	0	12	1320.17438	-0.00018	1993.26507	673.09051
52	1	1	2	0	12	1	1	0	0	13	1318.28025	0.00001	2017.15015	698.86991
53	1	1	2	0	13	1	1	0	0	14	1316.39240	-0.00019	2043.02319	726.63060
54	1	1	2	0	14	1	1	0	0	15	1314.51137	-0.00003	2070.88360	756.37220
55	1	1	2	0	15	1	1	0	0	16	1312.63644	0.00000	2100.73073	788.09430
56	1	1	2	0	16	1	1	0	0	17	1310.76749	0.00003	2132.56390	821.79644
57	1	1	2	0	17	1	1	0	0	18	1308.90426	0.00008	2166.38235	857.47816
58	1	1	2	0	18	1	1	0	0	19	1307.04636	0.00004	2202.18530	895.13897
59	1	1	2	0	19	1	1	0	0	19	1315.77450	-0.00088	2779.16202	1663.38664

1	1	2	0	20	1	1	0	0	21	1303.34596	0.00040	2279.74129	976.39572	
1	1	2	0	21	1	1	0	0	22	1301.50226	0.00029	2321.49251	1019.99053	
2	1	1	2	0	22	1	1	0	0	23	1299.66263	0.00022	2365.22458	1065.56217
3	1	1	2	0	23	1	1	0	0	24	1297.82673	0.00024	2410.93648	1113.10999
4	1	1	2	0	24	1	1	0	0	25	1295.99389	0.00010	2458.62713	1162.63334
5	1	1	2	0	25	1	1	0	0	26	1294.16397	0.00009	2508.29542	1214.13154
6	1	1	2	0	26	1	1	0	0	27	1292.33639	0.00007	2559.94017	1267.60385
7	1	1	2	0	27	1	1	0	0	28	1290.51042	-0.00023	2613.56020	1323.04955
8	1	1	2	0	28	1	1	0	0	29	1288.68620	-0.00020	2669.15425	1380.46786
9	1	1	2	0	29	1	1	0	0	30	1286.86282	-0.00027	2726.72106	1439.85797
10	1	1	2	0	30	1	1	0	0	31	1285.03982	-0.00043	2786.25932	1501.21907
11	1	1	2	0	31	1	1	0	0	32	1283.21674	-0.00064	2847.76768	1564.55030
12	1	1	2	0	32	1	1	0	0	33	1281.39312	-0.00089	2911.24479	1629.85078
13	1	1	2	0	33	1	1	0	0	34	1279.56849	-0.00116	2976.68926	1697.11961W
14	1	1	2	0	34	1	1	0	0	35	1277.74253	-0.00132	3044.09969	1766.35584W
15	1	1	2	0	35	1	1	0	0	36	1275.91448	-0.00167	3113.47467	1837.55852W
16	1	1	2	0	36	1	1	0	0	37	1274.08288	-0.00323	3184.81276	1910.72665W
17	1	1	2	0	37	1	1	0	0	38	1272.25146	-0.00185	3258.11253	1985.85922W
18	1	1	2	0	38	1	1	0	0	39	1270.41530	-0.00207	3333.37256	2062.95519W
19	1	1	2	0	39	1	1	0	0	40	1268.57484	-0.00308	3410.59139	2142.01348W
20	1	1	2	0	40	1	1	0	0	41	1266.72836	-0.00626	3489.76761	2223.03299W
21	1	1	2	0	2	1	1	0	0	1	1347.46793	0.00031	1867.83286	520.36524
22	1	1	2	0	3	1	1	0	0	2	1349.47477	0.00042	1873.80717	524.33282
23	1	1	2	0	4	1	1	0	0	3	1351.48927	0.00068	1881.77271	530.28412
24	1	1	2	0	5	1	1	0	0	4	1353.51030	0.00007	1891.72929	538.21906
25	1	1	2	0	6	1	1	0	0	5	1355.53902	-0.00016	1903.67670	548.13753
26	1	1	2	0	7	1	1	0	0	6	1357.57513	-0.00015	1917.61467	560.03938
27	1	1	2	0	8	1	1	0	0	7	1359.61845	0.00004	1933.54287	573.92447
28	1	1	2	0	9	1	1	0	0	8	1361.66856	0.00019	1951.46095	589.79258
29	1	1	2	0	10	1	1	0	0	9	1363.72527	0.00027	1971.36850	607.64350
30	1	1	2	0	11	1	1	0	0	10	1365.78840	0.00032	1993.26507	627.47699
31	1	1	2	0	12	1	1	0	0	11	1367.85793	0.00054	2017.15015	649.29275
32	1	1	2	0	13	1	1	0	0	12	1369.93312	0.00044	2043.02319	673.09051
33	1	1	2	0	14	1	1	0	0	13	1372.01424	0.00055	2070.88360	698.86991
34	1	1	2	0	15	1	1	0	0	14	1374.10036	0.00023	2100.73073	726.63060
35	1	1	2	0	16	1	1	0	0	15	1376.19183	0.00014	2132.56390	756.37220
36	1	1	2	0	17	1	1	0	0	16	1378.28848	0.00043	2166.38235	788.09430
37	1	1	2	0	18	1	1	0	0	17	1380.38945	0.00059	2202.18530	821.79644
38	1	1	2	0	19	1	1	0	0	18	1382.49402	0.00028	2239.97191	857.47816
39	1	1	2	0	20	1	1	0	0	19	1384.60279	0.00048	2279.74129	895.13897
40	1	1	2	0	21	1	1	0	0	20	1386.71472	0.00056	2321.49251	934.77834
41	1	1	2	0	22	1	1	0	0	21	1388.82924	0.00038	2365.22458	976.39572
42	1	1	2	0	23	1	1	0	0	22	1390.94621	0.00026	2410.93648	1019.99053
43	1	1	2	0	24	1	1	0	0	23	1393.06522	0.00026	2458.62713	1065.56217
44	1	1	2	0	25	1	1	0	0	24	1395.18539	-0.00003	2508.29542	1113.10999
45	1	1	2	0	26	1	1	0	0	25	1397.30671	-0.00012	2559.94017	1162.63334
46	1	1	2	0	27	1	1	0	0	26	1399.42846	-0.00020	2613.56020	1214.13154
47	1	1	2	0	28	1	1	0	0	27	1401.55043	0.00003	2669.15425	1267.60385
48	1	1	2	0	29	1	1	0	0	28	1403.67113	-0.00038	2726.72106	1323.04955
49	1	1	2	0	30	1	1	0	0	29	1405.79073	-0.00073	2786.25932	1380.46786
50	1	1	2	0	31	1	1	0	0	30	1407.91041	0.00070	2847.76768	1439.85797
51	1	1	2	0	32	1	1	0	0	31	1410.02479	-0.00093	2911.24479	1501.21907
52	1	1	2	0	33	1	1	0	0	32	1412.13781	-0.00115	2976.68926	1564.55030W
53	1	1	2	0	34	1	1	0	0	33	1414.24741	-0.00150	3044.09969	1629.85078W
54	1	1	2	0	35	1	1	0	0	34	1416.35369	-0.00137	3113.47467	1697.11961W
55	1	1	2	0	36	1	1	0	0	35	1418.45522	-0.00170	3184.81276	1766.35584W
56	1	1	2	0	37	1	1	0	0	36	1420.55213	-0.00189	3258.11253	1837.55852W
57	1	1	2	0	38	1	1	0	0	37	1422.64338	-0.00253	3333.37256	1910.72665W
58	1	1	2	0	39	1	1	0	0	38	1424.72981	-0.00236	3410.59139	1985.85922W
59	1	1	2	0	40	1	1	0	0	39	1426.80955	-0.00287	3489.76761	2062.95519W
60	1	1	2	0	41	1	1	0	0	40	1428.88288	-0.00343	3570.89978	2142.01348W
1	1	2	0	42	1	1	0	0	41	1430.94939	-0.00411	3653.98649	2223.03299W	
1	-1	2	0	1	1	-1	0	0	2	1339.49616	0.00018	1863.85543	524.35945	
1	-1	2	0	2	1	-1	0	0	3	1337.51208	0.00004	1867.84942	530.33737	
1	-1	2	0	3	1	-1	0	0	4	1335.53251	0.00004	1873.84028	538.30781	
1	-1	2	0	4	1	-1	0	0	5	1333.55720	-0.00005	1881.82789	548.27064	
1	-1	2	0	5	1	-1	0	0	6	1331.58642	0.00009	1891.81206	560.22573	
1	-1	2	0	6	1	-1	0	0	7	1329.61933	-0.00033	1903.79255	574.17289	
1	-1	2	0	7	1	-1	0	0	8	1327.65713	-0.0003	1917.76910	590.11194	

1	-1	2	0	8	1	-1	0	0	9	1325.69868	-0.00007	1933.74139	608.04264
1	-1	2	0	9	1	-1	0	0	10	1323.74443	0.00012	1951.70905	627.96474
2	-1	2	0	10	1	-1	0	0	11	1321.79356	-0.00016	1971.67167	649.87795
3	-1	2	0	11	1	-1	0	0	12	1319.84658	-0.00027	1993.62880	673.78196
4	-1	2	0	12	1	-1	0	0	13	1317.90335	-0.00018	2017.57995	699.67642
5	-1	2	0	13	1	-1	0	0	14	1315.96362	0.00001	2043.52458	727.56097
6	-1	2	0	14	1	-1	0	0	15	1314.02690	0.00000	2071.46210	757.43520
7	-1	2	0	15	1	-1	0	0	16	1312.09287	-0.00034	2101.39190	789.29869
8	-1	2	0	16	1	-1	0	0	17	1310.16207	-0.00026	2133.31332	823.15099
9	-1	2	0	17	1	-1	0	0	18	1308.23387	-0.00018	2167.22564	858.99160
10	-1	2	0	18	1	-1	0	0	19	1306.30815	0.00002	2203.12814	896.82001
11	-1	2	0	19	1	-1	0	0	20	1304.38412	-0.00023	2241.02004	936.63569
12	-1	2	0	20	1	-1	0	0	21	1302.46188	-0.00059	2280.90052	978.43806
13	-1	2	0	21	1	-1	0	0	22	1300.54278	0.00056	2322.76874	1022.22652
14	-1	2	0	22	1	-1	0	0	23	1298.62312	-0.00024	2366.62381	1068.00045
15	-1	2	0	23	1	-1	0	0	24	1296.70559	-0.00005	2412.46483	1115.75919
16	-1	2	0	24	1	-1	0	0	25	1294.78889	0.00010	2460.29085	1165.50207
17	-1	2	0	25	1	-1	0	0	26	1292.87272	0.00017	2510.10091	1217.22835
18	-1	2	0	26	1	-1	0	0	27	1290.95677	0.00009	2561.89400	1270.93732
19	-1	2	0	27	1	-1	0	0	28	1289.04091	0.00000	2615.66910	1326.62819
20	-1	2	0	28	1	-1	0	0	29	1287.12540	0.00040	2671.42518	1384.30018
21	-1	2	0	29	1	-1	0	0	30	1285.20920	0.00050	2729.16115	1443.95245
22	-1	2	0	30	1	-1	0	0	31	1283.29170	-0.00009	2788.87594	1505.58415
23	-1	2	0	31	1	-1	0	0	32	1281.37446	0.00043	2850.56844	1569.19441
24	-1	2	0	32	1	-1	0	0	33	1279.45602	0.00081	2914.23751	1634.78230
25	-1	2	0	33	1	-1	0	0	34	1277.53564	0.00052	2979.88203	1702.34690
26	-1	2	0	34	1	-1	0	0	35	1275.61437	0.00078	3047.50082	1771.88724
27	-1	2	0	35	1	-1	0	0	36	1273.69179	0.00137	3117.09273	1843.40231W
28	-1	2	0	36	1	-1	0	0	37	1271.76674	0.00129	3188.65655	1916.89110W
29	-1	2	0	37	1	-1	0	0	38	1269.84009	0.00155	3262.19111	1992.35257W
30	-1	2	0	38	1	-1	0	0	39	1267.91362*	0.00407	3337.69517	2069.78561W
31	-1	2	0	39	1	-1	0	0	40	1265.98072	0.00236	3415.16751	2149.18914W
32	-1	2	0	40	1	-1	0	0	41	1264.04740	0.00252	3494.60690	2230.56202W
33	-1	2	0	2	1	-1	0	0	1	1347.47450	-0.00080	1867.84942	520.37411
34	-1	2	0	3	1	-1	0	0	2	1349.48090	0.00006	1873.84028	524.35945
35	-1	2	0	4	1	-1	0	0	3	1351.49075	0.00023	1881.82789	530.33737
36	-1	2	0	5	1	-1	0	0	4	1353.50413	-0.00012	1891.81206	538.30781
37	-1	2	0	6	1	-1	0	0	5	1355.52144	-0.00047	1903.79255	548.27064
38	-1	2	0	7	1	-1	0	0	6	1357.54313	-0.00025	1917.76910	560.22573
39	-1	2	0	8	1	-1	0	0	7	1359.56800	-0.00050	1933.74139	574.17289
40	-1	2	0	9	1	-1	0	0	8	1361.59702	-0.00009	1951.70905	590.11194
41	-1	2	0	10	1	-1	0	0	9	1363.62903	0.00000	1971.67167	608.04264
42	-1	2	0	11	1	-1	0	0	10	1365.66365	-0.00041	1993.62880	627.96474
43	-1	2	0	12	1	-1	0	0	11	1367.70159	-0.00041	2017.57995	649.87795
44	-1	2	0	13	1	-1	0	0	12	1369.74223	-0.00039	2043.52458	673.78196
45	-1	2	0	14	1	-1	0	0	13	1371.78550	-0.00018	2071.46210	699.67642
46	-1	2	0	15	1	-1	0	0	14	1373.83130	0.00037	2101.39190	727.56097
47	-1	2	0	16	1	-1	0	0	15	1375.87813	0.00001	2133.31332	757.43520
48	-1	2	0	17	1	-1	0	0	16	1377.92670	-0.00025	2167.22564	789.29869
49	-1	2	0	18	1	-1	0	0	17	1379.97673	-0.00043	2203.12814	823.15099
50	-1	2	0	19	1	-1	0	0	18	1382.02812	-0.00032	2241.02004	858.99160
51	-1	2	0	20	1	-1	0	0	19	1384.08069	0.00018	2280.90052	896.82001
52	-1	2	0	21	1	-1	0	0	20	1386.13270	-0.00035	2322.76874	936.63569
53	-1	2	0	22	1	-1	0	0	21	1388.18593	0.00017	2366.62381	978.43806
54	-1	2	0	23	1	-1	0	0	22	1390.23813	-0.00018	2412.46483	1022.22652
55	-1	2	0	24	1	-1	0	0	23	1392.28995	-0.00045	2460.29085	1068.00045
56	-1	2	0	25	1	-1	0	0	24	1394.34153	-0.00018	2510.10091	1115.75919
57	-1	2	0	26	1	-1	0	0	25	1396.39174	-0.00019	2561.89400	1165.50207
58	-1	2	0	27	1	-1	0	0	26	1398.44087	0.00012	2615.66910	1217.22835
59	-1	2	0	28	1	-1	0	0	27	1400.48791	0.00005	2671.42518	1270.93732
60	-1	2	0	29	1	-1	0	0	28	1402.53318	0.00022	2729.16115	1326.62819
	-1	2	0	30	1	-1	0	0	29	1404.57594	0.00018	2788.87594	1384.30018
	-1	2	0	31	1	-1	0	0	30	1406.61610	0.00011	2850.56844	1443.95245
	-1	2	0	32	1	-1	0	0	31	1408.65373	0.00037	2914.23751	1505.58415
	-1	2	0	33	1	-1	0	0	32	1410.68827	0.00065	2979.88203	1569.19441
	-1	2	0	34	1	-1	0	0	33	1412.71935	0.00083	3047.50082	1634.78230
	-1	2	0	35	1	-1	0	0	34	1414.74711	0.00129	3117.09273	1702.34690W
	-1	2	0	36	1	-1	0	0	35	1416.77056	0.00124	3188.65655	1771.88724W
	-1	2	0	37	1	-1	0	0	36	1418.70065	0.00186	3262.19111	1843.40231W

1	-1	2	0	38	1	-1	0	0	37	1420.80652	0.00246	3337.69517	1916.89110W	
2	-1	2	0	39	1	-1	0	0	38	1422.81713	0.00219	3415.16751	1992.35257W	
3	-1	2	0	40	1	-1	0	0	39	1424.82437	0.00309	3494.60690	2069.78561W	
4	-1	2	0	41	1	-1	0	0	40	1426.82576	0.00283	3576.01208	2149.18914W	
5	-1	2	0	1	1	1	0	0	1	1343.49024	0.00005	1863.85543	520.36524	
6	-1	2	0	2	1	1	0	0	2	1343.51662	0.00002	1867.84942	524.33282	
7	-1	2	0	3	1	1	0	0	3	1343.55618	0.00001	1873.84028	530.28412	
8	-1	2	0	4	1	1	0	0	4	1343.60886	0.00003	1881.82789	538.21906	
9	-1	2	0	5	1	1	0	0	5	1343.67465	0.00012	1891.81206	548.13753	
10	-1	2	0	6	1	1	0	0	6	1343.75320	0.00003	1903.79255	560.03938	
11	-1	2	0	7	1	1	0	0	7	1343.84468	0.00004	1917.76910	573.92447	
12	-1	2	0	8	1	1	0	0	8	1343.94871	-0.00010	1933.74139	589.79258	
13	-1	2	0	9	1	1	0	0	9	1344.06563	0.00008	1951.70905	607.64350	
14	-1	2	0	10	1	1	0	0	10	1344.19541*	0.00072	1971.67167	627.47699	
15	-1	2	0	11	1	1	0	0	11	1344.33478*	-0.00127	1993.62880	649.29275W	
16	-1	2	0	12	1	1	0	0	12	1344.49068	0.00123	2017.57995	673.09051W	
17	-1	2	0	13	1	1	0	0	13	1344.65500	0.00033	2043.52458	698.86991	
18	-1	2	0	14	1	1	0	0	14	1344.83116	-0.00034	2071.46210	726.63060	
19	-1	2	0	15	1	1	0	0	15	1345.01968	-0.00002	2101.39190	756.37220	
20	-1	2	0	16	1	1	0	0	16	1345.21858	-0.00044	2133.31332	788.09430	
21	-1	2	0	17	1	1	0	0	17	1345.42848	-0.00072	2167.22564	821.79644	
22	-1	2	0	18	1	1	0	0	18	1345.64964	-0.00034	2203.12814	857.47816	
23	1	1	2	0	7	-1	1	0	0	7	1343.44222	0.00045	1917.61467	574.17289
24	1	1	2	0	8	-1	1	0	0	8	1343.43122	0.00029	1933.54287	590.11194
25	1	1	2	0	9	-1	1	0	0	9	1343.41878	0.00047	1951.46095	608.04264
26	1	1	2	0	10	-1	1	0	0	10	1343.40451	0.00075	1971.36850	627.96474
27	1	1	2	0	11	-1	1	0	0	11	1343.38645	-0.00067	1993.26507	649.87795
28	1	1	2	0	12	-1	1	0	0	12	1343.36871	0.00052	2017.15015	673.78196
29	1	1	2	0	13	-1	1	0	0	13	1343.34719	0.00042	2043.02319	699.67642
30	1	1	2	0	14	-1	1	0	0	14	1343.32314	0.00051	2070.88360	727.56097
31	1	1	2	0	15	-1	1	0	0	15	1343.29563	0.00010	2100.73073	757.43520

rms = 0.00035 cm⁻¹



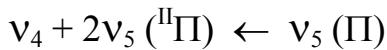
v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
1	-1	2	2	20	1	1	0	0	21	1324.31102	0.00010	2300.70664	976.39572
2	-1	2	2	19	1	1	0	0	20	1326.09194	0.00035	2260.86993	934.77834
3	-1	2	2	18	1	1	0	0	19	1327.88660	0.00053	2223.02504	895.13897
4	-1	2	2	17	1	1	0	0	18	1329.69391	-0.00002	2187.17209	857.47816
5	-1	2	2	16	1	1	0	0	17	1331.51407	-0.00065	2153.31116	821.79644
6	-1	2	2	15	1	1	0	0	16	1333.34914	0.00116	2121.44228	788.09430W
7	-1	2	2	14	1	1	0	0	15	1335.19638*	0.00311	2091.56547	756.37220W
8	-1	2	2	13	1	1	0	0	14	1337.05026	0.00013	2063.68073	726.63060
9	-1	2	2	12	1	1	0	0	13	1338.91809	-0.00003	2037.78803	698.86991
10	-1	2	2	11	1	1	0	0	12	1340.79693	0.00010	2013.88734	673.09051
11	-1	2	2	10	1	1	0	0	11	1342.68536	-0.00049	1991.97861	649.29275
12	-1	2	2	9	1	1	0	0	10	1344.58495	0.00015	1972.06179	627.47699
13	-1	2	2	8	1	1	0	0	9	1346.49298	-0.00035	1954.13683	607.64350
14	-1	2	2	7	1	1	0	0	8	1348.41083	-0.00027	1938.20368	589.79258
15	-1	2	2	6	1	1	0	0	7	1350.33888	0.00105	1924.26229	573.92447W
16	-1	2	2	2	1	1	0	0	3	1358.13006	0.00065	1888.41352	530.28412
17	-1	2	2	1	1	1	0	0	2	1360.09376*	-0.00380	1884.43037	524.33282W
18	-1	2	2	2	1	1	0	0	1	1368.04889	0.00060	1888.41352	520.36524
19	-1	2	2	3	1	1	0	0	2	1370.05330	-0.00215	1894.38827	524.33282W
20	-1	2	2	4	1	1	0	0	3	1372.07048	-0.00002	1902.35462	530.28412
21	-1	2	2	5	1	1	0	0	4	1374.09347*	-0.00009	1912.31262	538.21906
22	-1	2	2	6	1	1	0	0	5	1376.12475	-0.00001	1924.26229	548.13753
23	-1	2	2	7	1	1	0	0	6	1378.16425	-0.00005	1938.20368	560.03938
24	-1	2	2	8	1	1	0	0	7	1380.21257	0.00021	1954.13683	573.92447
25	-1	2	2	9	1	1	0	0	8	1382.26924	0.00003	1972.06179	589.79258
26	-1	2	2	10	1	1	0	0	9	1384.33451	-0.00060	1991.97861	607.64350
27	-1	2	2	11	1	1	0	0	10	1386.41008	-0.00028	2013.88734	627.47699
28	-1	2	2	12	1	1	0	0	11	1388.49523	-0.00005	2037.78803	649.29275
29	-1	2	2	13	1	1	0	0	12	1390.68073	0.00010	2100.73073	673.09051

URL: <http://mc.manuscriptcentral.com/tmp63.68073>

1	-1	2	2	14	1	1	0	0	13	1392.69571	0.00015	2091.56547	698.86991	
1	-1	2	2	15	1	1	0	0	14	1394.81158	-0.00009	2121.44228	726.63060	
2	-1	2	2	16	1	1	0	0	15	1396.93898	0.00003	2153.31116	756.37220	
3	-1	2	2	17	1	1	0	0	16	1399.07732	-0.00047	2187.17209	788.09430	
4	-1	2	2	18	1	1	0	0	17	1401.22836	-0.00024	2223.02504	821.79644	
5	-1	2	2	19	1	1	0	0	18	1403.39173	-0.00004	2260.86993	857.47816	
6	-1	2	2	20	1	1	0	0	19	1405.56761	-0.00006	2300.70664	895.13897	
7	-1	2	2	21	1	1	0	0	20	1407.75652	-0.00014	2342.53501	934.77834	
8	-1	2	2	22	1	1	0	0	21	1409.95910*	0.00000	2386.35482	976.39572	
9	-1	2	2	23	1	1	0	0	22	1412.17545	0.00017	2432.16581	1019.99053	
10	-1	2	2	24	1	1	0	0	23	1414.40527	-0.00021	2479.96765	1065.56217	
11	-1	2	2	25	1	1	0	0	24	1416.64987	-0.00007	2529.75993	1113.10999	
12	-1	2	2	27	1	1	0	0	26	1421.18220	-0.00020	2635.31393	1214.13154	
13	1	1	2	-2	30	1	-1	0	0	31	1304.67267	-0.00011	2810.25693	1505.58415
14	1	1	2	-2	29	1	-1	0	0	30	1306.44425	-0.00015	2750.39685	1443.95245
15	1	1	2	-2	28	1	-1	0	0	29	1308.23111	0.00068	2692.53061	1384.30018
16	1	1	2	-2	27	1	-1	0	0	28	1310.03076	0.00026	2636.65870	1326.62819
17	1	1	2	-2	26	1	-1	0	0	27	1311.84453	0.00034	2582.78151	1270.93732
18	1	1	2	-2	25	1	-1	0	0	26	1313.67067	-0.00040	2530.89942	1217.22835
19	1	1	2	-2	24	1	-1	0	0	25	1315.51100	0.00036	2481.01271	1165.50207
20	1	1	2	-2	23	1	-1	0	0	24	1317.36280	0.00040	2433.12160	1115.75919
21	1	1	2	-2	22	1	-1	0	0	23	1319.22591	0.00009	2387.22627	1068.00045
22	1	1	2	-2	21	1	-1	0	0	22	1321.10066	0.00035	2343.32683	1022.22652
23	1	1	2	-2	20	1	-1	0	0	21	1322.98558	0.00026	2301.42338	978.43806
24	1	1	2	-2	19	1	-1	0	0	20	1324.88042	0.00018	2261.51593	936.63569
25	1	1	2	-2	18	1	-1	0	0	19	1326.78458	0.00010	2223.60449	896.82001
26	1	1	2	-2	17	1	-1	0	0	18	1328.69748	0.00004	2187.68903	858.99160
27	1	1	2	-2	16	1	-1	0	0	17	1330.61859	0.00007	2153.76950	823.15099
28	1	1	2	-2	15	1	-1	0	0	16	1332.54688	-0.00026	2121.84584	789.29869
29	1	1	2	-2	14	1	-1	0	0	15	1334.48290	0.00015	2091.91795	757.43520
30	1	1	2	-2	13	1	-1	0	0	14	1336.42463	-0.00015	2063.98575	727.56097
31	1	1	2	-2	12	1	-1	0	0	13	1338.37315	0.00041	2038.04916	699.67642
32	1	1	2	-2	11	1	-1	0	0	12	1340.32676	0.00065	2014.10807	673.78196
33	1	1	2	-2	10	1	-1	0	0	11	1342.28476	0.00031	1992.16240	649.87795
34	1	1	2	-2	9	1	-1	0	0	10	1344.24666	-0.00067	1972.21207	627.96474
35	1	1	2	-2	8	1	-1	0	0	9	1346.21387*	-0.00049	1954.25700	608.04264
36	1	1	2	-2	7	1	-1	0	0	8	1348.18474	-0.00043	1938.29711	590.11194
37	1	1	2	-2	6	1	-1	0	0	7	1350.16026	0.00081	1924.33235	574.17289
38	1	1	2	-2	5	1	-1	0	0	6	1352.13632	-0.00060	1912.36265	560.22573
39	1	1	2	-2	4	1	-1	0	0	5	1354.11670	-0.00063	1902.38797	548.27064
40	1	1	2	-2	3	1	-1	0	0	4	1356.09711*	-0.00335	1894.40827	538.30781W
41	1	1	2	-2	2	1	-1	0	0	3	1358.09155*	0.00540	1888.42353	530.33737W
42	1	1	2	-2	1	1	-1	0	0	2	1360.07542	0.00116	1884.43371	524.35945W
43	1	1	2	-2	2	1	-1	0	0	1	1368.04907	-0.00034	1888.42353	520.37411
44	1	1	2	-2	5	1	-1	0	0	4	1374.05524	0.00040	1912.36265	538.30781
45	1	1	2	-2	6	1	-1	0	0	5	1376.06153	-0.00017	1924.33235	548.27064
46	1	1	2	-2	7	1	-1	0	0	6	1378.06871*	-0.00267	1938.29711	560.22573W
47	1	1	2	-2	8	1	-1	0	0	7	1380.08416	0.00005	1954.25700	574.17289
48	1	1	2	-2	9	1	-1	0	0	8	1382.10027	0.00014	1972.21207	590.11194
49	1	1	2	-2	10	1	-1	0	0	9	1384.11983	0.00007	1992.16240	608.04264
50	1	1	2	-2	11	1	-1	0	0	10	1386.14340	0.00007	2014.10807	627.96474
51	1	1	2	-2	12	1	-1	0	0	11	1388.17192	0.00071	2038.04916	649.87795
52	1	1	2	-2	13	1	-1	0	0	12	1390.20400	0.00021	2063.98575	673.78196
53	1	1	2	-2	14	1	-1	0	0	13	1392.24158	0.00005	2091.91795	699.67642
54	1	1	2	-2	15	1	-1	0	0	14	1394.28510	0.00023	2121.84584	727.56097
55	1	1	2	-2	16	1	-1	0	0	15	1396.33401	-0.00029	2153.76950	757.43520
56	1	1	2	-2	17	1	-1	0	0	16	1398.39046	0.00012	2187.68903	789.29869
57	1	1	2	-2	18	1	-1	0	0	17	1400.45347	-0.00003	2223.60449	823.15099
58	1	1	2	-2	19	1	-1	0	0	18	1402.52302*	-0.00131	2261.51593	858.99160W
59	1	1	2	-2	20	1	-1	0	0	19	1404.60347	0.00010	2301.42338	896.82001
60	1	1	2	-2	21	1	-1	0	0	20	1406.69132	0.00017	2343.32683	936.63569
	1	1	2	-2	22	1	-1	0	0	21	1408.78822	0.00001	2387.22627	978.43806
	1	1	2	-2	23	1	-1	0	0	22	1410.89508	0.00000	2433.12160	1022.22652
	1	1	2	-2	24	1	-1	0	0	23	1413.01181	-0.00045	2481.01271	1068.00045
	1	1	2	-2	25	1	-1	0	0	24	1415.14010	-0.00013	2530.89942	1115.75919
	1	1	2	-2	26	1	-1	0	0	25	1417.27925	-0.00020	2582.78151	1165.50207
	1	1	2	-2	27	1	-1	0	0	26	1419.43011	-0.00023	2636.65870	1217.22835
	1	1	2	-2	28	1	-1	0	0	27	1421.59316	-0.00013	2692.53061	1270.93732

1	1	2	-2	29	1	-1	0	0	28	1423.76840	-0.00026	2750.39685	1326.62819
1	1	2	-2	30	1	-1	0	0	29	1425.95648	-0.00027	2810.25693	1384.30018
1	1	2	-2	31	1	-1	0	0	30	1428.15731	-0.00055	2872.11031	1443.95245
1	1	2	-2	32	1	-1	0	0	31	1430.37097	-0.00124	2935.95636	1505.58415W
1	1	2	-2	33	1	-1	0	0	32	1432.60593*	0.00592	3001.79442	1569.19441W
1	1	2	-2	34	1	-1	0	0	33	1434.84035	-0.00108	3069.62373	1634.78230W
1	1	2	-2	35	1	-1	0	0	34	1437.09540	-0.00121	3139.44351	1702.34690W
1	1	2	-2	36	1	-1	0	0	35	1439.36450	-0.00115	3211.25289	1771.88724W

rms = 0.00034 cm⁻¹



	<i>v</i> _{4'}	<i>l</i> _{4'}	<i>v</i> _{5'}	<i>l</i> _{5'}	<i>J'</i>	<i>v</i> _{4''}	<i>l</i> _{4''}	<i>v</i> _{5''}	<i>l</i> _{5''}	<i>J''</i>	OBS	OBS - CALC	E'	E''
1	1	2	0	1	0	0	1	1	2	1180.09711*	0.00182	1863.84991	683.75462W	
1	1	2	0	2	0	0	1	1	3	1178.13194*	0.00048	1867.83286	689.70140	
1	1	2	0	3	0	0	1	1	4	1176.17681	-0.00004	1873.80717	697.63032	
1	1	2	0	4	0	0	1	1	5	1174.23163	0.00018	1881.77271	707.54126	
1	1	2	0	5	0	0	1	1	6	1172.29523	0.00002	1891.72929	719.43409	
1	1	2	0	6	0	0	1	1	7	1170.36828	0.00022	1903.67670	733.30864	
1	1	2	0	7	0	0	1	1	8	1168.44997	0.00003	1917.61467	749.16472	
1	1	2	0	8	0	0	1	1	9	1166.54082	0.00007	1933.54287	767.00212	
1	1	2	0	9	0	0	1	1	10	1164.64059	0.00023	1951.46095	786.82059	
1	1	2	0	10	0	0	1	1	11	1162.74923	0.00058	1971.36850	808.61985	
1	1	2	0	11	0	0	1	1	12	1160.86594*	0.00048	1993.26507	832.39961	
1	1	2	0	12	0	0	1	1	13	1158.99112	0.00051	2017.15015	858.15954	
1	1	2	0	13	0	0	1	1	14	1157.12441	0.00050	2043.02319	885.89928	
1	1	2	0	14	0	0	1	1	15	1155.26566	0.00051	2070.88360	915.61845	
1	1	2	0	15	0	0	1	1	16	1153.41469	0.00060	2100.73073	947.31664	
1	1	2	0	16	0	0	1	1	17	1151.57116	0.00068	2132.56390	980.99342	
1	1	2	0	17	0	0	1	1	18	1149.73481	0.00078	2166.38235	1016.64832	
1	1	2	0	18	0	0	1	1	19	1147.90447	0.00002	2202.18530	1054.28084	
1	1	2	0	19	0	0	1	1	20	1146.08203	0.00061	2239.97191	1093.89049	
1	1	2	0	20	0	0	1	1	21	1144.26509	0.00050	2279.74129	1135.47669	
1	1	2	0	21	0	0	1	1	22	1142.45411	0.00050	2321.49251	1179.03889	
1	1	2	0	22	0	0	1	1	23	1140.64855	0.00046	2365.22458	1224.57649	
1	1	2	0	23	0	0	1	1	24	1138.84734	-0.00029	2410.93648	1272.08885	
1	1	2	0	24	0	0	1	1	25	1137.05222	0.00041	2458.62713	1321.57533	
1	1	2	0	25	0	0	1	1	26	1135.25998	-0.00020	2508.29542	1373.03523	
1	1	2	0	26	0	0	1	1	27	1133.47237	0.00006	2559.94017	1426.46786	
1	1	2	0	27	0	0	1	1	28	1131.68733	-0.00039	2613.56020	1481.87248	
1	1	2	0	28	0	0	1	1	29	1129.90580	-0.00013	2669.15425	1539.24832	
1	1	2	0	2	0	0	1	1	1	1188.04252	-0.00029	1867.83286	679.79005	
1	1	2	0	3	0	0	1	1	2	1190.05276	0.00021	1873.80717	683.75462	
1	1	2	0	4	0	0	1	1	3	1192.07172	0.00042	1881.77271	689.70140	
1	1	2	0	5	0	0	1	1	4	1194.09875	-0.00022	1891.72929	697.63032	
1	1	2	0	6	0	0	1	1	5	1196.13565	0.00021	1903.67670	707.54126	
1	1	2	0	7	0	0	1	1	6	1198.18103	0.00045	1917.61467	719.43409	
1	1	2	0	8	0	0	1	1	7	1200.23486	0.00063	1933.54287	733.30864	
1	1	2	0	9	0	0	1	1	8	1202.29659	0.00036	1951.46095	749.16472	
1	1	2	0	10	0	0	1	1	9	1204.36693	0.00055	1971.36850	767.00212	
1	1	2	0	11	0	0	1	1	10	1206.44434	-0.00014	1993.26507	786.82059	
1	1	2	0	12	0	0	1	1	11	1208.53035	0.00006	2017.15015	808.61985	
1	1	2	0	13	0	0	1	1	12	1210.62405	0.00047	2043.02319	832.39961	
1	1	2	0	14	0	0	1	1	13	1212.72475	0.00069	2070.88360	858.15954	
1	1	2	0	15	0	0	1	1	14	1214.83233	0.00088	2100.73073	885.89928	
1	1	2	0	16	0	0	1	1	15	1216.94604	0.00059	2132.56390	915.61845	
1	1	2	0	17	0	0	1	1	16	1219.06612	0.00041	2166.38235	947.31664	
1	1	2	0	18	0	0	1	1	17	1221.19237	0.00049	2202.18530	980.99342	
1	1	2	0	19	0	0	1	1	18	1223.32409	0.00050	2239.97191	1016.64832	
1	1	2	0	20	0	0	1	1	19	1225.45978	-0.00066	2279.74129	1054.28084	
1	1	2	0	21	0	0	1	1	20	1227.60238	0.00036	2321.49251	1093.89049	
1	1	2	0	22	0	0	1	1	21	1229.74825	0.00036	2365.22458	1135.47669	
1	1	2	0	23	0	0	1	1	22	1231.89796	0.00037	2410.93648	1179.03889	
1	1	2	0	24	0	0	1	1	23	1234.05090	0.00026	2458.62713	1224.57649	
1	1	2	0	25	0	0	1	1	24	1236.20529	0.00050	2491.97191	1272.08885	

1	1	2	0	26	0	0	1	1	25	1238.36479	-0.00006	2559.94017	1321.57533	
1	1	2	0	27	0	0	1	1	26	1240.52489	-0.00008	2613.56020	1373.03523	
2	1	1	2	0	28	0	0	1	1	27	1242.68560	-0.00079	2669.15425	1426.46786
3	1	1	2	0	29	0	0	1	1	28	1244.84792	-0.00066	2726.72106	1481.87248
4	1	1	2	0	30	0	0	1	1	29	1247.01055	-0.00044	2786.25932	1539.24832
5	1	1	2	0	31	0	0	1	1	30	1249.17234	-0.00074	2847.76768	1598.59460
6	1	1	2	0	32	0	0	1	1	31	1251.33390	-0.00039	2911.24479	1659.91050
7	1	1	2	0	33	0	0	1	1	32	1253.49408	-0.00001	2976.68926	1723.19517
8	1	1	2	0	34	0	0	1	1	33	1255.65140	-0.00055	3044.09969	1788.44775
9	1	-1	2	0	1	0	0	1	-1	2	1180.07965	0.00000	1863.85543	683.77578
10	1	-1	2	0	2	0	0	1	-1	3	1178.10579	0.00008	1867.84942	689.74371
11	1	-1	2	0	3	0	0	1	-1	4	1176.13945	0.00000	1873.84028	697.70083
12	1	-1	2	0	4	0	0	1	-1	5	1174.18059	-0.00028	1881.82789	707.64702
13	1	-1	2	0	5	0	0	1	-1	6	1172.22956	-0.00035	1891.81206	719.58215
14	1	-1	2	0	6	0	0	1	-1	7	1170.28652	0.00000	1903.79255	733.50603
15	1	-1	2	0	7	0	0	1	-1	8	1168.35063	0.00002	1917.76910	749.41849
16	1	-1	2	0	8	0	0	1	-1	9	1166.42211	0.00002	1933.74139	767.31930
17	1	-1	2	0	9	0	0	1	-1	10	1164.50062	-0.00023	1951.70905	787.20820
18	1	-1	2	0	10	0	0	1	-1	11	1162.58653	-0.00022	1971.67167	809.08492
19	1	-1	2	0	11	0	0	1	-1	12	1160.67961	-0.00004	1993.62880	832.94916
20	1	-1	2	0	12	0	0	1	-1	13	1158.77907	-0.00032	2017.57995	858.80057
21	1	-1	2	0	13	0	0	1	-1	14	1156.88562	-0.00016	2043.52458	886.63880
22	1	-1	2	0	14	0	0	1	-1	15	1154.99858	-0.00007	2071.46210	916.46345
23	1	-1	2	0	15	0	0	1	-1	16	1153.11735	-0.00043	2101.39190	948.27412
24	1	-1	2	0	16	0	0	1	-1	17	1151.24247	-0.00050	2133.31332	982.07035
25	1	-1	2	0	17	0	0	1	-1	18	1149.37371	-0.00026	2167.22564	1017.85167
26	1	-1	2	0	18	0	0	1	-1	19	1147.51010	-0.00046	2203.12814	1055.61759
27	1	-1	2	0	19	0	0	1	-1	20	1145.65239	-0.00008	2241.02004	1095.36757
28	1	-1	2	0	20	0	0	1	-1	21	1143.79895	-0.00052	2280.90052	1137.10105
29	1	-1	2	0	21	0	0	1	-1	22	1141.95087	-0.00041	2322.76874	1180.81746
30	1	-1	2	0	22	0	0	1	-1	23	1140.10734	-0.00029	2366.62381	1226.51618
31	1	-1	2	0	23	0	0	1	-1	24	1138.26829	0.00003	2412.46483	1274.19657
32	1	-1	2	0	24	0	0	1	-1	25	1136.43324	0.00036	2460.29085	1323.85797
33	1	-1	2	0	25	0	0	1	-1	26	1134.60106	-0.00017	2510.10091	1375.49968
34	1	-1	2	0	26	0	0	1	-1	27	1132.77300	-0.00002	2561.89400	1429.12098
35	1	-1	2	0	2	0	0	1	-1	1	1188.05260	0.00029	1867.84942	679.79710
36	1	-1	2	0	3	0	0	1	-1	2	1190.06422	-0.00029	1873.84028	683.77578
37	1	-1	2	0	4	0	0	1	-1	3	1192.08388	-0.00030	1881.82789	689.74371
38	1	-1	2	0	5	0	0	1	-1	4	1194.11127	0.00004	1891.81206	697.70083
39	1	-1	2	0	6	0	0	1	-1	5	1196.14595	0.00042	1903.79255	707.64702
40	1	-1	2	0	7	0	0	1	-1	6	1198.18695	-0.00001	1917.76910	719.58215
41	1	-1	2	0	8	0	0	1	-1	7	1200.23486	-0.00050	1933.74139	733.50603
42	1	-1	2	0	9	0	0	1	-1	8	1202.29071	0.00015	1951.70905	749.41849
43	1	-1	2	0	10	0	0	1	-1	9	1204.35227	-0.00010	1971.67167	767.31930
44	1	-1	2	0	11	0	0	1	-1	10	1206.42024	-0.00036	1993.62880	787.20820
45	1	-1	2	0	12	0	0	1	-1	11	1208.49517	0.00014	2017.57995	809.08492
46	1	-1	2	0	13	0	0	1	-1	12	1210.57518	-0.00024	2043.52458	832.94916
47	1	-1	2	0	14	0	0	1	-1	13	1212.66144	-0.00010	2071.46210	858.80057
48	1	-1	2	0	15	0	0	1	-1	14	1214.75270	-0.00041	2101.39190	886.63880
49	1	-1	2	0	16	0	0	1	-1	15	1216.85008	0.00022	2133.31332	916.46345
50	1	-1	2	0	17	0	0	1	-1	16	1218.95155	0.00002	2167.22564	948.27412
51	1	-1	2	0	18	0	0	1	-1	17	1221.05759	-0.00020	2203.12814	982.07035
52	1	-1	2	0	19	0	0	1	-1	18	1223.16798	-0.00039	2241.02004	1017.85167
53	1	-1	2	0	20	0	0	1	-1	19	1225.28276	-0.00017	2280.90052	1055.61759
54	1	-1	2	0	21	0	0	1	-1	20	1227.40111	-0.00006	2322.76874	1095.36757
55	1	-1	2	0	22	0	0	1	-1	21	1229.52254	-0.00022	2366.62381	1137.10105
56	1	-1	2	0	23	0	0	1	-1	22	1231.64750	0.00013	2412.46483	1180.81746
57	1	-1	2	0	24	0	0	1	-1	23	1233.77513	0.00046	2460.29085	1226.51618
58	1	-1	2	0	25	0	0	1	-1	24	1235.90617	0.00183	2510.10091	1274.19657W
59	1	-1	2	0	26	0	0	1	-1	25	1238.03584	-0.00019	2561.89400	1323.85797
60	1	-1	2	0	27	0	0	1	-1	26	1240.16920	-0.00022	2615.66910	1375.49968

rms = 0.00037 cm⁻¹

$$\nu_4 + 2\nu_5 (^1\Pi) \leftarrow \nu_5 (\Pi)$$

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	-1	2	2	34	0	0	1	1	35	1142.50963	0.00033	3067.36229	1924.85299
2	1	-1	2	2	33	0	0	1	1	34	1144.01746	0.00003	2999.68476	1855.66733
3	1	-1	2	2	32	0	0	1	1	33	1145.54404	0.00063	2933.99116	1788.44775
4	1	-1	2	2	31	0	0	1	1	32	1147.08807	0.00079	2870.28245	1723.19517
5	1	-1	2	2	30	0	0	1	1	31	1148.64955	0.00050	2808.55954	1659.91050
6	1	-1	2	2	29	0	0	1	1	30	1150.23021*	0.00151	2748.82330	1598.59460W
7	1	-1	2	2	28	0	0	1	1	29	1151.82664	0.00044	2691.07452	1539.24832
8	1	-1	2	2	27	0	0	1	1	28	1153.44139	-0.00006	2635.31393	1481.87248
9	1	-1	2	2	26	0	0	1	1	27	1155.07457	0.00023	2581.54220	1426.46786
10	1	-1	2	2	25	0	0	1	1	26	1156.72497	0.00027	2529.75993	1373.03523
11	1	-1	2	2	24	0	0	1	1	25	1158.39243	0.00011	2479.96765	1321.57533
12	1	-1	2	2	23	0	0	1	1	24	1160.07694	-0.00002	2432.16581	1272.08885
13	1	-1	2	2	22	0	0	1	1	23	1161.77818	-0.00015	2386.35482	1224.57649
14	1	-1	2	2	21	0	0	1	1	22	1163.49621	0.00010	2342.53501	1179.03889
15	1	-1	2	2	20	0	0	1	1	21	1165.23003	0.00008	2300.70664	1135.47669
16	1	-1	2	2	19	0	0	1	1	20	1166.97960	0.00016	2260.86993	1093.89049
17	1	-1	2	2	18	0	0	1	1	19	1168.74439	0.00019	2223.02504	1054.28084
18	1	-1	2	2	17	0	0	1	1	18	1170.52403	0.00025	2187.17209	1016.64832
19	1	-1	2	2	16	0	0	1	1	17	1172.31805	0.00031	2153.31116	980.99342
20	1	-1	2	2	15	0	0	1	1	16	1174.12593	0.00029	2121.44228	947.31664
21	1	-1	2	2	14	0	0	1	1	15	1175.94708	0.00006	2091.56547	915.61845
22	1	-1	2	2	13	0	0	1	1	14	1177.78130	-0.00015	2063.68073	885.89928
23	1	-1	2	2	12	0	0	1	1	13	1179.62869	0.00020	2037.78803	858.15954
24	1	-1	2	2	11	0	0	1	1	12	1181.48773	0.00000	2013.88734	832.39961
25	1	-1	2	2	10	0	0	1	1	11	1183.35889	0.00013	1991.97861	808.61985
26	1	-1	2	2	9	0	0	1	1	10	1185.24160	0.00040	1972.06179	786.82059
27	1	-1	2	2	8	0	0	1	1	9	1187.13484	0.00013	1954.13683	767.00212
28	1	-1	2	2	7	0	0	1	1	8	1189.03908	0.00012	1938.20368	749.16472
29	1	-1	2	2	6	0	0	1	1	7	1190.95364	-0.00001	1924.26229	733.30864
30	1	-1	2	2	5	0	0	1	1	6	1192.87857	0.00004	1912.31262	719.43409
31	1	-1	2	2	4	0	0	1	1	5	1194.81343	0.00007	1902.35462	707.54126
32	1	-1	2	2	3	0	0	1	1	4	1196.75793	-0.00002	1894.38827	697.63032
33	1	-1	2	2	2	0	0	1	1	3	1198.71259	0.00047	1888.41352	689.70140
34	1	-1	2	2	1	0	0	1	1	2	1200.67607	0.00031	1884.43037	683.75462
35	1	-1	2	2	2	0	0	1	1	1	1208.62320	-0.00027	1888.41352	679.79005
36	1	-1	2	2	3	0	0	1	1	2	1210.63304	-0.00061	1894.38827	683.75462
37	1	-1	2	2	4	0	0	1	1	3	1212.65352	0.00030	1902.35462	689.70140
38	1	-1	2	2	5	0	0	1	1	4	1214.68264	0.00034	1912.31262	697.63032
39	1	-1	2	2	6	0	0	1	1	5	1216.72139	0.00036	1924.26229	707.54126
40	1	-1	2	2	7	0	0	1	1	6	1218.76977	0.00018	1938.20368	719.43409
41	1	-1	2	2	8	0	0	1	1	7	1220.82840	0.00021	1954.13683	733.30864
42	1	-1	2	2	9	0	0	1	1	8	1222.89712	0.00005	1972.06179	749.16472
43	1	-1	2	2	10	0	0	1	1	9	1224.97697	0.00048	1991.97861	767.00212
44	1	-1	2	2	11	0	0	1	1	10	1227.06672	-0.00003	2013.88734	786.82059
45	1	-1	2	2	12	0	0	1	1	11	1229.16804	-0.00014	2037.78803	808.61985
46	1	-1	2	2	13	0	0	1	1	12	1231.28149	0.00037	2063.68073	832.39961
47	1	-1	2	2	14	0	0	1	1	13	1233.40601	0.00008	2091.56547	858.15954
48	1	-1	2	2	15	0	0	1	1	14	1235.54326	0.00026	2121.44228	885.89928
49	1	-1	2	2	16	0	0	1	1	15	1237.69241	-0.00030	2153.31116	915.61845
50	1	-1	2	2	17	0	0	1	1	16	1239.85551	0.00006	2187.17209	947.31664
51	1	-1	2	2	18	0	0	1	1	17	1242.03197	0.00035	2223.02504	980.99342
52	1	-1	2	2	19	0	0	1	1	18	1244.22181	0.00020	2260.86993	1016.64832
53	1	-1	2	2	20	0	0	1	1	19	1246.42579	0.00000	2300.70664	1054.28084
54	1	-1	2	2	21	0	0	1	1	20	1248.64425	-0.00027	2342.53501	1093.89049
55	1	-1	2	2	22	0	0	1	1	21	1250.87835	0.00022	2386.35482	1135.47669
56	1	-1	2	2	23	0	0	1	1	22	1253.12704	0.00012	2432.16581	1179.03889
57	1	-1	2	2	24	0	0	1	1	23	1255.39128	0.00012	2479.96765	1224.57649
58	1	-1	2	2	25	0	0	1	1	24	1257.67123	0.00015	2529.75993	1272.08885
59	1	-1	2	2	26	0	0	1	1	25	1259.96702	0.00014	2581.54220	1321.57533
60	1	-1	2	2	27	0	0	1	1	26	1262.27888	0.00018	2635.31393	1373.03523
	1	-1	2	2	28	0	0	1	1	27	1264.60693	0.00027	2691.07452	1426.46786
	1	-1	2	2	29	0	0	1	1	28	1266.95119	0.00037	2748.82330	1481.87248
	1	-1	2	2	30	0	0	1	1	29	1269.31150	0.00028	2808.55954	1539.24832
	1	-1	2	2	31	0	0	1	1	30	1271.68944*	0.00159	2870.28245	1598.59460W
	1	-1	2	2	32	0	0	1	1	31	1274.08288	0.00222	2933.99116	1659.91050W
	1	-1	2	2	33	0	0	1	1	32	1276.49033	0.00074	2999.68476	1723.19517
	1	-1	2	2	34	0	0	1	1	34	1278.616571	0.00220	3067.36229	1788.44775W

1	-1	2	2	35	0	0	1	1	34	1281.35650	0.00109	3137.02273	1855.66733W	
1	-1	2	2	36	0	0	1	1	35	1283.81420	0.00217	3208.66502	1924.85299W	
2	1	1	2	-2	32	0	0	1	-1	33	1143.57994	-0.00022	2935.95636	1792.37620
3	1	1	2	-2	31	0	0	1	-1	32	1145.21620	-0.00002	2872.11031	1726.89408
4	1	1	2	-2	30	0	0	1	-1	31	1146.87073	0.00044	2810.25693	1663.38664
5	1	1	2	-2	29	0	0	1	-1	30	1148.54212	0.00003	2750.39685	1601.85477
6	1	1	2	-2	28	0	0	1	-1	29	1150.23039	-0.00091	2692.53061	1542.29931
7	1	1	2	-2	27	0	0	1	-1	28	1151.93732	-0.00026	2636.65870	1484.72111
8	1	1	2	-2	26	0	0	1	-1	27	1153.66041	-0.00013	2582.78151	1429.12098
9	1	1	2	-2	25	0	0	1	-1	26	1155.39987	0.00013	2530.89942	1375.49968
10	1	1	2	-2	24	0	0	1	-1	25	1157.15485	0.00011	2481.01271	1323.85797
11	1	1	2	-2	23	0	0	1	-1	24	1158.92529	0.00026	2433.12160	1274.19657
12	1	1	2	-2	22	0	0	1	-1	23	1160.71037	0.00028	2387.22627	1226.51618
13	1	1	2	-2	21	0	0	1	-1	22	1162.50720*	-0.00217	2343.32683	1180.81746W
14	1	1	2	-2	20	0	0	1	-1	21	1164.32257	0.00024	2301.42338	1137.10105
15	1	1	2	-2	19	0	0	1	-1	20	1166.14851	0.00015	2261.51593	1095.36757
16	1	1	2	-2	18	0	0	1	-1	19	1167.98714	0.00024	2223.60449	1055.61759
17	1	1	2	-2	17	0	0	1	-1	18	1169.83767	0.00031	2187.68903	1017.85167
18	1	1	2	-2	16	0	0	1	-1	17	1171.69904	-0.00011	2153.76950	982.07035
19	1	1	2	-2	15	0	0	1	-1	16	1173.57104	-0.00068	2121.84584	948.27412
20	1	1	2	-2	14	0	0	1	-1	15	1175.45443	-0.00007	2091.91795	916.46345
21	1	1	2	-2	13	0	0	1	-1	14	1177.34727	0.00031	2063.98575	886.63880
22	1	1	2	-2	12	0	0	1	-1	13	1179.24890	0.00031	2038.04916	858.80057
23	1	1	2	-2	11	0	0	1	-1	12	1181.15906	0.00014	2014.10807	832.94916
24	1	1	2	-2	10	0	0	1	-1	11	1183.07776	0.00028	1992.16240	809.08492
25	1	1	2	-2	9	0	0	1	-1	10	1185.00424	0.00037	1972.21207	787.20820
26	1	1	2	-2	8	0	0	1	-1	9	1186.93777	0.00007	1954.25700	767.31930
27	1	1	2	-2	7	0	0	1	-1	8	1188.87901	0.00039	1938.29711	749.41849
28	1	1	2	-2	6	0	0	1	-1	7	1190.82677	0.00046	1924.33235	733.50603
29	1	1	2	-2	5	0	0	1	-1	6	1192.78078	0.00028	1912.36265	719.58215
30	1	1	2	-2	4	0	0	1	-1	5	1194.74071	-0.00024	1902.38797	707.64702
31	1	1	2	-2	3	0	0	1	-1	4	1196.70727	-0.00017	1894.40827	697.70083
32	1	1	2	-2	2	0	0	1	-1	3	1198.68004	0.00023	1888.42353	689.74371
33	1	1	2	-2	1	0	0	1	-1	2	1200.65789	-0.00004	1884.43371	683.77578
34	1	1	2	-2	2	0	0	1	-1	1	1208.62540	-0.00102	1888.42353	679.79710W
35	1	1	2	-2	3	0	0	1	-1	2	1210.63329	0.00079	1894.40827	683.77578
36	1	1	2	-2	4	0	0	1	-1	3	1212.64451	0.00025	1902.38797	689.74371
37	1	1	2	-2	5	0	0	1	-1	4	1214.66201	0.00019	1912.36265	697.70083
38	1	1	2	-2	6	0	0	1	-1	5	1216.68563	0.00031	1924.33235	707.64702
39	1	1	2	-2	7	0	0	1	-1	6	1218.71520*	0.00024	1938.29711	719.58215
40	1	1	2	-2	8	0	0	1	-1	7	1220.75130	0.00034	1954.25700	733.50603
41	1	1	2	-2	9	0	0	1	-1	8	1222.79383	0.00025	1972.21207	749.41849
42	1	1	2	-2	10	0	0	1	-1	9	1224.84352	0.00041	1992.16240	767.31930
43	1	1	2	-2	11	0	0	1	-1	10	1226.90019	0.00032	2014.10807	787.20820
44	1	1	2	-2	12	0	0	1	-1	11	1228.96441	0.00017	2038.04916	809.08492
45	1	1	2	-2	13	0	0	1	-1	12	1231.03677	0.00017	2063.98575	832.94916
46	1	1	2	-2	14	0	0	1	-1	13	1233.11773	0.00035	2091.91795	858.80057
47	1	1	2	-2	15	0	0	1	-1	14	1235.20724	0.00020	2121.84584	886.63880
48	1	1	2	-2	16	0	0	1	-1	15	1237.30625	0.00020	2153.76950	916.46345
49	1	1	2	-2	17	0	0	1	-1	16	1239.41515	0.00024	2187.68903	948.27412
50	1	1	2	-2	18	0	0	1	-1	17	1241.53435	0.00021	2223.60449	982.07035
51	1	1	2	-2	19	0	0	1	-1	18	1243.66458	0.00033	2261.51593	1017.85167
52	1	1	2	-2	20	0	0	1	-1	19	1245.80593	0.00014	2301.42338	1055.61759
53	1	1	2	-2	21	0	0	1	-1	20	1247.95925	-0.00002	2343.32683	1095.36757
54	1	1	2	-2	22	0	0	1	-1	21	1250.12514	-0.00007	2387.22627	1137.10105
55	1	1	2	-2	23	0	0	1	-1	22	1252.30384	-0.00030	2433.12160	1180.81746
56	1	1	2	-2	24	0	0	1	-1	23	1254.49655	0.00002	2481.01271	1226.51618
57	1	1	2	-2	25	0	0	1	-1	24	1256.70283	-0.00002	2530.89942	1274.19657
58	1	1	2	-2	26	0	0	1	-1	25	1258.92340	-0.00015	2582.78151	1323.85797
59	1	1	2	-2	27	0	0	1	-1	26	1261.15922	0.00020	2636.65870	1375.49968
60	1	1	2	-2	28	0	0	1	-1	27	1263.40944	-0.00020	2692.53061	1429.12098
	1	1	2	-2	29	0	0	1	-1	28	1265.67597	0.00023	2750.39685	1484.72111
	1	1	2	-2	30	0	0	1	-1	29	1267.95737	-0.00025	2810.25693	1542.29931
	1	1	2	-2	31	0	0	1	-1	30	1270.25530	-0.00024	2872.11031	1601.85477
	1	1	2	-2	32	0	0	1	-1	31	1272.56957	-0.00015	2935.95636	1663.38664
	1	1	2	-2	33	0	0	1	-1	32	1274.89971	-0.00062	3001.79442	1726.89408
	1	1	2	-2	34	0	0	1	-1	33	1277.24714	-0.00039	3069.62373	1792.37620
	1	1	2	-2	35	0	0	1	-1	34	1279.61111	-0.00032	3139.44351	1859.83208
	1	1	2	-2	36	0	0	1	-1	35	1281.99170	-0.00041	3211.25289	1929.26077

1	1	2	-2	1	0	0	1	1	1	1204.64294	-0.00072	1884.43371	679.79005
1	1	2	-2	2	0	0	1	1	2	1204.66836	-0.00055	1888.42353	683.75462
1	1	2	-2	3	0	0	1	1	3	1204.70680	-0.00007	1894.40827	689.70140
1	1	2	-2	4	0	0	1	1	4	1204.75773	0.00008	1902.38797	697.63032
1	1	2	-2	5	0	0	1	1	5	1204.82177	0.00038	1912.36265	707.54126
1	1	2	-2	6	0	0	1	1	6	1204.89858	0.00032	1924.33235	719.43409
1	1	2	-2	7	0	0	1	1	7	1204.98870	0.00023	1938.29711	733.30864
1	1	2	-2	8	0	0	1	1	8	1205.09243	0.00015	1954.25700	749.16472
1	1	2	-2	9	0	0	1	1	9	1205.20959	-0.00036	1972.21207	767.00212
1	-1	2	2	1	0	0	1	-1	1	1204.63393	0.00066	1884.43037	679.79710
1	-1	2	2	3	0	0	1	-1	3	1204.64402	-0.00053	1894.38827	689.74371
1	-1	2	2	4	0	0	1	-1	4	1204.65379	0.00000	1902.35462	697.70083
1	-1	2	2	5	0	0	1	-1	5	1204.66836*	0.00277	1912.31262	707.64702W
1	-1	2	2	6	0	0	1	-1	6	1204.68013	-0.00001	1924.26229	719.58215
1	-1	2	2	8	0	0	1	-1	8	1204.71891	0.00057	1954.13683	749.41849
1	-1	2	2	9	0	0	1	-1	9	1204.74263	0.00014	1972.06179	767.31930
1	-1	2	2	10	0	0	1	-1	10	1204.77059	0.00018	1991.97861	787.20820

rms = 0.00031 cm⁻¹3v₅(Π) ← v₅(Π)

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''
0	0	3	1	1	0	0	1	1	2	1328.45439	0.00023	2012.20878	683.75462
0	0	3	1	2	0	0	1	1	3	1326.47768	0.00057	2016.17851	689.70140
0	0	3	1	3	0	0	1	1	4	1324.50249	-0.00020	2022.13301	697.63032
0	0	3	1	4	0	0	1	1	5	1322.53100	0.00008	2030.07218	707.54126
0	0	3	1	5	0	0	1	1	6	1320.56183	0.00003	2039.99589	719.43409
0	0	3	1	6	0	0	1	1	7	1318.59546	0.00015	2051.90395	733.30864
0	0	3	1	7	0	0	1	1	8	1316.63139	-0.00005	2065.79617	749.16472
0	0	3	1	8	0	0	1	1	9	1314.67021	0.00005	2081.67229	767.00212
0	0	3	1	9	0	0	1	1	10	1312.71127	-0.00018	2099.53204	786.82059
0	0	3	1	10	0	0	1	1	11	1310.75503	-0.00023	2119.37511	808.61985
0	0	3	1	11	0	0	1	1	12	1308.80152	-0.00003	2141.20116	832.39961
0	0	3	1	12	0	0	1	1	13	1306.85015	-0.00012	2165.00981	858.15954
0	0	3	1	13	0	0	1	1	14	1304.90124	-0.00012	2190.80064	885.89928
0	0	3	1	14	0	0	1	1	15	1302.95476	0.00000	2218.57321	915.61845
0	0	3	1	15	0	0	1	1	16	1301.01035	-0.00005	2248.32704	947.31664
0	0	3	1	16	0	0	1	1	17	1299.06806	-0.00015	2280.06163	980.99342
0	0	3	1	17	0	0	1	1	18	1297.12803	-0.00007	2313.77642	1016.64832
0	0	3	1	18	0	0	1	1	19	1295.18990	-0.00010	2349.47084	1054.28084
0	0	3	1	19	0	0	1	1	20	1293.25354	-0.00026	2387.14429	1093.89049
0	0	3	1	20	0	0	1	1	21	1291.31948	0.00005	2426.79612	1135.47669
0	0	3	1	21	0	0	1	1	22	1289.38688	0.00010	2468.42567	1179.03889
0	0	3	1	22	0	0	1	1	23	1287.45586	0.00011	2512.03224	1224.57649
0	0	3	1	23	0	0	1	1	24	1285.52636	0.00012	2557.61509	1272.08885
0	0	3	1	24	0	0	1	1	25	1283.59808	-0.00007	2605.17347	1321.57533
0	0	3	1	25	0	0	1	1	26	1281.67172	0.00037	2654.70659	1373.03523
0	0	3	1	26	0	0	1	1	27	1279.74586	0.00011	2706.21362	1426.46786
0	0	3	1	27	0	0	1	1	28	1277.82114	-0.00010	2759.69372	1481.87248
0	0	3	1	28	0	0	1	1	29	1275.89756	-0.00013	2815.14601	1539.24832
0	0	3	1	29	0	0	1	1	30	1273.97526	0.00027	2872.56959	1598.59460
0	0	3	1	30	0	0	1	1	31	1272.05327	0.00024	2931.96353	1659.91050
0	0	3	1	31	0	0	1	1	32	1270.13185	0.00014	2993.32688	1723.19517
0	0	3	1	32	0	0	1	1	33	1268.21126	0.00037	3056.65864	1788.44775
0	0	3	1	33	0	0	1	1	34	1266.28990	-0.00057	3121.95780	1855.66733
0	0	3	1	34	0	0	1	1	35	1264.37045	0.00010	3189.22334	1924.85299
0	0	3	1	35	0	0	1	1	36	1262.45060	0.00020	3258.45419	1996.00378
0	0	3	1	36	0	0	1	1	37	1260.53090	0.00037	3329.64926	2069.11873
0	0	3	1	37	0	0	1	1	38	1258.61056	-0.00006	3402.80744	2144.19682
0	0	3	1	38	0	0	1	1	39	1256.69029	-0.00029	3477.92760	2221.23702
0	0	3	1	39	0	0	1	1	40	1254.76900	-0.00131	3555.00858	2300.23827W
0	0	3	1	2	0	0	1	1	1	1336.38852	0.00006	2016.17851	679.79005
0	0	3	1	3	0	0	1	1	2	1338.37853	0.00014	2022.13301	683.75462
0	0	3	1	4	0	0	1	1	3	1340.37093	0.00015	2030.07218	689.70140
0	0	3	1	5	0	0	1	1	39	1340.37093	0.00015	2030.07218	697.63032

1	0	0	3	1	6	0	0	1	1	5	1344.36269	0.00000	2051.90395	707.54126	
2	0	0	3	1	7	0	0	1	1	6	1346.36205	-0.00003	2065.79617	719.43409	
3	0	0	3	1	8	0	0	1	1	7	1348.36377	0.00012	2081.67229	733.30864	
4	0	0	3	1	9	0	0	1	1	8	1350.36707	-0.00025	2099.53204	749.16472	
5	0	0	3	1	10	0	0	1	1	9	1352.37326	0.00027	2119.37511	767.00212	
6	0	0	3	1	11	0	0	1	1	10	1354.38054	-0.00003	2141.20116	786.82059	
7	0	0	3	1	12	0	0	1	1	11	1356.39003	0.00008	2165.00981	808.61985	
8	0	0	3	1	13	0	0	1	1	12	1358.40104	0.00001	2190.80064	832.39961	
9	0	0	3	1	14	0	0	1	1	13	1360.41357	-0.00010	2218.57321	858.15954	
10	0	0	3	1	15	0	0	1	1	14	1362.42784	0.00008	2248.32704	885.89928	
11	0	0	3	1	16	0	0	1	1	15	1364.44310	-0.00008	2280.06163	915.61845	
12	0	0	3	1	17	0	0	1	1	16	1366.45976	-0.00002	2313.77642	947.31664	
13	0	0	3	1	18	0	0	1	1	17	1368.47742	0.00000	2349.47084	980.99342	
14	0	0	3	1	19	0	0	1	1	18	1370.49600	0.00003	2387.14429	1016.64832	
15	0	0	3	1	20	0	0	1	1	19	1372.51515	-0.00013	2426.79612	1054.28084	
16	0	0	3	1	21	0	0	1	1	20	1374.53501	-0.00018	2468.42567	1093.89049	
17	0	0	3	1	22	0	0	1	1	21	1376.55571	0.00016	2512.03224	1135.47669	
18	0	0	3	1	23	0	0	1	1	22	1378.57644	0.00024	2557.61509	1179.03889	
19	0	0	3	1	24	0	0	1	1	23	1380.59693	-0.00005	2605.17347	1224.57649	
20	0	0	3	1	25	0	0	1	1	24	1382.61763	-0.00011	2654.70659	1272.08885	
21	0	0	3	1	26	0	0	1	1	25	1384.63839	0.00010	2706.21362	1321.57533	
22	0	0	3	1	27	0	0	1	1	26	1386.65868	0.00020	2759.69372	1373.03523	
23	0	0	3	1	28	0	0	1	1	27	1388.67889	0.00074	2815.14601	1426.46786	
24	0	0	3	1	29	0	0	1	1	28	1390.69726	0.00015	2872.56959	1481.87248	
25	0	0	3	1	30	0	0	1	1	29	1392.71521	0.00000	2931.96353	1539.24832	
26	0	0	3	1	31	0	0	1	1	30	1394.73235	0.00008	2993.32688	1598.59460	
27	0	0	3	1	32	0	0	1	1	31	1396.74785	-0.00029	3056.65864	1659.91050	
28	0	0	3	1	33	0	0	1	1	32	1398.76250	-0.00013	3121.95780	1723.19517	
29	0	0	3	1	34	0	0	1	1	33	1400.77566	0.00007	3189.22334	1788.44775	
30	0	0	3	1	35	0	0	1	1	34	1402.78667	-0.00019	3258.45419	1855.66733	
31	0	0	3	1	36	0	0	1	1	35	1404.79632	0.00006	3329.64926	1924.85299	
32	0	0	3	1	37	0	0	1	1	36	1406.80368	0.00003	3402.80744	1996.00378	
33	0	0	3	1	38	0	0	1	1	37	1408.80847	-0.00040	3477.92760	2069.11873	
34	0	0	3	1	39	0	0	1	1	38	1410.81194	0.00017	3555.00858	2144.19682	
35	0	0	3	1	40	0	0	1	1	39	1412.81193	-0.00025	3634.04920	2221.23702	
36	0	0	3	1	41	0	0	1	1	40	1414.80324*	-0.00674	3715.04825	2300.23827W	
37	0	0	3	1	42	0	0	1	1	41	1416.80460	-0.00042	3798.00451	2381.19949	
38	0	0	3	1	1	0	0	1	-1	1	1332.41117	-0.00051	2012.20878	679.79710	
39	0	0	3	1	2	0	0	1	-1	2	1332.40263	-0.00010	2016.17851	683.77578	
40	0	0	3	1	3	0	0	1	-1	3	1332.38900	-0.00030	2022.13301	689.74371	
41	0	0	3	1	5	0	0	1	-1	5	1332.35064	0.00178	2039.99589	707.64702W	
42	0	0	3	1	6	0	0	1	-1	6	1332.32191	0.00011	2051.90395	719.58215	
43	0	0	3	1	7	0	0	1	-1	7	1332.29020	0.00007	2065.79617	733.50603	
44	0	0	3	1	8	0	0	1	-1	8	1332.25402	0.00023	2081.67229	749.41849	
45	0	0	3	1	9	0	0	1	-1	9	1332.21261	-0.00013	2099.53204	767.31930	
46	0	0	3	1	11	0	0	1	-1	11	1332.11573	-0.00051	2141.20116	809.08492	
47	0	0	3	1	12	0	0	1	-1	12	1332.06026	-0.00039	2165.00981	832.94916	
48	0	0	3	1	13	0	0	1	-1	13	1331.99974	-0.00033	2190.80064	858.80057	
49	0	0	3	1	14	0	0	1	-1	14	1331.93473	0.00032	2218.57321	886.63880	
50	0	0	3	1	15	0	0	1	-1	15	1331.86297	-0.00062	2248.32704	916.46345	
51	0	0	3	1	-1	0	0	1	-1	2	1328.44790	0.00040	2012.22327	683.77578	
52	0	0	3	1	-1	2	0	0	1	-1	3	1326.47768	-0.00058	2016.22197	689.74371
53	0	0	3	1	-1	3	0	0	1	-1	4	1324.51936	0.00027	2022.21993	697.70083
54	0	0	3	1	-1	4	0	0	1	-1	5	1322.57007	0.00006	2030.21704	707.64702
55	0	0	3	1	-1	5	0	0	1	-1	6	1320.63107	0.00006	2040.21315	719.58215
56	0	0	3	1	-1	6	0	0	1	-1	7	1318.70260	0.00054	2052.20810	733.50603
57	0	0	3	1	-1	7	0	0	1	-1	8	1316.78333	0.00017	2066.20166	749.41849
58	0	0	3	1	-1	8	0	0	1	-1	9	1314.87443	0.00015	2082.19357	767.31930
59	0	0	3	1	-1	9	0	0	1	-1	10	1312.97569	0.00033	2100.18356	787.20820
60	0	0	3	1	-1	10	0	0	1	-1	11	1311.08658	0.00021	2120.17129	809.08492
61	0	0	3	1	-1	11	0	0	1	-1	12	1309.20703	-0.00022	2142.15640	832.94916
62	0	0	3	1	-1	12	0	0	1	-1	13	1307.33839	0.00046	2166.13850	858.80057
63	0	0	3	1	-1	13	0	0	1	-1	14	1305.47857	0.00023	2192.11714	886.63880
64	0	0	3	1	-1	14	0	0	1	-1	15	1303.62873	0.00034	2220.09184	916.46345
65	0	0	3	1	-1	15	0	0	1	-1	16	1301.78829	0.00031	2250.06210	948.27412
66	0	0	3	1	-1	16	0	0	1	-1	17	1299.95704	0.00004	2282.02735	982.07035
67	0	0	3	1	-1	17	0	0	1	-1	18	1298.13506	-0.00029	2315.98702	1017.85167
68	0	0	3	1	-1	18	0	0	1	-1	19	1296.32282	-0.00005	2351.94046	1055.61759
69	0	0	3	1	-1	19	0	0	1	-1	20	1294.51958	-0.00014	2389.88701	1095.36757

1	0	0	3	-1	20	0	0	1	-1	21	1292.72509	0.00019	2429.82595	1137.10105
2	0	0	3	-1	21	0	0	1	-1	22	1290.93918	0.00011	2471.75653	1180.81746
3	0	0	3	-1	22	0	0	1	-1	23	1289.16184	0.00006	2515.67796	1226.51618
4	0	0	3	-1	23	0	0	1	-1	24	1287.39291	0.00009	2561.58939	1274.19657
5	0	0	3	-1	24	0	0	1	-1	25	1285.63219	0.00021	2609.48995	1323.85797
6	0	0	3	-1	25	0	0	1	-1	26	1283.87925	0.00021	2659.37872	1375.49968
7	0	0	3	-1	26	0	0	1	-1	27	1282.13391	0.00017	2711.25472	1429.12098
8	0	0	3	-1	27	0	0	1	-1	28	1280.39572	-0.00011	2765.11695	1484.72111
9	0	0	3	-1	28	0	0	1	-1	29	1278.66517	0.00014	2820.96434	1542.29931
10	0	0	3	-1	29	0	0	1	-1	30	1276.94117	0.00015	2878.79579	1601.85477
11	0	0	3	-1	30	0	0	1	-1	31	1275.22342	-0.00009	2938.61015	1663.38664
12	0	0	3	-1	31	0	0	1	-1	32	1273.51224	0.00010	3000.40622	1726.89408
13	0	0	3	-1	32	0	0	1	-1	33	1271.80637	-0.00019	3064.18276	1792.37620
14	0	0	3	-1	33	0	0	1	-1	34	1270.10616	-0.00023	3129.93847	1859.83208
15	0	0	3	-1	34	0	0	1	-1	35	1268.41082	-0.00040	3197.67199	1929.26077
16	0	0	3	-1	35	0	0	1	-1	36	1266.72102	0.00038	3267.38195	2000.66131
17	0	0	3	-1	36	0	0	1	-1	37	1265.03424	0.00004	3339.06690	2074.03270
18	0	0	3	-1	37	0	0	1	-1	38	1263.35180	0.00038	3412.72533	2149.37391
19	0	0	3	-1	38	0	0	1	-1	39	1261.67123	-0.00060	3488.35572	2226.68389
20	0	0	3	-1	39	0	0	1	-1	40	1258.32127	0.00114	3645.52594	2387.20581W
21	0	0	3	-1	2	0	0	1	-1	1	1336.42496	0.00009	2016.22197	679.79710
22	0	0	3	-1	3	0	0	1	-1	2	1338.44445	0.00030	2022.21993	683.77578
23	0	0	3	-1	4	0	0	1	-1	3	1340.47360	0.00028	2030.21704	689.74371
24	0	0	3	-1	5	0	0	1	-1	4	1342.51234	0.00002	2040.21315	697.70083
25	0	0	3	-1	6	0	0	1	-1	5	1344.56103	-0.00005	2052.20810	707.64702
26	0	0	3	-1	7	0	0	1	-1	6	1346.61944	-0.00007	2066.20166	719.58215
27	0	0	3	-1	8	0	0	1	-1	7	1348.68755	0.00001	2082.19357	733.50603
28	0	0	3	-1	9	0	0	1	-1	8	1350.76507	0.00000	2100.18356	749.41849
29	0	0	3	-1	10	0	0	1	-1	9	1352.85249	0.00050	2120.17129	767.31930
30	0	0	3	-1	11	0	0	1	-1	10	1354.94821	0.00001	2142.15640	787.20820
31	0	0	3	-1	12	0	0	1	-1	11	1357.05372	0.00014	2166.13850	809.08492
32	0	0	3	-1	13	0	0	1	-1	12	1359.16814	0.00016	2192.11714	832.94916
33	0	0	3	-1	14	0	0	1	-1	13	1361.29160	0.00033	2220.09184	858.80057
34	0	0	3	-1	15	0	0	1	-1	14	1363.42357	0.00027	2250.06210	886.63880
35	0	0	3	-1	16	0	0	1	-1	15	1365.56430	0.00040	2282.02735	916.46345
36	0	0	3	-1	17	0	0	1	-1	16	1367.71311	0.00021	2315.98702	948.27412
37	0	0	3	-1	18	0	0	1	-1	17	1369.87009	-0.00002	2351.94046	982.07035
38	0	0	3	-1	19	0	0	1	-1	18	1372.03557	0.00023	2389.88701	1017.85167
39	0	0	3	-1	20	0	0	1	-1	19	1374.20849	0.00013	2429.82595	1055.61759
40	0	0	3	-1	22	0	0	1	-1	21	1378.57671	-0.00020	2515.67796	1137.10105
41	0	0	3	-1	23	0	0	1	-1	22	1380.77224	0.00031	2561.58939	1180.81746
42	0	0	3	-1	24	0	0	1	-1	23	1382.97374	-0.00003	2609.48995	1226.51618
43	0	0	3	-1	25	0	0	1	-1	24	1385.18230	0.00015	2659.37872	1274.19657
44	0	0	3	-1	26	0	0	1	-1	25	1387.39661	-0.00014	2711.25472	1323.85797
45	0	0	3	-1	27	0	0	1	-1	26	1389.61651	-0.00076	2765.11695	1375.49968
46	0	0	3	-1	28	0	0	1	-1	27	1391.84300	-0.00036	2820.96434	1429.12098
47	0	0	3	-1	29	0	0	1	-1	28	1394.07436	-0.00032	2878.79579	1484.72111
48	0	0	3	-1	30	0	0	1	-1	29	1396.31055	-0.00029	2938.61015	1542.29931
49	0	0	3	-1	31	0	0	1	-1	30	1398.55118	-0.00028	3000.40622	1601.85477
50	0	0	3	-1	32	0	0	1	-1	31	1400.79536	-0.00076	3064.18276	1663.38664
51	0	0	3	-1	33	0	0	1	-1	32	1403.04392	-0.00046	3129.93847	1726.89408
52	0	0	3	-1	34	0	0	1	-1	33	1405.29556	-0.00023	3197.67199	1792.37620
53	0	0	3	-1	35	0	0	1	-1	34	1407.54964	-0.00023	3267.38195	1859.83208
54	0	0	3	-1	36	0	0	1	-1	35	1409.80620	0.00007	3339.06690	1929.26077
55	0	0	3	-1	37	0	0	1	-1	36	1412.06365	-0.00037	3412.72533	2000.66131
56	0	0	3	-1	38	0	0	1	-1	37	1414.32306	0.00004	3488.35572	2074.03270
57	0	0	3	-1	39	0	0	1	-1	38	1416.58275	0.00019	3565.95647	2149.37391
58	0	0	3	-1	40	0	0	1	-1	39	1418.84272	0.00067	3645.52594	2226.68389
59	0	0	3	-1	41	0	0	1	-1	40	1421.10069	-0.00019	3727.06244	2305.96156
60	0	0	3	-1	42	0	0	1	-1	41	1423.35827	-0.00016	3810.56424	2387.20581
	0	0	3	-1	1	0	0	1	1	1	1332.43302	-0.00020	2012.22327	679.79005
	0	0	3	-1	2	0	0	1	1	2	1332.46738	0.00003	2016.22197	683.75462
	0	0	3	-1	3	0	0	1	1	3	1332.51847	-0.00006	2022.21993	689.70140
	0	0	3	-1	4	0	0	1	1	4	1332.58629	-0.00043	2030.21704	697.63032
	0	0	3	-1	5	0	0	1	1	5	1332.67195	0.00005	2040.21315	707.54126
	0	0	3	-1	6	0	0	1	1	6	1332.77417	0.00016	2052.20810	719.43409
	0	0	3	-1	7	0	0	1	1	7	1332.89407	0.00105	2066.20166	733.30864W
	0	0	3	-1	8	0	0	1	1	8	1333.02515*	-0.00370	2082.19357	749.16472W
	0	0	3	-1	9	0	0	1	1	9	1333.18176	-0.00032	2100.18356	767.00212

1	0	0	3	-1	10	0	0	1	1	10	1333.34973	-0.00097	2120.17129	786.82059
2	0	0	3	-1	11	0	0	1	1	11	1333.53843*	0.00188	2142.15640	808.61985W
3	0	0	3	-1	12	0	0	1	1	12	1333.73897	0.00008	2166.13850	832.39961
4	0	0	3	-1	13	0	0	1	1	13	1333.95846*	0.00086	2192.11714	858.15954
5	0	0	3	-1	15	0	0	1	1	15	1334.44299	-0.00066	2250.06210	915.61845
6	0	0	3	-1	16	0	0	1	1	16	1334.71231	0.00160	2282.02735	947.31664W

rms = 0.00027 cm⁻¹3v₄ (Π) ← G.S. (Σ⁺)

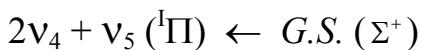
	v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
14	3	1	0	0	23	0	0	0	0	24	1505.23360	0.00103	2099.74084	594.50827W
15	3	1	0	0	22	0	0	0	0	23	1507.09800	-0.00030	2054.07593	546.97764
16	3	1	0	0	21	0	0	0	0	22	1508.96630*	0.00012	2010.38873	501.42254
17	3	1	0	0	20	0	0	0	0	21	1510.83640	-0.00004	1968.68006	457.84362
18	3	1	0	0	19	0	0	0	0	20	1512.70945	0.00015	1928.95077	416.24147
19	3	1	0	0	18	0	0	0	0	19	1514.58400	-0.00103	1891.20168	376.61665W
20	3	1	0	0	17	0	0	0	0	18	1516.46330	-0.00060	1855.43362	338.96972
21	3	1	0	0	16	0	0	0	0	17	1518.34630	0.00009	1821.64740	303.30118
22	3	1	0	0	15	0	0	0	0	16	1520.23170	-0.00057	1789.84380	269.61154
23	3	1	0	0	14	0	0	0	0	15	1522.12276	0.00039	1760.02361	237.90124
24	3	1	0	0	13	0	0	0	0	14	1524.01710	0.00024	1732.18758	208.17072
25	3	1	0	0	12	0	0	0	0	13	1525.91640	0.00036	1706.33645	180.42041
26	3	1	0	0	11	0	0	0	0	12	1527.81970	-0.00054	1682.47090	154.65066
27	3	1	0	0	10	0	0	0	0	11	1529.72790	-0.00187	1660.59161	130.86184W
28	3	1	0	0	9	0	0	0	0	10	1531.63909*	-0.00584	1640.69921	109.05428W
29	3	1	0	0	8	0	0	0	0	9	1533.56650	0.00048	1622.79429	89.22827
30	3	1	0	0	7	0	0	0	0	8	1535.49180*	-0.00149	1606.87737	71.38408W
31	3	1	0	0	6	0	0	0	0	7	1537.42750	0.00051	1592.94896	55.52197
32	3	1	0	0	5	0	0	0	0	6	1539.36720	-0.00015	1581.00949	41.64214
33	3	1	0	0	4	0	0	0	0	5	1541.31280	-0.00174	1571.05934	29.74480W
34	3	1	0	0	3	0	0	0	0	4	1543.26740	-0.00133	1563.09883	19.83009W
35	3	1	0	0	2	0	0	0	0	3	1545.23013	0.00008	1557.12821	11.89816
36	3	1	0	0	2	0	0	0	0	1	1555.14330*	-0.00186	1557.12821	1.98305W
37	3	1	0	0	3	0	0	0	0	2	1557.15000	0.00030	1563.09883	5.94912
38	3	1	0	0	4	0	0	0	0	3	1559.16200	0.00083	1571.05934	11.89816
39	3	1	0	0	5	0	0	0	0	4	1561.17980	0.00040	1581.00949	19.83009
40	3	1	0	0	6	0	0	0	0	5	1563.20630*	0.00214	1592.94896	29.74480W
41	3	1	0	0	7	0	0	0	0	6	1565.23510	-0.00013	1606.87737	41.64214
42	3	1	0	0	8	0	0	0	0	7	1567.27320	0.00088	1622.79429	55.52197
43	3	1	0	0	9	0	0	0	0	8	1569.31470	-0.00043	1640.69921	71.38408
44	3	1	0	0	10	0	0	0	0	9	1571.36280	-0.00054	1660.59161	89.22827
45	3	1	0	0	11	0	0	0	0	10	1573.41670	0.00008	1682.47090	109.05428
46	3	1	0	0	12	0	0	0	0	11	1575.47550	0.00090	1706.33645	130.86184
47	3	1	0	0	13	0	0	0	0	12	1577.53600	-0.00092	1732.18758	154.65066
48	3	1	0	0	14	0	0	0	0	13	1579.60180	-0.00141	1760.02361	180.42041W
49	3	1	0	0	15	0	0	0	0	14	1581.67360	0.00052	1789.84380	208.17072
50	3	1	0	0	16	0	0	0	0	15	1583.74490	-0.00126	1821.64740	237.90124W
51	3	1	0	0	17	0	0	0	0	16	1585.82130	-0.00079	1855.43362	269.61154
52	3	1	0	0	18	0	0	0	0	17	1587.90030	-0.00020	1891.20168	303.30118
53	3	-1	0	0	22	0	0	0	0	22	1557.03290	0.00192	2058.45353	501.42254W
54	3	-1	0	0	21	0	0	0	0	21	1556.56820	-0.00132	2014.41315	457.84362W
55	3	-1	0	0	20	0	0	0	0	20	1556.11780	-0.00158	1972.36084	416.24147W
56	3	-1	0	0	19	0	0	0	0	19	1555.68130	-0.00076	1932.29871	376.61665
57	3	-1	0	0	18	0	0	0	0	18	1555.25830	-0.00071	1894.22873	338.96972
58	3	-1	0	0	17	0	0	0	0	17	1554.85170	0.00011	1858.15277	303.30118
59	3	-1	0	0	16	0	0	0	0	16	1554.46020	-0.00084	1824.07257	269.61154
60	3	-1	0	0	15	0	0	0	0	15	1554.08836	-0.00015	1791.98975	237.90124
61	3	-1	0	0	14	0	0	0	0	14	1553.73535	0.00031	1761.90576	208.17072
62	3	-1	0	0	13	0	0	0	0	13	1553.40130	-0.00026	1733.82197	180.42041
63	3	-1	0	0	12	0	0	0	0	12	1553.08892	0.00001	1707.73957	154.65066
64	3	-1	0	0	11	0	0	0	0	11	1552.79769	-0.00014	1683.65967	130.86184
65	3	-1	0	0	10	0	0	0	0	10	1552.52958	0.00061	1661.58325	109.05428
66	3	-1	0	0	9	0	0	0	0	9	1552.28269	-0.00022	1641.51118	89.22827
67	3	-1	0	0	8	0	0	0	0	8	URL: http://smc.masscompcentral.com/tmp623.44425		71.38408	

1	3	-1	0	0	7	0	0	0	0	7	1551.86060	-0.00055	1607.38312	55.52197
2	3	-1	0	0	6	0	0	0	0	6	1551.68575	-0.00050	1593.32839	41.64214
3	3	-1	0	0	5	0	0	0	0	5	1551.53540	-0.00037	1581.28057	29.74480
4	3	-1	0	0	4	0	0	0	0	4	1551.40890	-0.00109	1571.24009	19.83009W
5	3	-1	0	0	3	0	0	0	0	3	1551.30820	-0.00092	1563.20728	11.89816
6	3	-1	0	0	2	0	0	0	0	2	1551.23230	-0.00102	1557.18244	5.94912W
7	3	-1	0	0	1	0	0	0	0	1	1551.18220*	-0.00052	1553.16577	1.98305

rms = 0.00050 cm⁻¹2v₄ + v₅ (^{II}Π) ← G.S. (Σ⁺)

	v _{4'}	l _{4'}	v _{5'}	l _{5'}	J'	v _{4''}	l _{4''}	v _{5''}	l _{5''}	J''	OBS	OBS - CALC	E'	E''
15	2	0	1	1	21	0	0	0	0	22	1671.30320	-0.00069	2172.72643	501.42254
16	2	0	1	1	20	0	0	0	0	21	1673.09285	0.00071	2130.93576	457.84362
17	2	0	1	1	19	0	0	0	0	20	1674.87930	0.00007	2091.12070	416.24147
18	2	0	1	1	18	0	0	0	0	19	1676.66640	-0.00006	2053.28311	376.61665
19	2	0	1	1	17	0	0	0	0	18	1678.45480	-0.00036	2017.42488	338.96972
20	2	0	1	1	16	0	0	0	0	17	1680.24730	0.00055	1983.54793	303.30118
21	2	0	1	1	15	0	0	0	0	16	1682.04187	-0.00074	1951.65414	269.61154
22	2	0	1	1	14	0	0	0	0	15	1683.84402	-0.00007	1921.74533	237.90124
23	2	0	1	1	13	0	0	0	0	14	1685.65270	0.00021	1893.82321	208.17072
24	2	0	1	1	12	0	0	0	0	13	1687.46904	0.00006	1867.88938	180.42041
25	2	0	1	1	11	0	0	0	0	12	1689.29471	0.00006	1843.94531	154.65066
26	2	0	1	1	10	0	0	0	0	11	1691.13023	-0.00024	1821.99232	130.86184
27	2	0	1	1	9	0	0	0	0	10	1692.97749	0.00018	1802.03159	109.05428
28	2	0	1	1	8	0	0	0	0	9	1694.83564	-0.00027	1784.06418	89.22827
29	2	0	1	1	7	0	0	0	0	8	1696.70637	-0.00054	1768.09099	71.38408
30	2	0	1	1	6	0	0	0	0	7	1698.59136	0.00050	1754.11283	55.52197
31	2	0	1	1	5	0	0	0	0	6	1700.48770	-0.00051	1742.13035	41.64214
32	2	0	1	1	4	0	0	0	0	5	1702.39860	-0.00073	1732.14413	29.74480
33	2	0	1	1	3	0	0	0	0	4	1704.32340	-0.00113	1724.15462	19.83009W
34	2	0	1	1	2	0	0	0	0	3	1706.26360	-0.00042	1718.16218	11.89816
35	2	0	1	1	1	0	0	0	0	2	1708.21816	0.00021	1714.16707	5.94912
36	2	0	1	1	3	0	0	0	0	2	1718.20550	0.00000	1724.15462	5.94912
37	2	0	1	1	4	0	0	0	0	3	1720.24532	-0.00065	1732.14413	11.89816
38	2	0	1	1	5	0	0	0	0	4	1722.30052	0.00026	1742.13035	19.83009
39	2	0	1	1	6	0	0	0	0	5	1724.36804	0.00001	1754.11283	29.74480
40	2	0	1	1	7	0	0	0	0	6	1726.44930	0.00045	1768.09099	41.64214
41	2	0	1	1	8	0	0	0	0	7	1728.54167	-0.00054	1784.06418	55.52197
42	2	0	1	1	9	0	0	0	0	8	1730.64737	-0.00014	1802.03159	71.38408
43	2	0	1	1	10	0	0	0	0	9	1732.76367	-0.00038	1821.99232	89.22827
44	2	0	1	1	11	0	0	0	0	10	1734.89087	-0.00016	1843.94531	109.05428
45	2	0	1	1	12	0	0	0	0	11	1737.02780	0.00026	1867.88938	130.86184
46	2	0	1	1	13	0	0	0	0	12	1739.17249	-0.00006	1893.82321	154.65066
47	2	0	1	1	14	0	0	0	0	13	1741.32452	-0.00040	1921.74533	180.42041
48	2	0	1	1	15	0	0	0	0	14	1743.48260	-0.00082	1951.65414	208.17072
49	2	0	1	1	16	0	0	0	0	15	1745.64520	-0.00149	1983.54793	237.90124W
50	2	0	1	1	17	0	0	0	0	16	1747.81390	0.00055	2017.42488	269.61154
51	2	0	1	1	18	0	0	0	0	17	1749.98110	-0.00083	2053.28311	303.30118
52	2	0	1	1	19	0	0	0	0	18	1752.14950	-0.00148	2091.12070	338.96972W
53	2	0	1	-1	23	0	0	0	0	23	1715.04990	-0.00029	2262.02782	546.97764
54	2	0	1	-1	22	0	0	0	0	22	1714.83896	0.00033	2216.26118	501.42254
55	2	0	1	-1	21	0	0	0	0	21	1714.63236	-0.00072	2172.47670	457.84362
56	2	0	1	-1	20	0	0	0	0	20	1714.43332	-0.00030	2130.67509	416.24147
57	2	0	1	-1	19	0	0	0	0	19	1714.24023	-0.00018	2090.85706	376.61665
58	2	0	1	-1	18	0	0	0	0	18	1714.05374	0.00012	2053.02334	338.96972
59	2	0	1	-1	17	0	0	0	0	17	1713.87326	-0.00020	2017.17464	303.30118
60	2	0	1	-1	16	0	0	0	0	16	1713.70022	0.00003	1983.31173	269.61154
	2	0	1	-1	15	0	0	0	0	15	1713.53421	0.00010	1951.43535	237.90124
	2	0	1	-1	14	0	0	0	0	14	1713.37564	0.00009	1921.54628	208.17072
	2	0	1	-1	13	0	0	0	0	13	1713.22479	-0.00009	1893.64529	180.42041
	2	0	1	-1	12	0	0	0	0	12	1713.08219	-0.00030	1867.73315	154.65066
	2	0	1	-1	11	0	0	0	0	11	1712.94878	-0.00003	1843.81066	130.86184
	2	0	1	-1	10	0	0	0	0	10	1712.82429	0.00002	1821.87855	109.05428
	2	0	1	-1	9	0	0	0	0	9	URL: http://mc.manuscriptcentral.com/tmp801.93758	89.22827		

1	2	0	1	-1	8	0	0	0	0	8	1712.60425	-0.00012	1783.98845	71.38408
2	2	0	1	-1	7	0	0	0	0	7	1712.51018	0.00032	1768.03183	55.52197
3	2	0	1	-1	6	0	0	0	0	6	1712.42656	0.00037	1754.06834	41.64214
4	2	0	1	-1	5	0	0	0	0	5	1712.35344	-0.00029	1742.09853	29.74480
5	2	0	1	-1	4	0	0	0	0	4	1712.29296	0.00014	1732.12291	19.83009
6	2	0	1	-1	3	0	0	0	0	3	1712.24372	0.00000	1724.14189	11.89816
7	2	0	1	-1	2	0	0	0	0	2	1712.20753	0.00084	1718.15582	5.94912
8	2	0	1	-1	1	0	0	0	0	1	1712.18201	0.00011	1714.16495	1.98305

rms = 0.00039 cm⁻¹

	<i>v</i> _{4'}	<i>l</i> _{4'}	<i>v</i> _{5'}	<i>l</i> _{5'}	<i>J'</i>	<i>v</i> _{4''}	<i>l</i> _{4''}	<i>v</i> _{5''}	<i>l</i> _{5''}	<i>J''</i>	OBS	OBS - CALC	E'	E''
1	2	2	1	-1	1	0	0	0	0	2	1718.51240	-0.00105	1724.46257	5.94912W
2	2	2	1	-1	2	0	0	0	0	3	1716.54590	-0.00108	1728.44514	11.89816W
3	2	2	1	-1	3	0	0	0	0	4	1714.58760	-0.00135	1734.41904	19.83009W
4	2	2	1	-1	4	0	0	0	0	5	1712.64002	0.00049	1742.38433	29.74480
5	2	2	1	-1	5	0	0	0	0	6	1710.69878	-0.00014	1752.34107	41.64214
6	2	2	1	-1	6	0	0	0	0	7	1708.76720	-0.00017	1764.28934	55.52197
7	2	2	1	-1	7	0	0	0	0	8	1706.84564	0.00047	1778.22926	71.38408
8	2	2	1	-1	8	0	0	0	0	9	1704.93234	-0.00033	1794.16094	89.22827
9	2	2	1	-1	9	0	0	0	0	10	1703.03026	0.00002	1812.08452	109.05428
10	2	2	1	-1	10	0	0	0	0	11	1701.13814	-0.00018	1832.00016	130.86184
11	2	2	1	-1	11	0	0	0	0	12	1699.25674	-0.00062	1853.90802	154.65066
12	2	2	1	-1	12	0	0	0	0	13	1697.38732	-0.00056	1877.80829	180.42041
13	2	2	1	-1	13	0	0	0	0	14	1695.52984	-0.00057	1903.70113	208.17072
14	2	2	1	-1	14	0	0	0	0	15	1693.68541	-0.00010	1931.58675	237.90124
15	2	2	1	-1	15	0	0	0	0	16	1691.85317	-0.00062	1961.46532	269.61154
16	2	2	1	-1	16	0	0	0	0	17	1690.03539	-0.00046	1993.33703	303.30118
17	2	2	1	-1	17	0	0	0	0	18	1688.23256	0.00024	2027.20204	338.96972
18	2	2	1	-1	18	0	0	0	0	19	1686.44347	-0.00036	2063.06048	376.61665
19	2	2	1	-1	19	0	0	0	0	20	1684.67092	-0.00006	2100.91245	416.24147
20	2	2	1	-1	20	0	0	0	0	21	1682.91368	-0.00071	2140.75802	457.84362
21	2	2	1	-1	21	0	0	0	0	22	1681.17487	0.00023	2182.59718	501.42254
22	2	2	1	-1	22	0	0	0	0	23	1679.45197	-0.00028	2226.42988	546.97764
23	2	2	1	-1	23	0	0	0	0	24	1677.74786	0.00014	2272.25599	594.50827
24	2	2	1	-1	24	0	0	0	0	25	1676.06127	-0.00024	2320.07531	644.01380
25	2	2	1	-1	25	0	0	0	0	26	1674.39307	-0.00094	2369.88754	695.49354
26	2	2	1	-1	26	0	0	0	0	27	1672.74407	-0.00146	2421.69231	748.94678W
27	2	2	1	-1	27	0	0	0	0	28	1671.11567	-0.00068	2475.48915	804.37280
28	2	2	1	-1	28	0	0	0	0	29	1669.51077	0.00410	2531.27750	861.77083W
29	2	2	1	-1	1	0	0	0	0	0	1724.46368	0.00111	1724.46257	0.00000W
30	2	2	1	-1	2	0	0	0	0	1	1726.45980	-0.00229	1728.44514	1.98305W
31	2	2	1	-1	3	0	0	0	0	2	1728.47043	0.00051	1734.41904	5.94912
32	2	2	1	-1	4	0	0	0	0	3	1730.48592	-0.00025	1742.38433	11.89816
33	2	2	1	-1	5	0	0	0	0	4	1732.51063	-0.00034	1752.34107	19.83009
34	2	2	1	-1	6	0	0	0	0	5	1734.54450	-0.00004	1764.28934	29.74480
35	2	2	1	-1	7	0	0	0	0	6	1736.58746	0.00035	1778.22926	41.64214
36	2	2	1	-1	8	0	0	0	0	7	1738.63901	0.00004	1794.16094	55.52197
37	2	2	1	-1	9	0	0	0	0	8	1740.70025	-0.00019	1812.08452	71.38408
38	2	2	1	-1	10	0	0	0	0	9	1742.77188	-0.00001	1832.00016	89.22827
39	2	2	1	-1	11	0	0	0	0	10	1744.85394	0.00019	1853.90802	109.05428
40	2	2	1	-1	12	0	0	0	0	11	1746.94630	-0.00014	1877.80829	130.86184
41	2	2	1	-1	13	0	0	0	0	12	1749.05065	0.00018	1903.70113	154.65066
42	2	2	1	-1	14	0	0	0	0	13	1751.16614	-0.00020	1931.58675	180.42041
43	2	2	1	-1	15	0	0	0	0	14	1753.29446	-0.00014	1961.46532	208.17072
44	2	2	1	-1	16	0	0	0	0	15	1755.43585	0.00005	1993.33703	237.90124
45	2	2	1	-1	17	0	0	0	0	16	1757.59087	0.00036	2027.20204	269.61154
46	2	2	1	-1	18	0	0	0	0	17	1759.75925	-0.00005	2063.06048	303.30118
47	2	2	1	-1	19	0	0	0	0	18	1761.94229	-0.00044	2100.91245	338.96972
48	2	2	1	-1	20	0	0	0	0	19	1764.14111	-0.00025	2140.75802	376.61665
49	2	2	1	-1	21	0	0	0	0	20	1766.35603	0.00032	2182.59718	416.24147
50	2	2	1	-1	22	0	0	0	0	21	1768.58640	0.00014	2226.42988	457.84362
51	2	2	1	-1	23	0	0	0	0	22	1770.83360	0.00015	2272.25599	501.42254
52	2	2	1	-1	24	0	0	0	0	23	0	URL: http://mc.manuscriptcentral.com/tmp120.07531	546.97764	

1	2	-2	1	1	1	0	0	0	0	1	1722.48808	-0.00068	1724.47181	1.98305
2	2	-2	1	1	2	0	0	0	0	2	1722.52377	0.00001	1728.47288	5.94912
3	2	-2	1	1	3	0	0	0	0	3	1722.57613	-0.00023	1734.47452	11.89816
4	2	-2	1	1	4	0	0	0	0	4	1722.64670	-0.00001	1742.47680	19.83009
5	2	-2	1	1	5	0	0	0	0	5	1722.73495	-0.00004	1752.47978	29.74480
6	2	-2	1	1	6	0	0	0	0	6	1722.84144	0.00001	1764.48357	41.64214
7	2	-2	1	1	7	0	0	0	0	7	1722.96620	-0.00010	1778.48827	55.52197
8	2	-2	1	1	8	0	0	0	0	8	1723.10995	0.00003	1794.49400	71.38408
9	2	-2	1	1	9	0	0	0	0	9	1723.27250	-0.00014	1812.50091	89.22827
10	2	-2	1	1	10	0	0	0	0	10	1723.45485	-0.00002	1832.50915	109.05428
11	2	-2	1	1	11	0	0	0	0	11	1723.65672	-0.00031	1854.51888	130.86184
12	2	-2	1	1	12	0	0	0	0	12	1723.87957	-0.00004	1878.53027	154.65066
13	2	-2	1	1	13	0	0	0	0	13	1724.12303	-0.00006	1904.54349	180.42041
14	2	-2	1	1	14	0	0	0	0	14	1724.38784	-0.00015	1932.55872	208.17072
15	2	-2	1	1	15	0	0	0	0	15	1724.67475	-0.00012	1962.57611	237.90124
16	2	-2	1	1	16	0	0	0	0	16	1724.98441	0.00013	1994.59581	269.61154
17	2	-2	1	1	17	0	0	0	0	17	1725.31680	0.00004	2028.61794	303.30118
18	2	-2	1	1	18	0	0	0	0	18	1725.67307	0.00020	2064.64259	338.96972
19	2	-2	1	1	19	0	0	0	0	19	1726.05306	-0.00009	2102.66980	376.61665
20	2	-2	1	1	20	0	0	0	0	20	1726.45980	0.00169	2142.69958	416.24147W
21	2	-2	1	1	21	0	0	0	0	21	1726.88769	-0.00056	2184.73187	457.84362
22	2	-2	1	1	22	0	0	0	0	22	1727.34297	-0.00103	2228.76654	501.42254W
23	2	-2	1	1	23	0	0	0	0	23	1727.82538	-0.00039	2274.80341	546.97764
24	2	-2	1	1	24	0	0	0	0	24	1728.33310	-0.00082	2322.84219	594.50827

rms = 0.00034 cm⁻¹ $v_4 + 2v_5 (\text{I}\Pi) \leftarrow \text{G.S.} (\Sigma^+)$

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
32	1	-1	2	2	21	0	0	0	0	22	1841.11210	-0.00036	2342.53501	501.42254
33	1	-1	2	2	20	0	0	0	0	21	1842.86230	-0.00072	2300.70664	457.84362
34	1	-1	2	2	19	0	0	0	0	20	1844.62848	0.00002	2260.86993	416.24147
35	1	-1	2	2	18	0	0	0	0	19	1846.40833	-0.00006	2223.02504	376.61665
36	1	-1	2	2	17	0	0	0	0	18	1848.20244	0.00007	2187.17209	338.96972
37	1	-1	2	2	16	0	0	0	0	17	1850.00913	-0.00084	2153.31116	303.30118
38	1	-1	2	2	15	0	0	0	0	16	1851.83041	-0.00033	2121.44228	269.61154
39	1	-1	2	2	14	0	0	0	0	15	1853.66406	-0.00017	2091.56547	237.90124
40	1	-1	2	2	13	0	0	0	0	14	1855.50979	-0.00022	2063.68073	208.17072
41	1	-1	2	2	12	0	0	0	0	13	1857.36686	-0.00077	2037.78803	180.42041
42	1	-1	2	2	11	0	0	0	0	12	1859.23656	-0.00012	2013.88734	154.65066
43	1	-1	2	2	10	0	0	0	0	11	1861.11678	0.00001	1991.97861	130.86184
44	1	-1	2	2	9	0	0	0	0	10	1863.00746	-0.00005	1972.06179	109.05428
45	1	-1	2	2	8	0	0	0	0	9	1864.90879	0.00023	1954.13683	89.22827
46	1	-1	2	2	7	0	0	0	0	8	1866.81952	-0.00008	1938.20368	71.38408
47	1	-1	2	2	6	0	0	0	0	7	1868.74093	0.00061	1924.26229	55.52197
48	1	-1	2	2	5	0	0	0	0	6	1870.67011	-0.00036	1912.31262	41.64214
49	1	-1	2	2	4	0	0	0	0	5	1872.60930	-0.00052	1902.35462	29.74480
50	1	-1	2	2	3	0	0	0	0	4	1874.55780	-0.00037	1894.38827	19.83009
51	1	-1	2	2	2	0	0	0	0	3	1876.51460	-0.00076	1888.41352	11.89816
52	1	-1	2	2	1	0	0	0	0	2	1878.48100	-0.00025	1884.43037	5.94912
53	1	-1	2	2	2	0	0	0	0	1	1886.43075	0.00038	1884.43037	0.00000
54	1	-1	2	2	3	0	0	0	0	2	1888.43967	0.00028	1888.41352	1.98305
55	1	-1	2	2	4	0	0	0	0	3	1890.45562	-0.00084	1902.35462	11.89816
56	1	-1	2	2	5	0	0	0	0	4	1892.48245	-0.00008	1912.31262	19.83009
57	1	-1	2	2	6	0	0	0	0	5	1894.51763	0.00014	1924.26229	29.74480
58	1	-1	2	2	7	0	0	0	0	6	1896.56153	-0.00001	1938.20368	41.64214
59	1	-1	2	2	8	0	0	0	0	7	1898.61495	0.00009	1954.13683	55.52197
60	1	-1	2	2	9	0	0	0	0	8	1900.67667*	-0.00103	1972.06179	71.38408W
	1	-1	2	2	10	0	0	0	0	9	1902.75037	0.00003	1991.97861	89.22827
	1	-1	2	2	11	0	0	0	0	10	1904.83274	-0.00032	2013.88734	109.05428
	1	-1	2	2	12	0	0	0	0	11	1906.92613	-0.00006	2037.78803	130.86184
	1	-1	2	2	13	0	0	0	0	12	1909.02998	-0.00009	2063.68073	154.65066
	1	-1	2	2	14	0	0	0	0	13	1911.14485	-0.00022	2091.56547	180.42041
	1	-1	2	2	15	0	0	0	0	14	1913.26886	-0.00082	2115.44228	208.17072

URL: <http://mc.manuscriptcentral.com/tmph21.44228>

1	-1	2	2	16	0	0	0	0	15	1915.40976	-0.00016	2153.31116	237.90124
1	-1	2	2	17	0	0	0	0	16	1917.55731*	-0.00325	2187.17209	269.61154W
2	-1	2	2	18	0	0	0	0	17	1919.72355	-0.00031	2223.02504	303.30118
3	-1	2	2	19	0	0	0	0	18	1921.90017	-0.00004	2260.86993	338.96972
4	-1	2	2	20	0	0	0	0	19	1924.08987	-0.00012	2300.70664	376.61665
5	-1	2	2	21	0	0	0	0	20	1926.29340	-0.00014	2342.53501	416.24147
6	-1	2	2	22	0	0	0	0	21	1928.51124	0.00004	2386.35482	457.84362
7	-1	2	2	23	0	0	0	0	22	1930.74340	0.00013	2432.16581	501.42254
8	-1	2	2	24	0	0	0	0	23	1932.98990	-0.00011	2479.96765	546.97764
9	-1	2	2	25	0	0	0	0	24	1935.25030	-0.00136	2529.75993	594.50827W
10	-1	2	2	26	0	0	0	0	25	1937.52770	-0.00071	2581.54220	644.01380
11	-1	2	2	27	0	0	0	0	26	1939.81960	-0.00080	2635.31393	695.49354
12	1	1	2	-2	4	0	0	0	4	1882.55809	0.00021	1902.38797	19.83009
13	1	1	2	-2	5	0	0	0	5	1882.61866	0.00081	1912.36265	29.74480
14	1	1	2	-2	6	0	0	0	6	1882.69037	0.00017	1924.33235	41.64214
15	1	1	2	-2	7	0	0	0	7	1882.77529	0.00015	1938.29711	55.52197
16	1	1	2	-2	8	0	0	0	8	1882.87303	0.00012	1954.25700	71.38408
17	1	1	2	-2	9	0	0	0	9	1882.98410	0.00030	1972.21207	89.22827
18	1	1	2	-2	10	0	0	0	10	1883.10805	-0.00008	1992.16240	109.05428
19	1	1	2	-2	11	0	0	0	11	1883.24639	0.00016	2014.10807	130.86184
20	1	1	2	-2	12	0	0	0	12	1883.39860	0.00010	2038.04916	154.65066
21	1	1	2	-2	13	0	0	0	13	1883.56533	-0.00002	2063.98575	180.42041
22	1	1	2	-2	14	0	0	0	14	1883.74724	0.00002	2091.91795	208.17072
23	1	1	2	-2	15	0	0	0	15	1883.94472	0.00012	2121.84584	237.90124
24	1	1	2	-2	16	0	0	0	16	1884.15814	0.00017	2153.76950	269.61154
25	1	1	2	-2	17	0	0	0	17	1884.38774	-0.00011	2187.68903	303.30118
26	1	1	2	-2	18	0	0	0	18	1884.63478	0.00001	2223.60449	338.96972
27	1	1	2	-2	19	0	0	0	19	1884.90192*	0.00265	2261.51593	376.61665W
28	1	1	2	-2	20	0	0	0	20	1885.18189	-0.00002	2301.42338	416.24147
29	1	1	2	-2	21	0	0	0	21	1885.48328	0.00007	2343.32683	457.84362
30	1	1	2	-2	22	0	0	0	22	1885.80365	-0.00007	2387.22627	501.42254
31	1	1	2	-2	23	0	0	0	23	1886.13745*	-0.00651	2433.12160	546.97764W
32	1	1	2	-2	24	0	0	0	24	1886.50429	-0.00015	2481.01271	594.50827
33	1	1	2	-2	25	0	0	0	25	1886.88587	0.00024	2530.89942	644.01380
34	1	1	2	-2	26	0	0	0	26	1887.28773	-0.00025	2582.78151	695.49354
35	1	1	2	-2	27	0	0	0	27	1887.71250	0.00059	2636.65870	748.94678
36	1	1	2	-2	28	0	0	0	28	1888.15740	-0.00041	2692.53061	804.37280
37	1	1	2	-2	29	0	0	0	29	1888.62600	-0.00002	2750.39685	861.77083
38	1	1	2	-2	30	0	0	0	30	1889.11630	-0.00054	2810.25693	921.14009

rms = 0.00035 cm⁻¹3v₅ (Π) ← G.S. (Σ⁺)

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''
0	0	3	1	1	0	0	0	0	2	2006.25984	0.00018	2012.20878	5.94912
0	0	3	1	2	0	0	0	0	3	2004.28082	0.00047	2016.17851	11.89816
0	0	3	1	3	0	0	0	0	4	2002.30291	-0.00001	2022.13301	19.83009
0	0	3	1	4	0	0	0	0	5	2000.32738	-0.00001	2030.07218	29.74480
0	0	3	1	5	0	0	0	0	6	1998.35393	0.00019	2039.99589	41.64214
0	0	3	1	6	0	0	0	0	7	1996.38185	-0.00013	2051.90395	55.52197
0	0	3	1	7	0	0	0	0	8	1994.41200	-0.00008	2065.79617	71.38408
0	0	3	1	8	0	0	0	0	9	1992.44426	0.00024	2081.67229	89.22827
0	0	3	1	9	0	0	0	0	10	1990.47762	-0.00014	2099.53204	109.05428
0	0	3	1	10	0	0	0	0	11	1988.51340	0.00013	2119.37511	130.86184
0	0	3	1	11	0	0	0	0	12	1986.55041	-0.00009	2141.20116	154.65066
0	0	3	1	12	0	0	0	0	13	1984.58953	0.00013	2165.00981	180.42041
0	0	3	1	13	0	0	0	0	14	1982.63003	0.00012	2190.80064	208.17072
0	0	3	1	14	0	0	0	0	15	1980.67206	0.00009	2218.57321	237.90124
0	0	3	1	15	0	0	0	0	16	1978.71537	-0.00014	2248.32704	269.61154
0	0	3	1	16	0	0	0	0	17	1976.76067	0.00023	2280.06163	303.30118
0	0	3	1	17	0	0	0	0	18	1974.80663	-0.00007	2313.77642	338.96972
0	0	3	1	18	0	0	0	0	19	1972.85409	-0.00010	2349.47084	376.61665
0	0	3	1	19	0	0	0	0	20	1970.90296	0.00014	2387.14429	416.24147
0	0	3	1	20	0	0	0	0	21	1968.95246	-0.00004	2426.79612	457.84362
0	0	3	1	21	0	URL: http://mc.manuscriptcentral.com/tmpl42567				921.14009	501.42254		

1	0	0	3	1	22	0	0	0	0	23	1965.05439	-0.00021	2512.03224	546.97764
2	0	0	3	1	23	0	0	0	0	24	1963.10711	0.00029	2557.61509	594.50827
3	0	0	3	1	24	0	0	0	0	25	1961.15947	-0.00020	2605.17347	644.01380
4	0	0	3	1	25	0	0	0	0	26	1959.21309	0.00004	2654.70659	695.49354
5	0	0	3	1	26	0	0	0	0	27	1957.26695	0.00012	2706.21362	748.94678
6	0	0	3	1	27	0	0	0	0	28	1955.32095	0.00004	2759.69372	804.37280
7	0	0	3	1	28	0	0	0	0	29	1953.37505	-0.00013	2815.14601	861.77083
8	0	0	3	1	29	0	0	0	0	30	1951.42958	0.00008	2872.56959	921.14009
9	0	0	3	1	30	0	0	0	0	31	1949.48430	0.00052	2931.96353	982.47976
10	0	0	3	1	1	0	0	0	0	0	2012.20855	-0.00023	2012.20878	0.00000
11	0	0	3	1	2	0	0	0	0	1	2014.19555	0.00009	2016.17851	1.98305
12	0	0	3	1	3	0	0	0	0	2	2016.18391	0.00002	2022.13301	5.94912
13	0	0	3	1	4	0	0	0	0	3	2018.17415	0.00013	2030.07218	11.89816
14	0	0	3	1	5	0	0	0	0	4	2020.16587	0.00007	2039.99589	19.83009
15	0	0	3	1	6	0	0	0	0	5	2022.15915	0.00000	2051.90395	29.74480
16	0	0	3	1	7	0	0	0	0	6	2024.15409	0.00007	2065.79617	41.64214
17	0	0	3	1	8	0	0	0	0	7	2026.15064	0.00032	2081.67229	55.52197
18	0	0	3	1	9	0	0	0	0	8	2028.14802	0.00006	2099.53204	71.38408
19	0	0	3	1	10	0	0	0	0	9	2030.14710	0.00026	2119.37511	89.22827
20	0	0	3	1	11	0	0	0	0	10	2032.14693	0.00005	2141.20116	109.05428
21	0	0	3	1	12	0	0	0	0	11	2034.14804	0.00007	2165.00981	130.86184
22	0	0	3	1	13	0	0	0	0	12	2036.14991	-0.00007	2190.80064	154.65066
23	0	0	3	1	14	0	0	0	0	13	2038.15296	0.00015	2218.57321	180.42041
24	0	0	3	1	15	0	0	0	0	14	2040.15636	0.00004	2248.32704	208.17072
25	0	0	3	1	16	0	0	0	0	15	2042.16047	0.00008	2280.06163	237.90124
26	0	0	3	1	17	0	0	0	0	16	2044.16468	-0.00020	2313.77642	269.61154
27	0	0	3	1	18	0	0	0	0	17	2046.16987	0.00021	2349.47084	303.30118
28	0	0	3	1	19	0	0	0	0	18	2048.17421	-0.00036	2387.14429	338.96972
29	0	0	3	1	20	0	0	0	0	19	2050.17953	0.00006	2426.79612	376.61665
30	0	0	3	1	21	0	0	0	0	20	2052.18493	0.00073	2468.42567	416.24147
31	0	0	3	1	22	0	0	0	0	21	2054.18848	-0.00014	2512.03224	457.84362
32	0	0	3	1	23	0	0	0	0	22	2056.19241	-0.00014	2557.61509	501.42254
33	0	0	3	1	24	0	0	0	0	23	2058.19593	0.00009	2605.17347	546.97764
34	0	0	3	1	25	0	0	0	0	24	2060.19796	-0.00036	2654.70659	594.50827
35	0	0	3	1	26	0	0	0	0	25	2062.19971	-0.00011	2706.21362	644.01380
36	0	0	3	1	28	0	0	0	0	27	2066.19909	-0.00014	2815.14601	748.94678
37	0	0	3	1	29	0	0	0	0	28	2068.19731	0.00052	2872.56959	804.37280
38	0	0	3	1	30	0	0	0	0	29	2070.19280	0.00010	2931.96353	861.77083
39	0	0	3	1	31	0	0	0	0	30	2072.18818	0.00139	2993.32688	921.14009W
40	0	0	3	1	32	0	0	0	0	31	2074.17890	0.00002	3056.65864	982.47976
41	0	0	3	1	33	0	0	0	0	32	2076.16815	-0.00066	3121.95780	1045.78899
42	0	0	3	-1	1	0	0	0	0	1	2010.23991	-0.00031	2012.22327	1.98305
43	0	0	3	-1	2	0	0	0	0	2	2010.27258	-0.00027	2016.22197	5.94912
44	0	0	3	-1	3	0	0	0	0	3	2010.32177	0.00001	2022.21993	11.89816
45	0	0	3	-1	4	0	0	0	0	4	2010.38694	0.00000	2030.21704	19.83009
46	0	0	3	-1	5	0	0	0	0	5	2010.46838	0.00002	2040.21315	29.74480
47	0	0	3	-1	6	0	0	0	0	6	2010.56615	0.00020	2052.20810	41.64214
48	0	0	3	-1	7	0	0	0	0	7	2010.67971	0.00002	2066.20166	55.52197
49	0	0	3	-1	8	0	0	0	0	8	2010.80952	0.00003	2082.19357	71.38408
50	0	0	3	-1	9	0	0	0	0	9	2010.95526	-0.00003	2100.18356	89.22827
51	0	0	3	-1	10	0	0	0	0	10	2011.11724	0.00023	2120.17129	109.05428
52	0	0	3	-1	11	0	0	0	0	11	2011.29471	0.00015	2142.15640	130.86184
53	0	0	3	-1	12	0	0	0	0	12	2011.48813	0.00029	2166.13850	154.65066
54	0	0	3	-1	13	0	0	0	0	13	2011.69674	0.00001	2192.11714	180.42041
55	0	0	3	-1	14	0	0	0	0	14	2011.92144	0.00033	2220.09184	208.17072
56	0	0	3	-1	15	0	0	0	0	15	2012.16100	0.00014	2250.06210	237.90124
57	0	0	3	-1	16	0	0	0	0	16	2012.41618	0.00036	2282.02735	269.61154
58	0	0	3	-1	17	0	0	0	0	17	2012.68584	0.00000	2315.98702	303.30118
59	0	0	3	-1	18	0	0	0	0	18	2012.97083	0.00009	2351.94046	338.96972
60	0	0	3	-1	19	0	0	0	0	19	2013.27065	0.00029	2389.88701	376.61665
	0	0	3	-1	20	0	0	0	0	20	2013.58483	0.00035	2429.82595	416.24147
	0	0	3	-1	21	0	0	0	0	21	2013.91335	0.00044	2471.75653	457.84362
	0	0	3	-1	22	0	0	0	0	22	2014.25570	0.00029	2515.67796	501.42254
	0	0	3	-1	23	0	0	0	0	23	2014.61202	0.00027	2561.58939	546.97764
	0	0	3	-1	24	0	0	0	0	24	2014.98214	0.00046	2609.48995	594.50827
	0	0	3	-1	25	0	0	0	0	25	2015.36500	0.00008	2659.37872	644.01380
	0	0	3	-1	26	0	0	0	0	26	2015.76119	0.00001	2711.25472	695.49354
	0	0	3	-1	27	0	0	0	0	27	2016.17015	-0.00001	2765.11695	748.94678
	0	0	3	-1	28	0	0	0	0	28	2016.50064	-0.00000	2820.96434	804.37280

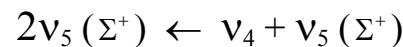
1	0	0	3	-1	29	0	0	0	0	29	2017.02500	0.00004	2878.79579	861.77083
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3	0	0	3	-1	31	0	0	0	0	31	2017.92667	0.00020	3000.40622	982.47976
4	0	0	3	-1	32	0	0	0	0	32	2018.39453	0.00076	3064.18276	1045.78899
5	0	0	3	-1	33	0	0	0	0	33	2018.87110	-0.00044	3129.93847	1111.06693
6	0	0	3	-1	34	0	0	0	0	34	2019.37160	0.01227	3197.67199	1178.31267

rms = 0.00025 cm⁻¹ $v_5(\Pi) \leftarrow v_4(\Pi)$

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	0	0	1	1	1	1	1	0	0	2	155.45724	0.00001	679.79005	524.33282
2	0	0	1	1	2	1	1	0	0	3	153.47038	-0.00012	683.75462	530.28412
3	0	0	1	1	3	1	1	0	0	4	151.48231	-0.00003	689.70140	538.21906
4	0	0	1	1	4	1	1	0	0	5	149.49279	0.00000	697.63032	548.13753
5	0	0	1	1	5	1	1	0	0	6	147.50187	-0.00001	707.54126	560.03938
6	0	0	1	1	6	1	1	0	0	7	145.50962	0.00000	719.43409	573.92447
7	0	0	1	1	7	1	1	0	0	8	143.51605	-0.00001	733.30864	589.79258
8	0	0	1	1	8	1	1	0	0	9	141.52121	-0.00001	749.16472	607.64350
9	0	0	1	1	9	1	1	0	0	10	139.52512	-0.00002	767.00212	627.47699
10	0	0	1	1	10	1	1	0	0	11	137.52783	-0.00001	786.82059	649.29275
11	0	0	1	1	11	1	1	0	0	12	135.52934	0.00000	808.61985	673.09051
12	0	0	1	1	12	1	1	0	0	13	133.52969	-0.00001	832.39961	698.86991
13	0	0	1	1	13	1	1	0	0	14	131.52893	-0.00001	858.15954	726.63060
14	0	0	1	1	14	1	1	0	0	15	129.52705	-0.00002	885.89928	756.37220
15	0	0	1	1	15	1	1	0	0	16	127.52411	-0.00004	915.61845	788.09430
16	0	0	1	1	16	1	1	0	0	17	125.52018	-0.00003	947.31664	821.79644
17	0	0	1	1	17	1	1	0	0	18	123.51521	-0.00004	980.99342	857.47816
18	0	0	1	1	18	1	1	0	0	19	121.50933	-0.00002	1016.64832	895.13897
19	0	0	1	1	19	1	1	0	0	20	119.50248	-0.00002	1054.28084	934.77834
20	0	0	1	1	20	1	1	0	0	21	117.49487	0.00011	1093.89049	976.39572
21	0	0	1	1	21	1	1	0	0	22	115.48617	0.00001	1135.47669	1019.99053
22	0	0	1	1	22	1	1	0	0	23	113.47672	-0.00001	1179.03889	1065.56217
23	0	0	1	1	23	1	1	0	0	24	111.46645	-0.00004	1224.57649	1113.10999
24	0	0	1	1	24	1	1	0	0	25	109.45552	0.00001	1272.08885	1162.63334
25	0	0	1	1	25	1	1	0	0	26	107.44379	0.00001	1321.57533	1214.13154
26	0	0	1	1	26	1	1	0	0	27	105.43131	-0.00007	1373.03523	1267.60385
27	0	0	1	1	27	1	1	0	0	28	103.41833	0.00002	1426.46786	1323.04955
28	0	0	1	1	28	1	1	0	0	29	101.40464	0.00001	1481.87248	1380.46786
29	0	0	1	1	29	1	1	0	0	30	99.39024	-0.00011	1539.24832	1439.85797
30	0	0	1	1	30	1	1	0	0	31	97.37556	0.00003	1598.59460	1501.21907
31	0	0	1	1	31	1	1	0	0	32	95.36017	-0.00003	1659.91050	1564.55030
32	0	0	1	1	32	1	1	0	0	33	93.34419	-0.00020	1723.19517	1629.85078
33	0	0	1	1	2	1	1	0	0	1	163.38939	0.00001	683.75462	520.36524
34	0	0	1	1	3	1	1	0	0	2	165.36862	0.00003	689.70140	524.33282
35	0	0	1	1	4	1	1	0	0	3	167.34621	0.00001	697.63032	530.28412
36	0	0	1	1	5	1	1	0	0	4	169.32223	0.00003	707.54126	538.21906
37	0	0	1	1	6	1	1	0	0	5	171.29658	0.00002	719.43409	548.13753
38	0	0	1	1	7	1	1	0	0	6	173.26932	0.00007	733.30864	560.03938
39	0	0	1	1	8	1	1	0	0	7	175.24028	0.00002	749.16472	573.92447
40	0	0	1	1	9	1	1	0	0	8	177.20958	0.00004	767.00212	589.79258
41	0	0	1	1	10	1	1	0	0	9	179.17711	0.00002	786.82059	607.64350
42	0	0	1	1	11	1	1	0	0	10	181.14291	0.00005	808.61985	627.47699
43	0	0	1	1	12	1	1	0	0	11	183.10689	0.00003	832.39961	649.29275
44	0	0	1	1	13	1	1	0	0	12	185.06906	0.00002	858.15954	673.09051
45	0	0	1	1	14	1	1	0	0	13	187.02940	0.00003	885.89928	698.86991
46	0	0	1	1	15	1	1	0	0	14	188.98787	0.00003	915.61845	726.63060
47	0	0	1	1	16	1	1	0	0	15	190.94447	0.00003	947.31664	756.37220
48	0	0	1	1	17	1	1	0	0	16	192.89914	0.00002	980.99342	788.09430
49	0	0	1	1	18	1	1	0	0	17	194.85191	0.00003	1016.64832	821.79644
50	0	0	1	1	19	1	1	0	0	18	196.80272	0.00004	1054.28084	857.47816
51	0	0	1	1	20	1	1	0	0	19	198.75155	0.00003	1093.89049	895.13897
52	0	0	1	1	21	1	1	0	0	20	200.69838	0.00003	1135.47669	934.77834
53	0	0	1	1	22	1	1	0	0	21	202.64342	0.00025	1179.03889	976.39572W
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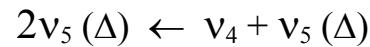
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3	0	0	1	1	26	1	1	0	0	25	210.40192	0.00003	1373.03523	1162.63334
4	0	0	1	1	27	1	1	0	0	26	212.33636	0.00003	1426.46786	1214.13154
5	0	0	1	1	28	1	1	0	0	27	214.26866	0.00004	1481.87248	1267.60385
6	0	0	1	1	29	1	1	0	0	28	216.19880	0.00003	1539.24832	1323.04955
7	0	0	1	1	30	1	1	0	0	29	218.12679	0.00004	1598.59460	1380.46786
8	0	0	1	1	31	1	1	0	0	30	220.05258	0.00005	1659.91050	1439.85797
9	0	0	1	1	32	1	1	0	0	31	221.97617	0.00006	1723.19517	1501.21907
10	0	0	1	1	33	1	1	0	0	32	223.89743	-0.00001	1788.44775	1564.55030
11	0	0	1	1	34	1	1	0	0	33	225.81653	-0.00002	1855.66733	1629.85078
12	0	0	1	1	35	1	1	0	0	34	227.73345	0.00007	1924.85299	1697.11961
13	0	0	1	1	36	1	1	0	0	35	229.64796	0.00001	1996.00378	1766.35584
14	0	0	1	1	1	1	-1	0	0	1	159.41595	0.00001	679.79005	520.37411
15	0	0	1	1	2	1	-1	0	0	2	159.39520	0.00003	683.75462	524.35945
16	0	0	1	1	3	1	-1	0	0	3	159.36406	0.00003	689.70140	530.33737
17	0	0	1	1	4	1	-1	0	0	4	159.32250	-0.00001	697.63032	538.30781
18	0	0	1	1	5	1	-1	0	0	5	159.27067	0.00005	707.54126	548.27064
19	0	0	1	1	6	1	-1	0	0	6	159.20842	0.00006	719.43409	560.22573
20	0	0	1	1	7	1	-1	0	0	7	159.13567	-0.00007	733.30864	574.17289
21	0	0	1	1	8	1	-1	0	0	8	159.05281	0.00003	749.16472	590.11194
22	0	0	1	1	9	1	-1	0	0	9	158.95957	0.00009	767.00212	608.04264
23	0	0	1	1	10	1	-1	0	0	10	158.85566	-0.00019	786.82059	627.96474
24	0	0	1	1	12	1	-1	0	0	12	158.61769	0.00004	832.39961	673.78196
25	0	0	1	-1	1	1	-1	0	0	2	155.43767	0.00002	679.79710	524.35945
26	0	0	1	-1	2	1	-1	0	0	3	153.43862	0.00022	683.77578	530.33737W
27	0	0	1	-1	3	1	-1	0	0	4	151.43587	-0.00003	689.74371	538.30781
28	0	0	1	-1	4	1	-1	0	0	5	149.43028	0.00009	697.70083	548.27064
29	0	0	1	-1	5	1	-1	0	0	6	147.42130	0.00000	707.64702	560.22573
30	0	0	1	-1	6	1	-1	0	0	7	145.40925	0.00000	719.58215	574.17289
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32	0	0	1	-1	8	1	-1	0	0	9	141.37583	-0.00002	749.41849	608.04264
33	0	0	1	-1	9	1	-1	0	0	10	139.35452	-0.00004	767.31930	627.96474
34	0	0	1	-1	10	1	-1	0	0	11	137.33023	-0.00002	787.20820	649.87795
35	0	0	1	-1	11	1	-1	0	0	12	135.30294	-0.00002	809.08492	673.78196
36	0	0	1	-1	12	1	-1	0	0	13	133.27271	-0.00003	832.94916	699.67642
37	0	0	1	-1	13	1	-1	0	0	14	131.23958	-0.00002	858.80057	727.56097
38	0	0	1	-1	14	1	-1	0	0	15	129.20356	-0.00004	886.63880	757.43520
39	0	0	1	-1	15	1	-1	0	0	16	127.16469	-0.00007	916.46345	789.29869
40	0	0	1	-1	16	1	-1	0	0	17	125.12310	-0.00004	948.27412	823.15099
41	0	0	1	-1	17	1	-1	0	0	18	123.07871	-0.00004	982.07035	858.99160
42	0	0	1	-1	18	1	-1	0	0	19	121.03164	-0.00003	1017.85167	896.82001
43	0	0	1	-1	19	1	-1	0	0	20	118.98188	-0.00002	1055.61759	936.63569
44	0	0	1	-1	20	1	-1	0	0	21	116.92951	0.00000	1095.36757	978.43806
45	0	0	1	-1	21	1	-1	0	0	22	114.87451	-0.00003	1137.10105	1022.22652
46	0	0	1	-1	22	1	-1	0	0	23	112.81708	0.00007	1180.81746	1068.00045
47	0	0	1	-1	23	1	-1	0	0	24	110.75697	-0.00002	1226.51618	1115.75919
48	0	0	1	-1	24	1	-1	0	0	25	108.69447	-0.00003	1274.19657	1165.50207
49	0	0	1	-1	25	1	-1	0	0	26	106.62956	-0.00005	1323.85797	1217.22835
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52	0	0	1	-1	28	1	-1	0	0	29	100.42087	-0.00007	1484.72111	1384.30018
53	0	0	1	-1	29	1	-1	0	0	30	98.34690	0.00004	1542.29931	1443.95245
54	0	0	1	-1	30	1	-1	0	0	31	96.27044	-0.00017	1601.85477	1505.58415
55	0	0	1	-1	31	1	-1	0	0	32	94.19222	-0.00001	1663.38664	1569.19441
56	0	0	1	-1	32	1	-1	0	0	33	92.11164	-0.00014	1726.89408	1634.78230
57	0	0	1	-1	33	1	-1	0	0	34	90.02912	-0.00018	1792.37620	1702.34690
58	0	0	1	-1	3	1	-1	0	0	1	163.40167	0.00001	683.77578	520.37411
59	0	0	1	-1	4	1	-1	0	0	2	165.38428	0.00001	689.74371	524.35945
60	0	0	1	-1	5	1	-1	0	0	3	167.36350	0.00004	697.70083	530.33737
	0	0	1	-1	6	1	-1	0	0	4	169.33924	0.00003	707.64702	538.30781
	0	0	1	-1	7	1	-1	0	0	5	171.31150	-0.00001	719.58215	548.27064
	0	0	1	-1	8	1	-1	0	0	6	173.28062	0.00031	733.50603	560.22573W
	0	0	1	-1	9	1	-1	0	0	7	175.24561	0.00001	749.41849	574.17289
	0	0	1	-1	10	1	-1	0	0	8	177.20737	0.00002	767.31930	590.11194
	0	0	1	-1	11	1	-1	0	0	9	179.16557	0.00001	787.20820	608.04264
	0	0	1	-1	12	1	-1	0	0	10	181.12019	0.00001	809.08492	627.96474
	0	0	1	-1	13	1	-1	0	0	11	183.07120	-0.00001	832.94916	649.87795
	0	0	1	-1	14	1	-1	0	0	12	185.01859	-0.00002	858.80057	673.78196

1	0	0	1	-1	14	1	-1	0	0	13	186.96238	0.00001	886.63880	699.67642
2	0	0	1	-1	15	1	-1	0	0	14	188.90247	-0.00001	916.46345	727.56097
3	0	0	1	-1	16	1	-1	0	0	15	190.83892	0.00000	948.27412	757.43520
4	0	0	1	-1	17	1	-1	0	0	16	192.77165	-0.00001	982.07035	789.29869
5	0	0	1	-1	18	1	-1	0	0	17	194.70068	-0.00001	1017.85167	823.15099
6	0	0	1	-1	19	1	-1	0	0	18	196.62599	0.00000	1055.61759	858.99160
7	0	0	1	-1	20	1	-1	0	0	19	198.54756	0.00001	1095.36757	896.82001
8	0	0	1	-1	21	1	-1	0	0	20	200.46537	0.00001	1137.10105	936.63569
9	0	0	1	-1	22	1	-1	0	0	21	202.37949	0.00009	1180.81746	978.43806
10	0	0	1	-1	23	1	-1	0	0	22	204.28965	-0.00001	1226.51618	1022.22652
11	0	0	1	-1	24	1	-1	0	0	23	206.19613	0.00001	1274.19657	1068.00045
12	0	0	1	-1	25	1	-1	0	0	24	208.09884	0.00007	1323.85797	1115.75919
13	0	0	1	-1	26	1	-1	0	0	25	209.99761	0.00000	1375.49968	1165.50207
14	0	0	1	-1	27	1	-1	0	0	26	211.89264	0.00002	1429.12098	1217.22835
15	0	0	1	-1	28	1	-1	0	0	27	213.78381	0.00002	1484.72111	1270.93732
16	0	0	1	-1	29	1	-1	0	0	28	215.67115	0.00003	1542.29931	1326.62819
17	0	0	1	-1	30	1	-1	0	0	29	217.55463	0.00004	1601.85477	1384.30018
18	0	0	1	-1	31	1	-1	0	0	30	219.43420	0.00000	1663.38664	1443.95245
19	0	0	1	-1	32	1	-1	0	0	31	221.30998	0.00005	1726.89408	1505.58415
20	0	0	1	-1	33	1	-1	0	0	32	223.18184	0.00005	1792.37620	1569.19441
21	0	0	1	-1	34	1	-1	0	0	33	225.04980	0.00003	1859.83208	1634.78230
22	0	0	1	-1	35	1	-1	0	0	34	226.91391	0.00004	1929.26077	1702.34690
23	0	0	1	-1	36	1	-1	0	0	35	228.77397	-0.00011	2000.66131	1771.88724
24	0	0	1	-1	1	1	1	0	0	1	159.43188	0.00002	679.79710	520.36524
25	0	0	1	-1	2	1	1	0	0	2	159.44297	0.00001	683.77578	524.33282
26	0	0	1	-1	3	1	1	0	0	3	159.45962	0.00002	689.74371	530.28412
27	0	0	1	-1	4	1	1	0	0	4	159.48181	0.00003	697.70083	538.21906
28	0	0	1	-1	5	1	1	0	0	5	159.50950	0.00000	707.64702	548.13753
29	0	0	1	-1	6	1	1	0	0	6	159.54246*	-0.00030	719.58215	560.03938W
30	0	0	1	-1	7	1	1	0	0	7	159.58161	0.00004	733.50603	573.92447
31	0	0	1	-1	8	1	1	0	0	8	159.62588	-0.00003	749.41849	589.79258
32	0	0	1	-1	9	1	1	0	0	9	159.67575	-0.00005	767.31930	607.64350
33	0	0	1	-1	10	1	1	0	0	10	159.73350*	0.00228	787.20820	627.47699W
34	0	0	1	-1	11	1	1	0	0	11	159.79210	-0.00007	809.08492	649.29275
35	0	0	1	-1	12	1	1	0	0	12	159.85875	0.00010	832.94916	673.09051
36	0	0	1	-1	13	1	1	0	0	13	159.93055	-0.00011	858.80057	698.86991

rms = 0.000052 cm⁻¹

v ₄ '	ℓ ₄ '	v ₅ '	ℓ ₅ '	J'	v ₄ ''	ℓ ₄ ''	v ₅ ''	ℓ ₅ ''	J''	OBS	OBS - CALC	E'	E''
0	0	2	0	0	1	1	1	-1	1	139.73733	-0.00012	1342.22645	1202.48900
0	0	2	0	1	1	1	1	-1	2	137.74484	0.00007	1344.21562	1206.47085
0	0	2	0	2	1	1	1	-1	3	135.75008	-0.00007	1348.19391	1212.44377
0	0	2	0	3	1	1	1	-1	4	133.75337	0.00004	1354.16122	1220.40789
0	0	2	0	4	1	1	1	-1	5	131.75405	0.00006	1362.11743	1230.36343
0	0	2	0	5	1	1	1	-1	6	129.75175	0.00006	1372.06234	1242.31065
0	0	2	0	6	1	1	1	-1	7	127.74591	0.00003	1383.99572	1256.24984
0	0	2	0	7	1	1	1	-1	8	125.73588	-0.00005	1397.91730	1272.18137
0	0	2	0	8	1	1	1	-1	9	123.72110	-0.00004	1413.82675	1290.10561
0	0	2	0	9	1	1	1	-1	10	121.70082	0.00010	1431.72370	1310.02298
0	0	2	0	10	1	1	1	-1	11	119.67390	0.00009	1451.60774	1331.93393
0	0	2	0	11	1	1	1	-1	12	117.63954	0.00004	1473.47840	1355.83891
0	0	2	0	12	1	1	1	-1	13	115.59692	0.00009	1497.33518	1381.73835
0	0	2	0	13	1	1	1	-1	14	113.54488	0.00003	1523.17752	1409.63267
0	0	2	0	14	1	1	1	-1	15	111.48257	0.00000	1551.00481	1439.52224
0	0	2	0	15	1	1	1	-1	16	109.40918	0.00012	1580.81643	1471.40738
0	0	2	0	16	1	1	1	-1	17	107.32352	0.00013	1612.61167	1505.28829
0	0	2	0	17	1	1	1	-1	18	105.22480	0.00009	1646.38981	1541.16510
0	0	2	0	18	1	1	1	-1	19	103.11213	-0.00011	1682.15007	1579.03782
0	0	2	0	19	1	1	1	-1	20	100.98541	0.00014	1719.89163	1618.90635
0	0	2	0	2	1	1	1	-1	1	145.70499	0.00008	1348.19391	1202.48900
0	0	2	0	3	1	1	1	-1	2	147.69037	0.00000	1354.16122	1206.47085
0	0	2	0	4	1	1	1	-1	3	149.67365	-0.00002	1362.11743	1212.44377
0	0	2	0	5	1	1	1	-1	4	151.64129	-0.00011	1387.80057	1220.40789

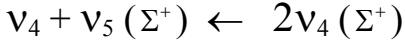
1	0	0	2	0	6	1	1	1	-1	5	153.63227	-0.00002	1383.99572	1230.36343
2	0	0	2	0	7	1	1	1	-1	6	155.60667	0.00002	1397.91730	1242.31065
3	0	0	2	0	8	1	1	1	-1	7	157.57710	0.00019	1413.82675	1256.24984
4	0	0	2	0	9	1	1	1	-1	8	159.54246	0.00013	1431.72370	1272.18137
5	0	0	2	0	10	1	1	1	-1	9	161.50216	0.00003	1451.60774	1290.10561
6	0	0	2	0	11	1	1	1	-1	10	163.45547	0.00005	1473.47840	1310.02298
7	0	0	2	0	12	1	1	1	-1	11	165.40128	0.00004	1497.33518	1331.93393
8	0	0	2	0	13	1	1	1	-1	12	167.33865	0.00004	1523.17752	1355.83891
9	0	0	2	0	14	1	1	1	-1	13	169.26657	0.00010	1551.00481	1381.73835
10	0	0	2	0	15	1	1	1	-1	14	171.18382	0.00006	1580.81643	1409.63267
11	0	0	2	0	16	1	1	1	-1	15	173.08947	0.00004	1612.61167	1439.52224
12	0	0	2	0	17	1	1	1	-1	16	174.98248	0.00005	1646.38981	1471.40738
13	0	0	2	0	18	1	1	1	-1	17	176.86188	0.00010	1682.15007	1505.28829
14	0	0	2	0	19	1	1	1	-1	18	178.72659	0.00007	1719.89163	1541.16510
15	0	0	2	0	20	1	1	1	-1	19	180.57581	0.00001	1759.61363	1579.03782
16	0	0	2	0	21	1	1	1	-1	20	182.40894	0.00012	1801.31517	1618.90635
17	0	0	2	0	22	1	1	1	-1	21	184.22491	0.00005	1844.99532	1660.77045
18	0	0	2	0	23	1	1	1	-1	22	186.02337	0.00005	1890.65309	1704.62977
19	0	0	2	0	24	1	1	1	-1	23	187.80370	0.00003	1938.28750	1750.48383
20	0	0	2	0	25	1	1	1	-1	24	189.56557	0.00015	1987.89749	1798.33206
21	0	0	2	0	26	1	1	1	-1	25	191.30822	0.00002	2039.48198	1848.17378
22	0	0	2	0	27	1	1	1	-1	26	193.03168	0.00002	2093.03990	1900.00824
23	0	0	2	0	28	1	1	1	-1	27	194.73527	-0.00022	2148.57010	1953.83461
24	0	0	2	0	29	1	1	1	-1	28	196.41921	-0.00025	2206.07144	2009.65198
25	0	0	2	0	30	1	1	1	-1	29	198.08326	-0.00008	2265.54275	2067.45942

rms = 0.000090 cm⁻¹

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''
0	0	2	2	3	1	1	1	1	2	169.25597	0.00001	1370.97815	1201.72219
0	0	2	2	4	1	1	1	1	3	171.23605	-0.00011	1378.93084	1207.69469
0	0	2	2	5	1	1	1	1	4	173.21418	0.00005	1388.87163	1215.65751
0	0	2	2	6	1	1	1	1	5	175.19031	0.00005	1400.80048	1225.61022
0	0	2	2	7	1	1	1	1	6	177.16511	0.00008	1414.71732	1237.55228
0	0	2	2	8	1	1	1	1	7	179.13919	0.00016	1430.62208	1251.48305
0	0	2	2	9	1	1	1	1	8	181.11301	0.00008	1448.51470	1267.40177
0	0	2	2	10	1	1	1	1	9	183.08746	-0.00001	1468.39508	1285.30761
0	0	2	2	11	1	1	1	1	10	185.06350	0.00001	1490.26312	1305.19963
0	0	2	2	12	1	1	1	1	11	187.04192	0.00002	1514.11873	1327.07683
0	0	2	2	13	1	1	1	1	12	189.02368	0.00003	1539.96178	1350.93813
0	0	2	2	14	1	1	1	1	13	191.00976	0.00002	1567.79214	1376.78240
0	0	2	2	15	1	1	1	1	14	193.00120	0.00001	1597.60969	1404.60850
0	0	2	2	16	1	1	1	1	15	194.99900	0.00000	1629.41426	1434.41526
0	0	2	2	17	1	1	1	1	16	197.00420	0.00000	1663.20571	1466.20152
0	0	2	2	18	1	1	1	1	17	199.01767	-0.00004	1698.98385	1499.96614
0	0	2	2	19	1	1	1	1	18	201.04039	-0.00007	1736.74850	1535.70804
0	0	2	2	20	1	1	1	1	19	203.07319	-0.00007	1776.49946	1573.42620
0	0	2	2	21	1	1	1	1	20	205.11697	0.00009	1818.23651	1613.11962
0	0	2	2	22	1	1	1	1	21	207.17197	-0.00001	1861.95941	1654.78743
0	0	2	2	23	1	1	1	1	22	209.23917	0.00002	1907.66792	1698.42877
0	0	2	2	24	1	1	1	1	23	211.31888	0.00000	1955.36175	1744.04287
0	0	2	2	25	1	1	1	1	24	213.41158	-0.00003	2005.04061	1791.62900
0	0	2	2	26	1	1	1	1	25	215.51779	0.00009	2056.70417	1841.18647
0	0	2	2	27	1	1	1	1	26	217.63748	0.00001	2110.35209	1892.71462
0	0	2	2	28	1	1	1	1	27	219.77137	0.00019	2165.98399	1946.21281
0	0	2	2	29	1	1	1	1	28	221.91921	0.00018	2223.59944	2001.68041
0	0	2	2	30	1	1	1	1	29	224.08137	0.00013	2283.19801	2059.11678
0	0	2	2	2	1	1	1	1	3	157.31885	-0.00006	1365.01359	1207.69469
0	0	2	2	3	1	1	1	1	4	155.32064	0.00000	1370.97815	1215.65751
0	0	2	2	4	1	1	1	1	5	153.32068	0.00006	1378.93084	1225.61022
0	0	2	2	5	1	1	1	1	6	151.31925	-0.00010	1388.87163	1237.55228
0	0	2	2	6	1	1	1	1	7	149.31748	0.00005	1400.80048	1251.48305
0	0	2	2	7	1	1	1	1	8	147.31559	0.00005	1414.71732	1267.40177
0	0	2	2	8	1	1	1	1	9	198.08326	-0.00008	2265.54275	1285.30761

1	0	0	2	2	9	1	1	1	1	10	143.31505	-0.00001	1448.51470	1305.19963
2	0	0	2	2	10	1	1	1	1	11	141.31823	-0.00002	1468.39508	1327.07683
3	0	0	2	2	11	1	1	1	1	12	139.32487	-0.00012	1490.26312	1350.93813
4	0	0	2	2	12	1	1	1	1	13	137.33632	0.00000	1514.11873	1376.78240
5	0	0	2	2	13	1	1	1	1	14	135.35324	-0.00004	1539.96178	1404.60850
6	0	0	2	2	14	1	1	1	1	15	133.37684	-0.00005	1567.79214	1434.41526
7	0	0	2	2	15	1	1	1	1	16	131.40810	-0.00007	1597.60969	1466.20152
8	0	0	2	2	16	1	1	1	1	17	129.44810	-0.00002	1629.41426	1499.96614
9	0	0	2	2	17	1	1	1	1	18	127.49765	-0.00002	1663.20571	1535.70804
10	0	0	2	2	18	1	1	1	1	19	125.55769	0.00004	1698.98385	1573.42620
11	0	0	2	2	19	1	1	1	1	20	123.62878	-0.00009	1736.74850	1613.11962
12	0	0	2	2	20	1	1	1	1	21	121.71202	-0.00001	1776.49946	1654.78743
13	0	0	2	2	21	1	1	1	1	22	119.80775	0.00001	1818.23651	1698.42877
14	0	0	2	2	22	1	1	1	1	23	117.91637	-0.00017	1861.95941	1744.04287
15	0	0	2	2	23	1	1	1	1	24	116.03892	0.00000	1907.66792	1791.62900
16	0	0	2	2	24	1	1	1	1	25	114.17532	0.00004	1955.36175	1841.18647
17	0	0	2	2	25	1	1	1	1	26	112.32591	-0.00008	2005.04061	1892.71462
18	0	0	2	2	2	1	-1	1	-1	2	163.29139	0.00005	1365.01359	1201.72226
19	0	0	2	2	3	1	-1	1	-1	3	163.28333	0.00021	1370.97815	1207.69503
20	0	0	2	2	4	1	-1	1	-1	4	163.27289	0.00059	1378.93084	1215.65854W
21	0	0	2	2	5	1	-1	1	-1	5	163.25900	0.00000	1388.87163	1225.61262
22	0	0	2	2	6	1	-1	1	-1	6	163.24316	-0.00023	1400.80048	1237.55708
23	0	0	2	2	7	1	-1	1	-1	7	163.22543	-0.00020	1414.71732	1251.49169
24	0	0	2	2	8	1	-1	1	-1	8	163.20648	0.00055	1430.62208	1267.41616W
25	0	0	2	2	9	1	-1	1	-1	9	163.18453	0.00001	1448.51470	1285.33018
26	0	0	2	2	10	1	-1	1	-1	10	163.16146	-0.00022	1468.39508	1305.23340
27	0	0	2	2	11	1	-1	1	-1	11	163.13718	-0.00049	1490.26312	1327.12545
28	0	0	2	2	12	1	-1	1	-1	12	169.25597	0.00017	1370.97805	1201.72226
29	0	0	2	2	13	1	-1	1	-1	13	171.23592	0.00038	1378.93057	1207.69503
30	0	0	2	2	14	1	-1	1	-1	14	173.21255	0.00009	1388.87100	1215.65854
31	0	0	2	2	15	1	-1	1	-1	15	175.18667	0.00008	1400.79921	1225.61262
32	0	0	2	2	16	1	-1	1	-1	16	177.15795	0.00001	1414.71503	1237.55708
33	0	0	2	2	17	1	-1	1	-1	17	179.12666	0.00008	1430.61827	1251.49169
34	0	0	2	2	18	1	-1	1	-1	18	181.09261	0.00006	1448.50870	1267.41616
35	0	0	2	2	19	1	-1	1	-1	19	183.05594	0.00003	1468.38608	1285.33018
36	0	0	2	2	20	1	-1	1	-1	20	185.01683	0.00010	1490.25013	1305.23340
37	0	0	2	2	21	1	-1	1	-1	21	186.97510	0.00001	1514.10054	1327.12545
38	0	0	2	2	22	1	-1	1	-1	22	188.93109	0.00003	1539.93697	1351.00592
39	0	0	2	2	23	1	-1	1	-1	23	190.88469	-0.00002	1567.75907	1376.87436
40	0	0	2	2	24	1	-1	1	-1	24	192.83611	-0.00001	1597.56645	1404.73033
41	0	0	2	2	25	1	-1	1	-1	25	194.78539	0.00005	1629.35868	1434.57334
42	0	0	2	2	26	1	-1	1	-1	26	196.73242	-0.00002	1663.13533	1466.40289
43	0	0	2	2	27	1	-1	1	-1	27	198.67748	0.00003	1698.89591	1500.21846
44	0	0	2	2	28	1	-1	1	-1	28	200.62040	0.00000	1736.63994	1536.01954
45	0	0	2	2	29	1	-1	1	-1	29	202.56144	0.00012	1776.36688	1573.80556
46	0	0	2	2	30	1	-1	1	-1	30	204.50027	0.00007	1818.07617	1613.57597
47	0	0	2	2	31	1	-1	1	-1	31	206.43708	0.00004	1861.76724	1655.33020
48	0	0	2	2	32	1	-1	1	-1	32	208.37192	0.00009	1907.43947	1699.06765
49	0	0	2	2	33	1	-1	1	-1	33	210.30459	0.00006	1955.09223	1744.78769
50	0	0	2	2	34	1	-1	1	-1	34	212.23529	0.00016	2004.72483	1792.48970
51	0	0	2	2	35	1	-1	1	-1	35	214.16380	0.00021	2056.33660	1842.17301
52	0	0	2	2	36	1	-1	1	-1	36	216.09000	0.00012	2109.92681	1893.83694
53	0	0	2	2	37	1	-1	1	-1	37	218.01413	0.00018	2165.49472	1947.48076
54	0	0	2	2	38	1	-1	1	-1	38	219.93591	0.00012	2223.03953	2003.10374
55	0	0	2	2	39	1	-1	1	-1	39	221.85561	0.00028	2282.56045	2060.70512
56	0	0	2	2	40	1	-1	1	-1	40	223.77217	-0.00040	2344.05666	2120.28409
57	0	0	2	2	41	1	-1	1	-1	41	225.31961	0.00009	1370.97805	1215.65854
58	0	0	2	2	42	1	-1	1	-1	42	227.31799	0.00005	1378.93057	1225.61262
59	0	0	2	2	43	1	-1	1	-1	43	229.31376	-0.00015	1388.87100	1237.55708
60	0	0	2	2	44	1	-1	1	-1	44	231.30751	0.00000	1400.79921	1251.49169
	0	0	2	2	45	1	-1	1	-1	45	233.18569	-0.00001	1448.50870	1305.23340
	0	0	2	2	46	1	-1	1	-1	46	235.20774*	0.00110	1468.38608	1327.12545
	0	0	2	2	47	1	-1	1	-1	47	237.24415	-0.00006	1490.25013	1351.00592
	0	0	2	2	48	1	-1	1	-1	48	239.22611	-0.00006	1514.10054	1376.87436
	0	0	2	2	49	1	-1	1	-1	49	241.20774*	0.000110	1539.93697	1404.73033W
	0	0	2	2	50	1	-1	1	-1	50	243.27532	0.00001	1448.50870	1343.57334

0	0	2	-2	15	1	-1	1	-1	16	131.16353	-0.00003	1597.56645	1466.40289	
1	0	0	2	-2	16	1	-1	1	-1	17	129.14014	-0.00007	1629.35868	1500.21846
2	0	0	2	-2	17	1	-1	1	-1	18	127.11570	-0.00009	1663.13533	1536.01954
3	0	0	2	-2	18	1	-1	1	-1	19	125.09025	-0.00010	1698.89591	1573.80556
4	0	0	2	-2	19	1	-1	1	-1	20	123.06383	-0.00013	1736.63994	1613.57597
5	0	0	2	-2	20	1	-1	1	-1	21	121.03631	-0.00037	1776.36688	1655.33020
6	0	0	2	-2	21	1	-1	1	-1	22	119.00860	0.00007	1818.07617	1699.06765
7	0	0	2	-2	22	1	-1	1	-1	23	116.97951	-0.00004	1861.76724	1744.78769
8	0	0	2	-2	23	1	-1	1	-1	24	114.94969	-0.00008	1907.43947	1792.48970
9	0	0	2	-2	2	1	1	1	1	2	163.29139	0.00000	1365.01357	1201.72219
10	0	0	2	-2	3	1	1	1	1	3	163.28333	-0.00004	1370.97805	1207.69469
11	0	0	2	-2	4	1	1	1	1	4	163.27289	-0.00017	1378.93057	1215.65751
12	0	0	2	-2	5	1	1	1	1	5	163.26071	-0.00007	1388.87100	1225.61022
13	0	0	2	-2	6	1	1	1	1	6	163.24675	-0.00018	1400.79921	1237.55228
14	0	0	2	-2	7	1	1	1	1	7	163.23219	0.00021	1414.71503	1251.48305
15	0	0	2	-2	8	1	1	1	1	8	163.21652	0.00002	1430.61827	1267.40177
16	0	0	2	-2	9	1	1	1	1	9	163.20159*	0.00049	1448.50870	1285.30761
17	0	0	2	-2	10	1	1	1	1	10	163.18586*	-0.00060	1468.38608	1305.19963W
18	0	0	2	-2	11	1	1	1	1	11	163.17306	-0.00025	1490.25013	1327.07683
19	0	0	2	-2	12	1	1	1	1	12	163.16206	-0.00035	1514.10054	1350.93813

rms = 0.00013 cm⁻¹

<i>v</i> _{4'}	<i>l</i> _{4'}	<i>v</i> _{5'}	<i>l</i> _{5'}	<i>J'</i>	<i>v</i> _{4''}	<i>l</i> _{4''}	<i>v</i> _{5''}	<i>l</i> _{5''}	<i>J''</i>	OBS	OBS - CALC	E'	E''
1	1	1	-1	0	2	0	0	0	1	164.56916	0.00023	1200.49810	1035.92917
29	1	1	1	-1	1	2	0	0	0	162.57244	0.00022	1202.48900	1039.91679
30	1	1	1	-1	2	2	0	0	0	160.57314	0.00018	1206.47085	1045.89789
31	1	1	1	-1	3	2	0	0	0	158.57178	0.00011	1212.44377	1053.87209
32	1	1	1	-1	4	2	0	0	0	156.56914	0.00013	1220.40789	1063.83887
33	1	1	1	-1	5	2	0	0	0	154.56590	0.00006	1230.36343	1075.79759
34	1	1	1	-1	6	2	0	0	0	152.56325	0.00007	1242.31065	1089.74746
35	1	1	1	-1	7	2	0	0	0	150.56219	-0.00004	1256.24984	1105.68761
36	1	1	1	-1	8	2	0	0	0	148.56437	0.00002	1272.18137	1123.61701
37	1	1	1	-1	9	2	0	0	0	146.57100	-0.00004	1290.10561	1143.53456
38	1	1	1	-1	10	2	0	0	0	144.58388	-0.00003	1310.02298	1165.43907
39	1	1	1	-1	11	2	0	0	0	142.60461	-0.00007	1331.93393	1189.32925
40	1	1	1	-1	12	2	0	0	0	140.63508	-0.00003	1355.83891	1215.20380
41	1	1	1	-1	13	2	0	0	0	138.67691	-0.00007	1381.73835	1243.06138
42	1	1	1	-1	14	2	0	0	0	136.73193	-0.00009	1409.63267	1272.90065
43	1	1	1	-1	15	2	0	0	0	134.80182	-0.00009	1439.52224	1304.72033
44	1	1	1	-1	16	2	0	0	0	132.88807	-0.00012	1471.40738	1338.51918
45	1	1	1	-1	17	2	0	0	0	130.99215	-0.00010	1505.28829	1374.29604
46	1	1	1	-1	18	2	0	0	0	129.11505	-0.00020	1541.16510	1412.04985
47	1	1	1	-1	19	2	0	0	0	127.25801	-0.00019	1579.03782	1451.77962
48	1	1	1	-1	20	2	0	0	0	125.42186	0.00001	1618.90635	1493.48450
49	1	1	1	-1	21	2	0	0	0	123.60678	0.00001	1660.77045	1537.16368
50	1	1	1	-1	22	2	0	0	0	121.81339	0.00008	1704.62977	1582.81646
51	1	1	1	-1	23	2	0	0	0	120.04162	-0.00002	1750.48383	1630.44219
52	1	1	1	-1	1	2	0	0	0	168.55386	0.00015	1202.48900	1033.93529
53	1	1	1	-1	2	2	0	0	0	170.54182	0.00014	1206.47085	1035.92917
54	1	1	1	-1	3	2	0	0	0	172.52715	0.00017	1212.44377	1039.91679
55	1	1	1	-1	4	2	0	0	0	174.51017	0.00017	1220.40789	1045.89789
56	1	1	1	-1	5	2	0	0	0	176.49149	0.00015	1230.36343	1053.87209
57	1	1	1	-1	6	2	0	0	0	178.47191	0.00013	1242.31065	1063.83887
58	1	1	1	-1	7	2	0	0	0	180.45235	0.00009	1256.24984	1075.79759
59	1	1	1	-1	8	2	0	0	0	182.43398	0.00008	1272.18137	1089.74746
60	1	1	1	-1	9	2	0	0	0	184.41804	0.00004	1290.10561	1105.68761
1	1	1	-1	10	2	0	0	0	9	186.40600	0.00003	1310.02298	1123.61701
1	1	1	-1	11	2	0	0	0	10	188.39937	0.00001	1331.93393	1143.53456
1	1	1	-1	12	2	0	0	0	11	190.39984	0.00000	1355.83891	1165.43907
1	1	1	-1	13	2	0	0	0	12	192.40906	-0.00004	1381.73835	1189.32925
1	1	1	-1	14	2	0	0	0	13	194.42876	-0.00011	1409.63267	1215.20380
1	1	1	-1	15	2	0	0	0	14	196.46078	-0.00008	1439.52224	1243.06138
1	1	1	-1	16	2	0	0	0	16	0 URL: http://mc.manuscriptcentral.com/af/tmp1	1.40738	1272.90065	

1	1	1	-1	17	2	0	0	0	16	200.56784	-0.00011	1505.28829	1304.72033
1	1	1	-1	18	2	0	0	0	17	202.64600	0.00009	1541.16510	1338.51918
2	1	1	-1	19	2	0	0	0	18	204.74167	-0.00012	1579.03782	1374.29604
3	1	1	-1	20	2	0	0	0	19	206.85638	-0.00013	1618.90635	1412.04985
4	1	1	-1	21	2	0	0	0	20	208.99072	-0.00011	1660.77045	1451.77962
5	1	1	-1	22	2	0	0	0	21	211.14512	-0.00015	1704.62977	1493.48450
6	1	1	-1	23	2	0	0	0	22	213.32014	0.00000	1750.48383	1537.16368
7	1	1	-1	24	2	0	0	0	23	215.51550	-0.00010	1798.33206	1582.81646
8	1	1	-1	25	2	0	0	0	24	217.73151	-0.00008	1848.17378	1630.44219
9	1	1	-1	26	2	0	0	0	25	219.96783	-0.00016	1900.00824	1680.04024
10	1	1	-1	27	2	0	0	0	26	222.22486	0.00031	1953.83461	1731.61005
11	1	1	-1	28	2	0	0	0	27	224.50086	-0.00009	2009.65198	1785.15104
12	1	1	-1	29	2	0	0	0	28	226.79691	0.00013	2067.45942	1840.66263

rms = 0.00012 cm⁻¹

$$\nu_4 + \nu_5 (\Delta) \leftarrow 2\nu_4 (\Delta)$$

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
21	1	1	1	1	3	2	2	0	0	2	162.99424	0.00014	1207.69469	1044.70059
22	1	1	1	1	4	2	2	0	0	3	164.97687	-0.00005	1215.65751	1050.68059
23	1	1	1	1	5	2	2	0	0	4	166.95596	-0.00001	1225.61022	1058.65425
24	1	1	1	1	6	2	2	0	0	5	168.93039	-0.00002	1237.55228	1068.62187
25	1	1	1	1	7	2	2	0	0	6	170.89922	-0.00003	1251.48305	1080.58379
26	1	1	1	1	8	2	2	0	0	7	172.86133	0.00002	1267.40177	1094.54045
27	1	1	1	1	9	2	2	0	0	8	174.81530	0.00003	1285.30761	1110.49234
28	1	1	1	1	10	2	2	0	0	9	176.75967	0.00002	1305.19963	1128.43999
29	1	1	1	1	11	2	2	0	0	10	178.69288	0.00004	1327.07683	1148.38399
30	1	1	1	1	12	2	2	0	0	11	180.61321	0.00006	1350.93813	1170.32497
31	1	1	1	1	13	2	2	0	0	12	182.51889	0.00005	1376.78240	1194.26357
32	1	1	1	1	14	2	2	0	0	13	184.40815	0.00004	1404.60850	1220.20039
33	1	1	1	1	15	2	2	0	0	14	186.27927	0.00004	1434.41526	1248.13603
34	1	1	1	1	16	2	2	0	0	15	188.13061	0.00010	1466.20152	1278.07100
35	1	1	1	1	17	2	2	0	0	16	189.96043	0.00003	1499.96614	1310.00574
36	1	1	1	1	18	2	2	0	0	17	191.76756	0.00006	1535.70804	1343.94054
37	1	1	1	1	19	2	2	0	0	18	193.55061	0.00001	1573.42620	1379.87559
38	1	1	1	1	20	2	2	0	0	19	195.30873	0.00003	1613.11962	1417.81092
39	1	1	1	1	21	2	2	0	0	20	197.04104	0.00000	1654.78743	1457.74639
40	1	1	1	1	22	2	2	0	0	21	198.74705	0.00000	1698.42877	1499.68172
41	1	1	1	1	23	2	2	0	0	22	200.42638	0.00000	1744.04287	1543.61649
42	1	1	1	1	24	2	2	0	0	23	202.07883	-0.00002	1791.62900	1589.55014
43	1	1	1	1	25	2	2	0	0	24	203.70431	-0.00016	1841.18647	1637.48199
44	1	1	1	1	26	2	2	0	0	25	205.30331	-0.00004	1892.71462	1687.41127
45	1	1	1	1	27	2	2	0	0	26	206.87555	-0.00015	1946.21281	1739.33712
46	1	1	1	1	28	2	2	0	0	27	208.42215*	0.00034	2001.68041	1793.25860
47	1	1	1	1	29	2	2	0	0	28	209.94173	-0.00032	2059.11678	1849.17473
48	1	1	1	1	30	2	2	0	0	29	211.43618	-0.00059	2118.52125	1907.08448W
49	1	1	1	1	31	2	2	0	0	30	212.90628	-0.00012	2179.89318	1966.98678
50	1	1	1	1	2	2	2	0	0	3	151.04207	0.00047	1201.72219	1050.68059
51	1	1	1	1	3	2	2	0	0	4	149.04058	0.00015	1207.69469	1058.65425
52	1	1	1	1	4	2	2	0	0	5	147.03562	-0.00002	1215.65751	1068.62187
53	1	1	1	1	5	2	2	0	0	6	145.02639	-0.00003	1225.61022	1080.58379
54	1	1	1	1	6	2	2	0	0	7	143.01179	-0.00003	1237.55228	1094.54045
55	1	1	1	1	7	2	2	0	0	8	140.99067	-0.00004	1251.48305	1110.49234
56	1	1	1	1	8	2	2	0	0	9	138.96189	0.00011	1267.40177	1128.43999
57	1	1	1	1	9	2	2	0	0	10	136.92359	-0.00002	1285.30761	1148.38399
58	1	1	1	1	10	2	2	0	0	11	134.87459	-0.00006	1305.19963	1170.32497
59	1	1	1	1	11	2	2	0	0	12	132.81324	-0.00002	1327.07683	1194.26357
60	1	1	1	1	12	2	2	0	0	13	130.73773	0.00000	1350.93813	1220.20039
	1	1	1	1	13	2	2	0	0	14	128.64635	-0.00002	1376.78240	1248.13603
	1	1	1	1	14	2	2	0	0	15	126.53748	-0.00002	1404.60850	1278.07100
	1	1	1	1	15	2	2	0	0	16	124.40953	0.00001	1434.41526	1310.00574
	1	1	1	1	16	2	2	0	0	17	122.26095	-0.00002	1466.20152	1343.94054
	1	1	1	1	17	2	2	0	0	18	120.09049	-0.00006	1499.96614	1379.87559
	1	1	1	1	18	2	2	0	0	19	117.89707	-0.00006	1535.70804	1417.81092
	1	1	1	1	19	2	2	0	0	20	2URL: http://mc.manuscriptcentral.com/andtmp73.42620	1457.74639		

1	1	1	1	20	2	2	0	0	21	113.43793	0.00003	1613.11962	1499.68172	
1	1	1	1	21	2	2	0	0	22	111.17072	-0.00022	1654.78743	1543.61649	
2	1	1	1	22	2	2	0	0	23	108.87840	-0.00023	1698.42877	1589.55014	
3	1	1	1	23	2	2	0	0	24	106.56094	0.00007	1744.04287	1637.48199	
4	1	-1	1	-1	2	2	2	0	0	2	157.02161	-0.00006	1201.72226	1044.70059
5	1	-1	1	-1	3	2	2	0	0	3	157.01448	0.00004	1207.69503	1050.68059
6	1	-1	1	-1	4	2	2	0	0	4	157.00446	0.00018	1215.65854	1058.65425
7	1	-1	1	-1	5	2	2	0	0	5	156.99063	-0.00012	1225.61262	1068.62187
8	1	-1	1	-1	6	2	2	0	0	6	156.97331	0.00002	1237.55708	1080.58379
9	1	-1	1	-1	7	2	2	0	0	7	156.95117	-0.00007	1251.49169	1094.54045
10	1	-1	1	-1	8	2	2	0	0	8	156.92360	-0.00022	1267.41616	1110.49234
11	1	-1	1	-1	9	2	2	0	0	9	156.89021	0.00002	1285.33018	1128.43999
12	1	-1	1	-1	10	2	2	0	0	10	156.84927	-0.00013	1305.23340	1148.38399
13	1	-1	1	-1	11	2	2	0	0	11	156.80031	-0.00017	1327.12545	1170.32497
14	1	-1	1	-1	12	2	2	0	0	12	156.74220	-0.00015	1351.00592	1194.26357
15	1	-1	1	-1	13	2	2	0	0	13	156.67360	-0.00038	1376.87436	1220.20039
16	1	-1	1	-1	14	2	2	0	0	14	156.59410	-0.00020	1404.73033	1248.13603
17	1	-1	1	-1	3	2	-2	0	0	2	162.99424	-0.00030	1207.69503	1044.70049
18	1	-1	1	-1	4	2	-2	0	0	3	164.97839	-0.00006	1215.65854	1050.68009
19	1	-1	1	-1	5	2	-2	0	0	4	166.95980	-0.00007	1225.61262	1058.65275
20	1	-1	1	-1	6	2	-2	0	0	5	168.93873	0.00000	1237.55708	1068.61835
21	1	-1	1	-1	7	2	-2	0	0	6	170.91491	-0.00001	1251.49169	1080.57677
22	1	-1	1	-1	8	2	-2	0	0	7	172.88838	0.00004	1267.41616	1094.52781
23	1	-1	1	-1	9	2	-2	0	0	8	174.85893	0.00004	1285.33018	1110.47128
24	1	-1	1	-1	10	2	-2	0	0	9	176.82651	0.00006	1305.23340	1128.40695
25	1	-1	1	-1	11	2	-2	0	0	10	178.79096	0.00007	1327.12545	1148.33456
26	1	-1	1	-1	12	2	-2	0	0	11	180.75219	0.00009	1351.00592	1170.25382
27	1	-1	1	-1	13	2	-2	0	0	12	182.71005	0.00010	1376.87436	1194.16442
28	1	-1	1	-1	14	2	-2	0	0	13	184.66445	0.00011	1404.73033	1220.06599
29	1	-1	1	-1	15	2	-2	0	0	14	186.61532	0.00016	1434.57334	1247.95819
30	1	-1	1	-1	16	2	-2	0	0	15	188.56243	0.00012	1466.40289	1277.84059
31	1	-1	1	-1	17	2	-2	0	0	16	190.50601	0.00031	1500.21846	1309.71276
32	1	-1	1	-1	18	2	-2	0	0	17	192.44545	0.00017	1536.01954	1343.57425
33	1	-1	1	-1	19	2	-2	0	0	18	194.38170*	0.00070	1573.80556	1379.42457W
34	1	-1	1	-1	20	2	-2	0	0	19	196.31294	0.00015	1613.57597	1417.26319
35	1	-1	1	-1	21	2	-2	0	0	20	198.24082	0.00018	1655.33020	1457.08957
36	1	-1	1	-1	22	2	-2	0	0	21	200.16464	0.00012	1699.06765	1498.90313
37	1	-1	1	-1	23	2	-2	0	0	22	202.08458	0.00015	1744.78769	1542.70326
38	1	-1	1	-1	24	2	-2	0	0	23	204.00041	0.00006	1792.48970	1588.48935
39	1	-1	1	-1	25	2	-2	0	0	24	205.91238	0.00008	1842.17301	1636.26071
40	1	-1	1	-1	26	2	-2	0	0	25	207.82022	-0.00006	1893.83694	1686.01666
41	1	-1	1	-1	27	2	-2	0	0	26	209.72419	-0.00008	1947.48076	1737.75648
42	1	-1	1	-1	28	2	-2	0	0	27	211.62428	-0.00003	2003.10374	1791.47943
43	1	-1	1	-1	29	2	-2	0	0	28	213.52043	0.00003	2060.70512	1847.18472
44	1	-1	1	-1	30	2	-2	0	0	29	215.41220	-0.00033	2120.28409	1904.87155
45	1	-1	1	-1	31	2	-2	0	0	30	217.30090	0.00015	2181.83983	1964.53909
46	1	-1	1	-1	32	2	-2	0	0	31	219.18492	-0.00010	2245.37149	2026.18647
47	1	-1	1	-1	33	2	-2	0	0	32	221.06517	-0.00021	2310.87818	2089.81280
48	1	-1	1	-1	34	2	-2	0	0	33	222.94173	-0.00009	2378.35899	2155.41717
49	1	-1	1	-1	2	2	-2	0	0	3	151.04207	-0.00010	1201.72226	1050.68009
50	1	-1	1	-1	3	2	-2	0	0	4	149.04246	0.00017	1207.69503	1058.65275
51	1	-1	1	-1	4	2	-2	0	0	5	147.04011	-0.00007	1215.65854	1068.61835
52	1	-1	1	-1	5	2	-2	0	0	6	145.03562	-0.00024	1225.61262	1080.57677
53	1	-1	1	-1	6	2	-2	0	0	7	143.02923	-0.00004	1237.55708	1094.52781
54	1	-1	1	-1	7	2	-2	0	0	8	141.02039	-0.00001	1251.49169	1110.47128
55	1	-1	1	-1	8	2	-2	0	0	9	139.00897	-0.00023	1267.41616	1128.40695
56	1	-1	1	-1	9	2	-2	0	0	10	136.99565	0.00004	1285.33018	1148.33456
57	1	-1	1	-1	10	2	-2	0	0	11	134.97961	0.00003	1305.23340	1170.25382
58	1	-1	1	-1	11	2	-2	0	0	12	132.96111	0.00008	1327.12545	1194.16442
59	1	-1	1	-1	12	2	-2	0	0	13	130.93997	0.00004	1351.00592	1220.06599
60	1	-1	1	-1	13	2	-2	0	0	14	128.91627	0.00009	1376.87436	1247.95819
1	-1	1	-1	14	2	-2	0	0	15	126.88989	0.00014	1404.73033	1277.84059	
1	-1	1	-1	15	2	-2	0	0	16	124.86067	0.00010	1434.57334	1309.71276	
1	-1	1	-1	16	2	-2	0	0	17	122.82871	0.00007	1466.40289	1343.57425	
1	-1	1	-1	17	2	-2	0	0	18	120.79403	0.00014	1500.21846	1379.42457	
1	-1	1	-1	18	2	-2	0	0	19	118.75657*	0.00022	1536.01954	1417.26319	
1	-1	1	-1	19	2	-2	0	0	20	116.71616	0.00016	1573.80556	1457.08957	
1	-1	1	-1	20	2	-2	0	0	21	114.67295	0.00010	1613.57597	1498.90313	
1	-1	1	-1	21	2	-2	0	0	22	112.62702	0.00008	1655.33020	1542.70326	

1	-1	1	-1	22	2	-2	0	0	23	110.57840	0.00010	1699.06765	1588.48935
1	-1	1	-1	23	2	-2	0	0	24	108.52689	-0.00010	1744.78769	1636.26071
2	-1	1	-1	24	2	-2	0	0	25	106.47294	-0.00010	1792.48970	1686.01666
3	-1	1	-1	25	2	-2	0	0	26	104.41660	0.00007	1842.17301	1737.75648
4	-1	1	-1	26	2	-2	0	0	27	102.35785	0.00034	1893.83694	1791.47943
5	-1	1	-1	27	2	-2	0	0	28	100.29611	0.00007	1947.48076	1847.18472
6	-1	1	-1	28	2	-2	0	0	29	98.23216	-0.00003	2003.10374	1904.87155
7	1	1	1	2	2	-2	0	0	2	157.02161	-0.00010	1201.72219	1044.70049
8	1	1	1	3	2	-2	0	0	3	157.01446	-0.00014	1207.69469	1050.68009
9	1	1	1	4	2	-2	0	0	4	157.00446	-0.00030	1215.65751	1058.65275
10	1	1	1	5	2	-2	0	0	5	156.99177	-0.00009	1225.61022	1068.61835
11	1	1	1	6	2	-2	0	0	6	156.97549	-0.00002	1237.55228	1080.57677
12	1	1	1	7	2	-2	0	0	7	156.95509	-0.00014	1251.48305	1094.52781
13	1	1	1	8	2	-2	0	0	8	156.93052	0.00003	1267.40177	1110.47128
14	1	1	1	9	2	-2	0	0	9	156.90063*	-0.00002	1285.30761	1128.40695
15	1	1	1	10	2	-2	0	0	10	156.86519	0.00013	1305.19963	1148.33456
16	1	1	1	11	2	-2	0	0	11	156.82349	0.00049	1327.07683	1170.25382

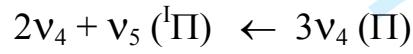
rms = 0.00014 cm⁻¹2v₄(Σ⁺) ← v₅(Π)

v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''	
2	0	0	0	2	0	0	1	1	3	350.21502	-0.00037	1039.91679	689.70140	
26	0	0	0	3	0	0	1	1	4	348.26764	0.00007	1045.89789	697.63032	
27	0	0	0	4	0	0	1	1	5	346.33073	-0.00011	1053.87209	707.54126	
28	0	0	0	5	0	0	1	1	6	344.40466	-0.00013	1063.83887	719.43409	
29	0	0	0	6	0	0	1	1	7	342.48904	0.00009	1075.79759	733.30864	
30	2	0	0	0	7	0	0	1	1	8	340.58281	0.00007	1089.74746	749.16472
31	2	0	0	0	8	0	0	1	1	9	338.68566	0.00018	1105.68761	767.00212
32	2	0	0	0	9	0	0	1	1	10	336.79691	0.00049	1123.61701	786.82059
33	2	0	0	0	10	0	0	1	1	11	334.91516	0.00045	1143.53456	808.61985
34	2	0	0	0	11	0	0	1	1	12	333.04003	0.00058	1165.43907	832.39961
35	2	0	0	0	12	0	0	1	1	13	331.17026	0.00055	1189.32925	858.15954
36	2	0	0	0	13	0	0	1	1	14	329.30440	-0.00012	1215.20380	885.89928
37	2	0	0	0	14	0	0	1	1	15	327.44313	0.00021	1243.06138	915.61845
38	2	0	0	0	15	0	0	1	1	16	325.58390	-0.00011	1272.90065	947.31664
39	2	0	0	0	16	0	0	1	1	17	323.72728	0.00037	1304.72033	980.99342
40	2	0	0	0	17	0	0	1	1	18	321.87147	0.00060	1338.51918	1016.64832
41	2	0	0	0	18	0	0	1	1	19	320.01536	0.00016	1374.29604	1054.28084
42	2	0	0	0	19	0	0	1	1	20	318.16001	0.00065	1412.04985	1093.89049
43	2	0	0	0	20	0	0	1	1	21	316.30287	-0.00006	1451.77962	1135.47669
44	2	0	0	0	21	0	0	1	1	22	314.44570	0.00010	1493.48450	1179.03889
45	2	0	0	0	22	0	0	1	1	23	312.58740	0.00021	1537.16368	1224.57649
46	2	0	0	0	2	0	0	1	-1	2	356.14140	0.00039	1039.91679	683.77578
47	2	0	0	0	3	0	0	1	-1	3	356.15438	0.00020	1045.89789	689.74371
48	2	0	0	0	4	0	0	1	-1	4	356.17125	-0.00001	1053.87209	697.70083
49	2	0	0	0	5	0	0	1	-1	5	356.19210	0.00025	1063.83887	707.64702
50	2	0	0	0	6	0	0	1	-1	6	356.21551	0.00007	1075.79759	719.58215
51	2	0	0	0	7	0	0	1	-1	7	356.24172	0.00029	1089.74746	733.50603
52	2	0	0	0	8	0	0	1	-1	8	356.26924	0.00013	1105.68761	749.41849
53	2	0	0	0	9	0	0	1	-1	9	356.29780	0.00009	1123.61701	767.31930
54	2	0	0	0	10	0	0	1	-1	10	356.32650	0.00014	1143.53456	787.20820
55	2	0	0	0	11	0	0	1	-1	11	356.35429	0.00015	1165.43907	809.08492
56	2	0	0	0	12	0	0	1	-1	12	356.38038	0.00029	1189.32925	832.94916
57	2	0	0	0	13	0	0	1	-1	13	356.40325	0.00002	1215.20380	858.80057
58	2	0	0	0	14	0	0	1	-1	14	356.42284	0.00026	1243.06138	886.63880
59	2	0	0	0	15	0	0	1	-1	15	356.43732	0.00012	1272.90065	916.46345
60	2	0	0	0	16	0	0	1	-1	16	356.44648	0.00026	1304.72033	948.27412
	2	0	0	0	17	0	0	1	-1	17	356.44966*	0.00083	1338.51918	982.07035
	2	0	0	0	18	0	0	1	-1	18	356.44440	0.00003	1374.29604	1017.85167
	2	0	0	0	19	0	0	1	-1	19	356.43225	0.00000	1412.04985	1055.61759
	2	0	0	0	20	0	0	1	-1	20	356.41239	0.00034	1451.77962	1095.36757
	2	0	0	0	21	0	0	1	-1	21	356.38329	-0.00015	1493.48450	1137.10105
	2	0	0	0	22	0	0	1	-1	22	356.34623	0.00000	1537.16368	1180.81746
	2	0	0	0	23	0	0	1	-1	23	356.34962	0.00049	1226.51618	

rms = 0.00027 cm⁻¹ $v_4 + 2v_5 (\Phi) \leftarrow 2v_4 + v_5 (\Phi)$

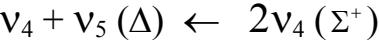
v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	2	2	15	2	2	1	1	16	128.63908	-0.00001	2115.65882	1987.01973
1	1	2	2	14	2	2	1	1	15	130.69696	-0.00006	2085.78481	1955.08779
1	1	2	2	13	2	2	1	1	14	132.74731	-0.00005	2057.89941	1925.15205
1	1	2	2	12	2	2	1	1	13	134.79078	-0.00013	2032.00319	1897.21228
1	1	2	2	11	2	2	1	1	12	136.82801	-0.00041	2008.09670	1871.26829
1	1	2	2	10	2	2	1	1	11	138.86048	-0.00006	1986.18048	1847.31994
1	1	2	2	9	2	2	1	1	10	140.88818	0.00031	1966.25501	1825.36714
1	1	2	2	7	2	2	1	1	8	144.93028	0.00023	1932.37810	1787.44806
1	1	2	2	6	2	2	1	1	7	146.94599	0.00033	1918.42746	1771.48179
1	1	2	2	5	2	2	1	1	6	148.95778	-0.00026	1906.46914	1757.51111
1	1	2	2	4	2	2	1	1	5	150.96758	0.00020	1896.50344	1745.53606
1	1	2	2	3	2	2	1	1	4	152.97514	0.00126	1888.53059	1735.55671W
1	1	2	2	4	2	2	1	1	3	168.93051*	0.00021	1896.50344	1727.57314
1	1	2	2	5	2	2	1	1	4	170.91285*	0.00042	1906.46914	1735.55671
1	1	2	2	6	2	2	1	1	5	172.89154	0.00014	1918.42746	1745.53606
1	1	2	2	7	2	2	1	1	6	174.86690	-0.00009	1932.37810	1757.51111
1	1	2	2	8	2	2	1	1	7	176.83800*	-0.00095	1948.32074	1771.48179
1	1	2	2	9	2	2	1	1	8	178.80733	0.00038	1966.25501	1787.44806
1	1	2	2	10	2	2	1	1	9	180.77085	0.00022	1986.18048	1805.40985
1	1	2	2	11	2	2	1	1	10	182.72944	-0.00013	2008.09670	1825.36714
1	1	2	2	12	2	2	1	1	11	184.68300	-0.00025	2032.00319	1847.31994
1	1	2	2	13	2	2	1	1	12	186.63155	0.00043	2057.89941	1871.26829
1	1	2	2	14	2	2	1	1	13	188.57256	0.00003	2085.78481	1897.21228
1	1	2	2	15	2	2	1	1	14	190.50700*	0.00023	2115.65882	1925.15205
1	1	2	2	16	2	2	1	1	15	192.43344	0.00041	2147.52082	1955.08779
1	1	2	2	17	2	2	1	1	16	194.35058	0.00010	2181.37021	1987.01973
1	1	2	2	18	2	2	1	1	17	196.25842	0.00018	2217.20636	2020.94812
1	1	2	2	19	2	2	1	1	18	198.15552	0.00009	2255.02864	2056.87321
1	1	2	2	20	2	2	1	1	19	200.04148	0.00031	2294.83643	2094.79526
1	1	2	2	21	2	2	1	1	20	201.91508	0.00040	2336.62911	2134.71443
1	1	2	2	22	2	2	1	1	21	203.77527	0.00002	2380.40608	2176.63083
1	1	2	2	23	2	2	1	1	22	205.62271	0.00040	2426.16675	2220.54443
1	-1	2	-2	3	2	2	1	1	3	160.95773	0.00028	1888.53059	1727.57314
1	-1	2	-2	4	2	2	1	1	4	160.94689	0.00016	1896.50344	1735.55671
1	-1	2	-2	5	2	2	1	1	5	160.93321	0.00013	1906.46914	1745.53606
1	-1	2	-2	6	2	2	1	1	6	160.91655	0.00022	1918.42744	1757.51111
1	-1	2	-2	7	2	2	1	1	7	160.89668	0.00042	1932.37805	1771.48179
1	-1	2	-2	8	2	2	1	1	8	160.87296	0.00038	1948.32063	1787.44806
1	-1	2	-2	10	2	2	1	1	10	160.81265	-0.00029	1986.18007	1825.36714
1	-1	2	-2	17	2	-2	1	-1	18	124.59490	0.00017	2181.36119	2056.76646
1	-1	2	-2	16	2	-2	1	-1	17	126.64433	0.00017	2147.51449	2020.87032
1	-1	2	-2	14	2	-2	1	-1	15	130.73233	-0.00020	2085.78191	1955.04938
1	-1	2	-2	13	2	-2	1	-1	14	132.77144	0.00007	2057.89753	1925.12616
1	-1	2	-2	12	2	-2	1	-1	13	134.80668	0.00004	2032.00201	1897.19537
1	-1	2	-2	11	2	-2	1	-1	12	136.83837	0.00002	2008.09600	1871.25765
1	-1	2	-2	10	2	-2	1	-1	11	138.86681	0.00026	1986.18007	1847.31352
1	-1	2	-2	9	2	-2	1	-1	10	140.89175	0.00042	1966.25479	1825.36346
1	-1	2	-2	8	2	-2	1	-1	9	142.91297	0.00020	1948.32063	1805.40786
1	-1	2	-2	7	2	-2	1	-1	8	144.93029	-0.00070	1932.37805	1787.44706
1	-1	2	-2	6	2	-2	1	-1	7	146.94597	-0.00013	1918.42744	1771.48134
1	-1	2	-2	5	2	-2	1	-1	6	148.95777	-0.00044	1906.46914	1757.51093
1	-1	2	-2	4	2	-2	1	-1	5	150.96758	0.00014	1896.50344	1745.53600
1	-1	2	-2	6	2	-2	1	-1	5	172.89153	0.00009	1918.42744	1745.53600
1	-1	2	-2	7	2	-2	1	-1	6	174.86697	-0.00016	1932.37805	1757.51093
1	-1	2	-2	8	2	-2	1	-1	7	176.83940*	0.00011	1948.32063	1771.48134
1	-1	2	-2	9	2	-2	1	-1	8	178.80734	-0.00039	1966.25479	1787.44706
1	-1	2	-2	10	2	-2	1	-1	9	180.77192	-0.00029	1986.18007	1805.40786
1	-1	2	-2	11	2	-2	1	-1	10	182.73216	-0.00038	2008.09600	1825.36346
1	-1	2	-2	12	2	-2	1	-1	11	184.68820	-0.00029	2032.00201	1847.31352
1	-1	2	-2	13	2	-2	1	-1	12	187.557.89753	1871.25765		

1	-1	2	-2	14	2	-2	1	-1	13	188.58626	-0.00028	2085.78191	1897.19537
1	-1	2	-2	15	2	-2	1	-1	14	190.52808	-0.00024	2115.65447	1925.12616
2	-1	2	-2	16	2	-2	1	-1	15	192.46514	0.00003	2147.51449	1955.04938
3	-1	2	-2	17	2	-2	1	-1	16	194.39677	-0.00006	2181.36119	1986.96435
4	-1	2	-2	18	2	-2	1	-1	17	196.32340	-0.00005	2217.19377	2020.87032
5	-1	2	-2	19	2	-2	1	-1	18	198.24502	0.00007	2255.01141	2056.76646
6	-1	2	-2	20	2	-2	1	-1	19	200.16159	0.00023	2294.81323	2094.65187
7	-1	2	-2	21	2	-2	1	-1	20	202.07244	-0.00029	2336.59836	2134.52563
8	-1	2	-2	22	2	-2	1	-1	21	203.97890	-0.00024	2380.36588	2176.38674
9	-1	2	-2	23	2	-2	1	-1	22	205.88082	0.00014	2426.11489	2220.23421
10	-1	2	-2	25	2	-2	1	-1	24	209.66973	0.00013	2523.55362	2313.88402
11	1	2	2	3	2	-2	1	-1	3	160.95773	0.00028	1888.53059	1727.57314
12	1	2	2	4	2	-2	1	-1	4	160.94689	0.00015	1896.50344	1735.55670
13	1	2	2	5	2	-2	1	-1	5	160.93321	0.00006	1906.46914	1745.53600
14	1	2	2	6	2	-2	1	-1	6	160.91655	0.00002	1918.42746	1757.51093
15	1	2	2	7	2	-2	1	-1	7	160.89668	-0.00008	1932.37810	1771.48134
16	1	2	2	8	2	-2	1	-1	8	160.87409	0.00041	1948.32074	1787.44706

rms = 0.00025 cm⁻¹

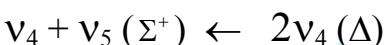
v _{4'}	ℓ _{4'}	v _{5'}	ℓ _{5'}	J'	v _{4''}	ℓ _{4''}	v _{5''}	ℓ _{5''}	J''	OBS	OBS - CALC	E'	E''	
25	2	2	1	-1	2	3	1	0	0	3	165.34610	-0.00022	1728.44514	1563.09883
26	2	2	1	-1	3	3	1	0	0	4	163.36015	0.00044	1734.41904	1571.05934
27	2	2	1	-1	4	3	1	0	0	5	161.37471	-0.00013	1742.38433	1581.00949
28	2	2	1	-1	5	3	1	0	0	6	159.39210	0.00000	1752.34107	1592.94896
29	2	2	1	-1	6	3	1	0	0	7	157.41233	0.00036	1764.28934	1606.87737
30	2	2	1	-1	7	3	1	0	0	8	155.43514	0.00017	1778.22926	1622.79429
31	2	2	1	-1	8	3	1	0	0	9	153.46149	-0.00024	1794.16094	1640.69921
32	2	2	1	-1	9	3	1	0	0	10	151.49288	-0.00003	1812.08452	1660.59161
33	2	2	1	-1	10	3	1	0	0	11	149.52833*	-0.00093	1832.00016	1682.47090
34	2	2	1	-1	11	3	1	0	0	12	147.57183	0.00025	1853.90802	1706.33645
35	2	2	1	-1	12	3	1	0	0	13	145.62091	0.00021	1877.80829	1732.18758
36	2	2	1	-1	13	3	1	0	0	14	143.67753	0.00001	1903.70113	1760.02361
37	2	2	1	-1	14	3	1	0	0	15	141.74299	0.00004	1931.58675	1789.84380
38	2	2	1	-1	15	3	1	0	0	16	139.81759	-0.00034	1961.46532	1821.64740
39	2	2	1	-1	16	3	1	0	0	17	137.90345	0.00004	1993.33703	1855.43362
40	2	2	1	-1	17	3	1	0	0	18	136.00087	0.00051	2027.20204	1891.20168
41	2	2	1	-1	18	3	1	0	0	19	134.10968	-0.00003	2063.06048	1928.95077
42	2	2	1	-1	19	3	1	0	0	20	132.23248	0.00009	2100.91245	1968.68006
43	2	2	1	-1	2	3	1	0	0	1	175.29788	0.00043	1728.44514	1553.14769
44	2	2	1	-1	3	3	1	0	0	2	177.29095	0.00012	1734.41904	1557.12821
45	2	2	1	-1	4	3	1	0	0	3	179.28510	-0.00040	1742.38433	1563.09883
46	2	2	1	-1	5	3	1	0	0	4	181.28186	0.00013	1752.34107	1571.05934
47	2	2	1	-1	6	3	1	0	0	5	183.27993	0.00008	1764.28934	1581.00949
48	2	2	1	-1	7	3	1	0	0	6	185.28076	0.00047	1778.22926	1592.94896
49	2	2	1	-1	8	3	1	0	0	7	187.28373	0.00016	1794.16094	1606.87737
50	2	2	1	-1	9	3	1	0	0	8	189.29065	0.00041	1812.08452	1622.79429
51	2	2	1	-1	10	3	1	0	0	9	191.30083	-0.00012	1832.00016	1640.69921
52	2	2	1	-1	11	3	1	0	0	10	193.31611	-0.00030	1853.90802	1660.59161
53	2	2	1	-1	12	3	1	0	0	11	195.33759	0.00021	1877.80829	1682.47090
54	2	2	1	-1	13	3	1	0	0	12	197.36450	-0.00018	1903.70113	1706.33645
55	2	2	1	-1	14	3	1	0	0	13	199.39922	0.00006	1931.58675	1732.18758
56	2	2	1	-1	15	3	1	0	0	14	201.44140*	-0.00031	1961.46532	1760.02361
57	2	2	1	-1	16	3	1	0	0	15	203.49337	0.00014	1993.33703	1789.84380
58	2	2	1	-1	17	3	1	0	0	16	205.55478	0.00014	2027.20204	1821.64740
59	2	2	1	-1	18	3	1	0	0	17	207.62737*	0.00051	2063.06048	1855.43362
60	2	2	1	-1	19	3	1	0	0	18	209.71090	0.00013	2100.91245	1891.20168
	2	2	1	-1	20	3	1	0	0	19	211.80742	0.00017	2140.75802	1928.95077
	2	-2	1	1	1	3	1	0	0	1	171.32398	-0.00014	1724.47181	1553.14769
	2	-2	1	1	2	3	-1	0	0	3	165.26573	0.00014	1728.47288	1563.20728
	2	-2	1	1	3	3	-1	0	0	4	163.23492	0.00048	1734.47452	1571.24009
	2	-2	1	1	4	3	-1	0	0	5	161.19642	0.00019	1742.47680	1581.28057
	2	-2	1	1	5	3	-1	0	0	6	159.15131	-0.00008	1752.47978	1593.32839
	2	-2	1	1	6	3	-1	0	0	7	170.44140*	0.00057	1778.38312	1607.38312

1	2	-2	1	1	7	3	-1	0	0	8	155.04401	-0.00001	1778.48827	1623.44425
2	2	-2	1	1	8	3	-1	0	0	9	152.98282	0.00000	1794.49400	1641.51118
3	2	-2	1	1	9	3	-1	0	0	10	150.91770	0.00004	1812.50091	1661.58325
4	2	-2	1	1	10	3	-1	0	0	11	148.84957	0.00009	1832.50915	1683.65967
5	2	-2	1	1	11	3	-1	0	0	12	146.77919	-0.00012	1854.51888	1707.73957
6	2	-2	1	1	12	3	-1	0	0	13	144.70856	0.00026	1878.53027	1733.82197
7	2	-2	1	1	13	3	-1	0	0	14	142.63762	-0.00011	1904.54349	1761.90576
8	2	-2	1	1	14	3	-1	0	0	15	140.56907	0.00010	1932.55872	1791.98975
9	2	-2	1	1	15	3	-1	0	0	16	138.50370	0.00016	1962.57611	1824.07257
10	2	-2	1	1	16	3	-1	0	0	17	136.44337*	0.00033	1994.59581	1858.15277
11	2	-2	1	1	2	3	-1	0	0	1	175.30690	-0.00021	1728.47288	1553.16577
12	2	-2	1	1	3	3	-1	0	0	2	177.29252	0.00044	1734.47452	1557.18244
13	2	-2	1	1	4	3	-1	0	0	3	179.26982	0.00031	1742.47680	1563.20728
14	2	-2	1	1	5	3	-1	0	0	4	181.23984	0.00014	1752.47978	1571.24009
15	2	-2	1	1	6	3	-1	0	0	5	183.20309	0.00009	1764.48357	1581.28057
16	2	-2	1	1	7	3	-1	0	0	6	185.16013	0.00025	1778.48827	1593.32839
17	2	-2	1	1	8	3	-1	0	0	7	187.11076	-0.00012	1794.49400	1607.38312
18	2	-2	1	1	9	3	-1	0	0	8	189.05705*	0.00039	1812.50091	1623.44425
19	2	-2	1	1	10	3	-1	0	0	9	190.99783	-0.00013	1832.50915	1641.51118
20	2	-2	1	1	11	3	-1	0	0	10	192.93569	0.00006	1854.51888	1661.58325
21	2	-2	1	1	12	3	-1	0	0	11	194.87054	-0.00006	1878.53027	1683.65967
22	2	-2	1	1	14	3	-1	0	0	13	198.73625*	-0.00050	1932.55872	1733.82197
23	2	-2	1	1	15	3	-1	0	0	14	200.67023	-0.00012	1962.57611	1761.90576
24	2	-2	1	1	16	3	-1	0	0	15	202.60628	0.00022	1994.59581	1791.98975
25	2	-2	1	1	17	3	-1	0	0	16	204.54565	0.00028	2028.61794	1824.07257
26	2	-2	1	1	18	3	-1	0	0	17	206.48962	-0.00020	2064.64259	1858.15277

rms = 0.00023 cm⁻¹

v _{4'}	$\ell_{4'}$	v _{5'}	$\ell_{5'}$	J'	v _{4''}	$\ell_{4''}$	v _{5''}	$\ell_{5''}$	J''	OBS	OBS - CALC	E'	E''
1	1	1	1	8	2	0	0	0	9	143.78462	-0.00014	1267.40177	1123.61701
2	1	1	1	9	2	0	0	0	10	141.77280	-0.00024	1285.30761	1143.53456
3	1	1	1	10	2	0	0	0	11	139.76079	0.00023	1305.19963	1165.43907
4	1	1	1	11	2	0	0	0	12	137.74740	-0.00018	1327.07683	1189.32925
5	1	1	1	12	2	0	0	0	13	135.73443	0.00010	1350.93813	1215.20380
6	1	1	1	13	2	0	0	0	14	133.72091	-0.00012	1376.78240	1243.06138
7	1	1	1	14	2	0	0	0	15	131.70787	0.00002	1404.60850	1272.90065
8	1	1	1	15	2	0	0	0	16	129.69475	-0.00018	1434.41526	1304.72033
9	1	1	1	16	2	0	0	0	17	127.68229	-0.00004	1466.20152	1338.51918
10	1	1	1	17	2	0	0	0	18	125.67021	0.00011	1499.96614	1374.29604
11	1	1	1	18	2	0	0	0	19	123.65842	0.00022	1535.70804	1412.04985
12	1	1	1	19	2	0	0	0	20	121.64674	0.00017	1573.42620	1451.77962
13	1	1	1	20	2	0	0	0	21	119.63504*	-0.00009	1613.11962	1493.48450
14	1	1	1	21	2	0	0	0	22	117.62373	-0.00002	1654.78743	1537.16368
15	1	1	1	22	2	0	0	0	23	115.61249	0.00018	1698.42877	1582.81646
16	1	1	1	23	2	0	0	0	24	113.60089	0.00021	1744.04287	1630.44219
17	1	1	1	24	2	0	0	0	25	111.58897	0.00022	1791.62900	1680.04024
18	1	1	1	25	2	0	0	0	26	109.57690*	0.00049	1841.18647	1731.61005
19	1	1	1	26	2	0	0	0	27	107.56395	0.00037	1892.71462	1785.15104
20	1	1	1	9	2	0	0	0	8	179.62002	0.00002	1285.30761	1105.68761
21	1	1	1	10	2	0	0	0	9	181.58256	-0.00006	1305.19963	1123.61701
22	1	1	1	11	2	0	0	0	10	183.54200	-0.00026	1327.07683	1143.53456
23	1	1	1	12	2	0	0	0	11	185.49915	0.00009	1350.93813	1165.43907
24	1	1	1	13	2	0	0	0	12	187.45337	0.00022	1376.78240	1189.32925
25	1	1	1	14	2	0	0	0	13	189.40479	0.00009	1404.60850	1215.20380
26	1	1	1	15	2	0	0	0	14	191.35383	-0.00005	1434.41526	1243.06138
27	1	1	1	16	2	0	0	0	15	193.30110	0.00024	1466.20152	1272.90065
28	1	1	1	17	2	0	0	0	16	195.24588	0.00007	1499.96614	1304.72033
29	1	1	1	18	2	0	0	0	17	197.18906	0.00020	1535.70804	1338.51918
30	1	1	1	19	2	0	0	0	18	199.13053	0.00038	1573.42620	1374.29604
31	1	1	1	20	2	0	0	0	19	201.07004	0.00026	1613.11962	1412.04985
32	1	1	1	21	2	0	0	0	20	203.00793	0.00012	1654.78743	1451.77962
33	1	1	1	22	2	0	0	0	21	204.94463	0.00036	1698.42877	1493.48450
34	1	1	1	23	2	0	0	0	22	URL: http://mc.maz2016central.com/tmp/tmp44.04287		1537.16368	

1	1	1	1	24	2	0	0	0	23	208.81272	0.00019	1791.62900	1582.81646
1	1	1	1	25	2	0	0	0	24	210.74455	0.00027	1841.18647	1630.44219
2	1	1	1	26	2	0	0	0	25	212.67473	0.00035	1892.71462	1680.04024
3	1	1	1	27	2	0	0	0	26	214.60305	0.00029	1946.21281	1731.61005
4	1	1	1	28	2	0	0	0	27	216.52966	0.00029	2001.68041	1785.15104
5	1	1	1	29	2	0	0	0	28	218.45446	0.00032	2059.11678	1840.66263
6	1	1	1	30	2	0	0	0	29	220.37722	0.00021	2118.52125	1898.14425
7	1	1	1	31	2	0	0	0	30	222.29827	0.00037	2179.89318	1957.59528
8	1	1	1	32	2	0	0	0	31	224.21666	-0.00009	2243.23185	2019.01510
9	1	1	1	33	2	0	0	0	32	226.13361	0.00009	2308.53656	2082.40305

rms = 0.00022 cm⁻¹

	v_4'	ℓ_4'	v_5'	ℓ_5'	J'	v_4''	ℓ_4''	v_5''	ℓ_5''	J''	OBS	OBS - CALC	E'	E''
1	1	1	1	-1	8	2	2	0	0	9	143.74137	-0.00001	1272.18137	1128.43999
19	1	1	1	-1	9	2	2	0	0	10	141.72122*	-0.00039	1290.10561	1148.38399
20	1	1	1	-1	10	2	2	0	0	11	139.69734*	-0.00067	1310.02298	1170.32497W
21	1	1	1	-1	11	2	2	0	0	12	137.67065	0.00028	1331.93393	1194.26357
22	1	1	1	-1	12	2	2	0	0	13	135.63864	0.00012	1355.83891	1220.20039
23	1	1	1	-1	13	2	2	0	0	14	133.60255	0.00023	1381.73835	1248.13603
24	1	1	1	-1	14	2	2	0	0	15	131.56157	-0.00010	1409.63267	1278.07100
25	1	1	1	-1	15	2	2	0	0	16	129.51659	0.00008	1439.52224	1310.00574
26	1	1	1	-1	16	2	2	0	0	17	127.46718	0.00035	1471.40738	1343.94054
27	1	1	1	-1	17	2	2	0	0	18	125.41292	0.00023	1505.28829	1379.87559
28	1	1	1	-1	18	2	2	0	0	19	123.35415	-0.00003	1541.16510	1417.81092
29	1	1	1	-1	19	2	2	0	0	20	121.29146	0.00002	1579.03782	1457.74639
30	1	1	1	-1	20	2	2	0	0	21	119.22481	0.00018	1618.90635	1499.68172
31	1	1	1	-1	21	2	2	0	0	22	117.15348	-0.00048	1660.77045	1543.61649
32	1	1	1	-1	22	2	2	0	0	23	115.07999	0.00036	1704.62977	1589.55014
33	1	1	1	-1	23	2	2	0	0	24	113.00189	0.00005	1750.48383	1637.48199
34	1	1	1	-1	24	2	2	0	0	25	110.92082	0.00003	1798.33206	1687.41127
35	1	1	1	-1	25	2	2	0	0	26	108.83662	-0.00004	1848.17378	1739.33712
36	1	1	1	-1	26	2	2	0	0	27	106.74914	-0.00050	1900.00824	1793.25860W
37	1	1	1	-1	27	2	2	0	0	28	104.65965	-0.00023	1953.83461	1849.17473
38	1	1	1	-1	9	2	2	0	0	8	179.61302	-0.00025	1290.10561	1110.49234
39	1	1	1	-1	10	2	2	0	0	9	181.58268	-0.00032	1310.02298	1128.43999
40	1	1	1	-1	11	2	2	0	0	10	183.54999	0.00005	1331.93393	1148.38399
41	1	1	1	-1	12	2	2	0	0	11	185.51407	0.00014	1355.83891	1170.32497
42	1	1	1	-1	13	2	2	0	0	12	187.47503	0.00025	1381.73835	1194.26357
43	1	1	1	-1	14	2	2	0	0	13	189.43232	0.00004	1409.63267	1220.20039
44	1	1	1	-1	15	2	2	0	0	14	191.38626*	0.00004	1439.52224	1248.13603
45	1	1	1	-1	16	2	2	0	0	15	193.33647	0.00010	1471.40738	1278.07100
46	1	1	1	-1	17	2	2	0	0	16	195.28254	-0.00001	1505.28829	1310.00574
47	1	1	1	-1	18	2	2	0	0	17	197.22440	-0.00016	1541.16510	1343.94054
48	1	1	1	-1	19	2	2	0	0	18	199.16214	-0.00009	1579.03782	1379.87559
49	1	1	1	-1	20	2	2	0	0	19	201.09532	-0.00011	1618.90635	1417.81092
50	1	1	1	-1	21	2	2	0	0	20	203.02396	-0.00010	1660.77045	1457.74639
51	1	1	1	-1	22	2	2	0	0	21	204.94808	0.00003	1704.62977	1499.68172
52	1	1	1	-1	23	2	2	0	0	22	206.86725	-0.00009	1750.48383	1543.61649
53	1	1	1	-1	24	2	2	0	0	23	208.78174	-0.00018	1798.33206	1589.55014
54	1	1	1	-1	25	2	2	0	0	24	210.69158	-0.00021	1848.17378	1637.48199
55	1	1	1	-1	26	2	2	0	0	25	212.59684	-0.00013	1900.00824	1687.41127
56	1	1	1	-1	27	2	2	0	0	26	214.49739	-0.00010	1953.83461	1739.33712
57	1	1	1	-1	28	2	2	0	0	27	216.39311	-0.00027	2009.65198	1793.25860
58	1	1	1	-1	29	2	2	0	0	28	218.28448	-0.00021	2067.45942	1849.17473
59	1	1	1	-1	30	2	2	0	0	29	220.17190	0.00046	2127.25592	1907.08448
60	1	1	1	-1	31	2	2	0	0	30	222.05368	0.00000	2189.04046	1966.98678
1	1	1	1	-1	32	2	2	0	0	31	223.93163	0.00018	2252.81197	2028.88052
1	1	1	1	-1	33	2	2	0	0	32	225.80500	0.00022	2318.56937	2092.76459
1	1	1	1	-1	34	2	2	0	0	33	227.67422	0.00053	2386.31153	2158.63783W
1	1	1	1	-1	35	2	2	0	0	34	229.53833	0.00011	2456.03731	2226.49908

rms = 0.00020 cm⁻¹

1
2 $2\nu_5(\Sigma^+) \leftarrow \nu_4 + \nu_5(\Delta)$
3

$v_4' \ell_4' v_5' \ell_5' J'$	$v_4'' \ell_4'' v_5'' \ell_5'' J''$	OBS	OBS - CALC	E'	E''
0 0 2 0 11	1 1 1 1 12	122.54059	0.00031	1473.47840	1350.93813
0 0 2 0 12	1 1 1 1 13	120.55298	0.00020	1497.33518	1376.78240
0 0 2 0 13	1 1 1 1 14	118.56900	-0.00001	1523.17752	1404.60850
0 0 2 0 14	1 1 1 1 15	116.58907*	-0.00049	1551.00481	1434.41526
0 0 2 0 15	1 1 1 1 16	114.61511	0.00020	1580.81643	1466.20152
0 0 2 0 16	1 1 1 1 17	112.64539	-0.00014	1612.61167	1499.96614
0 0 2 0 17	1 1 1 1 18	110.68185	0.00008	1646.38981	1535.70804
0 0 2 0 18	1 1 1 1 19	108.72383	-0.00004	1682.15007	1573.42620
0 0 2 0 16	1 1 1 1 15	178.19688*	0.00047	1612.61167	1434.41526
0 0 2 0 17	1 1 1 1 16	180.18834	0.00004	1646.38981	1466.20152
0 0 2 0 18	1 1 1 1 17	182.18395	0.00002	1682.15007	1499.96614
0 0 2 0 19	1 1 1 1 18	184.18349	-0.00009	1719.89163	1535.70804
0 0 2 0 20	1 1 1 1 19	186.18760	0.00017	1759.61363	1573.42620
0 0 2 0 21	1 1 1 1 20	188.19515*	-0.00039	1801.31517	1613.11962
0 0 2 0 22	1 1 1 1 21	190.20775	-0.00014	1844.99532	1654.78743
0 0 2 0 23	1 1 1 1 22	192.22425	-0.00008	1890.65309	1698.42877
0 0 2 0 24	1 1 1 1 23	194.24477	0.00014	1938.28750	1744.04287
0 0 2 0 25	1 1 1 1 24	196.26858	0.00009	1987.89749	1791.62900
0 0 2 0 26	1 1 1 1 25	198.29551	-0.00001	2039.48198	1841.18647
0 0 2 0 27	1 1 1 1 26	200.32526	-0.00002	2093.03990	1892.71462
0 0 2 0 28	1 1 1 1 27	202.35743	0.00015	2148.57010	1946.21281
0 0 2 0 29	1 1 1 1 28	204.39122	0.00019	2206.07144	2001.68041
0 0 2 0 30	1 1 1 1 29	206.42620	0.00022	2265.54275	2059.11678

28 rms = 0.00014 cm⁻¹
29

30
31 Rotational transitions in the G.S. (Σ^+), $\nu_4(\Pi)$ and $\nu_5(\Pi)$
32

$v_4' \ell_4' v_5' \ell_5' J'$	$v_4'' \ell_4'' v_5'' \ell_5'' J''$	OBS	OBS - CALC	E'	E''
0 0 0 0 1	0 0 0 0 0	1.98306*	0.000009	1.98305	0.000000W
0 0 0 0 3	0 0 0 0 2	5.94904	0.00001	11.89816	5.94912
0 0 0 0 6	0 0 0 0 5	11.89735	0.00002	41.64214	29.74480
0 0 0 0 7	0 0 0 0 6	13.87983	0.00001	55.52197	41.64214
0 0 0 0 8	0 0 0 0 7	15.86212	0.00001	71.38408	55.52197
0 0 0 0 9	0 0 0 0 8	17.84419	0.00001	89.22827	71.38408
0 0 0 0 10	0 0 0 0 9	19.82601	-0.000001	109.05428	89.22827
0 0 0 0 11	0 0 0 0 10	21.80756	0.000000	130.86184	109.05428
1 1 0 0 2	1 1 0 0 1	3.96758	0.000002	524.33282	520.36524
1 1 0 0 6	1 1 0 0 5	11.90186	0.000001	560.03938	548.13753
1 1 0 0 7	1 1 0 0 6	13.88508	-0.000001	573.92447	560.03938
1 -1 0 0 2	1 -1 0 0 1	3.98533	0.000001	524.35945	520.37411
1 -1 0 0 6	1 -1 0 0 5	11.95508	-0.000001	560.22573	548.27064
1 -1 0 0 7	1 -1 0 0 6	13.94717	0.000000	574.17289	560.22573
0 0 1 1 2	0 0 1 1 1	3.96457	0.000001	683.75462	679.79005
0 0 1 1 3	0 0 1 1 2	5.94679	0.000003	689.70140	683.75462
0 0 1 1 6	0 0 1 1 5	11.89283	0.000000	719.43409	707.54126
0 0 1 1 7	0 0 1 1 6	13.87455	0.000000	733.30864	719.43409
0 0 1 -1 2	0 0 1 -1 1	3.97867	0.000000	683.77578	679.79710
0 0 1 -1 3	0 0 1 -1 2	5.96794	-0.000001	689.74371	683.77578
0 0 1 -1 6	0 0 1 -1 5	11.93512	-0.000002	719.58215	707.64702
0 0 1 -1 7	0 0 1 -1 6	13.92388	-0.000005	733.50603	719.58215

59 rms = 0.000002 cm⁻¹
60