

$b'(v) \ ^1\Sigma_u^+ \leftarrow X(v) \ ^1\Sigma_g^+$ Band of the $^{14}\text{N}_2$. Values with B and D are blended and broadened lines, respectively.

J	(1,0) band		(2,0) band		(3,0) band		(4,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	104420.1B		105152.9B		105871.4B		106649.8B	
1	104421.2	104413.9	105153.6	105146.7	105871.7B	105864.9B	106649.8B	106642.5
2	104420.1B	104408.3	105152.9B	105141.2	105871.4B	105859.4	106649.8B	106637.0
3	104417.3	104401.1	105149.9	105133.7	105868.4	105852.1	106648.1	106630.2
4	104412.8	104392.0	105145.5	105124.7	105864.1	105843.2	106644.9	106621.9
5	104406.8	104381.4	105139.3	105114.1	105858.1	105832.5	106640.6	106612.3
6	104399.0	104369.1	105131.5	105101.7	105850.2	105820.2	106634.6	106601.2
7	104389.7	104355.0	105121.9	105087.7	105840.9	105806.3	106627.2	106588.8
8	104378.9	104339.5	105110.7	105071.7	105829.9	105790.7	106619.5	106575.0
9	104367.1	104322.1	105097.9	105054.1	105817.3	105773.4	106610.8	106559.8
10	104347.8	104303.4	105083.2	105035.2	105802.9	105754.5	106601.2B	106544.1
11	104333.7B	104283.7	105066.7	105014.2	105786.3B	105733.9		106526.9B
12	104315.6	104256.4	105048.9	104991.7	105769.0	105711.4		106509.8
13	104296.8B	104234.0B	105029.2	104967.9	105749.6	105687.3		106491.6
14		104208.4	105007.8	104941.5	105728.4	105661.1B		
15		104181.5B	104984.6	104914.0	105705.6			
16		104151.8	104959.8	104884.6	105680.9B	105605.6B		
17			104933.2	104853.4		105574.8		
18			104905.0	104820.7	105623.9	105542.7		
19			104874.9	104786.2	105595.0B	105510.3B		
20			104843.3	104750.2				
21			104809.8					
22			104774.7					

J	(5,0) band		(6,0) band		(7,0) band		(8,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	107328.3B		108000.9B		108954.9B		109545.8B	
1	107329.1	107321.8	108000.9B	107994.5B	108956.0B	108947.8	109545.8B	
2	107328.3B	107316.2	108000.9B	107989.0B	108956.0B	108942.6	109545.8B	109534.2
3	107325.3	107309.0	107998.5	107981.9B	108954.9B	108936.0	109542.1B	109526.8
4	107320.9	107300.1	107994.5B	107973.1B	108952.8	108928.3	109538.3	109517.4
5	107315.1	107289.5	107989.0B	107962.8B	108949.3	108919.4	109532.2	109507.0
6	107307.4	107277.1	107981.9B	107950.8B	108944.6	108909.1	109524.4	109494.6
7	107298.0	107263.2	107973.1B	107937.3B	108932.2	108885.0	109514.9	109480.5
8	107287.0	107247.6	107962.8B	107922.2B	108924.4	108871.6	109504.1	109464.9
9	107274.4	107230.4	107950.8B	107905.4B	108915.6	108856.7	109491.4	109447.5
10	107260.1	107211.4	107937.3B	107887.3	108915.6	108856.7	109476.5B	109428.5
11	107244.2	107190.8	107922.2B	107867.3	108905.8		109461.1	109407.8
12	107226.7	107168.7	107905.4B	107845.8	108895.4		109443.3	109385.6
13	107207.4	107144.9	107886.7	107822.6			109424.4	109361.6
14	107186.4	107119.2	107866.0	107797.6			109403.6	109336.1
15	107164.0	107092.1	107844.0	107771.2			109381.5	109309.1
16	107139.8	107063.2	107820.3	107742.8			109357.6	109280.5
17	107114.0	107032.8	107794.8	107712.9			109332.8	109250.3
18	107086.7	107000.8	107767.7	107681.3			109306.3	109218.9B
19	107057.7	106967.1	107738.9				109278.6	109185.8
20	107027.2	106931.9	107708.4				109249.9	109151.4
21	106995.4	106895.3B	107676.2				109218.9B	109115.0B
22	106961.7	106856.6					109188.3B	109078.9
23		106816.6B					109156.4	
24								109001.9
25								108963.0B
26								108927.5

J	(9,0) band		(10,0) band		(11,0) band		(12,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	110198.6B		110945.1B		111583.1B		112240.4B	
1	110198.6B	110192.5	110945.1B	110938.2	111583.1B	111576.9	112240.4B	112234.4
2	110198.6B	110186.8	110945.1B	110932.7	111582.1	111571.1	112239.4	112228.5
3	110195.2	110179.4	110943.2	110925.7	111578.8	111563.5	112235.8	112220.8
4	110190.5	110170.3	110939.8	110917.2	111573.8	111554.2	112230.6	112211.3
5	110184.1	110159.4	110935.1	110907.3	111567.1	111543.1	112223.5	112200.0
6	110175.9	110146.7	110929.2	110896.1B	111558.6	111530.2	112214.7	112186.9
7	110166.1	110132.3	110922.2	110883.3	111548.3	111515.4	112204.0	112171.9
8	110154.5	110116.3	110914.2	110869.5	111536.3	111499.0	112191.5	112155.1
9	110141.1	110098.4	110905.4	110854.5	111522.4	111480.7	112177.2	112136.5
10	110125.9	110078.9	110896.1B	110838.6	111506.9	111460.7	112160.9	112115.7
11	110109.2	110057.5	110887.1	110821.8	111489.9	111438.6	112142.8	112093.6
12	110090.5	110034.5	110878.5	110804.8	111471.4	111415.3	112122.9	112069.4
13	110070.1	110009.7	110868.6B	110787.7B	111453.1	111390.6	112101.1	112043.3
14	110048.1	109983.1		110771.8	111422.7	111364.1	112077.5	112015.6
15	110024.1	109954.9		110753.6	111399.5	111338.0	112052.2	111985.9
16	109998.4	109924.7			111374.5	111299.8	112024.9	111954.4
17	109971.0	109893.0			111346.7	111268.9	111995.8	111921.1
18	109941.8	109859.4			111317.6	111235.4	111964.8	111885.8
19	109910.8	109824.1			111286.7	111199.8	111932.1	111848.4B
20	109878.3	109787.0			111253.9	111162.7	111897.4	111809.9B
21	109843.8	109747.9B			111219.9	111123.7	111861.0B	111769.6B
22	109807.9	109707.7			111184.5	111083.3	111822.7	111726.8B
23		109665.5			111147.8	111041.5	111782.6	111682.4
24		109621.7			111108.0	110998.1	111740.7	111636.2
25					110071.6	110953.5	111697.4	111588.8
26					110027.3		111651.8	111538.6
27					110986.0		111604.7	111487.3

J	(13,0) band		(14,0) band		(15,0) band		(16,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	112910.1B		113542.4B		114171.6B		114756.7B	
1	112910.1B	112903.7B	113542.4B	113536.4	114171.6B	114165.3B	114757.9B	114749.8
2	112910.1B	112898.2	113541.0	113530.3	114170.0	114159.6	114757.9B	114744.5
3	112907.4	112890.8	113537.4	113522.6	114166.6B	114151.8	114756.7B	114738.2
4	112903.7B	112882.0	113532.0	113513.1	114161.0	114142.1	114753.3	114730.3
5	112898.8	112871.7	113524.8	113501.6	114153.8	114130.7	114748.2	114720.8B
6	112893.9	112860.4B	113515.7	113488.3	114144.6	114117.3	114741.2	114709.6
7	112889.3	112847.2B	113504.9	113473.1	114133.5	114102.0	114732.1	114696.5
8	112855.3	112834.3	113492.0	113456.2	114120.5	114084.9	114720.8B	114681.5
9	112847.2B	112821.7	113477.4	113437.3	114105.6	114065.8	114707.7	114664.6
10	112836.9	112779.6	113460.9	113416.5	114088.9	114044.9	114692.8	114645.5
11	112825.7B	112763.6B	113442.5	113393.8	114070.2	114022.1	114675.2	114624.3
12	112815.4	112745.4	113422.4	113369.4	114049.6	113997.4	114655.7	114601.1
13		112726.5	113400.3	113342.9	114027.1	113971.0	114634.1	114575.7
14	112795.3		113376.5	113315.0B	114002.7	113942.3	114610.5	114548.3
15			113351.4	113285.1	113976.4	113911.9	114584.7	114518.8
16			113325.3	113253.4	113948.2	113879.6	114557.0	114487.1
17			113301.7B	113220.4	113918.1	113845.3	114527.3	114453.6
18			113255.7	113186.3	113886.1	113809.2	114495.5	114418.0
19			113224.5B	113154.5B	113852.1	113771.2	114461.7	114380.3
20			113190.5	113100.8	113816.2	113731.2	114425.9	114340.6
21			113154.5B	113061.8	113778.4	113689.4	114388.1	114299.0
22			113116.2	113019.8B	113738.7	113645.6	114348.3	114255.3
23			113076.4	112975.3	113696.9	113599.9	114306.5	114209.7
24			113035.5	112929.6	113653.5	113552.3	114262.7	
25			112993.6	112880.8B	113608.0			
26			112950.2B	112831.2B	113561.0			
27				112782.8B				
28			112845.0					
29			112800.2	112675.7				
30				112614.2				
31				112558.8				

J	(17,0) band		(18,0) band		(19,0) band		(20,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	115371.4B		116209.0		116684.8B		117206.8B	
1	115371.4B	115365.2	116210.1B	116202.5	116684.8B	116678.4	117206.8B	117200.6
2	115370.7	115359.5	116210.1B	116197.1	116683.5	116672.6	117205.6	117194.7
3	115367.4	115352.0	116208.6	116190.3	116680.3	116665.0	117202.2	117187.1
4	115362.5	115342.6	116205.6	116182.2	116675.2	116655.6	117197.0	117177.7
5	115355.8	115331.6	116201.4	116172.5	116668.4	116644.5	117190.1	117166.4
6	115347.4	115318.8	116195.9	116161.9	116659.8	116631.5	117181.3D	117153.4D
7	115337.1	115304.1	116189.2	116149.7	116649.5	116616.7	117170.5D	117138.4D
8	115325.0	115287.7	116181.3	116136.2	116637.9	116600.2	117157.5D	117121.7D
9	115311.2	115269.5	116172.3	116121.5	116623.2	116581.2	117142.1D	117102.9D
10	115295.6	115249.5	116161.9	116105.6	116607.6	116562.3	117125.5D	117081.9D
11	115278.2	115227.7	116150.6	116088.6	116591.4	116539.7	117107.2D	117058.7D
12	115259.4	115204.1	116138.4	116070.5	116571.5	116516.1	117087.0D	117034.1D
13	115239.5	115179.1B	116125.3	116051.3	116550.9	116492.0	117064.9D	117007.8D
14	115220.3	115151.9	116111.2	116030.9	116528.6	116464.2	117040.9D	116979.7D
15	115179.1B	115124.2	116095.6		116504.8	116435.6	117015.0D	116949.7D
16	115155.4	115097.2B			116479.6	116405.4	116987.1D	116917.7D
17	115127.7	115048.0			116453.2	116373.7	116957.4D	116883.8D
18	115097.2B	115016.4			116425.3	116340.6	116925.6D	116848.0D
19	115065.0	114980.7			116396.5	116306.2	116892.2D	116810.2B
20	115030.7	114942.5			116366.5	116270.6	116857.6D	116770.7D
21	114994.6	114902.2			116335.9	116233.6		116729.3B
22	114957.1	114860.0			116304.7			
23	114918.4				116173.3			
24	114879.7				116241.3			

J	(21,0) band		(22,0) band		(23,0) band		(24,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	117683.7B		118486.5B		118969.4B		119431.4B	
1	117683.7B	117676.2B	118486.5B		118969.4B	118963.7	119431.4B	119425.4
2	117683.7B	117672.2	118486.5B	118475.1	118968.3	118958.0	119430.1	119419.5
3	117681.1	117662.8B	118483.1	118467.7	118964.5	118950.0	119426.5	119411.8
4	117676.2B	117654.9B	118478.1	118458.3	118959.2	118940.3	119421.2	119402.3
5	117670.7	117644.8	118471.6	118447.3	118952.1	118928.8	119414.1	119390.9
6	117662.8B	117632.4	118463.4	118434.5	118943.1	118915.5	119404.9	119377.5
7	117654.9B	117618.4	118453.4	118419.9	118932.4	118900.4	119393.9	119362.4
8	117642.9	117603.1	118441.7	118403.7	118920.1	118883.5	119381.0	119345.3
9	117630.8	117585.9	118428.3	118385.7	118907.9	118864.8	119366.1	119326.3
10	117615.8	117566.9	118413.2	118366.1	118888.2	118844.7	119349.2	119305.4
11	117599.9	117546.4	118396.7	118344.8	118873.4	118824.4	119330.4	119282.6
12	117581.4	117524.0	118378.6	118321.9	118849.8	118796.8	119309.7	119257.7
13	117561.2	117500.1	118359.1	118297.3	118832.2	118774.2	119287.2	119231.1
14	117539.3	117474.1	118338.1	118271.4	118813.9	118742.4	119262.1	119202.3
15	117515.6	117445.8	118315.8	118243.8		118717.4	119235.3	119171.9
16	117489.7	117416.1	118292.1	118214.8B		118691.0	119206.8	119139.0
17	117461.8	117384.6	118267.3	118184.7			119175.8	119104.1
18	117431.8	117350.7	118241.7	118153.0			119143.2	119067.8
19	117399.5	117314.9	118214.8B	118120.3				119029.5
20	117365.4	117276.8	118186.8	118086.8			119069.9B	118989.5
21	117329.2	117236.7						
22	117291.1							

J	(25,0) band		(26,0) band		(27,0) band		(28,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	119836.4B		120586.4B		121037.0B		121453.2B	
1	119836.4B	119830.6	120586.4B	120580.2	121037.0B	121029.7	121453.2B	
2	119836.4B	119825.0	120585.6	120574.5	121035.2	121025.2B	121451.4	121441.2B
3	119833.5	119817.6	120582.1	120566.9	121031.1	121017.4B	121447.3	121433.0B
4	119828.9	119808.4	120577.1	120557.6	121025.2B	121007.1B	121441.2B	121423.1B
5	119822.8	119797.6	120570.0	120546.5	121017.4B	120995.2	121433.0B	121411.0
6	119815.1	119785.2	120561.2	120533.4	121007.1B	120981.4	121423.1B	121397.0
7	119805.8	119771.2	120550.3	120518.5		120966.2		
8	119794.9		120537.7	120501.5		120947.5		
9			120523.0	120482.7				
10			120506.5	120462.2				
11			120488.4	120439.8				
12			120468.2	120415.2				
13		119649.6	120446.1	120389.2				
14	119689.7	119624.1	120422.5	120361.0				
15	119665.7	119596.4	120397.3	120331.1				
16	119639.6	119566.6	120370.3	120299.4				
17	119611.9	119534.7						
18	119581.2	119500.8						
19	119548.8	119464.8						
20	119513.6							
21	119476.8							
22	119437.3							

J	(32,0) band		(33,0) band		(34,0) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	123234.9B		123577.5B		123884.0B	
1	123234.9B	123228.6	123577.5B	123572.0B	123884.0B	123878.4
2	123231.4	123222.5	123574.6	123565.9	123881.5	123872.1
3	123225.3	123213.7	123569.7	123557.4	123877.2	123863.9
4	123218.9	123203.3	123562.6	123546.7	123870.2	123853.5
5	123209.4	123190.6	123553.2	123533.8	123861.6	123841.2
6	123197.7	123175.0	123541.9	123518.7	123850.7	123826.6
7	123182.2	123157.9	123526.9	123501.6	123837.3	
8	123166.8	123138.0	123511.0	123482.3	123822.3	
9	123153.3		123493.0	123459.3		

J	(7,1) band		(8,1) band		(9,1) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0			107216.3B		107868.8B	
1			107216.3B		107868.8B	107863.2
2			107216.3B		107868.8B	107857.4
3		106606.2	107213.2	107197.4	107866.2B	107850.0
4			107209.4	107188.5	107861.3	107841.0
5			107203.2	107177.9	107855.0	107830.3
6	106615.6	106579.8	107195.7	107165.7	107846.9	107817.9
7		106568.7	107186.5B	107152.0	107837.5	107803.8
8		106556.4	107175.8	107136.4	107826.2	107788.0
9				107119.6		
10			107149.5			

J	(11,1) band		(12,1) band		(21,1) band	
	R(J)	P(J)	R(J)	P(J)	R(J)	P(J)
0	109253.5B		109910.3B		114876.6B	
1	109253.5B	109247.5	109910.3B	109904.1	114876.6B	114869.4
2	109252.6	109241.3	109909.1	109898.3	114875.7	114864.7
3	109249.4	109234.1	109905.8	109890.8	114872.2	114857.2
4	109244.6	109224.9	109900.7	109881.4	114867.3	114847.9
5	109238.1	109213.8	109893.9	109870.3	114860.5	
6	109229.7	109201.3	109885.2	109857.3	114851.8	
7	109219.5	109186.8	109874.8	109842.6		
8	109207.8	109170.5	109862.4			
9			109848.8			

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