

List of the observed wavenumber of absorption bands of  $^{15}\text{N}_2$ .

E: Wavelength region of 94.672nm - 99.233nm

Wavenumber	$o_3(0) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$o_3(0) - X(0)$ $^{15}\text{N}_2$	$b(6) - X(0)$ $^{14}\text{N}_2$
105627.3		P(4)	
105624.9		Q(8)	
105621.9		P(5)	
105619.7		Q(9)	
105616.9	P(8)		
105613.7		Q(10)P(6)	
105611.8			
105607.4	P(9)	Q(11)	
105606.9		P(7)	
105600.8		Q(12)	
105598.7		P(8)	
105593.1		Q(13)	
105590.8		P(9)	
105584.5		Q(14)	
105581.8		P(10)	
105575.7		Q(15)	
105572.4		P(11)	
105562.2		P(12)	
105551.3		P(13)	
105539.6		P(14)	
105350.2			R(2)R(1)
105349.0			R(3)R(0)
105347.0			R(4)
105344.7			Q(1)
105343.4			R(5)
105342.1			Q(2)
105338.4			Q(3)R(6)
105337.0			P(2)
105334.4			
105333.2			Q(4)R(7)
105330.3			P(3)
105327.3			Q(5)
105325.4			R(8)
105323.7			
105322.4			P(4)
105321.7			
105319.7			Q(6)
105317.6			
105314.9			
105313.6			P(5)
105311.7			Q(7)
105303.3			P(6)
105301.1			Q(8)

Wavenumber	$b(6) - X(0)$ $^{14}\text{N}_2$	$b(6) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(6) - X(0)$ $^{15}\text{N}_2$
105295.3		R(2)R(1)	
105294.3		R(3)R(0)	
105288.6		R(5)Q(1)	
105287.2		Q(2)	
105283.9		R(6)Q(3)	
105282.2		P(2)	
105279.2	P(8)		
105278.8		Q(4)R(7)	
105275.9		P(3)	
105272.6		Q(5)	
105271.0		R(8)	
105268.5		P(4)	
105265.5		Q(6)	
105262.7		R(9)	
105259.7		P(5)	
105257.0		Q(7)	
105253.2		R(10)	
105249.6		P(6)	
105247.4		Q(8)	
105244.7			
105242.5		R(11)	
105238.4			R(2)R(1)
105237.5			R(3)R(0)
105235.6			R(4)
105233.1			Q(1)
105232.1			R(5)
105231.1			Q(2)
105227.5			Q(3)R(6)
105226.2			P(2)
105222.4			Q(4)R(7)
105219.8			P(3)
105216.9			Q(5)
105215.2			R(8)
105212.7			P(4)
105209.9			Q(6)
105207.1			R(9)
105204.3			P(5)
105201.6			Q(7)
105198.0			R(10)
105194.7			P(6)
105192.2			Q(8)
105190.3			
105187.7			R(11)
105184.0			P(7)
105181.5			Q(9)
105176.2			R(12)
105172.0			P(8)
105169.8			Q(10)

Wavenumber	$b(6) - X(0)$ $^{15}\text{N}_2$	$b'(2) - X(0)$ $^{15}\text{N}_2$	$b(5) - X(0)$ $^{14}\text{N}_2$	$b(5) - X(0)$ $^{14}\text{N}^{15}\text{N}$
105163.5	R(13)			
105159.0	P(9)			
105157.0	Q(11)			
105149.6	R(14)			
105144.7	P(10)			
105142.8	Q(12)			
105134.7	R(15)			
105131.2		R(1)R(0)		
105130.7		R(2)		
105129.2	P(11)			
105127.7	Q(13)	R(3)		
105124.9		P(1)		
105123.6		R(4)		
105119.8		P(2)		
105117.8		R(5)		
105112.7	P(12)	P(3)		
105110.7	Q(14)	R(6)		
105107.3				
105104.4		P(4)		
105101.6		R(7)		
105094.5		P(5)		
105093.9		R(8)		
105079.1		R(9)		
105069.6		P(7)		
104704.8			R(3)R(2)R(1)	
104702.9			R(4)R(0)	
104700.6			R(5)	
104698.8			Q(1)	
104696.6			Q(2)R(6)	
104694.3				
104693.0			Q(3)	
104690.8			P(2)	
104688.5			Q(4)	
104686.2			R(8)	
104684.7			P(3)	
104682.9			Q(5)	
104678.0				
104677.0			P(4)	
104676.3			Q(6)	
104668.7			P(5)Q(7)	
104661.7				R(3)R(2)R(1)
104660.6				R(4)
104659.7				R(0)
104657.7				R(5)
104655.5				Q(1)
104653.8				Q(2)R(6)
104650.3				Q(3)R(7)
104648.2				P(2)

Wavenumber	$b(5) - X(0)$ $^{14}\text{N}_2$	$b(5) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(5) - X(0)$ $^{15}\text{N}_2$
104646.1		Q(4)	
104644.6		R(8)	
104642.1		P(3)	
104640.9		Q(5)	
104638.2	Q(10)		
104637.4		R(9)	
104634.7		P(4)Q(6)	
104631.0		R(10)	
104627.1		P(5)Q(7)	
104624.6	P(9)		
104622.3		R(11)	
104617.8			R(3)R(2)R(1)
104616.1			R(4)R(0)
104614.5			R(5)
104612.0			R(6)Q(1)
104610.0			Q(2)
104607.0			Q(3)R(7)
104604.4			P(2)
104602.9			Q(4)
104602.4			R(8)
104599.5		Q(10)	
104598.7			P(3)
104597.7			Q(5)
104595.9			R(9)
104593.7			
104591.8			Q(6)P(4)
104589.1			R(10)
104587.4		Q(11)	
104586.0			
104584.5			Q(7)P(5)
104581.1			R(11)
104576.1			Q(8)P(6)
104574.3		Q(12)	
104572.4			R(12)
104571.6		P(10)	
104567.1			Q(9)
104566.1			P(7)
104562.9			R(13)
104560.6		Q(13)	
104557.3		P(11)	Q(10)
104555.6			P(8)
104546.1			Q(11)
104543.9			P(9)
104542.6		P(12)	
104534.1			Q(12)
104531.4			P(10)
104526.7			
104526.1		P(13)	

Wavenumber	$b(5) - X(0)$ $^{15}\text{N}_2$	$b'(1) - X(0)$ $^{15}\text{N}_2$	$b'(1) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b'(1) - X(0)$ $^{14}\text{N}_2$
104521.0	Q(13)			
104517.9	P(11)			
104515.2				
104513.1				
104510.1				
104507.2	Q(14)			
104504.4				
104503.6	P(12)			
104501.0				
104500.1				
104496.8				
104494.4				
104492.3	Q(15)			
104488.3	P(13)			
104481.8				
104479.9				
104476.5	Q(16)			
104472.2	P(14)			
104462.0				
104461.2				
104459.7	Q(17)			
104455.3	P(15)			
104442.0	Q(18)			
104438.6				
104437.5	P(16)			
104423.8	Q(19)			
104422.2		R(2)R(1)R(0)		
104419.2		R(3)		
104416.1		P(1)		
104415.0		R(4)	P(1)	
104414.0			R(4)	
104413.0				R(4)
104410.9		P(2)		
104409.3		R(5)	P(2)	
104408.1			R(5)	
104406.6				R(5)
104404.0		P(3)	P(3)	
104401.9		R(6)		
104400.4			R(6)	
104398.9				R(6)
104395.5		P(4)		
104393.4		R(7)	P(4)	
104391.5			R(7)	
104389.5				R(7)
104385.5		P(5)		
104383.1		R(8)	P(5)	
104380.7			R(8)	
104378.7				R(8)

Wavenumber	$b'(1) - X(0)$ $^{15}\text{N}_2$	$b'(1) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b'(1) - X(0)$ $^{14}\text{N}_2$	$c'_4(0) - X(0)$ $^{15}\text{N}_2$	$c'_4(0) - X(0)$ $^{14}\text{N}^{15}\text{N}$
104374.0	P(6)				
104371.4	R(9)	P(6)			
104369.1		R(9)			
104366.9			R(9)		
104362.4				R(10)R(13)	
104361.5					
104360.9				R(12)	
104360.1				R(11)	
104358.1		P(7)			
104355.9					
104354.3				R(9)	
104352.7				R(8)	
104352.0					R(8)
104350.5				R(7)	
104347.9				R(6)	
104347.2					R(6)
104345.4				R(5)	
104342.5		P(8)		R(4)	
104341.5					R(4)
104339.6				R(3)	
104338.3					R(3)
104336.6				R(2)	
104335.0					R(2)
104333.2				R(1)	
104331.7					R(1)
104329.8				R(0)	
104328.1					R(0)
104326.3		P(9)			
104324.5					
104322.6				P(1)	
104320.4					P(1)
104318.6				P(2)	
104316.4					P(2)
104314.7				P(3)	
104312.4					P(3)
104310.5				P(4)	
104308.1					P(4)
104306.2				P(5)	
104303.7					P(5)
104301.7				P(6)	
104299.0					P(6)
104297.2				P(7)	
104294.4					P(7)
104293.4					
104292.4				P(8)	
104289.6					P(8)
104287.4				P(9)	
104284.8					
104284.4					P(9)

Wavenumber	$c'_4(0) - X(0)$ $^{15}\text{N}_2$	$c'_4(0) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$c'_4(0) - X(0)$ $^{14}\text{N}_2$	$c_3(1) - X(1)$ $^{15}\text{N}_2$
104282.1	P(10)			
104279.2		P(10)		
104276.2	P(11)P(12)			
104272.9		P(11)		
104272.1		P(12)		
104267.2	P(13)			
104264.0		P(13)		
104262.1			P(13)	
104260.7	P(14)			
104257.6		P(14)		
104256.5			P(14)	
104254.2	P(15)			
104251.0		P(15)		
104249.1			P(15)	
104247.7	P(16)			
104244.2		P(16)		
104240.5	P(17)			
104237.4		P(17)		
104235.2			P(17)	
104233.0	P(18)			
104229.7		P(18)		
104226.5			P(18)	
104225.0	P(19)			
104224.5				
104216.4	P(20)			
104207.5				R(5)R(6)R(7)
104207.0				R(3)R(4)
104204.6				R(2)R(8)
104202.5				R(1)R(9)
104199.9				R(0)
104196.7				
104196.2				Q(1)
104195.3				Q(2)
104193.3				Q(3)
104192.8				
104192.2				
104190.0				Q(4)
104189.0				Q(5)P(2)
104185.3				Q(6)
104185.0				
104184.1				P(3)
104180.5				Q(7)
104178.5				Q(8)P(4)
104174.1				
104172.6				Q(9)
104172.0				
104171.8				P(5)
104170.2				

Wavenumber	$c_3(1) - X(1)$ $^{15}\text{N}_2$	$c_3(0) - X(0)$ $^{14}\text{N}_2$	$c_3(0) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$c_3(0) - X(0)$ $^{15}\text{N}_2$
104167.0	P(6)			
104166.5				
104164.7				
104159.9	P(7)			
104156.6				
104144.1		R(3)R(2)		
104143.3		R(4)R(1)		
104141.2		R(5)R(0)		
104137.7		R(6)Q(1)		
104135.6		Q(2)		
104132.8		Q(3)R(7)		
104128.8		Q(4)		
104128.6		R(8)P(2)		
104123.9		Q(4)		
104123.6		P(3)		
104118.1		Q(5)		
104116.6		P(4)		
104110.6			R(3)R(2)	
104109.9			R(1)	
104109.3			R(4)	
104107.5			R(0)R(5)	
104104.1			Q(1)	
104102.0			Q(2)	
104100.3		P(6)		
104099.3			Q(3)	
104095.5			Q(4)P(2)	
104093.8		Q(9)		
104090.6			Q(5)P(3)	
104089.2		P(7)		
104085.0			Q(6)	
104083.7			P(4)	
104082.3				
104078.3		P(8)		
104075.2				R(3)R(2)
104074.8				R(4)R(1)
104072.4				R(5)R(0)
104069.1				R(6)Q(1)
104067.2				Q(2)
104065.0				R(7)
104064.6				Q(3)
104060.6				Q(4)P(2)R(8)
104056.0				Q(5)P(3)
104054.7				R(9)
104050.5				Q(6)
104049.5				P(4)
104047.8				R(10)
104044.0				Q(7)
104041.8				P(5)
104039.9				R(11)



Wavenumber	$c_3(0) - X(0)$ $^{15}\text{N}_2$	$c_3(0) - X(0)$ $^{14}\text{N}^{15}\text{N}$
104036.6	Q(8)	
104033.3	P(6)	
104031.1	R(12)	
104028.2	Q(9)	
104023.9	P(7)	
104021.5	R(13)	
104018.8	Q(10)	
104013.5	P(8)	
104010.7	R(14)	
104008.6	Q(11)	
104004.7		
104002.1	P(9)	
103998.9	R(15)	
103997.3	Q(12)	
103993.7		P(12)
103989.8	P(10)	
103987.5		Q(15)
103986.1	R(16)	
103985.1	Q(13)	
103980.1		P(13)
103976.6	P(11)	
103971.9	Q(14)R(17)	
103967.1		
103966.4		P(14)
103962.4	P(12)	
103957.5	Q(15)R(18)	
103947.2	P(13)	
103942.1	Q(16)	
103941.5	R(19)	
103931.0	P(14)	
103925.9	Q(17)	
103924.1	R(20)	
103920.6		
103917.1		
103913.8	P(15)	
103912.3		
103909.7		
103908.3	Q(18)	
103905.8	R(21)	
103902.2		
103895.8	P(16)	
103889.9	Q(19)	
103887.9		R(22)
103876.5	P(17)	
103870.1	Q(20)	
103865.4	R(23)	
103856.5	P(18)	
103849.6	Q(21)	
103844.5		R(24)

Wavenumber	$c_3(0) - X(0)$ $^{15}\text{N}_2$	$b(7) - X(1)$ $^{15}\text{N}_2$	$b(4) - X(0)$ $^{14}\text{N}_2$	$b(4) - X(0)$ $^{14}\text{N}^{15}\text{N}$
103835.1	P(19)			
103804.4	Q(23)			
103776.6	Q(24)			
103735.4				
103730.4		R(2)R(1)		
103729.8		R(3)R(0)		
103727.7		R(4)		
103725.5		Q(1)		
103724.4		R(5)		
103723.1		Q(2)		
103719.8		R(6)Q(3)		
103718.1		P(2)		
103714.7		Q(4)R(7)		
103712.1		P(3)		
103709.2		Q(5)		
103707.6		R(8)		
103705.0		P(4)		
103702.3		Q(6)		
103700.2		R(9)		
103696.6		P(5)		
103694.2		Q(7)		
103687.2		P(6)		
103685.0		Q(8)		
103676.5		P(7)		
103674.6		Q(9)		
103667.1				
103628.5				
103622.4				
103619.9				
103575.2				
103574.3				
103572.1				
103568.4				
103562.6				
103556.9				
103553.8			R(3)R(2)R(1)	
103551.6			R(4)R(0)	
103548.5			R(5)	
103547.6			Q(1)	
103545.1			R(6)Q(2)	
103541.8			Q(3)	
103537.3			Q(4)	
103521.7				R(3)R(2)R(1)
103520.1				R(4)R(0)
103516.7				R(5)Q(1)
103513.6				Q(2)
103510.4				Q(3)
103507.8				P(2)
103506.2				Q(4)

Wavenumber	$b(4) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(4) - X(0)$ $^{15}\text{N}_2$
103500.9	Q(5)P(3)	
103493.8	Q(6)P(4)	
103489.8		R(3)R(2)R(1)
103488.2		R(4)R(0)
103484.9		R(5)Q(1)
103482.2		Q(2)
103481.5		R(6)
103479.1		Q(3)
103476.4		P(2)R(7)
103474.9		Q(4)
103470.4		P(3)R(8)
103469.4		Q(5)
103463.6		P(4)
103462.9		Q(6)R(9)
103455.6		Q(7)P(5)R(10)
103446.8		Q(8)P(6)
103445.7		R(11)
103437.0		P(7)Q(9)
103435.9		R(12)
103425.9		P(8)Q(10)
103423.4		R(13)
103413.8		P(9)Q(11)
103412.0		R(14)
103408.5	P(13)	
103401.2		P(10)
103399.8		Q(12)
103396.3		R(15)
103387.0		P(11)
103385.2		Q(13)
103382.6		
103381.2		R(16)
103378.2		
103375.8		
103374.0		
103371.7		Q(14)
103369.6		P(12)
103364.9		R(17)
103362.5		
103357.7		
103355.4		Q(15)
103352.8		P(13)
103348.3		
103345.1		

Wavenumber	$b(4) - X(0)$ $^{15}\text{N}_2$	$b(3) - X(0)$ $^{14}\text{N}_2$	$b(3) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(3) - X(0)$ $^{15}\text{N}_2$
103344.2				
103342.3				
103340.2				
103339.6				
103337.2	Q(16)			
103334.8	P(14)			
103333.4				
103328.4	R(19)			
103325.5				
103321.9				
103319.9				
103318.4	Q(17)			
103315.6	P(15)			
103298.4	Q(18)			
103277.2	Q(19)			
103273.8	P(17)			
103254.9	Q(20)			
103251.4	P(18)			
103231.2	Q(21)			
103227.5	P(19)			
102866.6				
102863.6		R(1)R(2)R(3)		
102861.3		R(0)R(4)		
102859.0		R(5)		
102857.6		Q(1)		
102853.6		R(6)		
102851.4		Q(3)		
102845.6			R(2)	
102845.1			R(1)R(3)	
102843.2			R(0)R(4)	
102839.8			R(5)	
102838.8			Q(1)	
102837.8			Q(2)	
102834.9			Q(3)	
102830.5			P(1)	
102829.7			Q(4)	
102821.3				R(3)R(2)R(1)R(0)
102819.3				R(4)
102816.6				Q(1)R(5)
102814.4				Q(2)
102813.9				R(6)
102811.2				Q(3)
102809.5				P(2)
102806.7				Q(4)R(7)
102803.1				P(3)
102800.8				Q(5)R(8)
102799.2			Q(8)	
102797.6			R(11)	

Wavenumber	$b(3) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(3) - X(0)$ $^{15}\text{N}_2$	$b(2) - X(0)$ $^{14}\text{N}_2$	$b(2) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(2) - X(0)$ $^{15}\text{N}_2$
102796.2		P(4)			
102794.1		Q(6)			
102792.7		R(9)			
102787.9		P(5)			
102786.2		Q(7)			
102778.7		P(6)			
102778.0	Q(10)				
102777.1		Q(8)			
102776.1					
102773.8		R(11)			
102771.1					
102768.0		P(7)			
102767.3		Q(9)			
102763.0		R(12)			
102758.2		P(8)			
102756.2		Q(10)			
102755.7					
102752.9	Q(12)				
102743.5		P(9)			
102743.0		Q(11)			
102738.6					
102736.6	P(11)				
102729.6		P(10)Q(12)			
102714.6		P(11)Q(13)			
102711.5					
102698.2		P(12)Q(14)			
102156.5			R(2)		
102155.7			R(3)		
102154.5			R(1)		
102153.7			R(4)		
102150.6			R(5)		
102149.8			Q(1)		
102148.2			Q(2)		
102144.5				R(2)R(3)	
102143.5				R(1)	
102142.4				R(0)R(4)	
102139.1				R(5)Q(1)	
102136.4				Q(2)	
102134.3					R(2)
102132.9					R(3)R(1)
102131.4					R(4)R(0)
102127.8					Q(1)R(5)
102125.7					Q(2)
102123.4					R(6)
102122.3					Q(3)
102118.0					Q(4)R(7)
102114.5					P(3)
102112.2					Q(5)R(8)

Wavenumber	$b(2) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(2) - X(0)$ $^{15}\text{N}_2$	$b(1) - X(0)$ $^{15}\text{N}_2$	$b(1) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(1) - X(0)$ $^{14}\text{N}_2$
102108.8	P(5)				
102107.5		P(4)			
102106.9	Q(7)				
102105.4		Q(6)			
102104.7		R(9)			
102099.2		P(5)			
102097.7		Q(7)			
102090.0		P(6)			
102088.7		Q(8)			
102085.8		R(11)			
102079.0		P(7)			
102078.4		Q(9)			
102075.3		R(12)			
102067.5		P(8)Q(10)			
102062.8		R(13)			
102055.1		P(9)Q(11)			
102041.3		P(10)Q(12)			
102026.4		P(11)Q(13)			
102010.5		P(12)			
101993.2		P(13)			
101460.0			R(3)R(2)R(1)		
101457.7			R(0)R(4)		
101455.0			R(5)Q(1)		
101452.6			Q(2)		
101451.4			R(6)		
101449.3			Q(3)		
101446.5			R(7)P(2)		
101444.8			Q(4)		
101442.5				Q(4)	
101441.3			P(3)		
101439.6			Q(5)R(8)		
101436.8				Q(5)	
101434.3			P(4)		
101433.1			Q(6)R(9)		
101431.7				P(4)	
101429.9				Q(6)	
101426.2			P(5)		
101425.5			Q(7)R(10)		
101423.2				P(5)	
101422.1				Q(7)	
101417.0			P(6)Q(8)		
101415.8			R(11)		
101413.3				Q(8)P(6)	
101410.0					Q(8)P(6)
101407.0			Q(9)P(7)		
101403.0				Q(9)P(7)	
101400.0					
101399.4					Q(9)P(7)
101395.8			Q(10)P(8)		

Wavenumber	$b(1) - X(0)$ $^{15}\text{N}_2$	$b(1) - X(0)$ $^{14}\text{N}^{15}\text{N}$	$b(0) - X(0)$ $^{15}\text{N}_2$	$b(0) - X(0)$ $^{14}\text{N}^{15}\text{N}$
101393.8				
101391.6		Q(10)		
101391.3		P(8)		
101384.4	Q(11)			
101383.6	P(9)			
101371.2	Q(12)			
101369.7	P(10)			
101356.8	Q(13)			
101355.2	P(11)			
100847.9			R(3)R(2)R(1)	
100846.3			R(4)R(0)	
100844.1			R(5)	
100842.3			Q(1)	
100840.4			R(6)Q(2)	
100837.2			Q(3)	
100835.9			R(7)	
100835.2			P(2)	
100833.1			Q(4)	
100831.0			R(8)	
100829.0			P(3)	
100827.9			Q(5)	
100823.8			R(9)	
100821.9			Q(6)P(4)	
100820.0				Q(4)
100814.5			Q(7)P(5)	
100808.2				Q(6)
100806.1			Q(8)	
100805.3			P(6)	
100804.7				
100800.6				Q(7)
100798.5				P(5)
100796.9			Q(9)	
100795.8			P(7)	
100785.0			P(8)	
100775.1				
100774.2				
100772.9			P(9)	