

Integrated cross sections of lines of the Herzberg II bands of O₂ at 295 K
in units of 10⁻²⁷cm²cm⁻¹

<i>N</i>	<i>R</i> <i>R</i> (<i>J</i>)	<i>R</i> <i>Q</i> (<i>J</i>)	<i>P</i> <i>Q</i> (<i>J</i>)	<i>P</i> <i>P</i> (<i>J</i>)	<i>R</i> <i>R</i> (<i>J</i>)	<i>R</i> <i>Q</i> (<i>J</i>)	<i>P</i> <i>Q</i> (<i>J</i>)	<i>P</i> <i>P</i> (<i>J</i>)
<i>c</i> (7)- <i>X</i> (0) band					<i>c</i> (8)- <i>X</i> (0) band			
1					25	46		34
3	31	62	31B	49	46B	90	43	65
5	53B	71	46	56	65	102	62B	96
7	71	93	59	124	93	118	96	107B
9	65	105	56	74	93	133	85	102B
11	43	62		65	83	114B	71	105
13	71	93	62	87	93	83	59	99
15	49	53	34B	37	40	68	31	61B
17					37B	51B	25	25
19					28	37	31	19
<i>c</i> (9)- <i>X</i> (0) band					<i>c</i> (10)- <i>X</i> (0) band			
1	29B	39B		56	37	56		46
3	53	90	71	68	71	93	49	93
5	77	96	108B	108B	83	136	80	142
7	101B	136B	93	114	114	158	102	173
9	105	130	118	114	105	155	99	148
11	90	96	65	114	102	179	90	142
13	80	102	62	91B	83	121	65	124
15	71	90	46	80	102	136	46	93B
17	46	65	25	40	43	74	40	77
19	19	37	22	31	25	46	31	34
<i>c</i> (11)- <i>X</i> (0) band					<i>c</i> (12)- <i>X</i> (0) band			
1	28	77		59	37	105		105B
3	77	130	53	87	96	139B	68	124
5	136	198	83	145	124	179	118	145
7	139B	195	105	158	161	213	158	204
9	152	223	93	152	195	238	150B	210B
11	108	173	93	152	164	204	164	189B
13	99	161	93	130	93	158	93B	158
15	62	118	53	80	83	25	77	220
17	49	77	31	65	62B	92B	77	309
19	56	49	28	53	40	62	53	65
21	23B	46	22	19				

N	${}^R R(J)$	${}^R Q(J)$	${}^P Q(J)$	${}^P P(J)$	${}^R R(J)$	${}^R Q(J)$	${}^P Q(J)$	${}^P P(J)$	
$c(13)-X(0)$ band					$c(14)-X(0)$ band				
1	28	62		46B	62	93		56	
3	59	145	86B	107B	102	148	93	90	
5	170B	216B	102	136	108	158	93B	155	
7	167	257	133B	170B	176	250	99	179	
9	121	210	133	195	161	204	108B	186B	
11	164	229	130	139	133B	142B	90	152	
13	108	145	96	114	90	136	83	102	
15	53	114	93	99	105	127	63B	100B	
17	46B	148	34	53	74	111			
19	28	43	56	62			30B	83	
$c(15)-X(0)$ band					$c(16)-X(0)$ band				
1		83		56					
3		148	77	136	80B	95B	85B	85B	
5	127	155B	71	127	148	114	130	155	
7	139B	164B	87	142	126B	150B	121	105	
9	145	223B	93B	145	105	164	161	145	
11	99	182	87B	151B	96	155	120B	121B	
13	87	158	68	142		93	71B	93	
15	121	116B	62B	111				62	
17	59	74	39B	68B					
19			31B						

B: Lines are blended and values are estimated.

References:

1. *Fourier Transform Spectroscopy and Cross Section Measurements of the Herzberg II Bands of O₂ at 295 K*, K. Yoshino, J.R. Esmond, W.H. Parkinson, A.P. Thorne, R.C.M. Learner and G. Cox, *J. Chem. Phys.* **111**, 2960-2967 (1999).