

Table 15.15 from (1991AJ01): Radiative widths from $^{15}\text{N}(\gamma, \gamma')$ and $^{15}\text{N}(e, e')$ ^a

E_x (MeV \pm keV)	J^π	Mult.	Γ_{γ_0} (eV)
5.27	$\frac{5}{2}^+$	C3	$(4.2 \pm 0.3) \times 10^{-6}$
		M2	$(1.2 \pm 0.7) \times 10^{-4}$
5.30	$\frac{1}{2}^+$	C1	2.2 ± 2.3
6.323 ± 1 ^b	$\frac{3}{2}^-$	C2	0.050 ± 0.004
		M1	1.9 ± 0.4 ^c
		M1 + E2	3.12 ± 0.18 ^{b, d, e}
7.16	$\frac{5}{2}^+$	C3	$(0.86 \pm 0.10) \times 10^{-5}$
7.301 ± 1 ^b	$\frac{3}{2}^+$	C1	2.6 ± 1.0
		M2	$(0.3 \pm 0.2) \times 10^{-5}$
		E1 + M2	1.08 ± 0.08 ^b
7.57	$\frac{7}{2}^+$	C3	$(1.84 \pm 0.16) \times 10^{-5}$
8.310 ± 4 ^b	$\frac{1}{2}^+$	E1	0.3 ± 0.2 ^b
8.575 ± 4 ^b	$\frac{3}{2}^+$	E1 + M2	0.3 ± 0.3 ^b
9.048 ± 1 ^b	$\frac{1}{2}^+$	E1	1.2 ± 0.2 ^b
9.150 ± 1 ^b	$\frac{3}{2}^-$	C2	0.095 ± 0.005 ^f
		M1	0.2 ± 0.8
		M1 + E2	0.47 ± 0.12 ^{b, g}
9.760 ± 1 ^b	$\frac{5}{2}^-$	C2	0.20 ± 0.05
		E2	0.21 ± 0.07 ^b
9.924 ± 1 ^b	$\frac{3}{2}^-$	M1	1.6 ± 0.2 ^b
10.064 ± 1 ^b	$\frac{3}{2}^+$	E1	6.3 ± 0.4 ^b
10.8	$\frac{3}{2}^+$	M2	$(1.8 \pm 0.8) \times 10^{-2}$
11.88	$\frac{3}{2}^-$	C2	0.44 ± 0.10
		M1	4.4 ± 3.8
12.5	$\frac{5}{2}^+$	M2	$(5.2 \pm 2.0) \times 10^{-2}$
(13.98)			
14.7	$\frac{5}{2}^-$	C2	1.8 ± 0.2
20.10			
23.25			

^a For references and $B(\lambda)\uparrow$ see [Table 15.17 in \(1981AJ01\)](#). See also [Tables 15.5 and 15.6](#) here. Form factors have also been measured to $^{15}\text{N}^*(9.23, 11.29$ [both $\frac{1}{2}^-$], 10.45 [$\frac{5}{2}^-$], 12.1 [u], 12.9 [u]) ([1987DE1Q](#)) [unpublished Ph.D. thesis].

^b ([1981MO09](#)): (γ, γ) .

^c See note added in proof in ([1975MO28](#)).

^d $\delta(\text{E2/M1}) = 0.137 \pm 0.005$. See, however, [Table 15.5](#).

^e Using $\delta(\text{E2/M1}) = 0.132 \pm 0.004$ [see [Table 15.5](#)] $\Gamma_{\gamma_0} = 3.07 \pm 0.18$ eV (M1) and $(5.34 \pm 0.44) \times 10^{-2}$ eV (E2) (D.J. Millener, private communication.)

^f $\delta(\text{E2/M1}) > 0.3$.

^g Mixing ratio is very small [see [Table 15.5](#)] and the transition is almost purely M1 (D.J. Millener, private communication).