²³⁰Th(d,⁶Li) 1984Va13

History											
Туре	Author	Citation	Literature Cutoff Date								
Full Evaluation	Y. A. Akovali	NDS 77,433 (1996)	1-Feb-1996								

E=45 MeV (1984Va13).

 $\sigma(\theta); \theta=13^{\circ}, 17^{\circ}, 21^{\circ}$ (1984Va13).

The absolute cross sections were obtained by normalizing the angular distributions for elastic scattering to optical-model predictions.

E(level) [†]	J^{π}	L [@]	s&	E(level) [†]	J^{π}	L@	s&	E(level) [†]	L [@]	s&
0	0^{+}	0	1.0	447 [‡]	5-	5	< 0.3	1220	(0)	(1.3)
67 [‡]	2+	2	0.8	650? [‡]	0^{+}	0	< 0.1	1330	(0)	(0.7)
211 [‡]	4+	4	0.4	824 [‡]	0^{+}	0	0.4	1420	(2)	(1.4)
254 [‡]	1-	1	< 0.1	873 [‡]	2^{+}	2	0.4	1540	(1)	(0.9)
322 [‡]	3-	3	< 0.3	1049 [#]	1-	1	0.4			
417 [‡]	6+	6	< 0.2	1140		(2)	(1.1)			

[†] Level energies given as listed by 1984Va13. The levels above 1.1 MeV are their measurements where the energy resolution was about 40 keV (1984Va13). The lower levels were taken from the decay work and from the Coulomb excitation experiment. See Adopted Levels for the adopted energies.

[‡] From Coulomb excitation work. [#] From ²²⁶Fr β^- decay work of 1981Ku02.

[@] Data were taken at $\theta(lab)=13^\circ$, 17° and 21°. The experimental cross sections were compared with finite-range DWBA calculations.

& Relative strengths, $S=(d\sigma/d\Omega)(exp)/(d\sigma/d\Omega)(theory)$, normalized to S=1 at g.s.; the strength for the g.s. is 0.016 (1984Va13).