

Time (min)	L	B/B <sub>0</sub>	>252MeV	>253MeV	>254MeV	>255MeV	>256MeV	>257MeV	>258MeV	>259MeV	>261MeV	>262MeV	>263MeV	>264MeV	>265MeV	>266MeV	>267MeV	>268MeV	>269MeV	TOTAL RADS
5	1.44168	2.14962	2.308E+01 (0.00010rad)	2.278E+01 (0.00010rad)	2.249E+01 (0.00010rad)	2.220E+01 (0.00010rad)	2.191E+01 (0.00010rad)	2.163E+01 (0.00010rad)	2.135E+01 (0.00010rad)	2.108E+01 (0.00010rad)	2.054E+01 (0.00009rad)	2.028E+01 (0.00009rad)	2.002E+01 (0.00009rad)	1.976E+01 (0.00009rad)	1.951E+01 (0.00009rad)	1.925E_01 (0.00009rad)	1.901E+01 (0.00009rad)	1.876E+01 (0.00009rad)	1.852E+01 (0.00009rad)	0.00161rad
6	1.51254	2.50334	2.377E+01 (0.00011rad)	2.343E+01 (0.00010rad)	2.309E+01 (0.00010rad)	2.275E+01 (0.00010rad)	2.242E+01 (0.00010rad)	2.210E+01 (0.00010rad)	2.178E+01 (0.00010rad)	2.146E+01 (0.00010rad)	2.084E+01 (0.00010rad)	2.054E+01 (0.00009rad)	2.024E+01 (0.00009rad)	1.995E+01 (0.00009rad)	1.966E+01 (0.00009rad)	1.937E+01 (0.00009rad)	1.909E+01 (0.00009rad)	1.882E+00 (0.00009rad)	1.854E+01 (0.00009rad)	0.00153rad
7	1.62236	2.90373	2.122E+01 (0.00009rad)	2.086E+01 (0.00009rad)	2.050E+01 (0.00009rad)	2.015E+01 (0.00009rad)	1.981E+01 (0.00009rad)	1.948E+01 (0.00009rad)	1.915E+01 (0.00009rad)	1.882E+01 (0.00009rad)	1.819E+01 (0.00008rad)	1.788E+01 (0.00008rad)	1.758E+01 (0.00008rad)	1.728E+01 (0.00008rad)	1.699E+01 (0.00008rad)	1.670E+01 (0.00008rad)	1.641E+01 (0.00008rad)	1.614E+01 (0.00008rad)	1.586E+01 (0.00008rad)	0.00144rad
8	1.73976	3.34539	4.767E+00 (0.00002rad)	4.660E+00 (0.00002rad)	4.555E+00 (0.00002rad)	4.452E+00 (0.00002rad)	4.351E+00 (0.00002rad)	4.253E+00 (0.00002rad)	4.157E+00 (0.00002rad)	4.064E+00 (0.00002rad)	3.882E+00 (0.00002rad)	3.795E+00 (0.00002rad)	3.709E+00 (0.00002rad)	3.626E+00 (0.00002rad)	3.544E+00 (0.00002rad)	3.464E+00 (0.00002rad)	3.386E+00 (0.00002rad)	3.310E+00 (0.00002rad)	3.235E+00 (0.00002rad)	0.00034rad
9	1.86325	3.82043	1.618E+00 (0.00001rad)	1.577E+00 (0.00001rad)	1.538E+00 (0.00001rad)	1.500E+00 (0.00001rad)	1.463E+00 (0.00001rad)	1.426E+00 (0.00001rad)	1.391E+00 (0.00001rad)	1.356E+00 (0.00001rad)	1.290E+00 (0.00001rad)	1.258E+00 (0.00001rad)	1.227E+00 (0.00001rad)	1.196E+00 (0.00001rad)	1.166E+00 (0.00001rad)	1.137E+00 (0.00001rad)	1.109E+00 (0.00001rad)	1.082E+00 (0.00001rad)	1.055E+00 (0.00001rad)	0.00016rad
10	1.99131	4.31882	1.484E+00 (0.00001rad)	1.452E+00 (0.00001rad)	1.420E+00 (0.00001rad)	1.389E+00 (0.00001rad)	1.359E+00 (0.00001rad)	1.330E+00 (0.00001rad)	1.301E+00 (0.00001rad)	1.272E+00 (0.00001rad)	1.217E+00 (0.00001rad)	1.191E+00 (0.00001rad)	1.165E+00 (0.00001rad)	1.139E+00 (0.00001rad)	1.115E+00 (0.00001rad)	1.090E+00 (0.00001rad)	1.067E+00 (0.00001rad)	1.043E+00 (0.00001rad)	1.021E+00 (0.00001rad)	0.00015rad
<b>TOTALS</b>																				<b>0.00370rad</b>

### Depth dose Calculations

$$(\text{Protons/cm}^2/\text{s}) * (100^2 \text{cm}^2) * (3600 \text{s/hr}) = \text{Protons/m}^2/\text{hr}$$

$$(\text{Protons/m}^2/\text{hr}) * 0.11 \text{m}^2 = \text{Protons/hr}$$

$$\text{Protons/hr} * (E \text{ MeV/Proton}) = E \text{ MeV/hr}$$

$$(E \text{ MeV/hr}) * (1.6 * 10^{-13} / \text{MeV}) = \text{Joules/hr}$$

$$(\text{Joules/hr}) / 60 \text{kg} = \text{Gray/hr}$$

$$(\text{Gray/hr}) * 100 \text{rad/hr} = \text{rad/hr}$$

$$\text{Rad/hr} * 1/60 = \text{rad/min}$$