

Time (min)	L	B/B <sub>0</sub>	>361MeV	>362MeV	>363MeV	>364MeV	>365MeV	>366MeV	>367MeV	>368MeV	>369MeV	>371MeV	>372MeV	>373MeV	>374MeV	>375MeV	>376MeV	>377MeV	>378MeV	TOTAL RADS
5	1.44168	2.14962	5.637E+00 (0.00004rad)	5.565E+00 (0.00004rad)	5.493E+00 (0.00004rad)	5.423E+00 (0.00003rad)	5.353E+00 (0.00003rad)	5.284E+00 (0.00003rad)	5.216E+00 (0.00003rad)	5.149E+00 (0.00003rad)	5.083E+00 (0.00003rad)	4.953E+00 (0.00003rad)	4.890E+00 (0.00003rad)	4.827E+00 (0.00003rad)	4.765E+00 (0.00003rad)	4.704E+00 (0.00003rad)	4.643E+00 (0.00003rad)	4.584E+00 (0.00003rad)	4.525E+00 (0.00003rad)	0.00054rad
6	1.51254	2.50334	4.834E+00 (0.00003rad)	4.763E+00 (0.00003rad)	4.694E+00 (0.00003rad)	4.626E+00 (0.00003rad)	4.559E+00 (0.00003rad)	4.493E+00 (0.00003rad)	4.428E+00 (0.00003rad)	4.364E+00 (0.00003rad)	4.300E+00 (0.00003rad)	4.176E+00 (0.00003rad)	4.116E+00 (0.00003rad)	4.056E+00 (0.00003rad)	3.997E+00 (0.00003rad)	3.939E+00 (0.00003rad)	3.882E+00 (0.00003rad)	3.826E+00 (0.00003rad)	3.770E+00 (0.00003rad)	0.00051rad
7	1.62236	2.90373	3.287E+00 (0.00002rad)	3.231E+00 (0.00002rad)	3.177E+00 (0.00002rad)	3.123E+00 (0.00002rad)	3.070E+00 (0.00002rad)	3.018E+00 (0.00002rad)	2.967E+00 (0.00002rad)	2.916E+00 (0.00002rad)	2.867E+00 (0.00002rad)	2.770E+00 (0.00002rad)	2.723E+00 (0.00002rad)	2.677E+00 (0.00002rad)	2.632E+00 (0.00002rad)	2.587E+00 (0.00002rad)	2.543E+00 (0.00002rad)	2.500E+00 (0.00002rad)	2.416E+00 (0.00002rad)	0.00034rad
<b>TOTALS</b>																				<b>0.00139rad</b>

### Depth dose Calculations

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

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

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

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

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

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

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