

Time (min)	L	B/B ₀	>308MeV	>309MeV	>311MeV	>312MeV	>313MeV	>314MeV	>315MeV	>316MeV	>317MeV	>318MeV	>319MeV	>321MeV	>322MeV	>323MeV	>324MeV	>325MeV	TOTAL RADS
5	1.44168	2.14962	1.119E+01 (0.00006rad)	1.104E+01 (0.00006rad)	1.076E+01 (0.00006rad)	1.062E+01 (0.00006rad)	1.049E+01 (0.00006rad)	1.035E+01 (0.00006rad)	1.022E+01 (0.00006rad)	1.009E+01 (0.00006rad)	9.957E+00 (0.00006rad)	9.829E+00 (0.00006rad)	9.703E+00 (0.00005rad)	9.455E+00 (0.00005rad)	9.334E+00 (0.00005rad)	9.214E+00 (0.00005rad)	9.096E+00 (0.00005rad)	8.979E+00 (0.00005rad)	0.00090rad
6	1.51254	2.50334	1.049E+01 (0.00006rad)	1.033E+01 (0.00006rad)	1.004E+01 (0.00005rad)	9.892E+00 (0.00005rad)	9.748E+00 (0.00005rad)	9.607E+00 (0.00005rad)	9.467E+00 (0.00005rad)	9.330E+00 (0.00005rad)	9.195E+00 (0.00005rad)	9.061E+00 (0.00005rad)	8.930E+00 (0.00005rad)	8.672E+00 (0.00005rad)	8.547E+00 (0.00005rad)	8.423E+00 (0.00005rad)	8.300E+00 (0.00005rad)	8.180E+00 (0.00005rad)	0.00082rad
7	1.62236	2.90373	8.140E+00 (0.00004rad)	8.002E+00 (0.00004rad)	7.732E+00 (0.00004rad)	7.601E+00 (0.00004rad)	7.472E+00 (0.00004rad)	7.346E+00 (0.00004rad)	7.221E+00 (0.00004rad)	7.099E+00 (0.00004rad)	6.978E+00 (0.00004rad)	6.860E+00 (0.00004rad)	6.743E+00 (0.00004rad)	6.517E+00 (0.00004rad)	6.406E+00 (0.00004rad)	6.297E+00 (0.00004rad)	6.191E+00 (0.00004rad)	6.086E+00 (0.00003rad)	0.00063rad
8	1.73976	3.34539	1.329E+00 (0.00001rad)	1.299E+00 (0.00001rad)	1.241E+00 (0.00001rad)	1.213E+00 (0.00001rad)	1.186E+00 (0.00001rad)	1.159E+00 (0.00001rad)	1.133E+00 (0.00001rad)	1.107E+00 (0.00001rad)	1.082E+00 (0.00001rad)	1.058E+00 (0.00001rad)	1.034E+00 (0.00001rad)	0	0	0	0	0	0.00011rad
TOTALS																			0.00246rad

Depth dose Calculations

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

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

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

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

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

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

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