

Time (min)	L	B/B ₀	>379MeV	>381MeV	>382MeV	>383MeV	>384MeV	>385MeV	>386MeV	>387MeV	>388MeV	>389MeV	>391MeV	>392MeV	>393MeV	>394MeV	TOTAL RADS
5	1.44168	2.14962	4.467E+00 (0.00003rad)	4.353E+00 (0.00003rad)	4.297E+00 (0.00003rad)	4.241E+00 (0.00003rad)	4.187E+00 (0.00003rad)	4.133E+00 (0.00003rad)	4.080E+00 (0.00003rad)	4.028E+00 (0.00003rad)	3.976E+00 (0.00003rad)	3.925E+00 (0.00003rad)	3.825E+00 (0.00003rad)	3.776E+00 (0.00003rad)	3.727E+00 (0.00003rad)	3.679E+00 (0.00003rad)	0.00042rad
6	1.51254	2.50334	3.716E+00 (0.00002rad)	3.609E+00 (0.00002rad)	3.556E+00 (0.00002rad)	3.505E+00 (0.00002rad)	3.454E+00 (0.00002rad)	3.404E+00 (0.00002rad)	3.354E+00 (0.00002rad)	3.306E+00 (0.00002rad)	3.258E+00 (0.00002rad)	3.210E+00 (0.00002rad)	3.118E+00 (0.00002rad)	3.073E+00 (0.00002rad)	3.028E+00 (0.00002rad)	2.984E+00 (0.00002rad)	0.00028rad
7	1.62236	2.90373	2.416E+00 (0.00002rad)	2.335E+00 (0.00002rad)	2.295E+00 (0.00002rad)	2.256E+00 (0.00002rad)	2.218E+00 (0.00001rad)	2.180E+00 (0.00001rad)	2.143E+00 (0.00001rad)	2.107E+00 (0.00001rad)	2.071E+00 (0.00001rad)	2.036E+00 (0.00001rad)	1.968E+00 (0.00001rad)	1.934E+00 (0.00001rad)	1.901E+00 (0.00001rad)	1.716E+00 (0.00001rad)	0.00018rad
TOTALS																	0.00088rad

Depth dose Calculations

$(\text{Protons/cm}^2/\text{s}) * (100^2\text{cm}^2) * (3600\text{s/hr}) = \text{Protons/m}^2/\text{hr}$
 $(\text{Protons/m}^2/\text{hr}) * 0.11\text{m}^2 = \text{Protons/hr}$
 $\text{Protons/hr} * (\text{E MeV/Proton}) = \text{E MeV/hr}$
 $(\text{E MeV/hr}) * (1.6 * 10^{-13}/\text{MeV}) = \text{Joules/hr}$
 $(\text{Joules/hr}) / 60\text{kg} = \text{Gray/hr}$
 $(\text{Gray/hr}) * 100\text{rad/hr} = \text{rad/hr}$
 $\text{Rad/hr} * 1/60 = \text{rad/min}$