

MicroShield 7.02
Dominion (07-MSD-7.02-1318)

Date	By	Checked

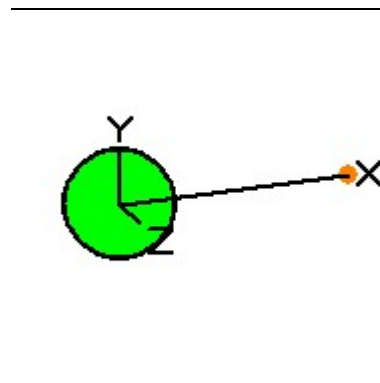
Filename	Run Date	Run Time	Duration
sphereWithShell.ms7	July 17, 2025	10:14:09 AM	00:00:00

Project Info	
Case Title	Case 10
Description	air sphere shielded by concrete
Geometry	6 - Sphere

Source Dimensions	
Radius	2.1e+3 cm (70 ft)

Dose Points			
A	X	Y	Z
#1	9.2e+3 cm (302 ft 7.0 in)	0.0 cm (0.0 in)	0.0 cm (0.0 in)

Shields			
Shield N	Dimension	Material	Density
Source	4.07e+10 cm ³	Air	0.00122
Shield 1	76.2 cm	Concrete	2.3
Transition	6949.44 cm	Air	0.00122
Air Gap		Air	0.00122



Source Input: Grouping Method - User Defined Energies				
Group #	Energy (MeV)	Activity (Photons/sec)	Volume Source Photons/sec/cm ³	% Energy Activity
1	1.0	1.0000e+017	2.4579e+006	100.000%

Buildup: The material reference is Shield 1	
Integration Parameters	
Rho (Radial)	10
Angle	10

Results					
Energy (MeV)	Activity (Photons/sec)	Fluence Rate MeV/cm ² /sec No Buildup	Fluence Rate MeV/cm ² /sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
1.0	1.000e+17	1.374e+02	3.977e+03	2.534e-01	7.331e+00
Totals	1.000e+17	1.374e+02	3.977e+03	2.534e-01	7.331e+00