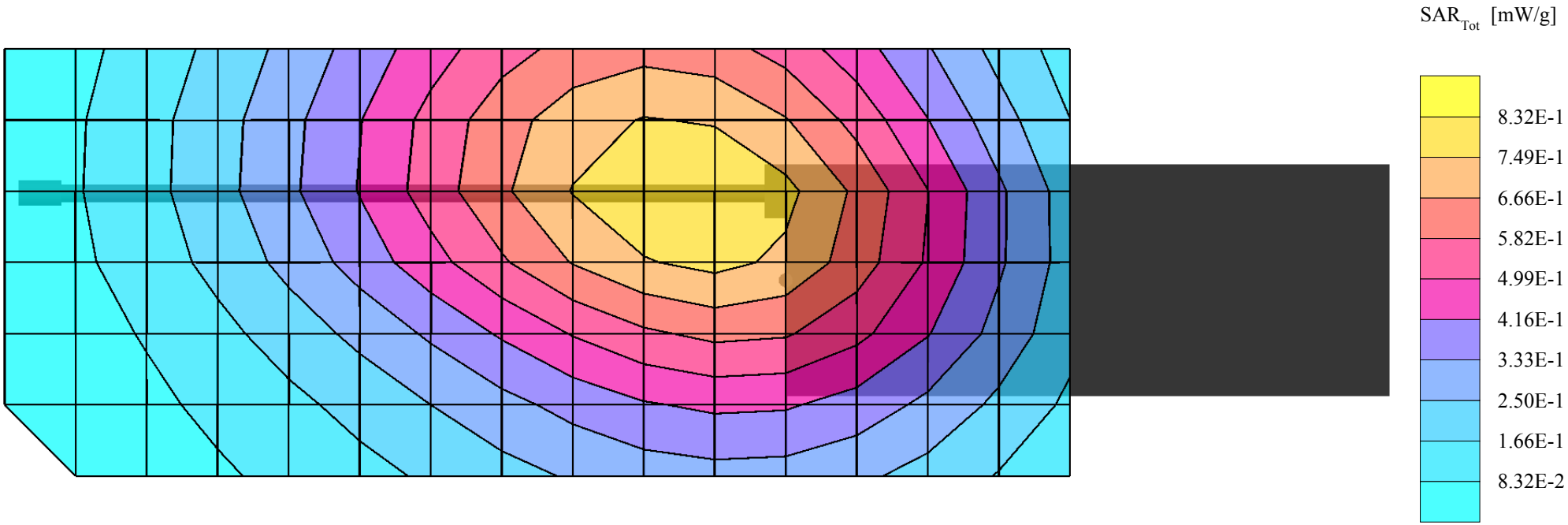
APPENDIX A - SAR MEASUREMENT DATA

M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 0.742 mW/g, SAR (10g): 0.574 mW/g

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiMH Battery Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.54 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Cube Scan to show Peak Scan Location

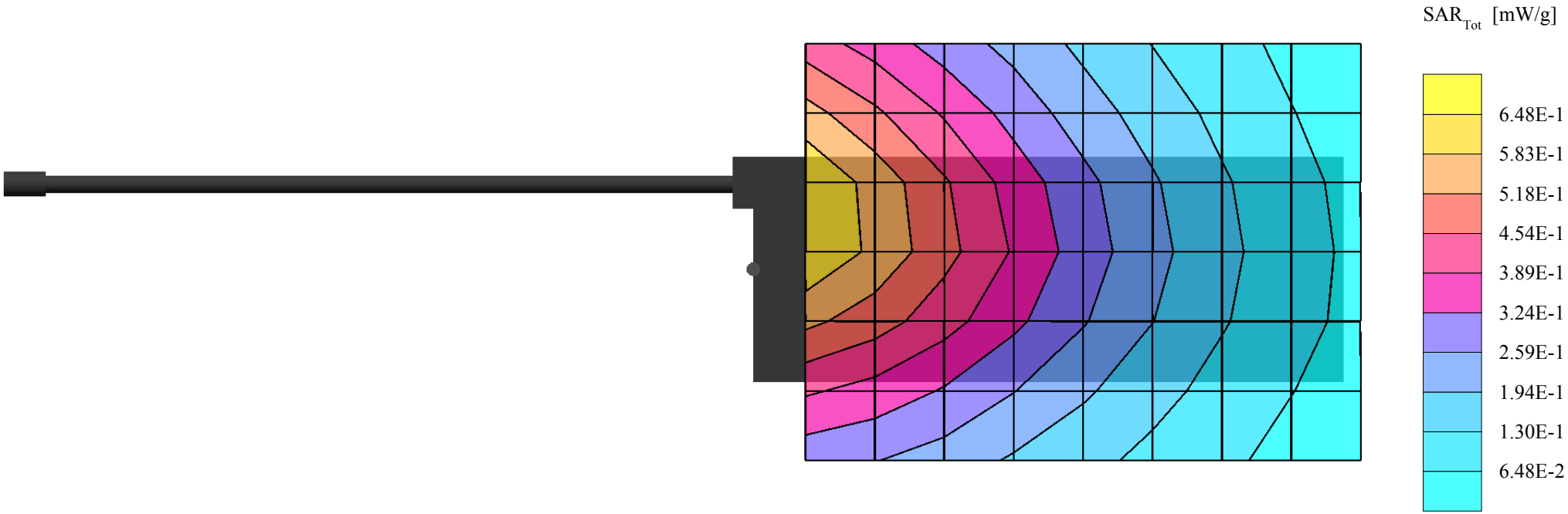


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiMH Battery Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.54 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Coarse Scan to show SAR Distribution at Lower Section of Radio

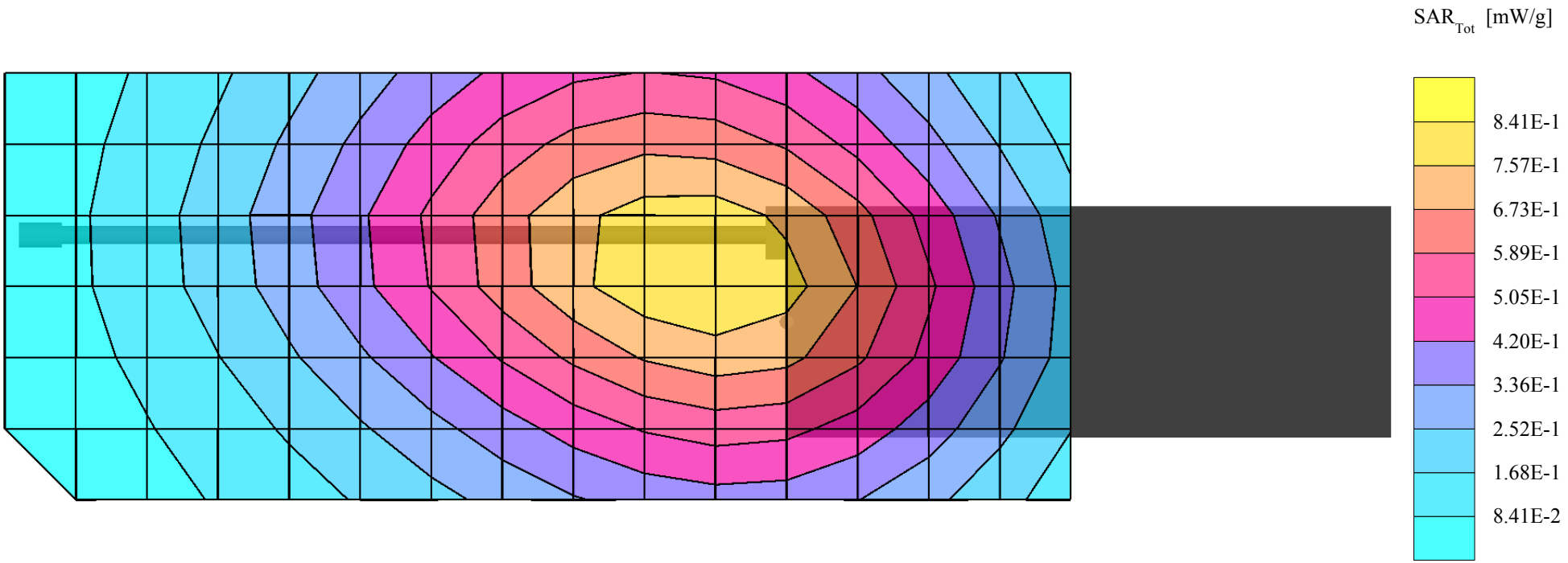


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 0.782 mW/g, SAR (10g): 0.600 mW/g

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiCd Battery Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.55 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Cube Scan to show Peak Scan Location

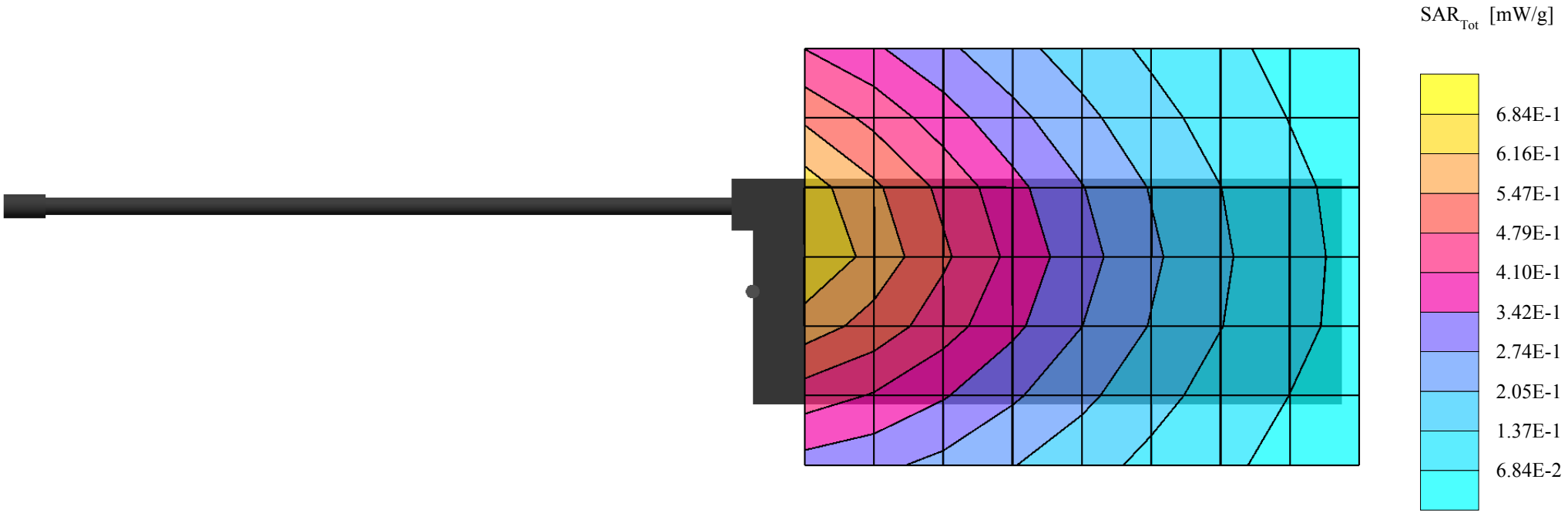


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiCd Battery Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.55 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Coarse Scan to show SAR Distribution at Lower Section of Radio

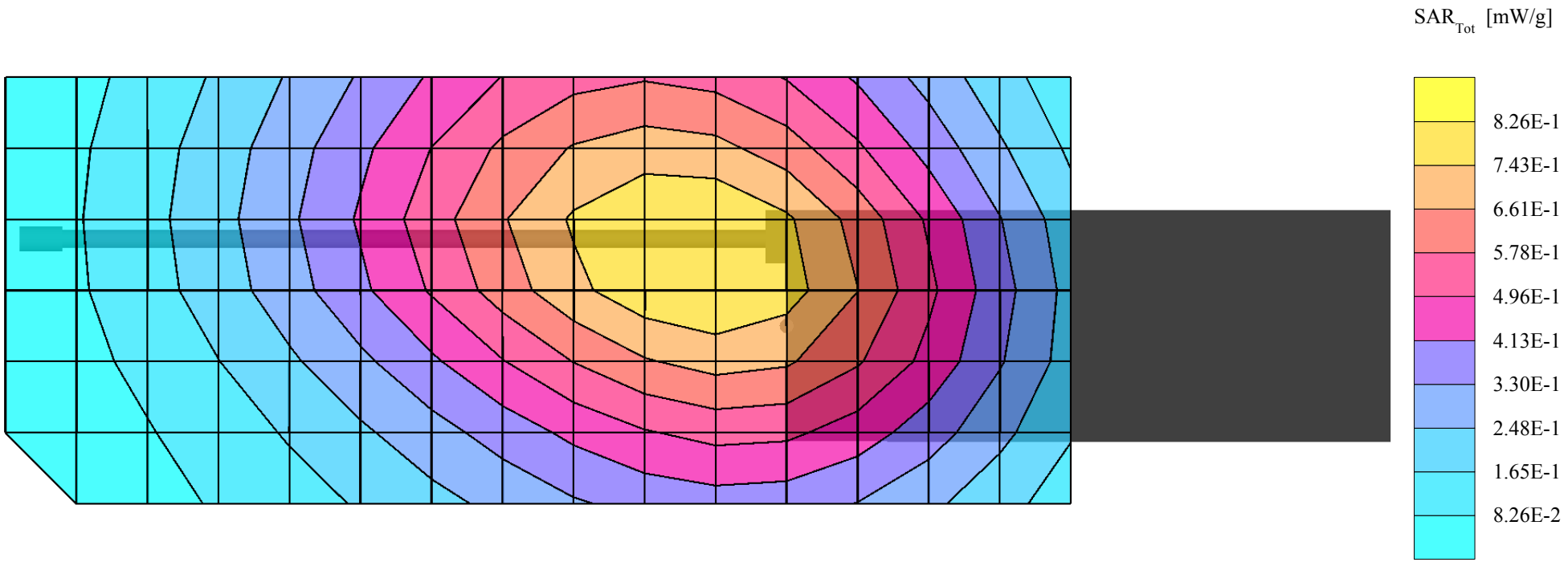


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 0.789 mW/g, SAR (10g): 0.610 mW/g

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiMH Battery Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.54 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Cube Scan to show Peak Scan Location

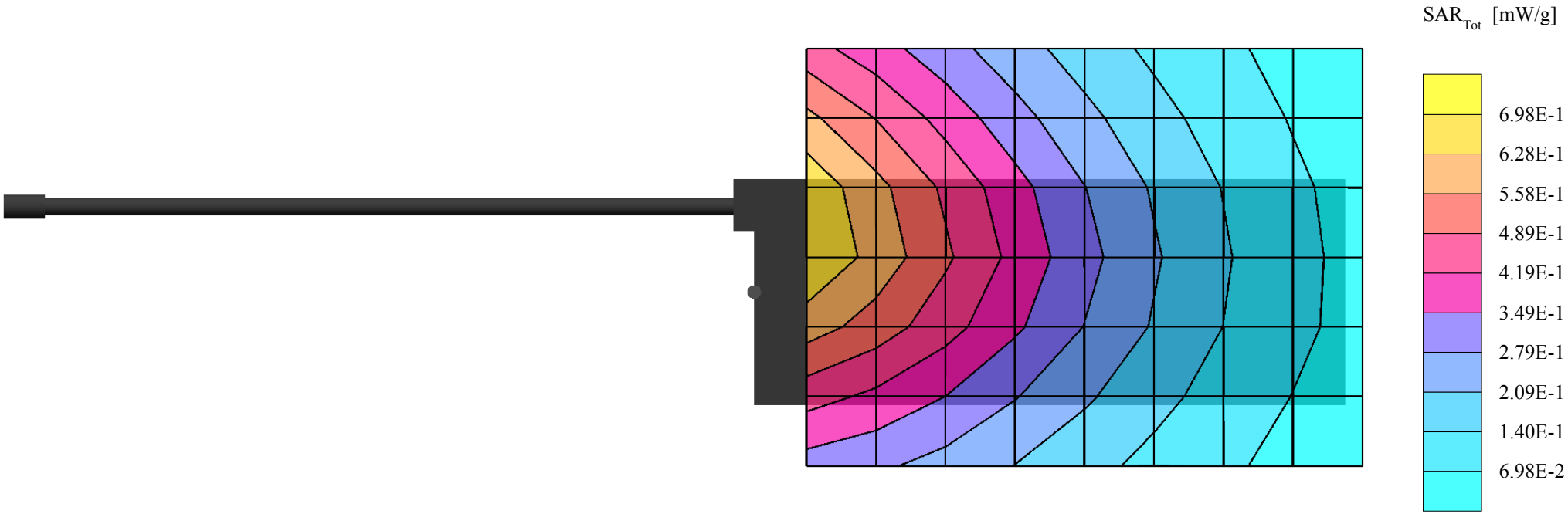


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiMH Battery Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.54 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Coarse Scan to show SAR Distribution at Lower Section of Radio

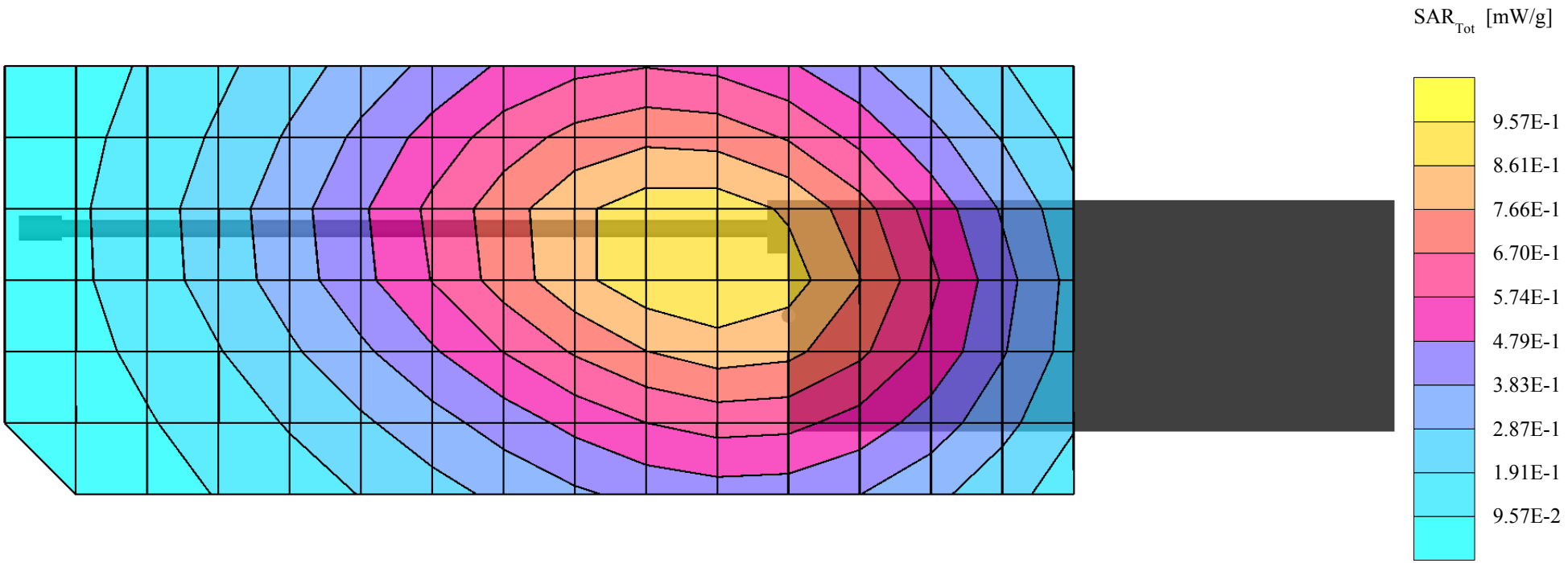


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 0.871 mW/g, SAR (10g): 0.673 mW/g

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiCd Battery Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.55 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

Cube Scan to show Peak Scan Location

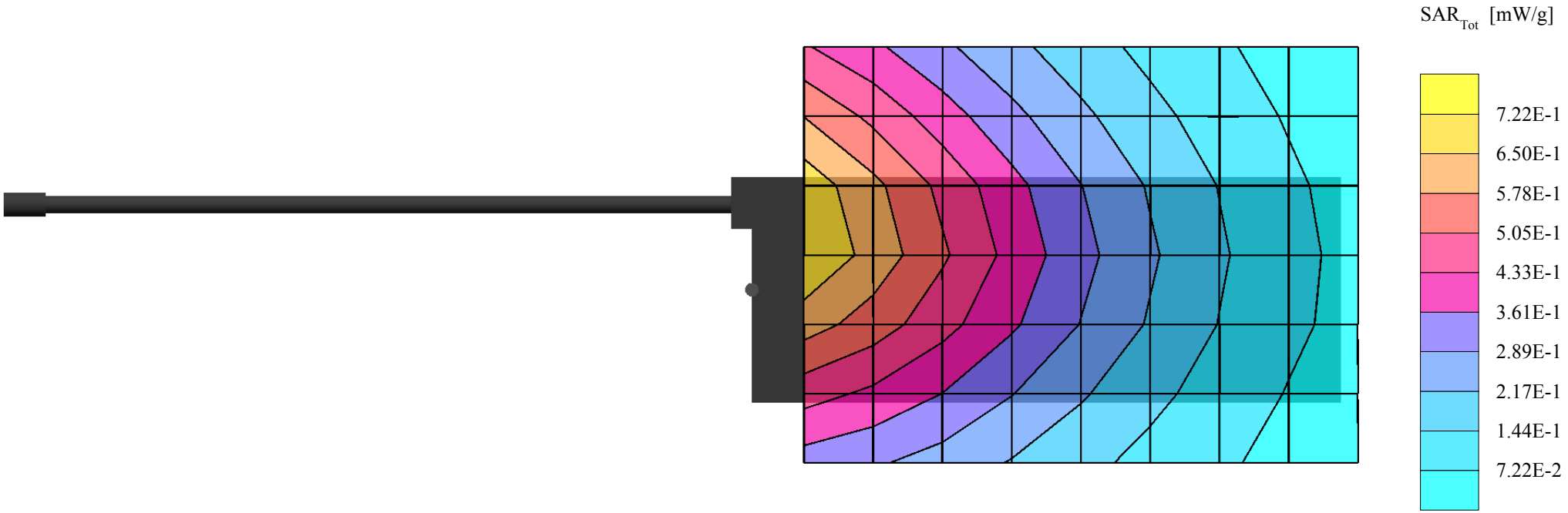


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiCd Battery Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.55 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

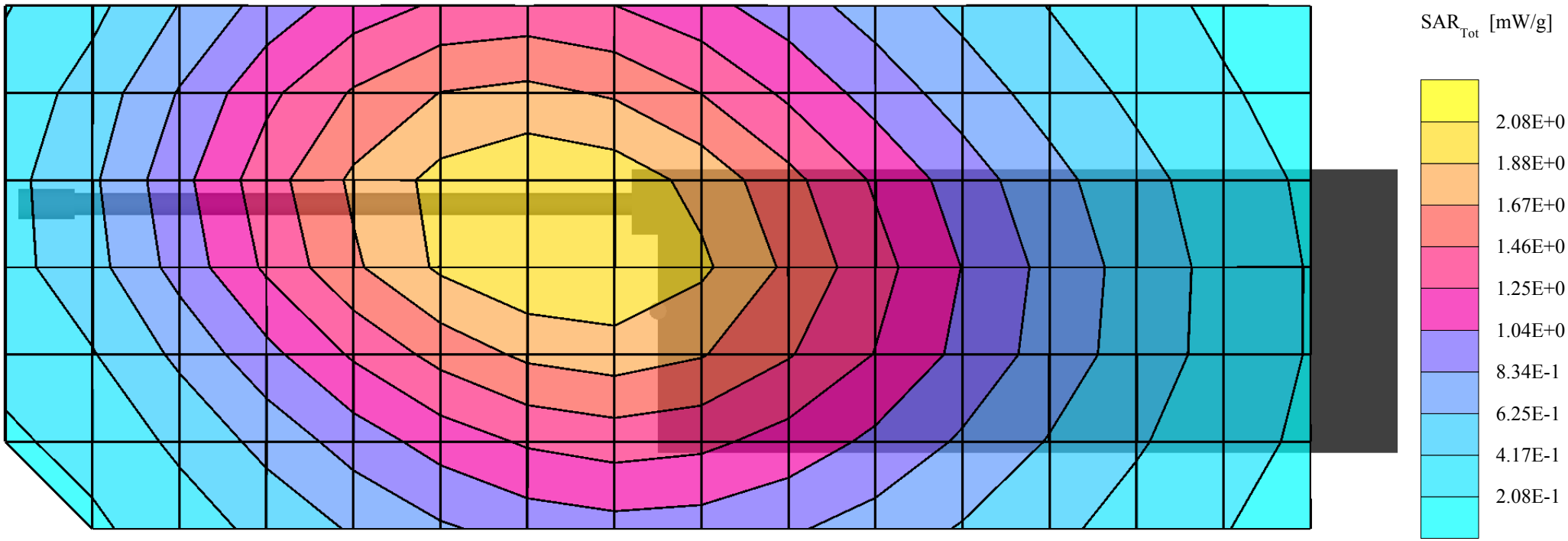
Coarse Scan to show SAR Distribution at Lower Section of Radio



M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 1.92 mW/g, SAR (10g): 1.48 mW/g

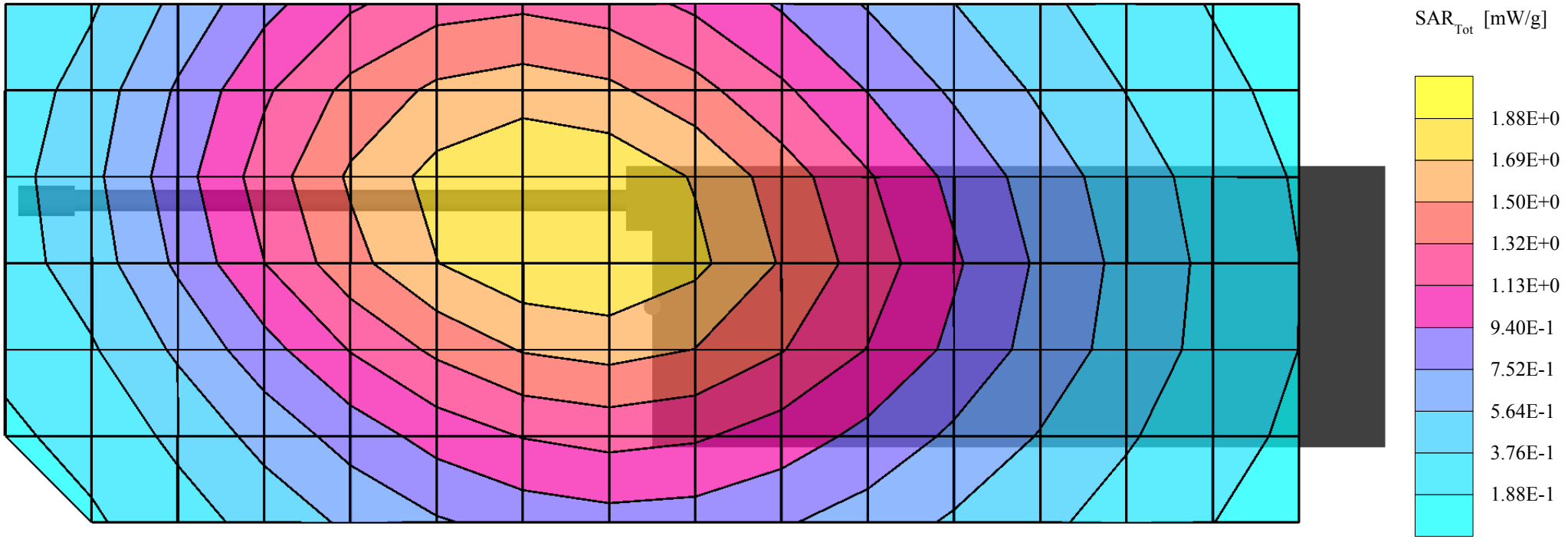
Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Helical Coil Antenna (KRE1011219/2)
NiMH Battery Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.57 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003



M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 1.78 mW/g, SAR (10g): 1.38 mW/g

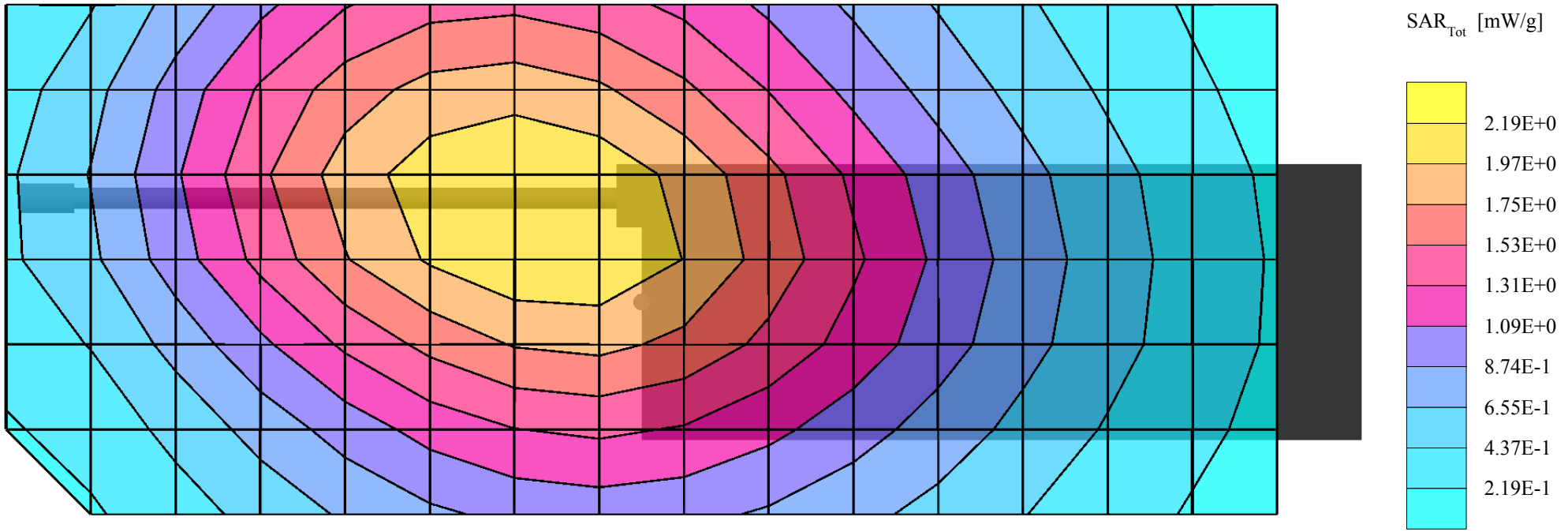
Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Helical Coil Antenna (KRE1011219/2)
NiCd Battery Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.57 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003



M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.02 mW/g, SAR (10g): 1.56 mW/g

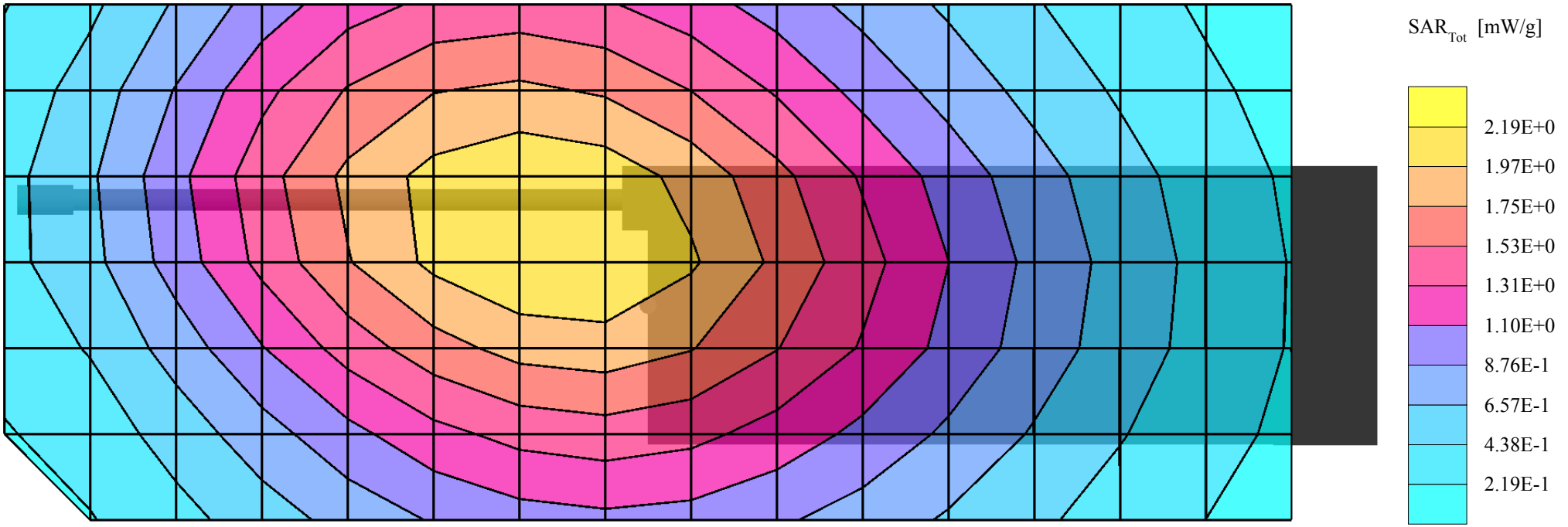
Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Helical Coil Antenna (KRE1011219/2)
NiMH Battery Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.57 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003



M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.04 mW/g, SAR (10g): 1.58 mW/g

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Helical Coil Antenna (KRE1011219/2)
NiCd Battery Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.55 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003

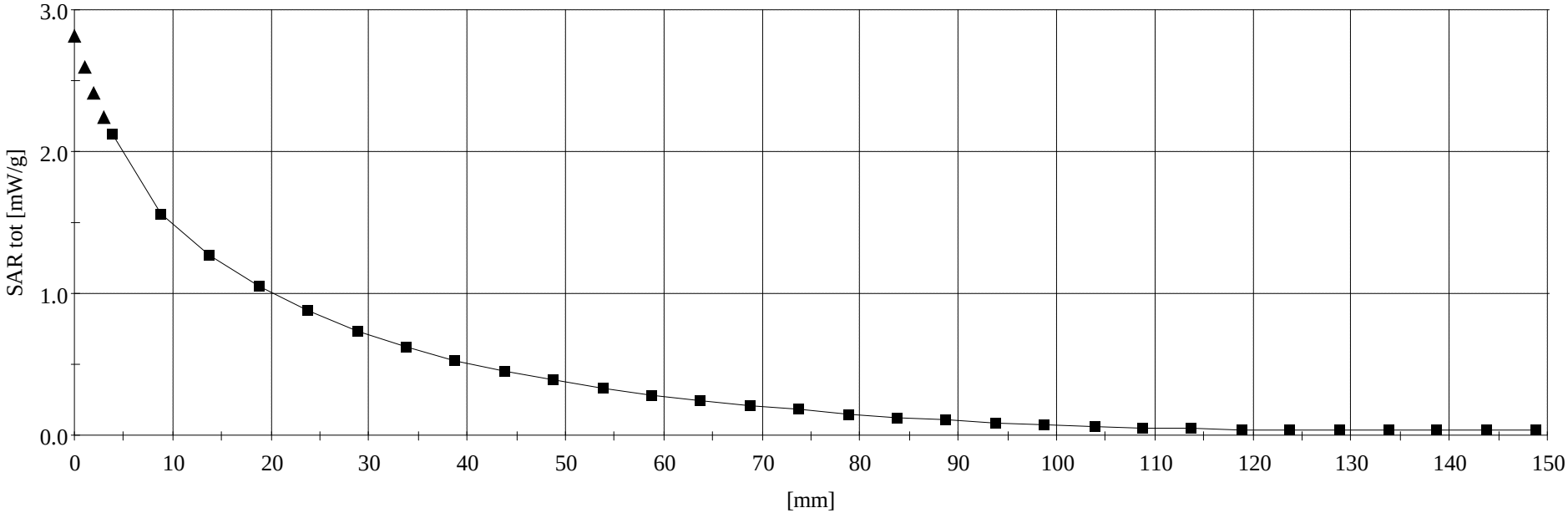


M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : σ = 0.73 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3

Z-Axis Extrapolation at Peak SAR Location

Face-Held SAR at 2.5 cm Separation Distance to Planar Phantom
P7100(IP) Portable VHF PTT Radio Transceiver
Helical Coil Antenna (KRE1011219/2)
NiCd Battery Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.55 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003



M/A-COM INC. FCC ID: OWDTR-0013-E

Small Planar Phantom; Flat Section; Position: (90°,0°)
Probe: ET3DV6 - SN1387; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Brain : $\sigma = 0.73$ mho/m $\varepsilon_r = 53.4$ $\rho = 1.00$ g/cm^3
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 0.823 mW/g, SAR (10g): 0.619 mW/g

Face-Held SAR at 2.5 cm Separation Distance
Speaker Microphone Antenna Version Plus (KRY1011617/184R1A)
P7100(IP) Portable VHF PTT Radio Transceiver
Spring Whip Antenna (KRE1011219/21)
NiCd Battery Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 5.57 Watts
Ambient Temp. 23.3°C; Fluid Temp. 22.1°C
Date Tested: June 21, 2003