

APPENDIX A - SAR MEASUREMENT DATA

M/A-COM INC. FCC ID: OWDTR-0016-E

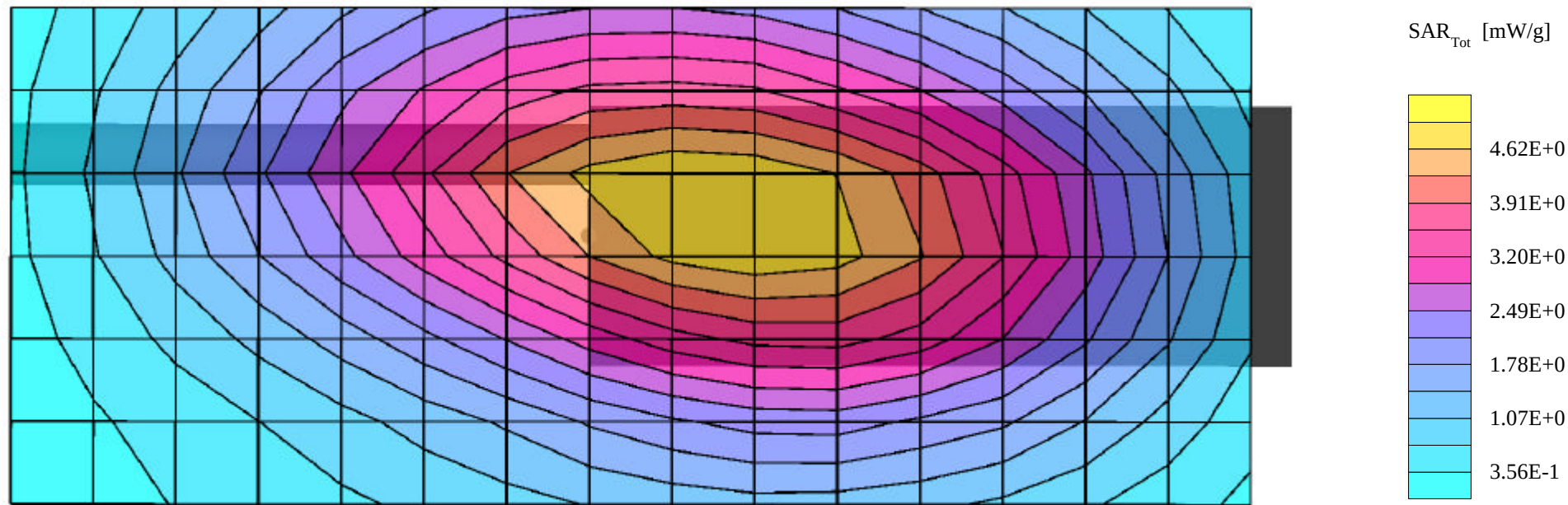
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 5.09 mW/g, SAR (10g): 3.73 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiCd Battery - Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.39 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom

Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0

450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Z-Axis Extrapolation at Peak SAR Location

Face-Held SAR at 2.5 cm Separation Distance

P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)

Quarter-Wave Whip Antenna (KRE1011223/10)

NiCd Battery - Non-Intrinsically Safe (BKB191210/3)

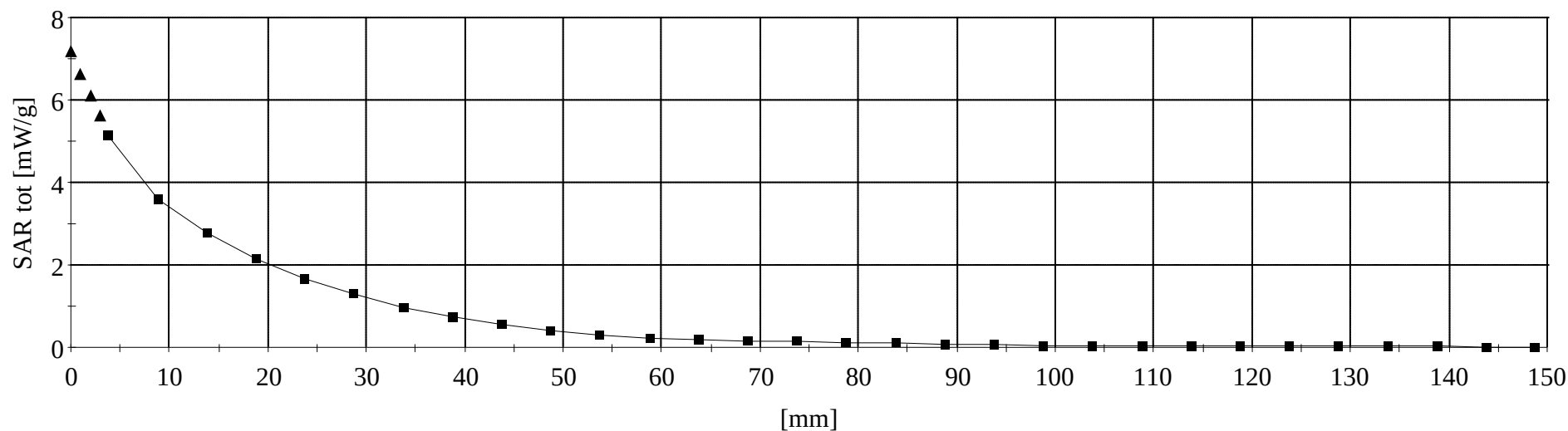
Continuous Wave Mode

Mid Channel [403.000 MHz]

Conducted Power: 4.39 Watts

Ambient Temp. 23.5°C; Fluid Temp. 23.7°C

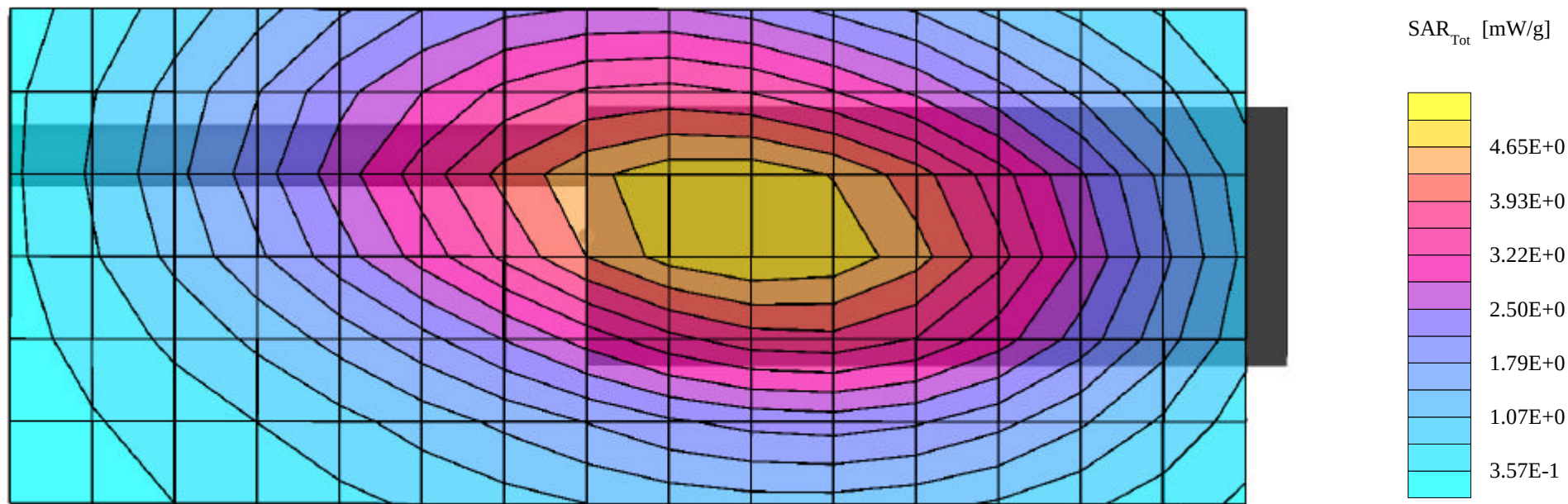
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 5.05 mW/g, SAR (10g): 3.72 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiMH Battery - Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.41 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

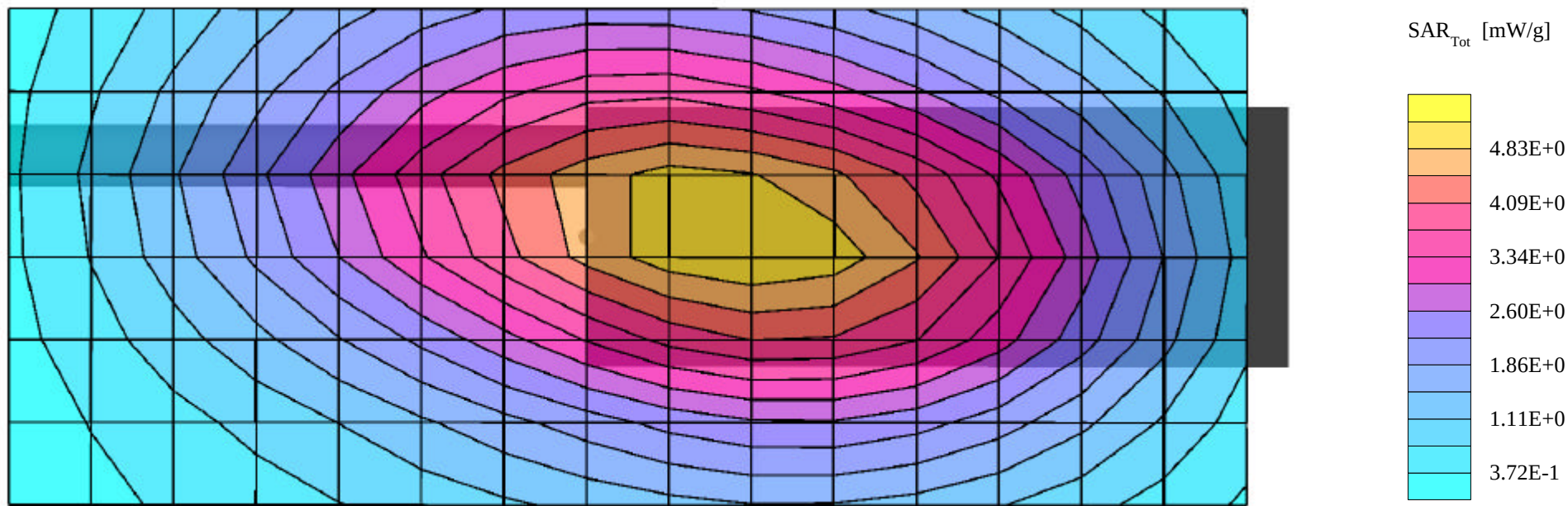
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 5.00 mW/g, SAR (10g): 3.70 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiCd Battery - Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.33 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

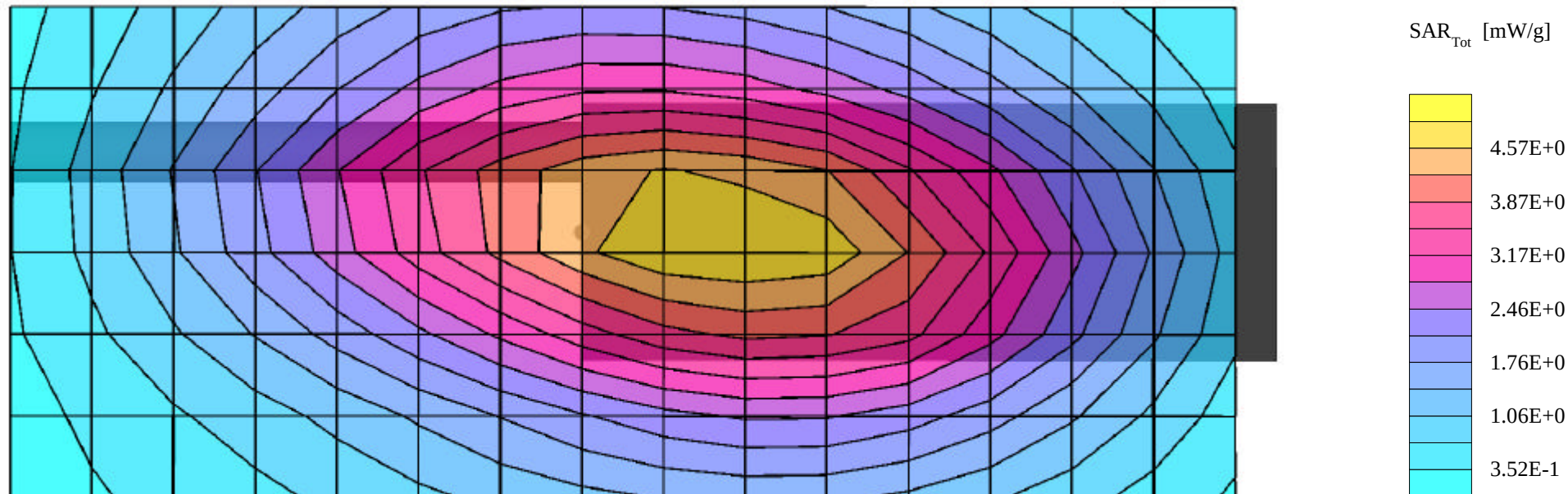
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 4.63 mW/g, SAR (10g): 3.49 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiMH Battery - Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.28 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

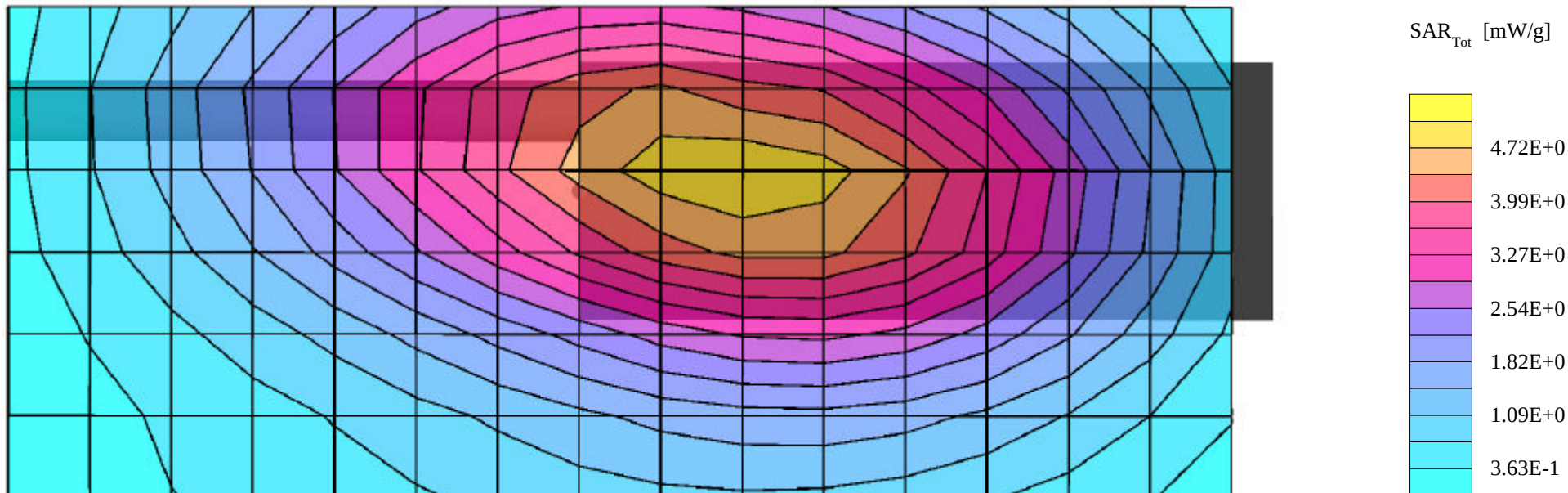
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 4.96 mW/g, SAR (10g): 3.66 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR02)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiCd Battery - Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.39 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

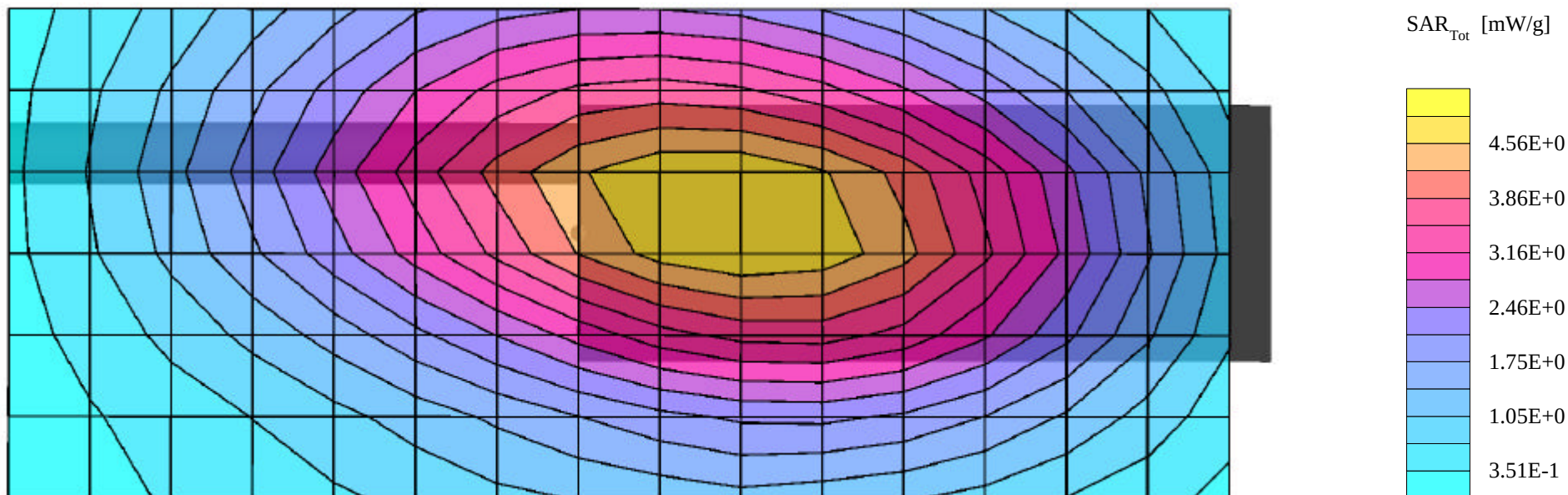
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 4.92 mW/g, SAR (10g): 3.63 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR02)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiMH Battery - Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.40 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

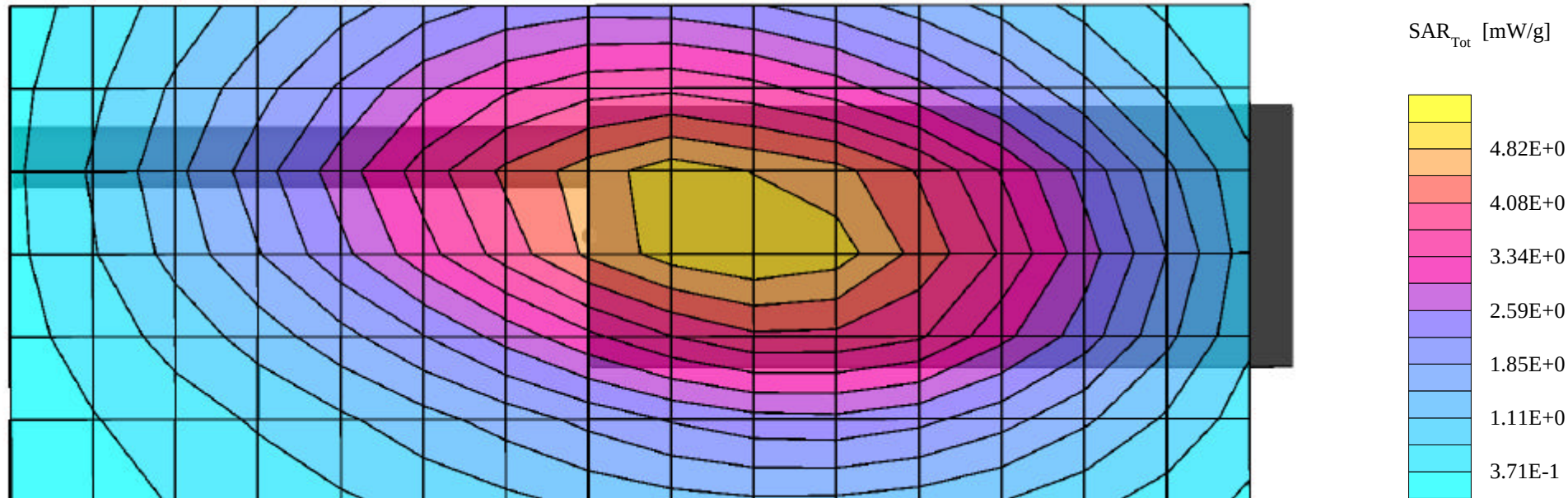
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 4.98 mW/g, SAR (10g): 3.70 mW/g

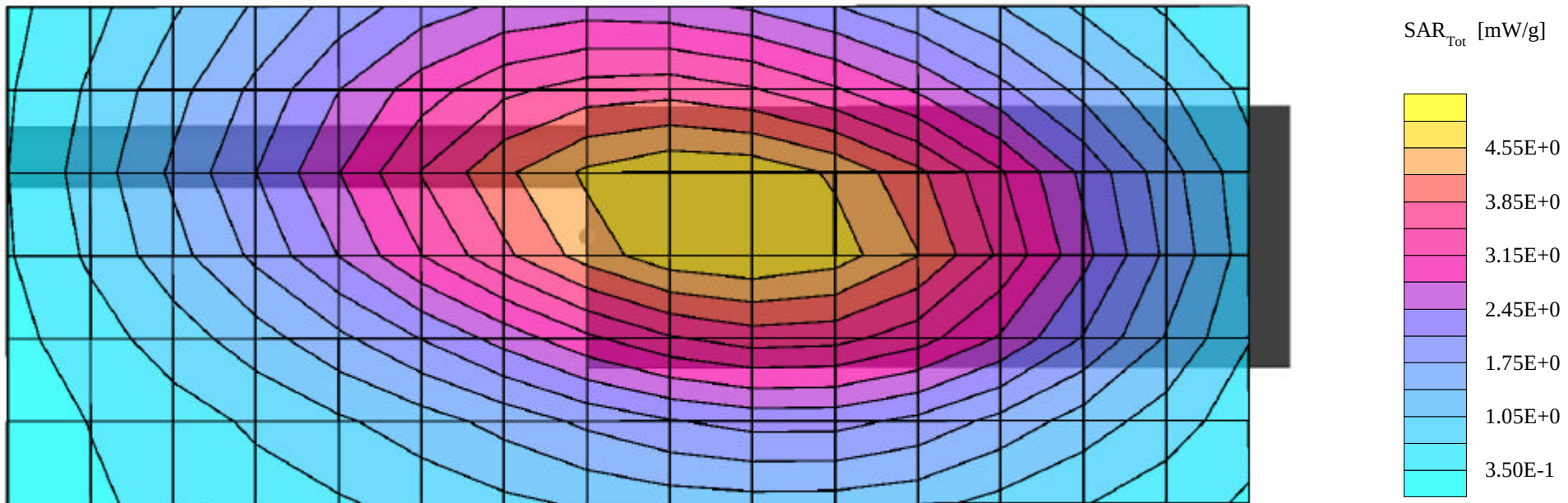
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR02)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiCd Battery - Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.32 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 4.54 mW/g, SAR (10g): 3.44 mW/g

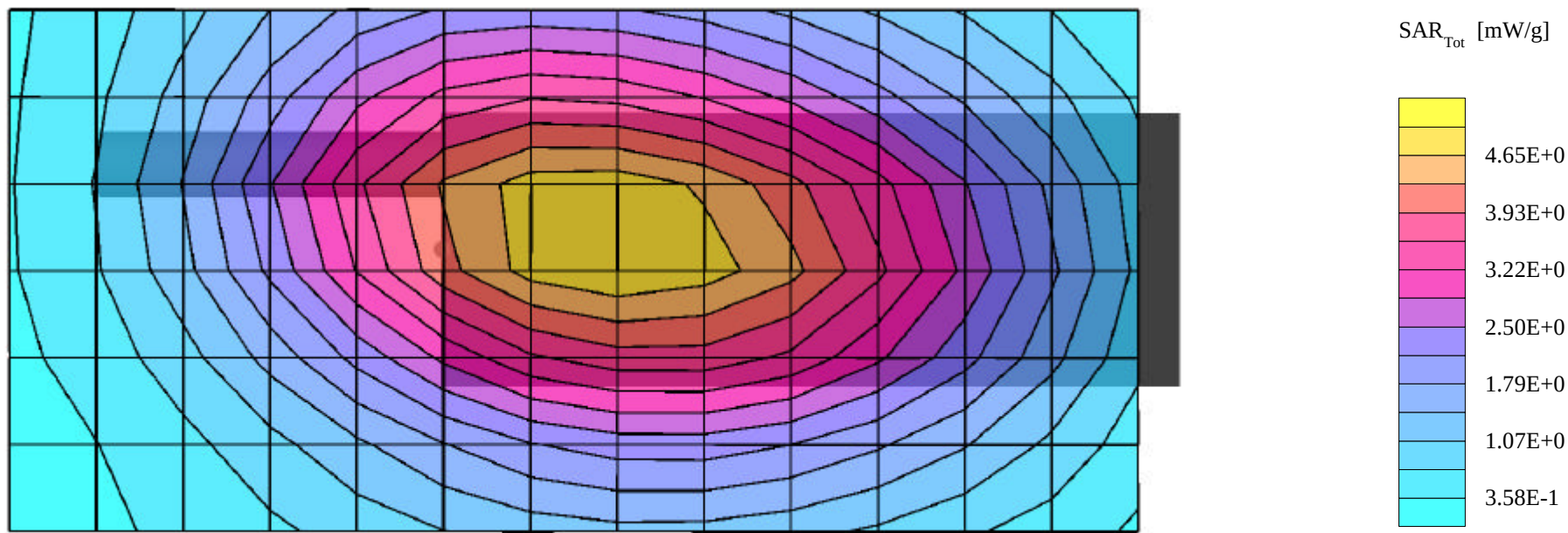
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR02)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiMH Battery - Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.25 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 4.62 mW/g, SAR (10g): 3.52 mW/g

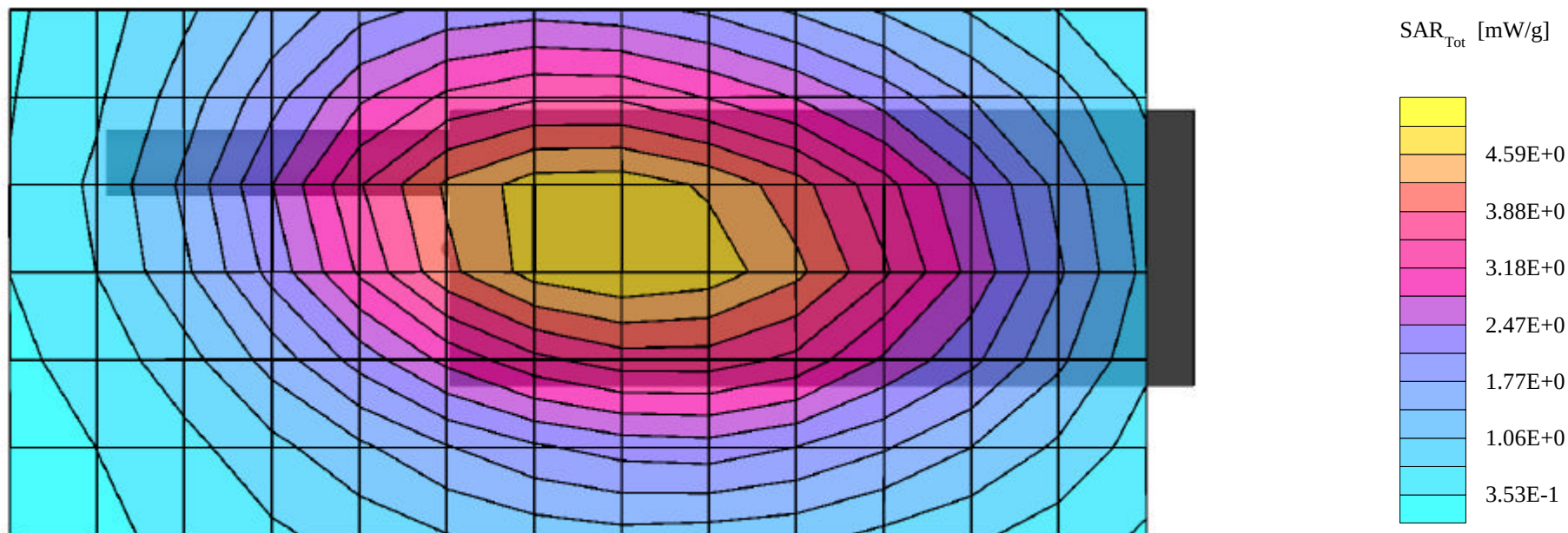
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/10)
NiCd Battery - Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.29 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 4.42 mW/g, SAR (10g): 3.34 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/10)
NiMH Battery - Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.29 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

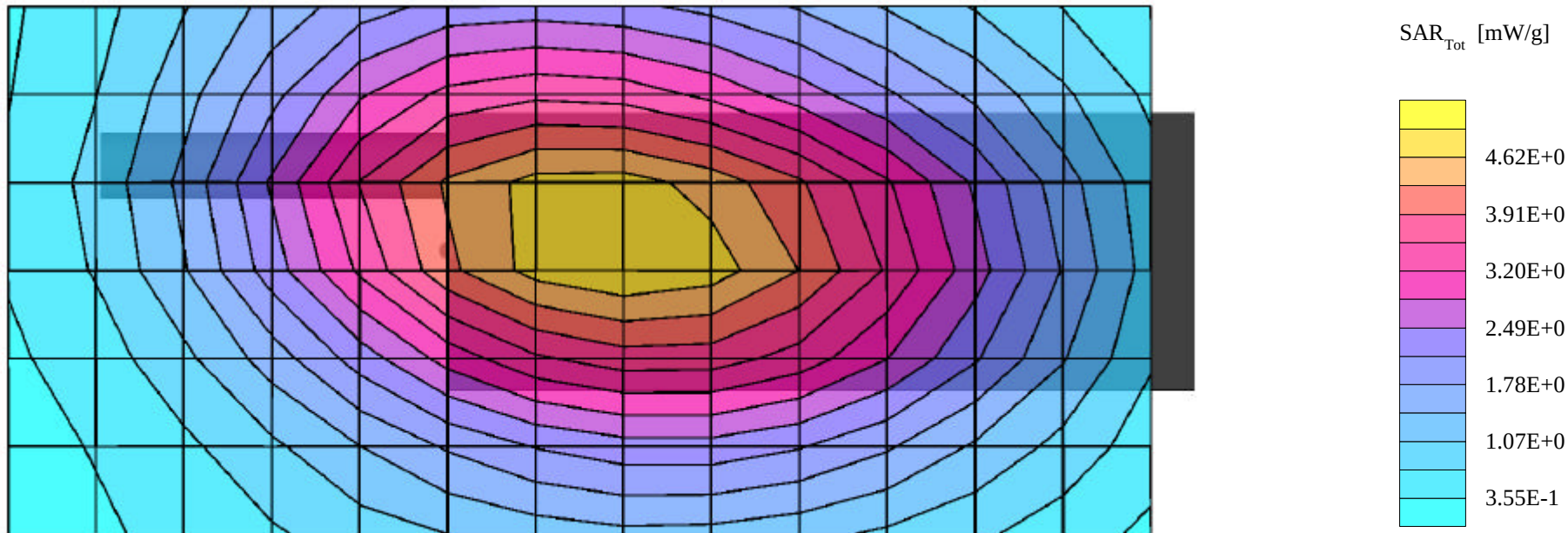
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 4.40 mW/g, SAR (10g): 3.33 mW/g

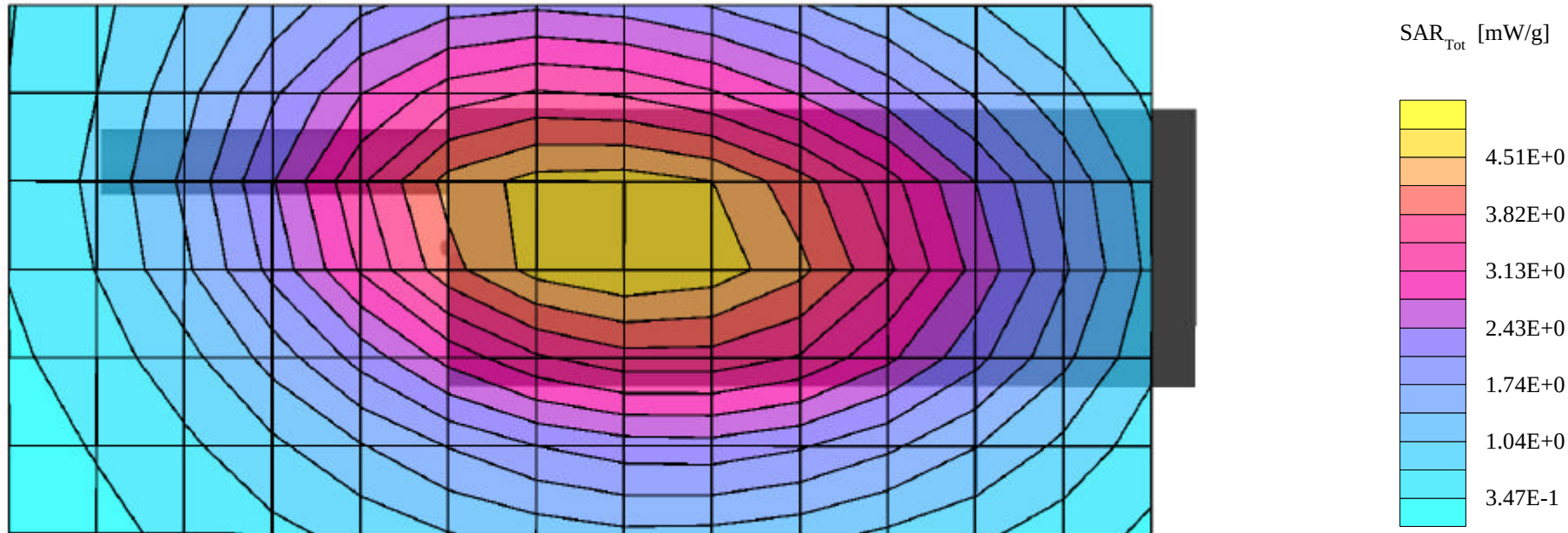
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/10)
NiCd Battery - Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.28 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 4.38 mW/g, SAR (10g): 3.32 mW/g

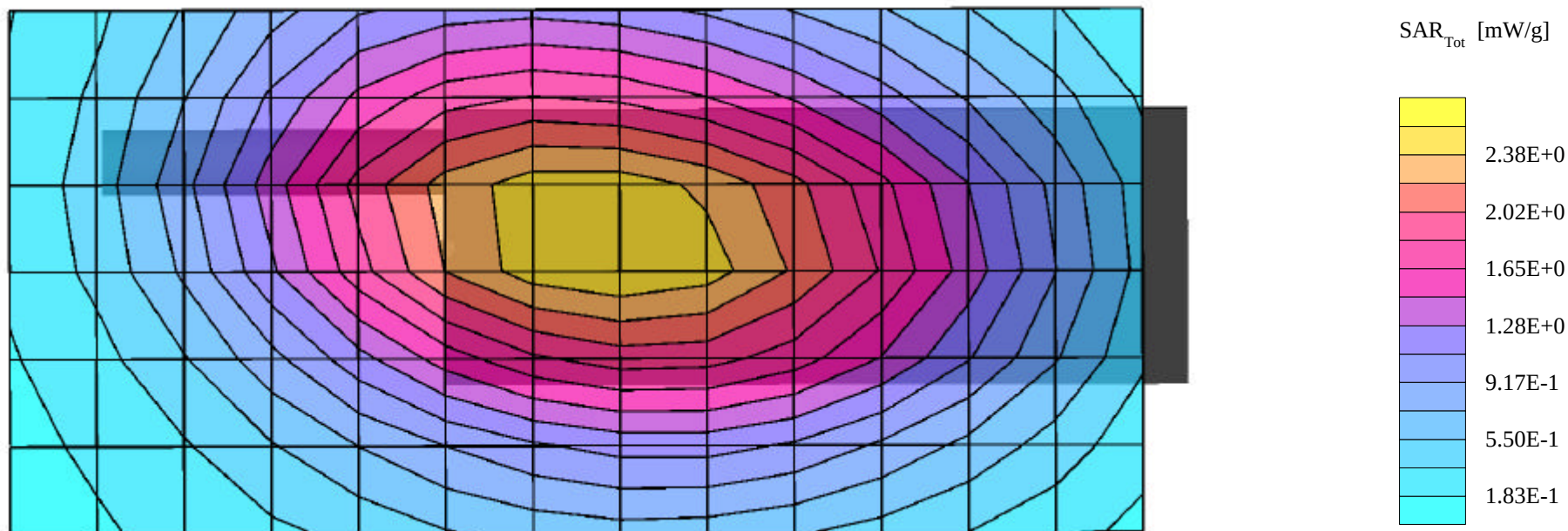
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/10)
NiMH Battery - Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.31 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.25 mW/g, SAR (10g): 1.70 mW/g

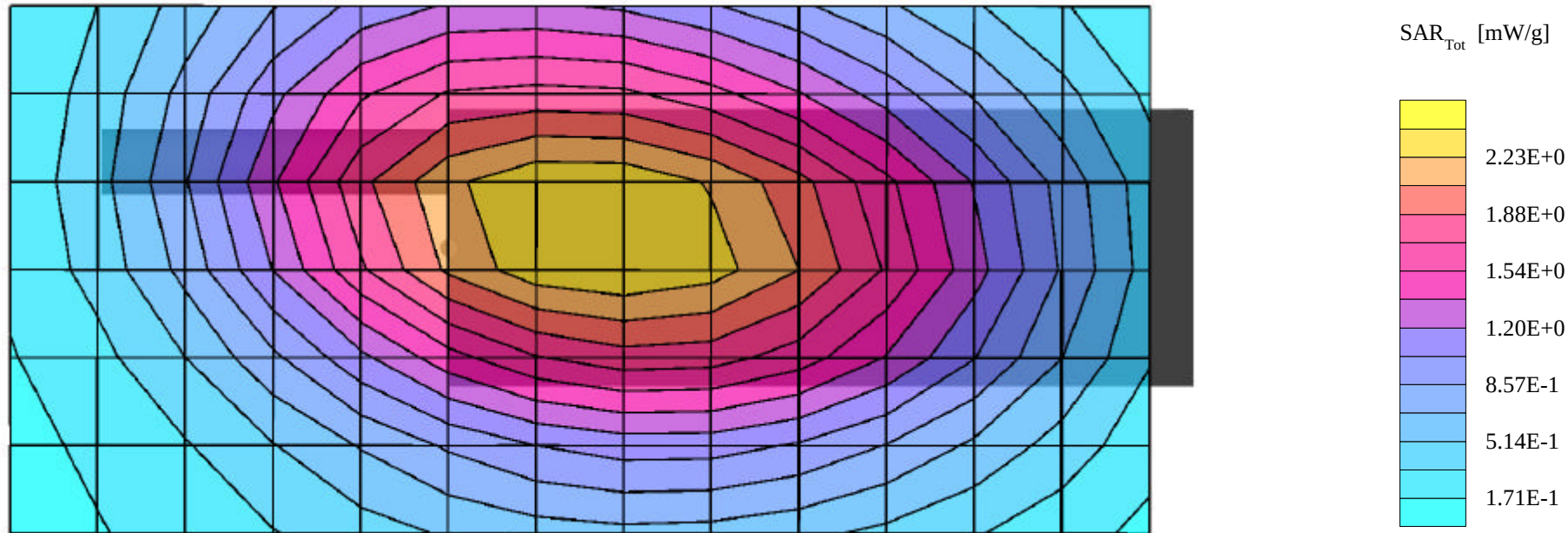
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/9)
NiCd Battery - Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.32 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.00 mW/g, SAR (10g): 1.50 mW/g

Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/9)
NiMH Battery - Non-Intrinsically Safe (BKB191210/4)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.32 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

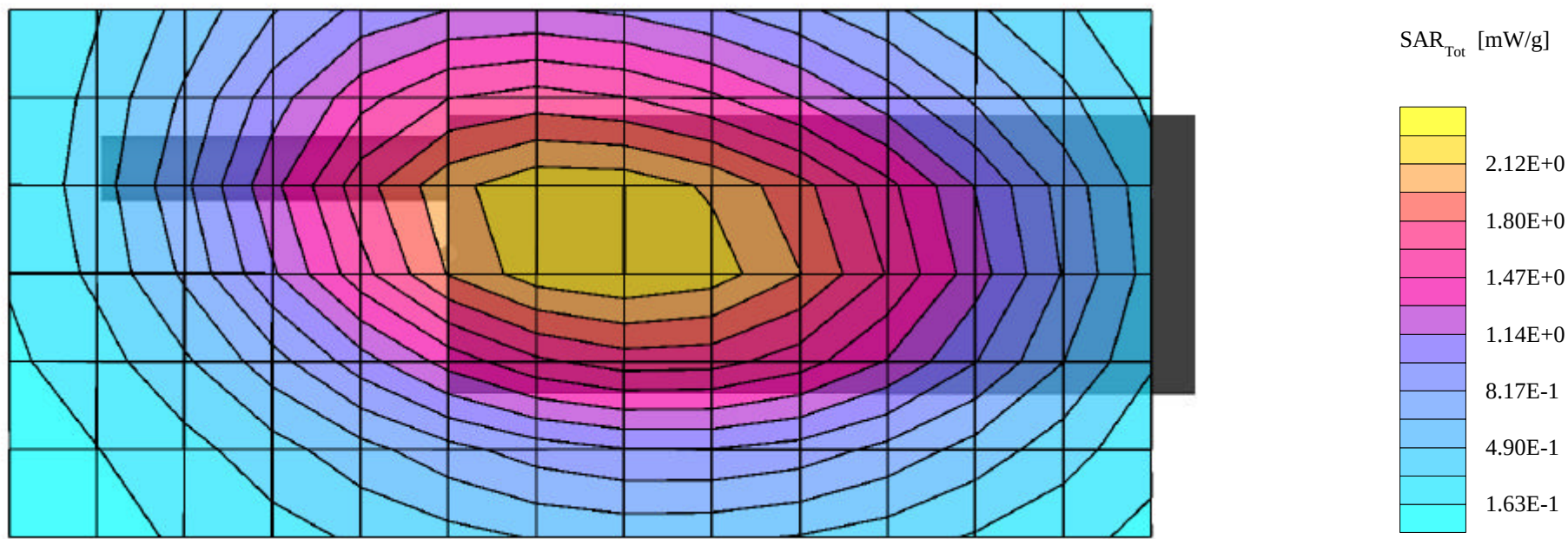
Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Cube 5x5x7

SAR (1g): 1.89 mW/g, SAR (10g): 1.43 mW/g

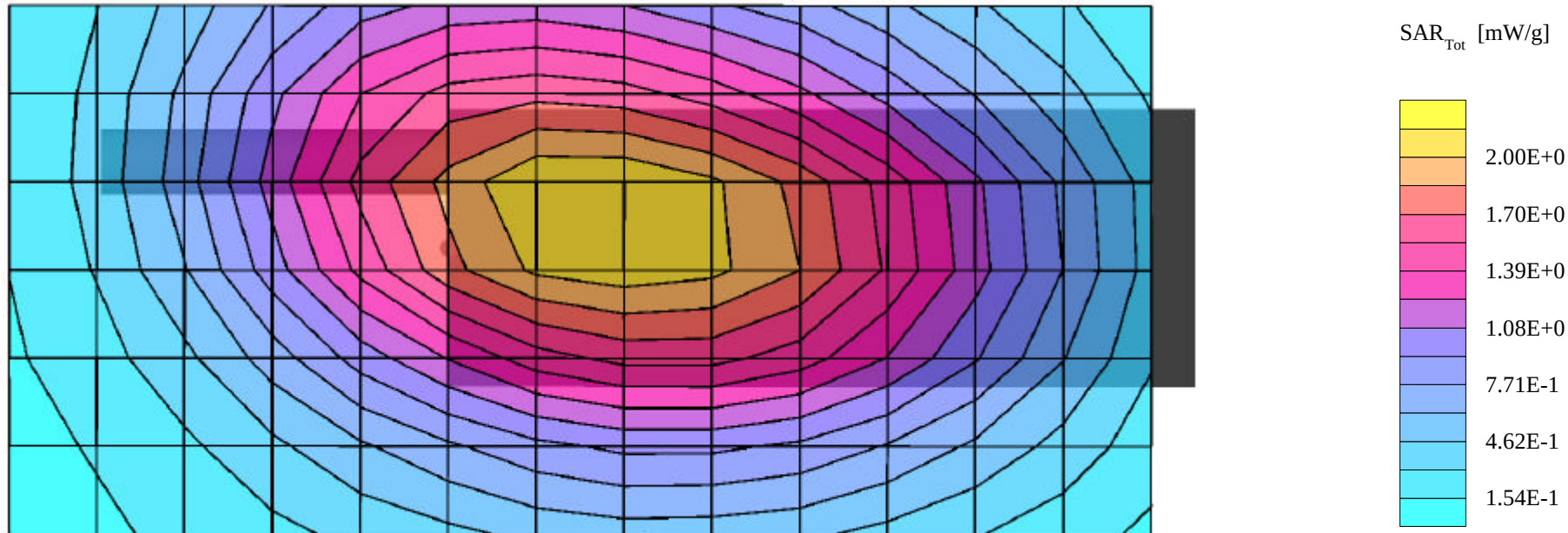
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/9)
NiCd Battery - Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.30 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 1.84 mW/g, SAR (10g): 1.39 mW/g

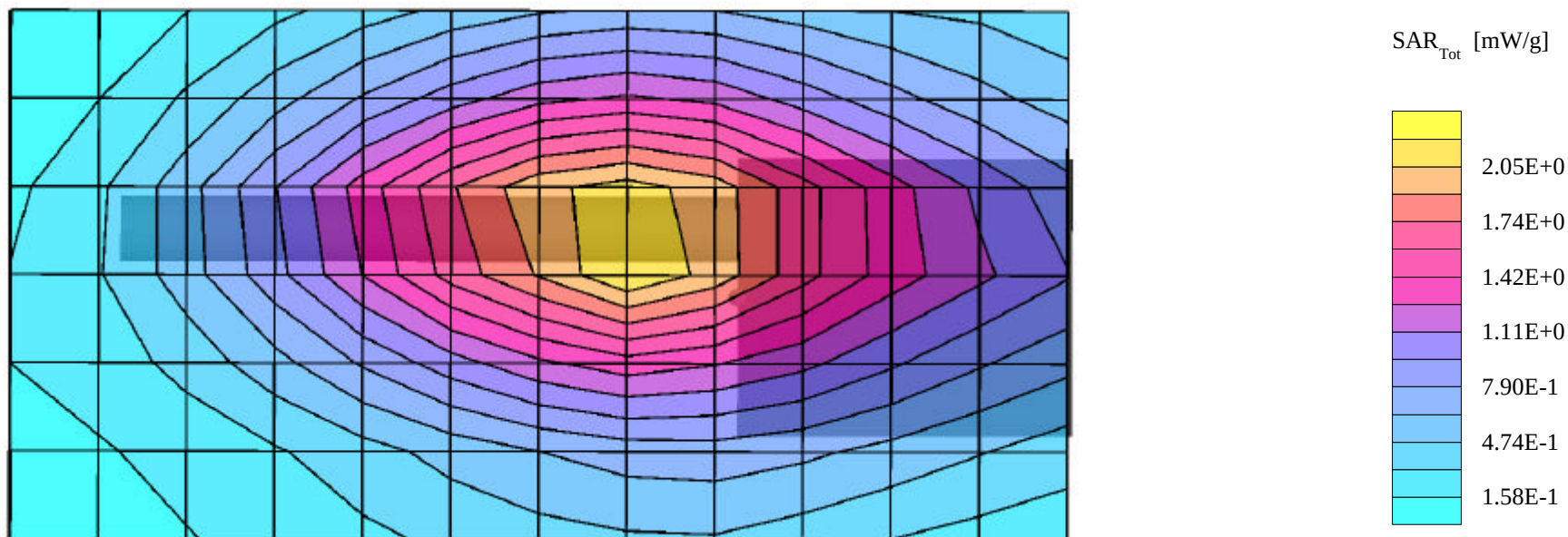
Face-Held SAR at 2.5 cm Separation Distance
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/9)
NiMH Battery - Intrinsically Safe (BKB191210/6)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.30 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.15 mW/g, SAR (10g): 1.56 mW/g

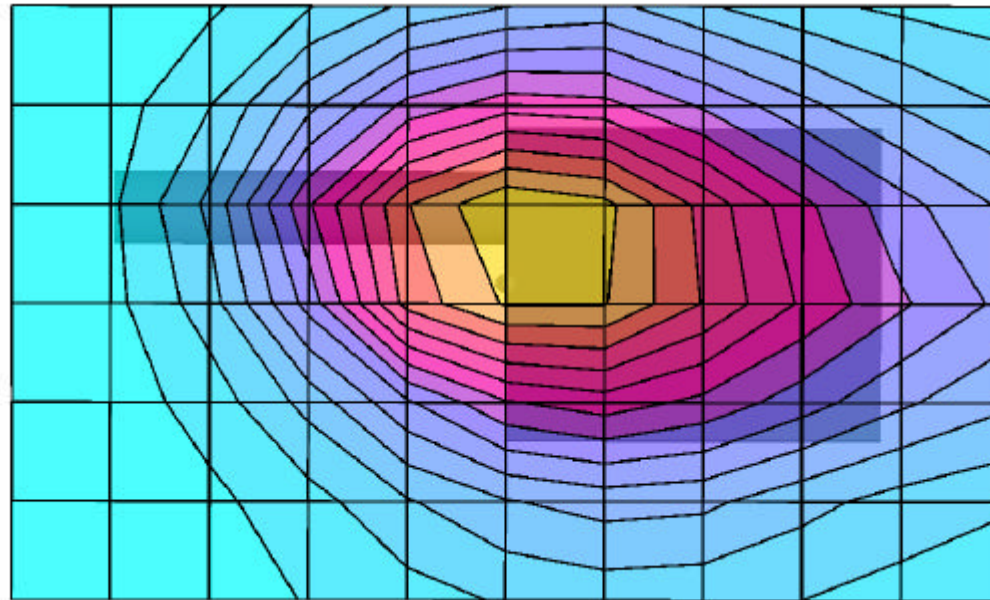
Face-Held SAR at 2.5 cm Separation Distance
Speaker-Microphone Antenna Version Plus (KRY1011617/184R1A)
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Quarter-Wave Whip Antenna (KRE1011223/10)
NiCd Battery - Intrinsically Safe (BKB191210/5)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.32 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



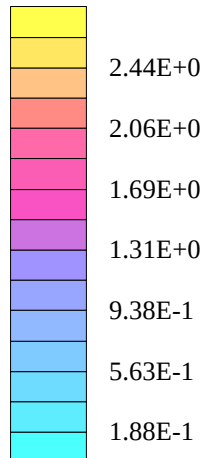
M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.43 mW/g, SAR (10g): 1.72 mW/g

Face-Held SAR at 2.5 cm Separation Distance
Speaker-Microphone Antenna Version Plus (KRY1011617/184R1A)
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/10)
NiCd Battery - Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.27 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003



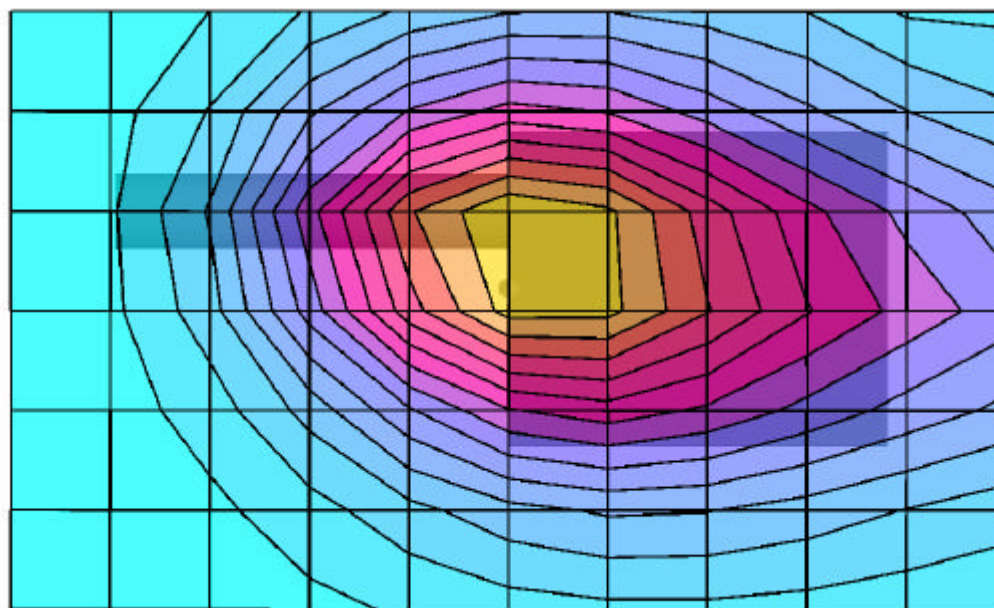
SAR_{Tot} [mW/g]



M/A-COM INC. FCC ID: OWDTR-0016-E

Small Planar Phantom; Planar Section; Position: (90°,0°)
Probe: ET3DV6 - SN1590; ConvF(7.80,7.80,7.80); Crest factor: 1.0
450 MHz Brain: $\sigma = 0.88$ mho/m $\epsilon_r = 44.0$ $\rho = 1.00$ g/cm³
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Cube 5x5x7
SAR (1g): 2.61 mW/g, SAR (10g): 1.86 mW/g

Face-Held SAR at 2.5 cm Separation Distance
Speaker-Microphone Antenna Version Plus (KRY1011617/184R1A)
P7100(IP) Portable UHF PTT Radio Transceiver (T1-LSAR01)
Helical Coil Antenna (KRE1011219/9)
NiCd Battery - Non-Intrinsically Safe (BKB191210/3)
Continuous Wave Mode
Mid Channel [403.000 MHz]
Conducted Power: 4.29 Watts
Ambient Temp. 23.5°C; Fluid Temp. 23.7°C
Date Tested: April 23, 2003

SAR_{Tot} [mW/g]