9. ANNEX A: SAR DISTRIBUTION PRINTOUTS

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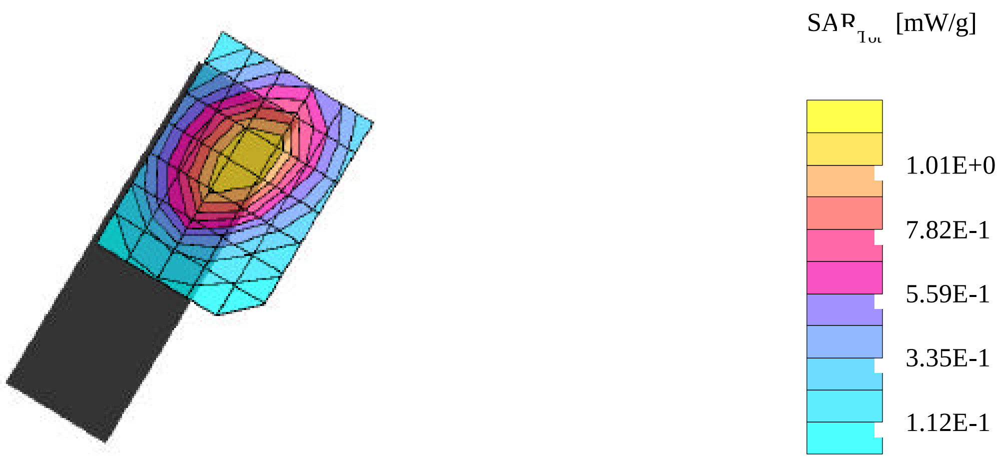
04/09/02 Temp = 23° C ± 1°

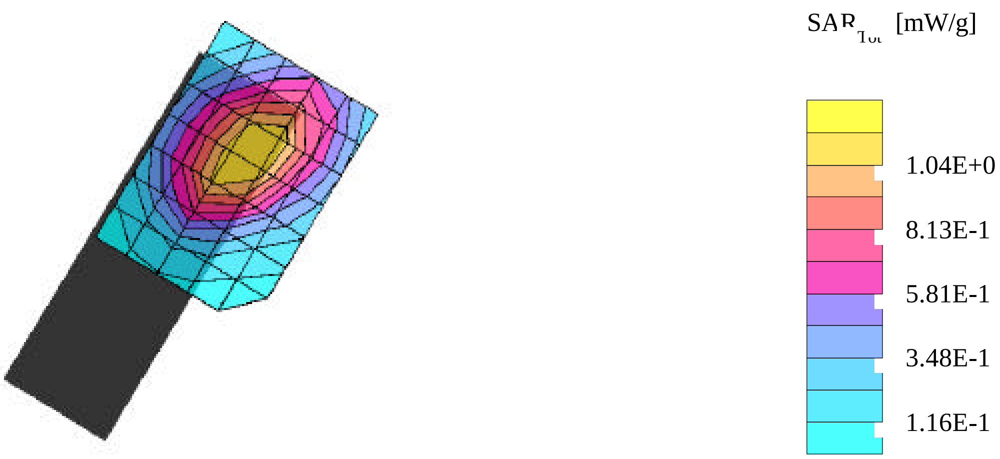
Eagle

SAM Low Band Phantom; Left Hand Section; Position: (90°,59°);Mode: AMPS
; SAM touch left 836 MHz CH 991, antenna out; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0;
Head 900 MHz (SAM): σ = 0.89 mho/m ε_r = 40.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.21 mW/g, SAR (10g): 0.813 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.00 dB



Eagle

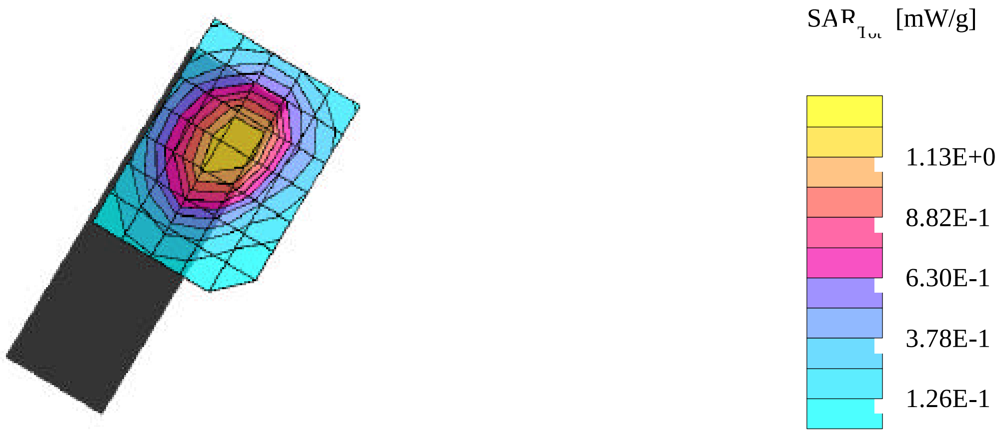
SAM Low Band Phantom; Left Hand Section; Position: (90°,59°); Mode: AMPS
; SAM touch left 836 MHz CH 384, antenna out; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0;
Head 900 MHz (SAM): σ = 0.89 mho/m ε_r = 40.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.22 mW/g, SAR (10g): 0.827 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.00 dB



04/11/02 Temp = 23° C ± 1°

Eagle

SAM Low Band Phantom; Left Hand Section; Position: (90°,59°);Mode: AMPS
; SAM touch left 836 MHz CH 799, antenna in - 3, Pwr lowered; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.92 mho/m ε_r = 39.7 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.28 mW/g, SAR (10g): 0.880 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.05 dB



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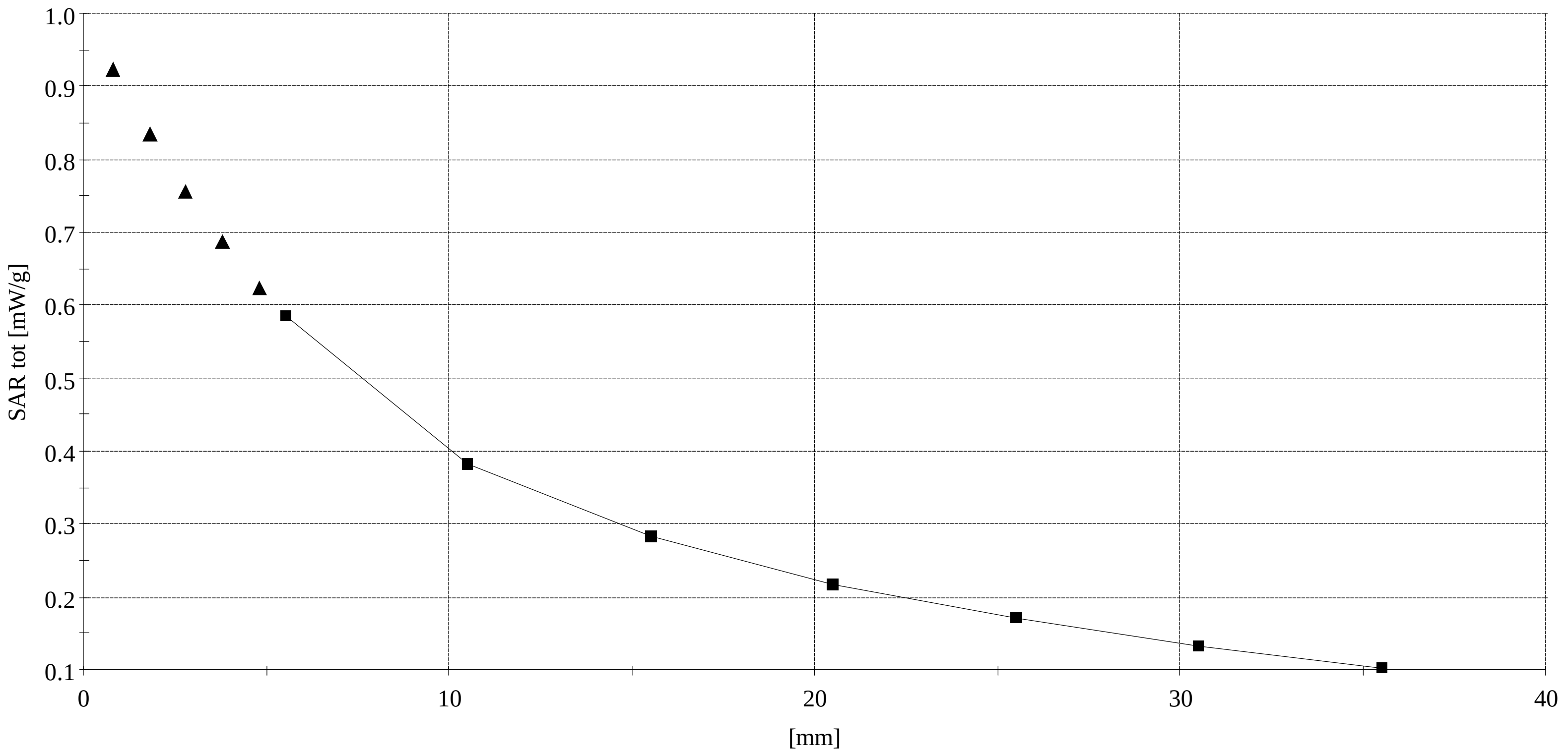
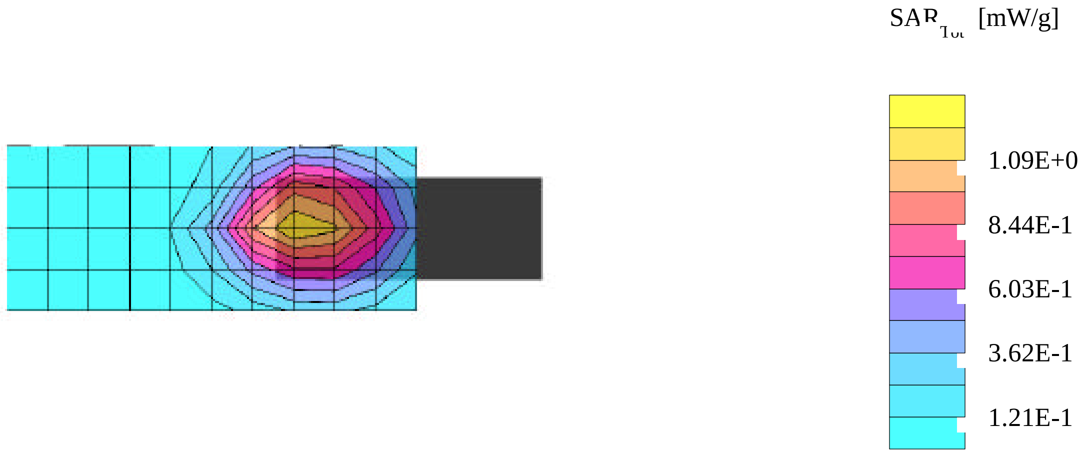
Eagle

SAM Low Band Phantom; Left Hand Section; Position: (90°,59°); Frequency: 836 MHz
; SAM touch left 836 MHz CH 799, antenna in - 3; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.92 mho/m ε_r = 39.7 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.28 mW/g, SAR (10g): 0.880 mW/g * Max outside, (Worst-case extrapolation)
Cube 7x7x7: Dx = 5.0, Dy = 5.0, Dz = 5.0



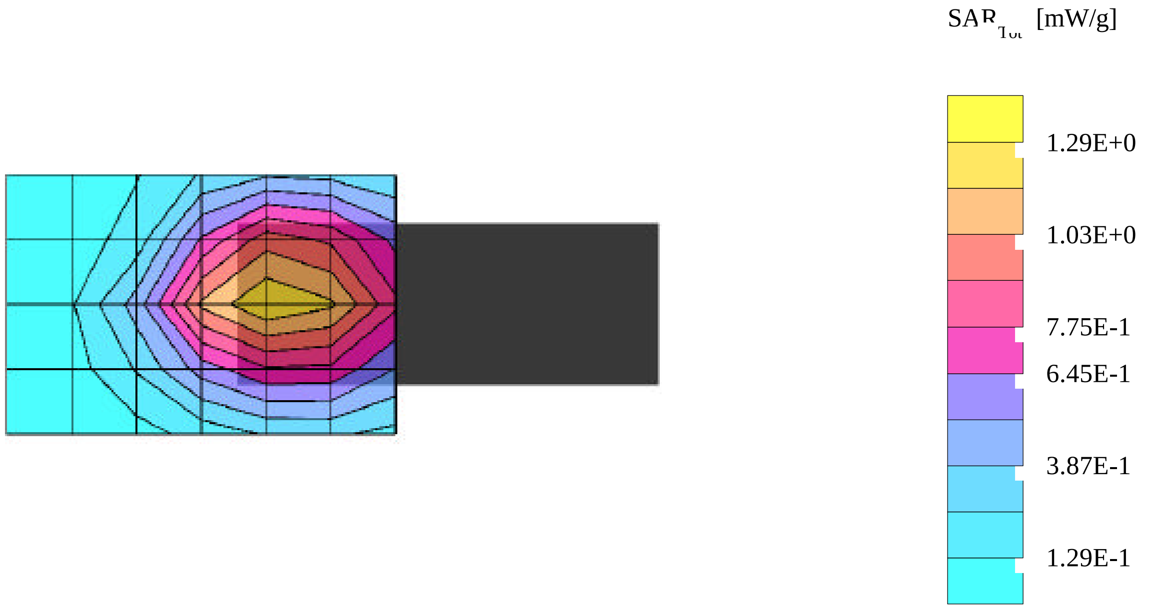
Eagle

SAM Low Band Phantom; Flat Section; Position: (270°,90°); Mode: AMPS
; SAM Body CH 991, antenna in HDC-5, - 1; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 0.94 mho/m ε_r = 56.8 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 1.21 mW/g, SAR (10g): 0.875 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.05 dB



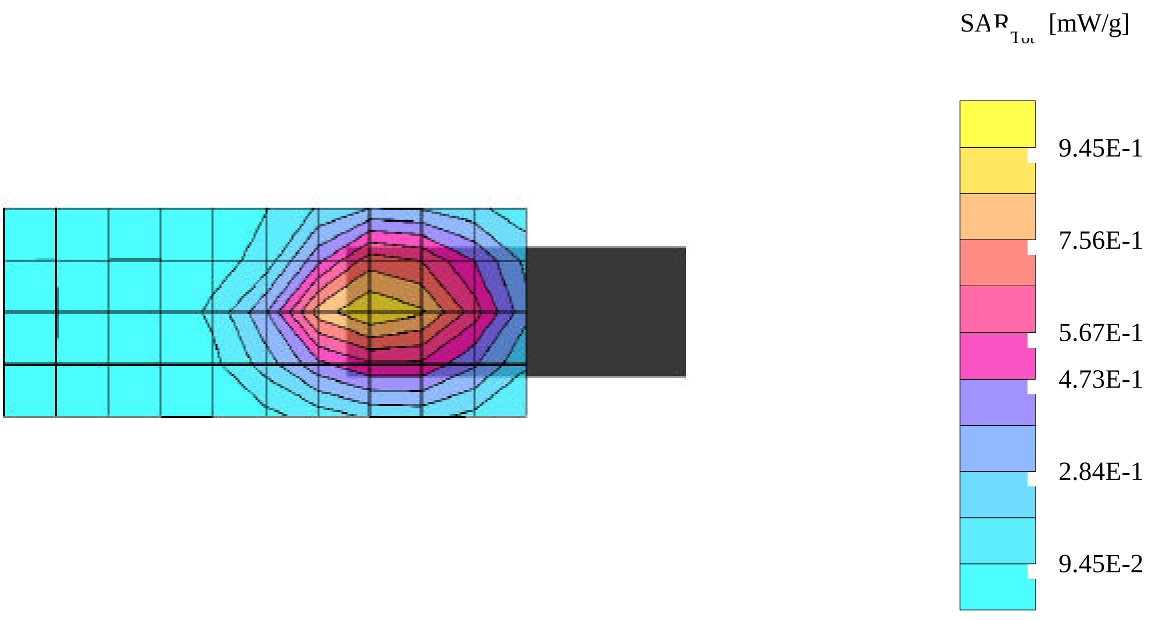
Eagle

SAM Low Band Phantom; Flat Section; Position: (270°,90°); Mode: AMPS
; SAM Body CH 384, antenna in HDC-5; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 0.94 mho/m ε_r = 56.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.28 mW/g, SAR (10g): 0.931 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.09 dB



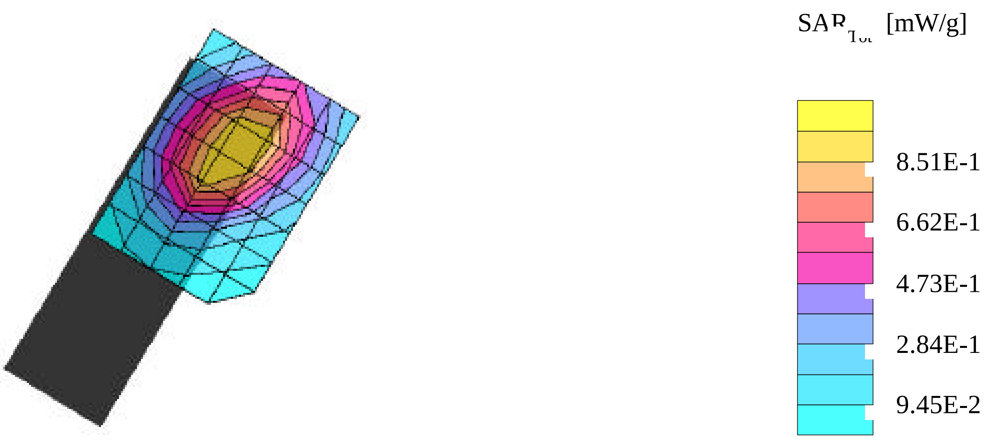
Eagle

SAM Low Band Phantom; Flat Section; Position: (270°,90°); Mode: AMPS
; SAM Body CH 799, antenna in HDC-5; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 0.94 mho/m ε_r = 56.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.935 mW/g, SAR (10g): 0.674 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.14 dB



Eagle

SAM Low Band Phantom; Left Hand Section; Position: (90°,59°);Mode: CDMA
; SAM touch left 836 MHz CH 1013, antenna out; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0;
Head 900 MHz (SAM): σ = 0.91 mho/m ε_r = 41.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.01 mW/g, SAR (10g): 0.683 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.00 dB



Eagle

SAM Low Band Phantom; Righ Hand Section; Position: (90°,301°); Mode: CDMA
; SAM touch right 836 MHz CH 384, antenna in - 2; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0;
Head 900 MHz (SAM): σ = 0.89 mho/m ε_r = 39.9 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.949 mW/g, SAR (10g): 0.666 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.01 dB

04/18/02 Temp = 23° C ± 1°

Eagle

SAM Low Band Phantom; Righ Hand Section; Position: (90°,301°); Mode: CDMA
; SAM touch right 836 MHz CH 777, antenna in - 2; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0;
Head 900 MHz (SAM): σ = 0.89 mho/m ε_r = 39.9 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.25 mW/g, SAR (10g): 0.879 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.16 dB

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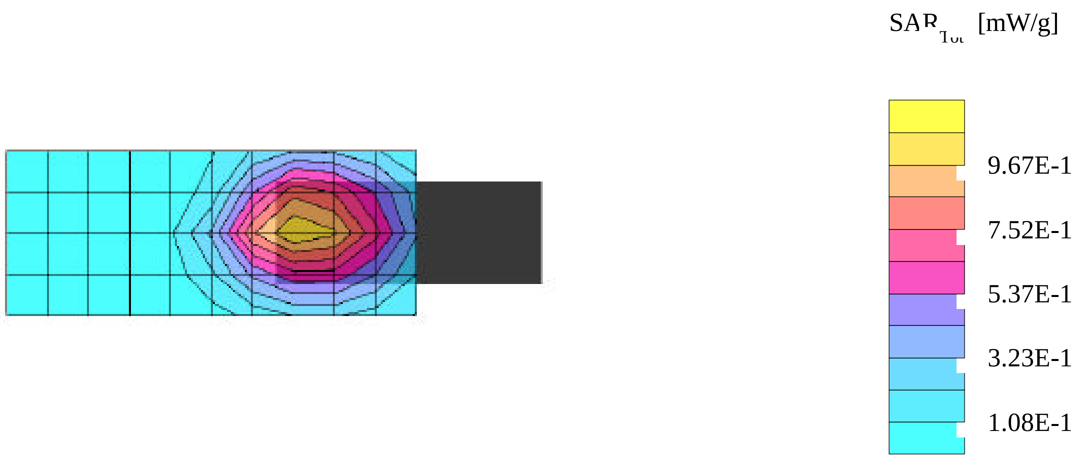
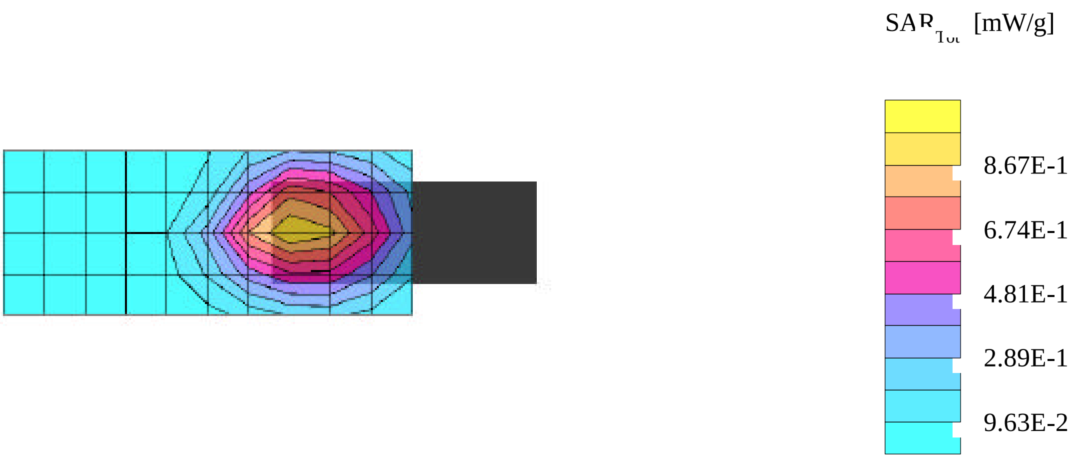
Eagle

SAM Low Band Phantom; Flat Section; Position: (270°,90°); Mode: CDMA
; SAM Body CH 1013, antenna in HDC-5; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 0.94 mho/m ε_r = 56.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.07 mW/g, SAR (10g): 0.771 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.01 dB



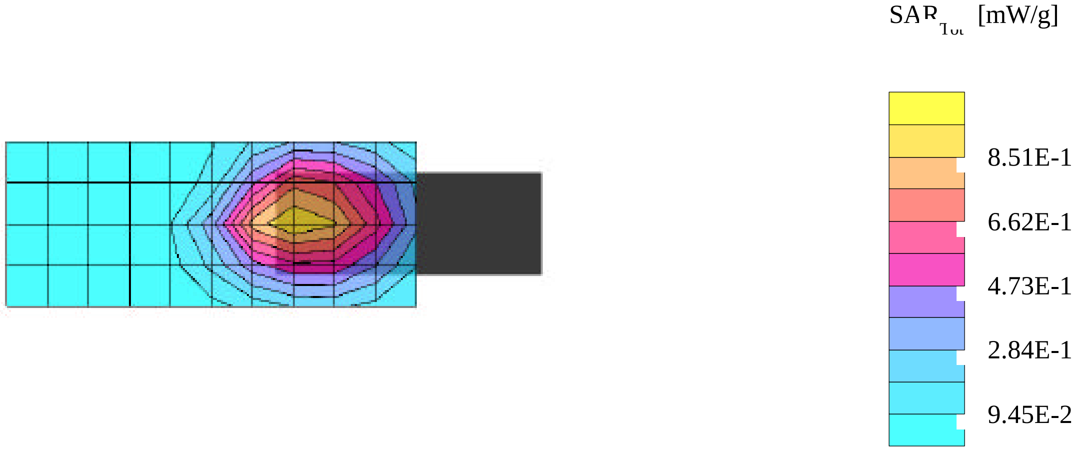
Eagle

SAM Low Band Phantom; Flat Section; Position: (270°,90°); Mode: CDMA
; SAM Body CH 384, antenna in HDC-5; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 0.94 mho/m ε_r = 56.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.955 mW/g, SAR (10g): 0.692 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.05 dB



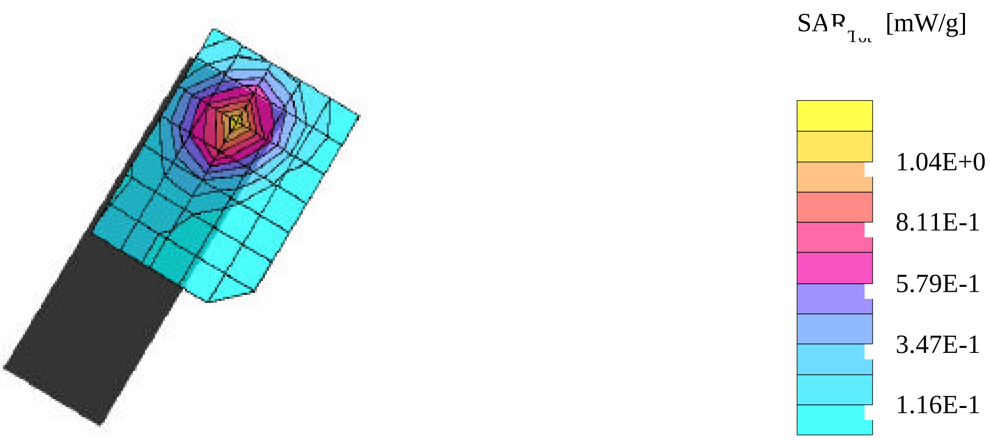
Eagle

SAM Low Band Phantom; Flat Section; Position: (270°,90°); Mode: CDMA
; SAM Body CH 777, antenna in HDC-5; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 0.94 mho/m ε_r = 56.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.955 mW/g, SAR (10g): 0.685 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.18 dB



Eagle

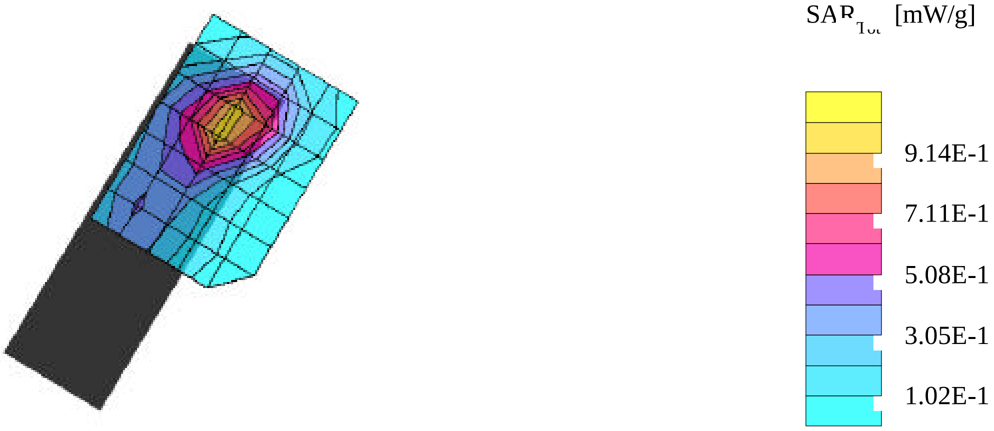
SAM High Band Phantom; Left Hand Section; Position: (90°,59°); Mode: PCS
; SAM plus15° left 1900 MHz CH 25, antenna in - 4; Probe: ET3DV6R - SN1431; ConvF(4.95,4.95,4.95); Crest factor: 1.0;
Head 1900 MHz (SAM): σ = 1.44 mho/m ε_r = 38.4 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.14 mW/g, SAR (10g): 0.652 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.02 dB



04/16/02 Temp = 23° C ± 1°

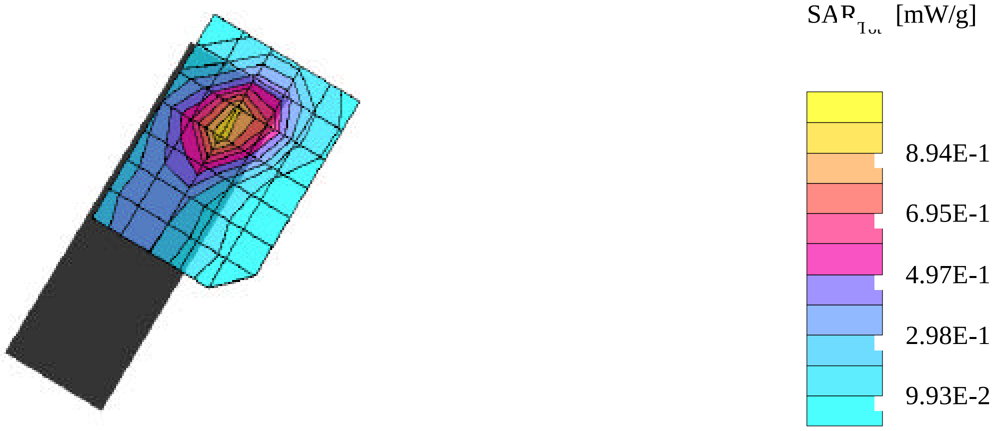
Eagle

SAM High Band Phantom; Left Hand Section; Position: (90°,59°); Mode: PCS
; SAM touch left 1900 MHz CH 600, antenna in - 2; Probe: ET3DV6R - SN1431; ConvF(4.95,4.95,4.95); Crest factor: 1.0;
Head 1900 MHz (SAM): σ = 1.51 mho/m ε_r = 37.8 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.11 mW/g, SAR (10g): 0.623 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.11 dB



Eagle

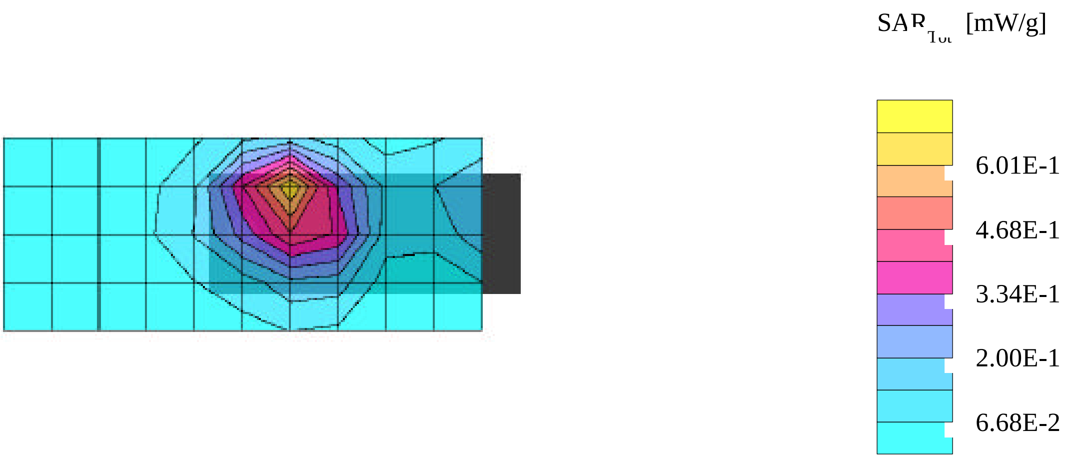
SAM High Band Phantom; Left Hand Section; Position: (90°,59°); Mode: PCS
; SAM touch left 1900 MHz CH 1175, antenna in - 2; Probe: ET3DV6R - SN1431; ConvF(4.95,4.95,4.95); Crest factor: 1.0;
Head 1900 MHz (SAM): σ = 1.51 mho/m ε_r = 37.8 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 1.06 mW/g, SAR (10g): 0.595 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.00 dB



05/02/02 Temp = 23° C ± 1°

Eagle

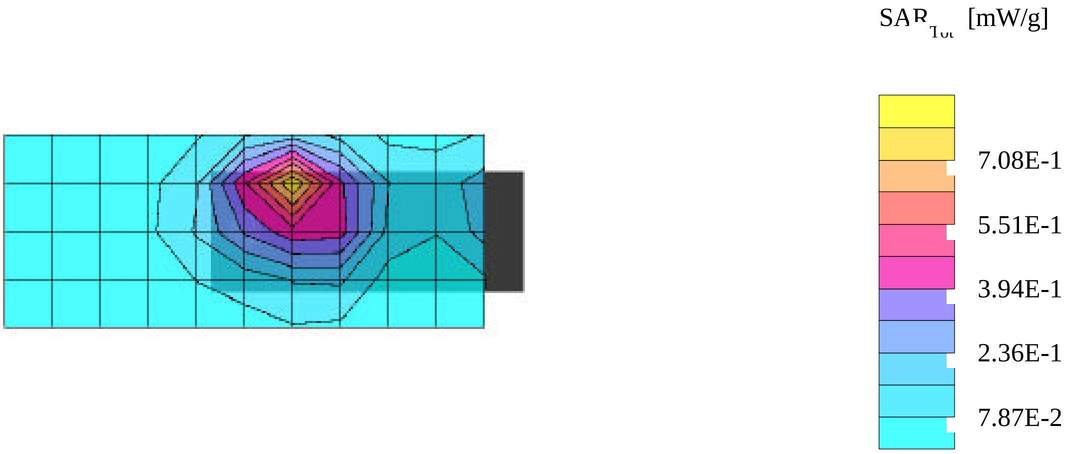
SAM High Band Phantom; Flat Section; Position: (90°,270°); Mode: PCS
; SAM Body CH 25, antenna in HDB-4; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Body 1800-2000 MHz (SAM): σ = 1.56 mho/m ε_r = 52.1 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 0.739 mW/g, SAR (10g): 0.420 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.11 dB



05/02/02 Temp = 23° C ± 1°

Eagle

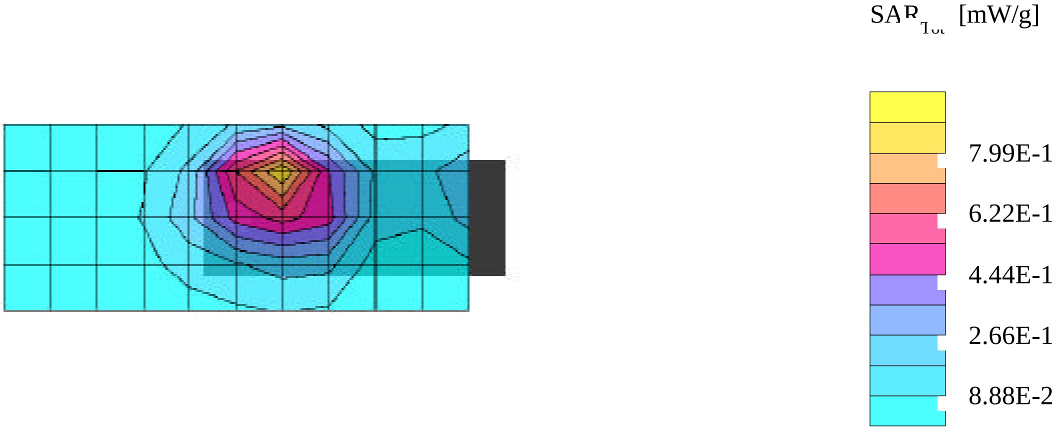
SAM High Band Phantom; Flat Section; Position: (90°,270°); Mode: PCS
; SAM Body CH 600, antenna in HDB-4; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Body 1800-2000 MHz (SAM): σ = 1.56 mho/m ε_r = 52.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.843 mW/g, SAR (10g): 0.472 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: 0.32 dB



05/02/02 Temp = 23° C ± 1°

Eagle

SAM High Band Phantom; Flat Section; Position: (90°,270°); Mode: PCS
; SAM Body CH 1175, antenna in, HDB-4; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Body 1800-2000 MHz (SAM): σ = 1.56 mho/m ε_r = 52.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.983 mW/g, SAR (10g): 0.558 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: 0.07 dB



10. ANNEX B: VALIDATION PLOTS

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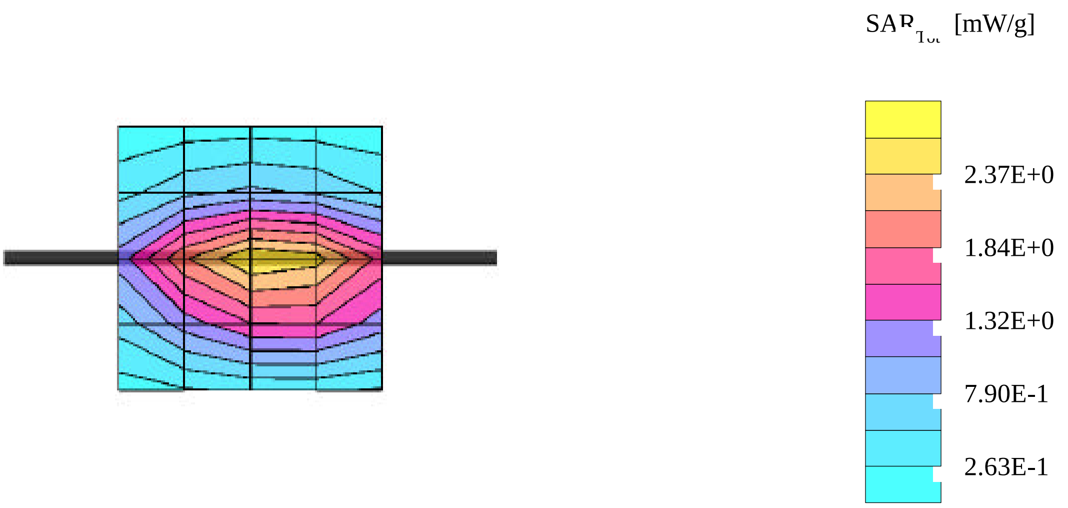
04/09/02 Temp = 23° C ± 1°

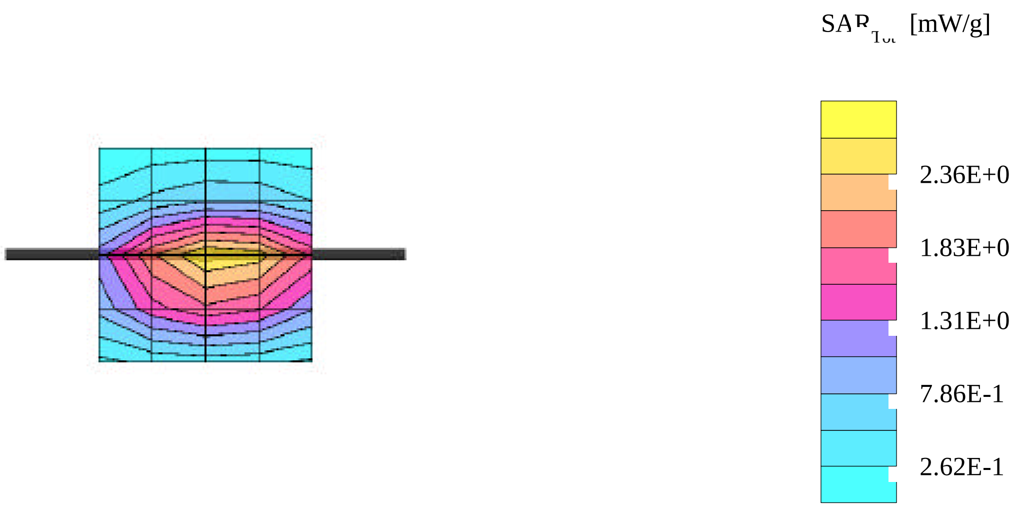
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 9; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.95 mho/m ε_r = 39.9 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 2.76 mW/g, SAR (10g): 1.75 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



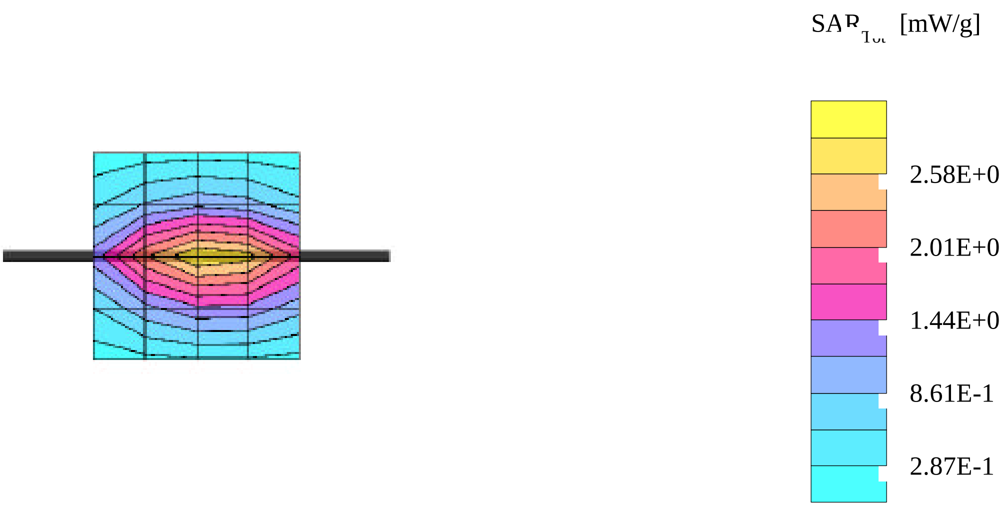
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 10; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): $\sigma = 0.95$ mho/m $\varepsilon_r = 39.9$ $\rho = 1.00$ g/cm^3
Cube 5x5x7: SAR (1g): 2.85 mW/g, SAR (10g): 1.80 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



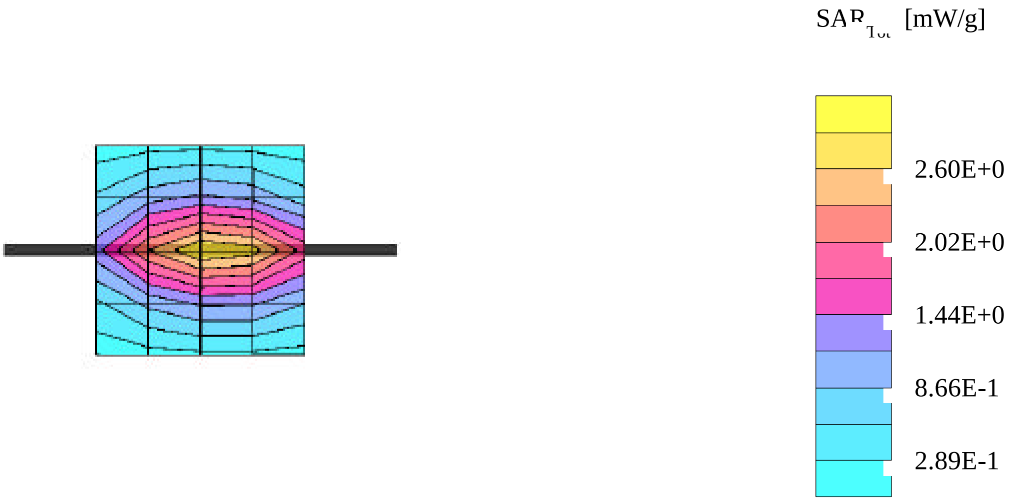
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 11; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.98 mho/m ε_r = 38.9 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 2.90 mW/g, SAR (10g): 1.83 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



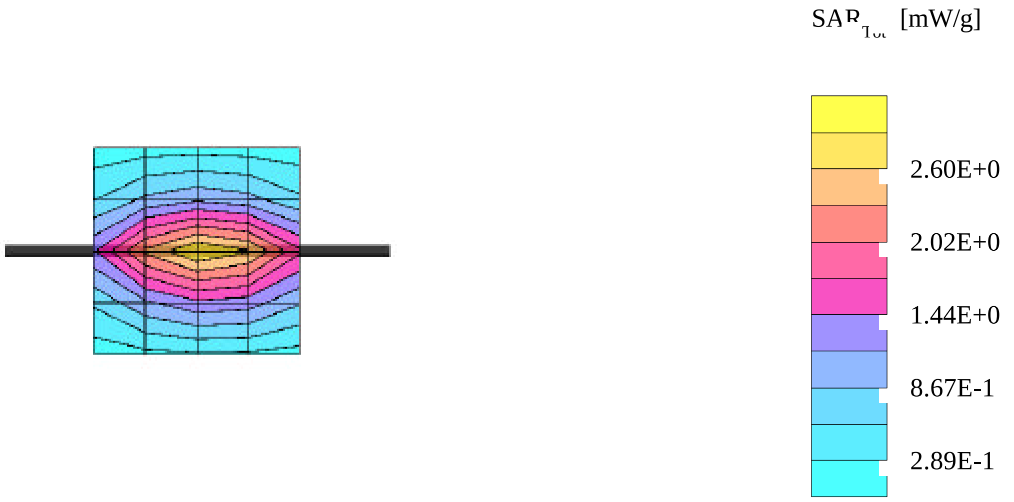
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 16; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.96 mho/m ε_r = 40.0 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 2.92 mW/g, SAR (10g): 1.84 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



Dipole 900 MHz

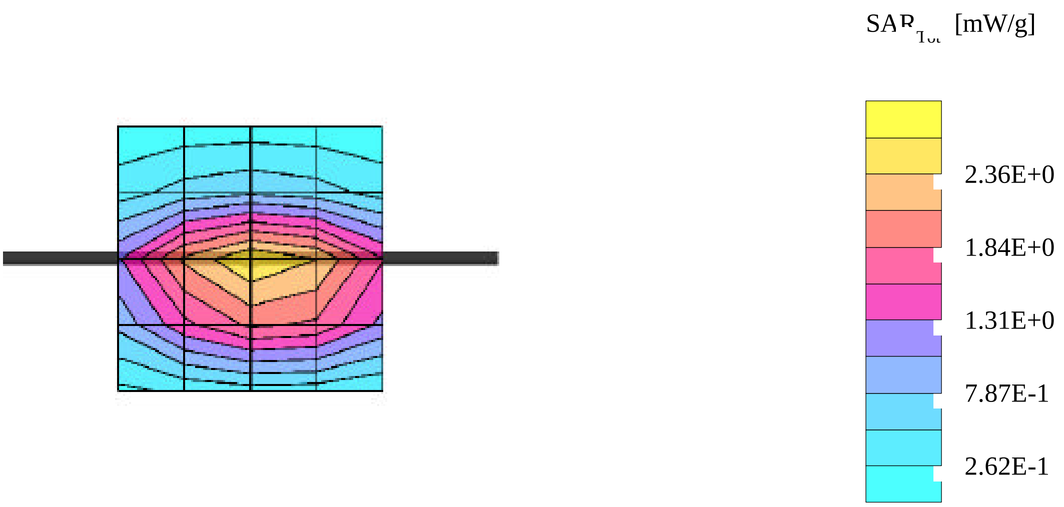
SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 17; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.96 mho/m ε_r = 40.0 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 2.88 mW/g, SAR (10g): 1.82 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



04/18/02 Temp = 23° C ± 1°

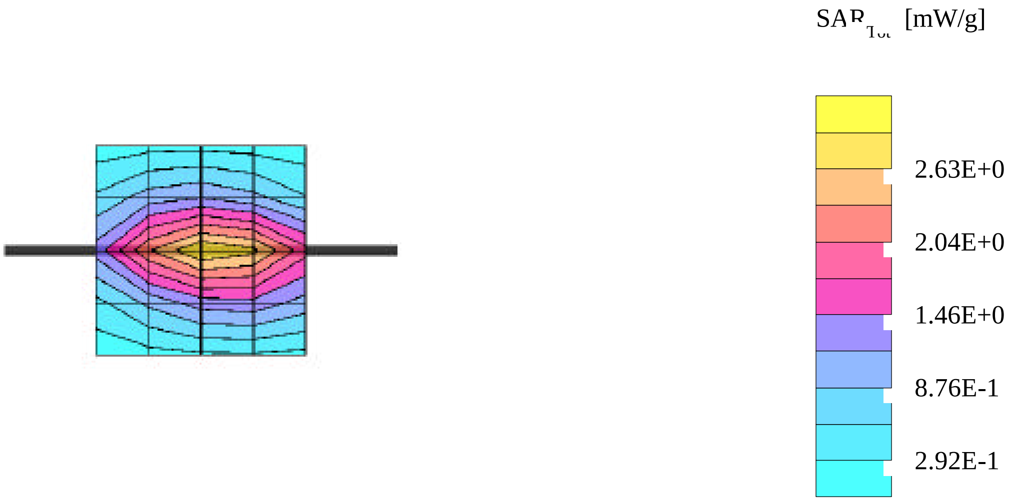
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 18; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): $\sigma = 0.94$ mho/m $\varepsilon_r = 39.1$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 2.86 mW/g, SAR (10g): 1.80 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



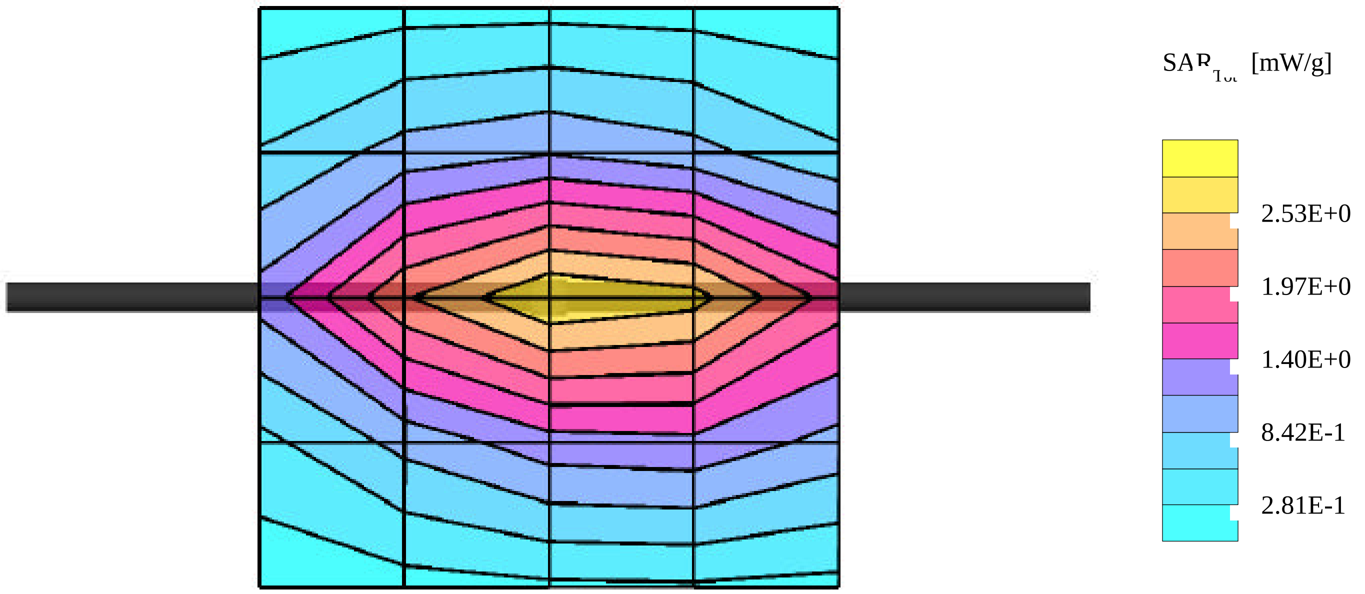
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 19; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.97 mho/m ε_r = 41.0 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 2.92 mW/g, SAR (10g): 1.84 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



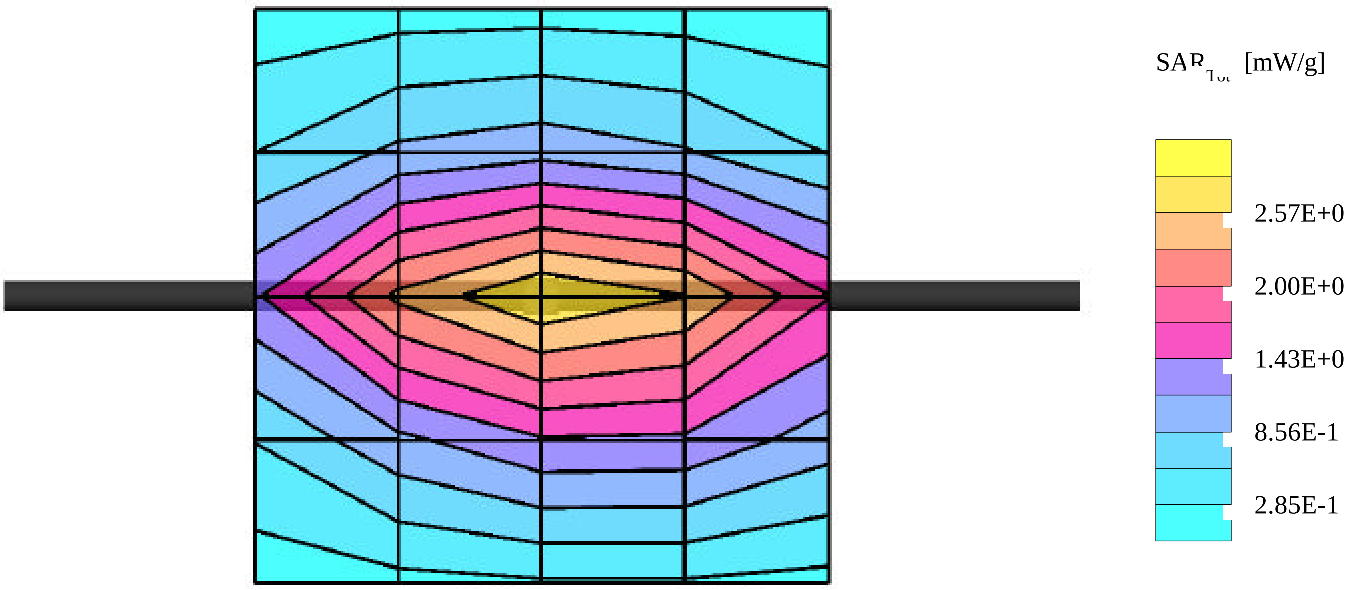
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 22; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): $\sigma = 0.95$ mho/m $\varepsilon_r = 39.5$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 2.83 mW/g, SAR (10g): 1.79 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



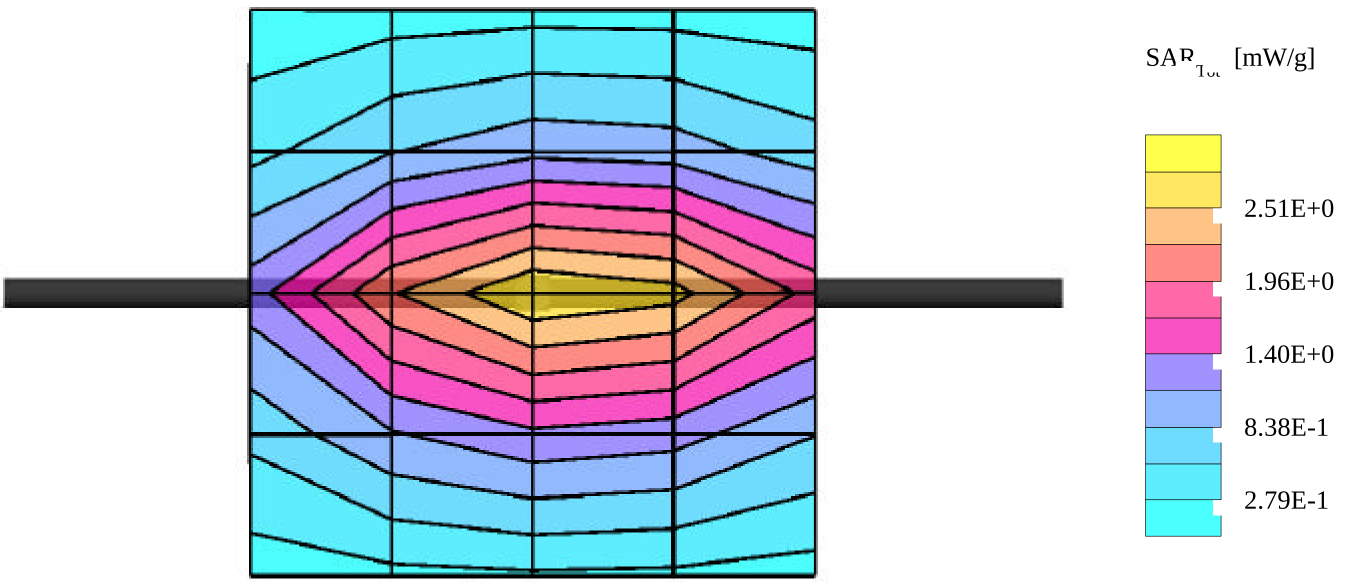
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 23; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): σ = 0.97 mho/m ε_r = 40.7 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 2.86 mW/g, SAR (10g): 1.81 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



Dipole 900 MHz

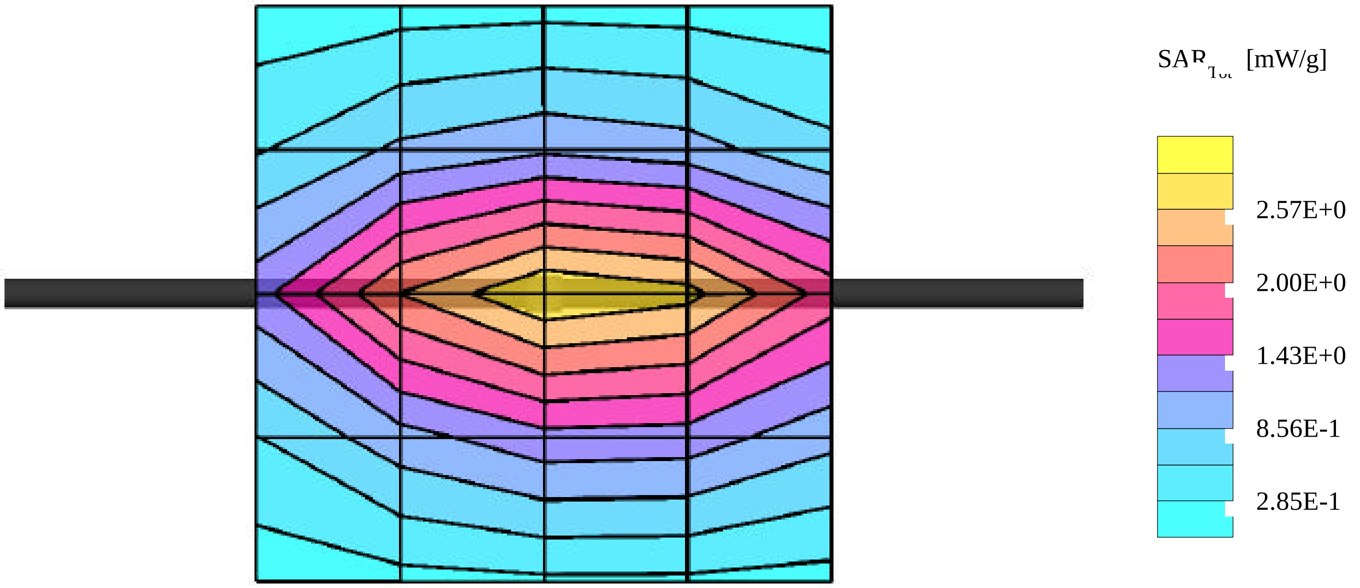
SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 24; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): $\sigma = 0.94$ mho/m $\varepsilon_r = 39.3$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 2.80 mW/g, SAR (10g): 1.77 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



04/25/02 Temp = 23° C ± 1°

Dipole 900 MHz

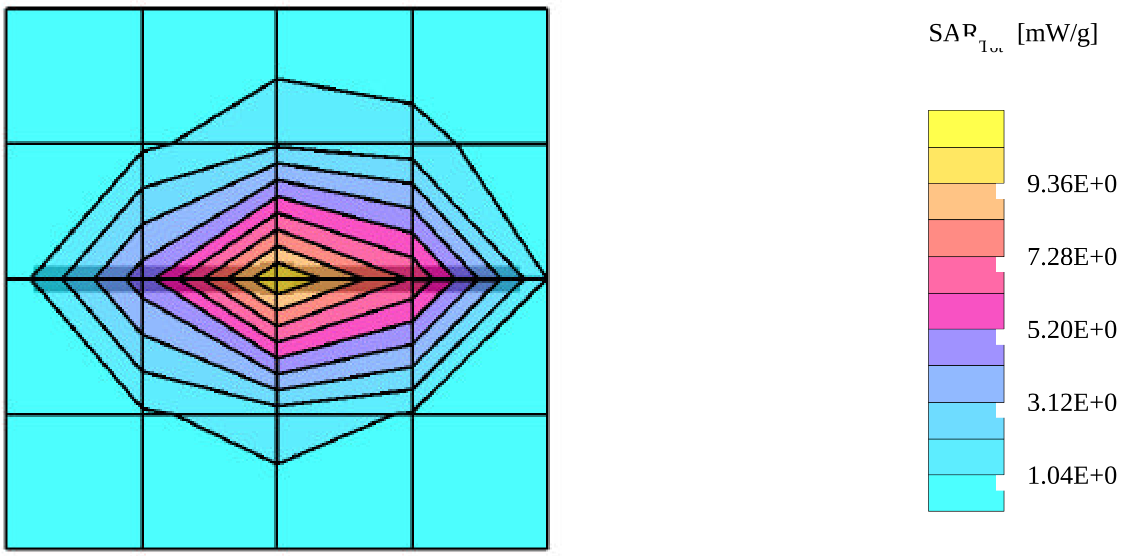
SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Validation 900 MHz 25; Probe: ET3DV6R - SN1431; ConvF(6.09,6.09,6.09); Crest factor: 1.0; Head 900 MHz (SAM): $\sigma = 0.97$ mho/m $\varepsilon_r = 40.9$ $\rho = 1.00$ g/cm³
Cube 5x5x7: SAR (1g): 2.89 mW/g, SAR (10g): 1.82 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



04/12/02 Temp = 23° C ± 1°

Dipole 1800 MHz

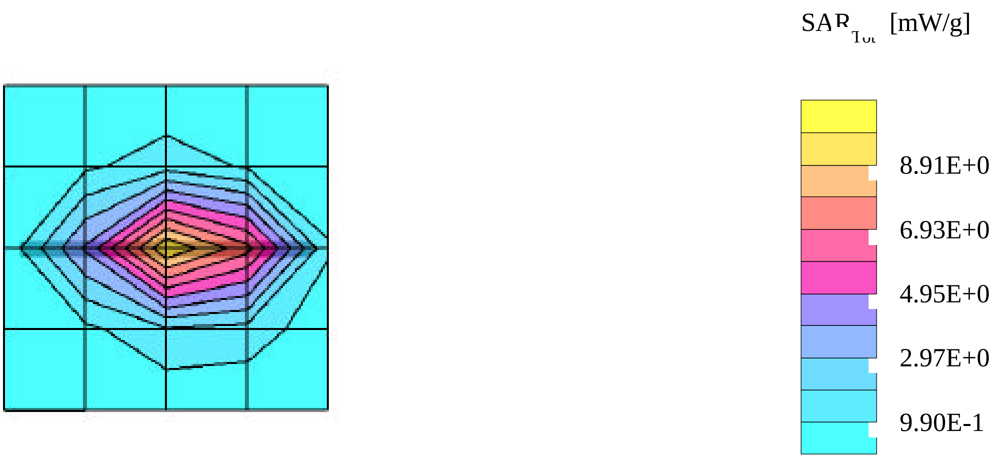
SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Head 12; Probe: ET3DV6R - SN1431; ConvF(4.95,4.95,4.95); Crest factor: 1.0; Head 1900 MHz (SAM): σ = 1.37 mho/m
ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 10.3 mW/g, SAR (10g): 5.40 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



04/15/02 Temp = 23° C ± 1°

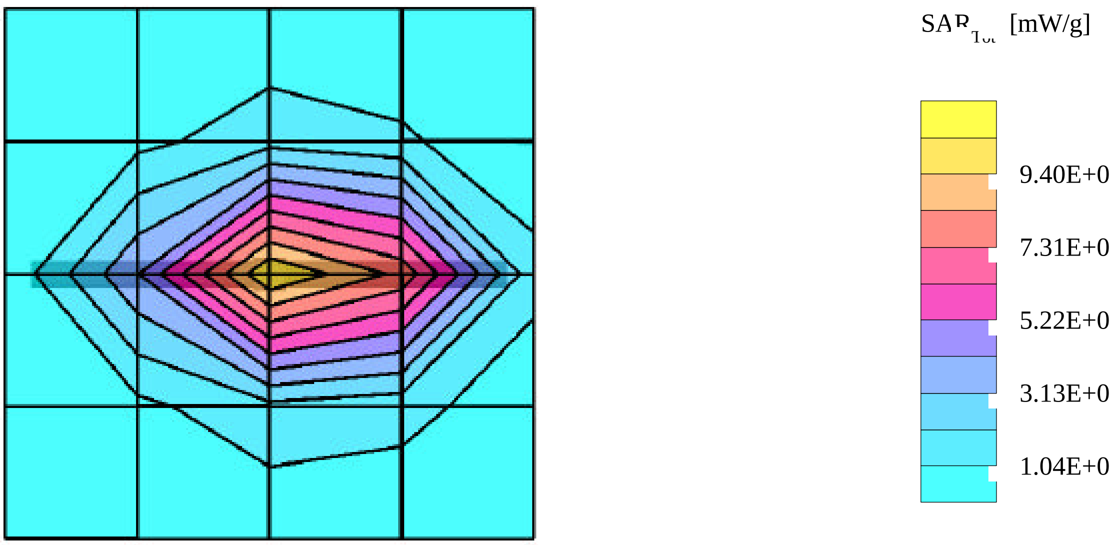
Dipole 1800 MHz

SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Head 15; Probe: ET3DV6R - SN1431; ConvF(4.95,4.95,4.95); Crest factor: 1.0; Head 1900 MHz (SAM): σ = 1.36 mho/m
ε_r = 38.7 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 9.88 mW/g, SAR (10g): 5.18 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



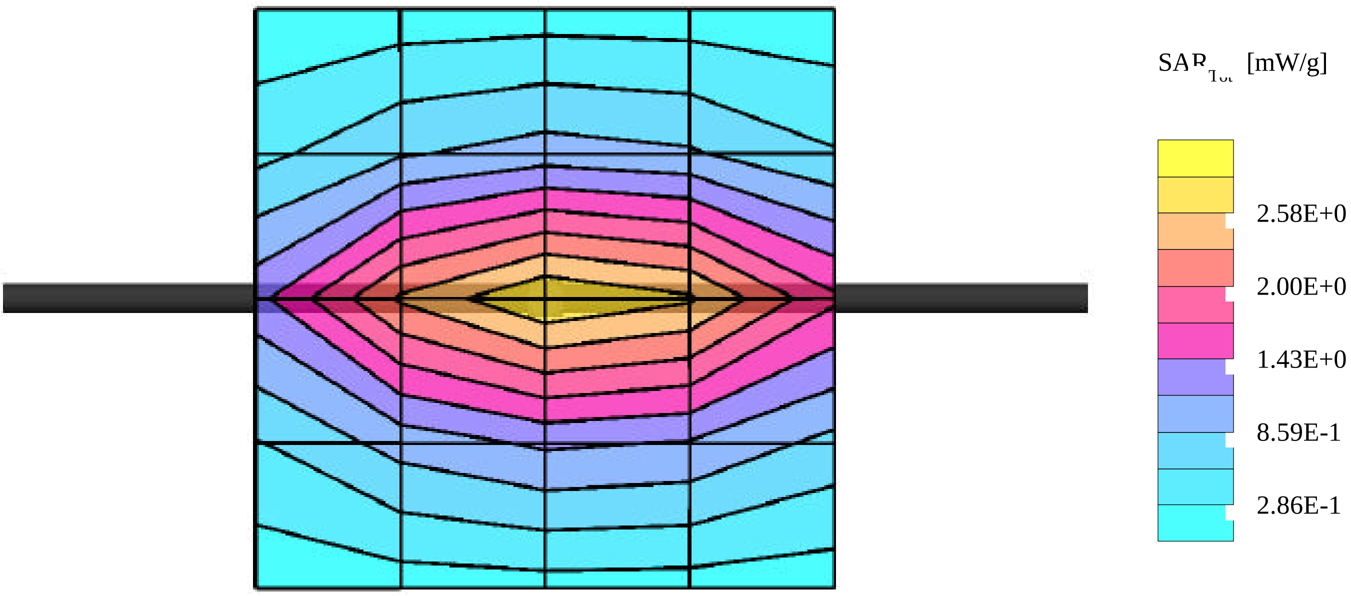
Dipole 1800 MHz

SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Head 16; Probe: ET3DV6R - SN1431; ConvF(4.95,4.95,4.95); Crest factor: 1.0; Head 1900 MHz (SAM): σ = 1.43 mho/m
ε_r = 38.2 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 10.3 mW/g, SAR (10g): 5.42 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



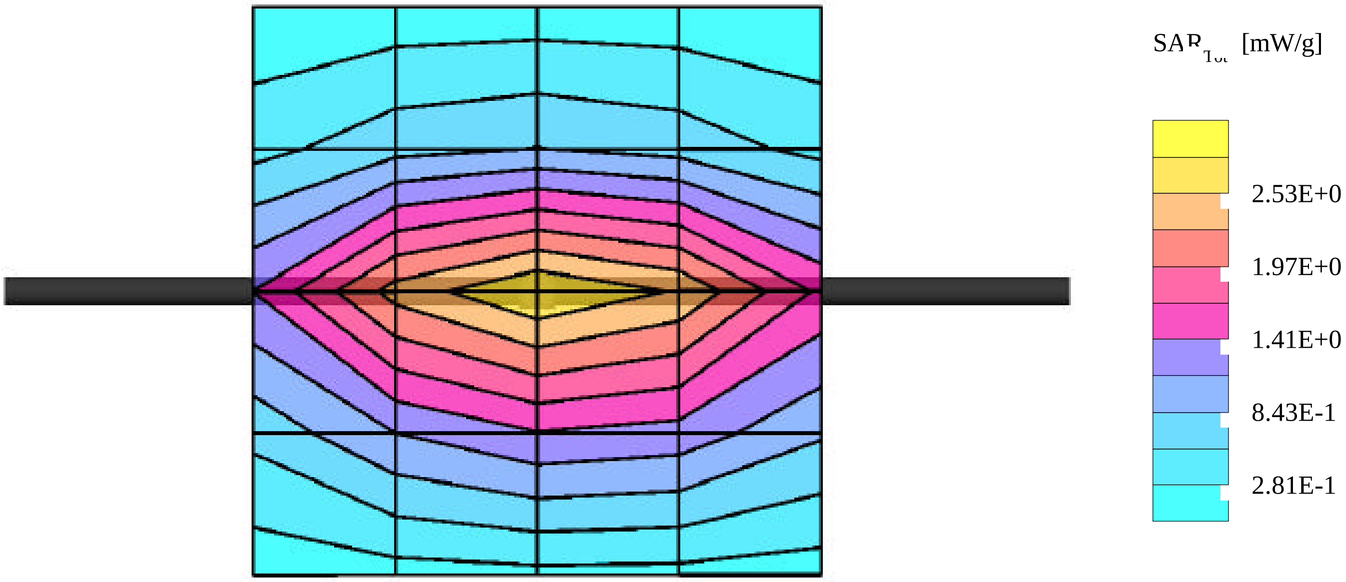
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Body - 30; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 1.01 mho/m
ε_r = 56.2 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 2.84 mW/g, SAR (10g): 1.82 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



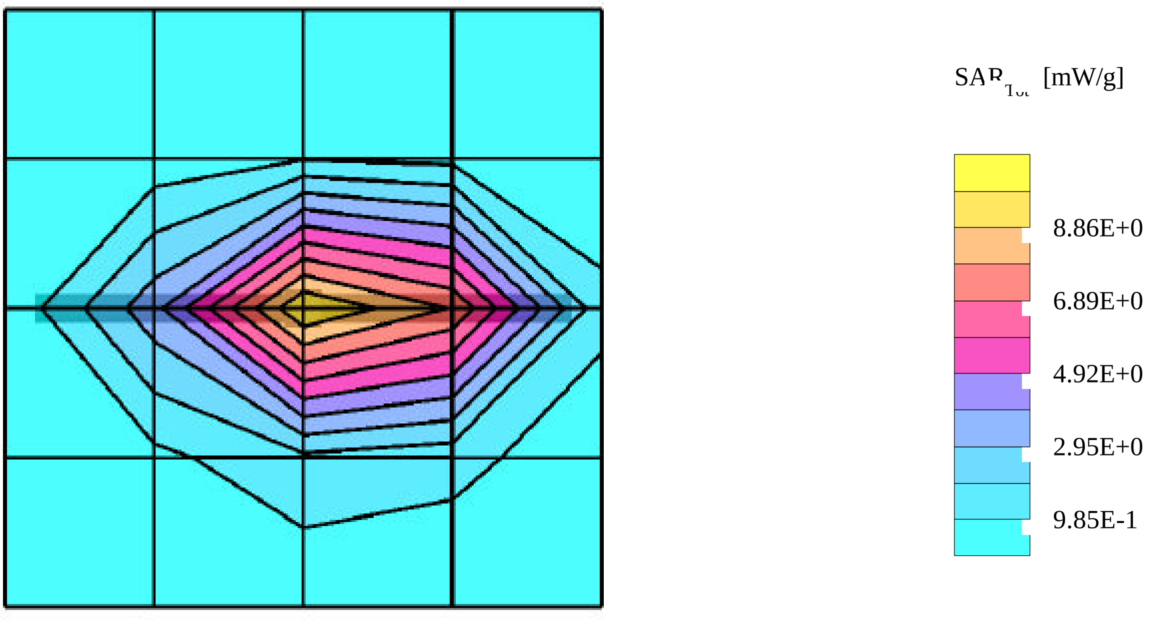
Dipole 900 MHz

SAM Low Band Phantom; Flat Section; Position: (90°,90°); Frequency: 900 MHz
; Body - 01; Probe: ET3DV6R - SN1431; ConvF(5.85,5.85,5.85); Crest factor: 1.0; Body 835 MHz (SAM): σ = 1.01 mho/m
ε_r = 56.2 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 2.83 mW/g, SAR (10g): 1.82 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



Dipole 1800 MHz

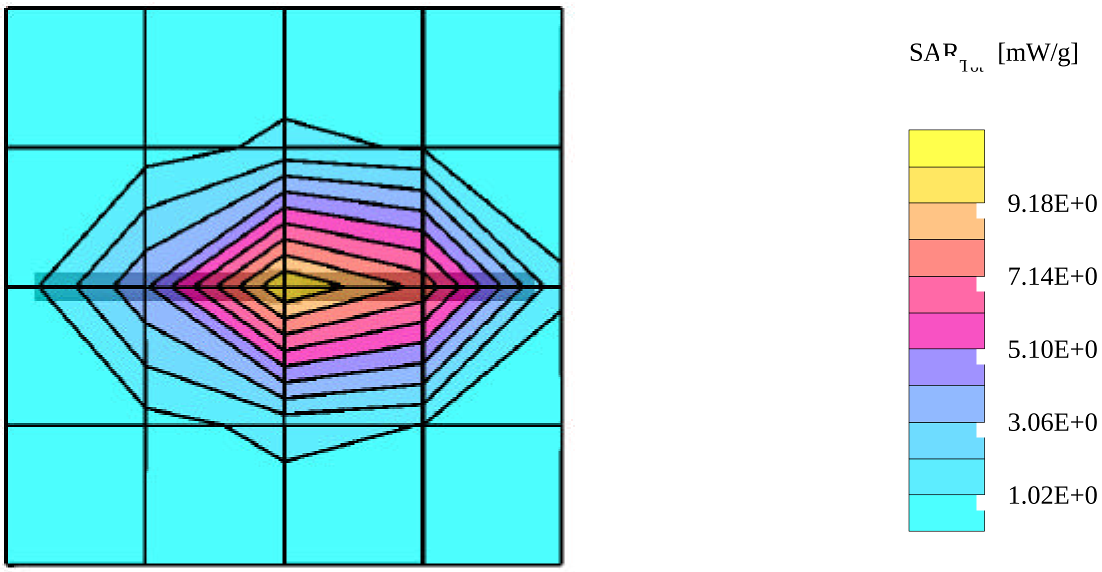
SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Body - 29; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Body 1800-2000 MHz (SAM): σ = 1.46 mho/m ε_r = 52.5 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 10.1 mW/g, SAR (10g): 5.32 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



04/30/02 Temp = 23° C ± 1°

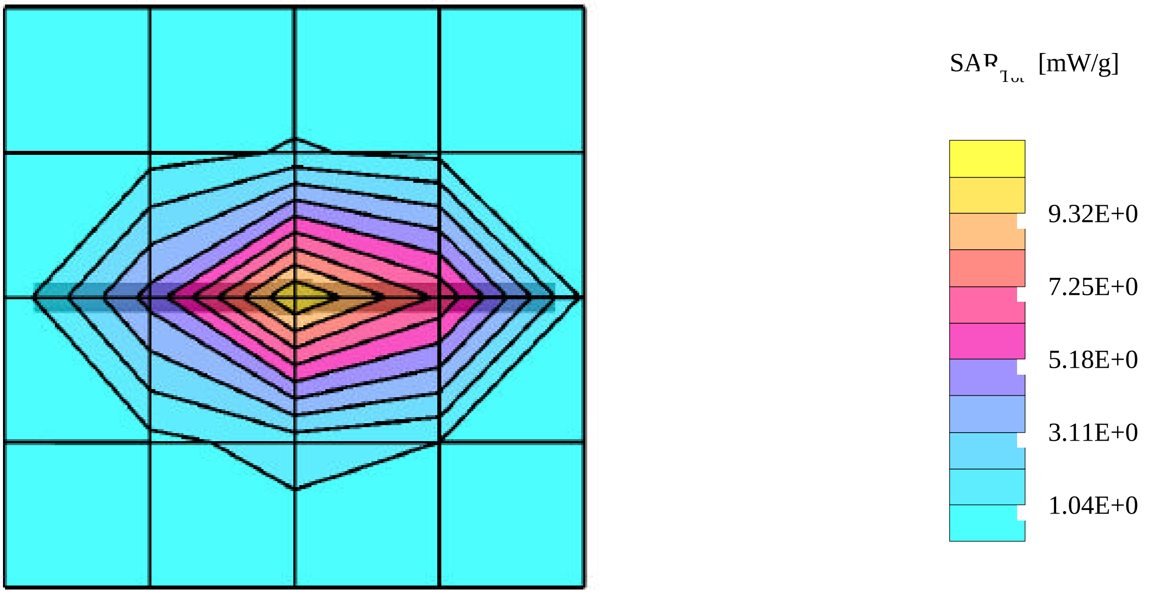
Dipole 1800 MHz

SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Body - 30; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Body 1800-2000 MHz (SAM): σ = 1.46 mho/m ε_r = 52.5 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 10.2 mW/g, SAR (10g): 5.38 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



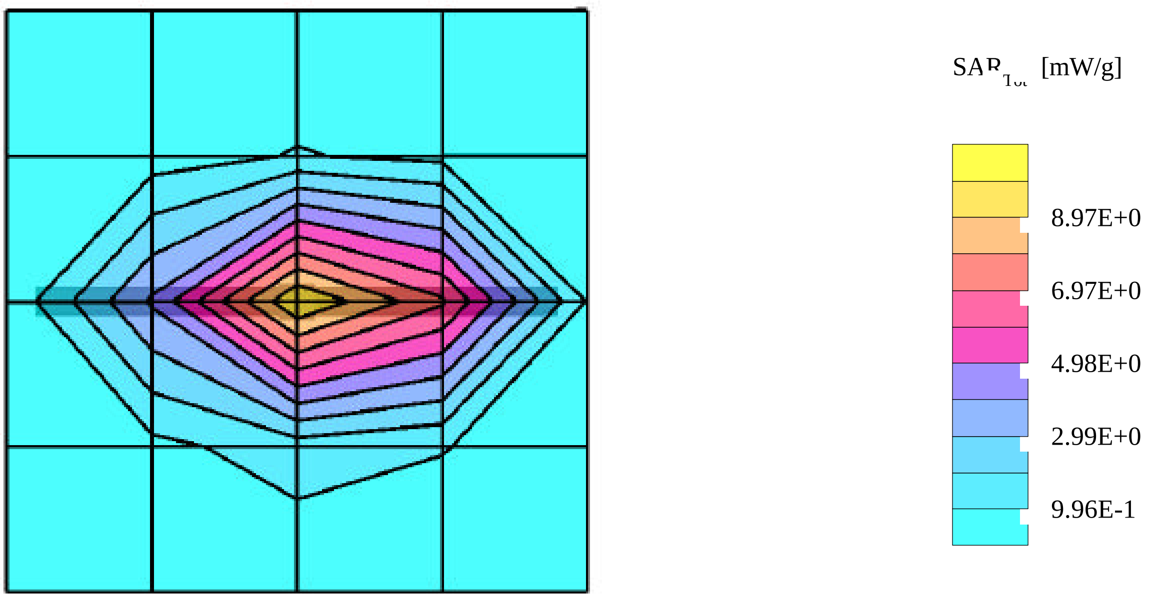
Dipole 1800 MHz

SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Body - 01; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Validation Body 1800-2000 MHz (SAM): σ = 1.46 mho/m ε_r = 52.5 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 10.2 mW/g, SAR (10g): 5.37 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



Dipole 1800 MHz

SAM High Band Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
; Body - 02; Probe: ET3DV6R - SN1431; ConvF(4.52,4.52,4.52); Crest factor: 1.0; Validation Body 1800-2000 MHz
(SAM): σ = 1.46 mho/m ε_r = 52.5 ρ = 1.00 g/cm³
Cube 7x7x7: SAR (1g): 9.92 mW/g, SAR (10g): 5.23 mW/g, (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0



11. ANNEX C: CALIBRATION CERTIFICATES

Copyright © TCC Cph, Nokia Danmark A/S,
Frederikskaj, DK-1790 Copenhagen V, Denmark
Tel. +4533292929 Fax. +4533292001

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

Calibration Certificate

900 MHz System Validation Dipole

Type:	D900V2
Serial Number:	033
Place of Calibration:	Zurich
Date of Calibration:	October 23, 2001
Calibration Interval:	24 months

Schmid & Partner Engineering AG hereby certifies, that this device has been calibrated on the date indicated above. The calibration was performed in accordance with specifications and procedures of Schmid & Partner Engineering AG.

Wherever applicable, the standards used in the calibration process are traceable to international standards. In all other cases the standards of the Laboratory for EMF and Microwave Electronics at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland have been applied.

Calibrated by:

Approved by:

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

DASY

Dipole Validation Kit

Type: D900V2

Serial: 033

Manufactured: July 9, 1998
Calibrated: October 23, 2001

1. Measurement Conditions

The measurements were performed in the flat section of the new generic twin phantom filled with head simulating solution of the following electrical parameters at 900 MHz:

Relative Dielectricity	**41.5**	± 5%
Conductivity	**0.97 mho/m**	± 5%

The DASY3 System (Software version 3.1c) with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 6.27 at 900 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 15mm from dipole center to the solution surface. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 5x5x7 fine cube was chosen for cube integration. Probe isotropy errors were cancelled by measuring the SAR with normal and 90° turned probe orientations and averaging.
The dipole input power (forward power) was 250mW ± 3 %. The results are normalized to 1W input power.

2. SAR Measurement

Standard SAR-measurements were performed with the phantom according to the measurement conditions described in section 1. The results have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values are:

averaged over 1 cm^3 (1 g) of tissue:	**11.44 mW/g**
averaged over 10 cm^3 (10 g) of tissue:	**7.24 mW/g**

Note: If the liquid parameters for validation are slightly different from the ones used for initial calibration, the SAR-values will be different as well.

3. Dipole Impedance and Return Loss

The impedance was measured at the SMA-connector with a network analyzer and numerically transformed to the dipole feedpoint. The transformation parameters from the SMA-connector to the dipole feedpoint are:

Electrical delay:	**1.417 ns**	(one direction)
Transmission factor:	**0.993**	(voltage transmission, one direction)

The dipole was positioned at the flat phantom sections according to section 1 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 900 MHz:	Re{Z} = **50.5 Ω**
	Im {Z} = **-1.8 Ω**
Return Loss at 900 MHz	**-34.7 dB**

4. Measurement Conditions

The measurements were performed in the flat section of the new generic twin phantom filled with muscle simulating solution of the following electrical parameters at 900 MHz:

Relative Dielectricity	**55.4**	± 5%
Conductivity	**1.04 mho/m**	± 5%

The DASY3 System (Software version 3.1c) with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 6.02 at 900 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was <u>15mm</u> from dipole center to the solution surface. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 5x5x7 fine cube was chosen for cube integration. Probe isotropy errors were cancelled by measuring the SAR with normal and 90° turned probe orientations and averaging.
The dipole input power (forward power) was 250mW ± 3 %. The results are normalized to 1W input power.

5. SAR Measurement

Standard SAR-measurements were performed with the phantom according to the measurement conditions described in section 4. The results have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values are:

averaged over 1 cm^3 (1 g) of tissue:	**11.84 mW/g**
averaged over 10 cm^3 (10 g) of tissue:	**7.52 mW/g**

Note: If the liquid parameters for validation are slightly different from the ones used for initial calibration, the SAR-values will be different as well.

6. Dipole Impedance and Return Loss

The dipole was positioned at the flat phantom sections according to section 4 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 900 MHz:	Re{Z} = **47.1 Ω**
	Im {Z} = **-3.7 Ω**
Return Loss at 900 MHz	**-25.8 dB**

7. Handling

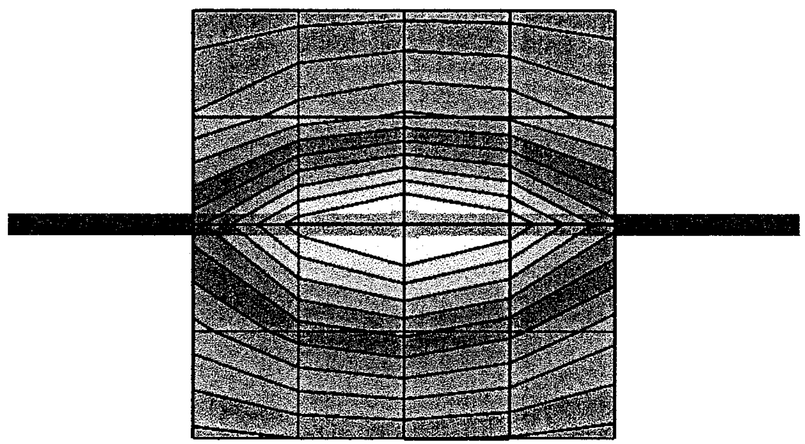
The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

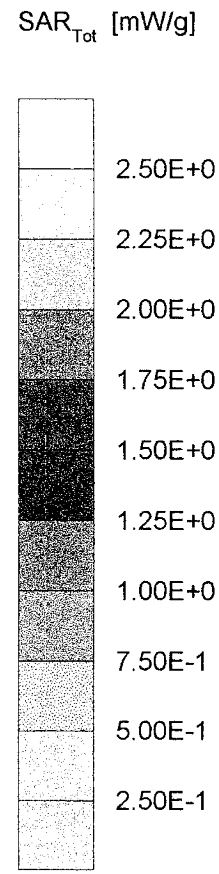
Do not apply excessive force to the dipole arms, because they might bend. If the dipole arms have to be bent back, take care to release stress to the soldered connections near the feedpoint; they might come off.

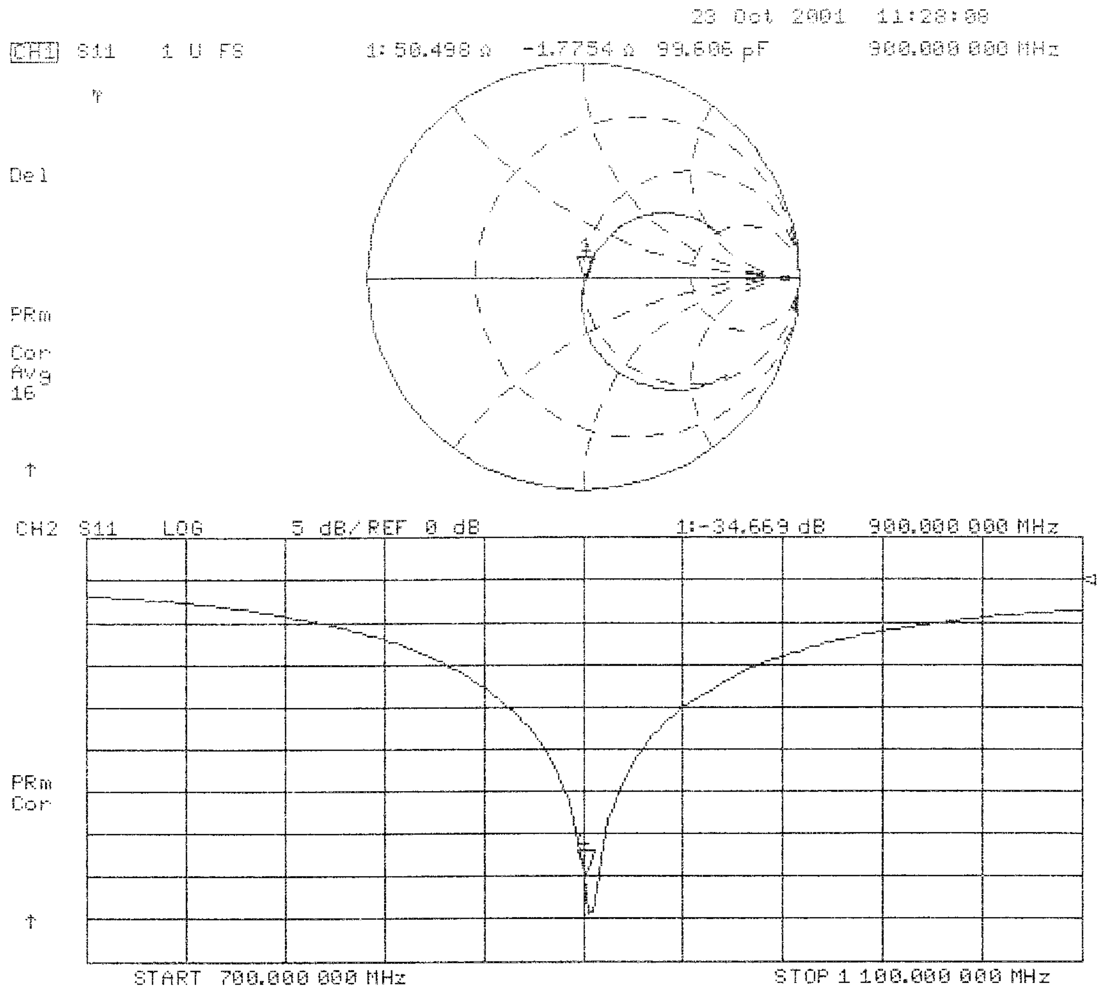
After prolonged use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

Validation Dipole D900V2 SN:033, d = 15 mm

Frequency: 900 MHz; Antenna Input Power: 250 [mW]
SAM Phantom; Flat Section; Grid Spacing: Dx = 20.0, Dy = 20.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(6.27,6.27,6.27) at 900 MHz; IEEE1528 900 MHz; σ = 0.97 mho/m ε_r = 41.5 ρ = 1.00 g/cm^3
Cubes (2): Peak: 4.62 mW/g ± 0.04 dB, SAR (1g): 2.86 mW/g ± 0.02 dB, SAR (10g): 1.81 mW/g ± 0.01 dB, (Worst-case extrapolation)
Penetration depth: 11.5 (10.2, 13.2) [mm]
Powerdrift: 0.00 dB

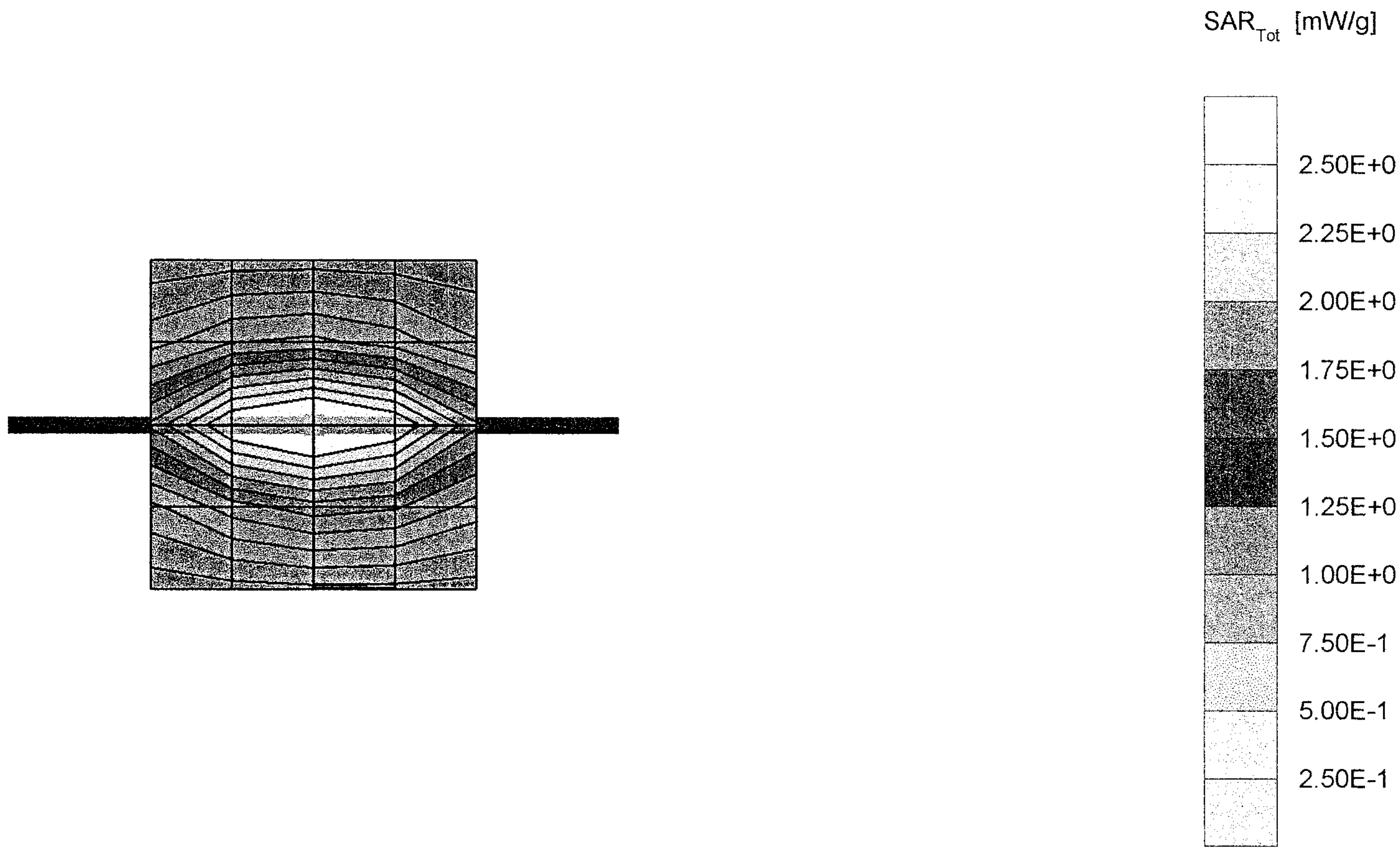


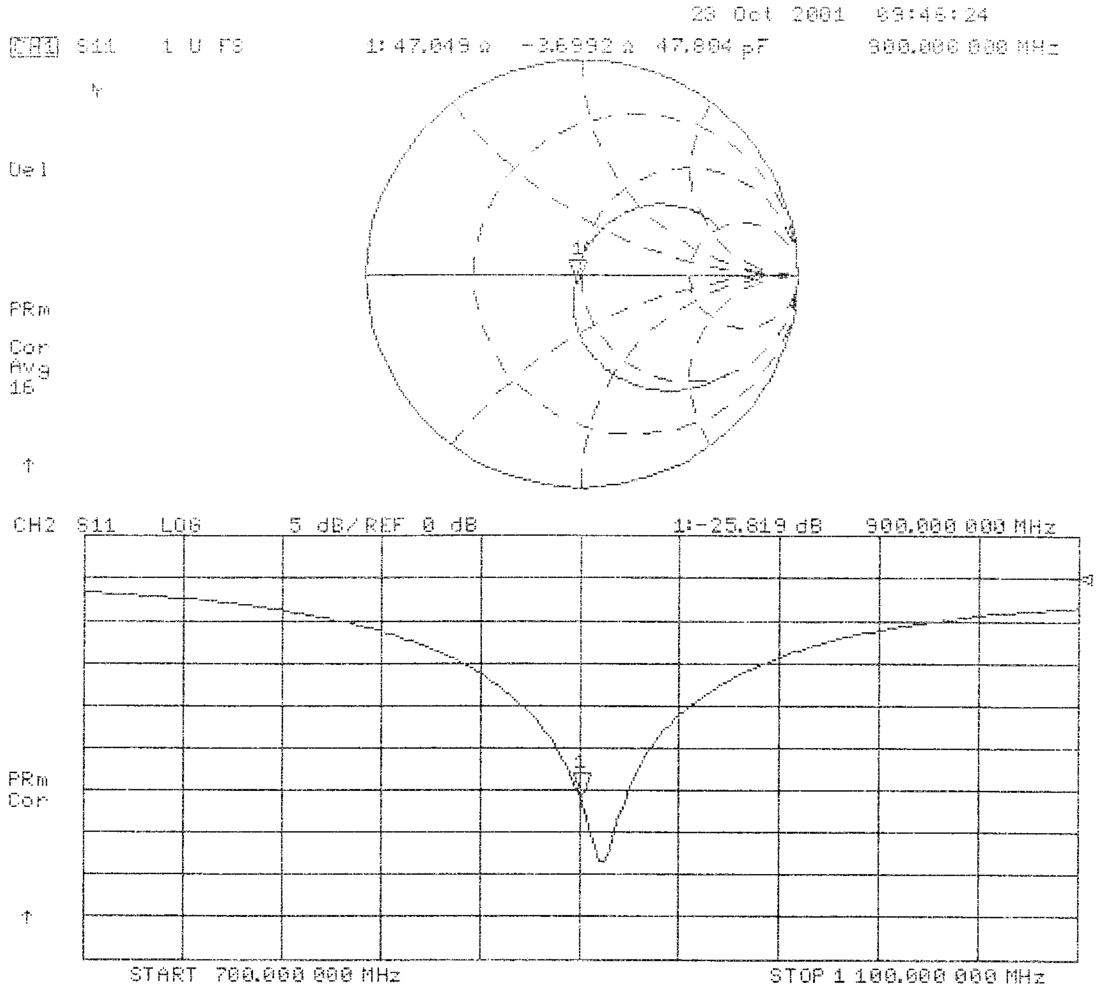



23 Oct 2001 11:28:08
CH1 S11 1 U FS
1: 50.498 Ω -1.7754 Ω 99.606 pF
900.000 000 MHz
Del
PRm
Cor
Avg
16
CH2 S11 LOG 5 dB/ REF 0 dB
1:-34.669 dB
900.000 000 MHz
PRm
Cor
START 700.000 000 MHz
STOP 1 100.000 000 MHz

Validation Dipole D900V2 SN:033, d = 15 mm

Frequency: 900 MHz; Antenna Input Power: 250 [mW]
SAM Phantom; Flat Section; Grid Spacing: Dx = 20.0, Dy = 20.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(6.02,6.02,6.02) at 900 MHz; Muscle 900 MHz; σ = 1.04 mho/m ε_r = 55.4 ρ = 1.00 g/cm^3
Cubes (2): Peak: 4.76 mW/g ± 0.02 dB, SAR (1g): 2.96 mW/g ± 0.02 dB, SAR (10g): 1.88 mW/g ± 0.01 dB, (Worst-case extrapolation)
Penetration depth: 11.9 (10.5, 13.7) [mm]
Powerdrift: -0.01 dB





23 Oct 2001 09:46:24
CH1 S11 1 U FS
1: 47.049 Ω -3.6992 Ω 47.804 pF 900.000 000 MHz
Del
PRm
Cor
Avg
16
CH2 S11 LOG 5 dB/ REF 0 dB
1:-25.819 dB 900.000 000 MHz
PRm
Cor
START 700.000 000 MHz
STOP 1 100.000 000 MHz

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

Calibration Certificate

1800 MHz System Validation Dipole

Type:	**D1800V2**
Serial Number:	**230**
Place of Calibration:	**Zurich**
Date of Calibration:	**October 25, 2001**
Calibration Interval:	**24 months**

Schmid & Partner Engineering AG hereby certifies, that this device has been calibrated on the date indicated above. The calibration was performed in accordance with specifications and procedures of Schmid & Partner Engineering AG.

Wherever applicable, the standards used in the calibration process are traceable to international standards. In all other cases the standards of the Laboratory for EMF and Microwave Electronics at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland have been applied.

Calibrated by: Pokovic Katja

Approved by: N. Kuster

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

Calibration Certificate

1800 MHz System Validation Dipole

Type:	**D1800V2**
Serial Number:	**230**
Place of Calibration:	**Zurich**
Date of Calibration:	**October 25, 2001**
Calibration Interval:	**24 months**

Schmid & Partner Engineering AG hereby certifies, that this device has been calibrated on the date indicated above. The calibration was performed in accordance with specifications and procedures of Schmid & Partner Engineering AG.

Wherever applicable, the standards used in the calibration process are traceable to international standards. In all other cases the standards of the Laboratory for EMF and Microwave Electronics at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland have been applied.

Calibrated by:

Approved by:

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

DASY

Dipole Validation Kit

Type: D1800V2

Serial: 230

Manufactured: February 26, 1998
Calibrated: October 25, 2001

1. Measurement Conditions

The measurements were performed in the flat section of the new generic twin phantom filled with head simulating glycol solution of the following electrical parameters at 1800 MHz:

Relative Dielectricity	**40.7**	± 5%
Conductivity	**1.35 mho/m**	± 5%

The DASY3 System (Software version 3.1d) with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 5.57 at 1800 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10mm from dipole center to the solution surface. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 5x5x7 fine cube was chosen for cube integration. Probe isotropy errors were cancelled by measuring the SAR with normal and 90° turned probe orientations and averaging.
The dipole input power (forward power) was 250mW ± 3 %. The results are normalized to 1W input power.

2. SAR Measurement

Standard SAR-measurements were performed with the phantom according to the measurement conditions described in section 1. The results have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values are:

averaged over 1 cm^3 (1 g) of tissue:	**37.4 mW/g**
averaged over 10 cm^3 (10 g) of tissue:	**19.7 mW/g**

Note: If the liquid parameters for validation are slightly different from the ones used for initial calibration, the SAR-values will be different as well. The estimated sensitivities of SAR-values and penetration depths to the liquid parameters are listed in the DASY Application Note 4: 'SAR Sensitivities'.

3. Dipole Impedance and Return Loss

The impedance was measured at the SMA-connector with a network analyzer and numerically transformed to the dipole feedpoint. The transformation parameters from the SMA-connector to the dipole feedpoint are:

Electrical delay:	**1.213 ns**	(one direction)
Transmission factor:	**0.990**	(voltage transmission, one direction)

The dipole was positioned at the flat phantom sections according to section 1 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 1800 MHz:	Re{Z} = **49.3 Ω**
	Im {Z} = **-6.2 Ω**
Return Loss at 1800 MHz	**-24.0dB**

4. Measurement Conditions

The measurements were performed in the flat section of the new generic twin phantom filled with muscle simulating glycol solution of the following electrical parameters at 1800 MHz:

Relative Dielectricity	**53.5**	± 5%
Conductivity	**1.45 mho/m**	± 5%

The DASY3 System (Software version 3.1d) with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 4.85 at 1800 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10mm from dipole center to the solution surface. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 5x5x7 fine cube was chosen for cube integration. Probe isotropy errors were cancelled by measuring the SAR with normal and 90° turned probe orientations and averaging.
The dipole input power (forward power) was 250mW ± 3 %. The results are normalized to 1W input power.

5. SAR Measurement

Standard SAR-measurements were performed with the phantom according to the measurement conditions described in section 4. The results have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values are:

averaged over 1 cm^3 (1 g) of tissue:	**40.8 mW/g**
averaged over 10 cm^3 (10 g) of tissue:	**21.4 mW/g**

Note: If the liquid parameters for validation are slightly different from the ones used for initial calibration, the SAR-values will be different as well. The estimated sensitivities of SAR-values and penetration depths to the liquid parameters are listed in the DASY Application Note 4: 'SAR Sensitivities'.

6. Dipole Impedance and Return Loss

The dipole was positioned at the flat phantom sections according to section 4 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 1800 MHz:	Re{Z} = **44.7 Ω**
	Im {Z} = **-6.5Ω**
Return Loss at 1800 MHz	**-21.1 dB**

7. Handling

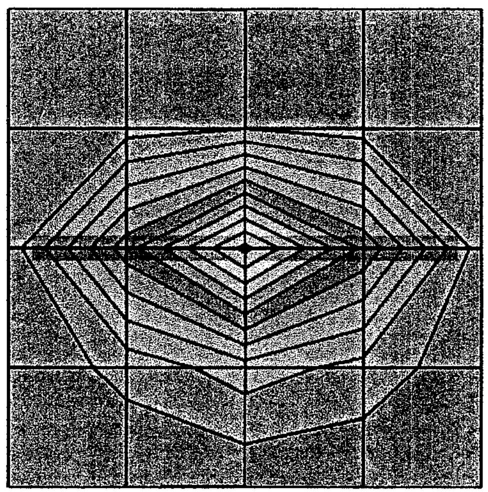
The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

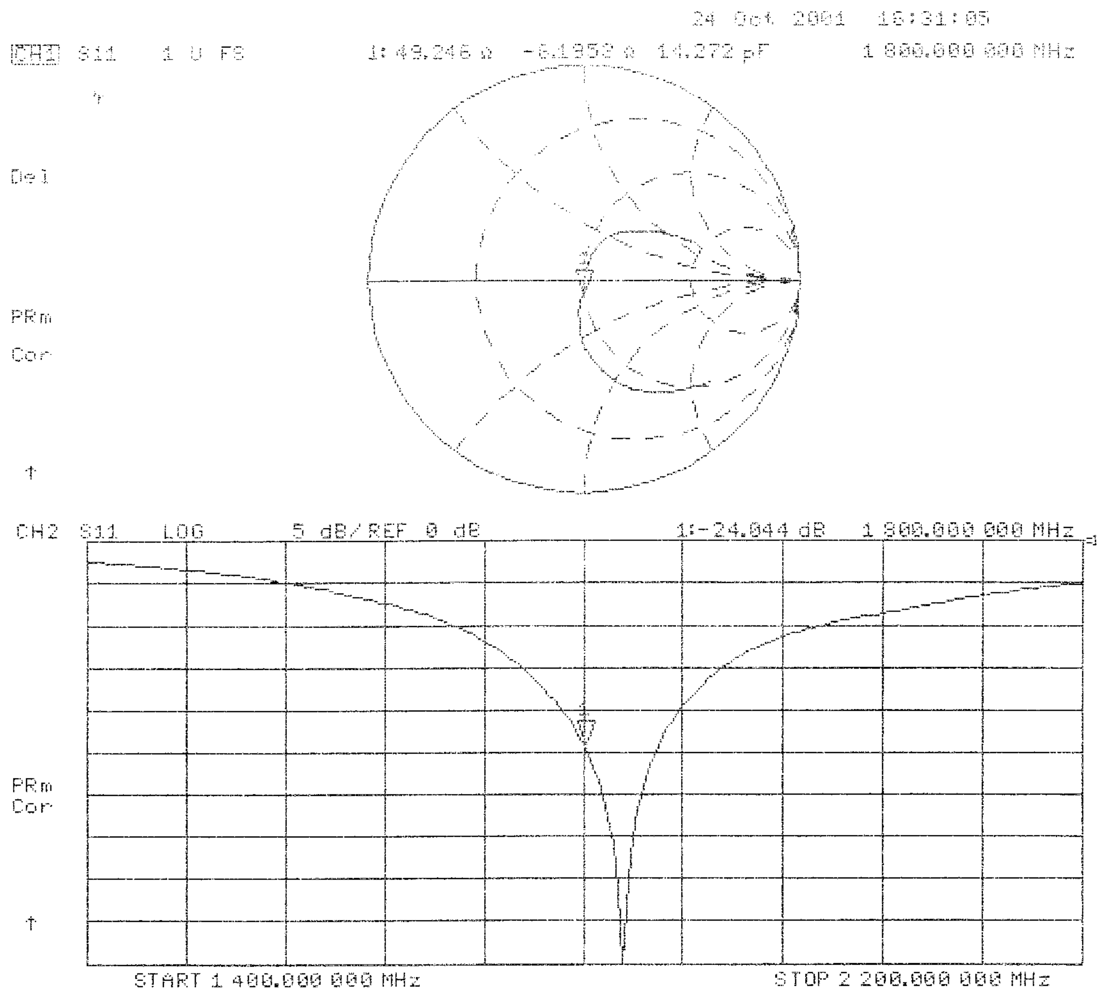
Do not apply excessive force to the dipole arms, because they might bend. If the dipole arms have to be bent back, take care to release stress to the soldered connections near the feedpoint; they might come off.

After prolonged use with 40W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

Validation Dipole D1800V2 SN:230, d = 10 mm

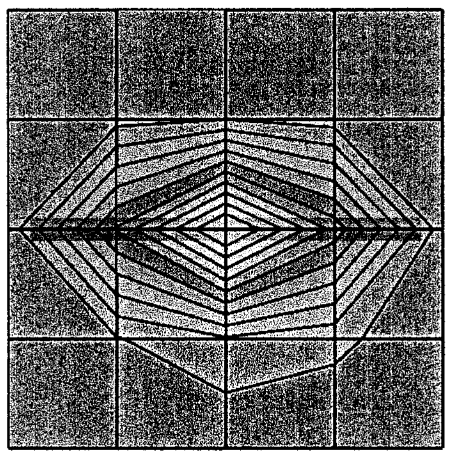
Frequency: 1800 MHz; Antenna Input Power: 250 [mW]
SAM Phantom; Flat Section; Grid Spacing: Dx = 20.0, Dy = 20.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(5.57,5.57,5.57) at 1800 MHz; IEEE1528 1800 MHz ; σ = 1.35 mho/m ε_r = 40.7 ρ = 1.00 g/cm^3
Cubes (2): Peak: 17.5 mW/g ± 0.02 dB, SAR (1g): 9.36 mW/g ± 0.01 dB, SAR (10g): 4.92 mW/g ± 0.02 dB, (Worst-case extrapolation)
Penetration depth: 8.5 (7.9, 9.6) [mm]
Powerdrift: -0.03 dB

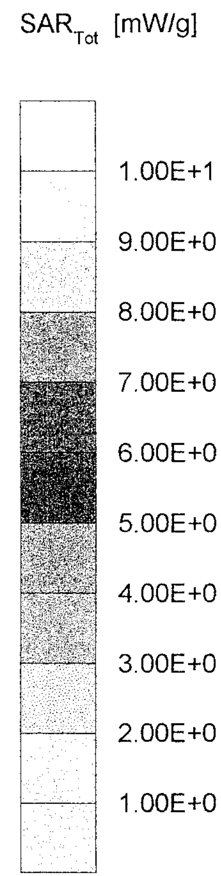


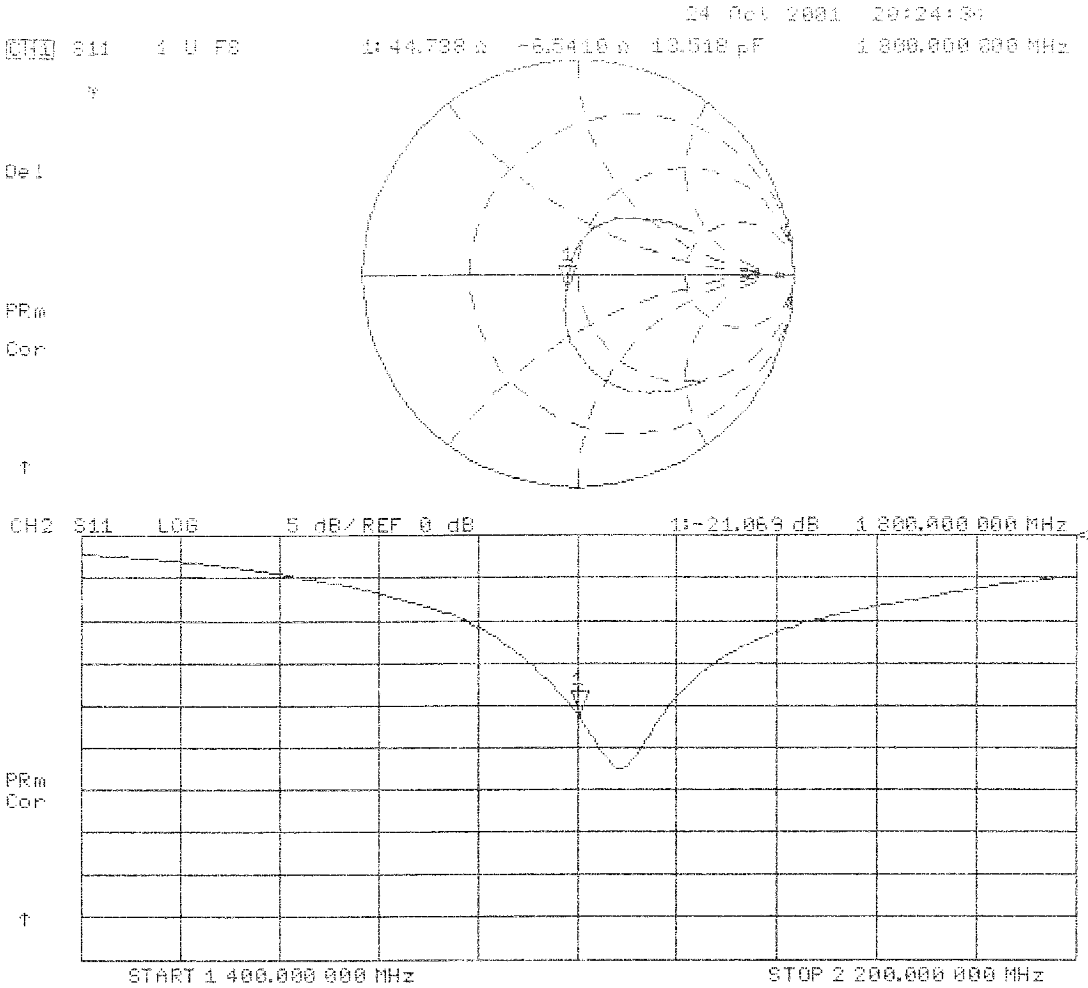

24 Oct 2001 16:31:05
CH1 S11 1 U FS
1: 49.246 Ω -6.1952 Ω 14.272 pF 1 800.000 000 MHz
Del
PRm
Cor
CH2 S11 LOG 5 dB/ REF 0 dB 1:-24.044 dB 1 800.000 000 MHz
PRm
Cor
START 1 400.000 000 MHz
STOP 2 200.000 000 MHz

Validation Dipole D1800V2 SN:230, d = 10 mm

Frequency: 1800 MHz; Antenna Input Power: 250 [mW]
SAM Phantom; Flat Section; Grid Spacing: Dx = 20.0, Dy = 20.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(4.85,4.85,4.85) at 1800 MHz; Muscle 1800 MHz; σ = 1.45 mho/m ε_r = 53.5 ρ = 1.00 g/cm^3
Cubes (2): Peak: 19.2 mW/g ± 0.01 dB, SAR (1g): 10.2 mW/g ± 0.02 dB, SAR (10g): 5.34 mW/g ± 0.02 dB, (Worst-case extrapolation)
Penetration depth: 8.8 (7.9, 10.3) [mm]
Powerdrift: -0.03 dB





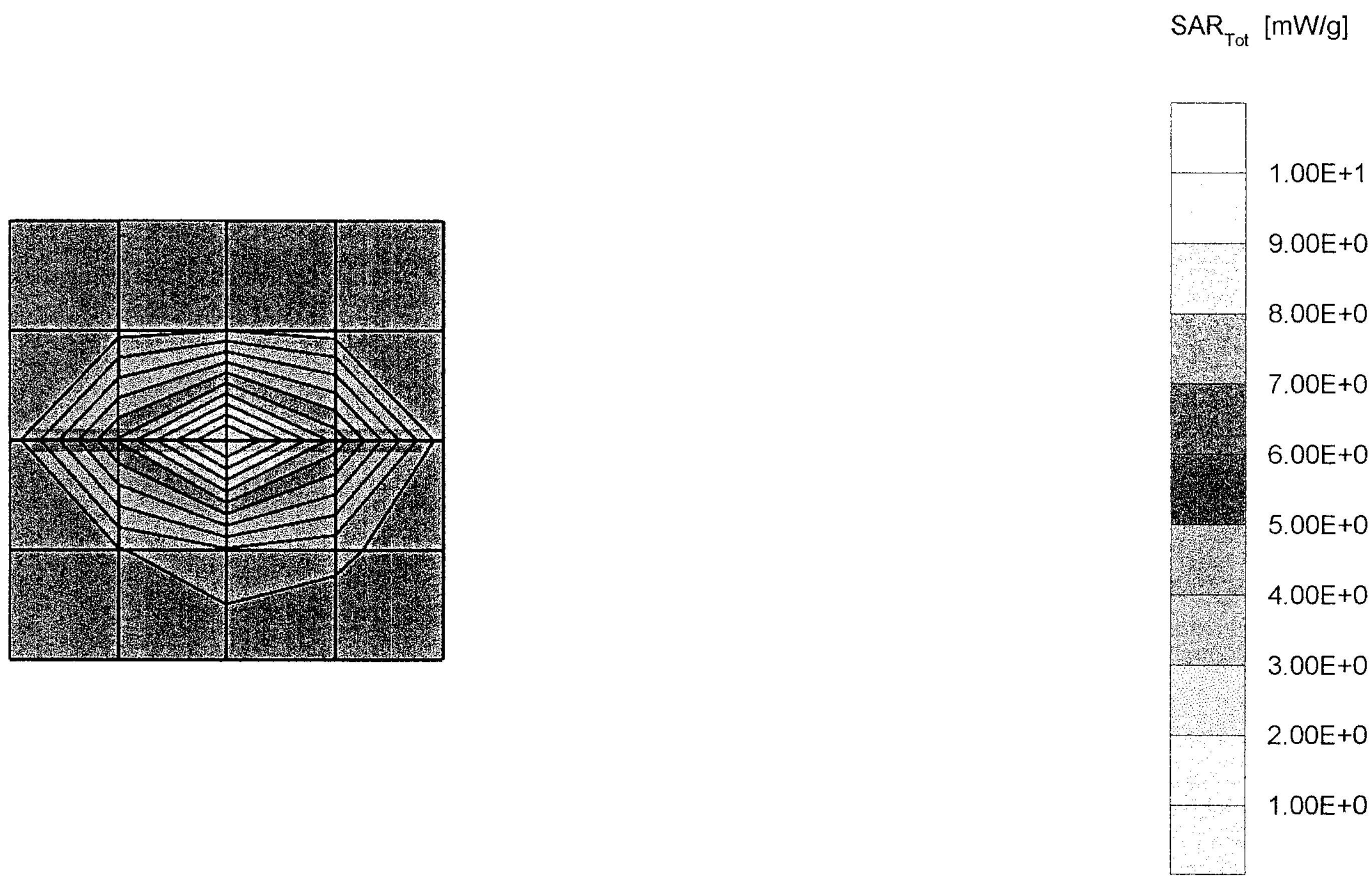


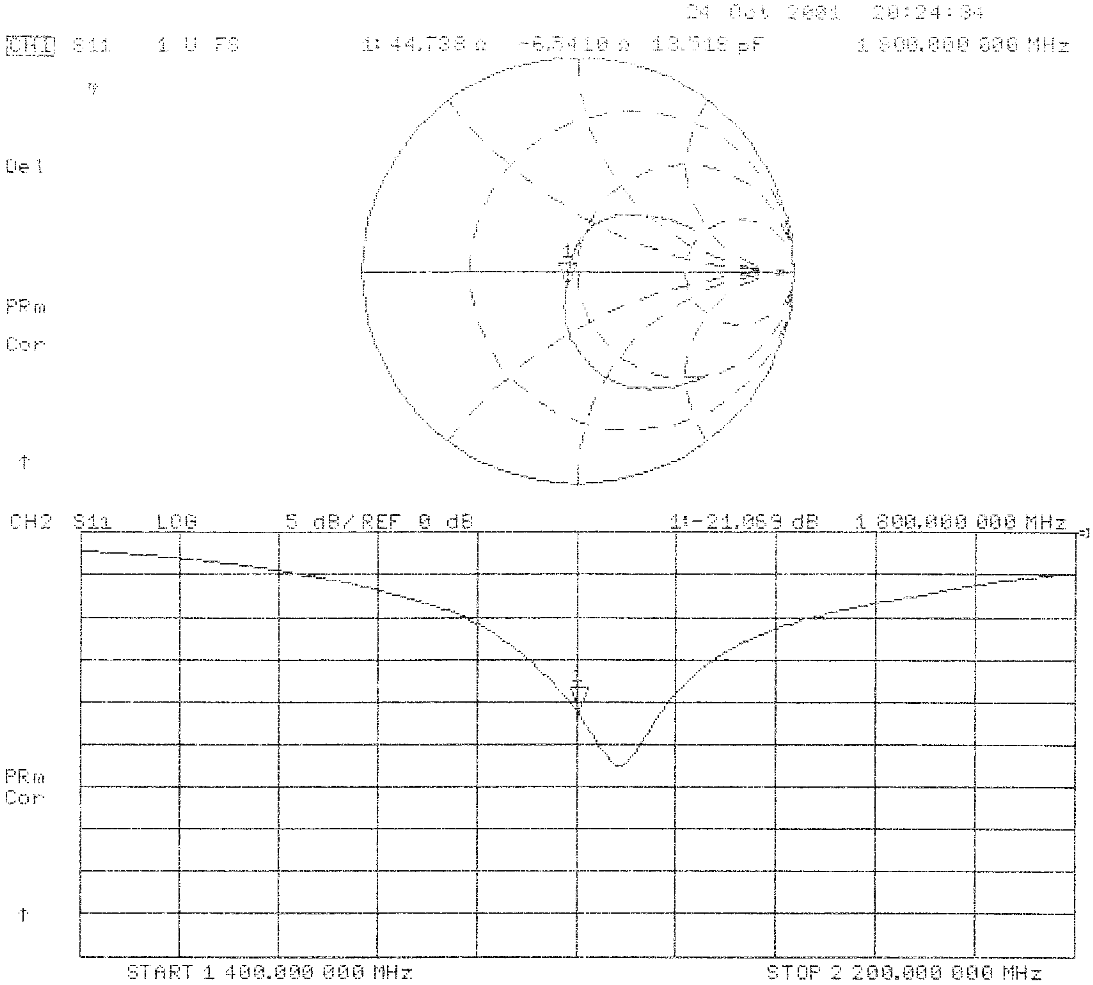
24 Oct 2001 20:24:30
CH1 S11 1 U FS
1: 44.738 Ω -6.5410 Ω 13.518 pF 1 800.000 000 MHz
Del
PRm
Cor
CH2 S11 LOG 5 dB/ REF 0 dB 1:-21.069 dB 1 800.000 000 MHz
PRm
Cor
START 1 400.000 000 MHz
STOP 2 200.000 000 MHz

10/24/01

Validation Dipole D1800V2 SN:230, d = 10 mm

Frequency: 1800 MHz; Antenna Input Power: 250 [mW]
SAM Phantom; Flat Section; Grid Spacing: Dx = 20.0, Dy = 20.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(4.85,4.85,4.85) at 1800 MHz; Muscle 1800 MHz; σ = 1.45 mho/m ε_r = 53.5 ρ = 1.00 g/cm³
Cubes (2): Peak: 19.2 mW/g ± 0.01 dB, SAR (1g): 10.2 mW/g ± 0.02 dB, SAR (10g): 5.34 mW/g ± 0.02 dB, (Worst-case extrapolation)
Penetration depth: 8.8 (7.9, 10.3) [mm]
Powerdrift: -0.03 dB





24 Oct 2001 20:24:34
CH1 S11 1 U FS
1: 44.738 Ω -6.5410 Ω 13.518 pF 1 800.000 000 MHz
Del
PRm
Cor
CH2 S11 LOG 5 dB/ REF 0 dB
1:-21.069 dB 1 800.000 000 MHz
PRm
Cor
START 1 400.000 000 MHz
STOP 2 200.000 000 MHz

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Phone +41 1 245 97 00, Fax +41 1 245 97 79

Calibration Certificate

Dosimetric E-Field Probe

Type:	**ET3DV6R**
Serial Number:	**1431**
Place of Calibration:	**Zurich**
Date of Calibration:	**December 19, 2001**
Calibration Interval:	**12 months**

17752

Schmid & Partner Engineering AG hereby certifies, that this device has been calibrated on the date indicated above. The calibration was performed in accordance with specifications and procedures of Schmid & Partner Engineering AG.

Wherever applicable, the standards used in the calibration process are traceable to international standards. In all other cases the standards of the Laboratory for EMF and Microwave Electronics at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland have been applied.

Calibrated by: Nikolai Nouara [signature]

Approved by: [signature]

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland, Telephone +41 1 245 97 00, Fax +41 1 245 97 79

Probe ET3DV6R

SN:1431

Manufactured: May 18, 2001
Calibrated: December 19, 2001

Calibrated for System DASY3

DASY3 - Parameters of Probe: ET3DV6R SN:1431

Sensitivity in Free Space

NormX	**2.33**	$\mu V/(V/m)^2$
NormY	**2.23**	$\mu V/(V/m)^2$
NormZ	**2.02**	$\mu V/(V/m)^2$

Diode Compression

DCP X	**99**	mV
DCP Y	**99**	mV
DCP Z	**99**	mV

Sensitivity in Tissue Simulating Liquid

Head **450 MHz** **ε_r = 43.5 ± 5%** **σ = 0.87 ± 10% mho/m**

ConvF X	**6.65**	extrapolated	Boundary effect:	
ConvF Y	**6.65**	extrapolated	Alpha	**0.57**
ConvF Z	**6.65**	extrapolated	Depth	**1.84**

Head **800 - 1000 MHz** **ε_r = 39.0 - 43.5** **σ = 0.80 - 1.10 mho/m**

ConvF X	**6.09**	± 9.5% (k=2)	Boundary effect:	
ConvF Y	**6.09**	± 9.5% (k=2)	Alpha	**0.57**
ConvF Z	**6.09**	± 9.5% (k=2)	Depth	**1.95**

Head **1500 MHz** **ε_r = 40.4 ± 5%** **σ = 1.23 ± 10% mho/m**

ConvF X	**5.33**	interpolated	Boundary effect:	
ConvF Y	**5.33**	interpolated	Alpha	**0.57**
ConvF Z	**5.33**	interpolated	Depth	**2.10**

Head **1700 - 1910 MHz** **ε_r = 39.5 - 41.0** **σ = 1.20 - 1.55 mho/m**

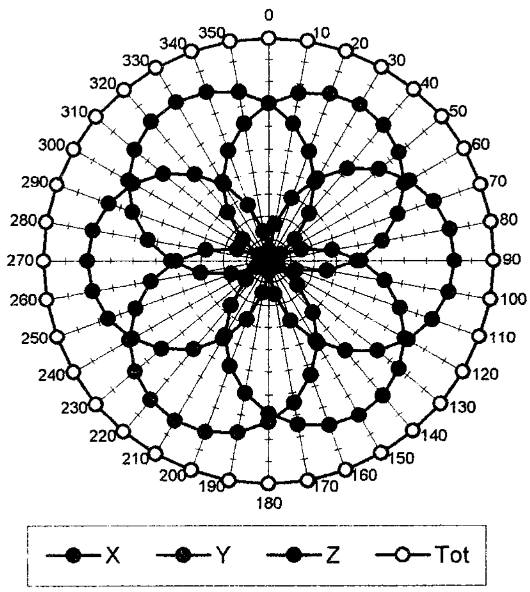
ConvF X	**4.95**	± 9.5% (k=2)	Boundary effect:	
ConvF Y	**4.95**	± 9.5% (k=2)	Alpha	**0.57**
ConvF Z	**4.95**	± 9.5% (k=2)	Depth	**2.17**

Sensor Offset

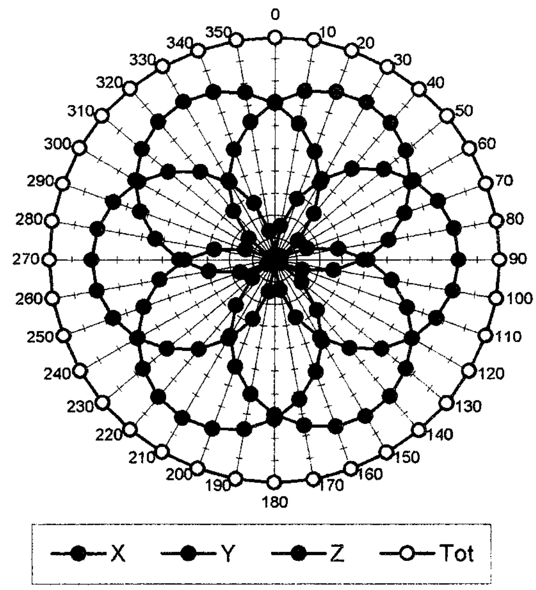
Probe Tip to Sensor Center	**2.7**	mm

Receiving Pattern (ϕ), $\theta = 0°$

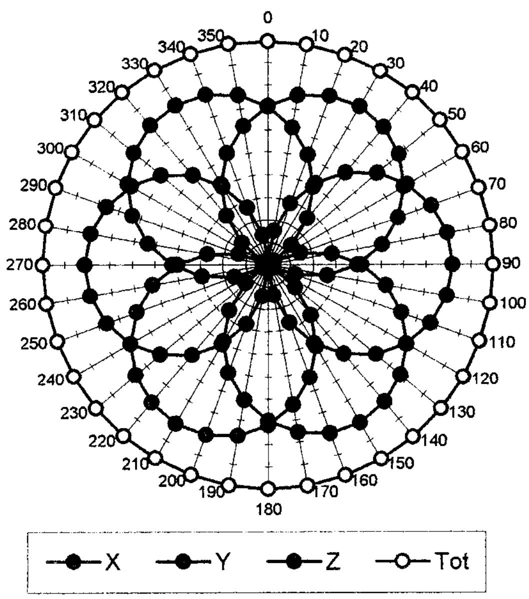
f = 30 MHz, TEM cell ifi110



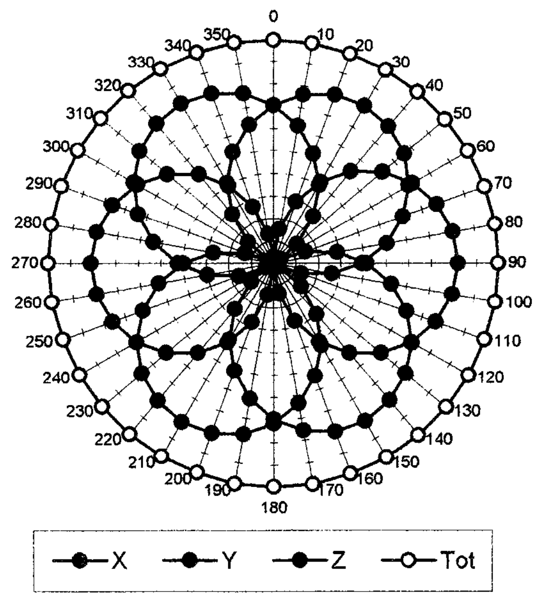
f = 100 MHz, TEM cell ifi110

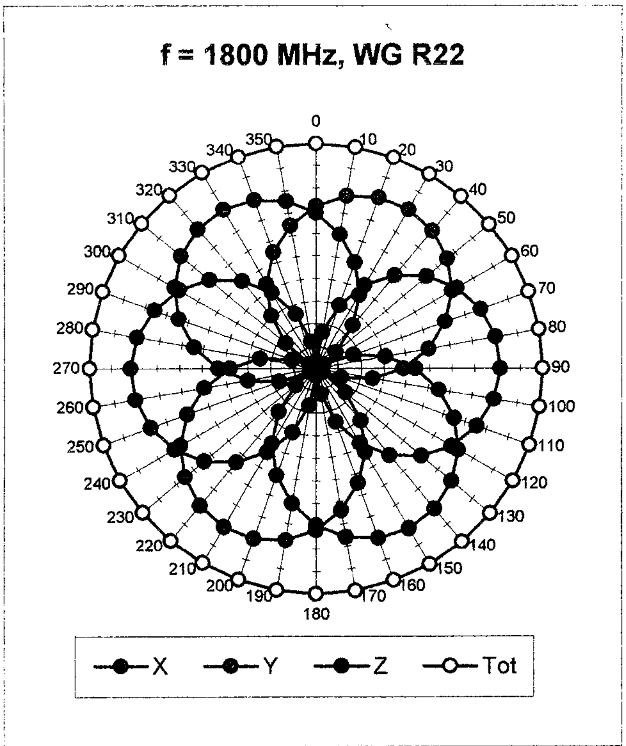


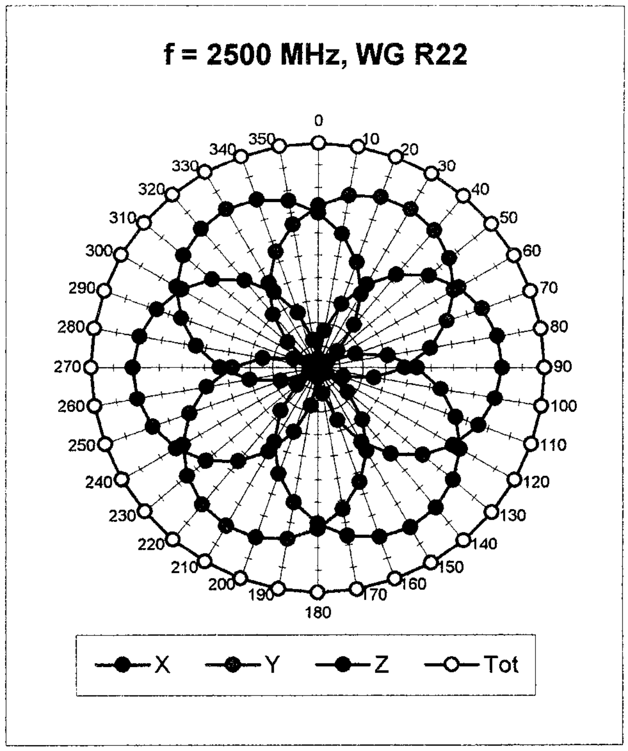
f = 300 MHz, TEM cell ifi110



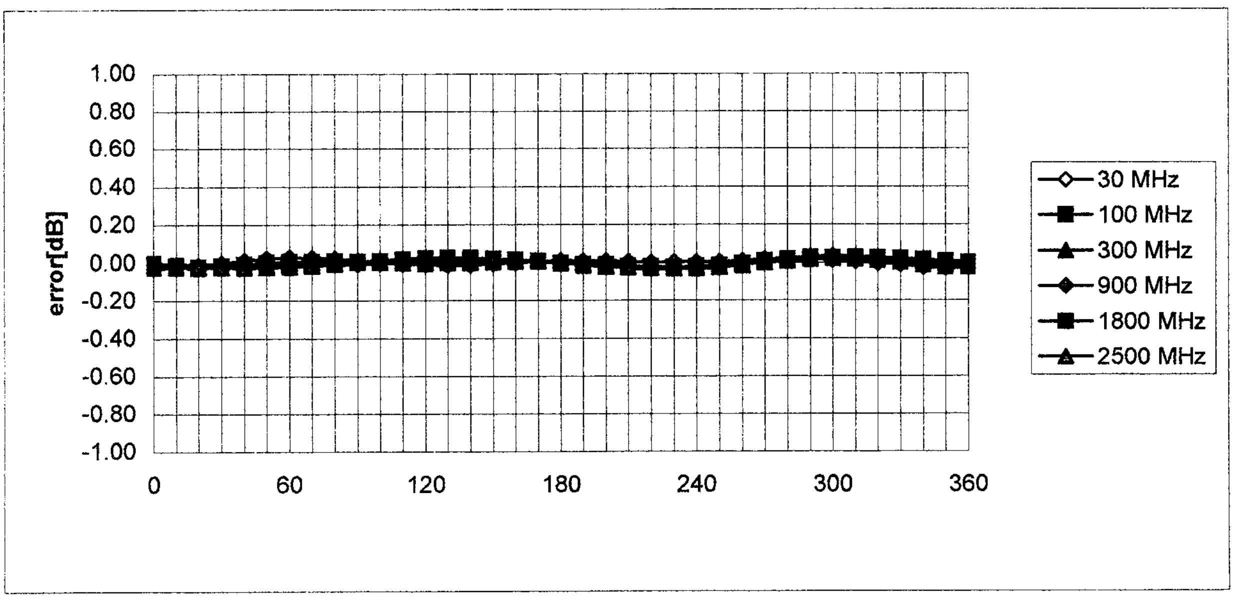
f = 900 MHz, TEM cell ifi110





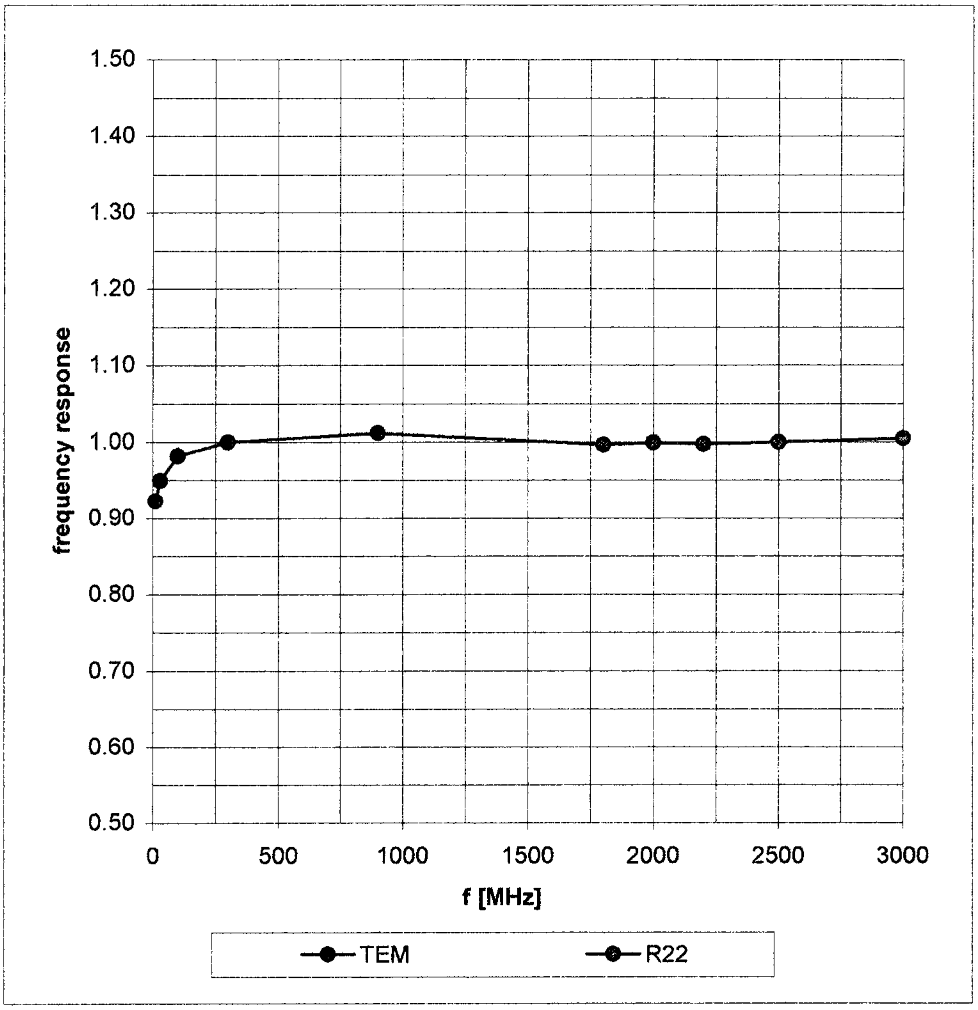


Isotropy Error (ϕ), θ = 0°



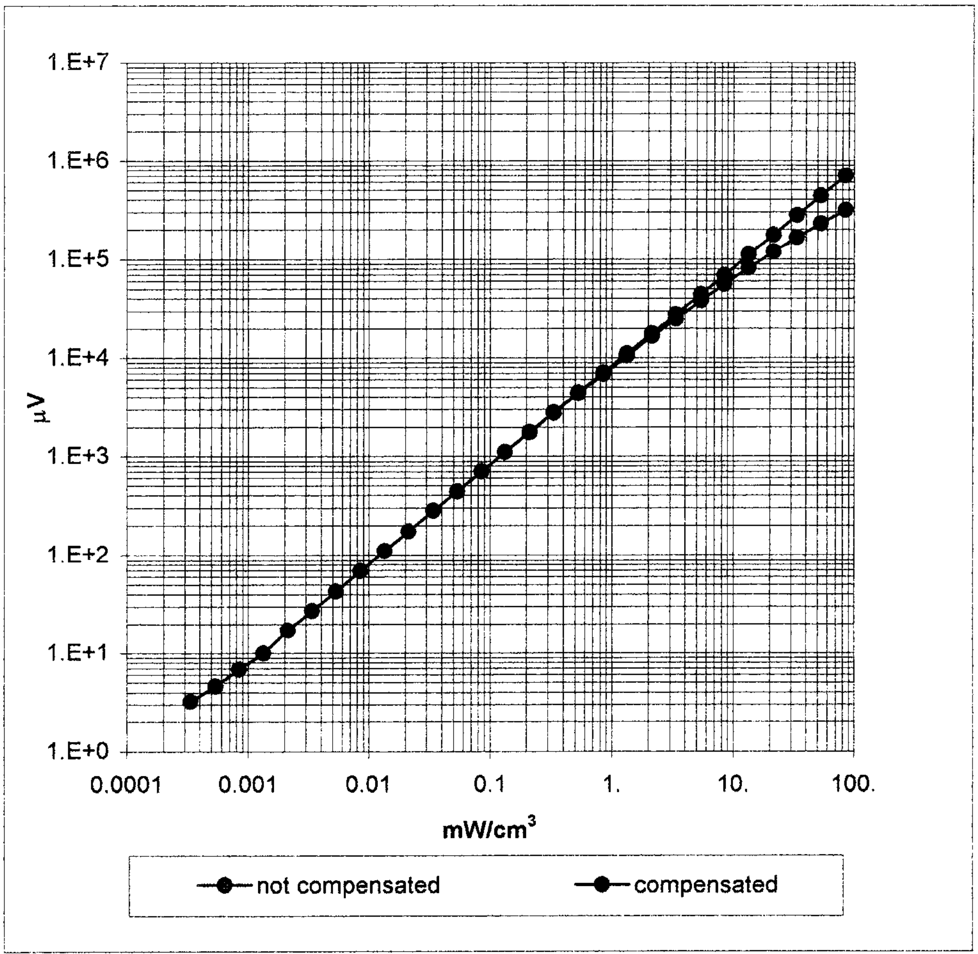
Frequency Response of E-Field

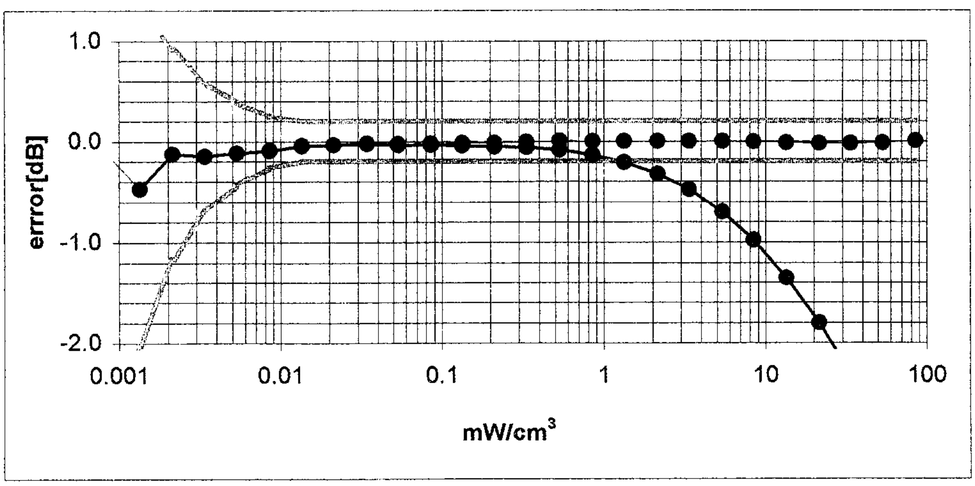
(TEM-Cell:ifi110, Waveguide R22)



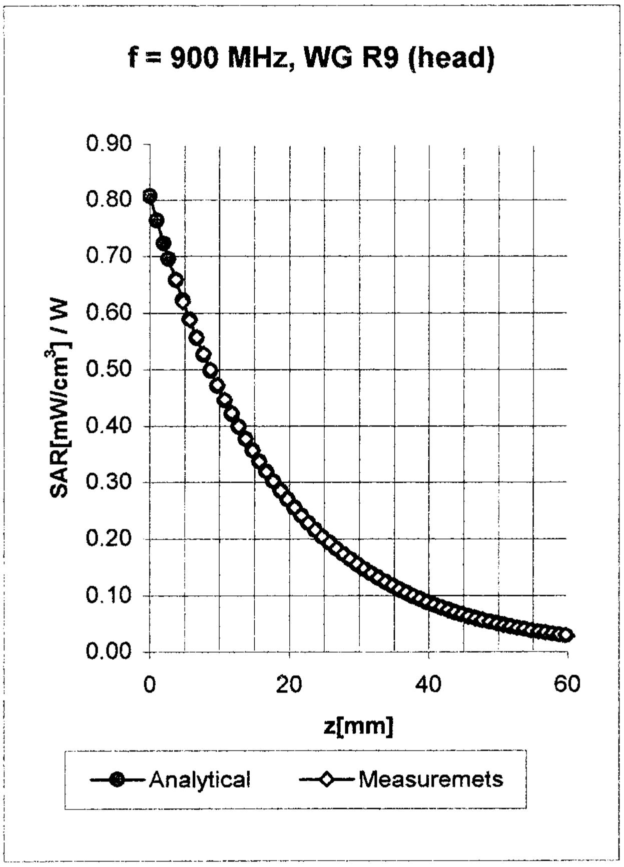
Dynamic Range f(SAR$_{brain}$)

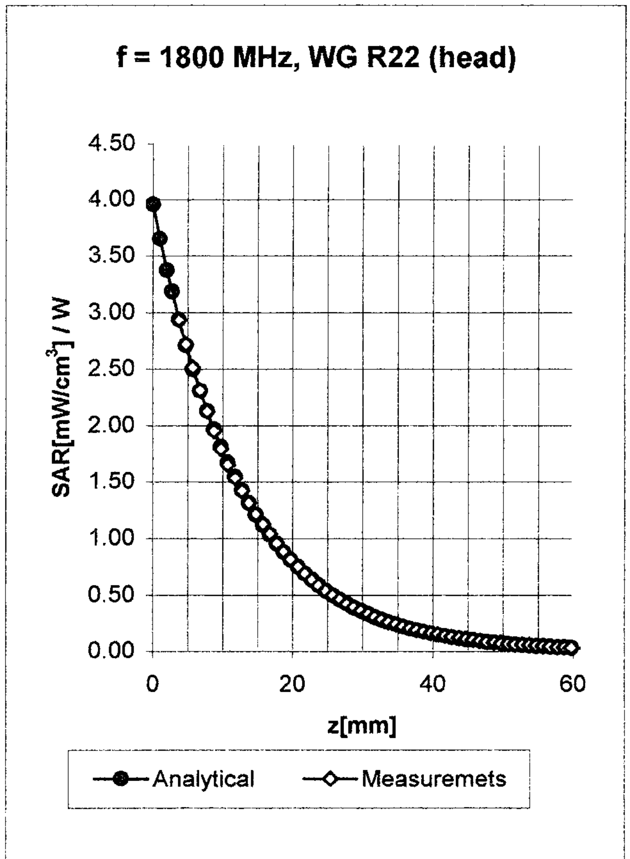
(Waveguide R22)





Conversion Factor Assessment





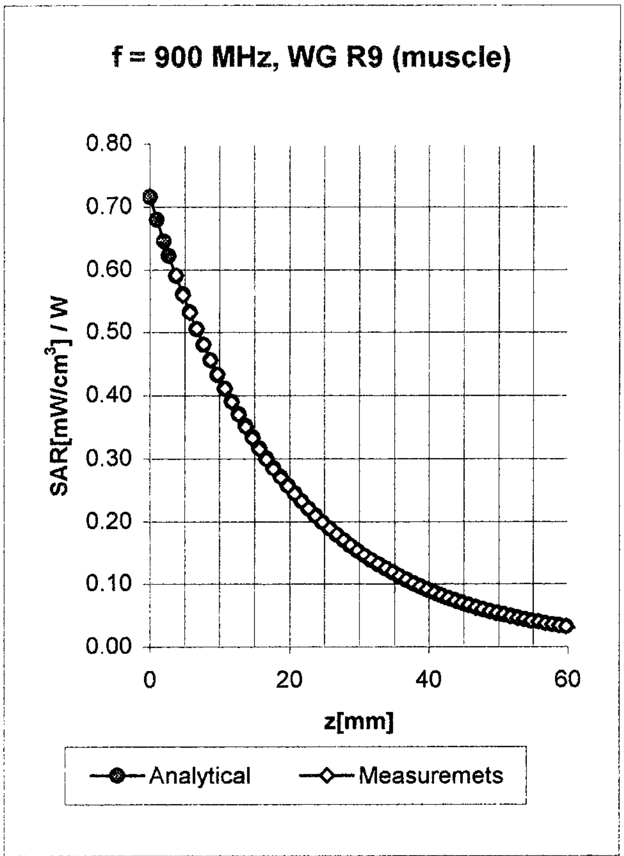
Head **800 - 1000 MHz** **ε_r = 39.0 - 43.5** **σ = 0.80 - 1.10 mho/m**

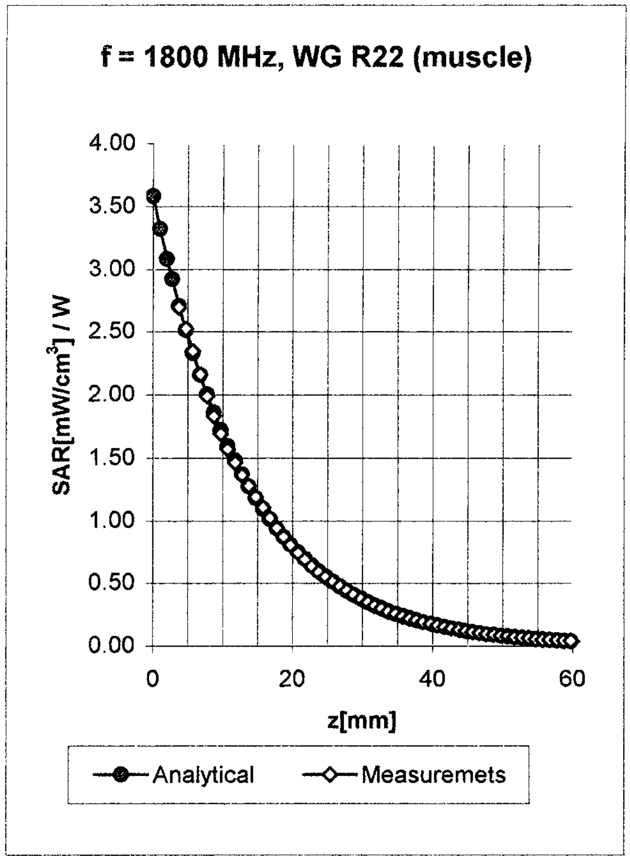
ConvF X	**6.09**	± 9.5% (k=2)	Boundary effect:	
ConvF Y	**6.09**	± 9.5% (k=2)	Alpha	**0.57**
ConvF Z	**6.09**	± 9.5% (k=2)	Depth	**1.95**

Head **1700 - 1910 MHz** **ε_r = 39.5 - 41.0** **σ = 1.20 - 1.55 mho/m**

ConvF X	**4.95**	± 9.5% (k=2)	Boundary effect:	
ConvF Y	**4.95**	± 9.5% (k=2)	Alpha	**0.57**
ConvF Z	**4.95**	± 9.5% (k=2)	Depth	**2.17**

Conversion Factor Assessment





Muscle **900 MHz** ε_r **= 52.3 - 57.8** σ **= 0.96 - 1.15 mho/m**

ConvF X	**5.85**	± 9.5% (k=2)	Boundary effect:	
ConvF Y	**5.85**	± 9.5% (k=2)	Alpha	**0.58**
ConvF Z	**5.85**	± 9.5% (k=2)	Depth	**2.01**

Muscle **1800 MHz** ε_r **= 50.6 - 56.0** σ **= 1.35 - 1.65 mho/m**

ConvF X	**4.52**	± 9.5% (k=2)	Boundary effect:	
ConvF Y	**4.52**	± 9.5% (k=2)	Alpha	**0.70**
ConvF Z	**4.52**	± 9.5% (k=2)	Depth	**2.17**

Deviation from Isotropy in HSL

Error (θ,ϕ), f = 900 MHz