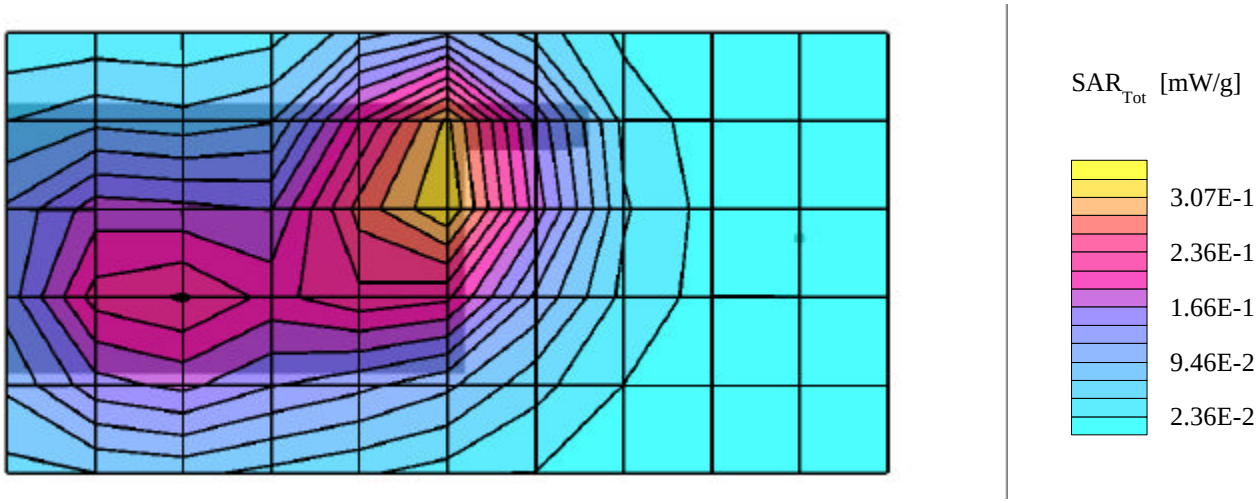
1900MHz PCS CDMA SAR TEST PLOTS – BODY

Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(5.36,5.36,5.36); Crest factor: 1.0
1800 MHz Muscle: σ = 1.52 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.05 dB
SAR (1g): 0.326 mW/g, SAR (10g): 0.193 mW/g

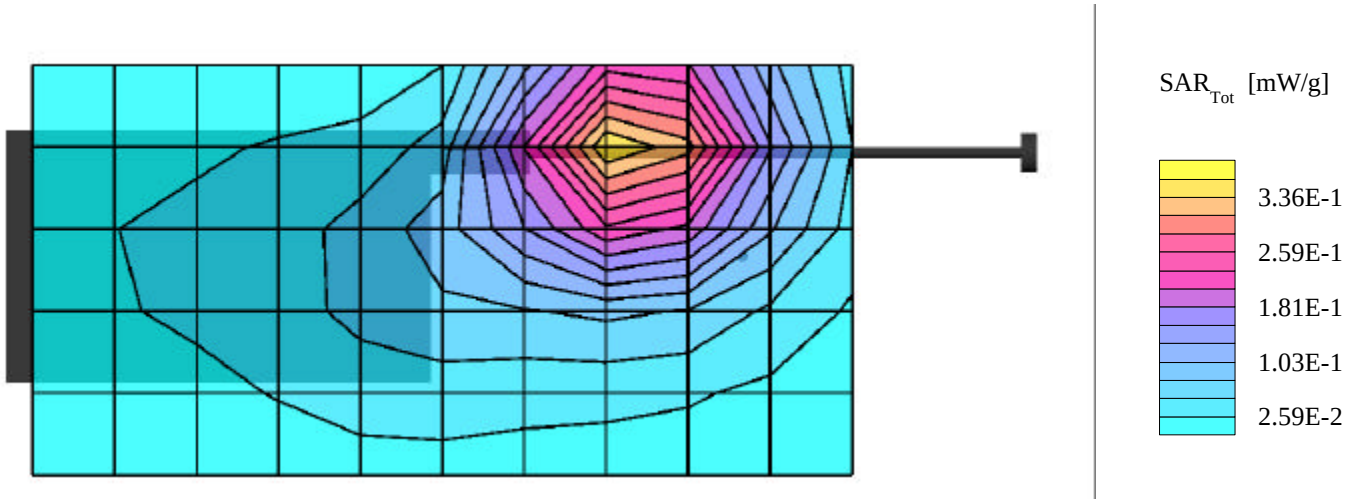
Body-Worn SAR at 1.5 cm Separation Distance
Antenna In
Withus Model: WPE-2000
PCS CDMA Mode
Channel 25 [1851.25 MHz]
Conducted Power: 24.53 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(5.36,5.36,5.36); Crest factor: 1.0
1800 MHz Muscle: σ = 1.52 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.20 dB
SAR (1g): 0.331 mW/g, SAR (10g): 0.197 mW/g

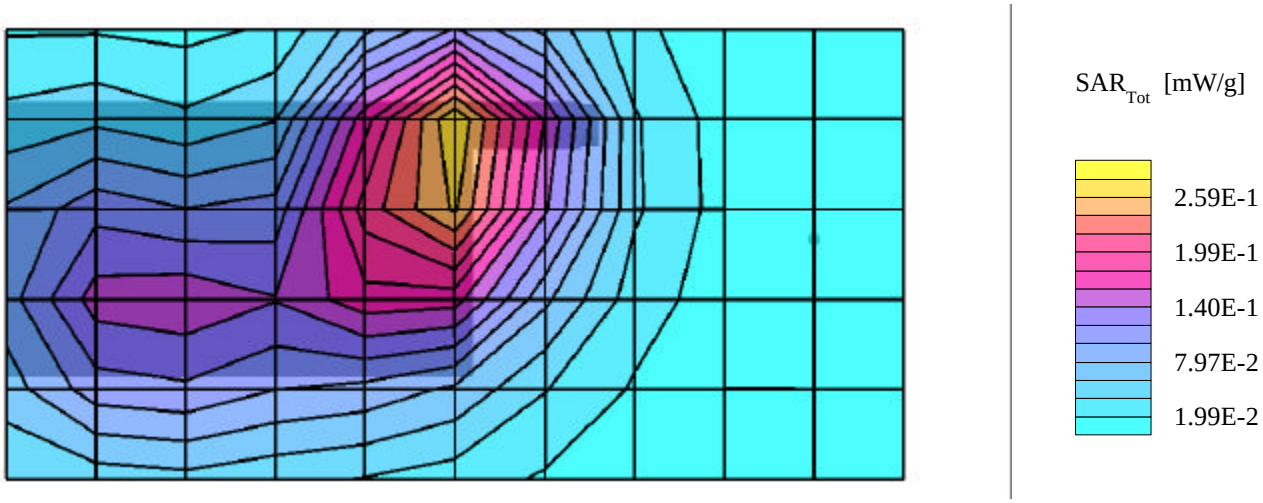
Body SAR at 1.5 cm Separation Distance
Antenna Out
Withus Model: WPE-2000
PCS CDMA Mode
Channel 25 [1851.25 MHz]
Conducted Power: 24.50 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(5.36,5.36,5.36); Crest factor: 1.0
1800 MHz Muscle: σ = 1.52 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.17 dB
SAR (1g): 0.252 mW/g, SAR (10g): 0.149 mW/g

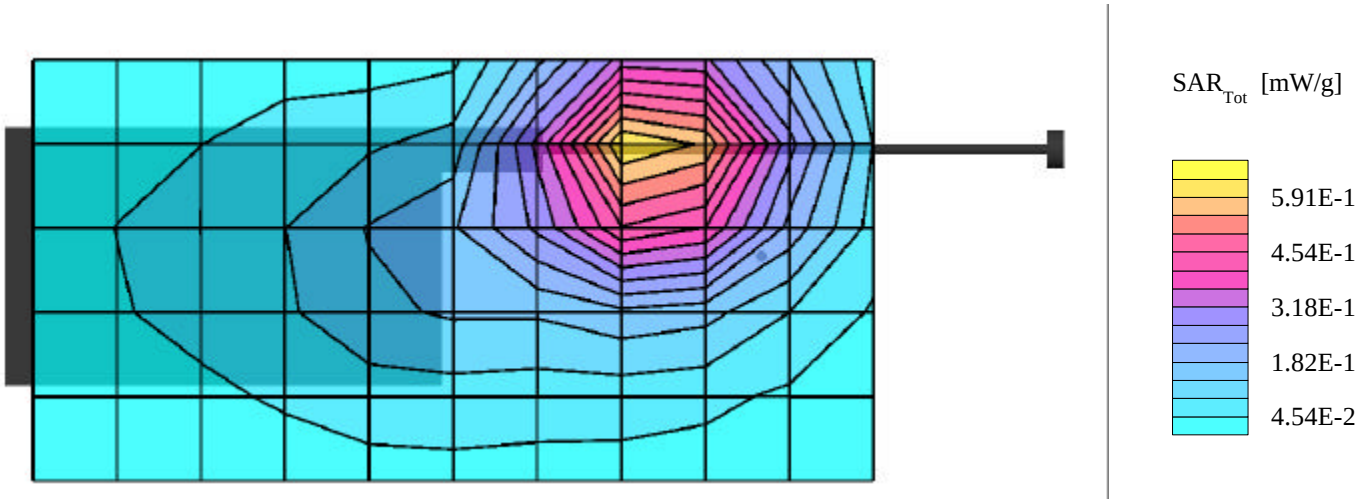
Body-Worn SAR at 1.5 cm Separation Distance
Antenna In
Withus Model: WPE-2000
PCS CDMA Mode
Channel 600 [1880.00 MHz]
Conducted Power: 24.53 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(5.36,5.36,5.36); Crest factor: 1.0
1800 MHz Muscle: σ = 1.52 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.18 dB
SAR (1g): 0.586 mW/g, SAR (10g): 0.345 mW/g

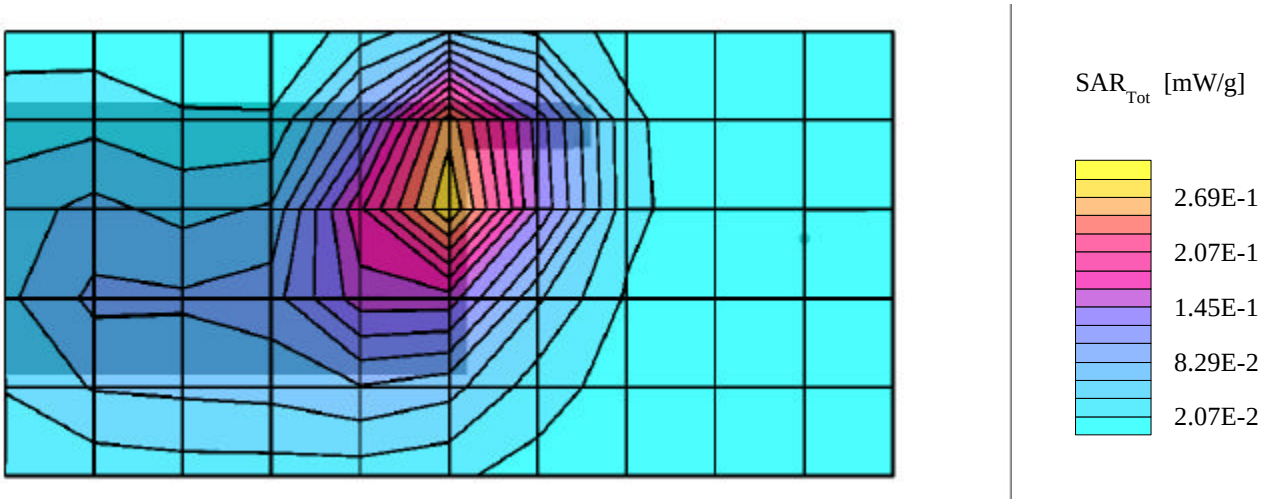
Body SAR at 1.5 cm Separation Distance
Antenna Out
Withus Model: WPE-2000
PCS CDMA Mode
Channel 600 [1880.00 MHz]
Conducted Power: 24.50 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(5.36,5.36,5.36); Crest factor: 1.0
1800 MHz Muscle: σ = 1.52 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.15 dB
SAR (1g): 0.273 mW/g, SAR (10g): 0.149 mW/g

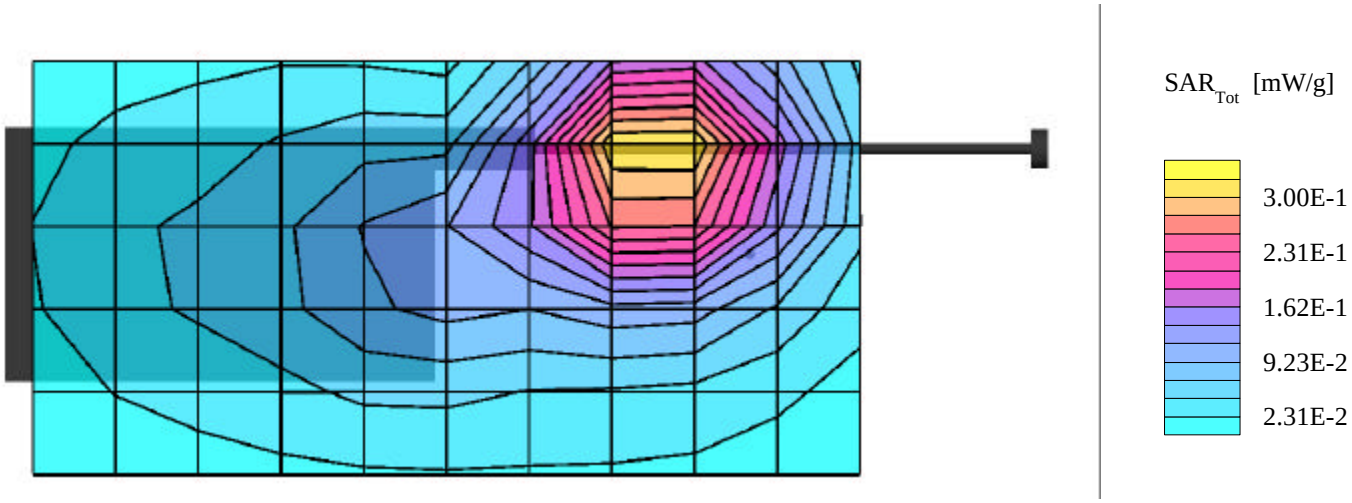
Body-Worn SAR at 1.5 cm Separation Distance
Antenna In
Withus Model: WPE-2000
PCS CDMA Mode
Channel 1175 [1908.75 MHz]
Conducted Power: 24.50 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(5.36,5.36,5.36); Crest factor: 1.0
1800 MHz Muscle: σ = 1.52 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.11 dB
SAR (1g): 0.318 mW/g, SAR (10g): 0.188 mW/g

Body SAR at 1.5 cm Separation Distance
Antenna Out
Withus Model: WPE-2000
PCS CDMA Mode
Channel 1175 [1908.75 MHz]
Conducted Power: 24.50 dBm
Date Tested: Nov. 23, 2001

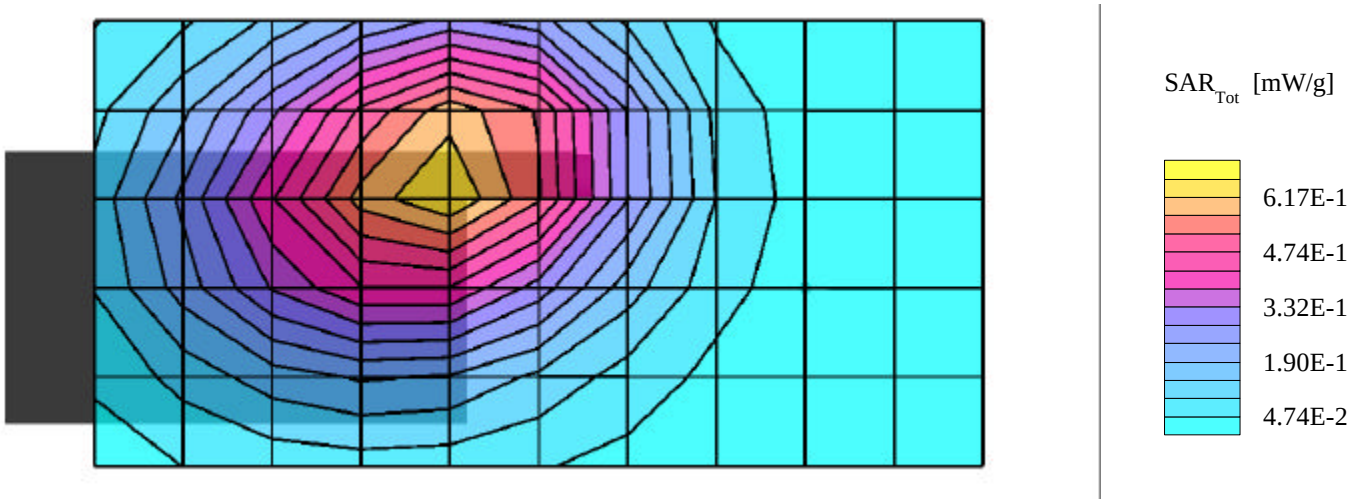


800MHz CELLULAR CDMA SAR TEST PLOTS – BODY

Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(6.70,6.70,6.70); Crest factor: 1.0
835 MHz Muscle: σ = 0.97 mho/m ε_r = 55.1 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: 0.13 dB
SAR (1g): 0.617 mW/g, SAR (10g): 0.421 mW/g

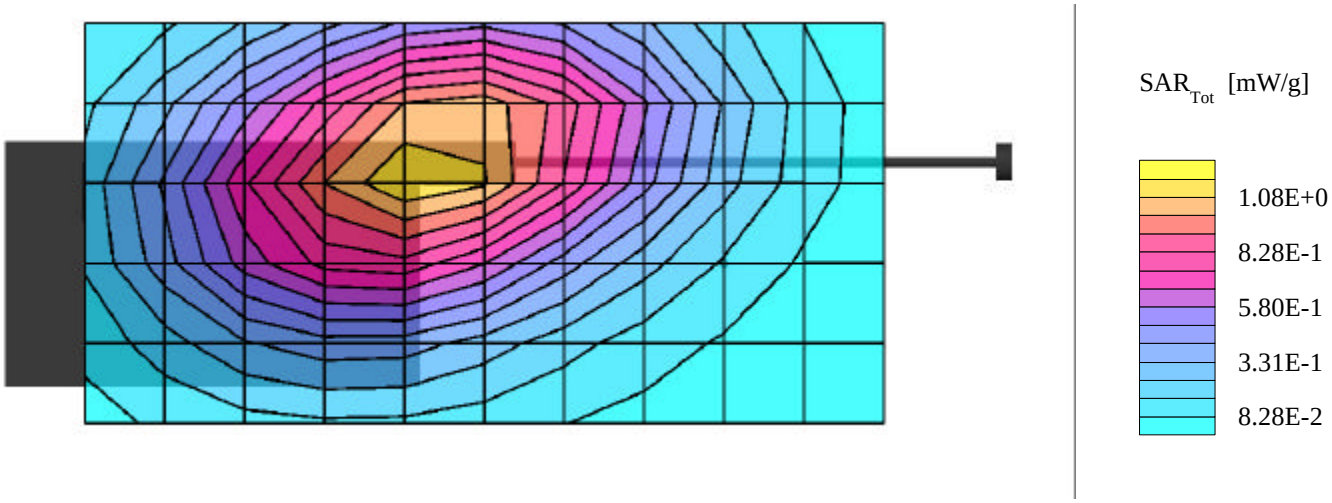
Body-Worn SAR at 1.5 cm Separation Distance
Antenna In
Withus Model: WPE-2000
CDMA Mode
Channel 1013 [824.70 MHz]
Conducted Power: 24.05 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(6.70,6.70,6.70); Crest factor: 1.0
835 MHz Muscle: σ = 0.97 mho/m ε_r = 55.1 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: 0.11 dB
SAR (1g): 1.10 mW/g, SAR (10g): 0.759 mW/g

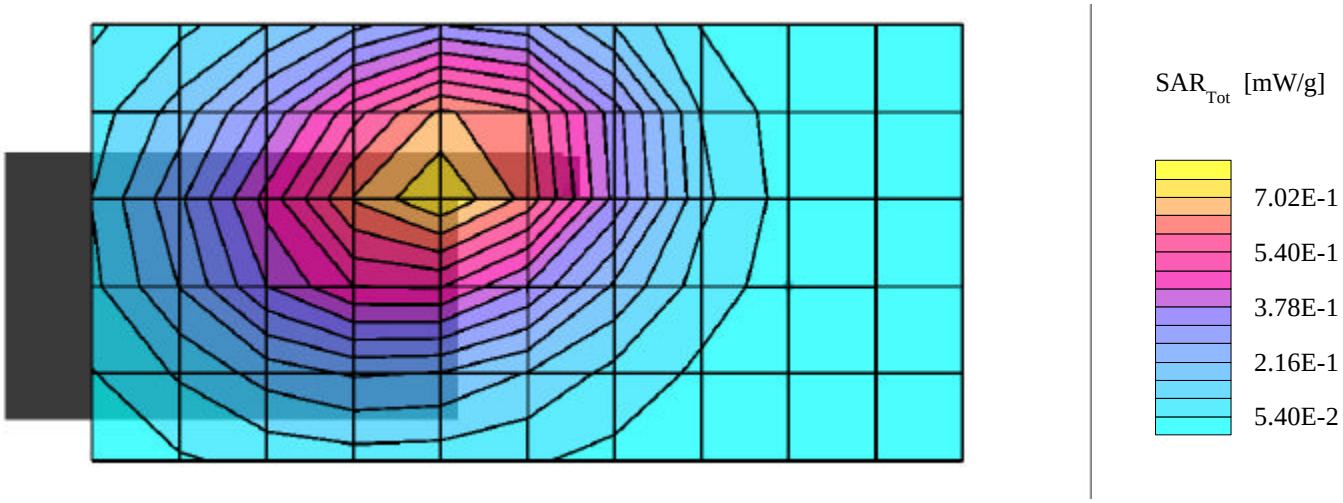
Body-Worn SAR at 1.5 cm Separation Distance
Antenna Out
Withus Model: WPE-2000
CDMA Mode
Channel 1013 [824.70 MHz]
Conducted Power: 24.05 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(6.70,6.70,6.70); Crest factor: 1.0
835 MHz Muscle: σ = 0.97 mho/m ε_r = 55.1 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.05 dB
SAR (1g): 0.706 mW/g, SAR (10g): 0.479 mW/g

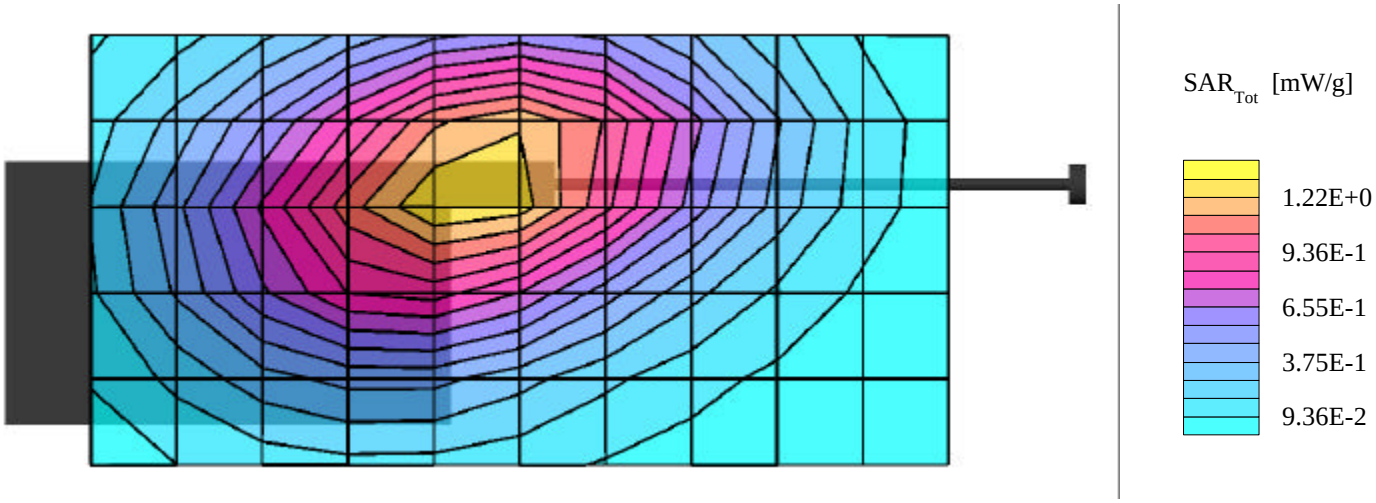
Body-Worn SAR at 1.5 cm Separation Distance
Antenna In
Withus Model: WPE-2000
CDMA Mode
Channel 363 [835.89 MHz]
Conducted Power: 24.05 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(6.70,6.70,6.70); Crest factor: 1.0
835 MHz Muscle: σ = 0.97 mho/m ε_r = 55.1 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.07 dB
SAR (1g): 1.26 mW/g, SAR (10g): 0.856 mW/g

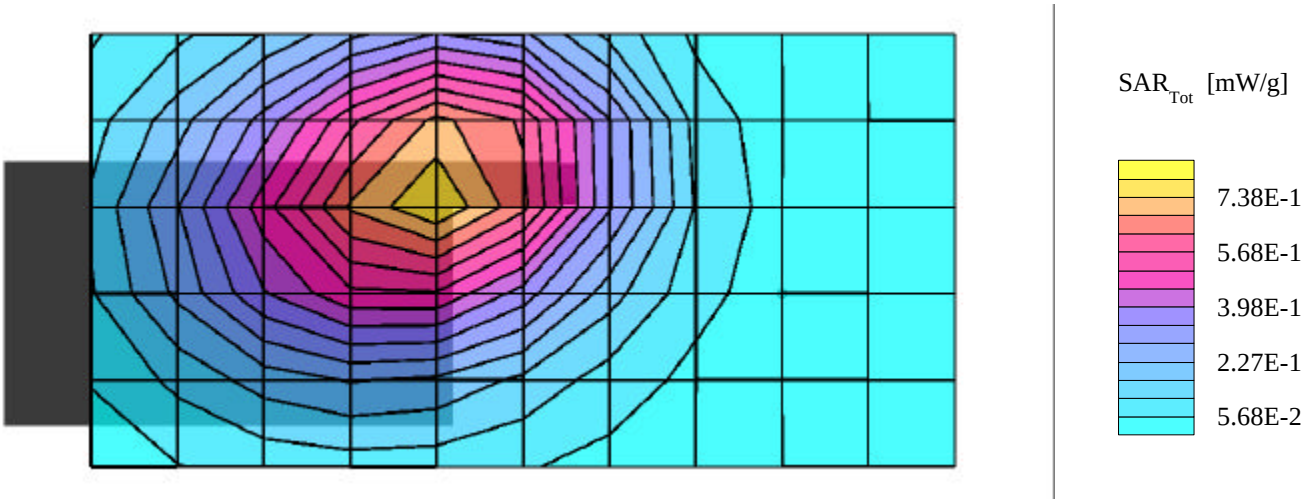
Body-Worn SAR at 1.5 cm Separation Distance
Antenna Out
Withus Model: WPE-2000
CDMA Mode
Channel 363 [835.89 MHz]
Conducted Power: 24.07 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(6.70,6.70,6.70); Crest factor: 1.0
835 MHz Muscle: σ = 0.97 mho/m ε_r = 55.1 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.20 dB
SAR (1g): 0.752 mW/g, SAR (10g): 0.507 mW/g

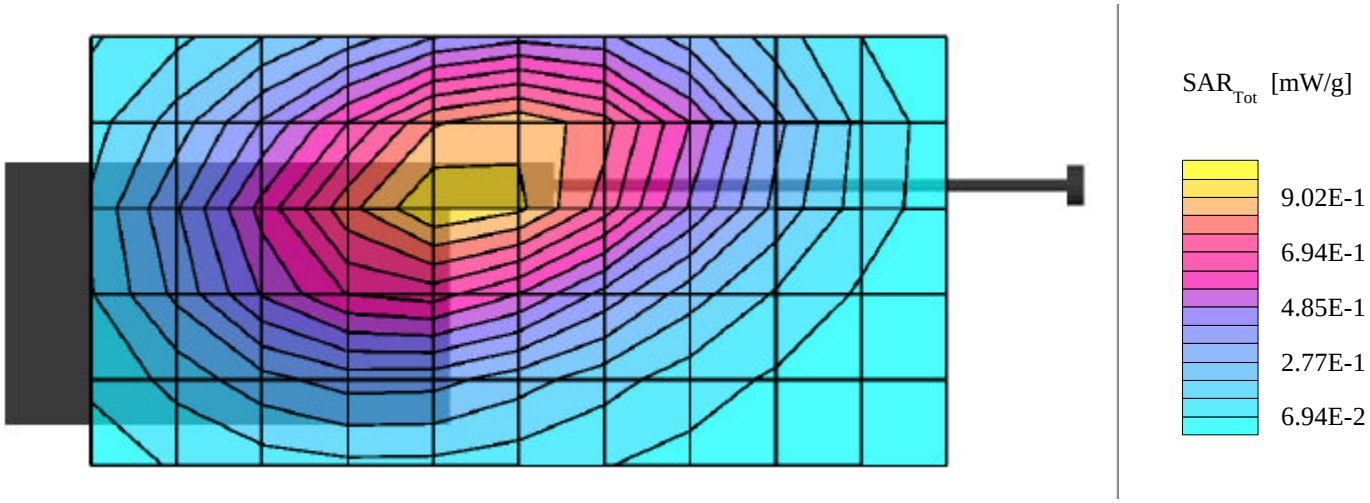
Body-Worn SAR at 1.5 cm Separation Distance
Antenna In
Withus Model: WPE-2000
CDMA Mode
Channel 777 (848.31 MHz]
Conducted Power: 24.06 dBm
Date Tested: Nov. 23, 2001



Withus IT Co., Ltd. FCC ID: POQWPE-2000

SAM Phantom; Flat Section; Position: (270°,270°)
Probe: ET3DV6 - SN1590; ConvF(6.70,6.70,6.70); Crest factor: 1.0
835 MHz Muscle: σ = 0.97 mho/m ε_r = 55.1 ρ = 1.00 g/cm^3
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Cube 5x5x7 Powerdrift: -0.18 dB
SAR (1g): 0.942 mW/g, SAR (10g): 0.641 mW/g

Body-Worn SAR at 1.5 cm Separation Distance
Antenna Out
Withus Model: WPE-2000
CDMA Mode
Channel 777 [848.31 MHz]
Conducted Power: 24.02 dBm
Date Tested: Nov. 23, 2001

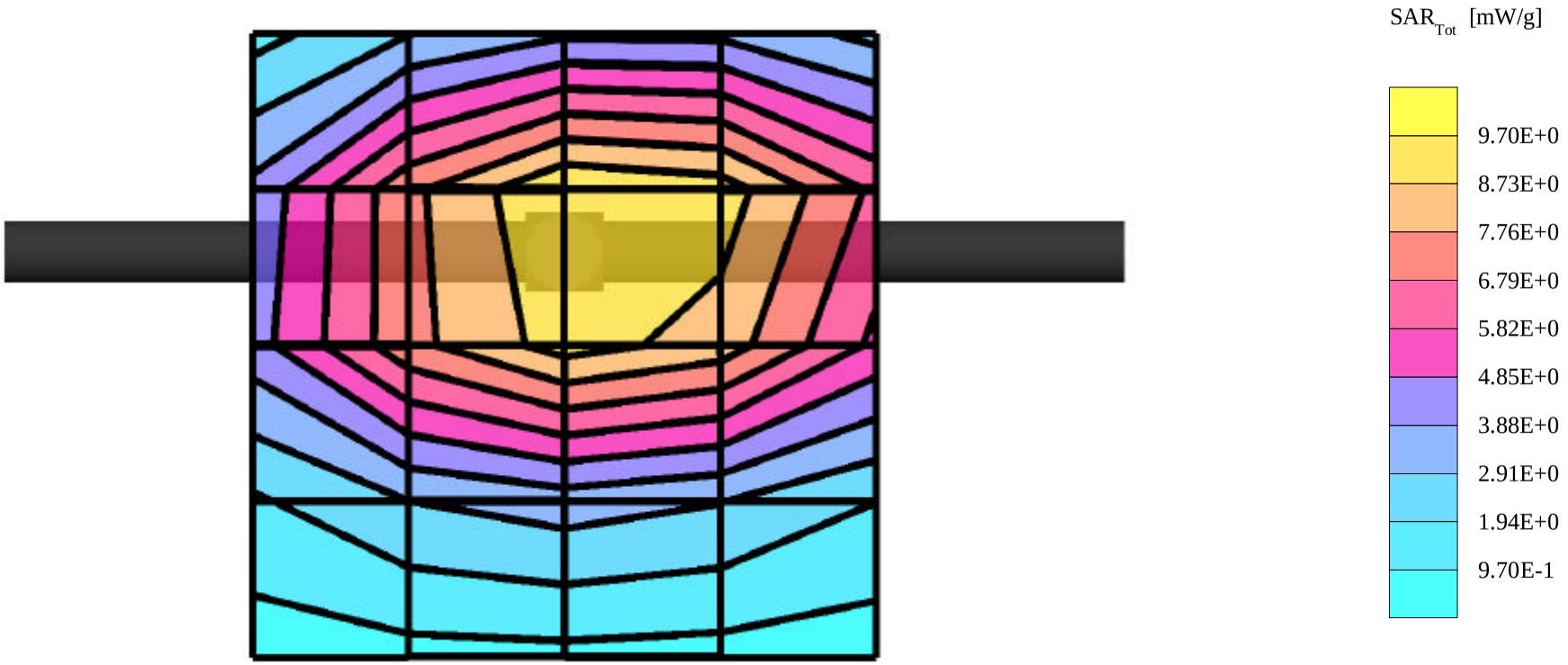


APPENDIX B - DIPOLE VALIDATION

Dipole 1800 MHz

SAM Phantom; Flat Section
Probe: ET3DV6 - SN1590; ConvF(5.78,5.78,5.78); Crest factor: 1.0; 1800 MHz Brain: σ = 1.40 mho/m ε_r = 40.4 ρ = 1.00 g/cm^3
Cube 5x5x7: Peak: 18.6 mW/g, SAR (1g): 9.65 mW/g, SAR (10g): 4.88 mW/g, (Worst-case extrapolation)
Penetration depth: 7.7 (7.3, 8.6) [mm]
Powerdrift: 0.02 dB

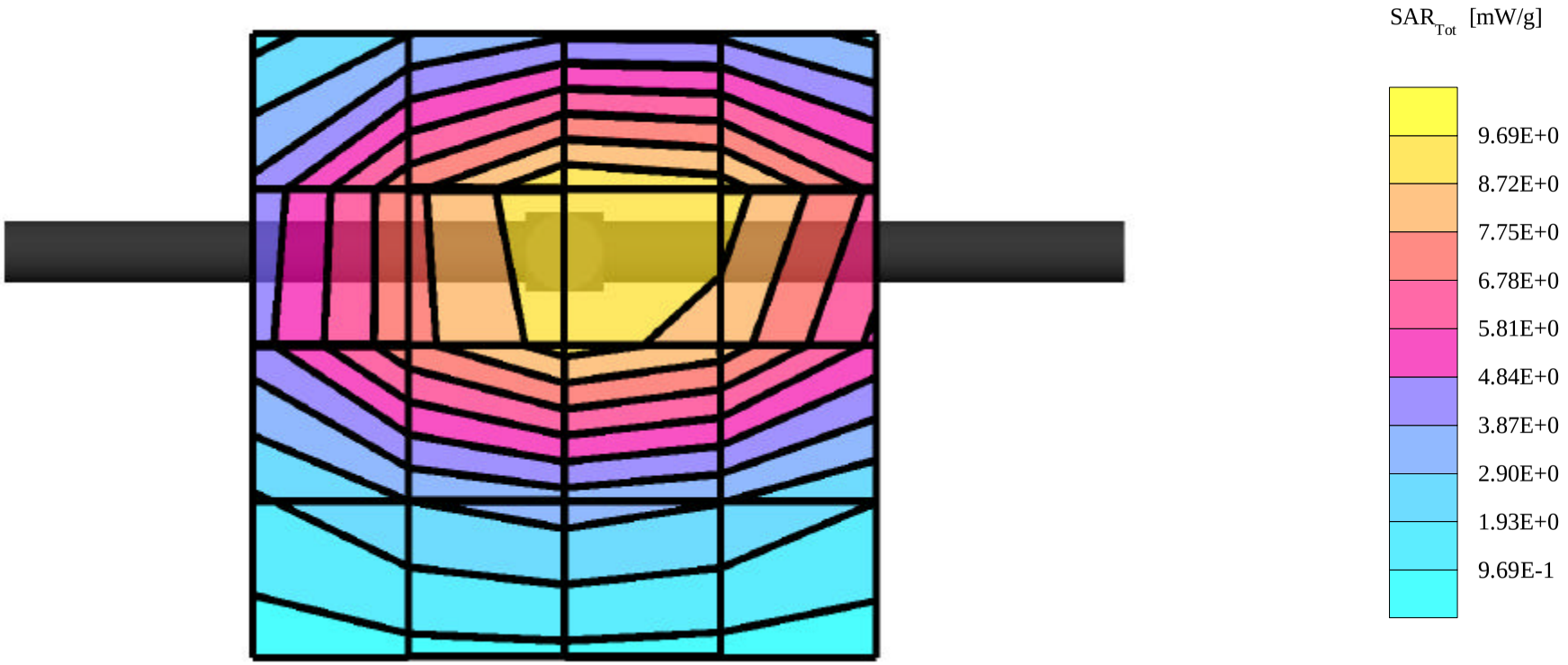
1800MHz Dipole Validation
Date: November 22, 2001
Conducted Power: 250 mW



Dipole 1800 MHz

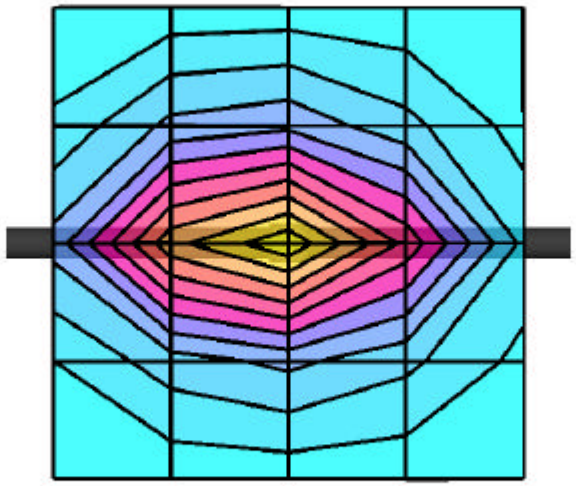
SAM Phantom; Flat Section
Probe: ET3DV6 - SN1590; ConvF(5.78,5.78,5.78); Crest factor: 1.0; 1800 MHz Brain: σ = 1.40 mho/m ε_r = 40.4 ρ = 1.00 g/cm^3
Cube 5x5x7: Peak: 18.6 mW/g, SAR (1g): 9.64 mW/g, SAR (10g): 4.87 mW/g, (Worst-case extrapolation)
Penetration depth: 7.7 (7.3, 8.6) [mm]
Powerdrift: 0.02 dB

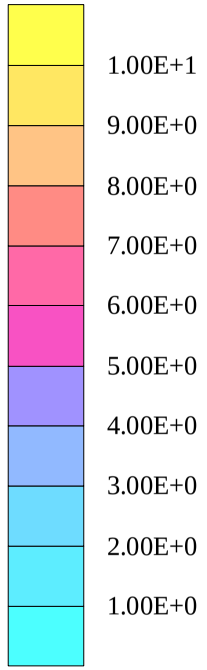
1800MHz Dipole Validation
Date: November 23, 2001
Conducted Power: 250 mW



Validation Dipole D1800V2 SN:247, d = 10 mm

Frequency: 1800 MHz; Antenna Input Power: 250 [mW]
Generic Twin Phantom; Flat Section; Grid Spacing:Dx = 15.0, Dy = 15.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(5.57,5.57,5.57); Crest factor: 1.0; IEEE1528 1800 MHz : σ = 1.36 mho/m ε_r = 40.0 ρ = 1.00 g/cm^3
Cubes (2): Peak: 18.2 mW/g ± 0.04 dB, SAR (1g): 9.66 mW/g ± 0.03 dB, SAR (10g): 5.02 mW/g ± 0.03 dB, (Worst-case extrapolation)
Penetration depth: 8.2 (7.6, 9.4) [mm]
Powerdrift: -0.01 dB

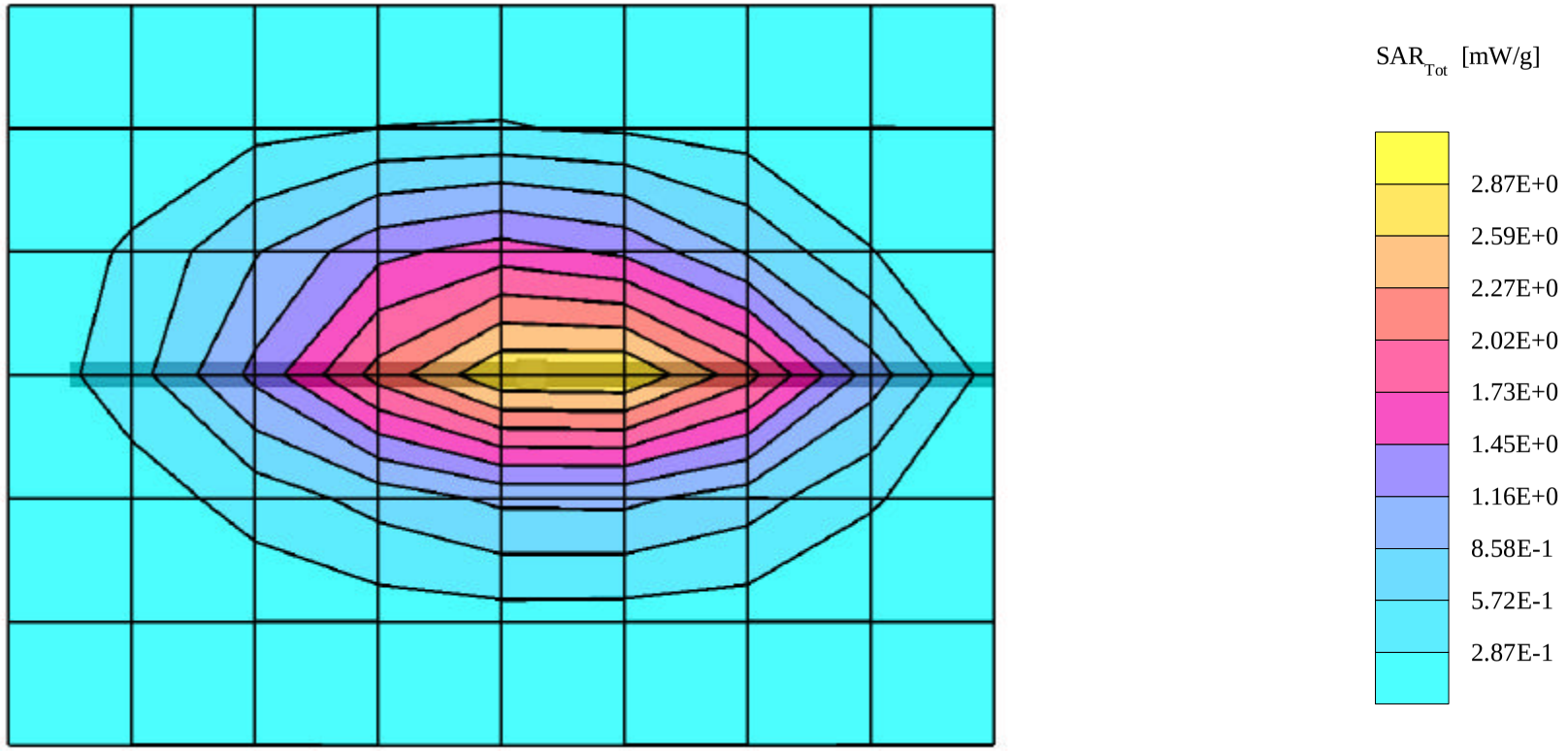




Dipole 900 MHz

SAM Phantom; Flat Section
Probe: ET3DV6 - SN1590; ConvF(6.83,6.83,6.83); Crest factor: 1.0; 900 MHz Brain: σ = 0.97 mho/m ε_r = 40.5 ρ = 1.00 g/cm^3
Cube 5x5x7: Peak: 4.43 mW/g, SAR (1g): 2.76 mW/g, SAR (10g): 1.74 mW/g, (Worst-case extrapolation)
Penetration depth: 11.3 (10.2, 12.7) [mm]
Powerdrift: 0.03 dB

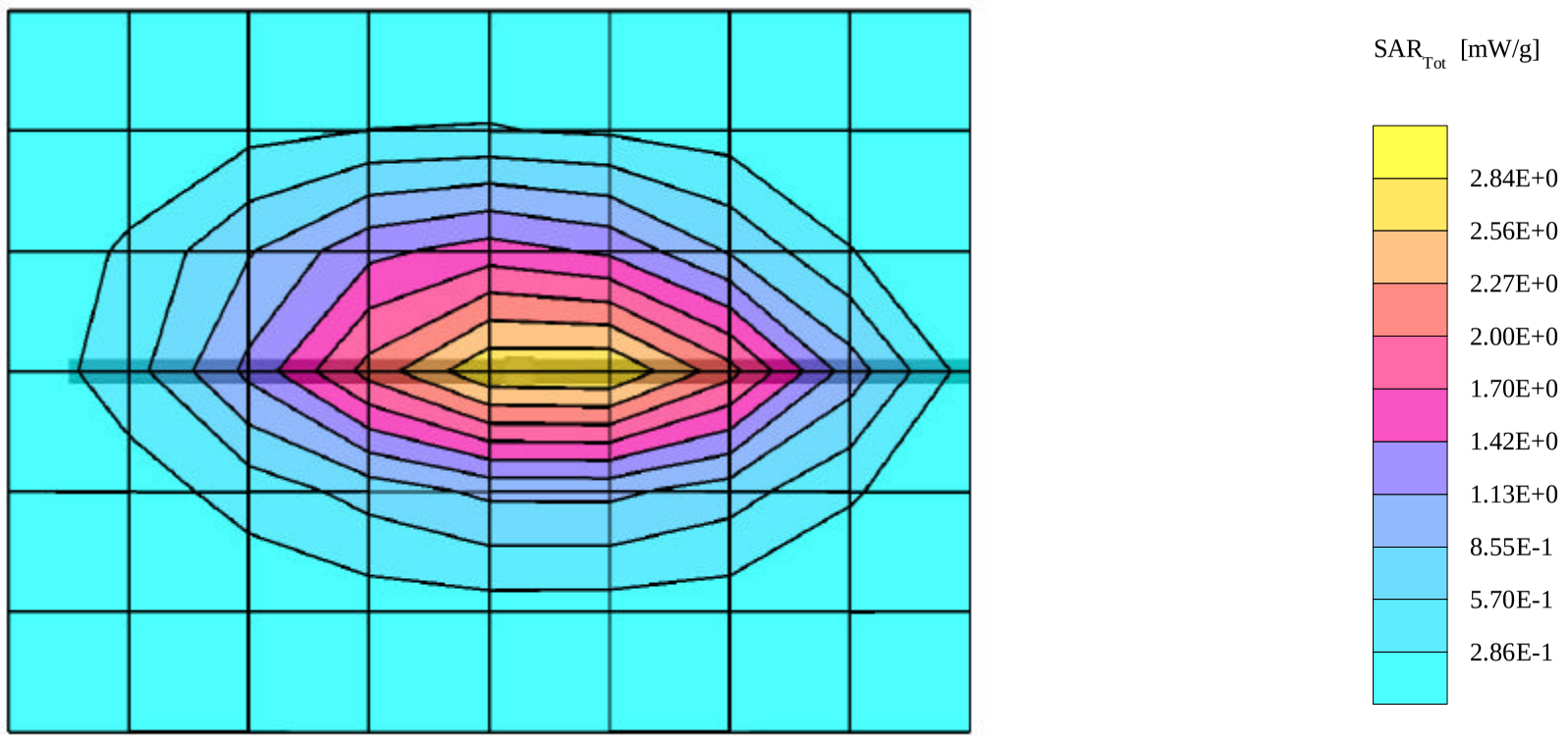
900MHz Dipole Validation
Conducted Power: 250.0 mW
Date Tested: November 22, 2001



Dipole 900 MHz

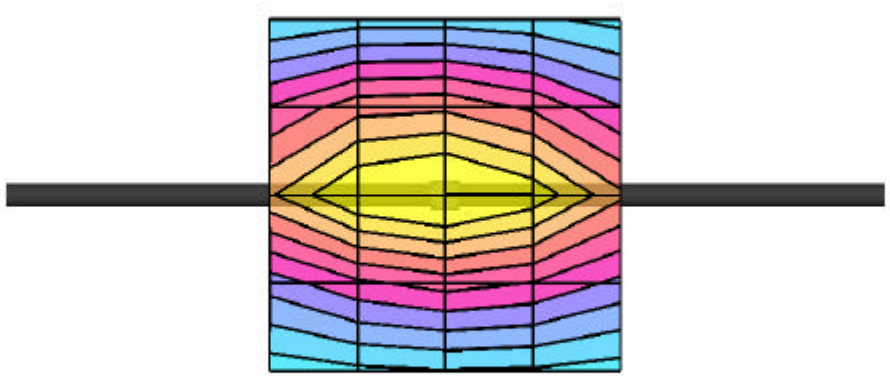
SAM Phantom; Flat Section
Probe: ET3DV6 - SN1590; ConvF(6.83,6.83,6.83); Crest factor: 1.0; 900 MHz Brain: σ = 0.97 mho/m ε_r = 42.1 ρ = 1.00 g/cm^3
Cube 5x5x7: Peak: 4.42 mW/g, SAR (1g): 2.75 mW/g, SAR (10g): 1.73 mW/g, (Worst-case extrapolation)
Penetration depth: 11.3 (10.2, 12.7) [mm]
Powerdrift: 0.03 dB

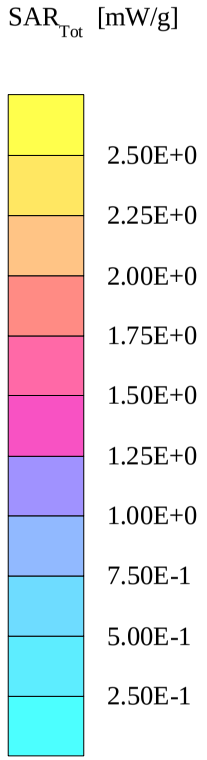
900MHz Dipole Validation
Conducted Power: 250.0 mW
Date Tested: November 23, 2001



Validation Dipole D900V2 SN:054, d = 15 mm

Frequency: 900 MHz; Antenna Input Power: 250 [mW]
Generic Twin Phantom; Flat Section; Grid Spacing:Dx = 15.0, Dy = 15.0, Dz = 10.0
Probe: ET3DV6 - SN1507; ConvF(6.27,6.27,6.27); Crest factor: 1.0; IEEE1528 900 MHz: σ = 0.97 mho/m ε_r = 42.4 ρ = 1.00 g/cm^3
Cubes (2): Peak: 4.47 mW/g ± 0.05 dB, SAR (1g): 2.78 mW/g ± 0.04 dB, SAR (10g): 1.76 mW/g ± 0.02 dB, (Worst-case extrapolation)
Penetration depth: 11.5 (10.3, 13.2) [mm]
Powerdrift: -0.00 dB





APPENDIX C - PROBE CALIBRATION

Probe ET3DV6

SN:1590

Manufactured:	March 19, 2001
Calibrated:	March 26, 2001

Calibrated for System DASY3

DASY3 - Parameters of Probe: ET3DV6 SN:1590

Sensitivity in Free Space

NormX	**1.77**	$\mu V/(V/m)^2$
NormY	**1.91**	$\mu V/(V/m)^2$
NormZ	**1.67**	$\mu V/(V/m)^2$

Diode Compression

DCP X	**100**	mV
DCP Y	**100**	mV
DCP Z	**100**	mV

Sensitivity in Tissue Simulating Liquid

Head **450 MHz** e_r **= 43.5 ± 5%** s **= 0.87 ± 10% mho/m**

ConvF X	**7.36**	extrapolated	Boundary effect:	
ConvF Y	**7.36**	extrapolated	Alpha	**0.29**
ConvF Z	**7.36**	extrapolated	Depth	**2.72**

Head **900 MHz** e_r **= 42 ± 5%** s **= 0.97 ± 10% mho/m**

ConvF X	**6.83**	± 7% (k=2)	Boundary effect:	
ConvF Y	**6.83**	± 7% (k=2)	Alpha	**0.37**
ConvF Z	**6.83**	± 7% (k=2)	Depth	**2.48**

Head **1500 MHz** e_r **= 40.4 ± 5%** s **= 1.23 ± 10% mho/m**

ConvF X	**6.13**	interpolated	Boundary effect:	
ConvF Y	**6.13**	interpolated	Alpha	**0.47**
ConvF Z	**6.13**	interpolated	Depth	**2.17**

Head **1800 MHz** e_r **= 40 ± 5%** s **= 1.40 ± 10% mho/m**

ConvF X	**5.78**	± 7% (k=2)	Boundary effect:	
ConvF Y	**5.78**	± 7% (k=2)	Alpha	**0.53**
ConvF Z	**5.78**	± 7% (k=2)	Depth	**2.01**

Sensor Offset

Probe Tip to Sensor Center	**2.7**	mm
Optical Surface Detection	**1.2 ± 0.2**	mm

DASY3 - Parameters of Probe: ET3DV6 SN: 1590

Body **450 MHz** e_r **= 56.7 ± 5%** σ **= 0.94 ± 10% mho/m**

ConvF X	**7.23**	extrapolated
ConvF Y	**7.23**	extrapolated
ConvF Z	**7.23**	extrapolated

Body **900 MHz** e_r **= 55.0 ± 5%** σ **= 1.05 ± 10% mho/m**

ConvF X	**6.61**	± 7% (k=2)
ConvF Y	**6.61**	± 7% (k=2)
ConvF Z	**6.61**	± 7% (k=2)

Body **1500 MHz** e_r **= 54.0 ± 5%** σ **= 1.30 ± 10% mho/m**

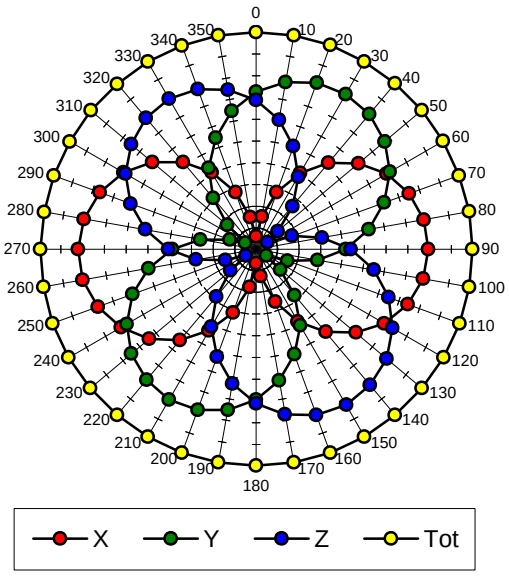
ConvF X	**5.78**	interpolated
ConvF Y	**5.78**	interpolated
ConvF Z	**5.78**	interpolated

Body **1800 MHz** e_r **= 53.3 ± 5%** σ **= 1.52 ± 10% mho/m**

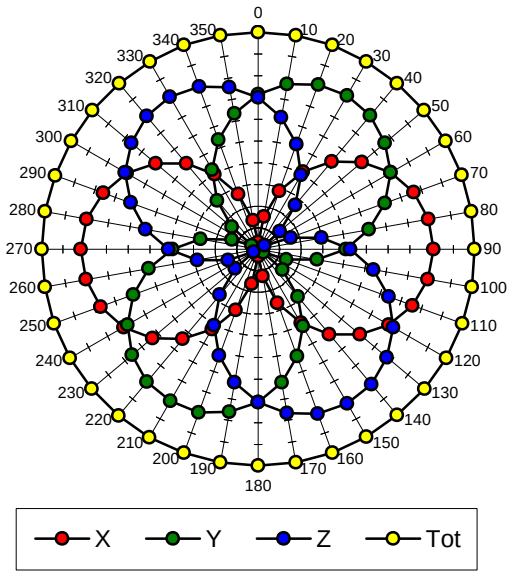
ConvF X	**5.36**	± 7% (k=2)
ConvF Y	**5.36**	± 7% (k=2)
ConvF Z	**5.36**	± 7% (k=2)

Receiving Pattern (ϕ , θ = 0°

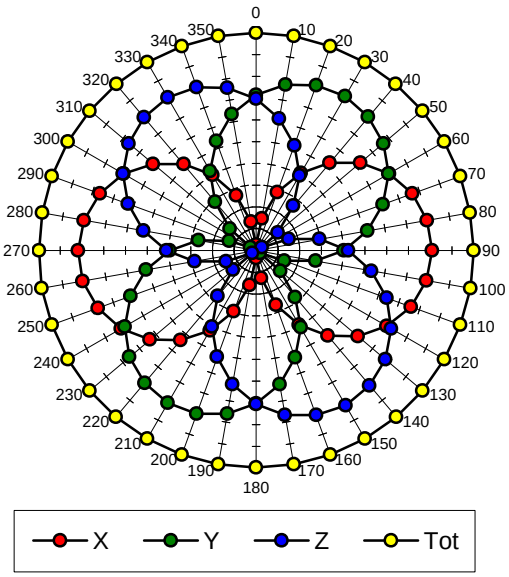
f = 30 MHz, TEM cell ifi110



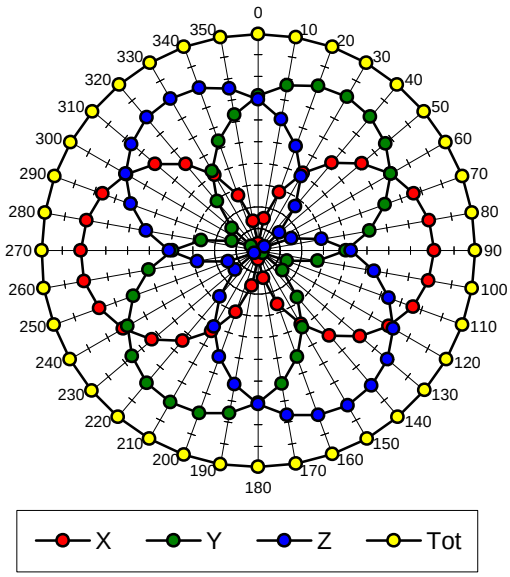
f = 100 MHz, TEM cell ifi110



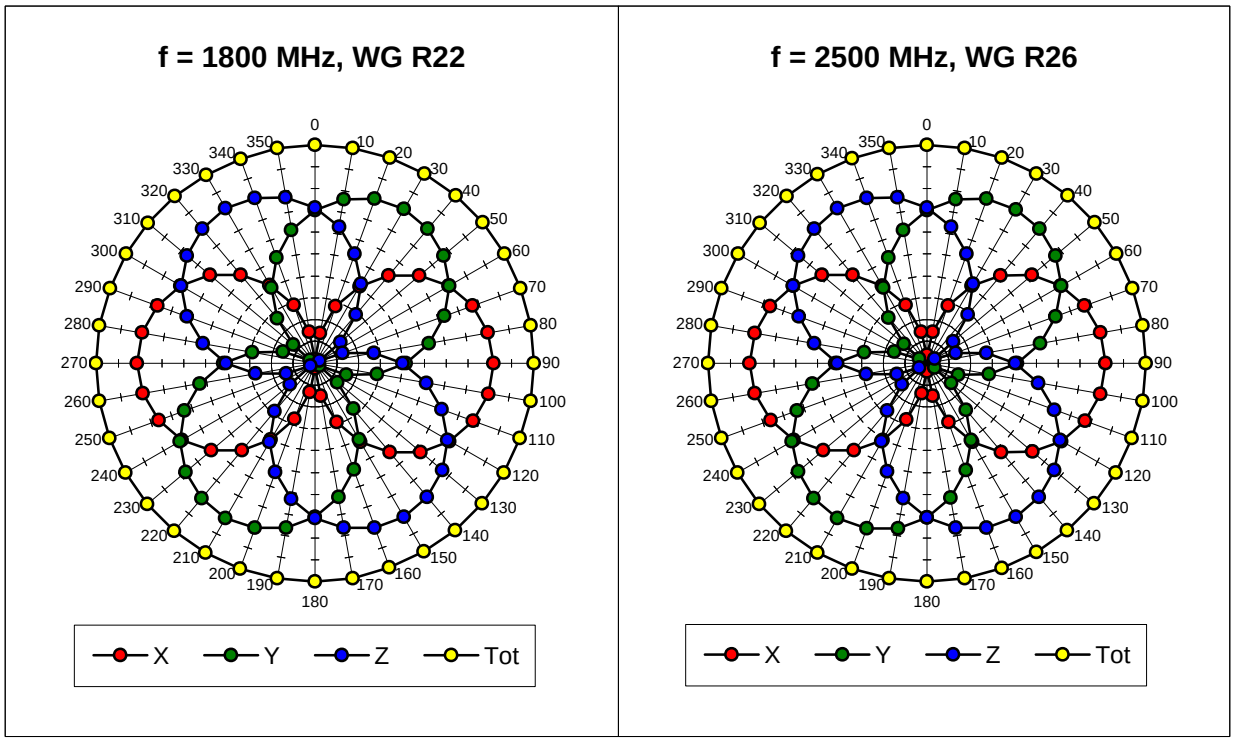
f = 300 MHz, TEM cell ifi110



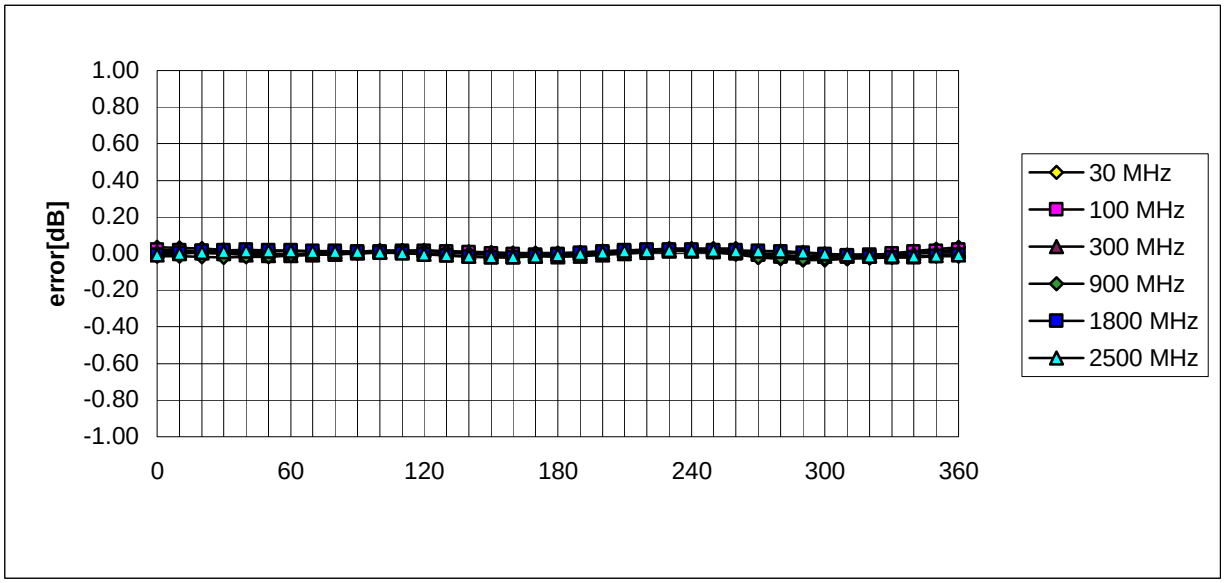
f = 900 MHz, TEM cell ifi110



ET3DV6 SN:1590

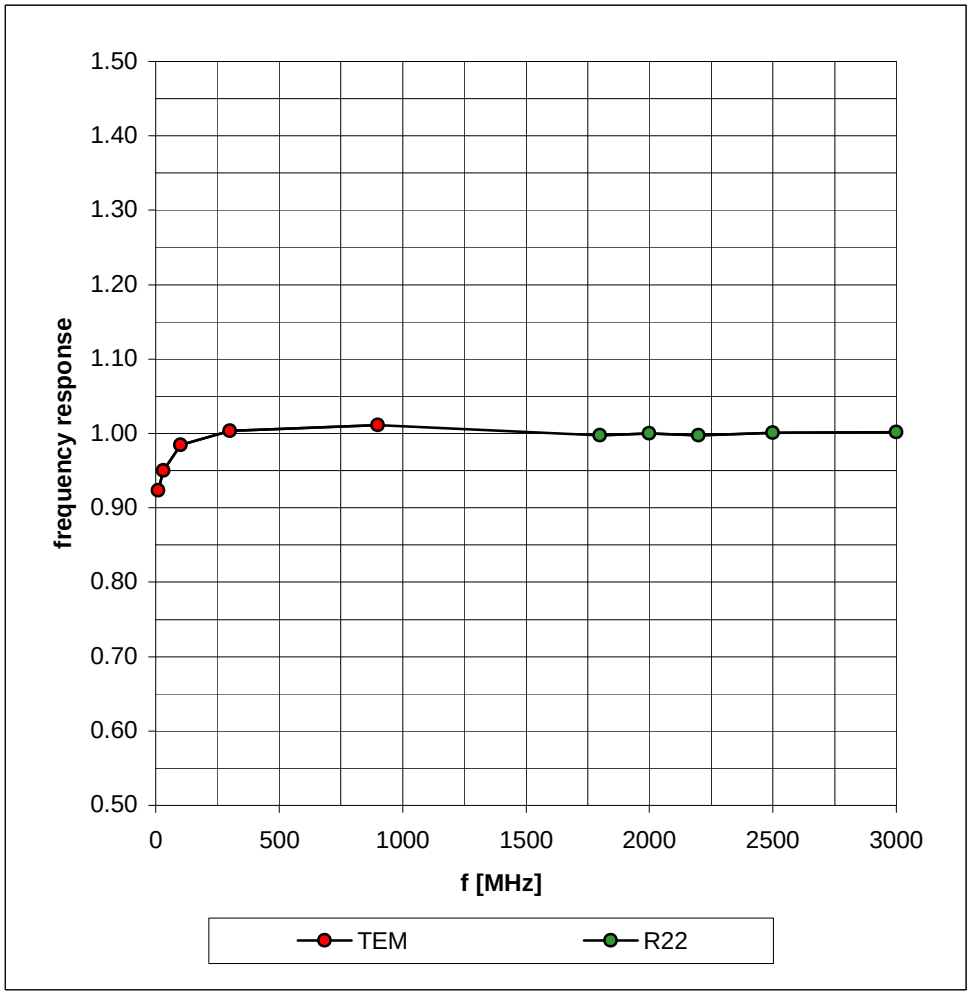


Isotropy Error (f), q = 0°



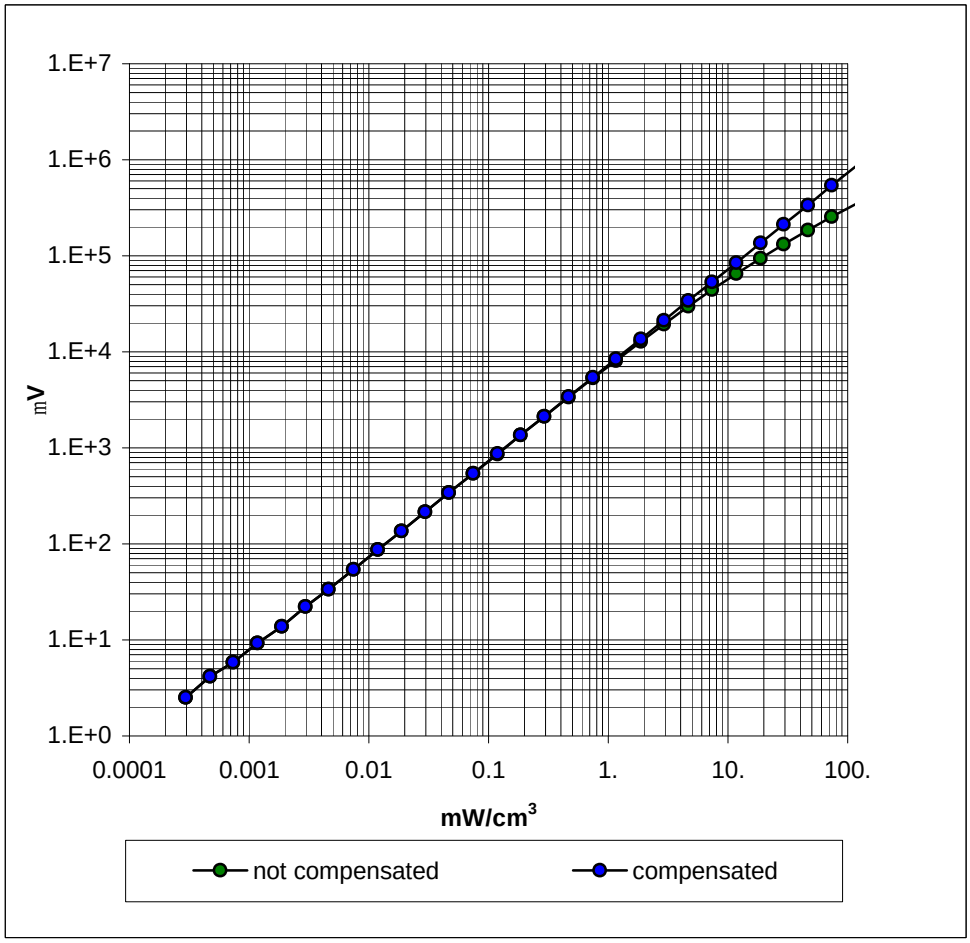
Frequency Response of E-Field

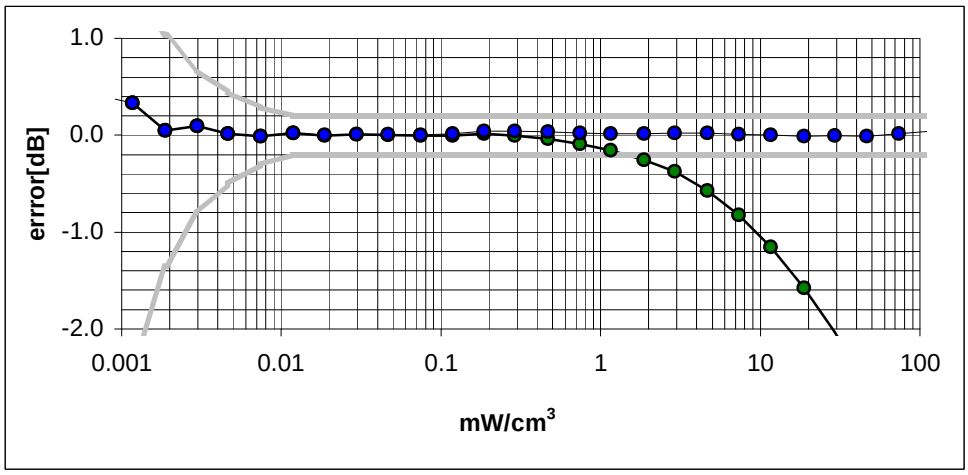
(TEM-Cell:ifi110, Waveguide R22)



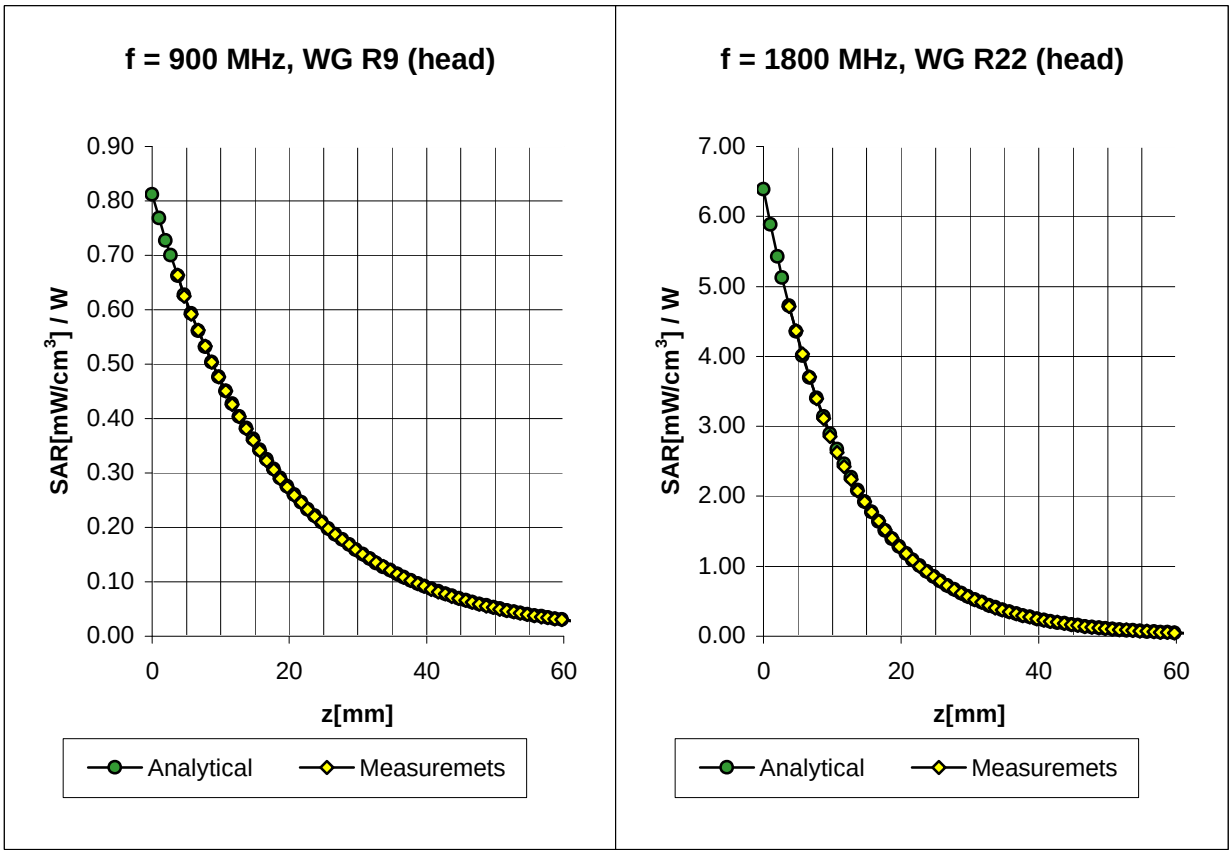
Dynamic Range f(SAR_{brain})

(TEM-Cell:ifi110)





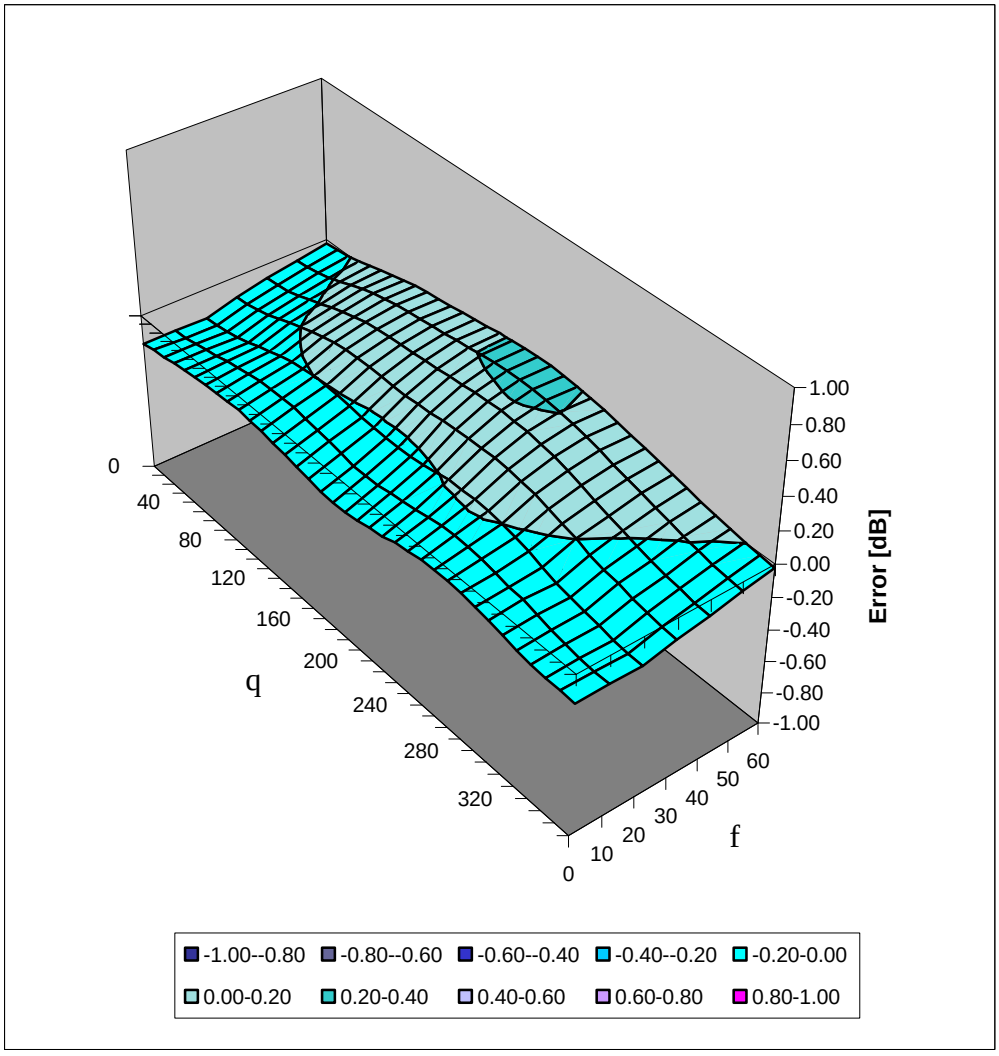
Conversion Factor Assessment



ET3DV6 SN:1590

Deviation from Isotropy in HSL

Error (q,f), f = 900 MHz



APPENDIX D - MEASURED TISSUE DIELECTRIC PARAMETERS

1800MHz Validation & Evaluation

Measured Tissue Dielectric Parameters (Brain)

November 22, 2001

Frequency	e'	e''
1.750000000 GHz	40.5892	13.9415
1.755000000 GHz	40.5647	13.9476
1.760000000 GHz	40.5412	13.9656
1.765000000 GHz	40.5248	13.9793
1.770000000 GHz	40.4974	13.9842
1.775000000 GHz	40.4967	13.9765
1.780000000 GHz	40.4679	13.9884
1.785000000 GHz	40.4521	13.9958
1.790000000 GHz	40.4329	14.0022
1.795000000 GHz	40.4112	14.0039
1.800000000 GHz	40.3933	14.0065
1.805000000 GHz	40.3874	14.0081
1.810000000 GHz	40.3449	14.0195
1.815000000 GHz	40.3353	14.0293
1.820000000 GHz	40.3108	14.0543
1.825000000 GHz	40.2829	14.0631
1.830000000 GHz	40.2728	14.0855
1.835000000 GHz	40.2592	14.0918
1.840000000 GHz	40.2556	14.1041
1.845000000 GHz	40.2363	14.1199
1.850000000 GHz	40.2149	14.1219
1.855000000 GHz	40.2018	14.1370
1.860000000 GHz	40.1663	14.1447
1.865000000 GHz	40.1646	14.1529
1.870000000 GHz	40.1321	14.1740
1.875000000 GHz	40.1080	14.1839
1.880000000 GHz	40.0930	14.2032
1.885000000 GHz	40.0648	14.2248
1.890000000 GHz	40.0457	14.2317
1.895000000 GHz	40.0355	14.2571
1.900000000 GHz	40.0123	14.2756
1.905000000 GHz	40.9843	14.2763
1.910000000 GHz	40.9697	14.2836
1.915000000 GHz	40.9382	14.3015
1.920000000 GHz	40.9170	14.3071

1800MHz Validation

Measured Tissue Dielectric Parameters (Brain)

November 23, 2001

Frequency	e'	e''
1.750000000 GHz	40.5938	13.9388
1.755000000 GHz	40.5720	13.9495
1.760000000 GHz	40.5504	13.9602
1.765000000 GHz	40.5300	13.9671
1.770000000 GHz	40.5039	13.9743
1.775000000 GHz	40.4967	13.9765
1.780000000 GHz	40.4715	13.9894
1.785000000 GHz	40.4539	13.9886
1.790000000 GHz	40.4329	14.0022
1.795000000 GHz	40.4116	14.0098
1.800000000 GHz	40.3947	14.0240
1.805000000 GHz	40.3842	14.0130
1.810000000 GHz	40.3583	14.0266
1.815000000 GHz	40.3344	14.0329
1.820000000 GHz	40.3126	14.0472
1.825000000 GHz	40.2803	14.0587
1.830000000 GHz	40.2674	14.0766
1.835000000 GHz	40.2619	14.0962
1.840000000 GHz	40.2538	14.1112
1.845000000 GHz	40.2372	14.1314
1.850000000 GHz	40.2180	14.1321
1.855000000 GHz	40.2034	14.1300
1.860000000 GHz	40.1818	14.1503
1.865000000 GHz	40.1708	14.1581
1.870000000 GHz	40.1356	14.1748
1.875000000 GHz	40.1185	14.1864
1.880000000 GHz	40.1022	14.2035
1.885000000 GHz	40.0686	14.2164
1.890000000 GHz	40.0514	14.2312
1.895000000 GHz	40.0363	14.2536
1.900000000 GHz	40.0150	14.2799
1.905000000 GHz	40.9910	14.2870
1.910000000 GHz	40.9745	14.2865
1.915000000 GHz	40.9409	14.3058
1.920000000 GHz	40.9239	14.3086

1800MHz Evaluation

Measured Tissue Dielectric Parameters (Body)

November 23, 2001

Frequency	e'	e''
1.750000000 GHz	53.5553	15.1648
1.755000000 GHz	53.5344	15.1641
1.760000000 GHz	53.5174	15.1676
1.765000000 GHz	53.5055	15.1853
1.770000000 GHz	53.4935	15.1848
1.775000000 GHz	53.4655	15.1867
1.780000000 GHz	53.4546	15.1778
1.785000000 GHz	53.4395	15.1764
1.790000000 GHz	53.4356	15.1875
1.795000000 GHz	53.4140	15.1992
1.800000000 GHz	53.3991	15.2051
1.805000000 GHz	53.3842	15.2147
1.810000000 GHz	53.3788	15.2347
1.815000000 GHz	53.3803	15.2451
1.820000000 GHz	53.3760	15.2567
1.825000000 GHz	53.3612	15.2812
1.830000000 GHz	53.3625	15.3064
1.835000000 GHz	53.3494	15.3148
1.840000000 GHz	53.3435	15.3390
1.845000000 GHz	53.3342	15.3588
1.850000000 GHz	53.3175	15.3779
1.855000000 GHz	53.3132	15.3897
1.860000000 GHz	53.2948	15.4141
1.865000000 GHz	53.2890	15.4273
1.870000000 GHz	53.2746	15.4631
1.875000000 GHz	53.2458	15.4823
1.880000000 GHz	53.2351	15.4964
1.885000000 GHz	53.2067	15.5230
1.890000000 GHz	53.1922	15.5481
1.895000000 GHz	53.1742	15.5728
1.900000000 GHz	53.1507	15.5990
1.905000000 GHz	53.1302	15.6077
1.910000000 GHz	53.1178	15.6128
1.915000000 GHz	53.0784	15.6319
1.920000000 GHz	53.0549	15.6438

835MHz Evaluation & 900MHz Validation

Measured Tissue Dielectric Parameters (Brain)

November 22, 2001

Frequency	e'	e''
800.000000 MHz	41.6687	19.4597
805.000000 MHz	41.5833	19.4213
810.000000 MHz	41.5457	19.4352
815.000000 MHz	41.4554	19.4098
820.000000 MHz	41.4278	19.3945
825.000000 MHz	41.3375	19.3807
830.000000 MHz	41.2744	19.3650
835.000000 MHz	41.1861	19.3304
840.000000 MHz	41.1513	19.3339
845.000000 MHz	41.0389	19.3174
850.000000 MHz	40.9952	19.2822
855.000000 MHz	40.9412	19.2812
860.000000 MHz	40.8868	19.2395
865.000000 MHz	40.8009	19.2276
870.000000 MHz	40.7336	19.2414
875.000000 MHz	40.6993	19.2255
880.000000 MHz	40.6631	19.2003
885.000000 MHz	40.5920	19.2256
890.000000 MHz	40.5270	19.1992
895.000000 MHz	40.5243	19.1451
900.000000 MHz	40.4635	19.1283
905.000000 MHz	40.4062	19.1205
910.000000 MHz	40.3660	19.1178
915.000000 MHz	40.2916	19.0960
920.000000 MHz	40.2484	19.0945
925.000000 MHz	40.2096	19.0724
930.000000 MHz	40.1537	19.0558
935.000000 MHz	40.0723	19.0471
940.000000 MHz	40.0007	19.0359
945.000000 MHz	39.9561	19.0167
950.000000 MHz	39.8802	19.0169
955.000000 MHz	39.8173	18.9945
960.000000 MHz	39.7578	18.9807
965.000000 MHz	39.7077	18.9645
970.000000 MHz	39.6577	18.9764

900MHz Validation

Measured Tissue Dielectric Parameters (Brain)

November 23, 2001

Frequency	e'	e''
800.000000 MHz	43.2206	19.7445
805.000000 MHz	43.1612	19.7477
810.000000 MHz	43.1123	19.7264
815.000000 MHz	43.0366	19.7023
820.000000 MHz	43.0031	19.6719
825.000000 MHz	42.9343	19.6466
830.000000 MHz	42.8730	19.6249
835.000000 MHz	42.8042	19.6110
840.000000 MHz	42.7588	19.6012
845.000000 MHz	42.6700	19.5833
850.000000 MHz	42.6057	19.5379
855.000000 MHz	42.5810	19.5540
860.000000 MHz	42.5268	19.5374
865.000000 MHz	42.4273	19.5036
870.000000 MHz	42.3646	19.5210
875.000000 MHz	42.3189	19.5231
880.000000 MHz	42.2777	19.5037
885.000000 MHz	42.2059	19.5139
890.000000 MHz	42.1452	19.4908
895.000000 MHz	42.1403	19.4511
900.000000 MHz	42.0784	19.4191
905.000000 MHz	42.0253	19.3651
910.000000 MHz	41.9775	19.3741
915.000000 MHz	41.9012	19.3675
920.000000 MHz	41.8524	19.3673
925.000000 MHz	41.8179	19.3481
930.000000 MHz	41.7902	19.3174
935.000000 MHz	41.7043	19.3149
940.000000 MHz	41.6342	19.2981
945.000000 MHz	41.5737	19.2786
950.000000 MHz	41.5137	19.2879
955.000000 MHz	41.4436	19.2626
960.000000 MHz	41.3799	19.2546
965.000000 MHz	41.3341	19.2412
970.000000 MHz	41.2803	19.2587

835MHz Evaluation

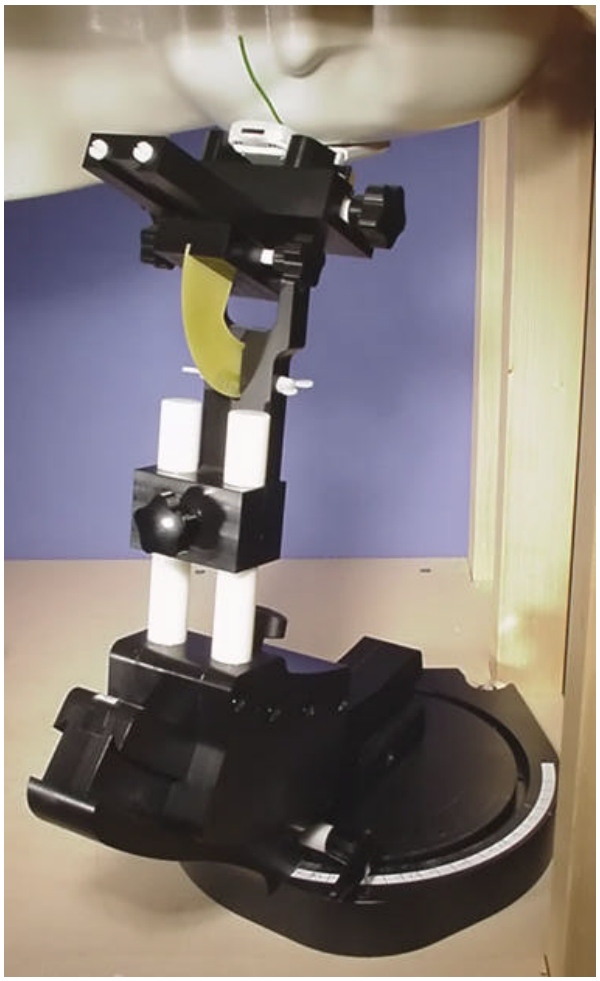
Measured Tissue Dielectric Parameters (Body)

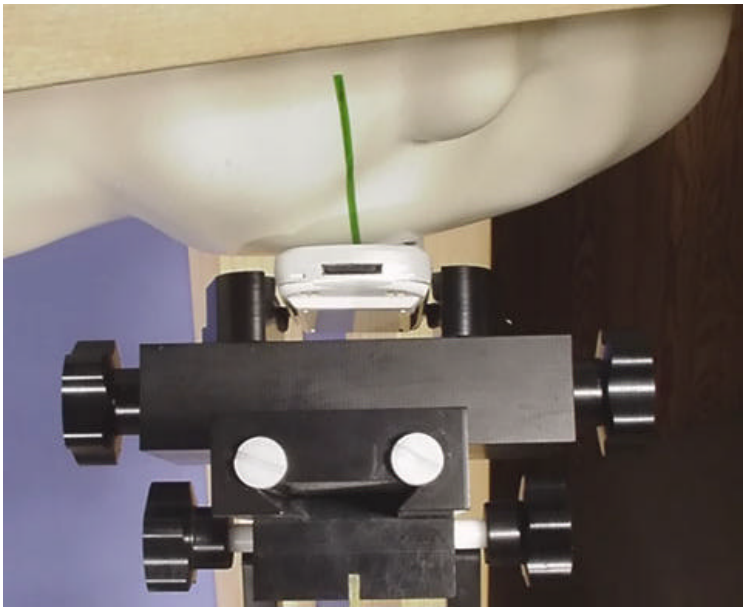
November 23, 2001

Frequency	e'	e''
800.000000 MHz	55.4736	21.0627
805.000000 MHz	55.4254	21.0620
810.000000 MHz	55.3693	21.0359
815.000000 MHz	55.3355	20.9907
820.000000 MHz	55.2832	20.9695
825.000000 MHz	55.2204	20.9469
830.000000 MHz	55.1539	20.9260
835.000000 MHz	55.0989	20.9177
840.000000 MHz	55.0739	20.8983
845.000000 MHz	55.0196	20.8572
850.000000 MHz	54.9795	20.8220
855.000000 MHz	54.9154	20.8072
860.000000 MHz	54.8503	20.8147
865.000000 MHz	54.8036	20.7828
870.000000 MHz	54.7615	20.7603
875.000000 MHz	54.7146	20.7505
880.000000 MHz	54.6815	20.7461
885.000000 MHz	54.6474	20.7634
890.000000 MHz	54.5924	20.7253
895.000000 MHz	54.5966	20.6484
900.000000 MHz	54.5603	20.6404
905.000000 MHz	54.5311	20.6087
910.000000 MHz	54.4821	20.5904
915.000000 MHz	54.4288	20.5845
920.000000 MHz	54.3762	20.5526
925.000000 MHz	54.3467	20.5374
930.000000 MHz	54.2845	20.5152
935.000000 MHz	54.2218	20.5140
940.000000 MHz	54.1565	20.5038
945.000000 MHz	54.1340	20.4965
950.000000 MHz	54.0828	20.4910
955.000000 MHz	54.0325	20.4853
960.000000 MHz	53.9827	20.4546
965.000000 MHz	53.9119	20.4431
970.000000 MHz	53.8679	20.4453

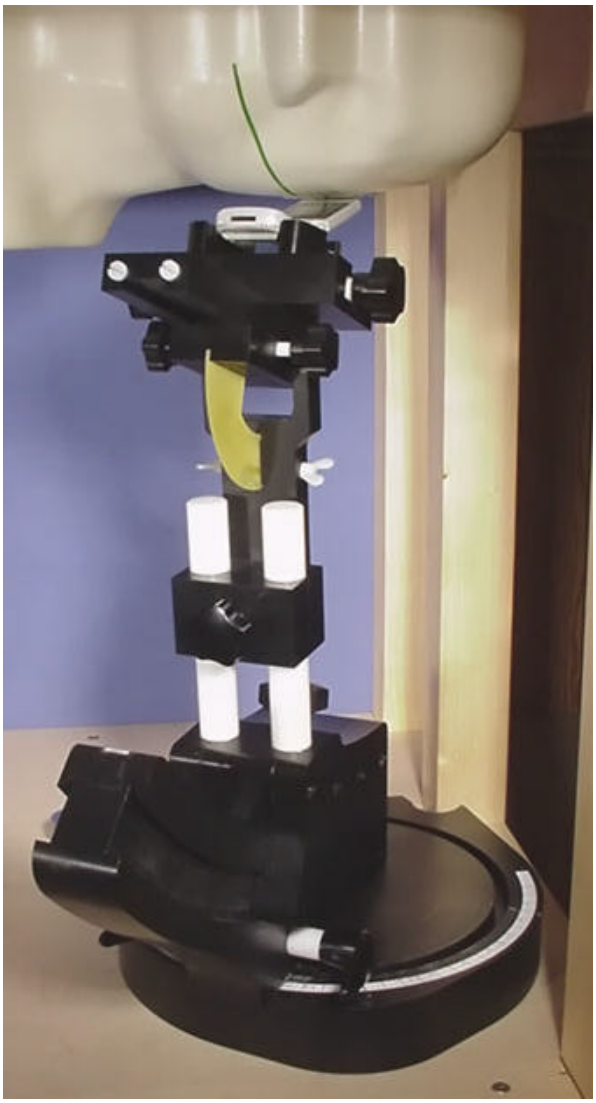
APPENDIX E - SAR TEST SETUP PHOTOGRAPHS

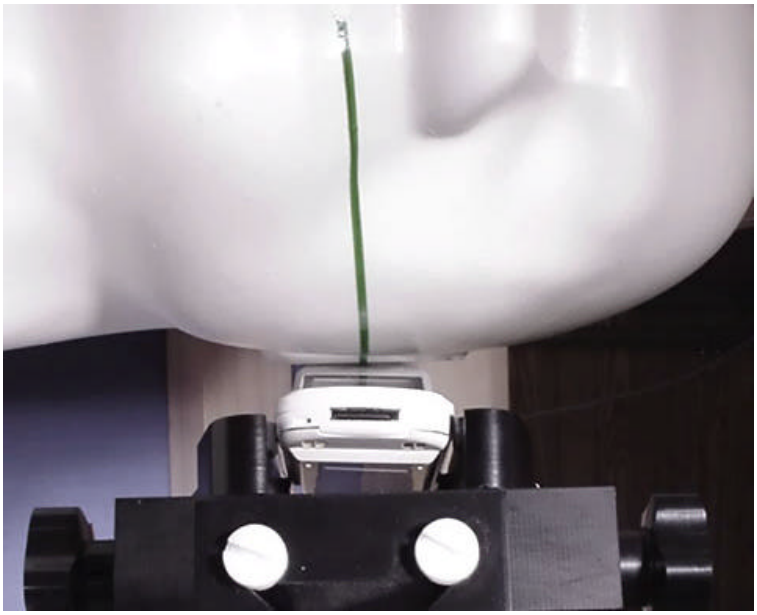
SAR TEST SETUP PHOTOGRAPHS
Left Head Section – Cheek/Touch Position



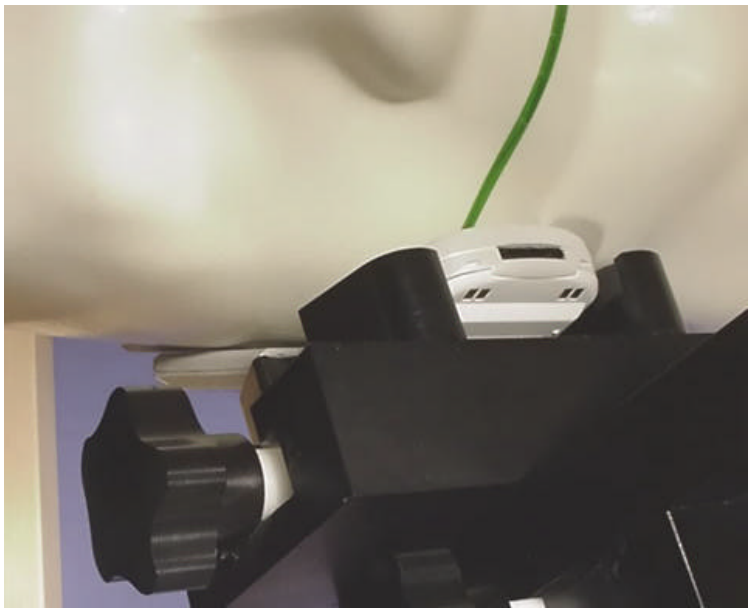


SAR TEST SETUP PHOTOGRAPHS
Left Head Section – Ear/Tilt Position

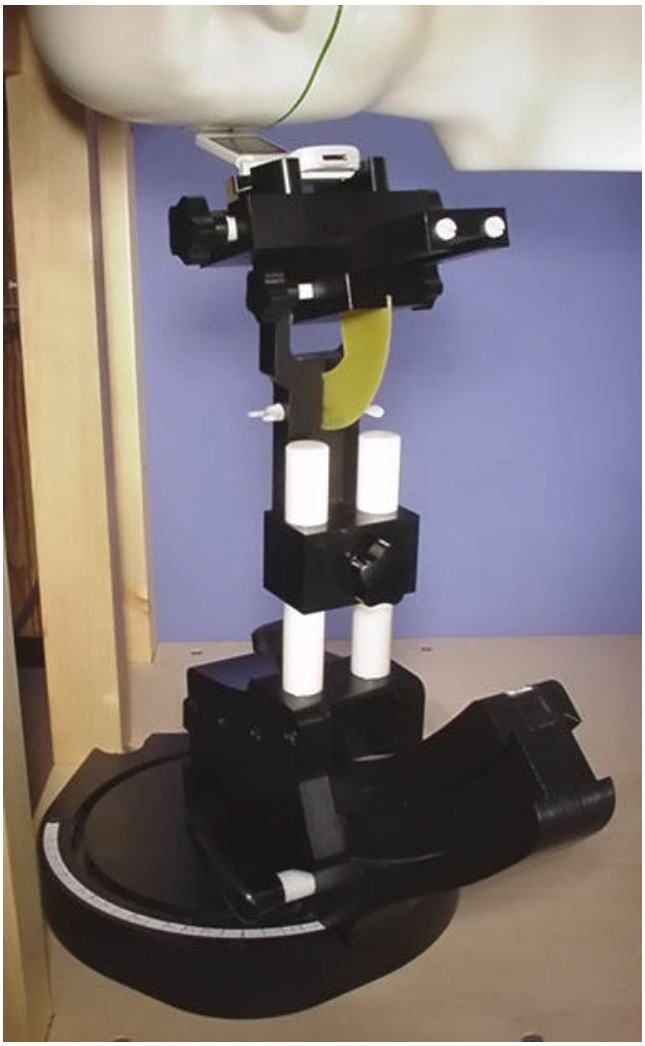


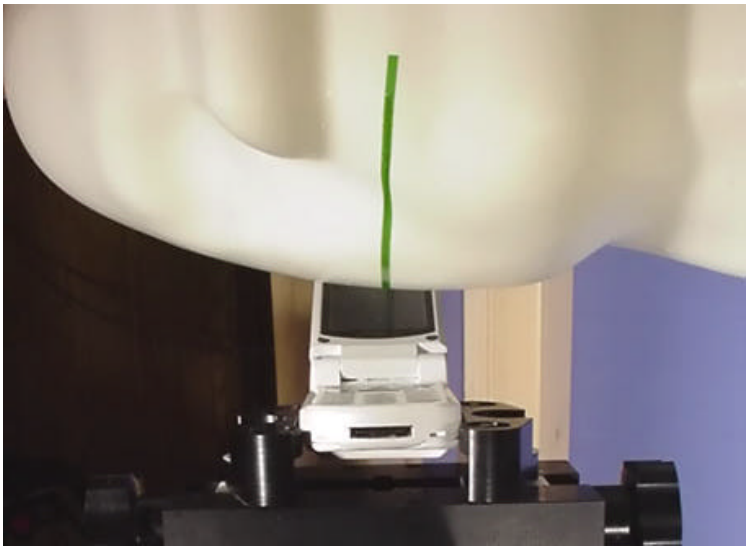


SAR TEST SETUP PHOTOGRAPHS
Right Head Section – Cheek/Touch Position



SAR TEST SETUP PHOTOGRAPHS
Right Head Section – Ear/Tilt Position





SAR TEST SETUP PHOTOGRAPHS
Planar Section – Body-Worn Configuration
(1.5 cm Separation Distance)