

ATTACHMENT Q – DIPOLE VALIDATION

■ Validation Data (1900MHz Brain)

Dipole 1900 MHz

SAM II Phantom: Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ET3DV6 - SN1609; ConvF(5.34,5.34,5.34); Crest factor: 1.0; Brain 1900 MHz: $s = 1.39$

ρ/m , $\epsilon_r = 40.4$, $r = 1.00$ g/cm³

Cubes (2): SAR (1g): 42.1 mW/g $\pm$ 0.03 dB, SAR (10g): 21.0 mW/g $\pm$ 0.04 dB

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

Powerdrift: 0.03 dB

Comment:

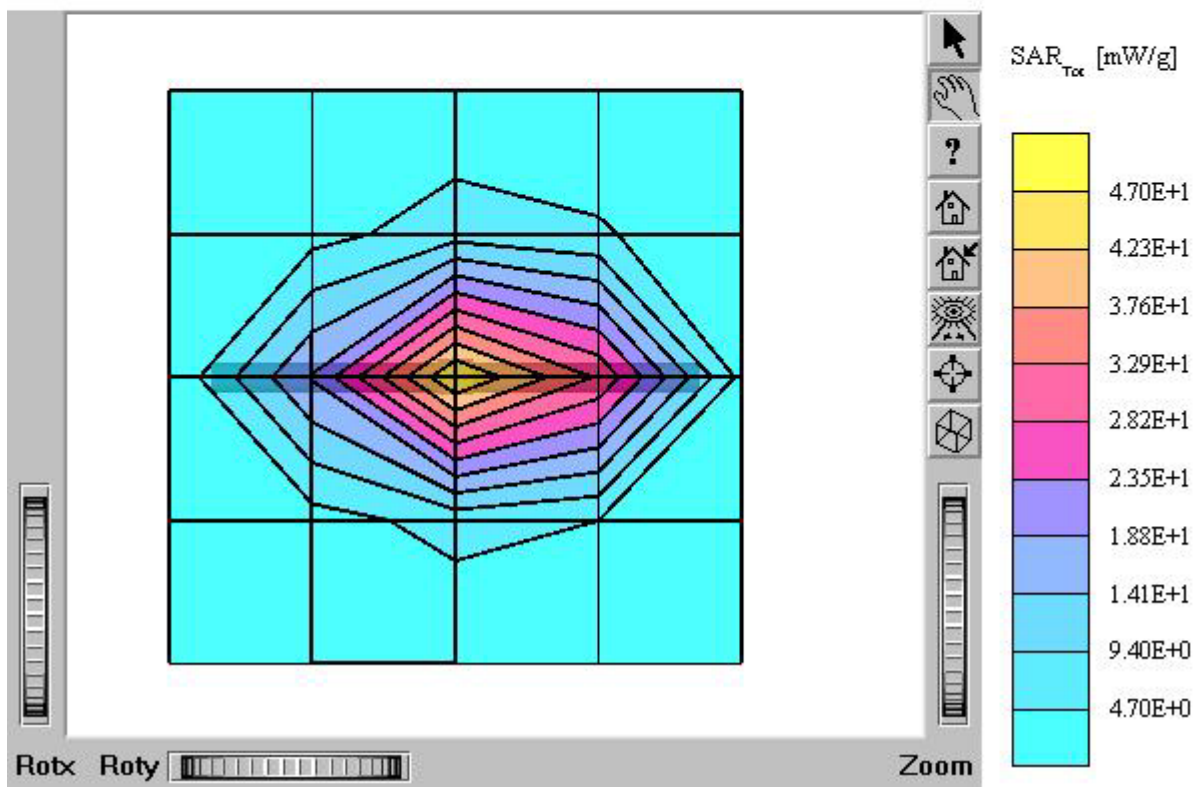
1900 MHz Brain Dipole Validation (D1900V2/ S.N: 5d032)

Antenna Input Power: 30 dBm (1 W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature: 21.3°C

Date Tested : March 2, 2005



Dipole 1900 MHz

SAM II Phantom; Section; Position; ; Frequency: 1900 MHz

Probe: ET3DV6 - SN1609; ConvF(5.34,5.34,5.34); Crest factor: 1.0; Brain 1900 MHz: $s = 1.39$
 ρ_{ho}/m , $\epsilon_r = 40.4$, $\rho = 1.00$ g/cm³

:

Z-Axis: $D_x = 0.0$, $D_y = 0.0$, $D_z = 5.0$

Comment:

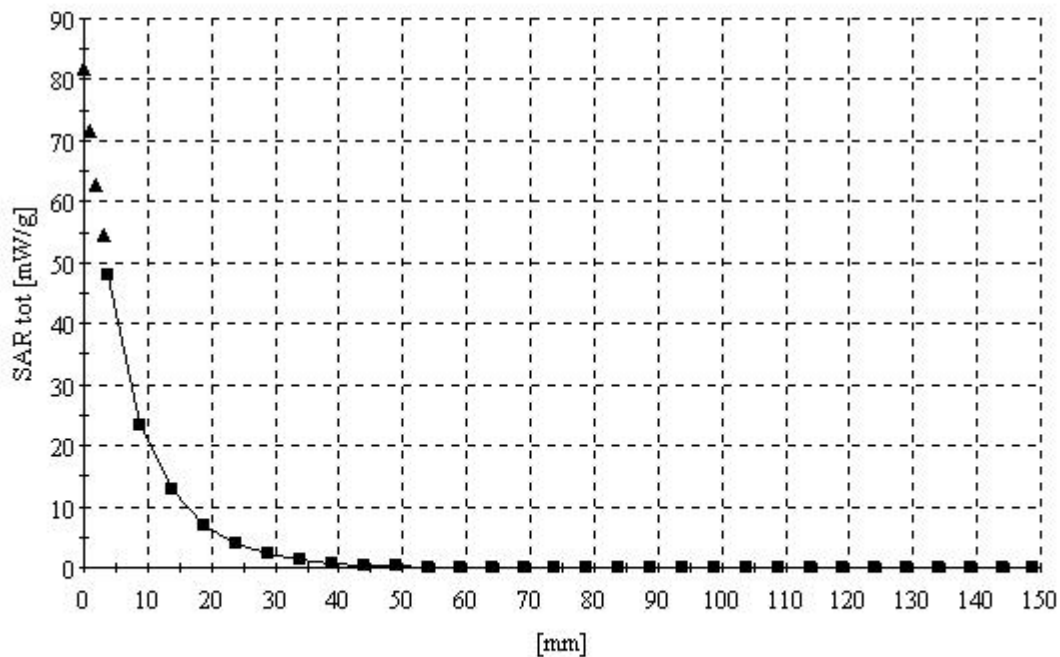
1900 MHz Brain Dipole Validation (D1900V2/ S.N: 5d032)

Antenna Input Power: 30 dBm (1 W)

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■ Dielectric Parameter (1900MHz Brain)

Title : INNO-P10**SubTitle : GSM 1900 Brain****March 02, 2005 09:40 AM**

Frequency	e'	e''
1.800000000 GHz	40.8717	12.8876
1.810000000 GHz	40.7995	12.9547
1.820000000 GHz	40.7852	13.0187
1.830000000 GHz	40.7222	13.0709
1.840000000 GHz	40.7128	13.0950
1.850000000 GHz	40.6628	13.1391
1.860000000 GHz	40.6436	13.1723
1.870000000 GHz	40.6183	13.2034
1.880000000 GHz	40.5348	13.1850
1.890000000 GHz	40.4891	13.1996
1.900000000 GHz	40.3860	13.2073
1.910000000 GHz	40.2974	13.2211
1.920000000 GHz	40.2202	13.2457
1.930000000 GHz	40.1250	13.2858
1.940000000 GHz	40.0688	13.3064
1.950000000 GHz	40.0246	13.3696
1.960000000 GHz	40.0257	13.4408
1.970000000 GHz	40.0288	13.4691
1.980000000 GHz	39.9813	13.5080
1.990000000 GHz	39.9797	13.5303
2.000000000 GHz	39.9562	13.5706

■ Dielectric Parameter (1900MHz Muscle)

Title : INNO-P10
SubTitle : GSM 1900 Body
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Frequency	e'	e''
1.800000000 GHz	51.3573	14.5993
1.810000000 GHz	51.3021	14.6196
1.820000000 GHz	51.2686	14.6723
1.830000000 GHz	51.2411	14.7593
1.840000000 GHz	51.2548	14.7867
1.850000000 GHz	51.2092	14.8428
1.860000000 GHz	51.1567	14.8589
1.870000000 GHz	51.1446	14.8870
1.880000000 GHz	51.0905	14.9054
1.890000000 GHz	50.9979	14.8936
1.900000000 GHz	50.9340	14.8968
1.910000000 GHz	50.8716	14.8676
1.920000000 GHz	50.8180	14.8950
1.930000000 GHz	50.7619	14.9497
1.940000000 GHz	50.7258	14.9731
1.950000000 GHz	50.6901	15.0423
1.960000000 GHz	50.6540	15.1088
1.970000000 GHz	50.6426	15.1533
1.980000000 GHz	50.6232	15.1947
1.990000000 GHz	50.6110	15.2226
2.000000000 GHz	50.5550	15.2239