

## ATTACHMENT Q – DIPOLE VALIDATION

## Validation Data (1900MHz Brain)

### Dipole 1900 MHz

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

Probe: ET3DV6 - SN1798; ConvF(5.27,5.27,5.27); Crest factor: 1.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$   $\epsilon_r = 40.0$   $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 39.9 mW/g, SAR (10g): 20.7 mW/g

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

Powerdrift: -0.09 dB

Comment :

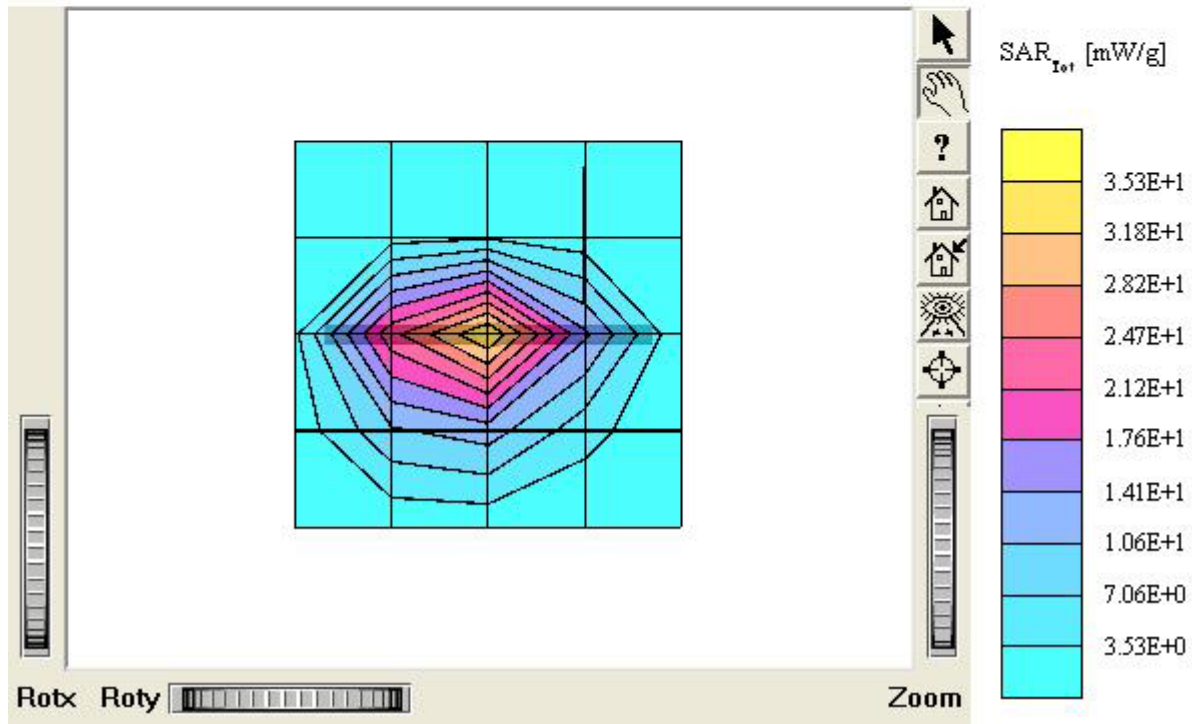
1900 MHz Brain Dipole Validation (D1900V2/ S.N: 5d032)

Antenna Input Power : 30 dBm (1W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature: 22.6 °C

Date Tested : December 3, 2003



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

Probe: ET3DV6 - SN1798; ConvF(5.27,5.27,5.27); Crest factor: 1.0; Head 1900 MHz:  $\sigma = 1.46 \text{ mho/m}$   $\epsilon_r = 40.0$   $\rho = 1.00 \text{ g/cm}^3$

:

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

Comment :

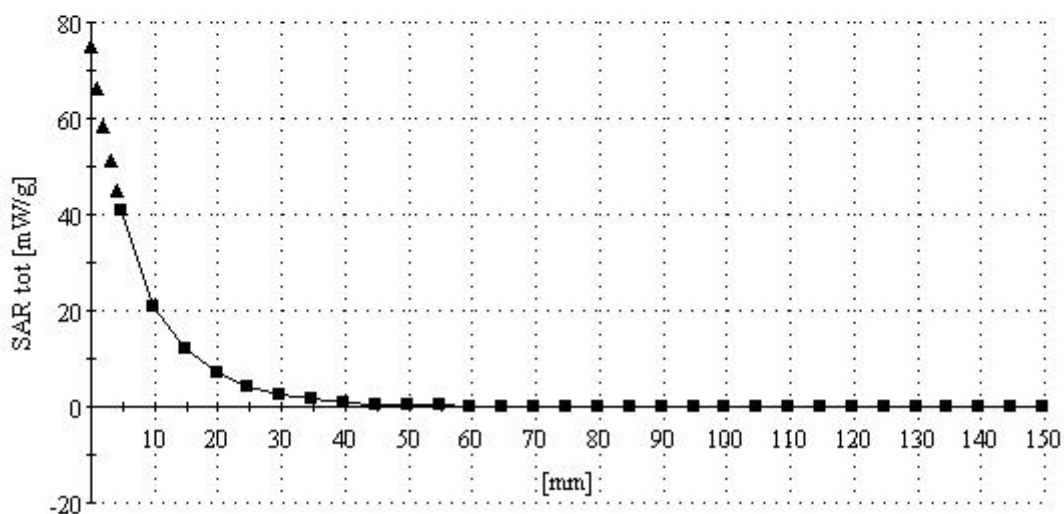
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Dielectric Parameter (1900MHz Brain)**Title : AXW-L1900****SubTitle : 1900 MHz HEAD**

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Frequency	e'	e''
1.800000000 GHz	40.4132	13.4920
1.810000000 GHz	40.3795	13.5417
1.820000000 GHz	40.3572	13.5780
1.830000000 GHz	40.2934	13.6677
1.840000000 GHz	40.2986	13.7140
1.850000000 GHz	40.2724	13.7950
1.860000000 GHz	40.1995	13.8144
1.870000000 GHz	40.1461	13.8430
1.880000000 GHz	40.0691	13.8235
1.890000000 GHz	40.0278	13.7967
1.900000000 GHz	39.9706	13.8138
1.910000000 GHz	39.9347	13.8112
1.920000000 GHz	39.8657	13.8067
1.930000000 GHz	39.8327	13.8327
1.940000000 GHz	39.8038	13.8949
1.950000000 GHz	39.7558	13.9666
1.960000000 GHz	39.7393	14.0027
1.970000000 GHz	39.7208	14.0785
1.980000000 GHz	39.7006	14.1318
1.990000000 GHz	39.6673	14.1197
2.000000000 GHz	39.5970	14.1389

Dielectric Parameter (1900MHz Body)**Title : AXW-L1900****SubTitle : 1900 MHz BODY**

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Frequency	e'	e''
1.800000000 GHz	52.2263	13.7457
1.810000000 GHz	52.2060	13.8222
1.820000000 GHz	52.1682	13.8923
1.830000000 GHz	52.1411	13.9676
1.840000000 GHz	52.0851	14.0359
1.850000000 GHz	52.0308	14.0458
1.860000000 GHz	51.9629	14.1075
1.870000000 GHz	51.9004	14.1078
1.880000000 GHz	51.8531	14.1596
1.890000000 GHz	51.7646	14.2269
1.900000000 GHz	51.7180	14.2469
1.910000000 GHz	51.6695	14.3261
1.920000000 GHz	51.6623	14.3933
1.930000000 GHz	51.6355	14.4678
1.940000000 GHz	51.5942	14.5201
1.950000000 GHz	51.6004	14.5790
1.960000000 GHz	51.5341	14.6229
1.970000000 GHz	51.4833	14.6850
1.980000000 GHz	51.4237	14.6705
1.990000000 GHz	51.3583	14.6975
2.000000000 GHz	51.2685	14.7270