

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: $\sigma = 1.45 \text{ mho/m}$ $\epsilon_r = 38.5 \rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 41.4 mW/g, SAR (10g): 21.4 mW/g

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

Powerdrift: -0.09 dB

Comment :

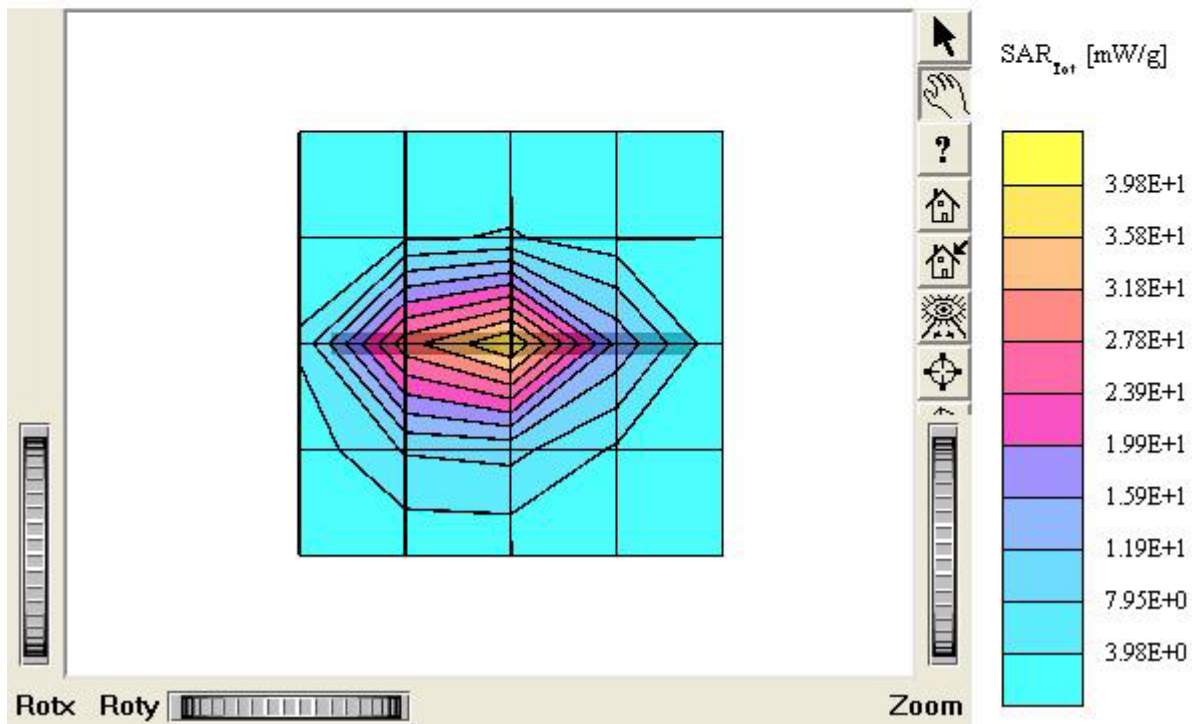
1900 MHz Brain Dipole Validation (D1900V2/ S.N: 5d032)

Antenna Input Power : 30 dBm (1W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature: 22.4 °C

Date Tested : December 5, 2003



Dipole 1900 MHz

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: $\sigma = 1.45 \text{ mho/m}$ $\epsilon_r = 38.5$ $\rho = 1.00 \text{ g/cm}^3$

:

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

Comment :

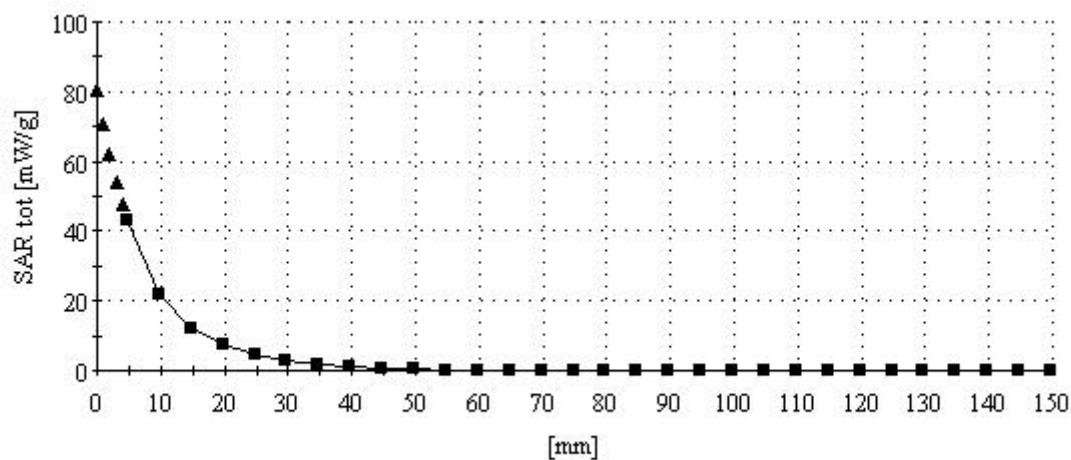
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■ Dielectric Parameter (1900MHz Brain)

Title : AXW-P1930

SubTitle : 1900 MHz HEAD

December 05, 2005 09:10 AM

Frequency	e'	e''
1.800000000 GHz	38.9005	13.3040
1.810000000 GHz	38.8675	13.3509
1.820000000 GHz	38.8111	13.4267
1.830000000 GHz	38.7431	13.5003
1.840000000 GHz	38.7208	13.5526
1.850000000 GHz	38.7077	13.6229
1.860000000 GHz	38.6678	13.7004
1.870000000 GHz	38.6212	13.7402
1.880000000 GHz	38.6185	13.8007
1.890000000 GHz	38.5293	13.7572
1.900000000 GHz	38.4990	13.6930
1.910000000 GHz	38.4540	13.6472
1.920000000 GHz	38.3926	13.6211
1.930000000 GHz	38.3110	13.6315
1.940000000 GHz	38.2440	13.6770
1.950000000 GHz	38.1774	13.7487
1.960000000 GHz	38.1259	13.8051
1.970000000 GHz	38.0901	13.9068
1.980000000 GHz	38.1187	13.9933
1.990000000 GHz	38.0991	14.0611
2.000000000 GHz	38.0877	14.0858

■ Dielectric Parameter (1900MHz Body)

Title : AXW-P1930**SubTitle : 1900 MHz BODY**

December 05, 2005 10:50 AM

Frequency	e'	e''
1.800000000 GHz	52.5954	13.9431
1.810000000 GHz	52.5736	14.0082
1.820000000 GHz	52.5249	14.0063
1.830000000 GHz	52.4177	14.0054
1.840000000 GHz	52.3558	13.9802
1.850000000 GHz	52.2513	14.0112
1.860000000 GHz	52.1492	14.0589
1.870000000 GHz	52.0530	14.1309
1.880000000 GHz	51.9854	14.2284
1.890000000 GHz	51.8833	14.3286
1.900000000 GHz	51.8736	14.4292
1.910000000 GHz	51.8721	14.5441
1.920000000 GHz	51.8718	14.6257
1.930000000 GHz	51.9022	14.6399
1.940000000 GHz	51.8957	14.6590
1.950000000 GHz	51.8464	14.6568
1.960000000 GHz	51.7744	14.6439
1.970000000 GHz	51.6404	14.6395
1.980000000 GHz	51.4882	14.6214
1.990000000 GHz	51.3238	14.6909
2.000000000 GHz	51.2163	14.7545