

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: $s = 1.39$ mho/m $\epsilon_r = 40.4$ $\rho = 1.00$ g/cm³Cubes (2): SAR (1g): 41.9 mW/g ± 0.00 dB, SAR (10g): 21.1 mW/g ± 0.01 dB

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

Powerdrift: -0.08 dB

Comment:

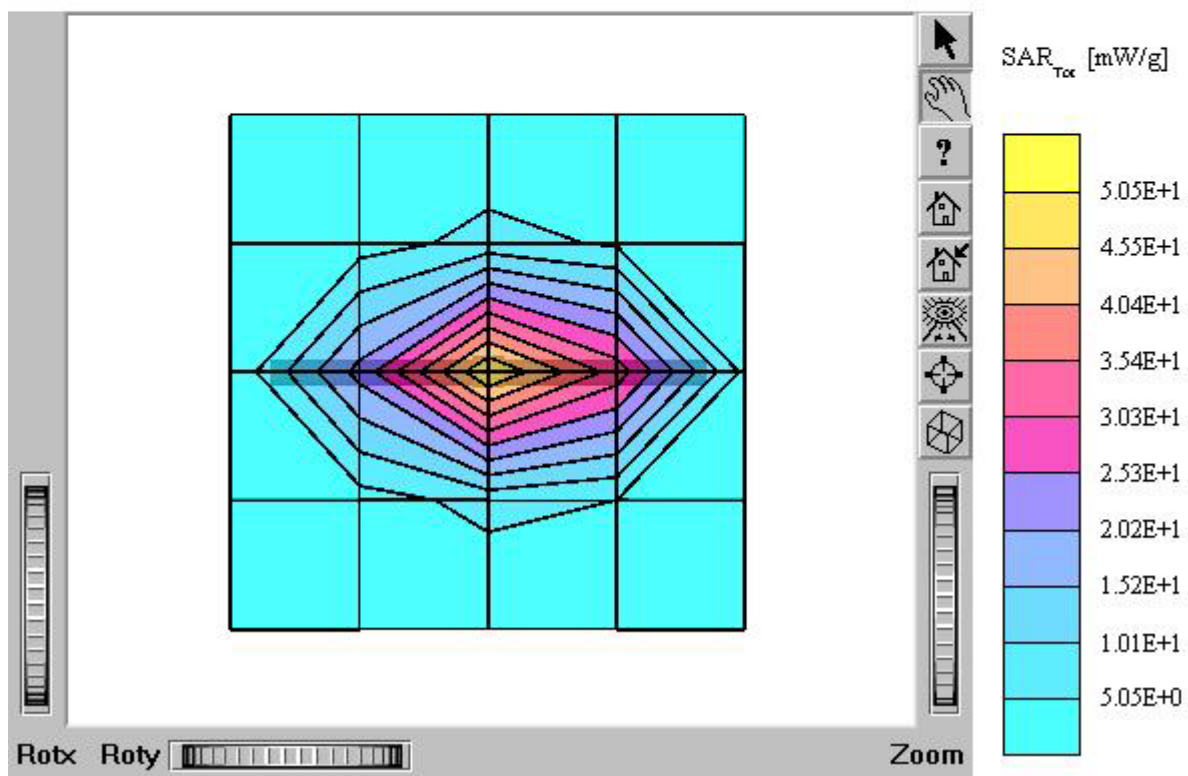
1900 MHz Brain Dipole Validation (D1900V2/ S.N: 5d032)

Antenna Input Power: 30 dBm (1 W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature : 21.4°C

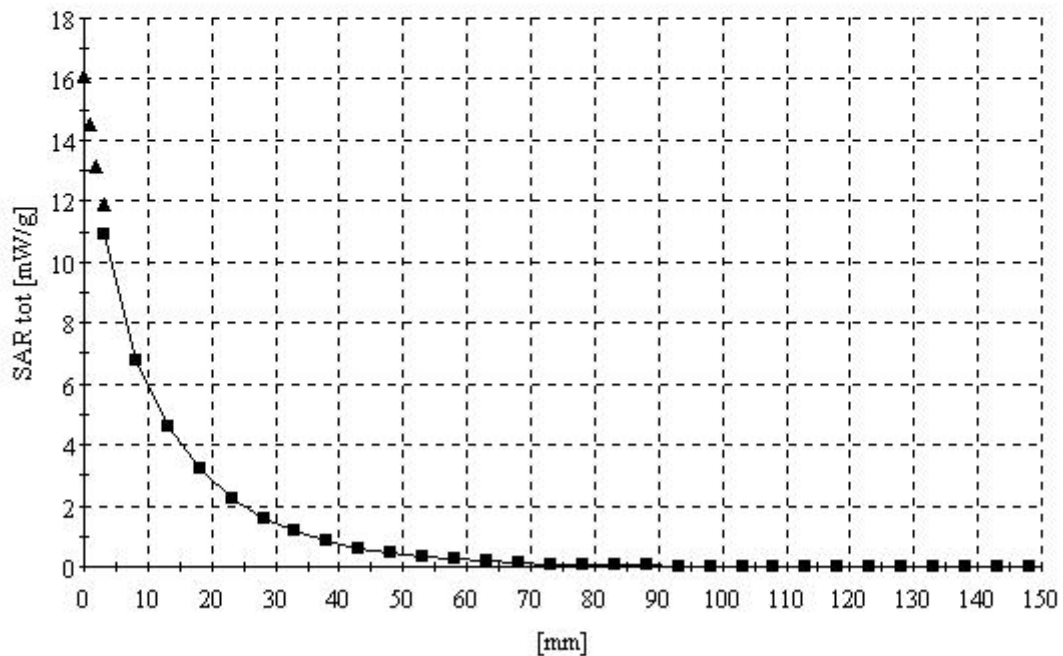
Date Tested : November 28, 2004



Dipole 835 MHz

SAM I Phantom; Section; Position: ; Frequency: 835 MHz
Probe: ET3DV6 - SN1609; ConvF(6.63,6.63,6.63); Crest factor: 1.0; Brain 835 MHz: $s = 0.89$
 mho/m $e_r = 42.4$ $r = 1.00 \text{ g/cm}^3$
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Z-Axis: $D_x = 0.0$, $D_y = 0.0$, $D_z = 5.0$

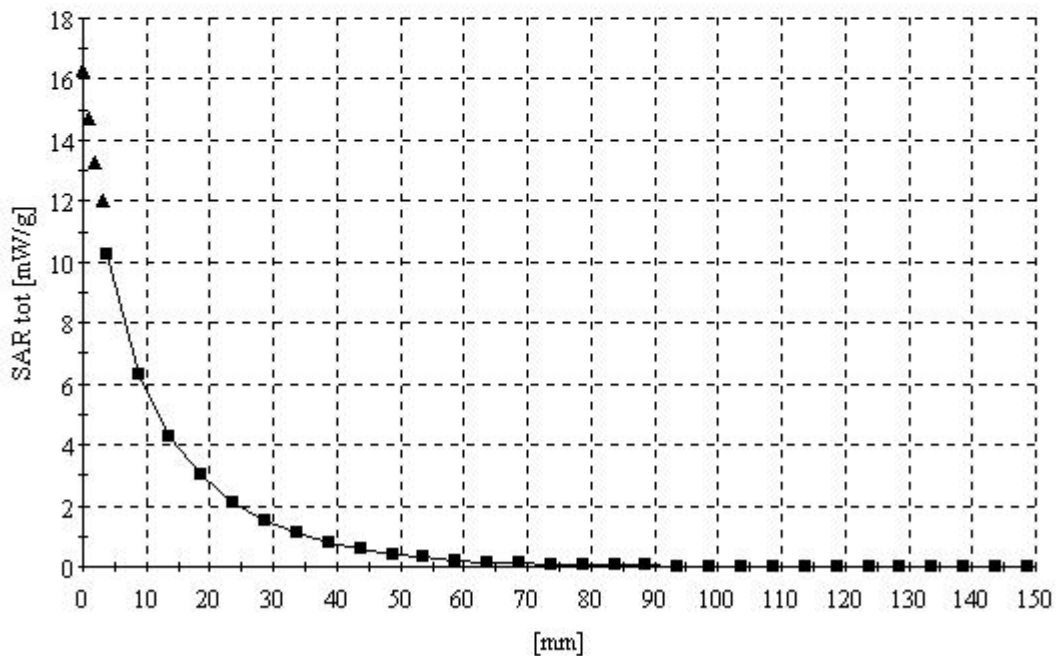
Comment:
835MHz Brain Dipole Validation (D835V2/ S.N: 441)
Antenna Input Power: 30 dBm (1 W)
HCT Co., Ltd. Brain Tissue Simulating Liquid
Liquid Temperature: 21.3°C
Date Tested : November 20, 2004



Dipole 835 MHz

SAM I Phantom; Section; Position: ; Frequency: 835 MHz
Probe: ET3DV6 - SN1609; ConvF(6.63,6.63,6.63); Crest factor: 1.0; Brain 835 MHz: $s = 0.88$
 $\rho_{\text{mho/m}}$ $\epsilon_r = 42.4$ $r = 1.00$ g/cm^3
Z-Axis: $D_x = 0.0$, $D_y = 0.0$, $D_z = 5.0$

Comment:
835MHz Brain Dipole Validation (D835V2/ S.N: 441)
Antenna Input Power: 30 dBm (1 W)
HCT Co., Ltd. Brain Tissue Simulating Liquid
Liquid Temperature : 21.4°C
Date Tested : November 21, 2004



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: $s = 1.40$
 $\rho_{\text{ho/m}} e_r = 39.6$ $r = 1.00$ g/cm^3

:

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

Comment:

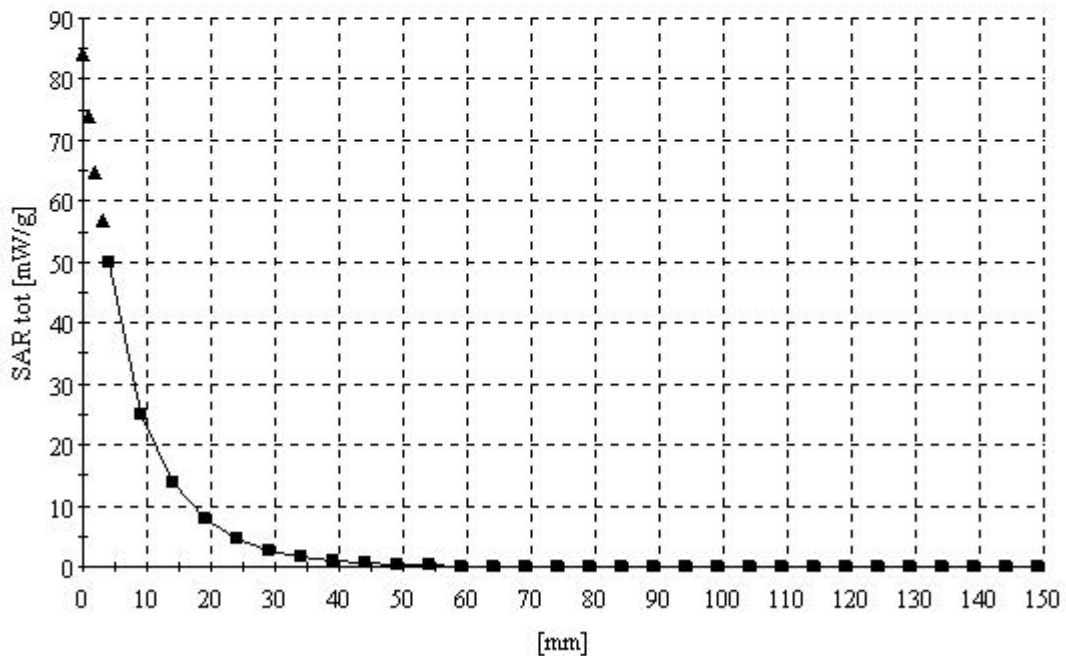
1900 MHz Brain Dipole Validation (D1900V2/ S.N: 5d032)

Antenna Input Power: 30 dBm (1 W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature : 21.5°C

Date Tested : November 22, 2004



■ Dielectric Parameter (835MHz Brain)

Title : TX-110C**SubTitle : AMPS BRAIN**

November 25, 2004 09:11 AM

Frequency	e'	e''
800.000000 MHz	42.6794	18.9341
805.000000 MHz	42.6219	18.9423
810.000000 MHz	42.5299	18.9386
815.000000 MHz	42.4874	18.9535
820.000000 MHz	42.3872	18.9686
825.000000 MHz	42.2846	18.8943
830.000000 MHz	42.2312	18.9709
835.000000 MHz	42.1483	18.9764
840.000000 MHz	42.0889	18.9859
845.000000 MHz	42.0221	18.9663
850.000000 MHz	41.9730	19.0042
855.000000 MHz	41.9260	19.0103
860.000000 MHz	41.8598	19.0528
865.000000 MHz	41.8885	18.9958
870.000000 MHz	41.8532	18.9986
875.000000 MHz	41.7907	19.0094
880.000000 MHz	41.7858	18.9729
885.000000 MHz	41.6476	18.9763
890.000000 MHz	41.6092	18.9405
895.000000 MHz	41.5742	18.8642
900.000000 MHz	41.5170	18.8448

■ Dielectric Parameter (835MHz Brain)

Title : TX-110C**SubTitle : AMPS BODY**

November 26, 2004 03:44 PM

Frequency	e'	e''
800.000000 MHz	56.3420	20.9985
805.000000 MHz	56.2819	20.9765
810.000000 MHz	56.1709	20.9057
815.000000 MHz	56.1763	20.9620
820.000000 MHz	56.0808	20.9260
825.000000 MHz	56.0224	20.9102
830.000000 MHz	55.8682	20.9030
835.000000 MHz	55.7464	20.8733
840.000000 MHz	55.6346	20.8075
845.000000 MHz	55.5782	20.7107
850.000000 MHz	55.4910	20.7031
855.000000 MHz	55.4432	20.6807
860.000000 MHz	55.3889	20.6394
865.000000 MHz	55.3894	20.6527
870.000000 MHz	55.3551	20.6578
875.000000 MHz	55.2662	20.6843
880.000000 MHz	55.1946	20.6828
885.000000 MHz	55.0712	20.5747
890.000000 MHz	55.0832	20.5514
895.000000 MHz	55.0141	20.6659
900.000000 MHz	54.9391	20.7611

■ Dielectric Parameter (1900MHz Brain)**Title : TX-110C****SubTitle : CDMA BRAIN****November 27, 2004 09:07 AM**

Frequency	e'	e''
800.000000 MHz	42.9433	18.9046
805.000000 MHz	42.8799	18.9356
810.000000 MHz	42.7454	18.9000
815.000000 MHz	42.6790	18.9105
820.000000 MHz	42.6214	18.9667
825.000000 MHz	42.5131	18.9890
830.000000 MHz	42.4698	19.0300
835.000000 MHz	42.3970	19.0738
840.000000 MHz	42.2603	19.0730
845.000000 MHz	42.2894	19.1709
850.000000 MHz	42.2281	19.1692
855.000000 MHz	42.1789	19.2055
860.000000 MHz	42.1212	19.2441
865.000000 MHz	42.1072	19.2184
870.000000 MHz	42.0507	19.1850
875.000000 MHz	42.0555	19.1846
880.000000 MHz	41.9721	19.1750
885.000000 MHz	41.9277	19.1239
890.000000 MHz	41.9175	19.0681
895.000000 MHz	41.8381	19.0136
900.000000 MHz	41.7725	18.9360

■ Dielectric Parameter (835MHz Muscle)

Title : TX-110C**SubTitle : CDMA BODY**

November 27, 2004 04:11 PM

Frequency	e'	e''
800.000000 MHz	56.2721	20.9325
805.000000 MHz	56.2223	20.9074
810.000000 MHz	56.1462	20.8695
815.000000 MHz	56.1640	20.8988
820.000000 MHz	56.0408	20.8791
825.000000 MHz	55.9574	20.8116
830.000000 MHz	55.8291	20.8288
835.000000 MHz	55.7498	20.7945
840.000000 MHz	55.6475	20.7254
845.000000 MHz	55.5585	20.6304
850.000000 MHz	55.5321	20.6108
855.000000 MHz	55.4481	20.5809
860.000000 MHz	55.3874	20.6075
865.000000 MHz	55.4126	20.5465
870.000000 MHz	55.3093	20.5683
875.000000 MHz	55.2584	20.5964
880.000000 MHz	55.1544	20.6081
885.000000 MHz	55.0139	20.4437
890.000000 MHz	54.9940	20.5131
895.000000 MHz	54.9886	20.6024
900.000000 MHz	54.8973	20.6835

■ Dielectric Parameter (835MHz Muscle)**Title : TX-110C****SubTitle : PCS BRAIN**

November 29, 2004 09:21 AM

Frequency	e'	e''
1.800000000 GHz	40.9202	12.9062
1.810000000 GHz	40.8404	12.9564
1.820000000 GHz	40.8430	12.9943
1.830000000 GHz	40.7731	13.0599
1.840000000 GHz	40.7454	13.0985
1.850000000 GHz	40.7251	13.1415
1.860000000 GHz	40.6974	13.1618
1.870000000 GHz	40.6693	13.1703
1.880000000 GHz	40.5917	13.1751
1.890000000 GHz	40.5233	13.2013
1.900000000 GHz	40.4076	13.1991
1.910000000 GHz	40.3362	13.2074
1.920000000 GHz	40.2548	13.2348
1.930000000 GHz	40.1649	13.2564
1.940000000 GHz	40.1360	13.3002
1.950000000 GHz	40.0683	13.3641
1.960000000 GHz	40.0728	13.4359
1.970000000 GHz	40.0385	13.4922
1.980000000 GHz	40.0254	13.5252
1.990000000 GHz	40.0266	13.5514
2.000000000 GHz	39.9896	13.5506

■ Dielectric Parameter (1900MHz Muscle)

Title : TX-110C**SubTitle : PCS BODY**

November 29, 2004 04:33 PM

Frequency	e'	e''
1.800000000 GHz	51.6609	12.9063
1.806666667 GHz	51.6538	12.9434
1.813333333 GHz	51.6332	13.0342
1.820000000 GHz	51.6094	13.0783
1.826666667 GHz	51.5889	13.1373
1.833333333 GHz	51.5896	13.1745
1.840000000 GHz	51.5605	13.2374
1.846666667 GHz	51.5389	13.3363
1.853333333 GHz	51.5293	13.4353
1.860000000 GHz	51.5086	13.4876
1.866666667 GHz	51.4886	13.5676
1.873333333 GHz	51.4775	13.6363
1.880000000 GHz	51.4507	13.7542
1.886666667 GHz	51.4517	13.8299
1.893333333 GHz	51.3990	13.8754
1.900000000 GHz	51.3595	13.9307
1.906666667 GHz	51.3918	14.0495
1.913333333 GHz	51.3673	14.1270
1.920000000 GHz	51.2931	14.1713
1.926666667 GHz	51.2707	14.2013
1.933333333 GHz	51.3010	14.2652
1.940000000 GHz	51.2685	14.3328
1.946666667 GHz	51.2630	14.3937
1.953333333 GHz	51.2015	14.4349
1.960000000 GHz	51.1378	14.4609