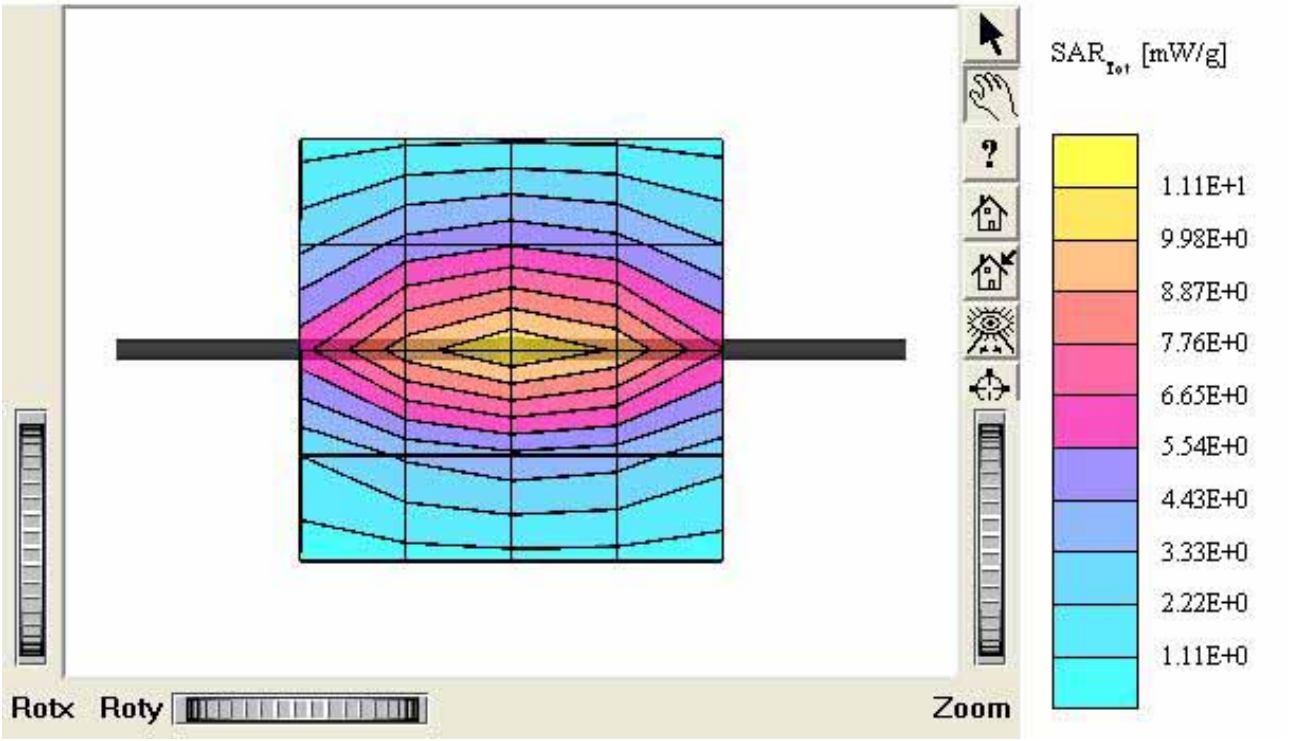
ATTACHMENT Q – DIPOLE VALIDATION

■ Validation Data (835MHz Head)

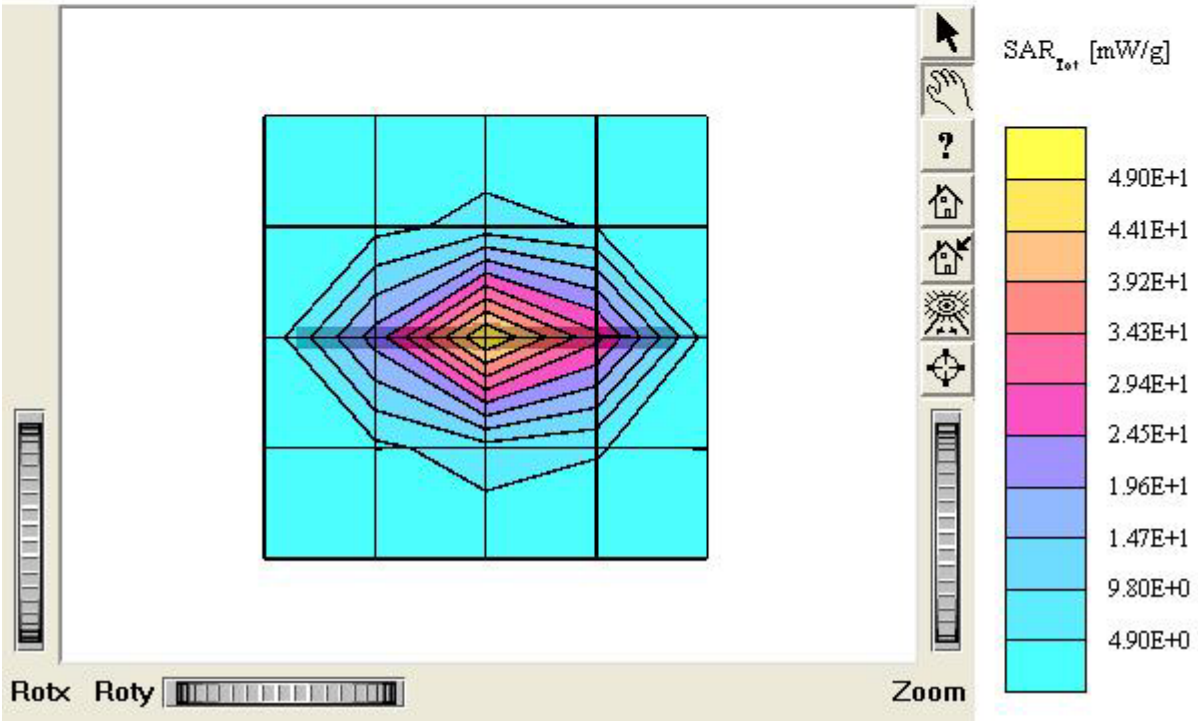
Dipole 835 MHz
SAM I Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz
Probe: ET3DV6 - SN1609; ConvF(6.63,6.63,6.63); Crest factor: 1.0; Brain 835 MHz: σ = 0.88 mho/m ε_r = 42.0 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 10.0 mW/g ± 0.18 dB, SAR (10g): 6.43 mW/g ± 0.15 dB
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.08 dB
Comment :
835 MHz Brain Dipole Validation (D835V2/ S.N: 441)
Antenna Input Power : 30 dBm (1W)
HCT Co., Ltd. Brain Tissue Simulating Liquid
Liquid Temperature: 21.8℃
Date Tested : August 09, 2005



■ Validation Data (1900MHz Head)

Dipole 1900 MHz

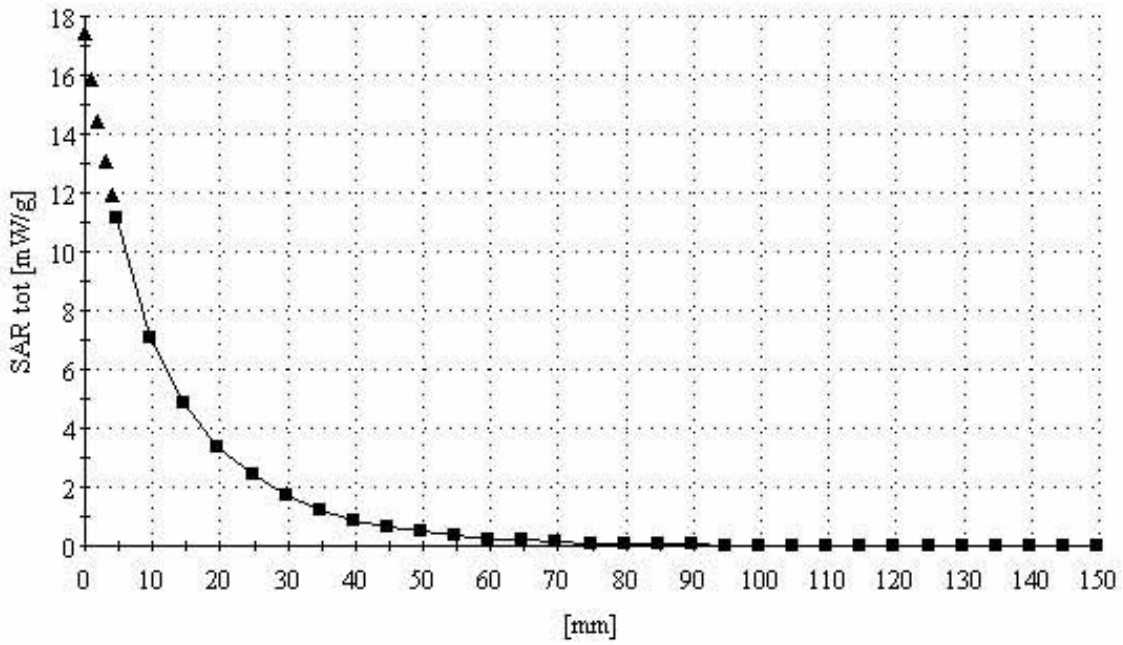
SAM II Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz
Probe: ET3DV6 - SN1609; ConvF(5.34,5.34,5.34); Crest factor: 1.0; Head 1900 MHz: σ = 1.44 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 40.5 mW/g, SAR (10g): 20.2 mW/g
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
Powerdrift: -0.07 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: 21.8℃
Date Tested : August 09, 2005



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: σ = 0.88 mho/m ε_r = 42.0 ρ = 1.00 g/cm^3
:
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0

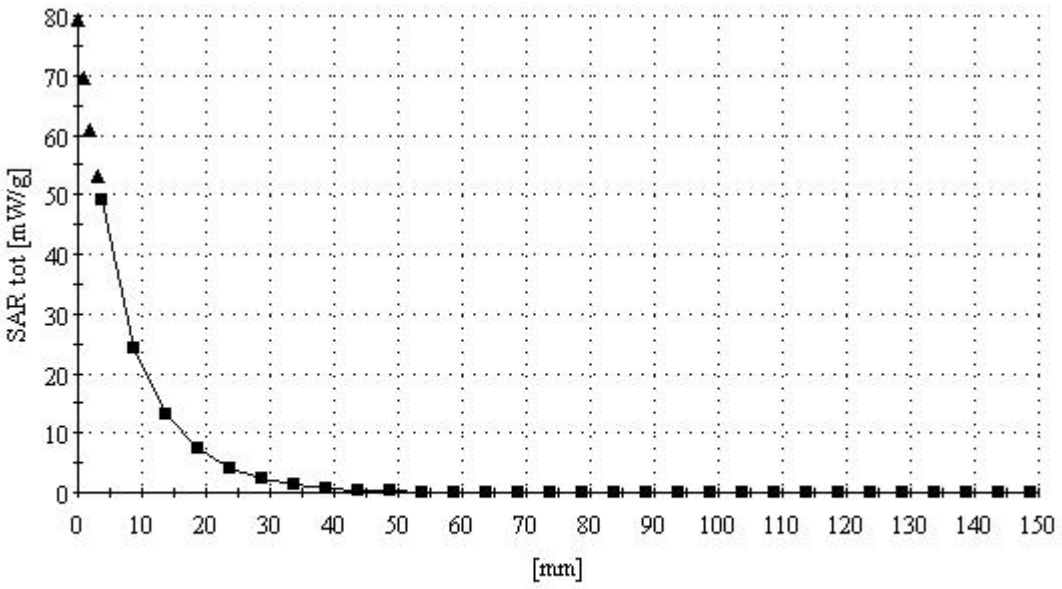
Comment:
835 MHz Brain Dipole Validation (D835V2/ S.N: 441)
Antenna Input Power : 30 dBm (1W)
HCT Co., Ltd. Brain Tissue Simulating Liquid
Liquid Temperature: 21.8℃
Date Tested : August 09, 2005



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; Head 1900 MHz: σ = 1.44 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
:
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0

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: 21.8℃
Date Tested : August 09, 2005



■ Dielectric Parameter (850MHz Head)

Title : EZ300

SubTitle : GSM850 Head

August 09, 2005 09:53 AM

Frequency	e'	e''
800.000000 MHz	42.4983	19.0275
805.000000 MHz	42.4793	19.0142
810.000000 MHz	42.3937	19.0303
815.000000 MHz	42.3437	19.0151
820.000000 MHz	42.2855	18.9864
825.000000 MHz	42.2470	19.0057
830.000000 MHz	42.1306	18.9888
835.000000 MHz	42.0345	18.9456
840.000000 MHz	41.9466	18.8905
845.000000 MHz	41.8421	18.8825
850.000000 MHz	41.7704	18.8759
855.000000 MHz	41.6929	18.8095
860.000000 MHz	41.6584	18.7828
865.000000 MHz	41.5548	18.7969
870.000000 MHz	41.4620	18.8080
875.000000 MHz	41.3421	18.7565
880.000000 MHz	41.3320	18.7492
885.000000 MHz	41.2026	18.7770
890.000000 MHz	41.1028	18.7814
895.000000 MHz	41.0162	18.7920
900.000000 MHz	40.9772	18.7592

■ Dielectric Parameter (1900MHz Head)

Title : EZ300
SubTitle : GSM1900 Head
August 09, 2005 10:43 AM

Frequency	e'	e''
1.800000000 GHz	38.7758	13.2150
1.810000000 GHz	38.7101	13.3030
1.820000000 GHz	38.6706	13.4172
1.830000000 GHz	38.6663	13.5671
1.840000000 GHz	38.6861	13.7139
1.850000000 GHz	38.7644	13.8156
1.860000000 GHz	38.7711	13.9002
1.870000000 GHz	38.7874	13.8857
1.880000000 GHz	38.7908	13.8493
1.890000000 GHz	38.7272	13.7566
1.900000000 GHz	38.6049	13.6688
1.910000000 GHz	38.4896	13.6194
1.920000000 GHz	38.3274	13.5916
1.930000000 GHz	38.2502	13.6462
1.940000000 GHz	38.1638	13.7303
1.950000000 GHz	38.1231	13.8381
1.960000000 GHz	38.1712	13.9916
1.970000000 GHz	38.2405	14.1251
1.980000000 GHz	38.3109	14.2075
1.990000000 GHz	38.3178	14.2165
2.000000000 GHz	38.2912	14.1948

■ Dielectric Parameter (850MHz Body)

Title : EZ300

SubTitle : GSM850 Body

August 09, 2005 01:15 PM

Frequency	e'	e''
800.000000 MHz	54.3836	20.8819
805.000000 MHz	54.3508	20.8804
810.000000 MHz	54.3625	20.8742
815.000000 MHz	54.2746	20.8699
820.000000 MHz	54.2496	20.8655
825.000000 MHz	54.1482	20.8776
830.000000 MHz	54.1626	20.9142
835.000000 MHz	54.1248	20.8811
840.000000 MHz	54.0828	20.8937
845.000000 MHz	54.1005	20.9168
850.000000 MHz	54.0723	20.9021
855.000000 MHz	54.0365	20.9227
860.000000 MHz	54.0383	20.8966
865.000000 MHz	53.9851	20.8376
870.000000 MHz	53.9253	20.8994
875.000000 MHz	53.8758	20.8450
880.000000 MHz	53.7981	20.8391
885.000000 MHz	53.7396	20.7838
890.000000 MHz	53.6426	20.7494
895.000000 MHz	53.6209	20.6496
900.000000 MHz	53.4873	20.6362

■ Dielectric Parameter (1900MHz Body)

Title : EZ300
SubTitle : GSM1900 Body
August 09, 2005 03:24 PM

Frequency	e'	e''
1.800000000 GHz	52.1989	13.7473
1.810000000 GHz	52.1637	13.8189
1.820000000 GHz	52.1334	13.8934
1.830000000 GHz	52.0736	13.9433
1.840000000 GHz	52.0966	13.9829
1.850000000 GHz	52.0319	14.0306
1.860000000 GHz	51.9726	14.0776
1.870000000 GHz	51.8886	14.1146
1.880000000 GHz	51.8284	14.1600
1.890000000 GHz	51.7232	14.2244
1.900000000 GHz	51.6662	14.2646
1.910000000 GHz	51.6229	14.3535
1.920000000 GHz	51.5986	14.3937
1.930000000 GHz	51.5699	14.4701
1.940000000 GHz	51.5501	14.5459
1.950000000 GHz	51.5422	14.5895
1.960000000 GHz	51.4964	14.6361
1.970000000 GHz	51.4652	14.6732
1.980000000 GHz	51.4455	14.6786
1.990000000 GHz	51.3544	14.7048
2.000000000 GHz	51.2790	14.7420