

## APPENDIX D – DIPOLE VALIDATION PLOTS

## Dipole 450 MHz

SAM I Phantom; Flat Section; Position: (90°,90°); Frequency: 450 MHz

Probe: ET3DV6 - SN1609; ConvF(7.69,7.69,7.69); Crest factor: 1.0; Brain 450 MHz:  $s = 0.86$  $\rho/m_e = 43.8$   $r = 1.00$  g/cm<sup>3</sup>Cubes (2): SAR (1g): 4.62 mW/g  $\pm 0.01$  dB, SAR (10g): 3.08 mW/g  $\pm 0.00$  dB

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

Powerdrift: 0.03 dB

Comment:

Dipole Validation (D450V2/ S.N: 1007)

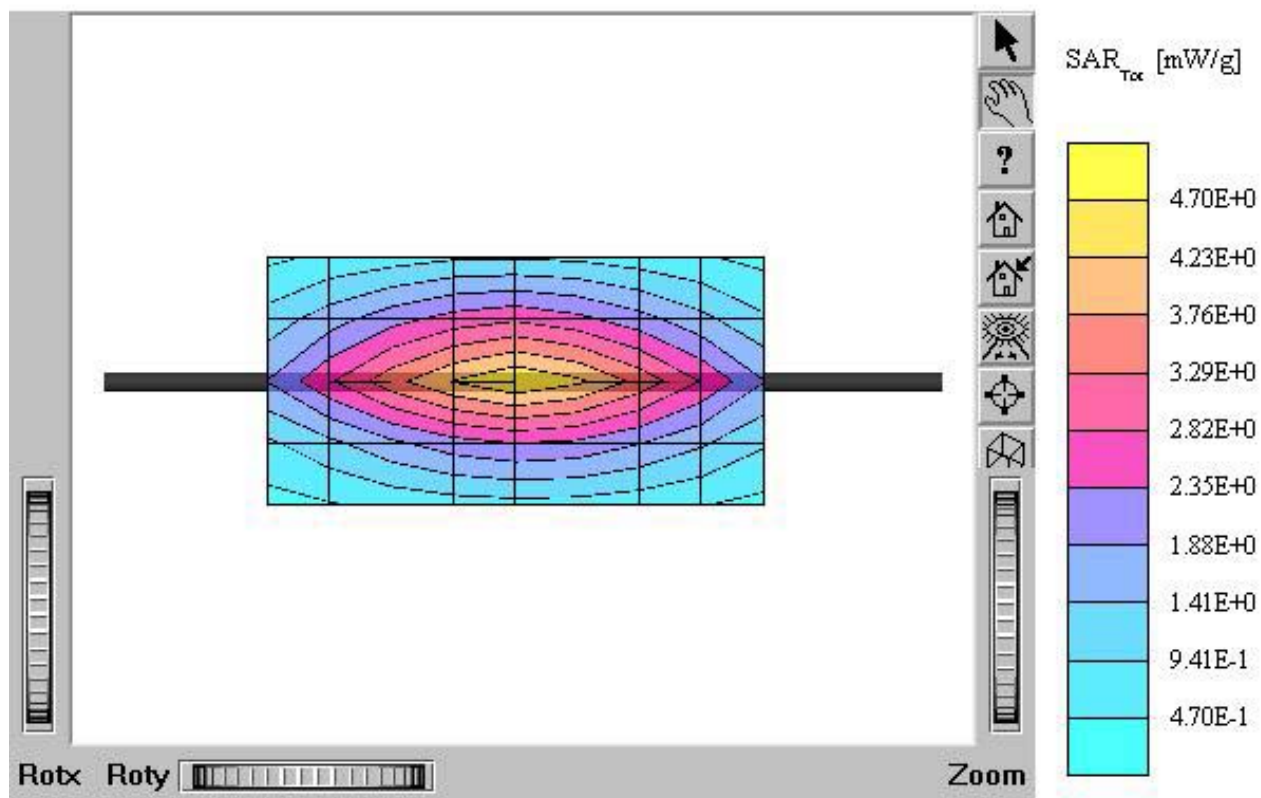
450MHz Brain

Antenna Input Power: 30dBm (1 W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature : 21.5 °C

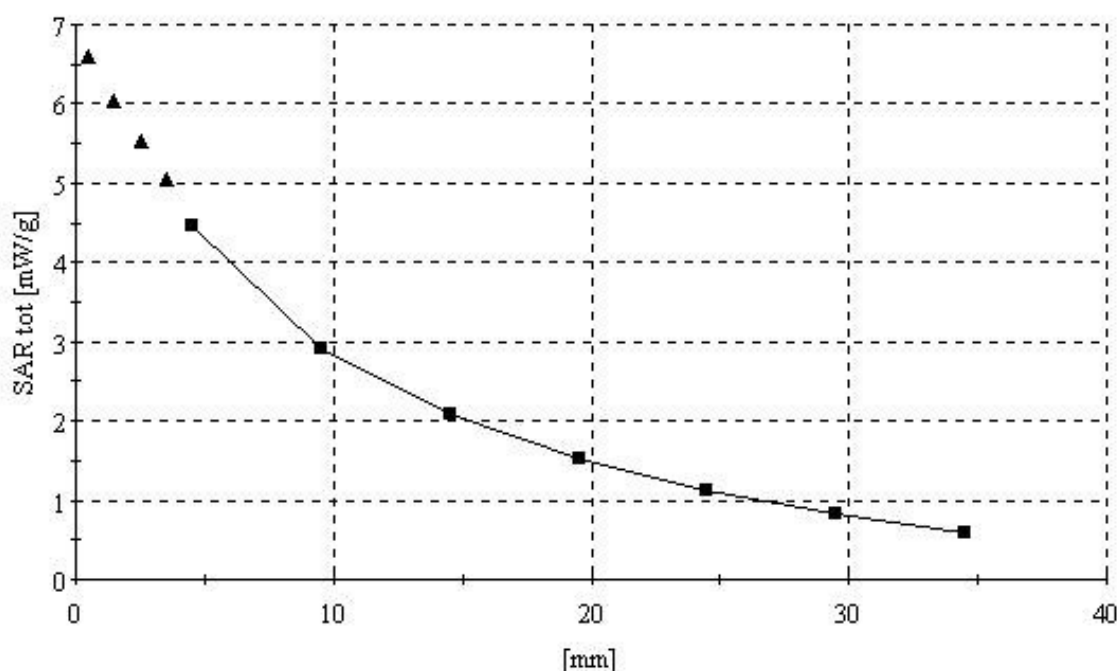
Date Tested : January 19, 2005



## Dipole 450 MHz

SAM I Phantom; Flat Section; Position: (90°,90°); Frequency: 450 MHz  
Probe: ET3DV6 - SN1609; ConvF(7.69,7.69,7.69); Crest factor: 1.0; Brain 450 MHz:  $s = 0.86$   
 $\rho = 43.8$  g/cm<sup>3</sup>  
Cubes (2): SAR (1g):  $4.62 \text{ mW/g} \pm 0.01 \text{ dB}$ , SAR (10g):  $3.08 \text{ mW/g} \pm 0.00 \text{ dB}$   
Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Comment:  
Dipole Validation (D450V2/ S.N: 1007)  
450MHz Brain  
Antenna Input Power: 30dBm (1 W)  
HCT Co., Ltd. Brain Tissue Simulating Liquid  
Liquid Temperature : 21.5 °C  
Date Tested : January 19, 2005



# Title : GXT-500

## SubTitle : 450MHz Brain

January 19, 2005 09:05 AM

| Frequency      | e'      | e''     |
|----------------|---------|---------|
| 400.000000 MHz | 45.0934 | 36.7330 |
| 405.000000 MHz | 45.0578 | 36.5964 |
| 410.000000 MHz | 44.8756 | 36.1470 |
| 415.000000 MHz | 44.7614 | 36.0016 |
| 420.000000 MHz | 44.5615 | 35.6629 |
| 425.000000 MHz | 44.5221 | 35.4467 |
| 430.000000 MHz | 44.3313 | 35.2582 |
| 435.000000 MHz | 44.1586 | 35.0331 |
| 440.000000 MHz | 44.0420 | 34.6518 |
| 445.000000 MHz | 44.0053 | 34.5316 |
| 450.000000 MHz | 43.8741 | 34.2787 |
| 455.000000 MHz | 43.8073 | 34.2998 |
| 460.000000 MHz | 43.6792 | 34.0364 |
| 465.000000 MHz | 43.6069 | 33.8789 |
| 470.000000 MHz | 43.5218 | 33.7990 |
| 475.000000 MHz | 43.5612 | 33.5934 |
| 480.000000 MHz | 43.5115 | 33.4414 |
| 485.000000 MHz | 43.3782 | 33.3063 |
| 490.000000 MHz | 43.4422 | 33.0890 |
| 495.000000 MHz | 43.3855 | 32.8784 |
| 500.000000 MHz | 43.4611 | 32.8366 |

# Title : GXT-500

## SubTitle : 450MHz Body

January 19, 2005 02:20 PM

| Frequency      | e'      | e''     |
|----------------|---------|---------|
| 400.000000 MHz | 55.7160 | 40.3303 |
| 405.000000 MHz | 55.6889 | 40.1142 |
| 410.000000 MHz | 55.5493 | 39.6729 |
| 415.000000 MHz | 55.4895 | 39.4334 |
| 420.000000 MHz | 55.4881 | 39.0050 |
| 425.000000 MHz | 55.4102 | 38.8212 |
| 430.000000 MHz | 55.2435 | 38.5784 |
| 435.000000 MHz | 55.0969 | 38.3180 |
| 440.000000 MHz | 54.9890 | 37.9389 |
| 445.000000 MHz | 55.0059 | 37.6984 |
| 450.000000 MHz | 54.9903 | 37.3919 |
| 455.000000 MHz | 54.9135 | 37.2550 |
| 460.000000 MHz | 54.8934 | 37.0157 |
| 465.000000 MHz | 54.8730 | 36.8644 |
| 470.000000 MHz | 54.7037 | 36.7462 |
| 475.000000 MHz | 54.5083 | 36.4813 |
| 480.000000 MHz | 54.5202 | 36.1976 |
| 485.000000 MHz | 54.4031 | 36.0709 |
| 490.000000 MHz | 54.3187 | 35.8336 |
| 495.000000 MHz | 54.1707 | 35.4562 |
| 500.000000 MHz | 54.3884 | 35.2341 |

## Dipole 450 MHz

SAM I Phantom; Flat Section; Position: (90°,90°); Frequency: 450 MHz

Probe: ET3DV6 - SN1609; ConvF(7.69,7.69,7.69); Crest factor: 1.0; Brain 450 MHz:  $\sigma = 0.86$  mho/m  $\epsilon_r = 43.9$

$\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 4.40 mW/g, SAR (10g): 2.90 mW/g, (Worst-case extrapolation)

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

Peak: 6.90 mW/g; Powerdrift: -0.03 dB

Comment :

Dipole Validation (D450V2/ S.N: 1007)

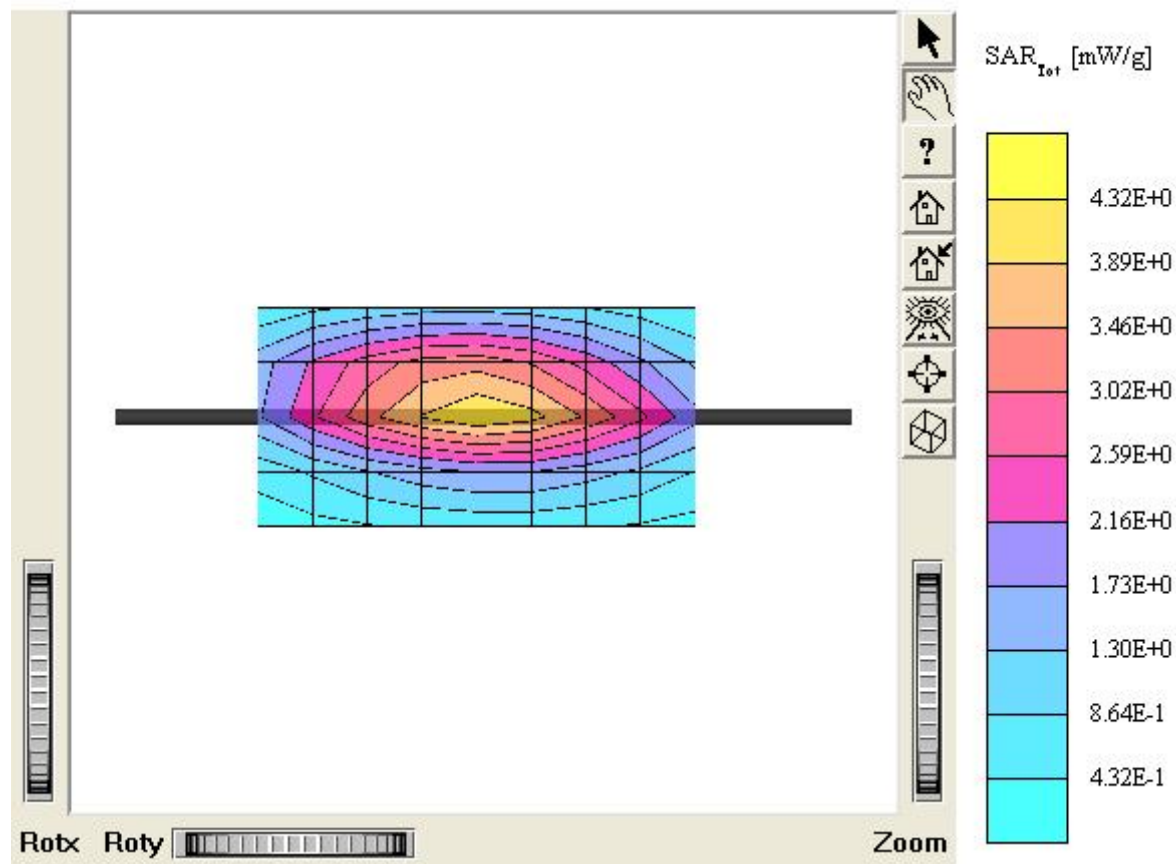
450MHz Brain

Antenna Input Power: 30dBm (1 W)

HCT Co., Ltd. Brain Tissue Simulating Liquid

Liquid Temperature : 21.5 °C

Date Tested : February 15, 2005



**Title : GXT-500**  
**SubTitle : 450MHz Brain**  
February 15, 2005 09:25 AM

| Frequency      | e'      | e''     |
|----------------|---------|---------|
| 400.000000 MHz | 45.0670 | 36.6950 |
| 405.000000 MHz | 44.9360 | 36.4693 |
| 410.000000 MHz | 44.9912 | 36.0994 |
| 415.000000 MHz | 44.6875 | 35.9115 |
| 420.000000 MHz | 44.5644 | 35.6824 |
| 425.000000 MHz | 44.4969 | 35.4109 |
| 430.000000 MHz | 44.3285 | 35.2390 |
| 435.000000 MHz | 44.0772 | 35.0068 |
| 440.000000 MHz | 43.9859 | 34.6604 |
| 445.000000 MHz | 43.9938 | 34.4576 |
| 450.000000 MHz | 43.8867 | 34.2393 |
| 455.000000 MHz | 43.8472 | 34.2006 |
| 460.000000 MHz | 43.7359 | 34.0457 |
| 465.000000 MHz | 43.6189 | 33.8406 |
| 470.000000 MHz | 43.4529 | 33.8192 |
| 475.000000 MHz | 43.5641 | 33.6107 |
| 480.000000 MHz | 43.5230 | 33.4041 |
| 485.000000 MHz | 43.3981 | 33.3205 |
| 490.000000 MHz | 43.4900 | 33.0635 |
| 495.000000 MHz | 43.4104 | 32.8225 |
| 500.000000 MHz | 43.4303 | 32.7566 |