

APPENDIX D – DIPOLE VALIDATION PLOTS

Test Laboratory: HCT CO., LTD
Liquid Temperature: 21.2 °C
Ambient Temperature: 21.5 °C
Test Date: Mar.13, 2008

DUT: Dipole 450 MHz; Type: D450V2; Serial: D450V2 – SN:1007

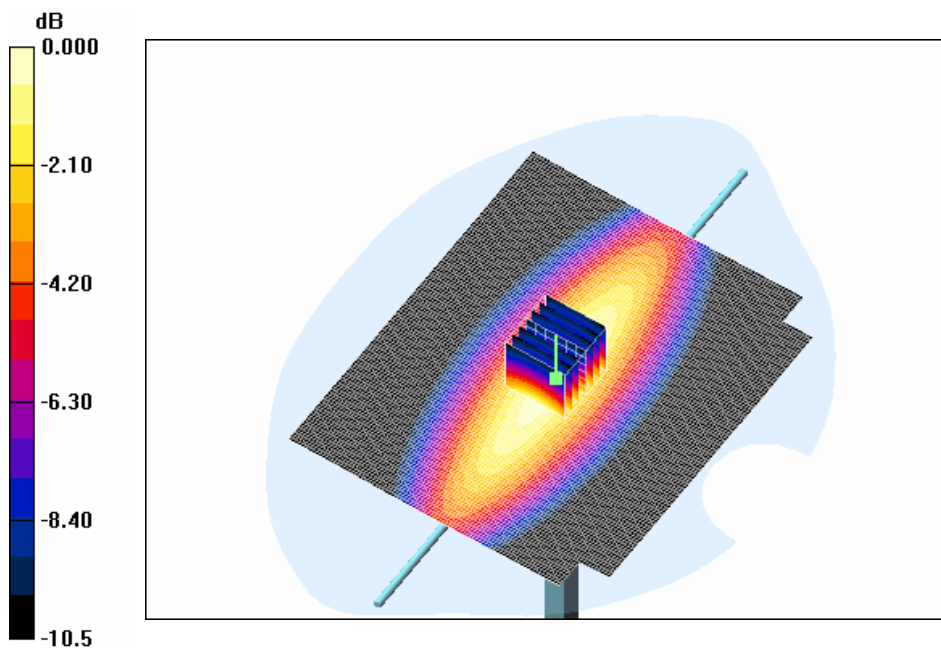
Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.849 \text{ mho/m}$; $\epsilon_r = 45.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 176

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(7.25, 7.25, 7.25); Calibrated: 2007-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-09-13
- Phantom: SAM 450/835/900 MHz; Type: SAM

Validatoin 450 MHz/Area Scan (101x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 5.76 mW/g

Validatoin 450 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 84.3 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 8.99 W/kg
SAR(1 g) = 5.33 mW/g; SAR(10 g) = 3.35 mW/g
Maximum value of SAR (measured) = 5.72 mW/g



0 dB = 5.72mW/g

Title : GXT775**SubTitle : 450MHz Head**

Frequency	e'	e''
400.000000 MHz	47.1727	36.7834
405.000000 MHz	46.9028	36.3437
410.000000 MHz	46.7685	35.9559
415.000000 MHz	46.6437	35.6165
420.000000 MHz	46.2370	35.2488
425.000000 MHz	46.1188	34.9055
430.000000 MHz	46.0126	34.6269
435.000000 MHz	45.8369	34.3850
440.000000 MHz	45.7863	34.1862
445.000000 MHz	45.7061	34.1479
450.000000 MHz	45.5624	33.9336
455.000000 MHz	45.5092	33.9135
460.000000 MHz	45.4464	33.8220
465.000000 MHz	45.5041	33.7852
470.000000 MHz	45.4623	33.7474
475.000000 MHz	45.4777	33.7185
480.000000 MHz	45.3812	33.6029
485.000000 MHz	45.3267	33.4123
490.000000 MHz	45.2600	33.2448
495.000000 MHz	45.2148	33.0941
500.000000 MHz	45.1486	32.9157

Title : GXT775**SubTitle : 450MHz Body**

Frequency	e'	e''
400.000000 MHz	55.6381	41.2188
405.000000 MHz	55.5376	40.9219
410.000000 MHz	55.4536	40.4722
415.000000 MHz	55.3883	40.2358
420.000000 MHz	55.1978	39.9766
425.000000 MHz	55.1443	39.7793
430.000000 MHz	54.9771	39.6075
435.000000 MHz	54.6676	39.2887
440.000000 MHz	54.6255	39.0059
445.000000 MHz	54.5485	38.6385
450.000000 MHz	54.3804	38.3924
455.000000 MHz	54.3591	38.1992
460.000000 MHz	54.1149	37.9219
465.000000 MHz	54.0699	37.6863
470.000000 MHz	54.0708	37.3998
475.000000 MHz	54.0517	37.2869
480.000000 MHz	54.0671	37.1598
485.000000 MHz	54.0834	37.0344
490.000000 MHz	53.9065	37.0047
495.000000 MHz	53.7991	36.6970
500.000000 MHz	53.8110	36.6149