

APPENDIX D – DIPOLE VALIDATION PLOTS

Test Laboratory: HCT

450 Dipole Validation test: Input power(1W)
Liquid Temperature : 21.7 °C
Date Tested : February 27, 2007

DUT: Dipole 450 MHz; Type: D450V2; Serial: D450V2 - SN:1007
Program Name: Validation 450MHz

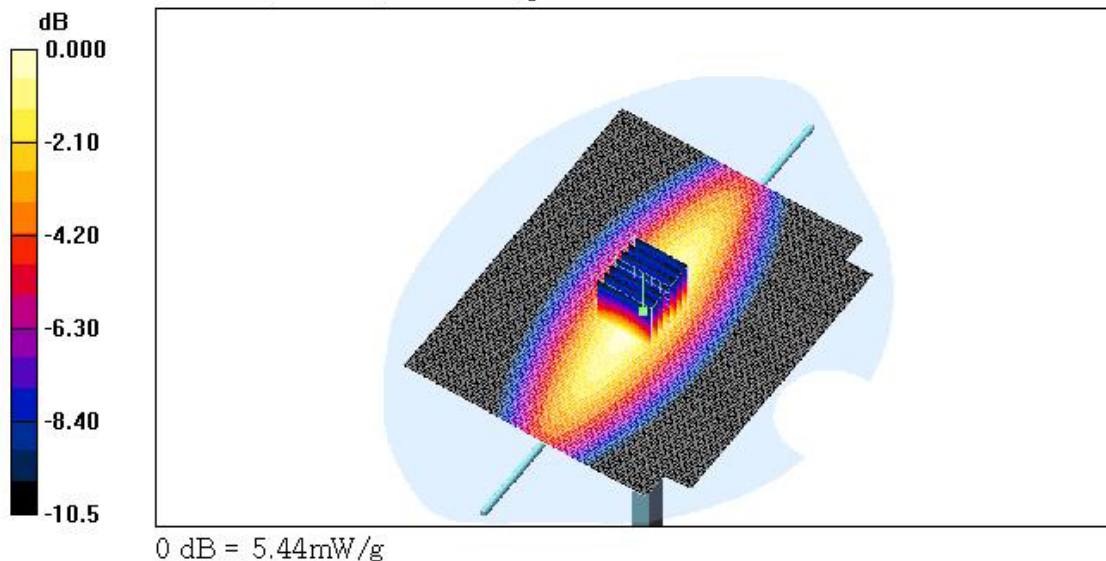
Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.868 \text{ mho/m}$; $\epsilon_r = 44.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(7.59, 7.59, 7.59); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2007-01-25
- Phantom: SAM 835/900 MHz; Type: SAM

Validatoin 450 MHz/Area Scan (101x121x1): Measurement grid: $\Delta x = 15\text{mm}$, $\Delta y = 15\text{mm}$
Maximum value of SAR (interpolated) = 5.47 mW/g

Validatoin 450 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $\Delta x = 5\text{mm}$, $\Delta y = 5\text{mm}$, $\Delta z = 5\text{mm}$
Reference Value = 81.2 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 8.57 W/kg
SAR(1 g) = 5.07 mW/g; SAR(10 g) = 3.18 mW/g
Maximum value of SAR (measured) = 5.44 mW/g



Title : GMRS1072

SubTitle : 450MHz(Head)

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Frequency	e'	e''
400.000000 MHz	45.5159	37.1954
405.000000 MHz	45.4005	36.9604
410.000000 MHz	45.3128	36.6861
415.000000 MHz	45.2649	36.4629
420.000000 MHz	45.0724	36.1364
425.000000 MHz	45.1032	35.9523
430.000000 MHz	45.0282	35.7194
435.000000 MHz	44.9082	35.4987
440.000000 MHz	44.7610	35.2106
445.000000 MHz	44.7461	35.0222
450.000000 MHz	44.6296	34.6658
455.000000 MHz	44.5451	34.4979
460.000000 MHz	44.5051	34.2528
465.000000 MHz	44.4545	34.0507
470.000000 MHz	44.3119	33.8860
475.000000 MHz	44.1408	33.6405
480.000000 MHz	44.1171	33.4641
485.000000 MHz	43.9922	33.3082
490.000000 MHz	43.8786	33.1017
495.000000 MHz	43.8092	32.8402
500.000000 MHz	43.7204	32.7577

Title : GMRS1072

SubTitle : 450MHz(Body)

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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