

APPENDIX D – DIPOLE VALIDATION PLOTS

Test Laboratory: HCT

450 Dipole Validation test: Input power(1W)
Liquid Temperature : 21.6℃
Date Tested : March 10, 2007

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

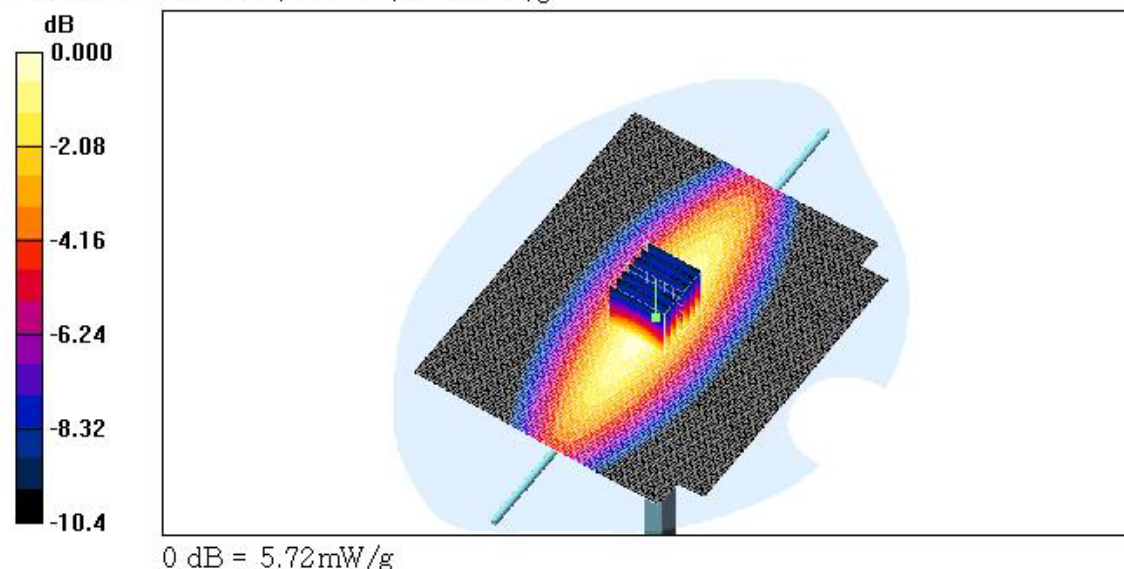
Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.854 \text{ mho/m}$; $\epsilon_r = 45.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2007-01-25
- Phantom: SAM 1800/1900 MHz; Type: SAM

Validatoin 450 MHz/Area Scan (101x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 5.80 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 = 85.4 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 8.43 W/kg
SAR(1 g) = 5.23 mW/g; SAR(10 g) = 3.4 mW/g
Maximum value of SAR (measured) = 5.72 mW/g



Title : GMRS672

SubTitle : 450MHz(Head)

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Frequency	e'	e''
400.000000 MHz	47.1994	36.8213
405.000000 MHz	46.9585	36.4387
410.000000 MHz	46.8060	36.1343
415.000000 MHz	46.7441	35.7425
420.000000 MHz	46.4038	35.4228
425.000000 MHz	46.2201	35.0478
430.000000 MHz	46.1441	34.8407
435.000000 MHz	45.9393	34.5427
440.000000 MHz	45.8849	34.3234
445.000000 MHz	45.7455	34.2742
450.000000 MHz	45.5922	34.1162
455.000000 MHz	45.4850	33.9918
460.000000 MHz	45.5061	33.8489
465.000000 MHz	45.4804	33.7527
470.000000 MHz	45.4317	33.7797
475.000000 MHz	45.3932	33.6435
480.000000 MHz	45.3783	33.5857
485.000000 MHz	45.2556	33.4071
490.000000 MHz	45.1895	33.2398
495.000000 MHz	45.2226	33.0409
500.000000 MHz	45.1439	32.9849

Title : GMRS672
SubTitle : 450MHz(Body)

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Frequency	e'	e''
400.000000 MHz	55.7804	39.1915
405.000000 MHz	55.7109	38.8272
410.000000 MHz	55.6866	38.5356
415.000000 MHz	55.7125	38.2921
420.000000 MHz	55.5891	38.1216
425.000000 MHz	55.5219	37.8039
430.000000 MHz	55.6285	37.5594
435.000000 MHz	55.5038	37.4025
440.000000 MHz	55.3989	37.0798
445.000000 MHz	55.2409	36.8225
450.000000 MHz	55.2651	36.5543
455.000000 MHz	55.1368	36.2834
460.000000 MHz	54.9940	36.1147
465.000000 MHz	54.9687	35.8705
470.000000 MHz	54.7417	35.5802
475.000000 MHz	54.6458	35.3787
480.000000 MHz	54.5232	35.1688
485.000000 MHz	54.4113	34.8718
490.000000 MHz	54.2843	34.6634
495.000000 MHz	54.2261	34.4796
500.000000 MHz	54.1383	34.3142