

## APPENDIX D – DIPOLE VALIDATION PLOTS

Test Laboratory: HCT

450 Dipole Validation test: Input power(1W)  
Liquid Temperature : 21.5℃  
Date Tested : March 5, 2007

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

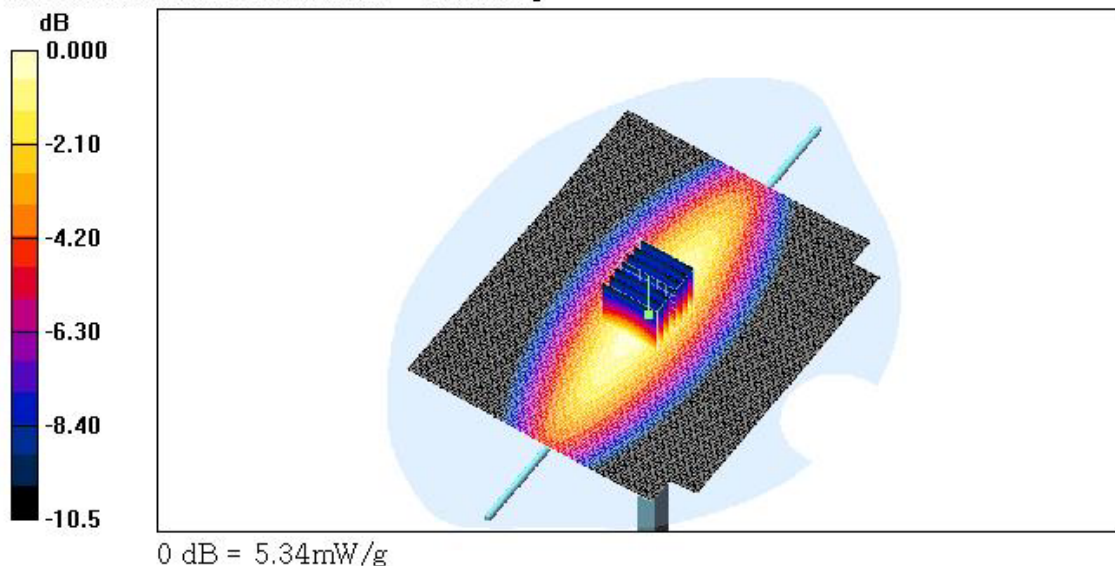
Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.853$  mho/m;  $\epsilon_r = 45.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

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 1800/1900 MHz; Type: SAM

**Validatoin 450 MHz/Area Scan (101x121x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm  
Maximum value of SAR (interpolated) = 5.37 mW/g

**Validatoin 450 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm  
Reference Value = 81.2 V/m; Power Drift = -0.053 dB  
Peak SAR (extrapolated) = 8.42 W/kg  
**SAR(1 g) = 4.98 mW/g; SAR(10 g) = 3.13 mW/g**  
Maximum value of SAR (measured) = 5.34 mW/g



Title : GMRS7015RC

SubTitle : 450MHz(Head)

March 05, 2007 09:31 AM

Frequency	e'	e''
400.000000 MHz	46.9997	36.7465
405.000000 MHz	46.7127	36.4551
410.000000 MHz	46.7467	36.2150
415.000000 MHz	46.6468	35.8991
420.000000 MHz	46.3139	35.6167
425.000000 MHz	46.2207	35.3048
430.000000 MHz	46.0406	35.0527
435.000000 MHz	45.8659	34.6898
440.000000 MHz	45.7289	34.4250
445.000000 MHz	45.6353	34.1783
450.000000 MHz	45.4707	34.0610
455.000000 MHz	45.4456	34.0911
460.000000 MHz	45.5538	33.9145
465.000000 MHz	45.5812	33.9181
470.000000 MHz	45.5269	33.8087
475.000000 MHz	45.5298	33.7096
480.000000 MHz	45.4561	33.6255
485.000000 MHz	45.2875	33.4894
490.000000 MHz	45.2232	33.2339
495.000000 MHz	45.2137	32.9908
500.000000 MHz	45.1847	32.9263

Title : GMRS7015RC

SubTitle : 450MHz(Body)

March 05, 2007 12:48 PM

Frequency	e'	e''
400.000000 MHz	56.7866	41.0677
405.000000 MHz	56.6428	40.7230
410.000000 MHz	56.6603	40.3883
415.000000 MHz	56.6276	40.1213
420.000000 MHz	56.6201	39.8756
425.000000 MHz	56.4749	39.4889
430.000000 MHz	56.5190	39.2948
435.000000 MHz	56.4223	39.0917
440.000000 MHz	56.3404	38.8019
445.000000 MHz	56.1323	38.5044
450.000000 MHz	56.1249	38.1834
455.000000 MHz	56.0929	37.9304
460.000000 MHz	55.9320	37.6897
465.000000 MHz	55.8825	37.4314
470.000000 MHz	55.7142	37.1750
475.000000 MHz	55.7186	36.9430
480.000000 MHz	55.4966	36.6268
485.000000 MHz	55.4413	36.3180
490.000000 MHz	55.3468	36.1567
495.000000 MHz	55.2888	35.9908
500.000000 MHz	55.1719	35.7097