

APPENDIX D – DIPOLE VALIDATION PLOTS

Test Laboratory: HCT

450 Dipole Validation test: Input power(1W)
Liquid Temperature : 22.5 °C
Date Tested : June 5, 2007

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

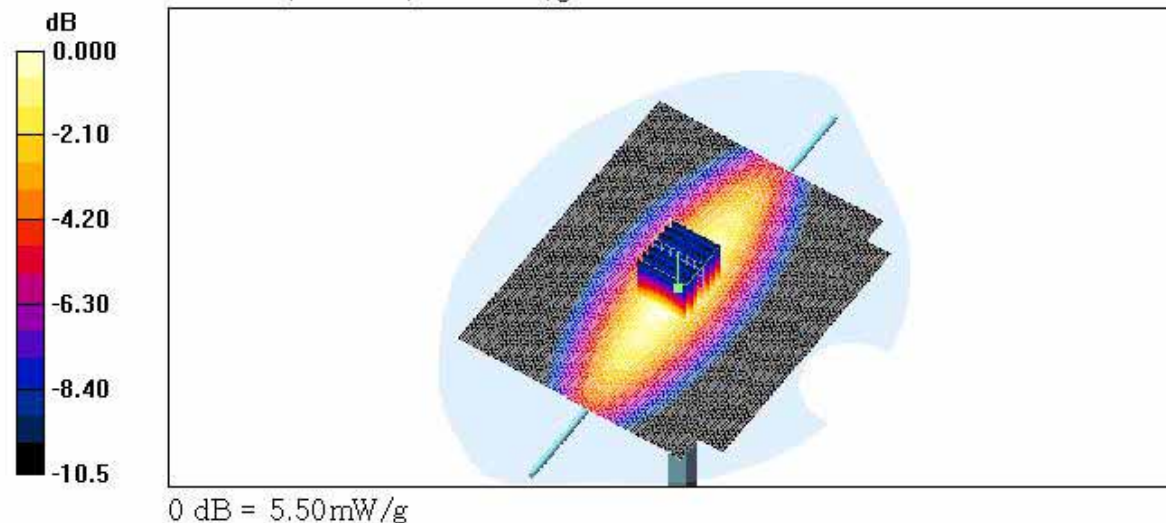
Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450$ MHz; $\sigma = 0.895$ mho/m; $\epsilon_r = 45.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

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: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (interpolated) = 5.49 mW/g

Validatoin 450 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 79.6 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 8.67 W/kg
SAR(1 g) = 5.09 mW/g; SAR(10 g) = 3.19 mW/g
Maximum value of SAR (measured) = 5.50 mW/g



Title :GMRS1072N

SubTitle :450MHz(Head)

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Frequency	e'	e''
400.000000 MHz	46.5892	38.3608
405.000000 MHz	46.4280	38.0849
410.000000 MHz	46.3346	37.8263
415.000000 MHz	46.2525	37.5619
420.000000 MHz	46.0763	37.1975
425.000000 MHz	45.8927	37.0220
430.000000 MHz	45.6384	36.7441
435.000000 MHz	45.5232	36.4516
440.000000 MHz	45.4278	36.2106
445.000000 MHz	45.2638	36.0051
450.000000 MHz	45.1056	35.7565
455.000000 MHz	44.9725	35.5282
460.000000 MHz	44.8217	35.2895
465.000000 MHz	44.7873	35.0735
470.000000 MHz	44.7469	34.8719
475.000000 MHz	44.6032	34.6916
480.000000 MHz	44.6488	34.5099
485.000000 MHz	44.3886	34.2954
490.000000 MHz	44.4307	34.0865
495.000000 MHz	44.3580	33.9183
500.000000 MHz	44.3846	33.7702

Title :GMRS1072N**SubTitle :450MHz(Body)**

June 05, 2007 01:40 PM

Frequency	e'	e''
400.000000 MHz	58.4721	41.6806
405.000000 MHz	58.4952	41.3547
410.000000 MHz	58.3617	40.9811
415.000000 MHz	58.3215	40.6502
420.000000 MHz	58.2809	40.3673
425.000000 MHz	58.2794	40.0724
430.000000 MHz	58.3385	39.8817
435.000000 MHz	58.2600	39.6022
440.000000 MHz	58.2331	39.2787
445.000000 MHz	58.0094	39.0408
450.000000 MHz	57.9610	38.6955
455.000000 MHz	57.8891	38.4191
460.000000 MHz	57.8336	38.1259
465.000000 MHz	57.7900	37.9293
470.000000 MHz	57.6242	37.6327
475.000000 MHz	57.5602	37.4124
480.000000 MHz	57.2856	37.0966
485.000000 MHz	57.2145	36.7435
490.000000 MHz	57.1043	36.4949
495.000000 MHz	57.0074	36.3367
500.000000 MHz	56.8897	36.1162