

APPENDIX D – DIPOLE VALIDATION PLOTS

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

Communication System: CW; Frequency: 450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.883 \text{ mho/m}$; $\epsilon_r = 44.3$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn466; Calibrated: 2007-01-25
- Phantom: SAM 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) = 5.36 mW/g

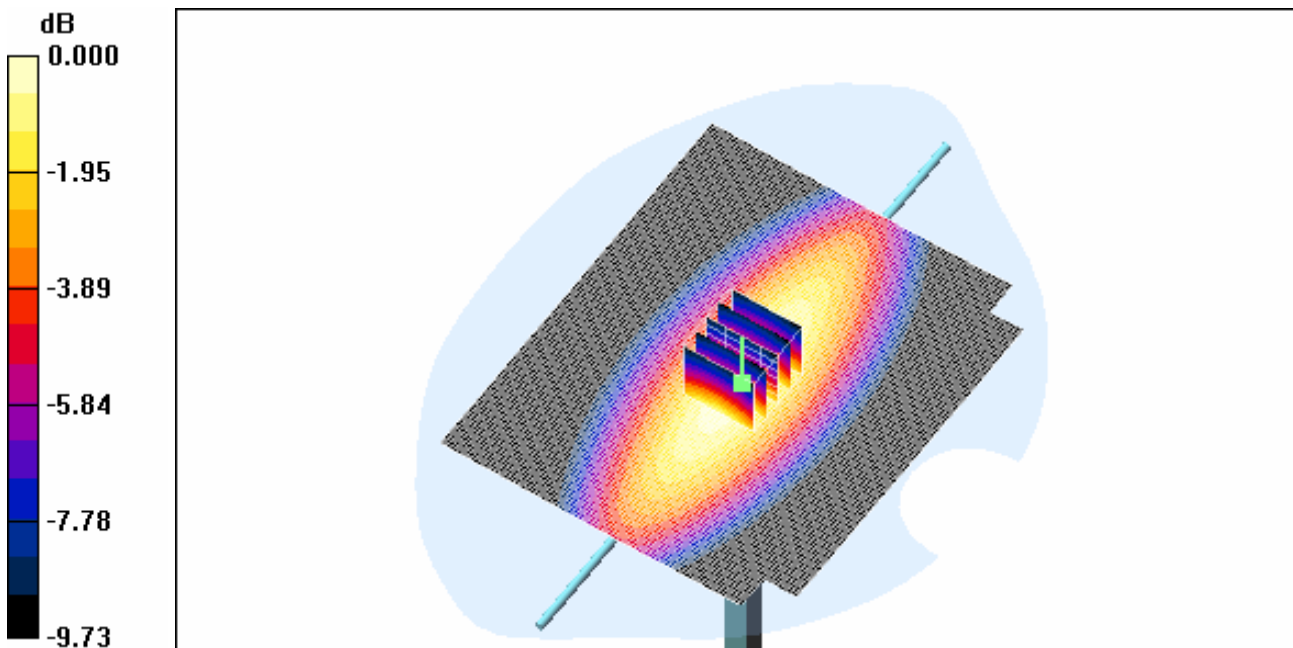
Validatoin 450 MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 79.7 V/m ; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 7.96 W/kg

SAR(1 g) = 5.07 mW/g ; SAR(10 g) = 3.37 mW/g

Maximum value of SAR (measured) = 5.41 mW/g



0 dB = 5.41 mW/g

Title: TR-450H**SubTitle: 450MHz(HEAD)**

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| Frequency | e' | e'' |
|----------------|---------|---------|
| 400.000000 MHz | 45.5643 | 37.9644 |
| 405.000000 MHz | 45.4319 | 37.6711 |
| 410.000000 MHz | 45.3549 | 37.3871 |
| 415.000000 MHz | 45.1866 | 37.0929 |
| 420.000000 MHz | 44.9809 | 36.8617 |
| 425.000000 MHz | 44.8806 | 36.6405 |
| 430.000000 MHz | 44.7922 | 36.2263 |
| 435.000000 MHz | 44.5835 | 36.0340 |
| 440.000000 MHz | 44.4563 | 35.7188 |
| 445.000000 MHz | 44.3497 | 35.5216 |
| 450.000000 MHz | 44.2528 | 35.2520 |
| 455.000000 MHz | 44.0944 | 35.0540 |
| 460.000000 MHz | 44.0449 | 34.8247 |
| 465.000000 MHz | 43.9880 | 34.6012 |
| 470.000000 MHz | 43.9253 | 34.4465 |
| 475.000000 MHz | 43.8153 | 34.2670 |
| 480.000000 MHz | 43.8072 | 34.0477 |
| 485.000000 MHz | 43.6489 | 33.8753 |
| 490.000000 MHz | 43.6804 | 33.6746 |
| 495.000000 MHz | 43.6228 | 33.5615 |
| 500.000000 MHz | 43.6191 | 33.3559 |

Title: TR-450H**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 |