

APPENDIX E

The Validation Measurements

835MHz Dipole Validation

DUT: Dipole 835 MHz; Serial: 4d014

Program Name: 835MHz Dipole Validation 2006.05.18

Procedure Name: 835MHz @ 250mW

Procedure Notes:

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(9.31, 9.31, 9.31); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

835MHz @ 250mW/Area Scan (51x51x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 2.64 mW/g

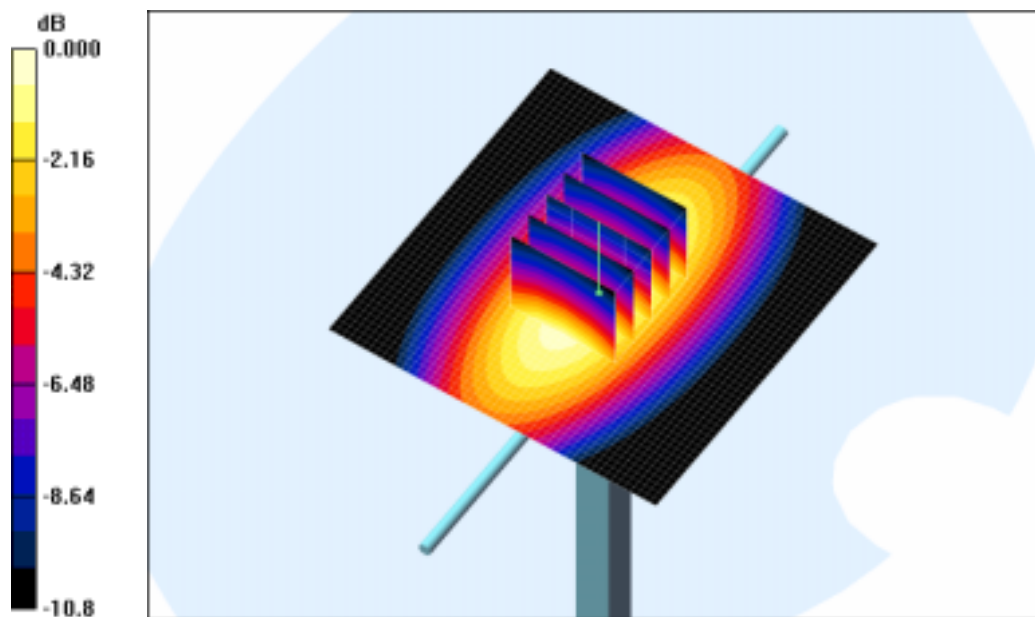
835MHz @ 250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.2 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 3.62 W/kg

SAR(1 g) = 2.44 mW/g

Maximum value of SAR (measured) = 2.64 mW/g



0 dB = 2.64mW/g

1900MHz Dipole Validation

DUT: Dipole 1900 MHz; Serial: 5d023

Program Name: 1900MHz Dipole Validation 2006.05.17

Procedure Name: 1900MHz

Procedure Notes:

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.04, 8.04, 8.04); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

1900MHz/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 16.0 mW/g

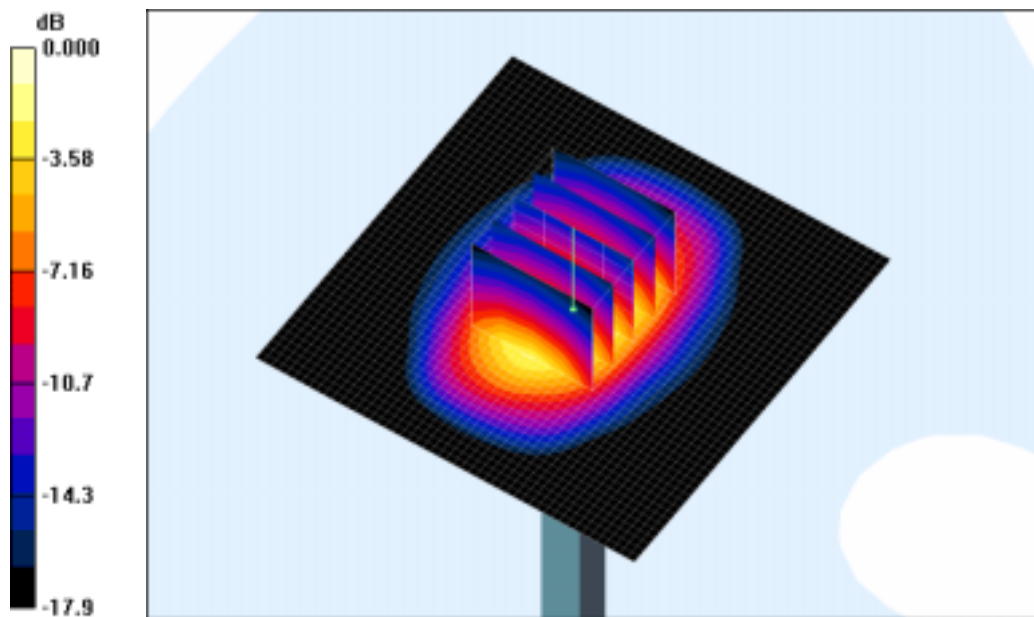
1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.4 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 19.1 W/kg

SAR(1 g) = 10.3 mW/g

Maximum value of SAR (measured) = 11.6 mW/g



0 dB = 11.6mW/g