

APPENDIX F

The Validation Measurements

835MHz Brain Dipole Validation

DUT: Dipole 835 MHz; Serial: 4d014

Program Name: 835MHz Dipole Validation 2005.07.01

Procedure Name: 835MHz @ 250mW

Procedure Notes:

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 40.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(9.24, 9.24, 9.24); Calibrated: 2004-12-15

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn468; Calibrated: 2004-12-07

- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 2.63 mW/g

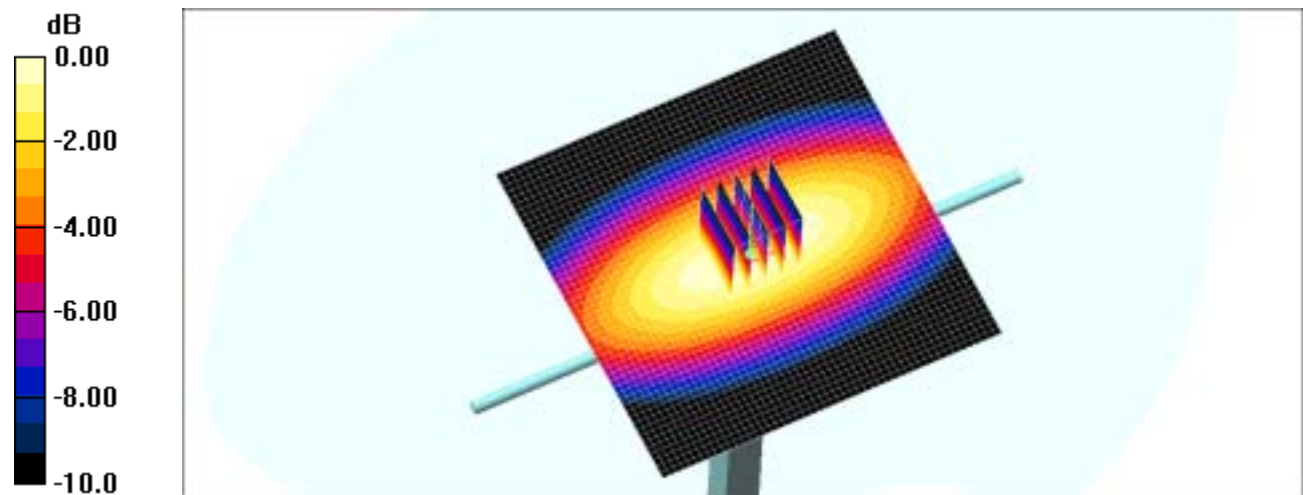
835MHz @ 250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.9 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 3.71 W/kg

SAR(1 g) = 2.45 mW/g

Maximum value of SAR (measured) = 2.65 mW/g



0 dB = 2.65mW/g

1900MHz Brain Dipole validation

DUT: Dipole 1900 MHz; Serial: 5d023

Program Name: 1900 Dipole Validation 2005.07.01

Procedure Name: 1900MHz @250mW

Procedure Notes:

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn468; Calibrated: 2004-12-07

- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

1900MHz @250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

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

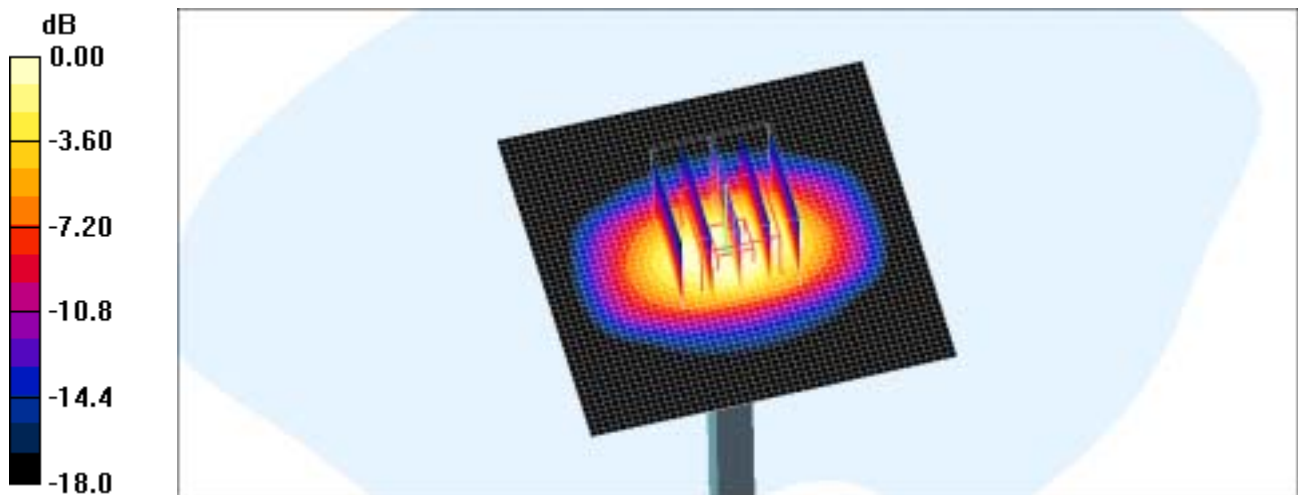
1900MHz @250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 91.2 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 18.6 W/kg

SAR(1 g) = 9.97 mW/g

Maximum value of SAR (measured) = 11.2 mW/g



0 dB = 11.2mW/g