

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

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

Medium: 835 Brain ( $\sigma = 0.93$  mho/m,  $\epsilon_r = 41.93$ ,  $\rho = 1000$  kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 08-08-2007; Ambient Temp: 23.5°C; Tissue Temp: 21.8°C

Probe: ES3DV2 - SN3022; ConvF(6.05, 6.05, 6.05); Calibrated: 9/20/2006

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/23/2007

Phantom: SAM Main; Type: SAM 4.0; Serial: TP-1114

Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

## 835 MHz Dipole Validation

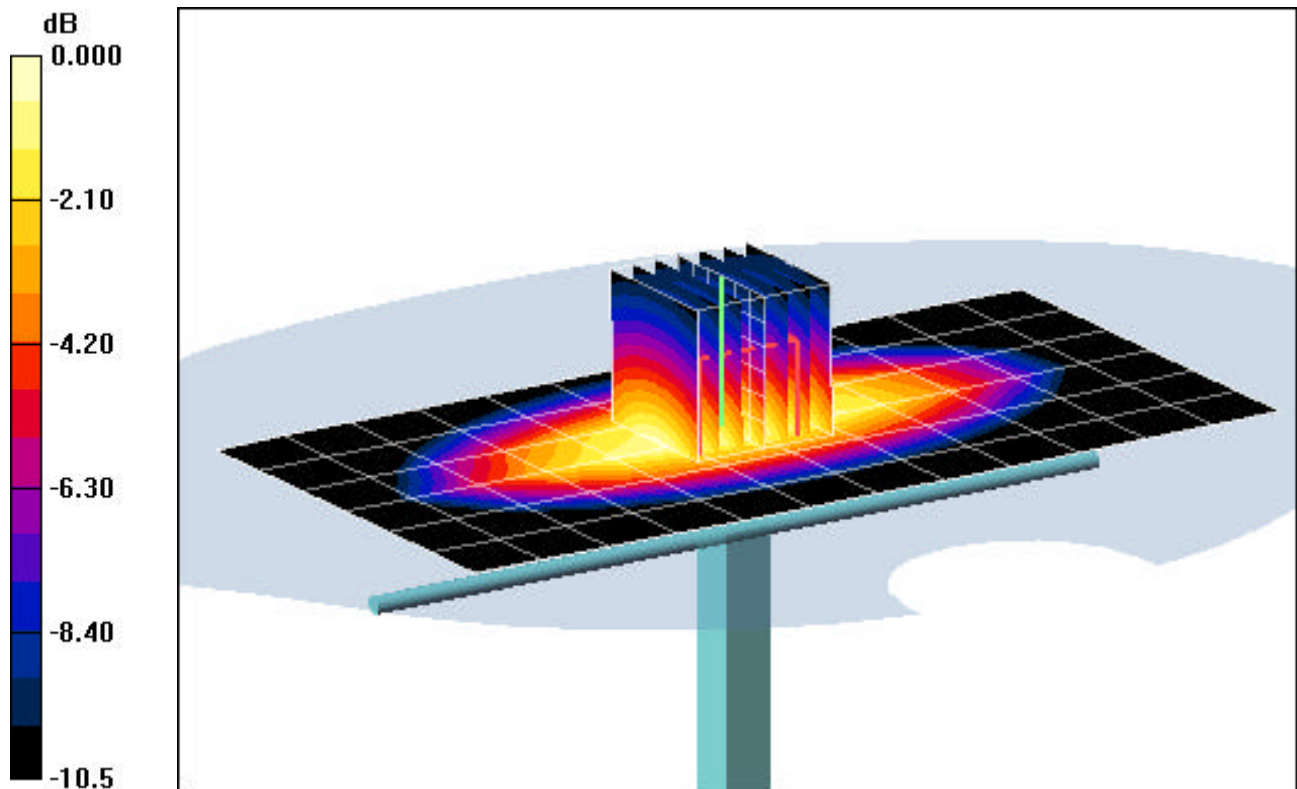
**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Input Power = 24.0 dBm (250 mW)

**SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.55 mW/g**

Target SAR(1g) = 2.29 mW/g; Deviation = + 3.49 %



0 dB = 2.77mW/g

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

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

Medium: 1900 Brain ( $\sigma = 1.44$  mho/m,  $\epsilon_r = 39.61$ ,  $\rho = 1000$  kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08-08-2007; Ambient Temp: 23.8°C; Tissue Temp: 21.3°C

Probe: ES3DV2 - SN3022; ConvF(5.03, 5.03, 5.03); Calibrated: 9/20/2006

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/23/2007

Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1357

Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

## 1900 MHz Dipole Validation

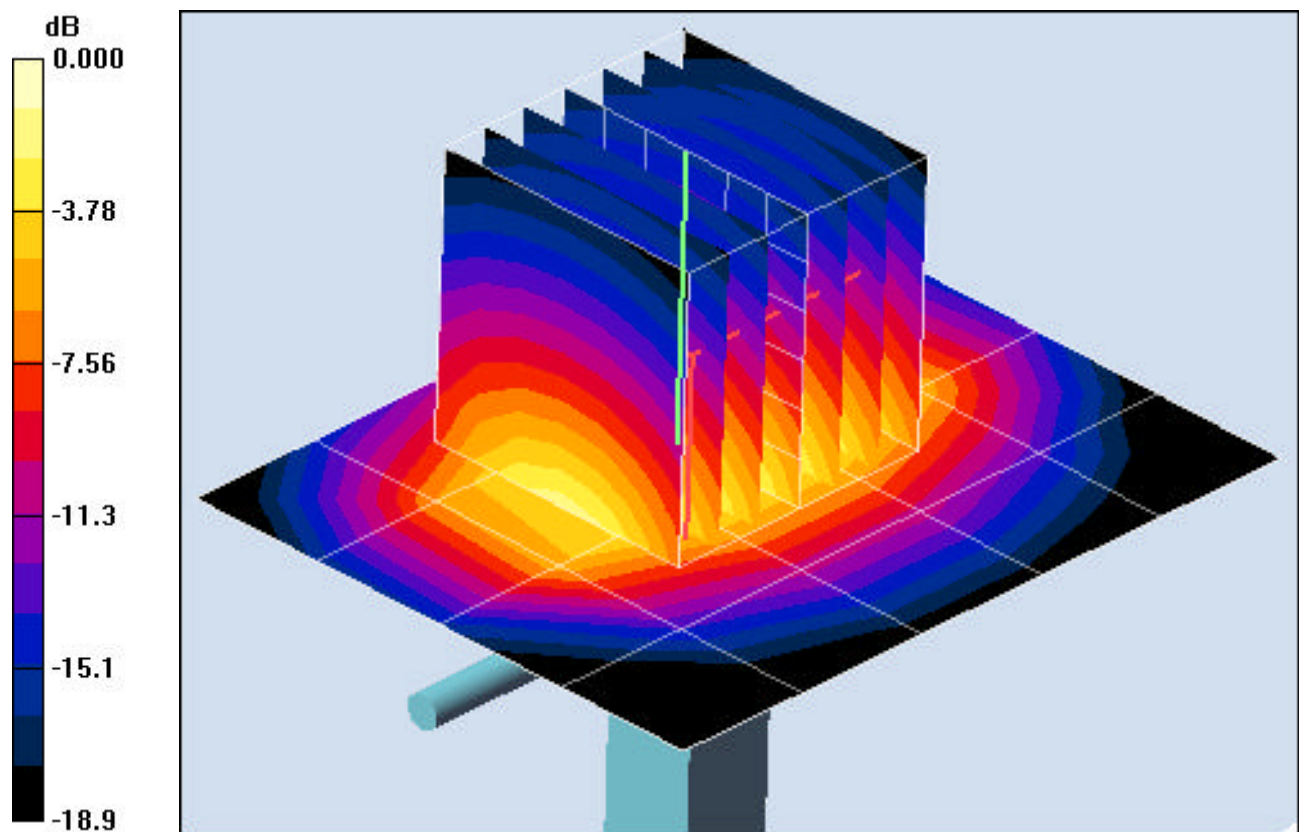
**Area Scan (5x6x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Input Power = 20.0 dBm (100 mW)

**SAR(1 g) = 3.89 mW/g; SAR(10 g) = 1.95 mW/g**

Target SAR(1g) = 3.77 mW/g; Deviation = + 3.18 %



0 dB = 5.00mW/g

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Brain ( $\sigma = 1.84$  mho/m,  $\epsilon_r = 38.59$ ,  $\rho = 1000$  kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08-09-2007; Ambient Temp: 23.6°C; Tissue Temp: 21.6°C

Probe: ES3DV2 - SN3022; ConvF(4.49, 4.49, 4.49); Calibrated: 9/20/2006

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/23/2007

Phantom: SAM Main; Type: SAM 4.0; Serial: TP-1114

Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

## 2450MHz Dipole Validation

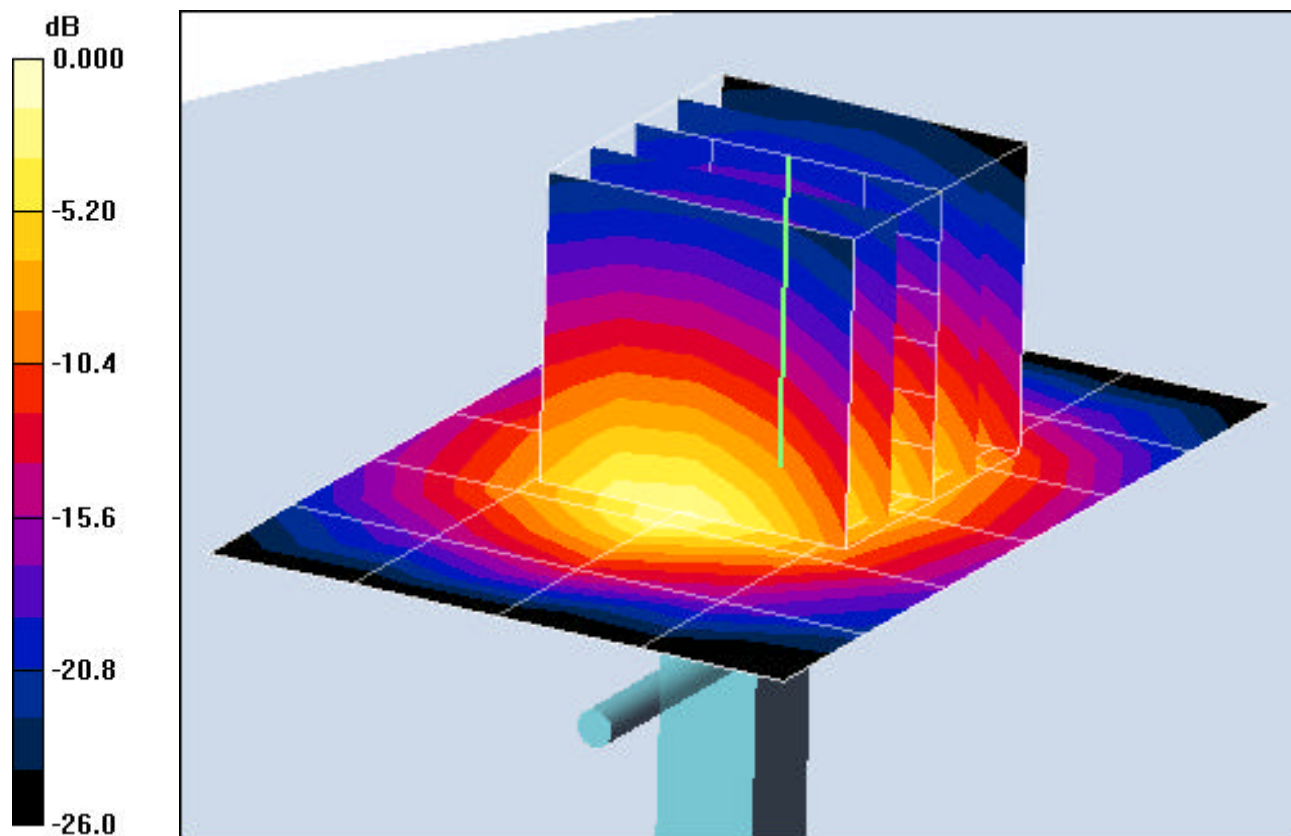
**Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

**SAR(1 g) = 5.72 mW/g; SAR(10 g) = 2.67 mW/g**

Target SAR(1g) = 5.24 mW/g; Deviation = + 5.73 %



0 dB = 4.50mW/g

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

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

Medium: 835 Brain ( $\sigma = 0.93$  mho/m,  $\epsilon_r = 42.91$ ,  $\rho = 1000$  kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 08-21-2007; Ambient Temp: 23.9°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN3589; ConvF(8.28, 8.28, 8.28); Calibrated: 5/28/2007

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn704; Calibrated: 5/25/2007

Phantom: SAM Main; Type: SAM 4.0; Serial: TP-1406

Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

## 835MHz Dipole Validation

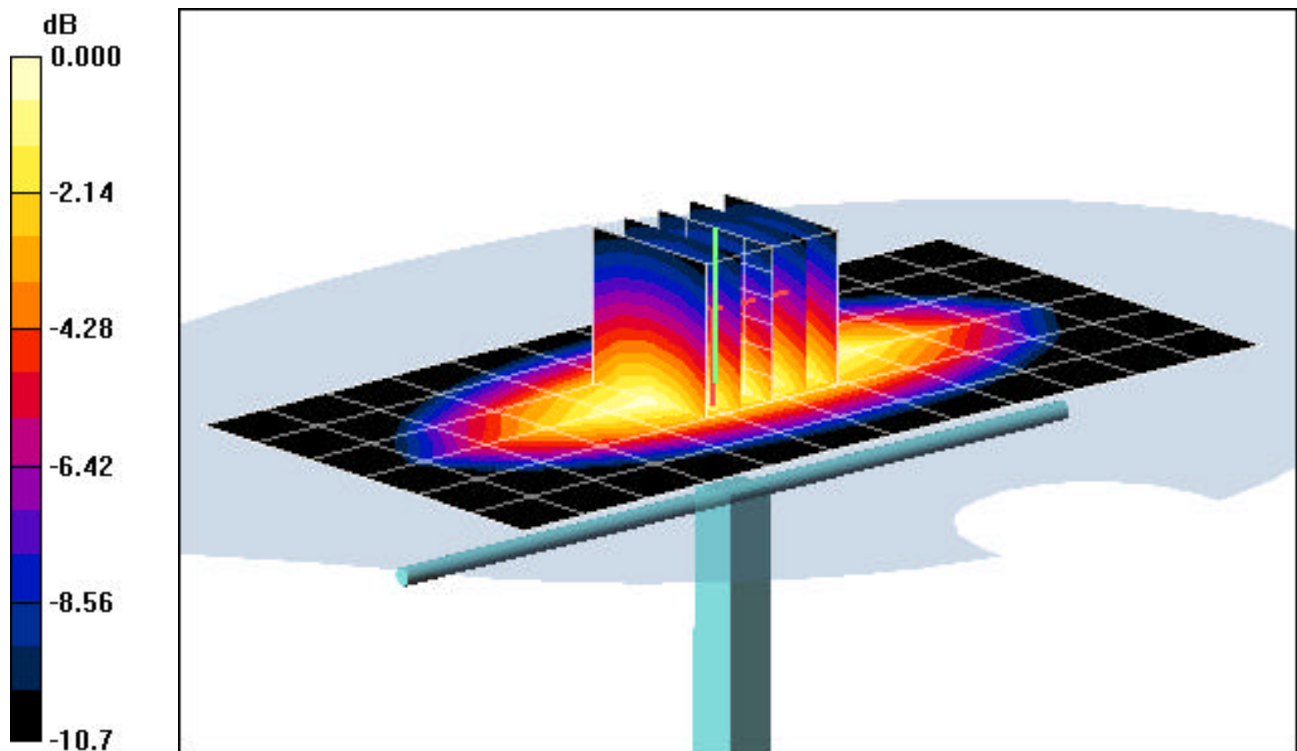
**Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm

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

Input Power = 24.0 dBm (250 mW)

**SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.57 mW/g**

Target SAR(1g) = 2.29 mW/g; Deviation = + 5.68 %



0 dB = 2.84mW/g

# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

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

Medium: 1900 Brain ( $\sigma = 1.44 \text{ mho/m}$ ,  $\epsilon_r = 41.58$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08-21-2007; Ambient Temp: 23.9°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN3589; ConvF(6.71, 6.71, 6.71); Calibrated: 5/28/2007

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn704; Calibrated: 5/25/2007

Phantom: SAM Main; Type: SAM 4.0; Serial: TP-1406

Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

## 1900MHz Dipole Validation

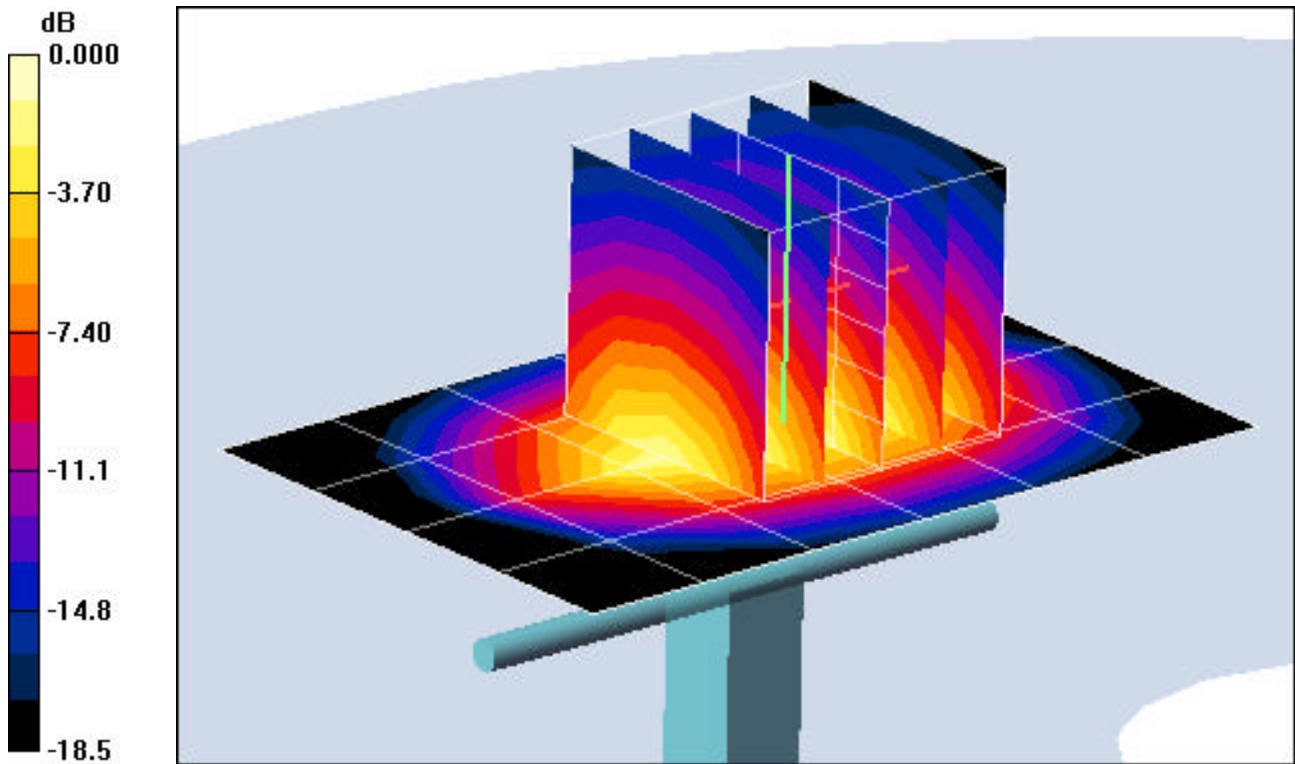
**Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

**SAR(1 g) = 3.93 mW/g; SAR(10 g) = 2.02 mW/g**

Target SAR(1g) = 3.77 mW/g; Deviation = + 4.24 %



0 dB = 4.99mW/g



# PCTEST ENGINEERING LABORATORY, INC.

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Brain ( $\sigma = 1.83$  mho/m,  $\epsilon_r = 40.12$ ,  $\rho = 1000$  kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 08-22-2007; Ambient Temp: 23.5°C; Tissue Temp: 21.1°C

Probe: EX3DV4 - SN3589; ConvF(6.29, 6.29, 6.29); Calibrated: 5/28/2007

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn704; Calibrated: 5/25/2007

Phantom: SAM Main; Type: SAM 4.0; Serial: TP:1406

Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

## 2450MHz Dipole Validation

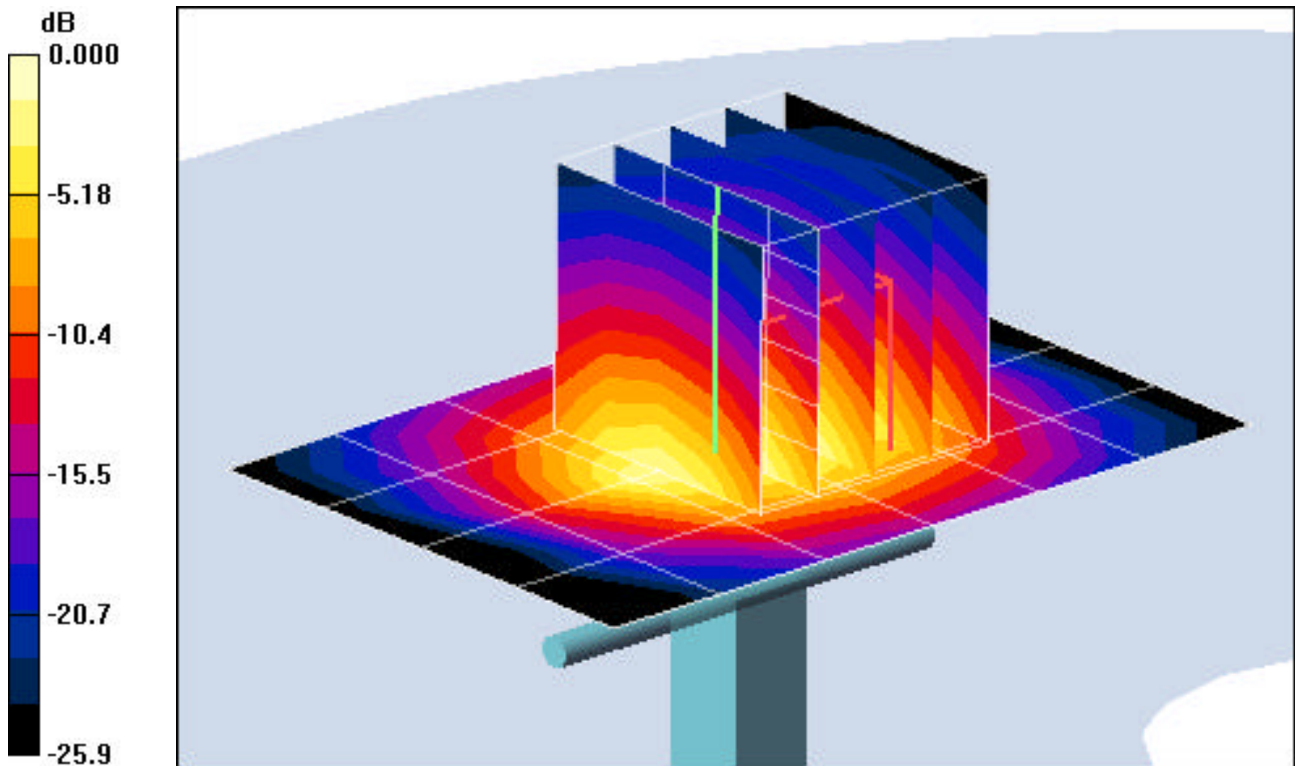
**Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

**SAR(1 g) = 5.63 mW/g; SAR(10 g) = 2.46 mW/g**

Target SAR(1g) = 5.4 mW/g; Deviation = + 4.26 %



0 dB = 7.36mW/g