

PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 502

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

Medium: 1900 Muscle ($\sigma = 1.53$ mho/m, $\epsilon_r = 53.15$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 04-10-2009; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: ES3DV2 - SN3022; ConvF(4.5, 4.5, 4.5); Calibrated: 10/21/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn704; Calibrated: 6/26/2008

Phantom: SAM Sub; Type: SAM 4.0; Serial: TP-1403

Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

1900 MHz SAR Validation

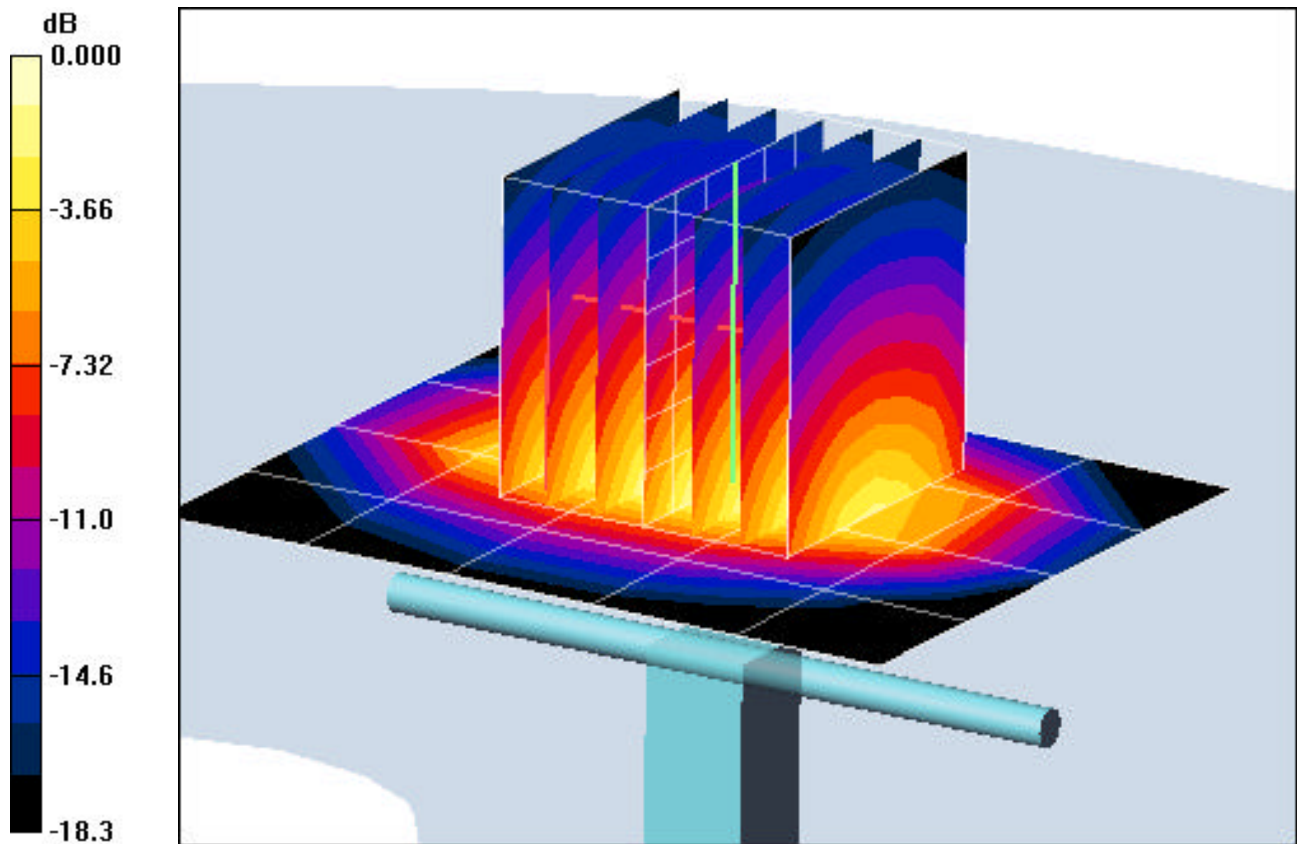
Area Scan (5x6x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 4.37 mW/g; SAR(10 g) = 2.24 mW/g

Deviation = 5.30%



0 dB = 5.57mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: SAR Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d047

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

Medium: 850 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 42.67$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 04-14-2009; Ambient Temp: 23.0°C; Tissue Temp: 22.6 °C

Probe: ES3DV2 - SN3022; ConvF(6.15, 6.15, 6.15); Calibrated: 10/21/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn704; Calibrated: 6/26/2008

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

Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

835 MHz SAR Validation

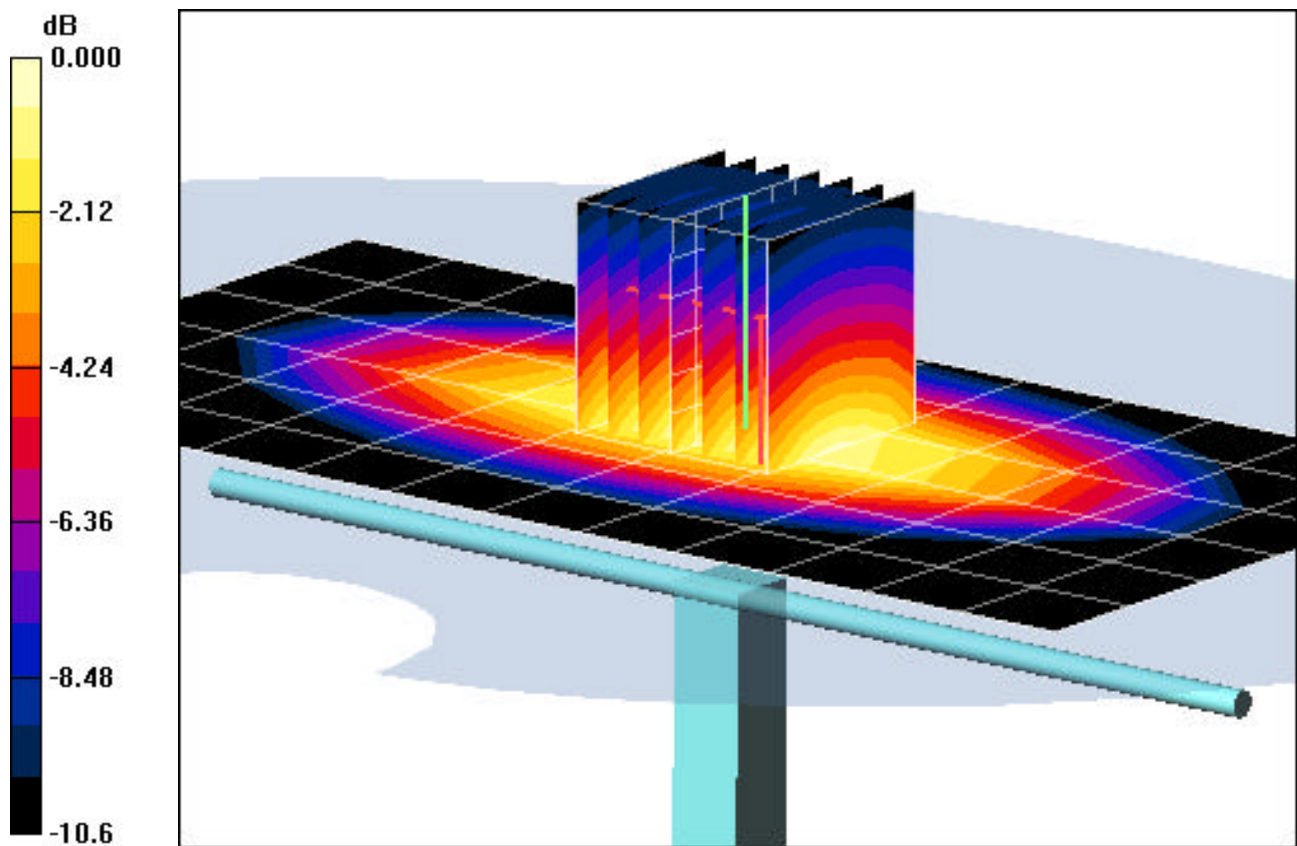
Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 24.0 dBm (250 mW)

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.63 mW/g

Deviation = 3.51%



0 dB = 2.95mW/g

PCTEST ENGINEERING LABORATORY, INC.

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

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

Medium: 850 Muscle ($\sigma = 0.99$ mho/m, $\epsilon_r = 54.38$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 06-02-2009; Ambient Temp: 23.49°C; Tissue Temp: 22.8°C

Probe: ES3DV3 - SN3209; ConvF(6.07, 6.07, 6.07); Calibrated: 4/15/2009

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 5/25/2009

Phantom: SAM with CRP; Type: SAM; Serial: TP1375

Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

835MHz Dipole Validation

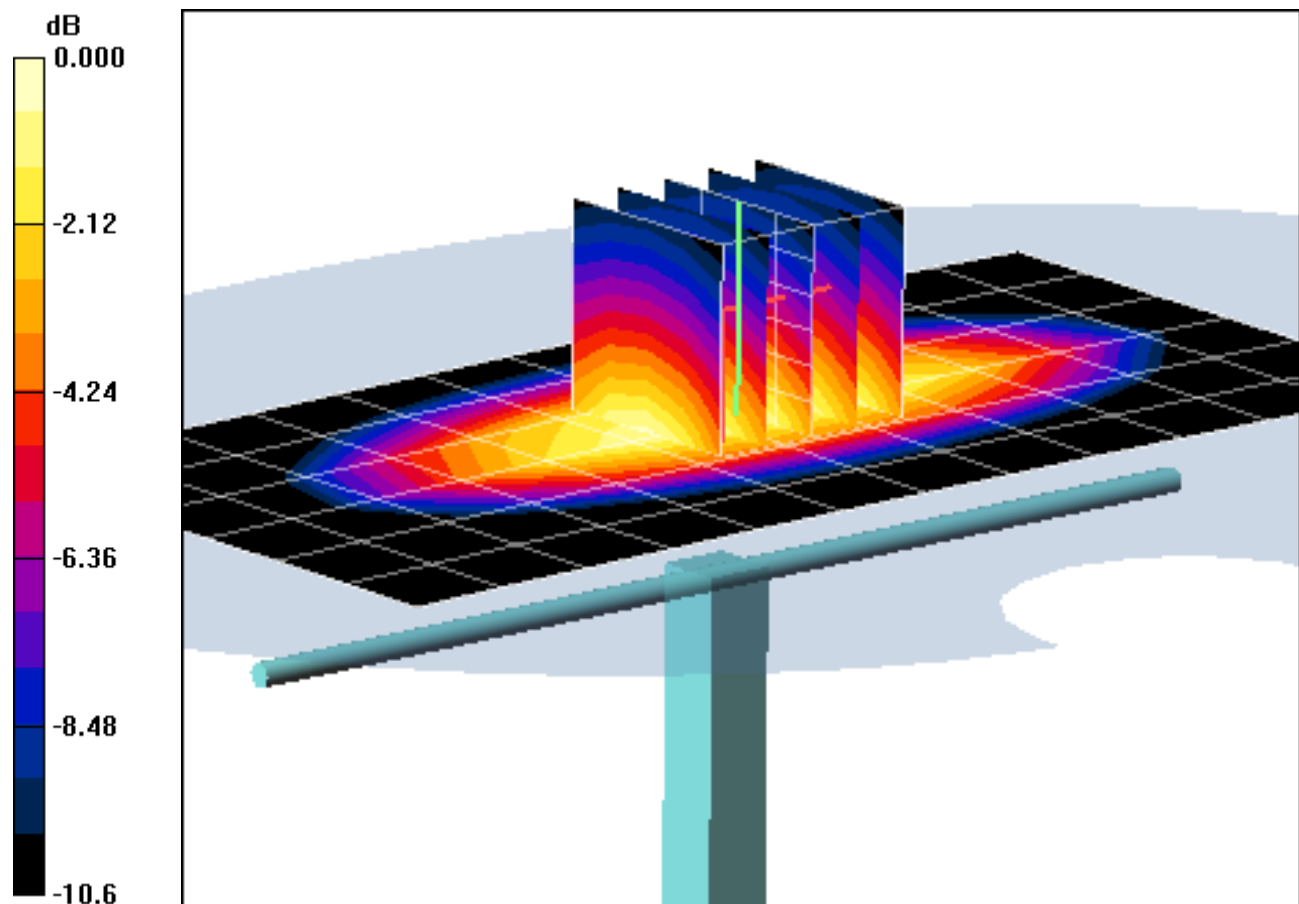
Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 24.0 dBm (250 mW)

SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.66 mW/g

Deviation = 3.25%



0 dB = 2.96mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 1900MHz SAR Dipole 502; Type: D1900V2; Serial: 502

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

Medium: 1900 Muscle Medium parameters used (interpolated):

$f = 1900 \text{ MHz}$; $\sigma = 1.56 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 2.0 cm

Test Date: 06-03-2009; Ambient Temp: 23.9° C; Tissue Temp: 22.0° C

Probe: ES3DV3 - SN3209; ConvF(4.55, 4.55, 4.55); Calibrated: 4/15/2009

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn665; Calibrated: 5/25/2009

Phantom: SAM with CRP; Type: SAM; Serial: TP1375

Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

1900 MHz Dipole Validation

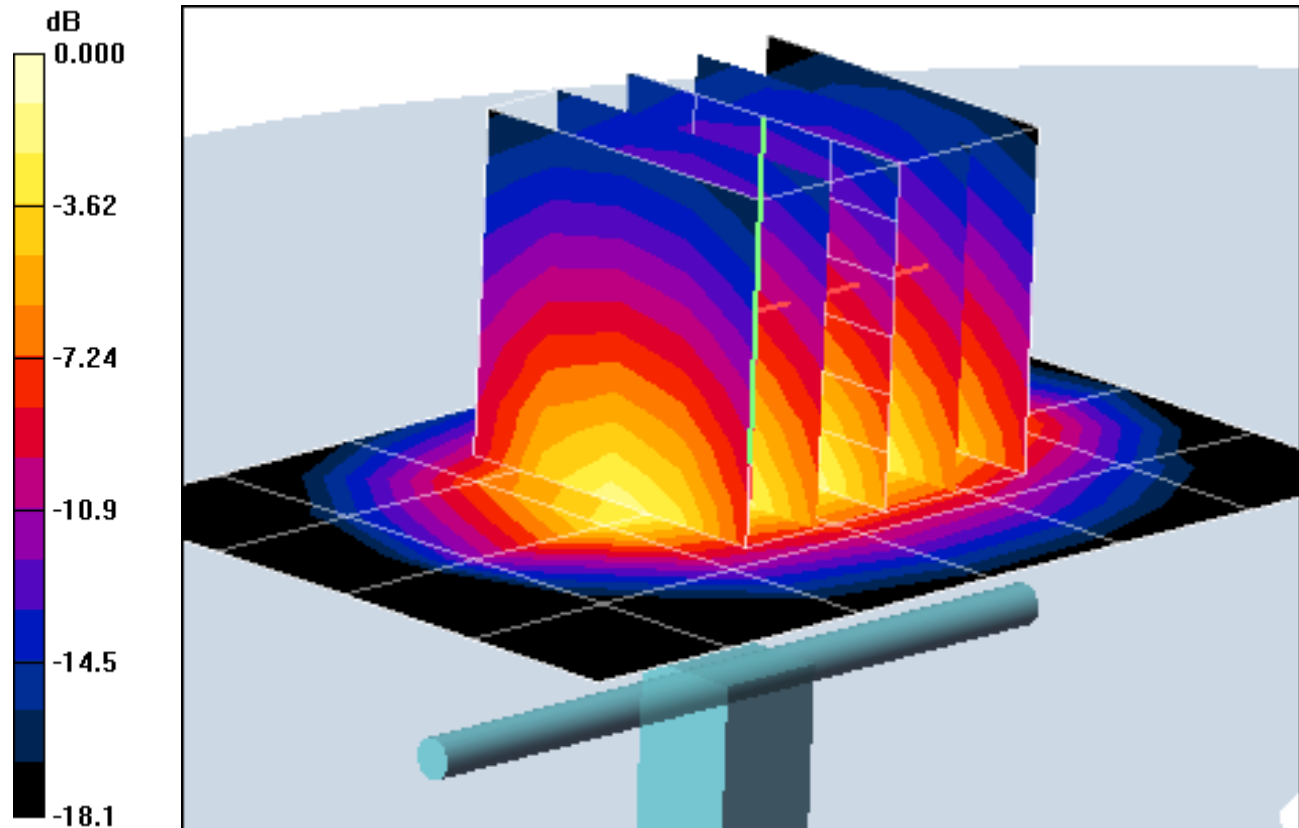
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 4.38 mW/g; SAR(10 g) = 2.29 mW/g

Deviation = 5.54 %



0 dB = 5.55mW/g