

APPENDIX A: SAR TEST DATA

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-16-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11b, Laptop position, LCD Flip, Mid.ch, 1Mbps, Main Ant

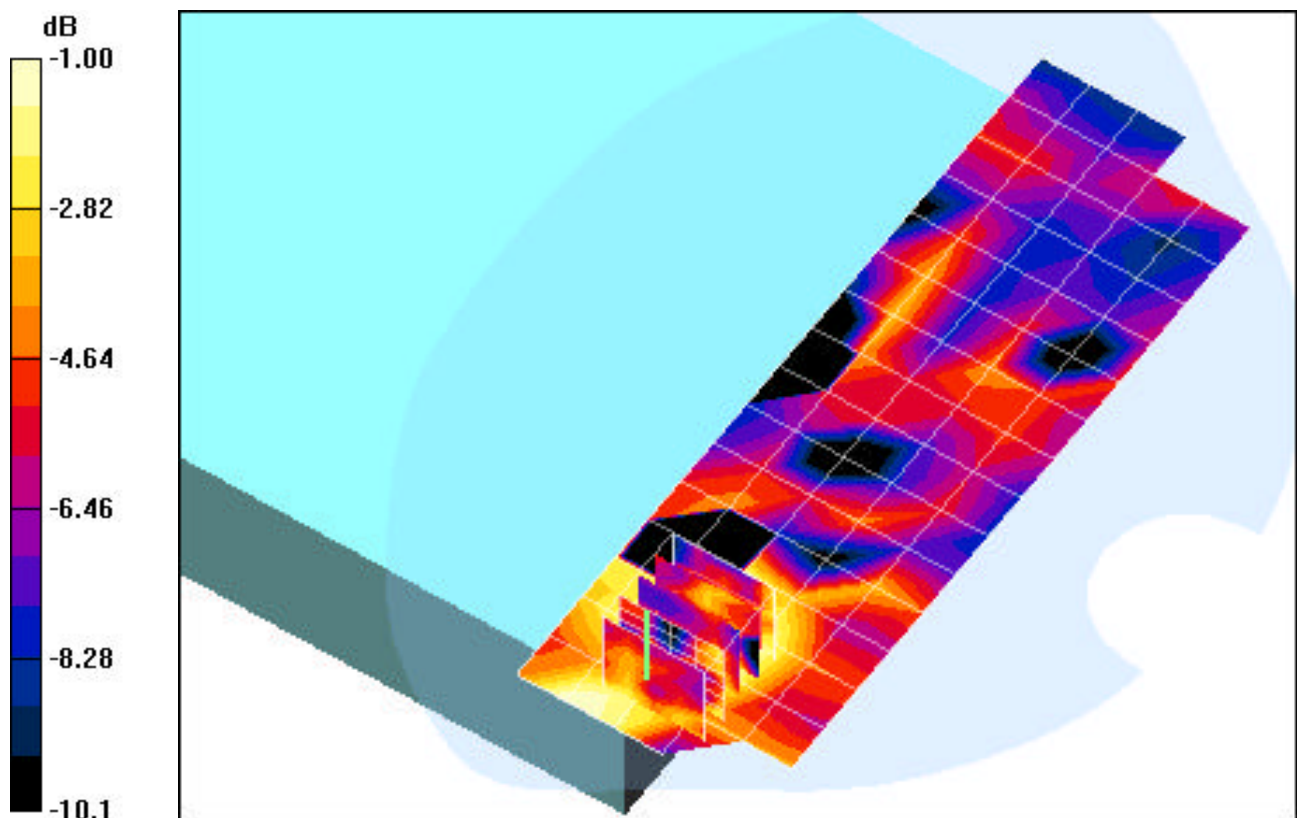
Area Scan (6x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 2.99 V/m

Peak SAR (extrapolated) = 0.039 W/kg

SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00923 mW/g



0 dB = 0.021mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-16-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11b, Tablet position, LCD Flip, Mid.ch, 1Mbps, Main Ant, Bottom Side

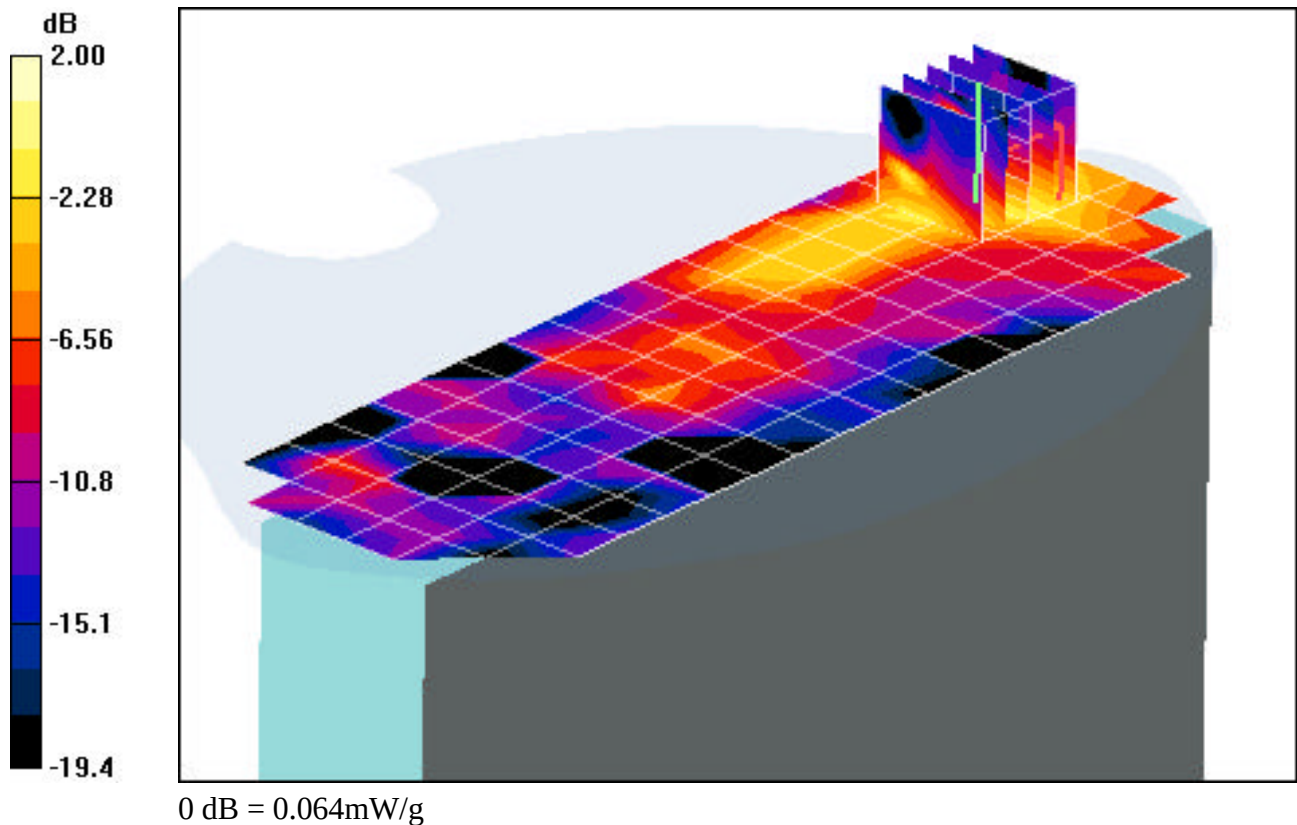
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 3.31 V/m

Peak SAR (extrapolated) = 0.090 W/kg

SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.020 mW/g



PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: IEEE 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-16-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11b, Tablet position, LCD Flip, Mid.ch, 1Mbps, Main Ant, Top Side

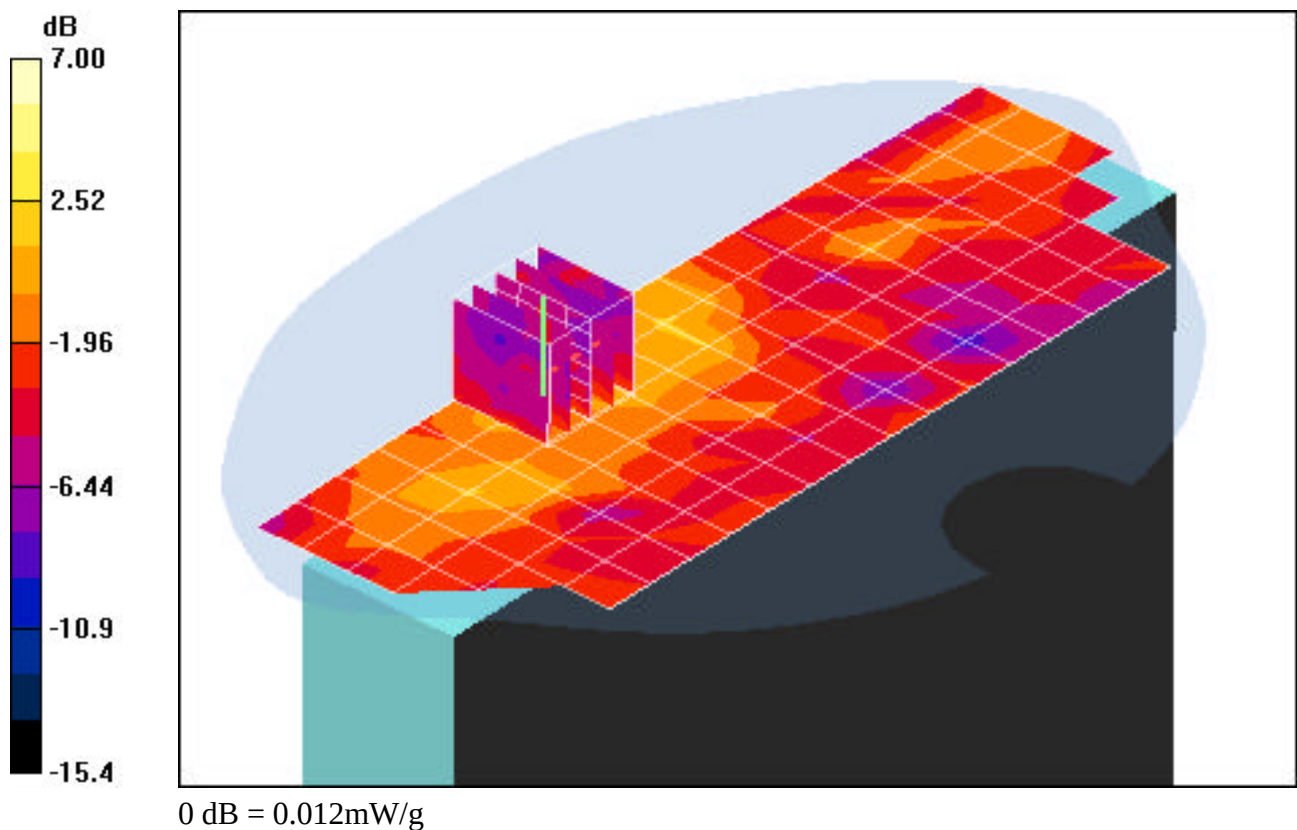
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 1.36 V/m

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.00602 mW/g; SAR(10 g) = 0.00419 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11g; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11g, Laptop position, LCD Flip, Mid.ch, 6Mbps, Main Ant

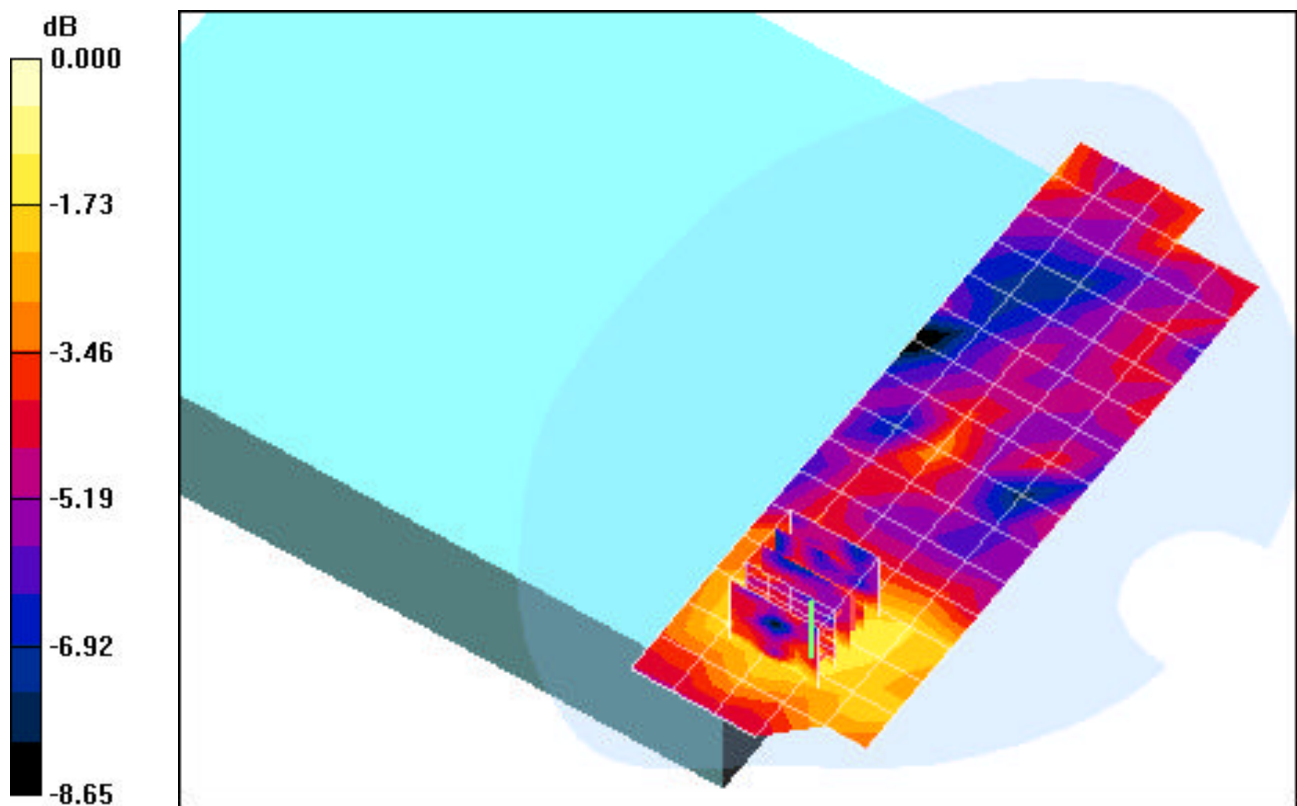
Area Scan (6x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 2.85 V/m

Peak SAR (extrapolated) = 0.082 W/kg

SAR(1 g) = 0.046 mW/g; SAR(10 g) = 0.031 mW/g



0 dB = 0.053mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: IEEE 802.11g; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11g, Tablet position, LCD Flip, Mid.ch, 6Mbps, Main Ant, Bottom Side

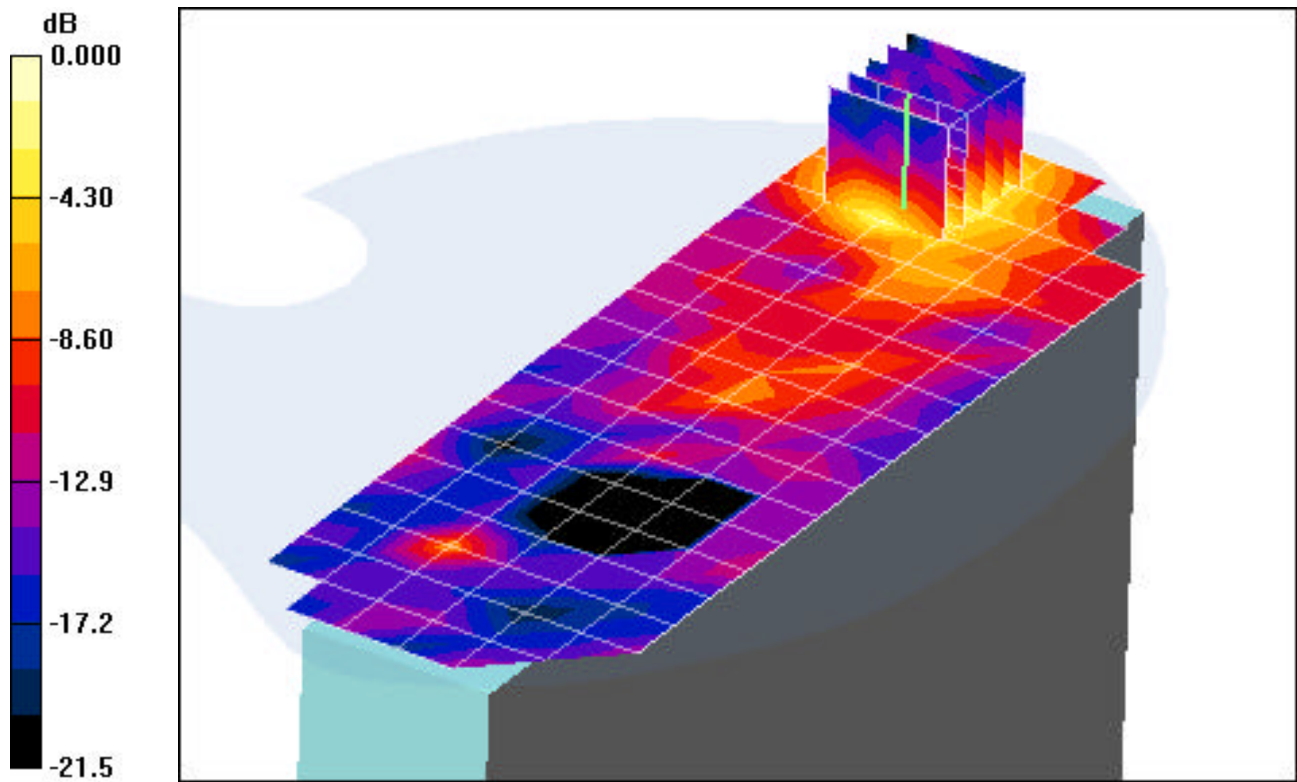
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 3.68 V/m

Peak SAR (extrapolated) = 0.162 W/kg

SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.042 mW/g



0 dB = 0.093mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11g; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11g, Tablet position, LCD Flip, Mid.ch, 6Mbps, Main Ant, Top Side

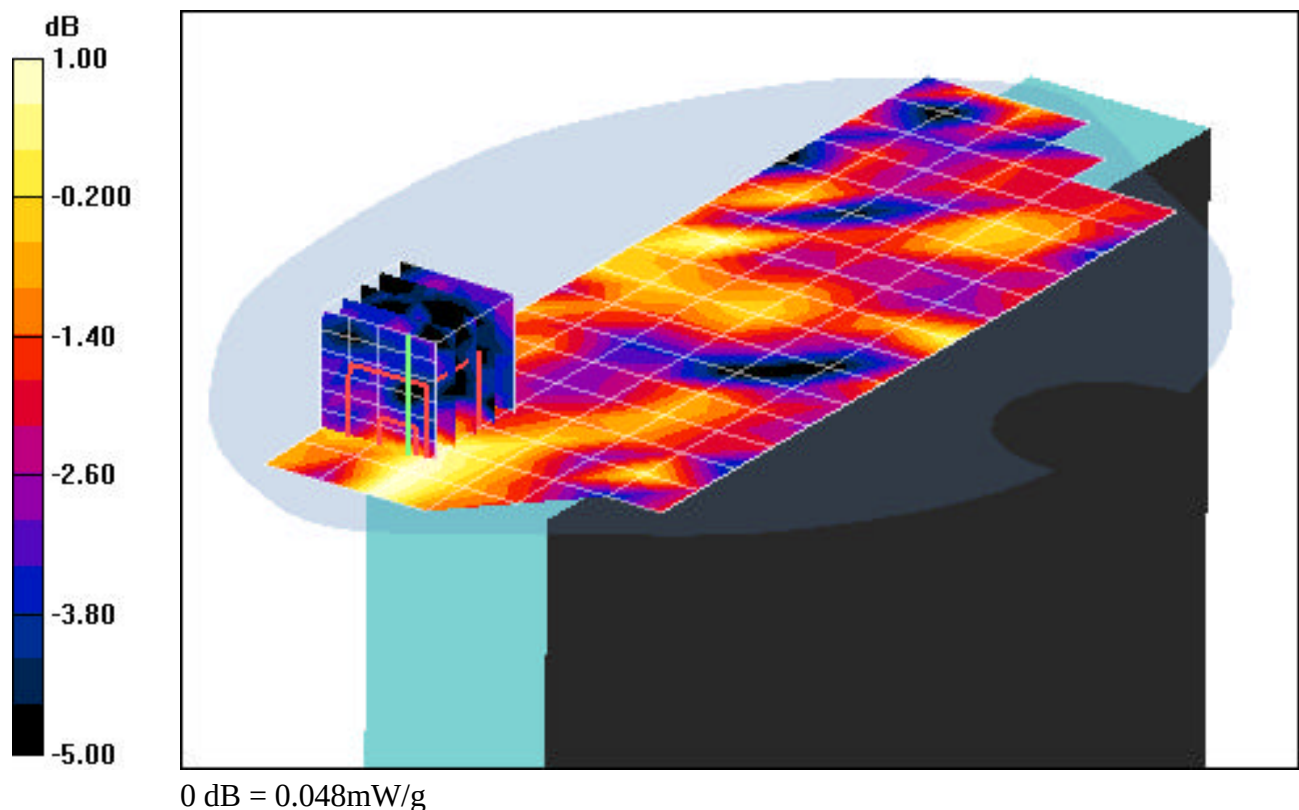
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 1.34 V/m

Peak SAR (extrapolated) = 0.078 W/kg

SAR(1 g) = 0.0391 mW/g; SAR(10 g) = 0.0172 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Laptop position, LCD Flip, Mid.ch, 13.5Mbps, Main Ant

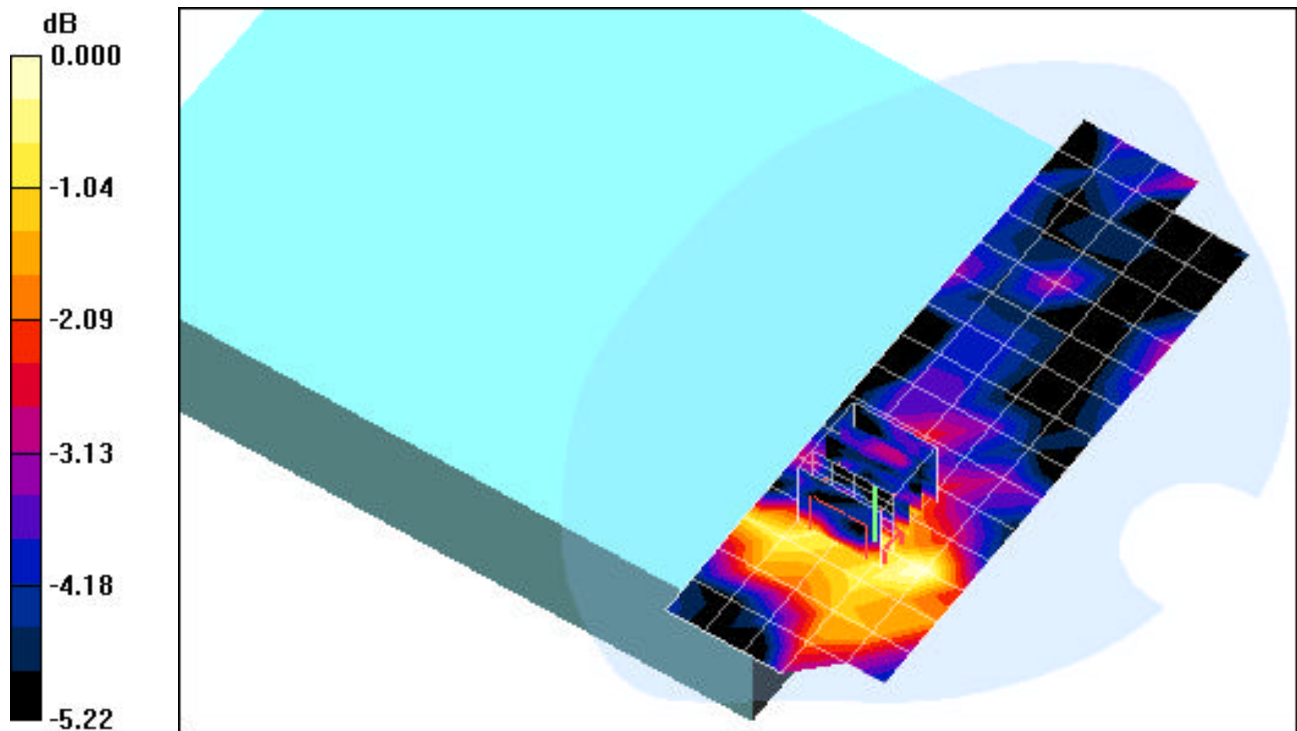
Area Scan (6x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 2.54 V/m

Peak SAR (extrapolated) = 0.036 W/kg

SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00898 mW/g



0 dB = 0.015mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Mid.ch, 13.5Mbps, Main Ant, Bottom Side

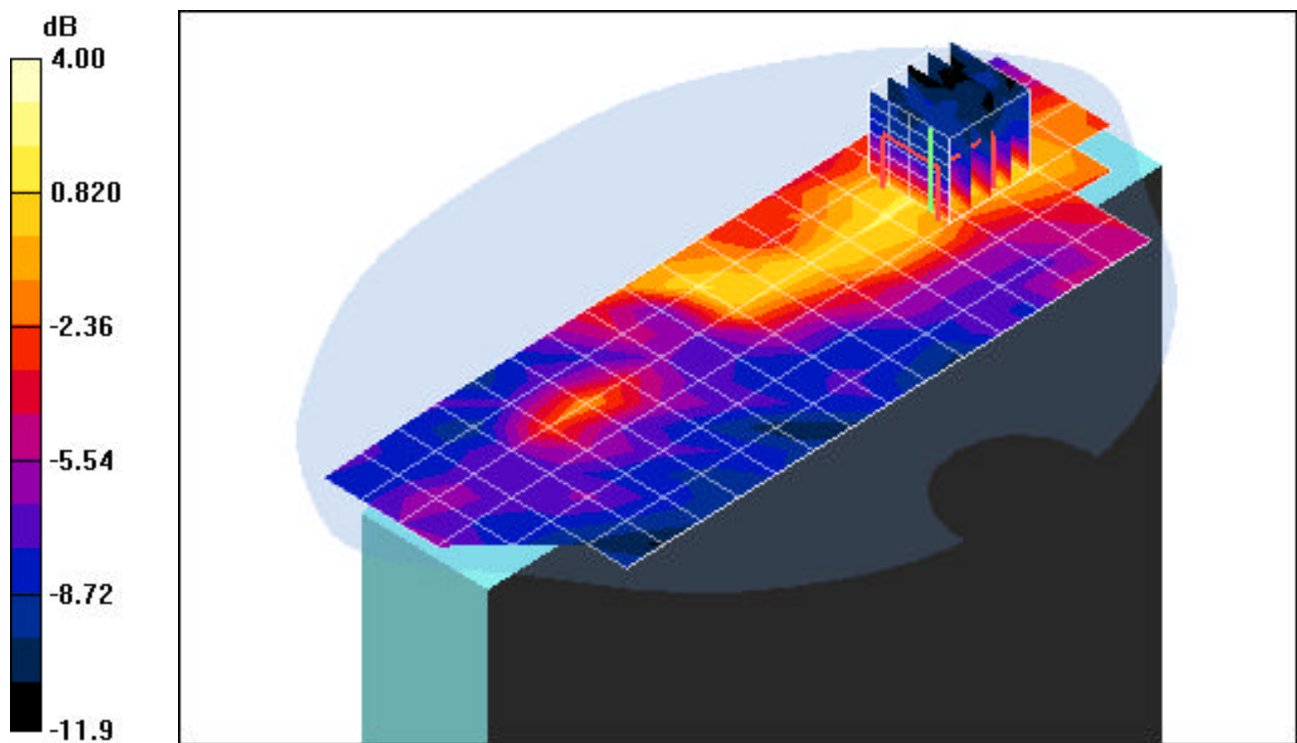
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 3.99 V/m

Peak SAR (extrapolated) = 0.065 W/kg

SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.017 mW/g



0 dB = 0.031mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Mid.ch, 13.5Mbps, Main Ant, Top Side

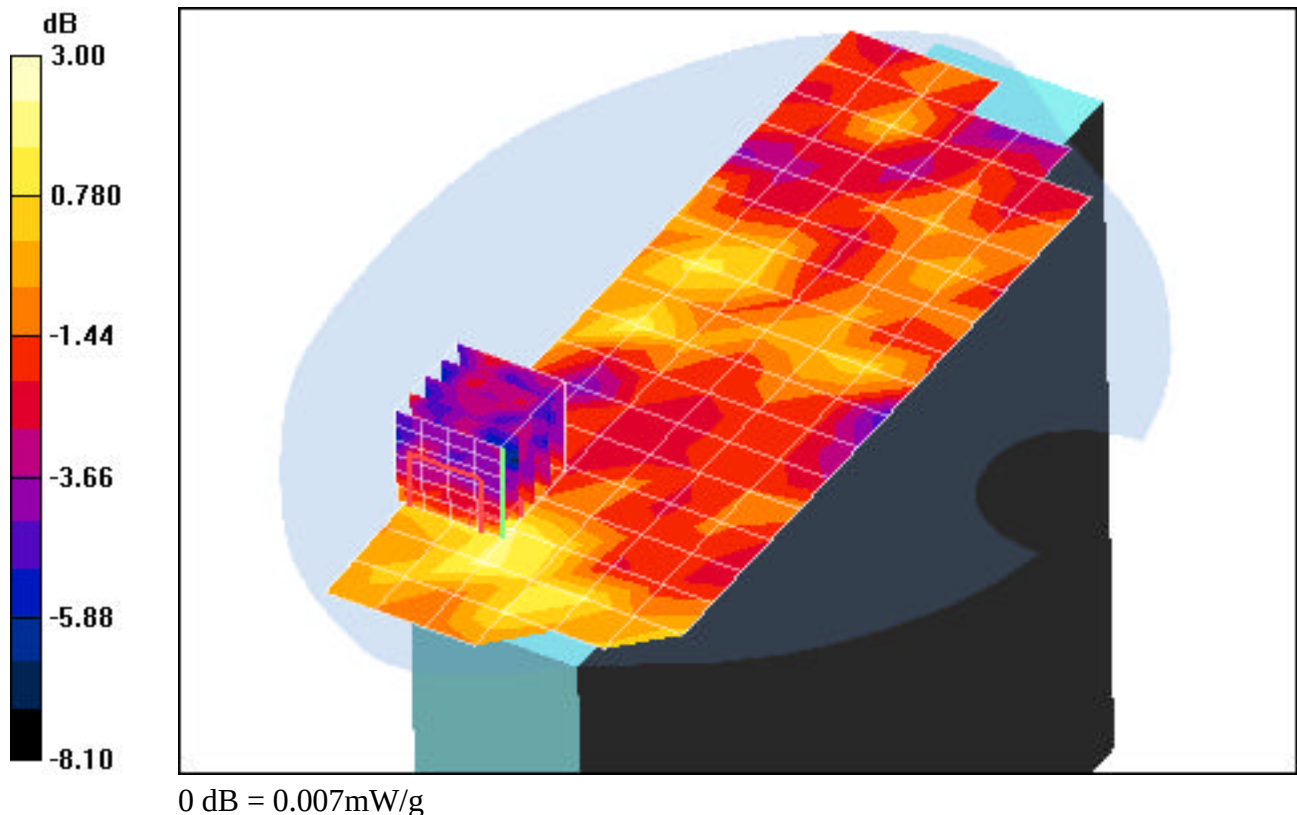
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 1.08 V/m

Peak SAR (extrapolated) = 0.015 W/kg

SAR(1 g) = 0.00637 mW/g; SAR(10 g) = 0.00402 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.2GHz Band; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a , Laptop position, LCD Flip, Ch.40, 6Mbps, Main Ant

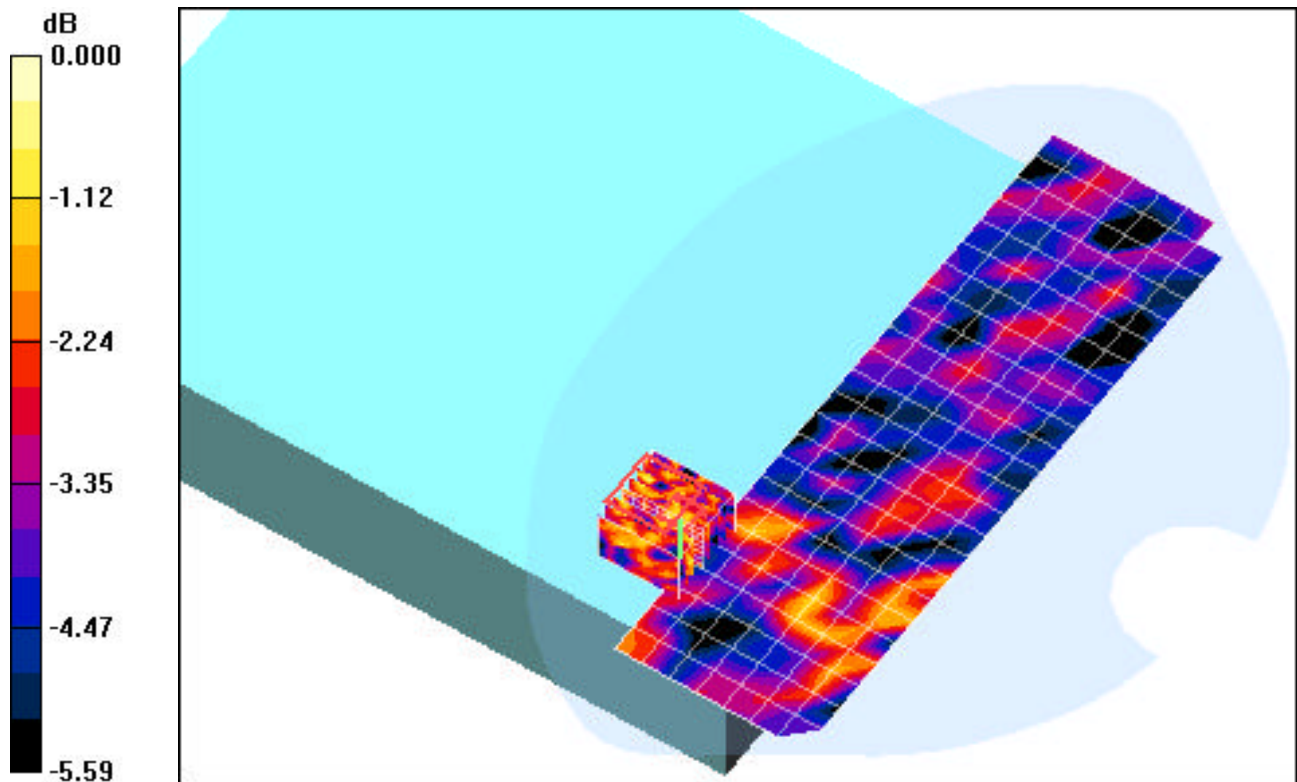
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.53 V/m

Peak SAR (extrapolated) = 0.104 W/kg

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.026 mW/g



0 dB = 0.049mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.2GHz Band; Frequency: 5240 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.48, 6Mbps, Main Ant, Bottom Side

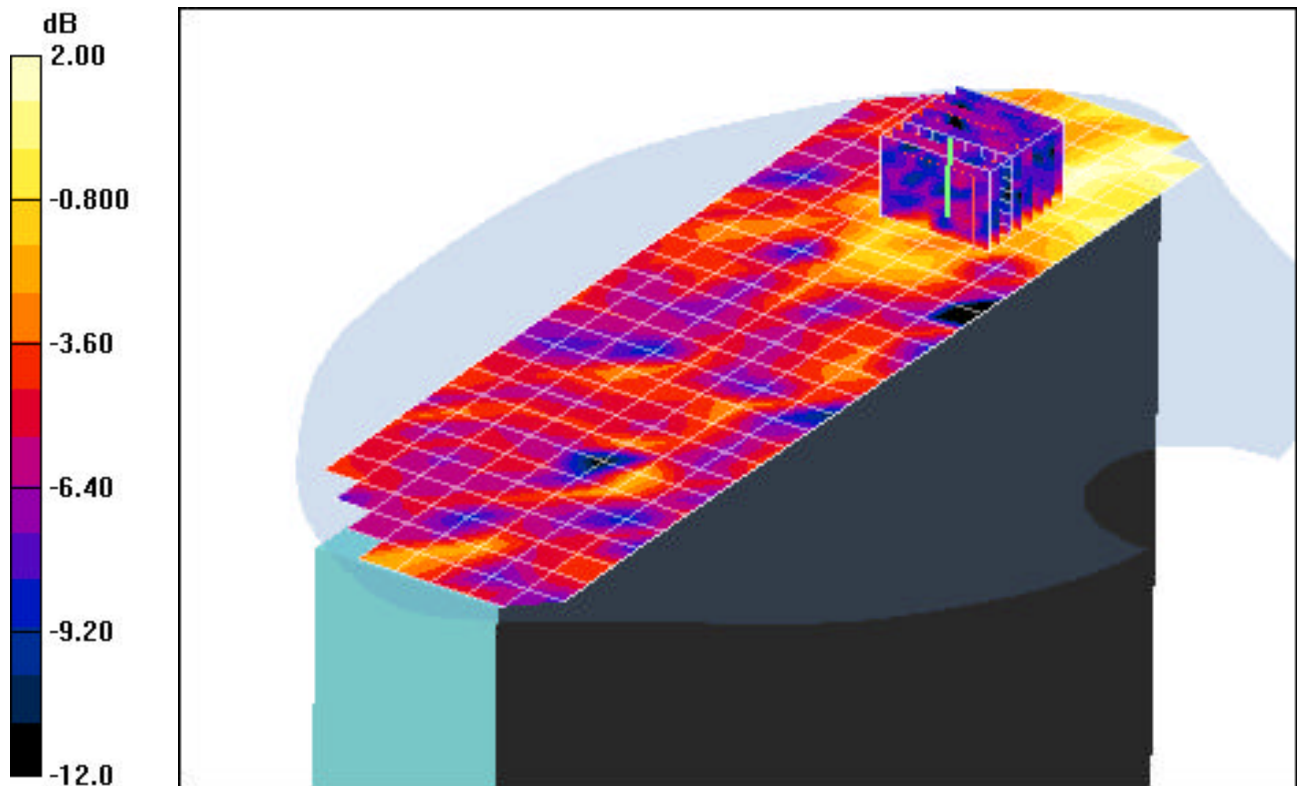
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.86 V/m

Peak SAR (extrapolated) = 0.213 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.020 mW/g



0 dB = 0.055mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.2GHz Band; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.40, 6Mbps, Main Ant, Top Side

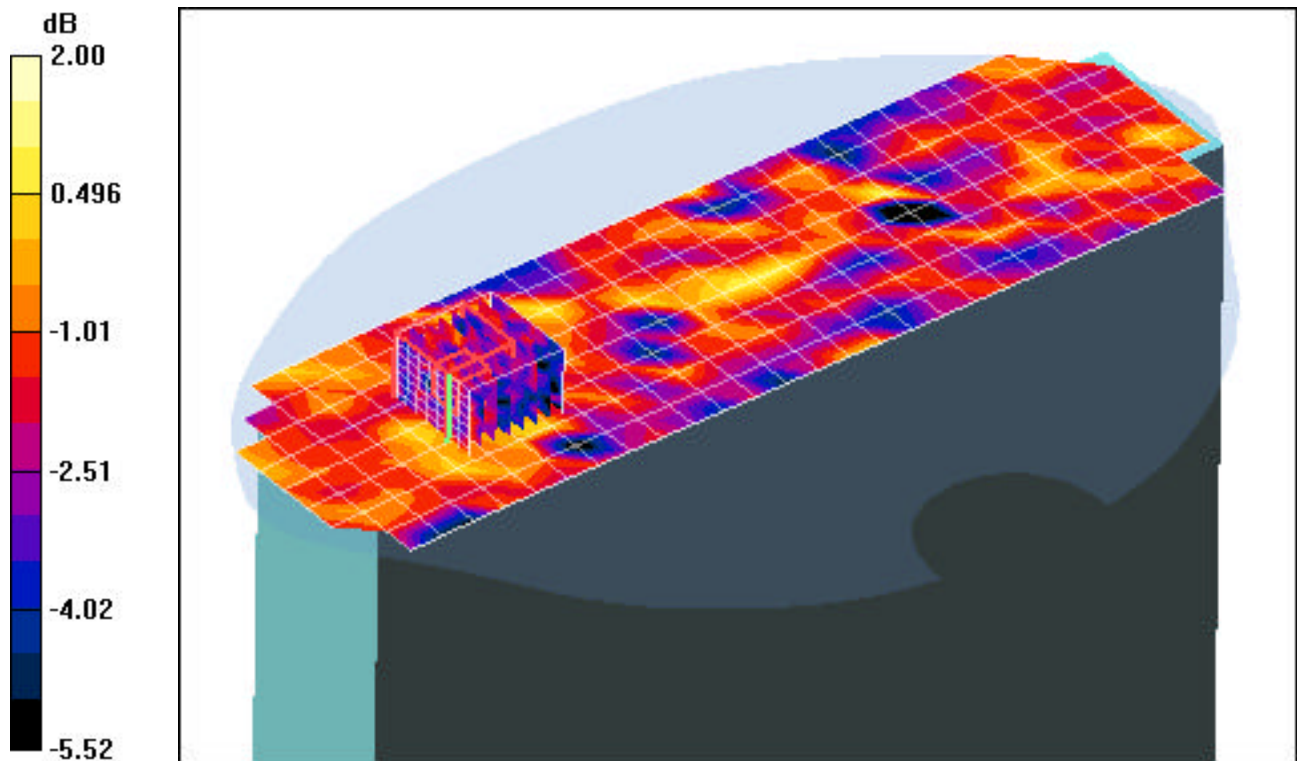
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.33 V/m; Power Drift = 3.46 dB

Peak SAR (extrapolated) = 0.061 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.014 mW/g



0 dB = 0.033mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.3GHz Band; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.83, 3.83, 3.83); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Laptop position, LCD Flip, Ch.52, 6Mbps, Main Ant

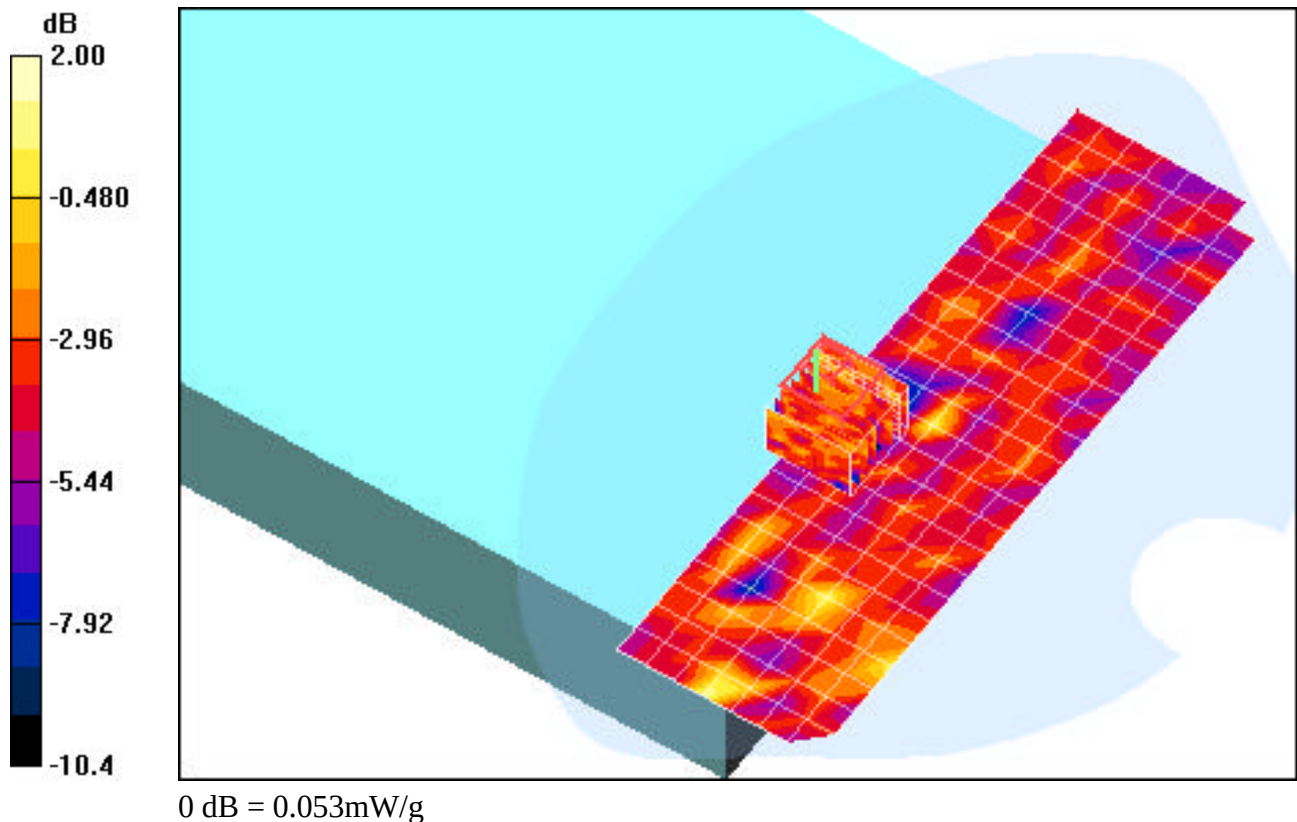
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.660 V/m

Peak SAR (extrapolated) = 0.094 W/kg

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.023 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.3GHz Band; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.83, 3.83, 3.83); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.52, 6Mbps, Main Ant, Bottom Side

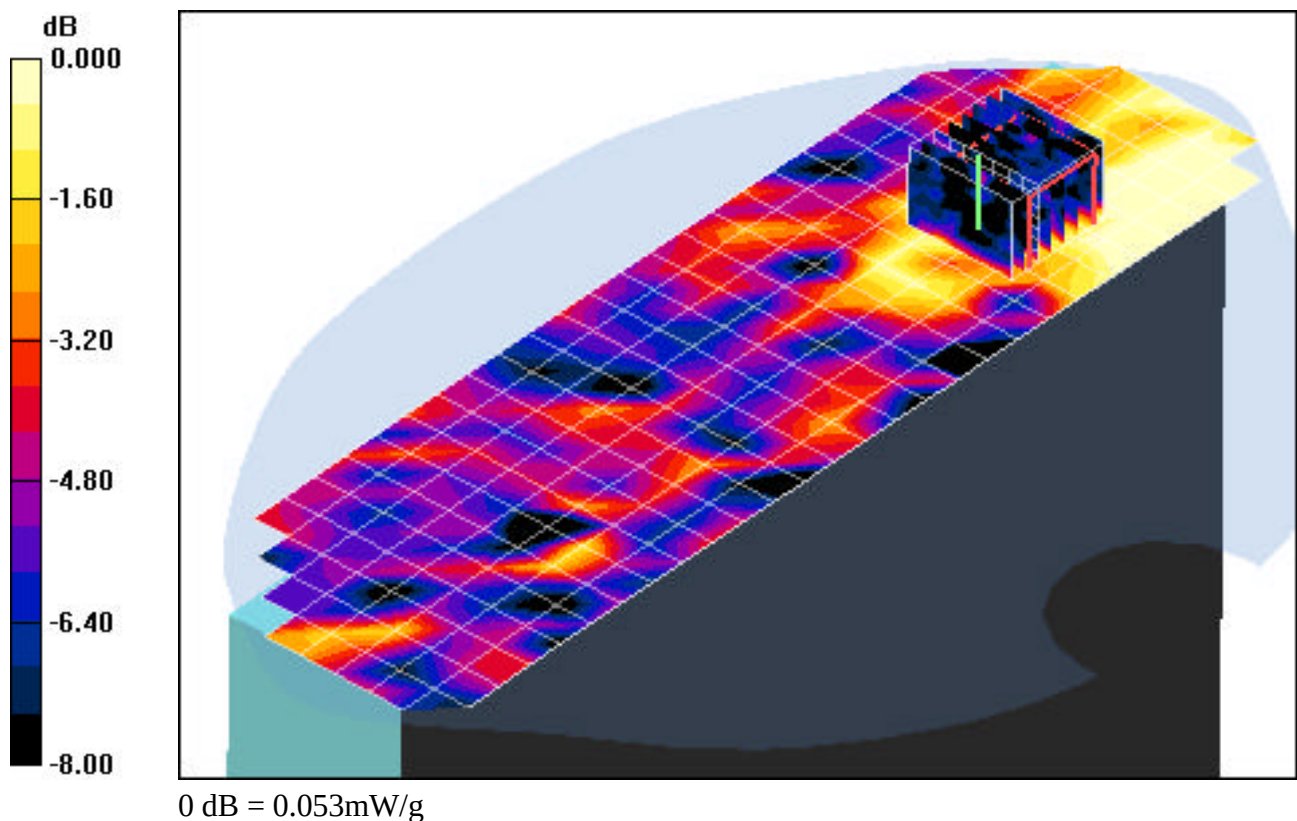
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.80 V/m

Peak SAR (extrapolated) = 0.183 W/kg

SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.019 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.3GHz Band; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.83, 3.83, 3.83); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.60, 6Mbps, Main Ant, Top Side

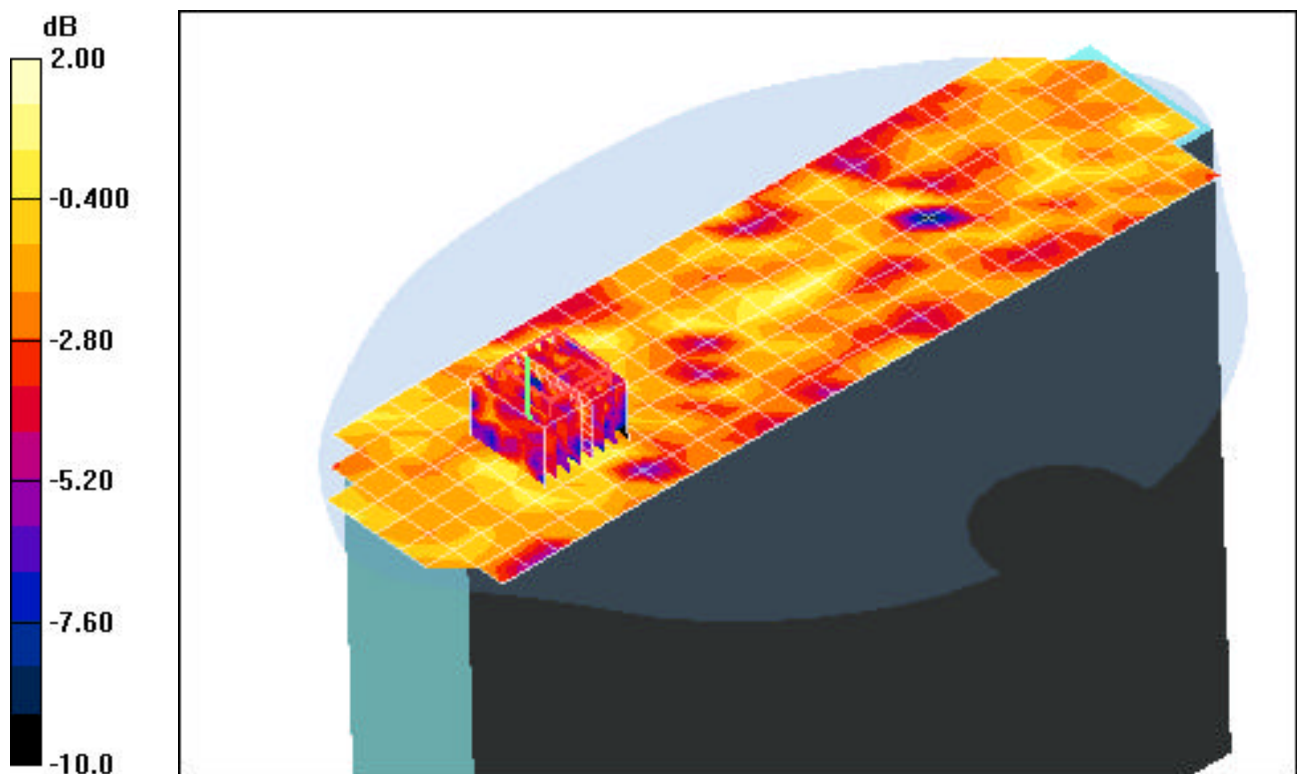
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.62 V/m

Peak SAR (extrapolated) = 0.094 W/kg

SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00892 mW/g



0 dB = 0.035mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.5GHz Band; Frequency: 5580 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Laptop position, LCD Flip, Ch.116, 6Mbps, Main Ant

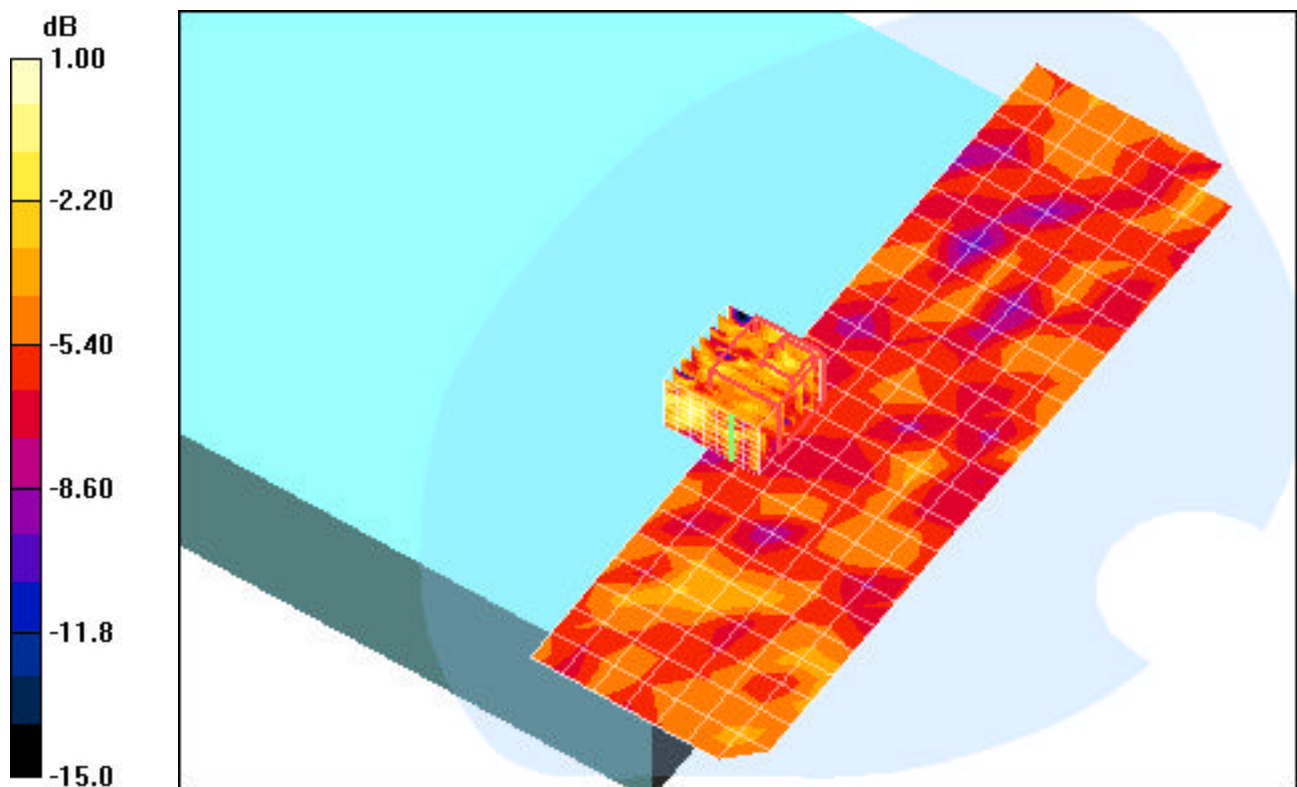
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.099 V/m

Peak SAR (extrapolated) = 0.107 W/kg

SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.020 mW/g



0 dB = 0.073mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.5GHz Band; Frequency: 5540 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.69, 3.69, 3.69); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.108, 6Mbps, Main Ant, Bottom Side

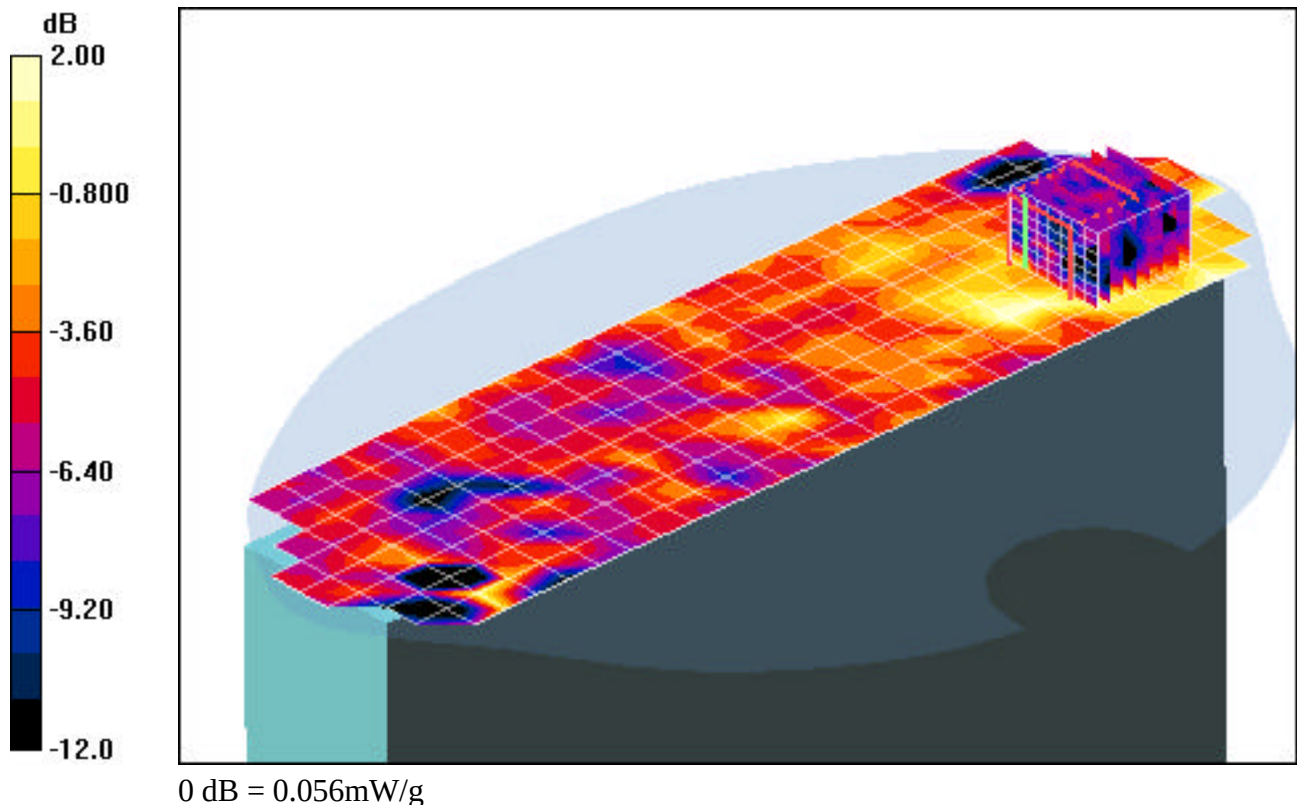
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.50 V/m

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.016 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.5GHz Band; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.73, 3.73, 3.73); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.120, 6Mbps, Main Ant, Top Side

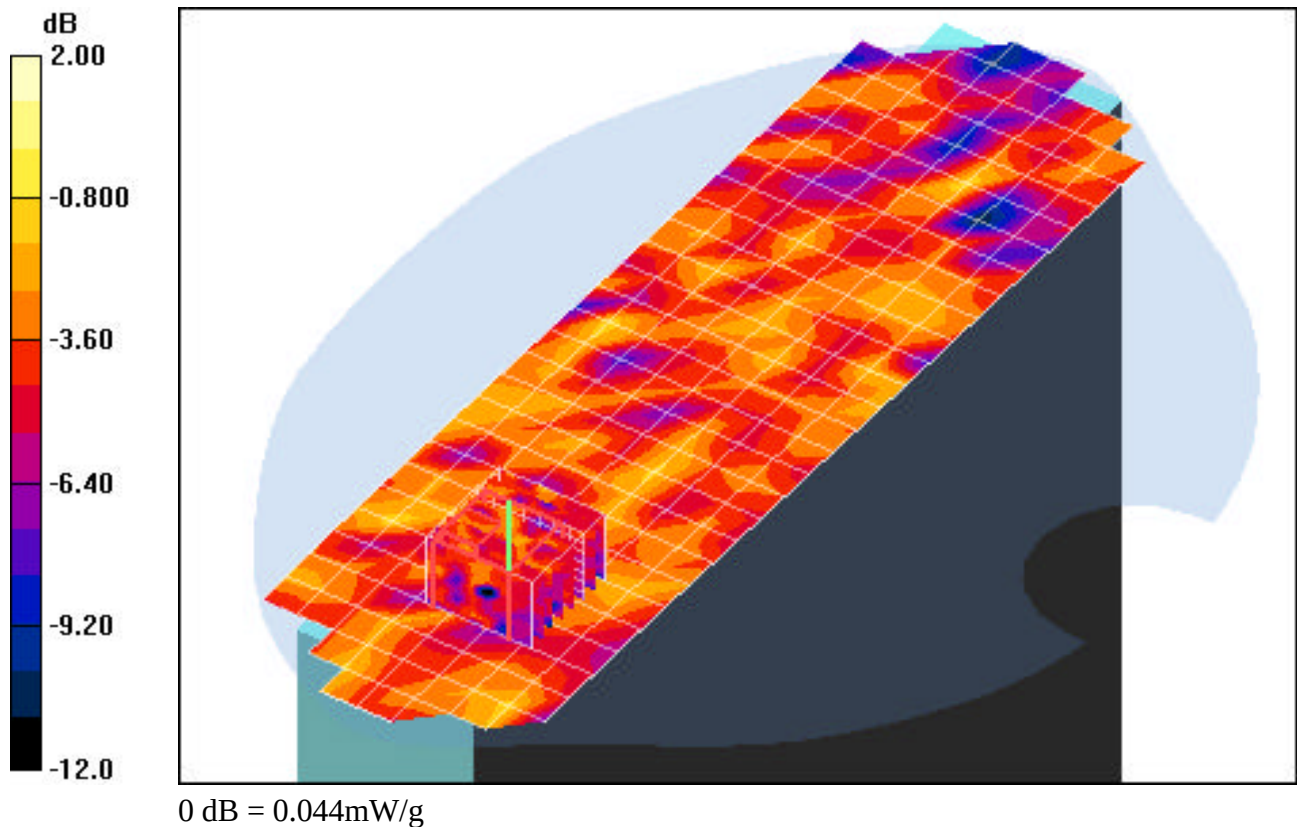
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.50 V/m

Peak SAR (extrapolated) = 0.045 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00937 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.8GHz Band; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Laptop position, LCD Flip, Ch.157, 6Mbps, Main Ant

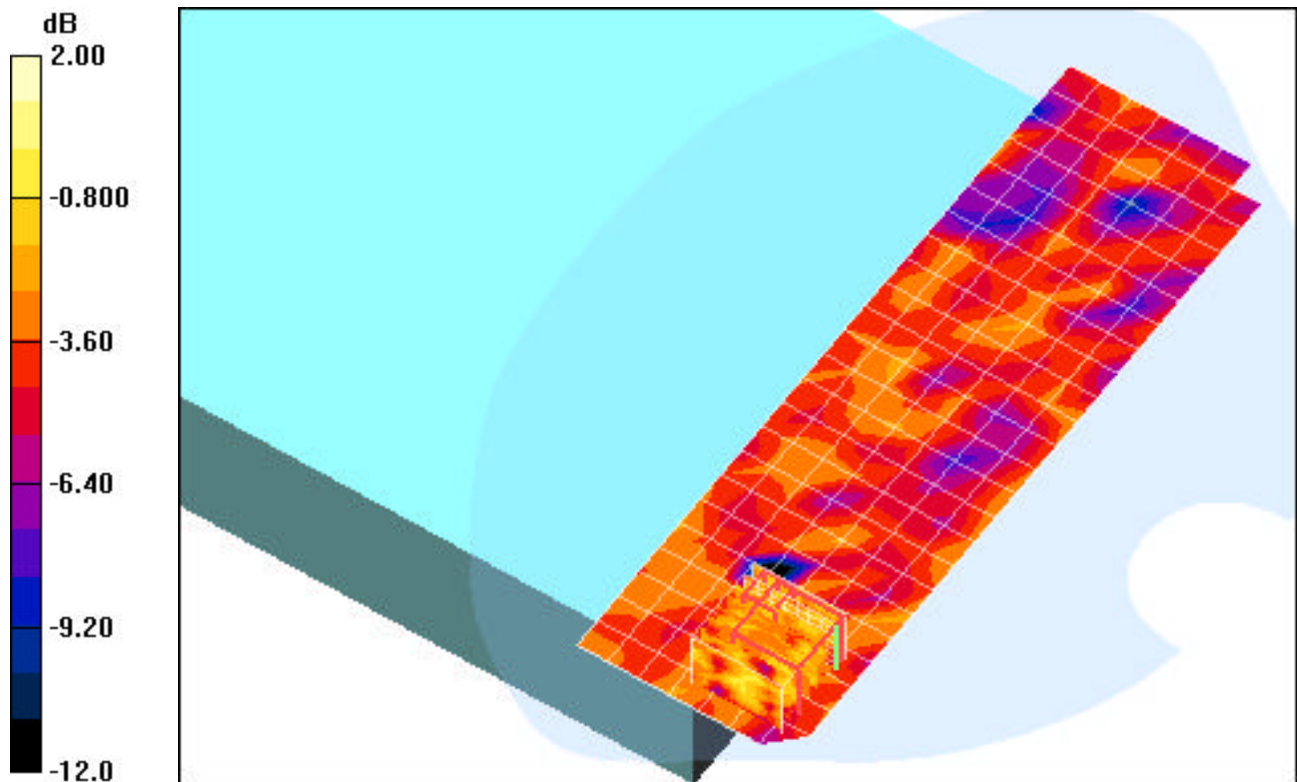
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.22 V/m

Peak SAR (extrapolated) = 0.112 W/kg

SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.027 mW/g



0 dB = 0.052mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.8GHz Band; Frequency: 5745 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.149, 6Mbps, Main Ant, Bottom Side

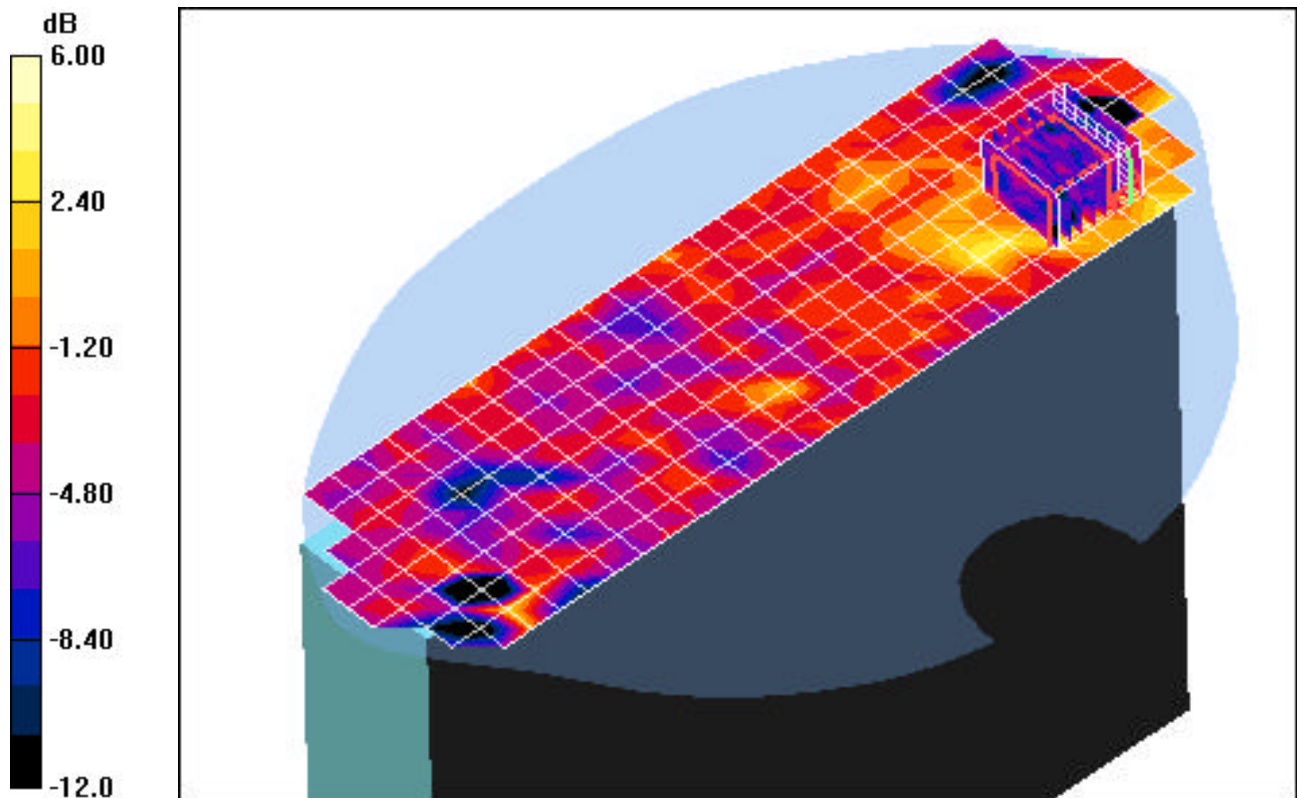
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.36 V/m

Peak SAR (extrapolated) = 0.184 W/kg

SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.013 mW/g



0 dB = 0.042mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11a 5.8GHz Band; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11a, Tablet position, LCD Flip, Ch.157, 6Mbps, Main Ant, Top Side

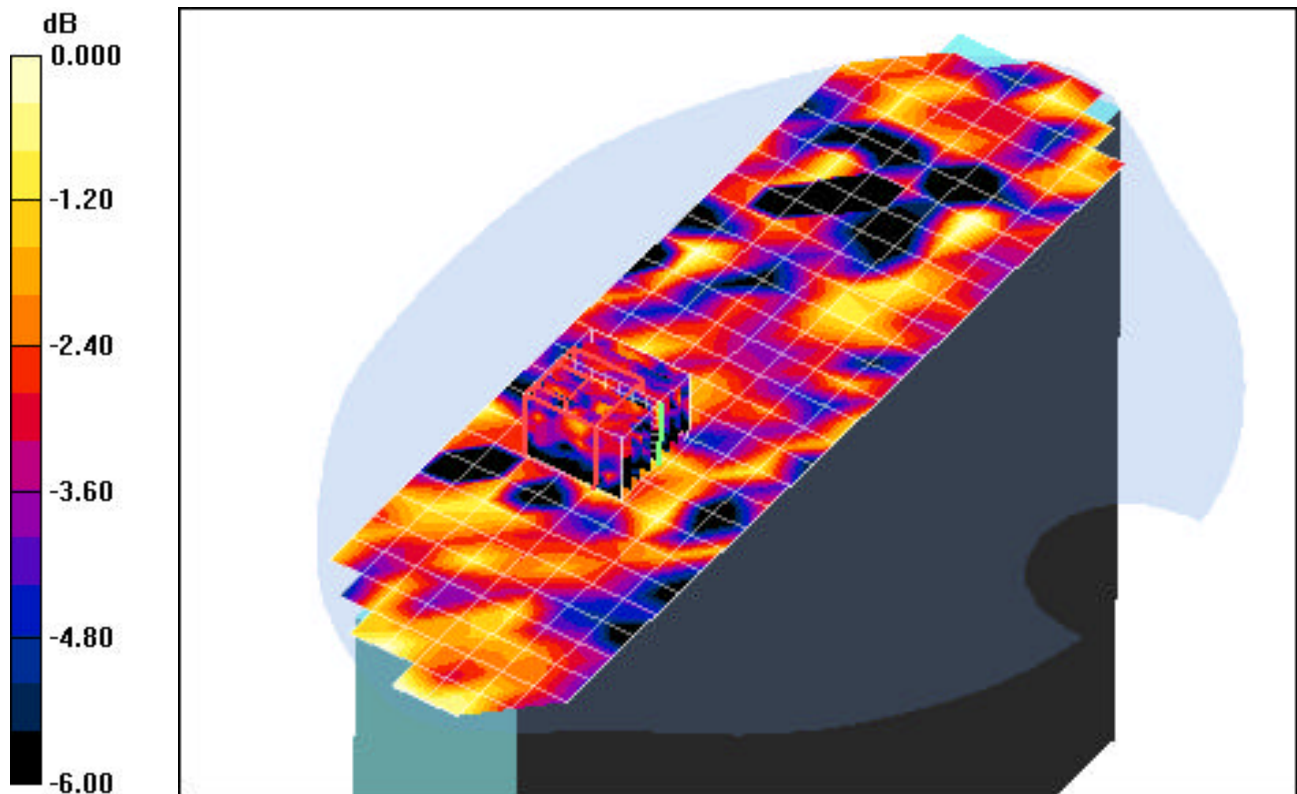
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.23 V/m

Peak SAR (extrapolated) = 0.038 W/kg

SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00922 mW/g



0 dB = 0.038mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.2GHz; Frequency: 5190 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Laptop position, LCD Flip, Ch.38, 13.5Mbps, Main Ant

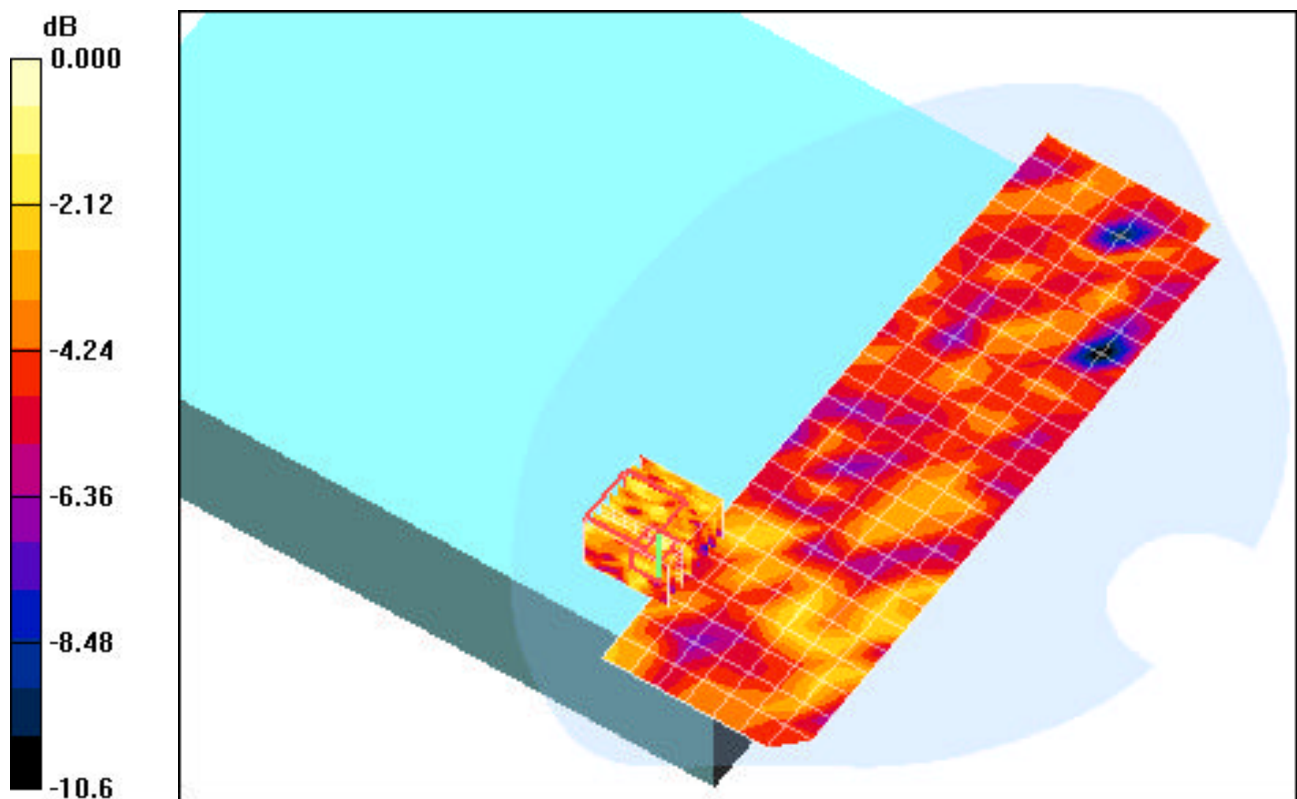
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.25 V/m

Peak SAR (extrapolated) = 0.162 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.027 mW/g



0 dB = 0.058mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.2GHz; Frequency: 5230 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.46, 13.5Mbps, Main Ant, Bottom Side

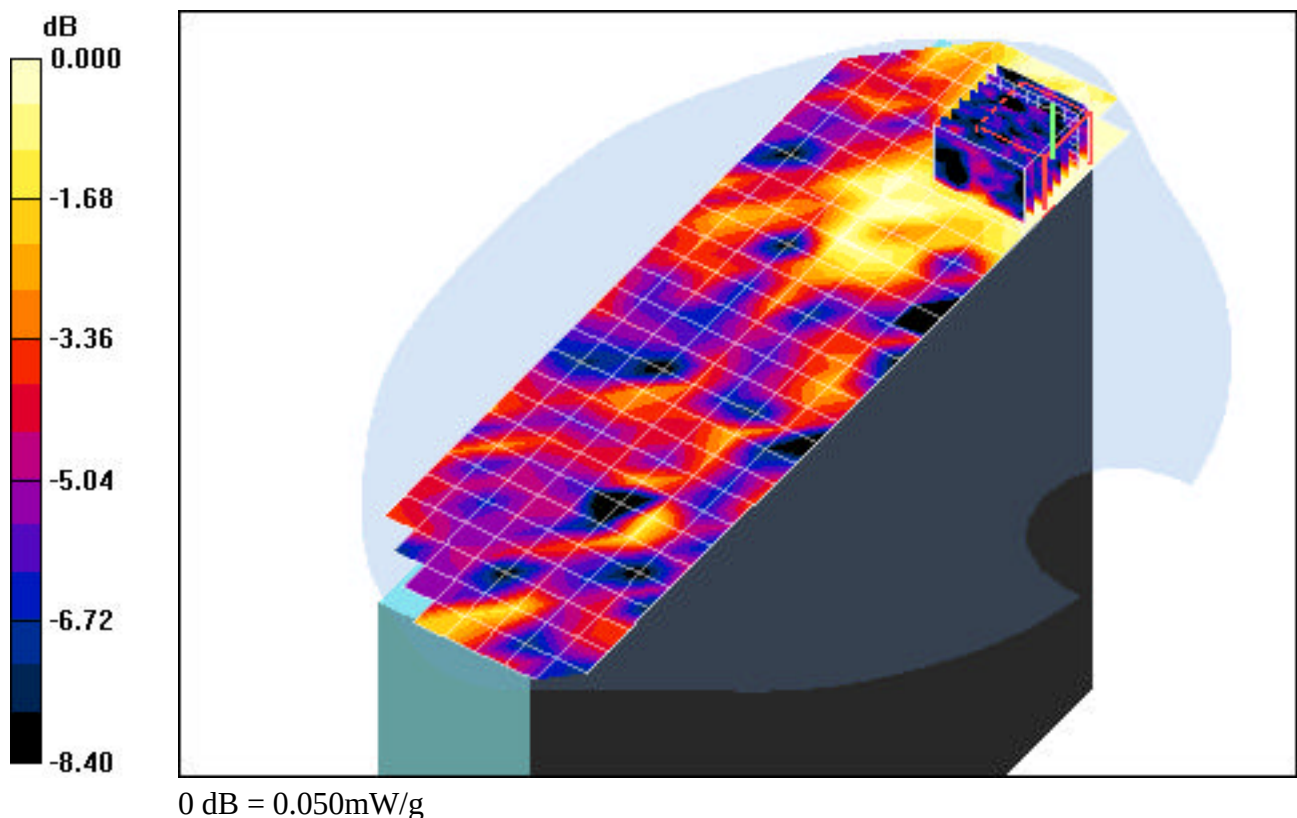
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.74 V/m

Peak SAR (extrapolated) = 0.125 W/kg

SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.020 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.2GHz Band; Frequency: 5230 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.46, 13.5Mbps, Main Ant, Top Side

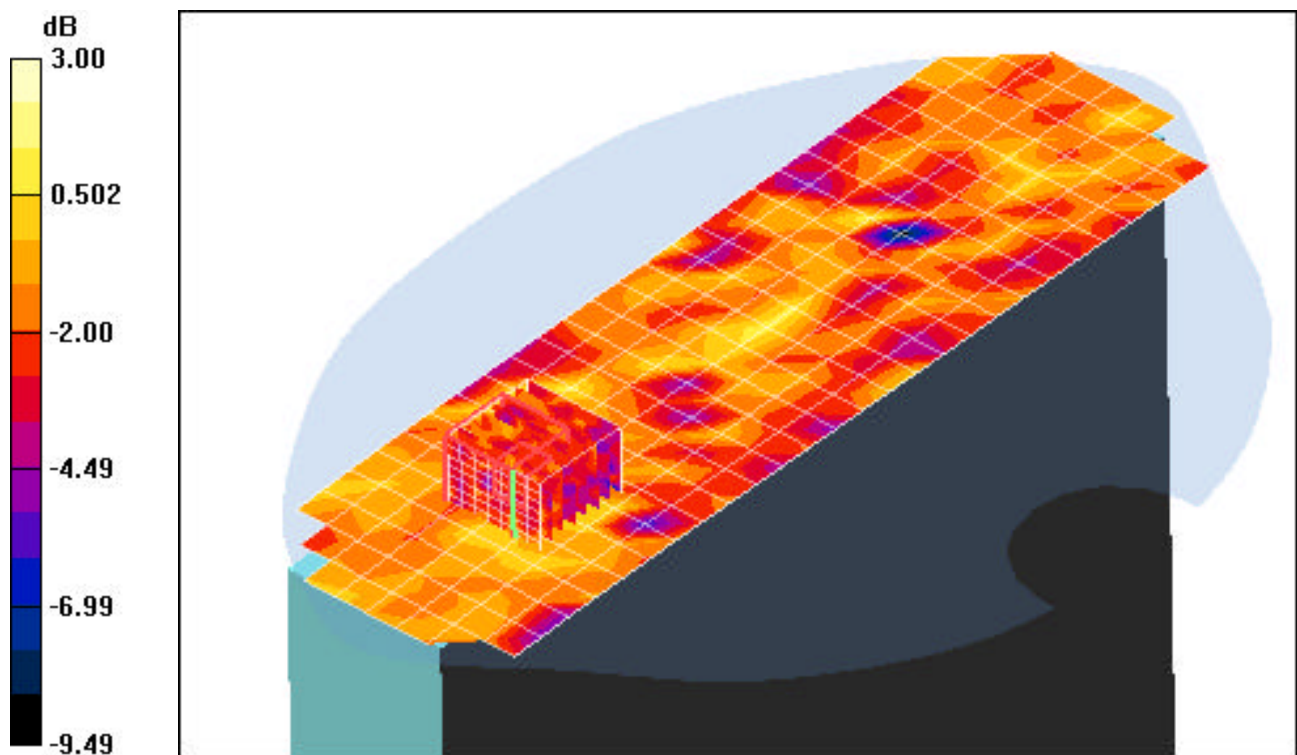
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.15 V/m

Peak SAR (extrapolated) = 0.091 W/kg

SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.0084 mW/g



0 dB = 0.033mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.3GHz; Frequency: 5270 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.83, 3.83, 3.83); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Laptop position, LCD Flip, Ch.54, 13.5Mbps, Main Ant

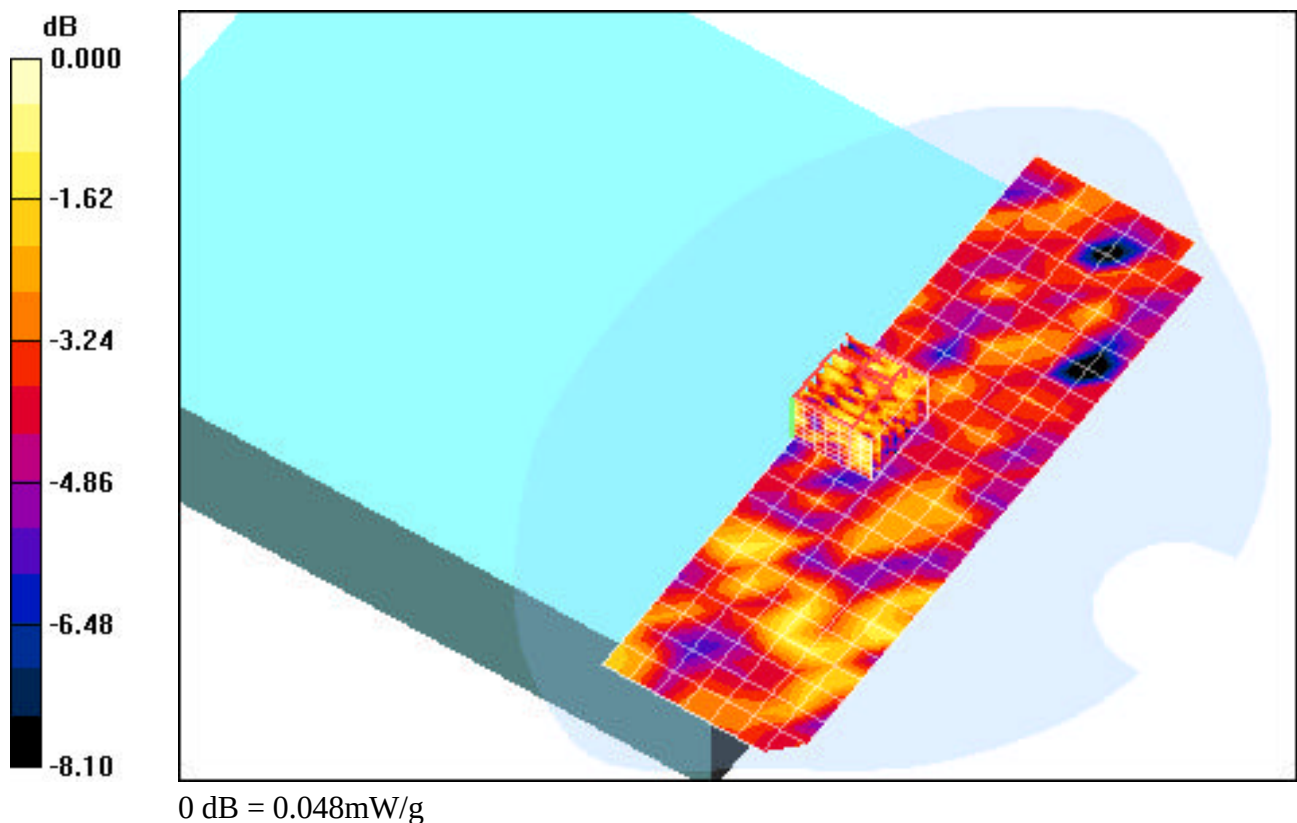
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.28 V/m

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.021 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.3GHz; Frequency: 5270 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.83, 3.83, 3.83); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.54, 13.5Mbps, Main Ant, Bottom Side

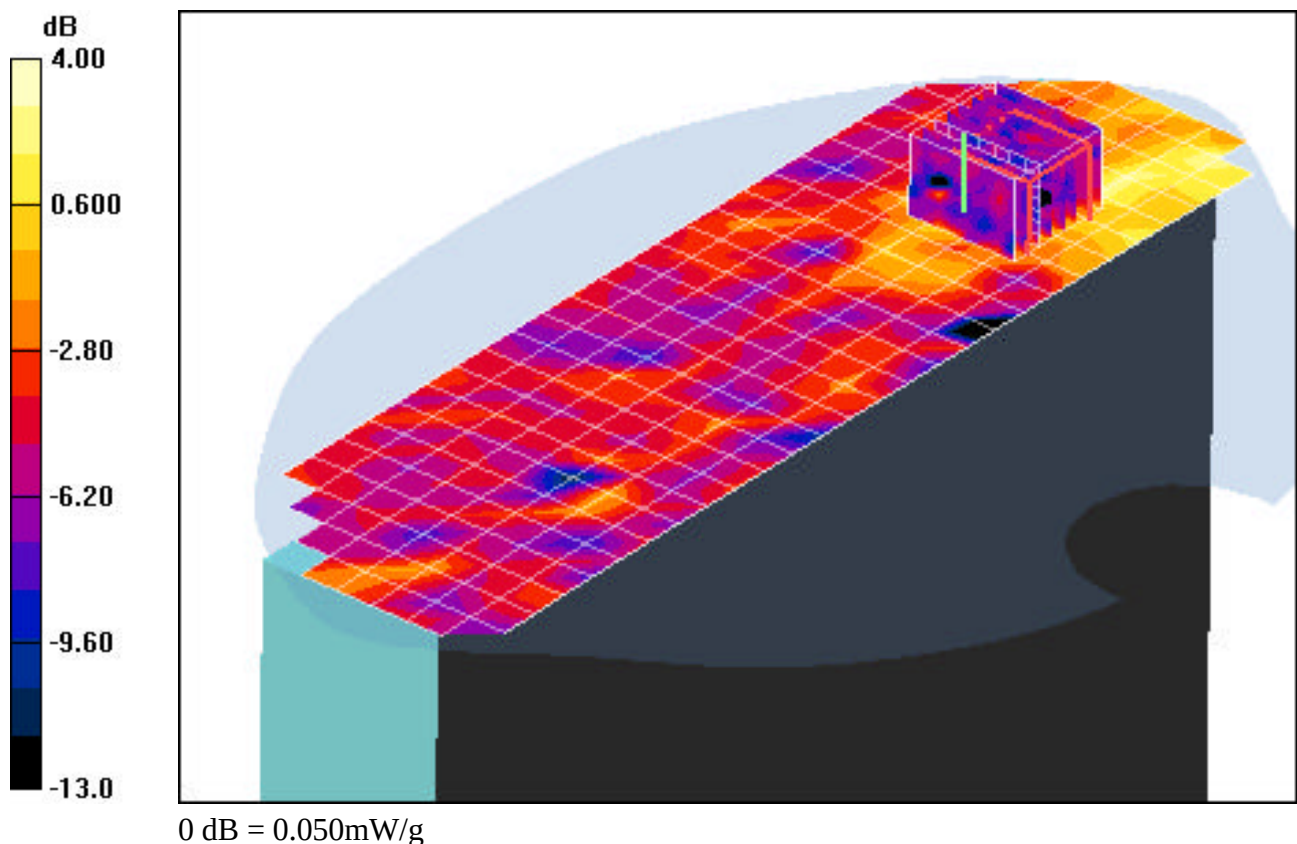
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.81 V/m

Peak SAR (extrapolated) = 0.137 W/kg

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.017 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.3GHz Band; Frequency: 5310 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.83, 3.83, 3.83); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.62, 13.5Mbps, Main Ant, Top Side

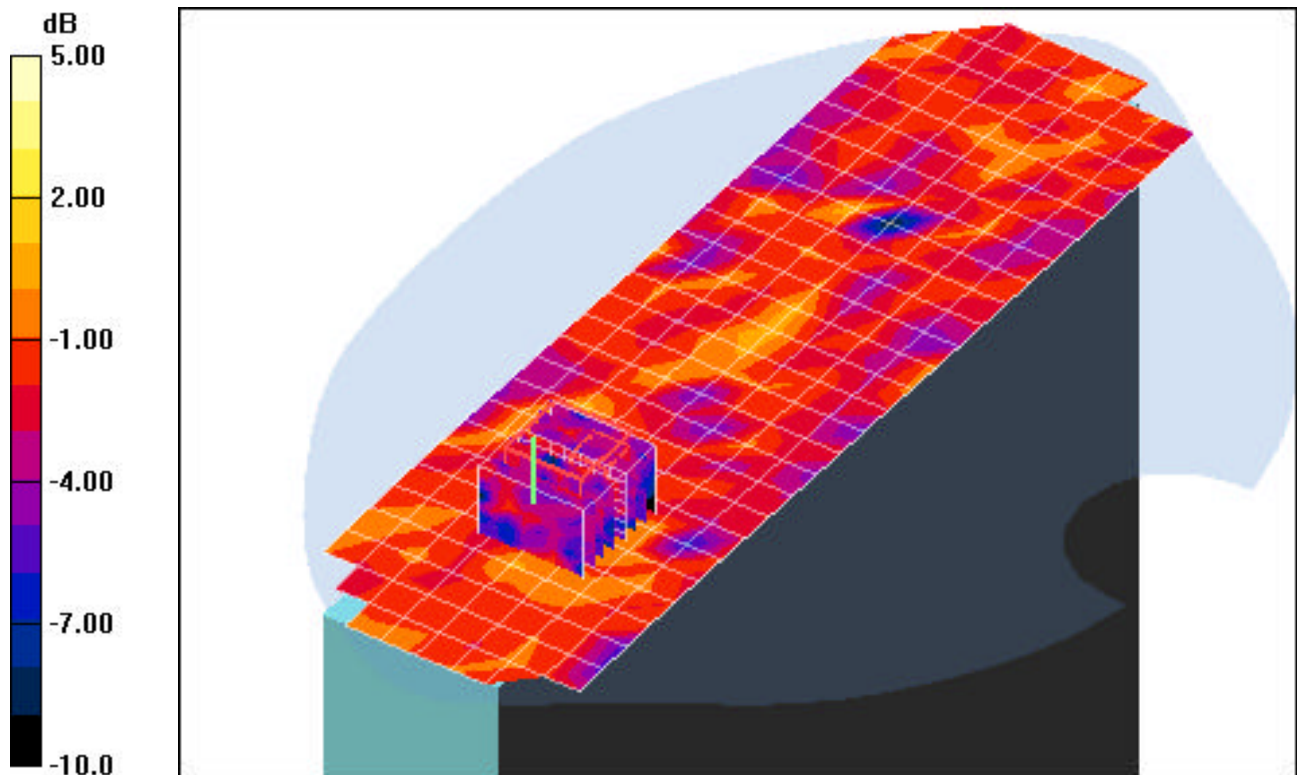
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.07 V/m

Peak SAR (extrapolated) = 0.094 W/kg

SAR(1 g) = 0.010 mW/g; SAR(10 g) = 0.00862 mW/g



0 dB = 0.035mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.5GHz; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.73, 3.73, 3.73); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Laptop position, LCD Flip, Ch.118, 13.5Mbps, Main Ant

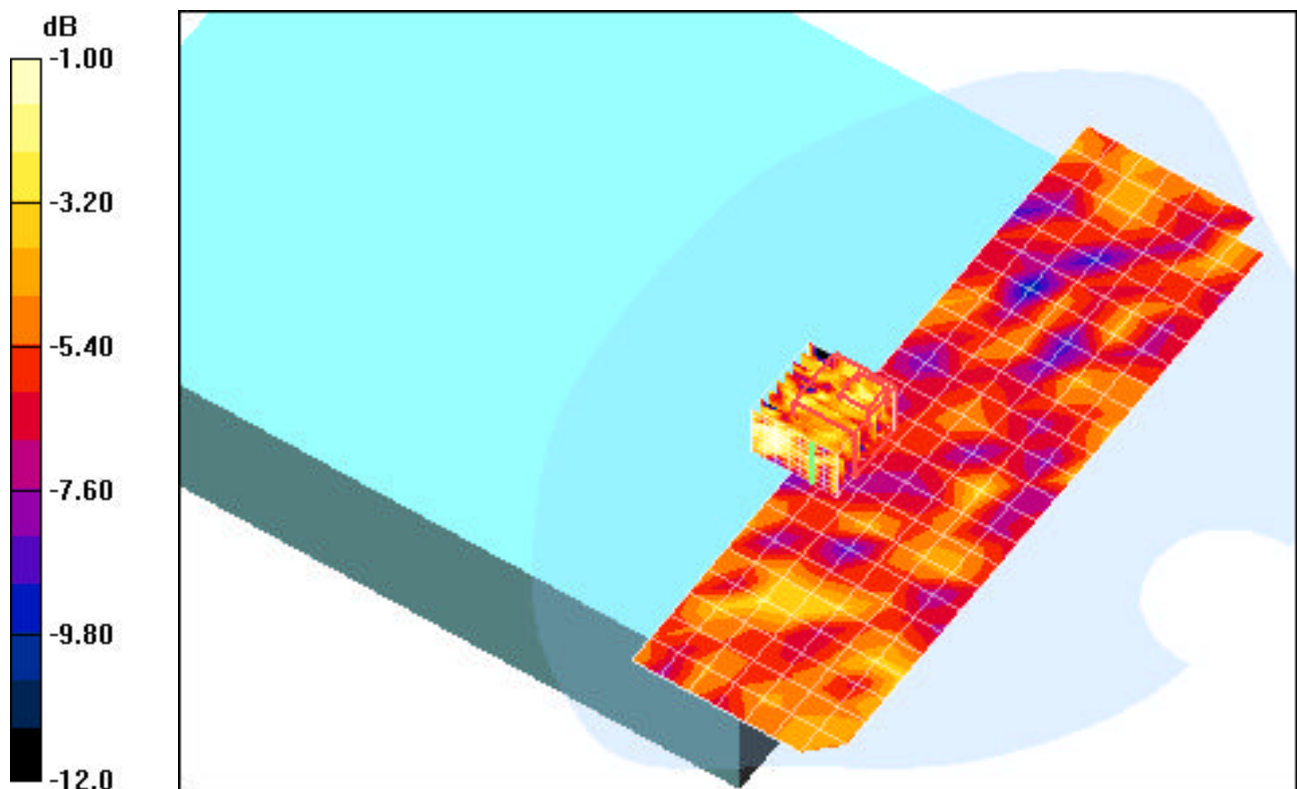
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.19 V/m

Peak SAR (extrapolated) = 0.101 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.019 mW/g



0 dB = 0.069mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.5GHz; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.73, 3.73, 3.73); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.118, 13.5Mbps, Main Ant, Bottom Side

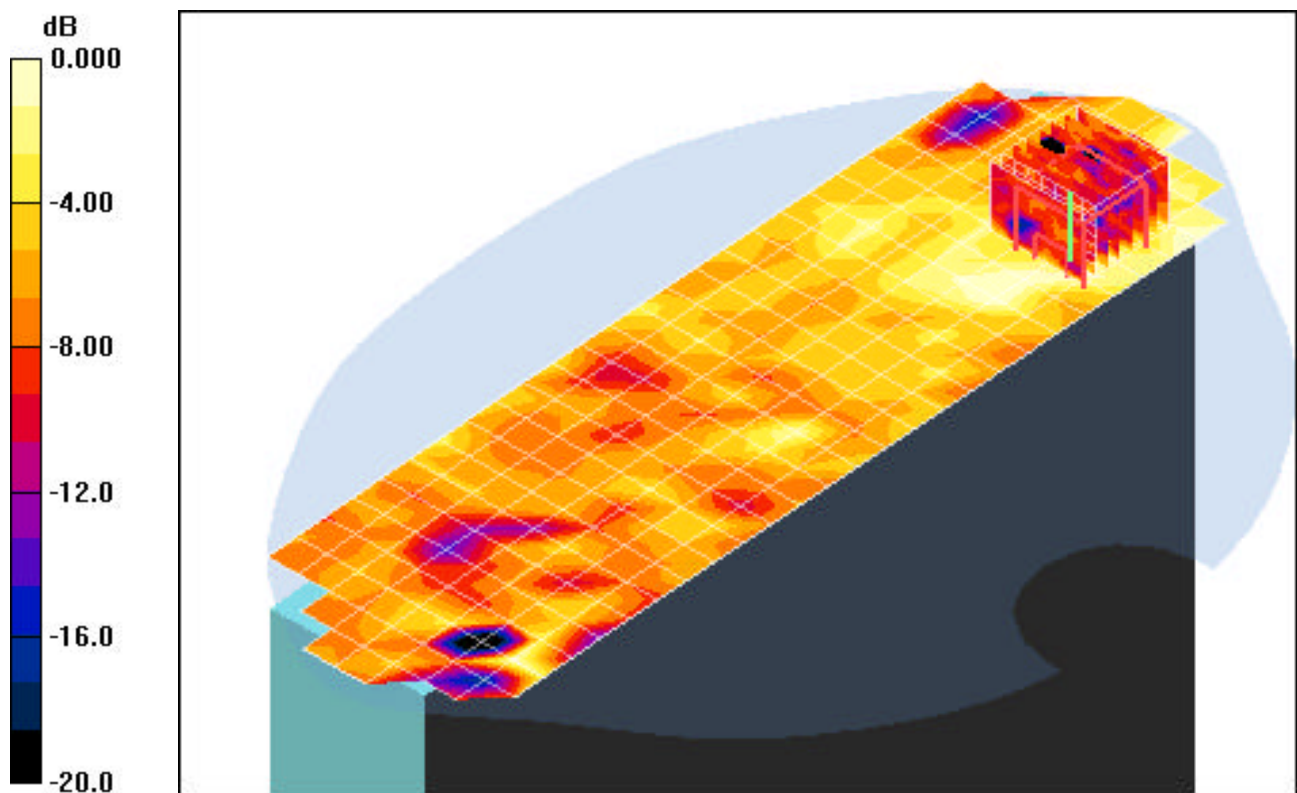
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.38 V/m

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.011 mW/g



0 dB = 0.072mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.5GHz; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.73, 3.73, 3.73); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.118, 13.5Mbps, Main Ant, Top Side

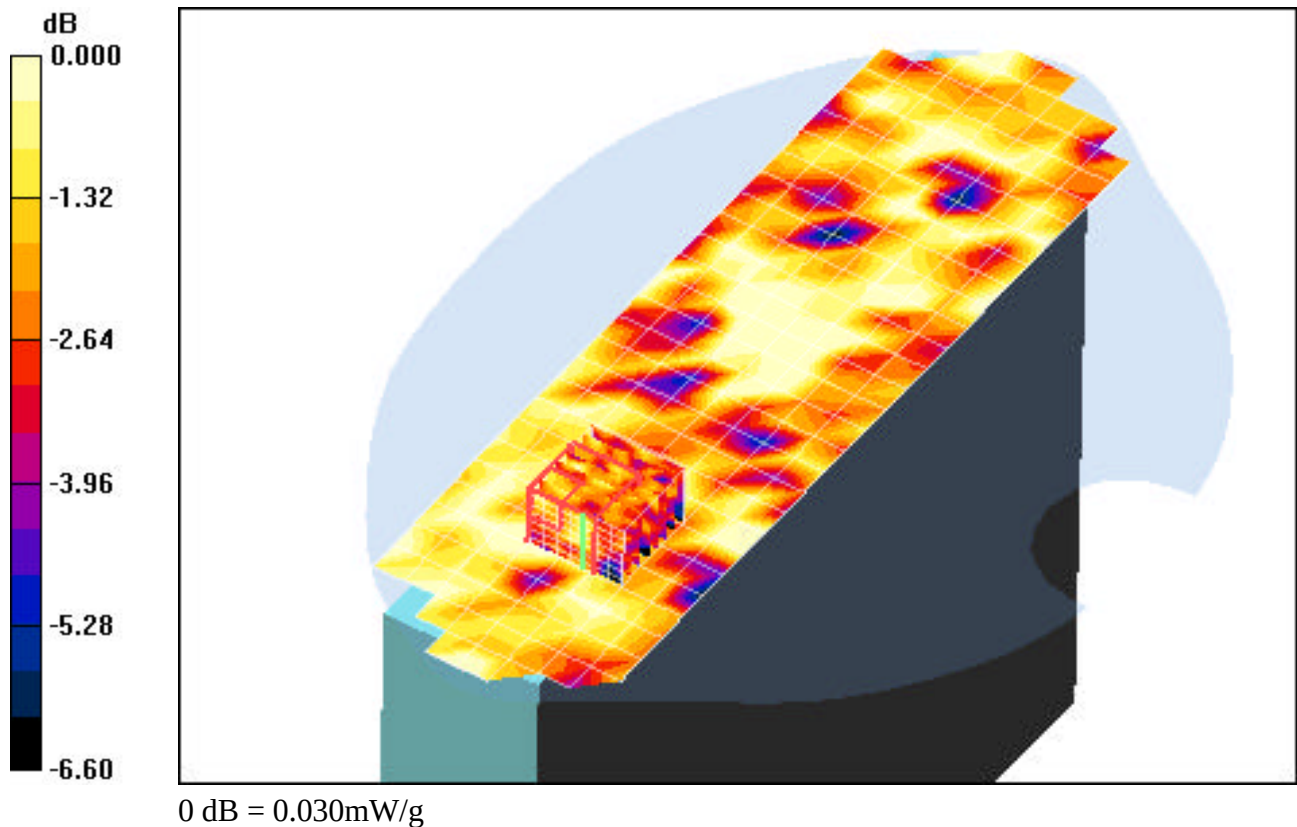
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.16 V/m

Peak SAR (extrapolated) = 0.054 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.012 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.8GHz; Frequency: 5755 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Laptop position, LCD Flip, Ch.151, 13.5Mbps, Main Ant

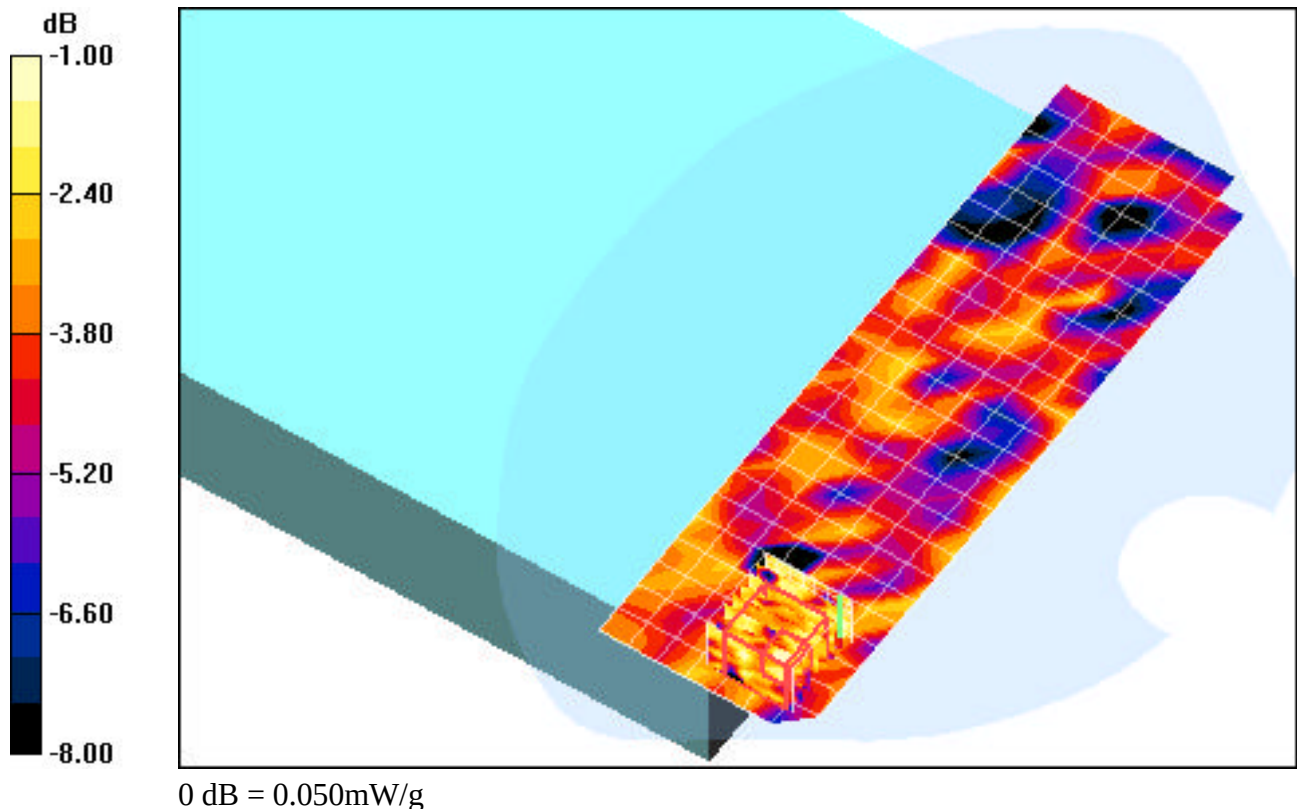
Area Scan (8x25x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.40 V/m

Peak SAR (extrapolated) = 0.132 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.024 mW/g



PCTEST ENGINEERING LABORATORY, INC.

DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: IEEE 802.11n 5.8GHz; Frequency: 5795 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.159, 13.5Mbps, Main Ant, Bottom Side

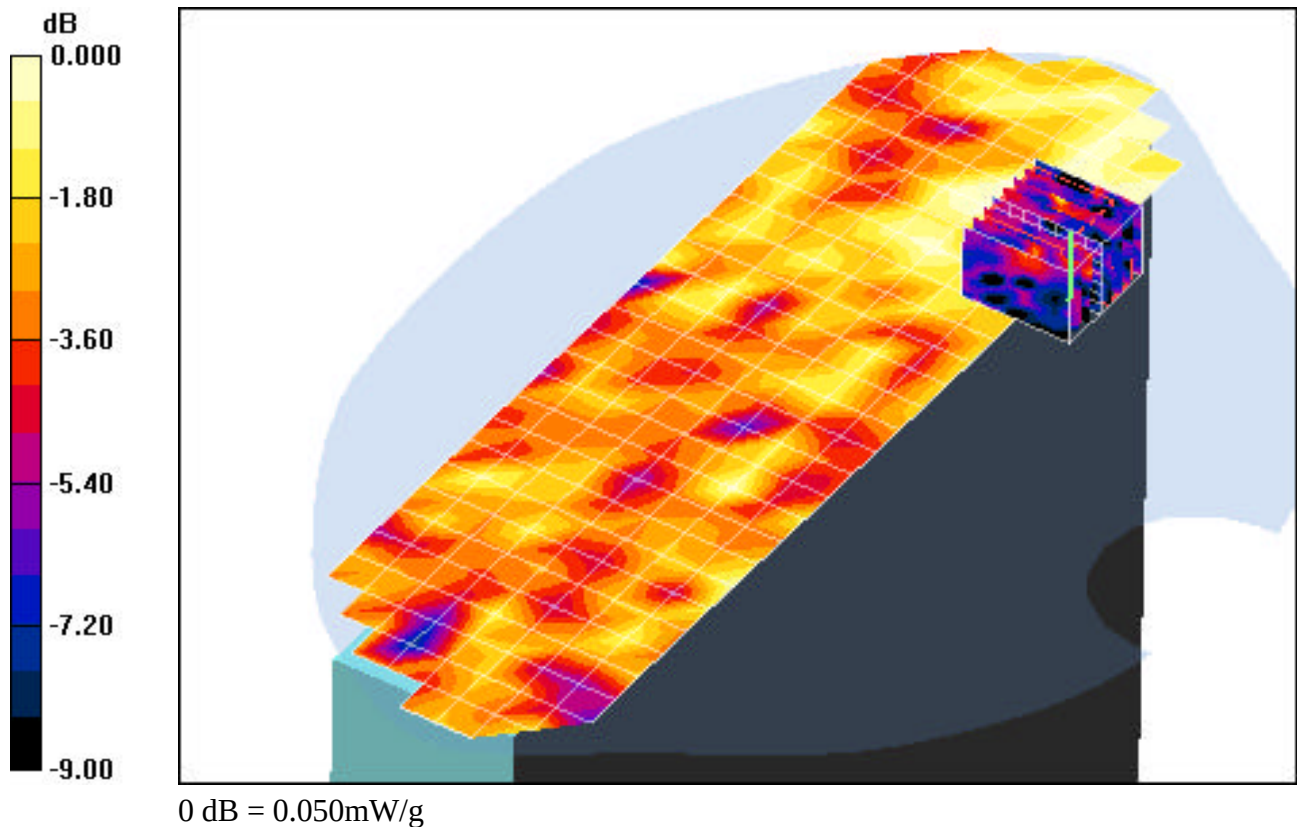
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.29 V/m

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00706 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF -19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11n 5.8GHz; Frequency: 5795 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11n, Tablet position, LCD Flip, Ch.159, 13.5Mbps, Main Ant, Top Side

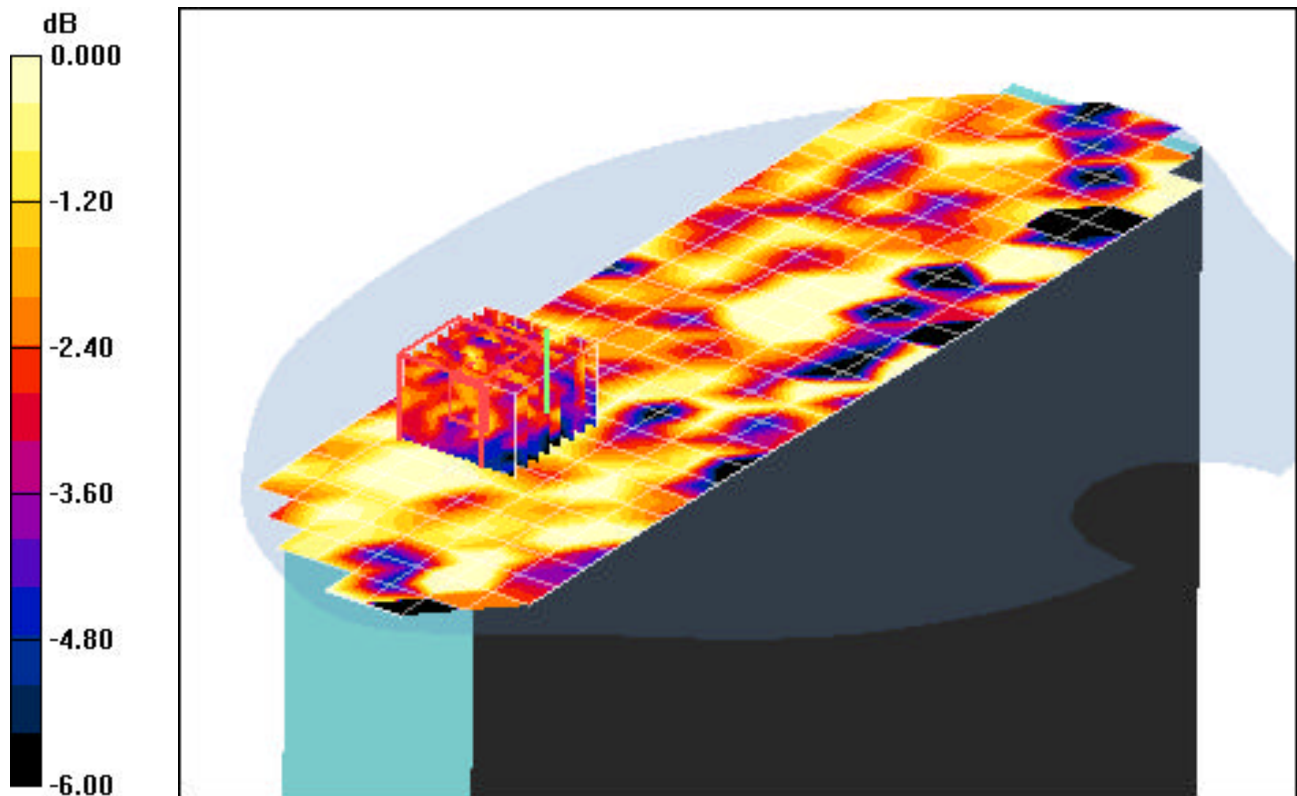
Area Scan (9x31x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.53 V/m

Peak SAR (extrapolated) = 0.075 W/kg

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.017 mW/g



0 dB = 0.039mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: GSM850 GPRS; 2 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:4.15

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS850, Laptop position, LCD Flip, Mid ch, 2Tx Slot

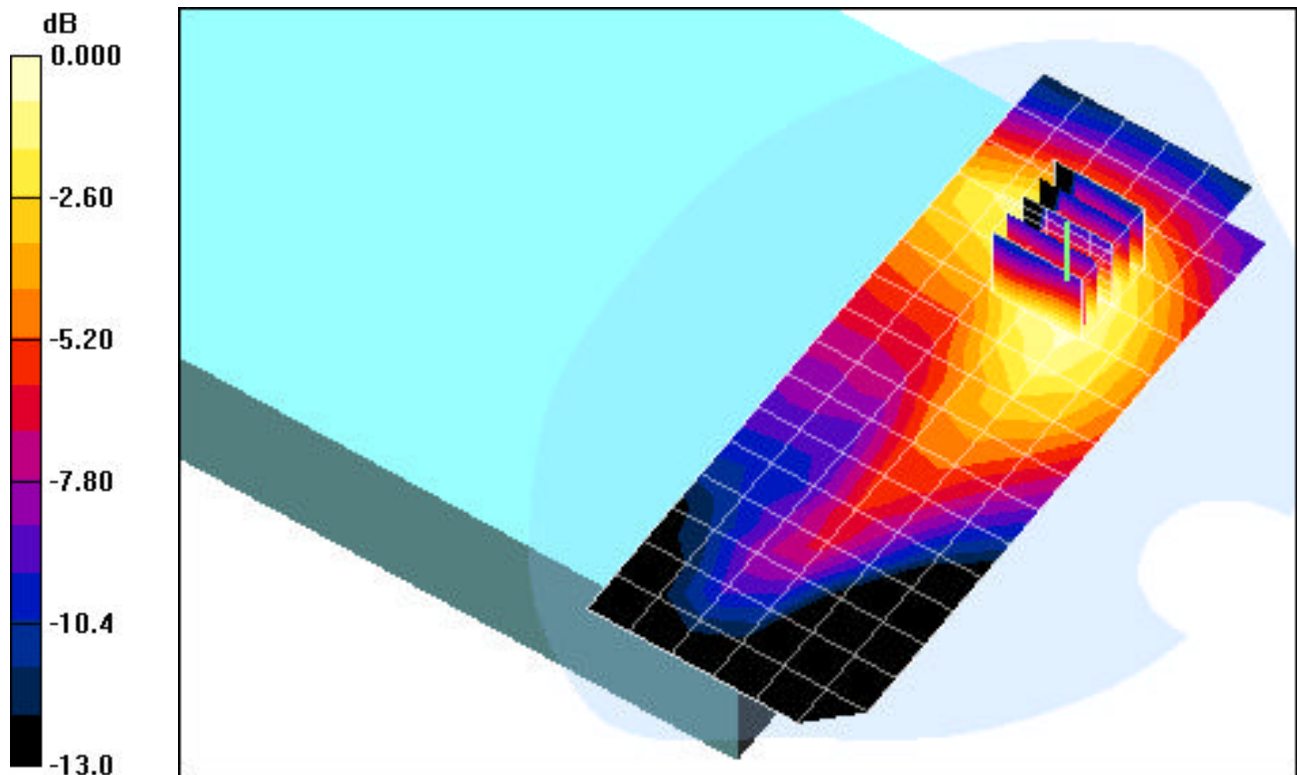
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 14.4 V/m

Peak SAR (extrapolated) = 0.504 W/kg

SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.121 mW/g



0 dB = 0.206mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: GSM850 GPRS; 3 Tx slots; Frequency: 824.2 MHz; Duty Cycle: 1:2.76

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS850, Tablet position, Left Side, LCD Flip, Low ch, 3Tx Slot

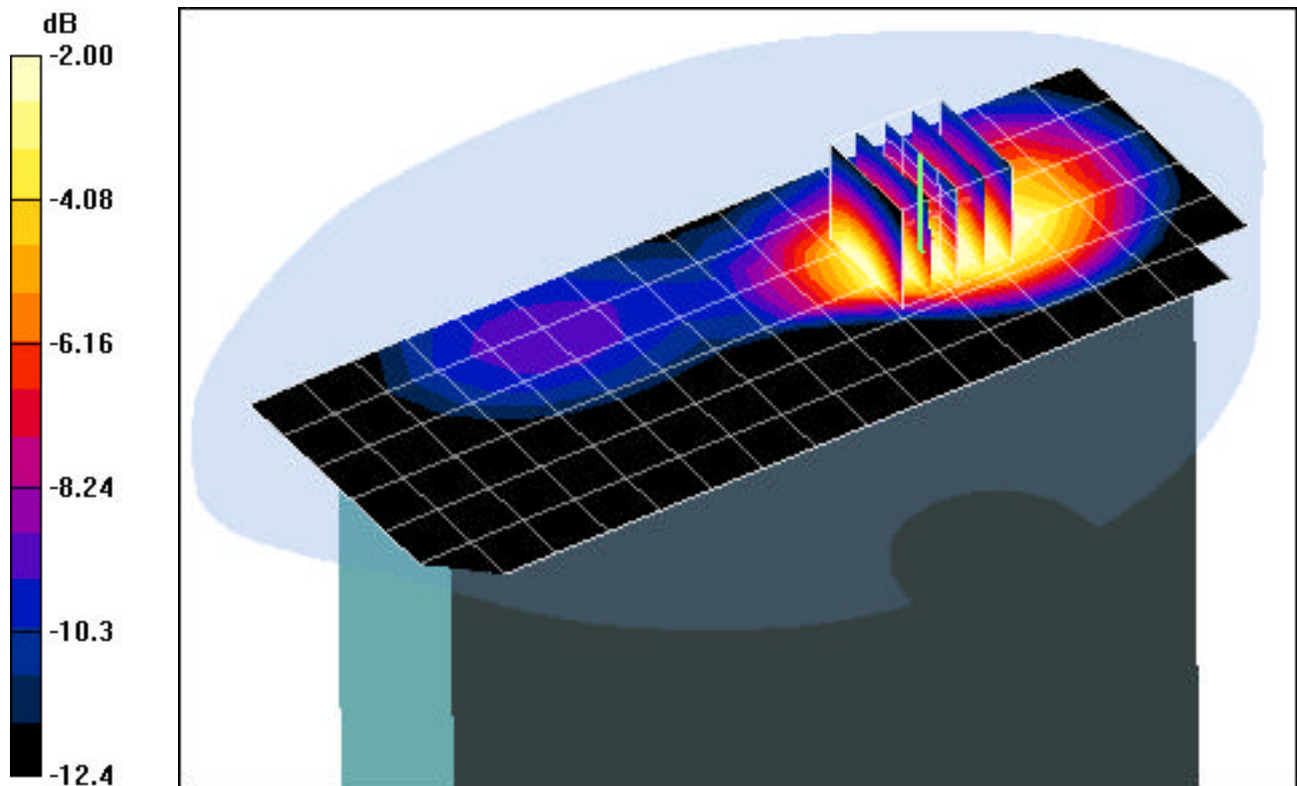
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 35.7 V/m

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.641 mW/g



0 dB = 1.25mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: GSM850 GPRS; 3 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:2.76

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS850, Tablet position, Top Side, LCD Flip, Mid ch, 3Tx Slot

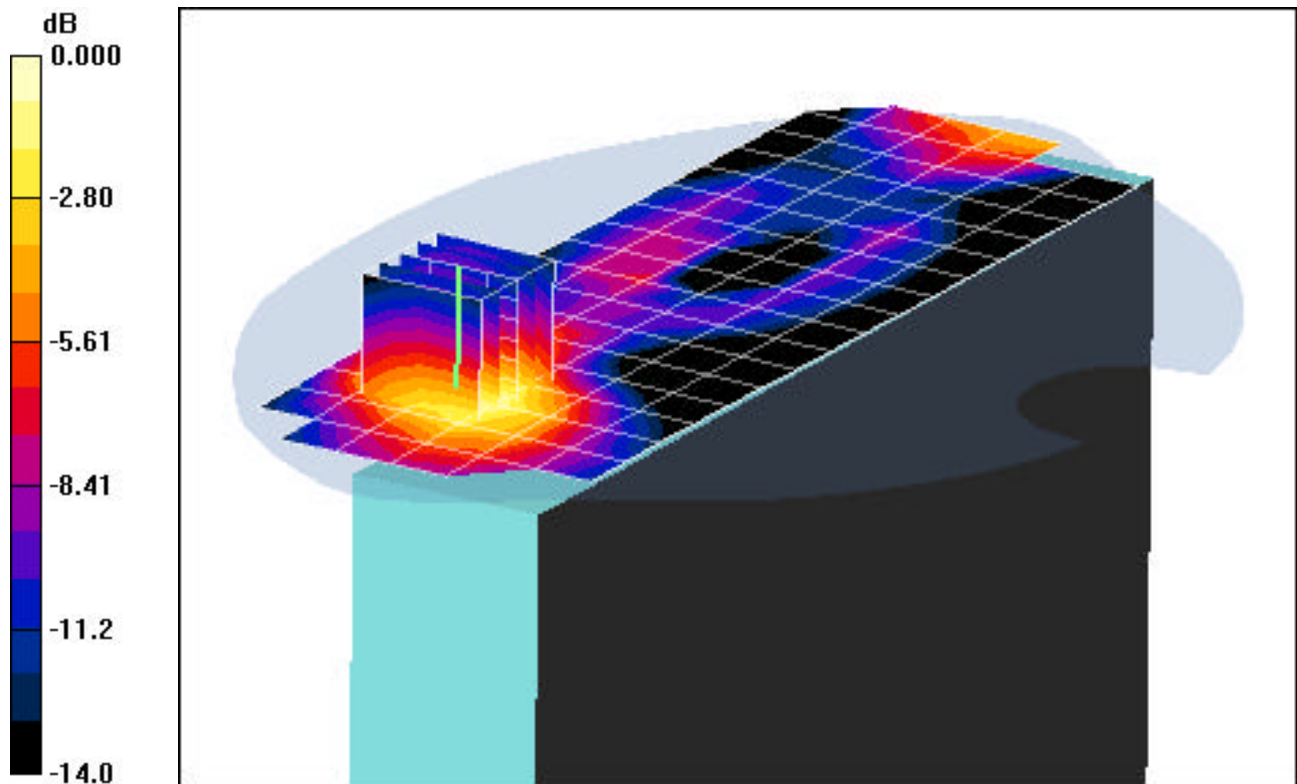
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 23.3 V/m

Peak SAR (extrapolated) = 0.699 W/kg

SAR(1 g) = 0.445 mW/g; SAR(10 g) = 0.276 mW/g



0 dB = 0.536mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: GSM850 GPRS; 3 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:2.76

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS850, Tablet position, Bottom Side, LCD Flip, Mid ch, 3Tx Slot

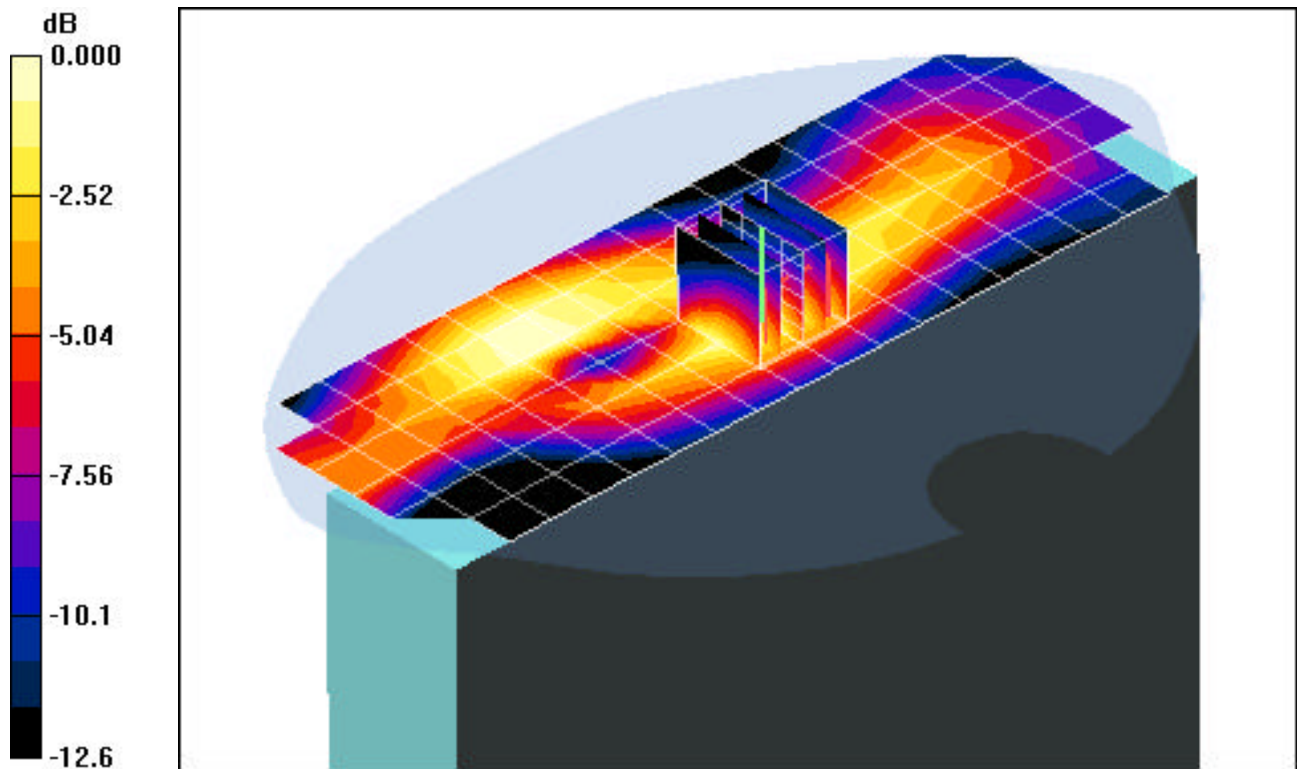
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 11.8 V/m

Peak SAR (extrapolated) = 0.218 W/kg

SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.070 mW/g



0 dB = 0.140mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: GSM850 EGPRS; 3 Tx slots; Frequency: 824.2 MHz; Duty Cycle: 1:2.76

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: EGPRS850, Tablet position, Left Side, LCD Flip, Low ch, 3Tx Slot

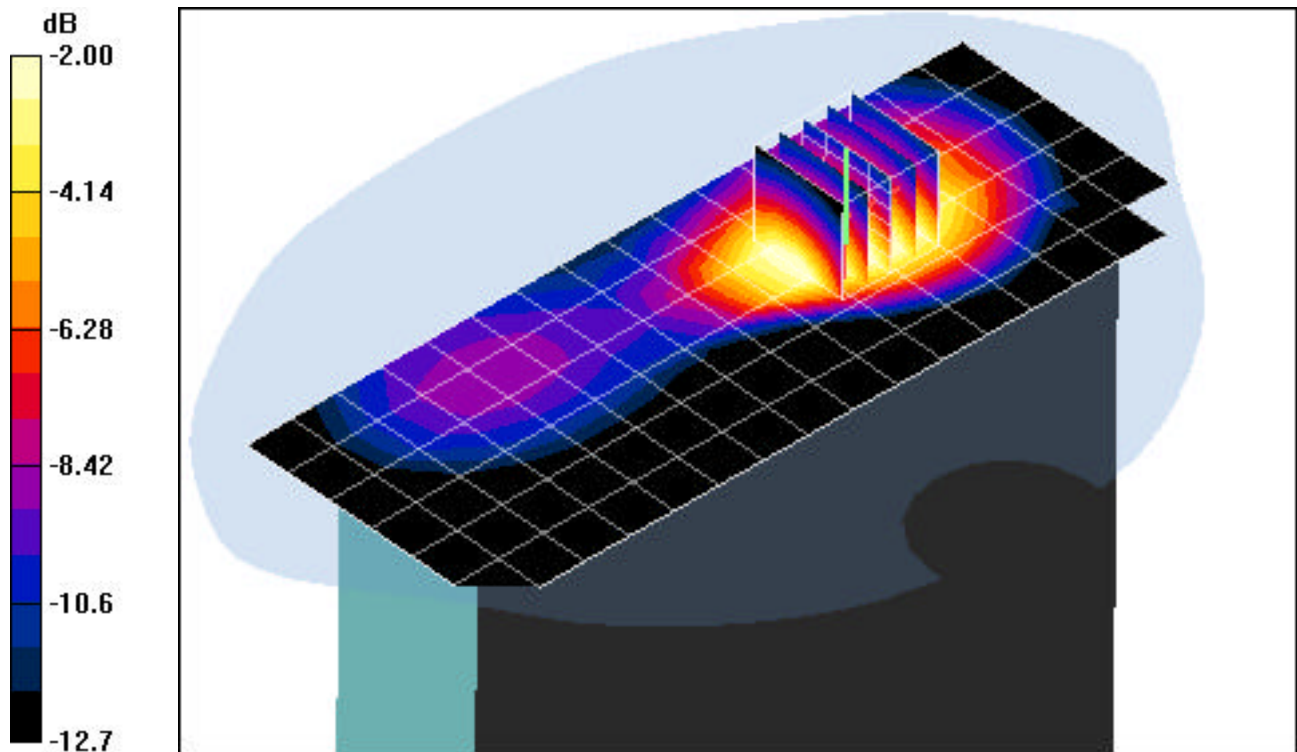
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 28.2 V/m

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.654 mW/g; SAR(10 g) = 0.399 mW/g



0 dB = 0.779mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: GSM1900 GPRS; 4 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS1900, Laptop position, LCD Flip, Mid ch, 4Tx Slot

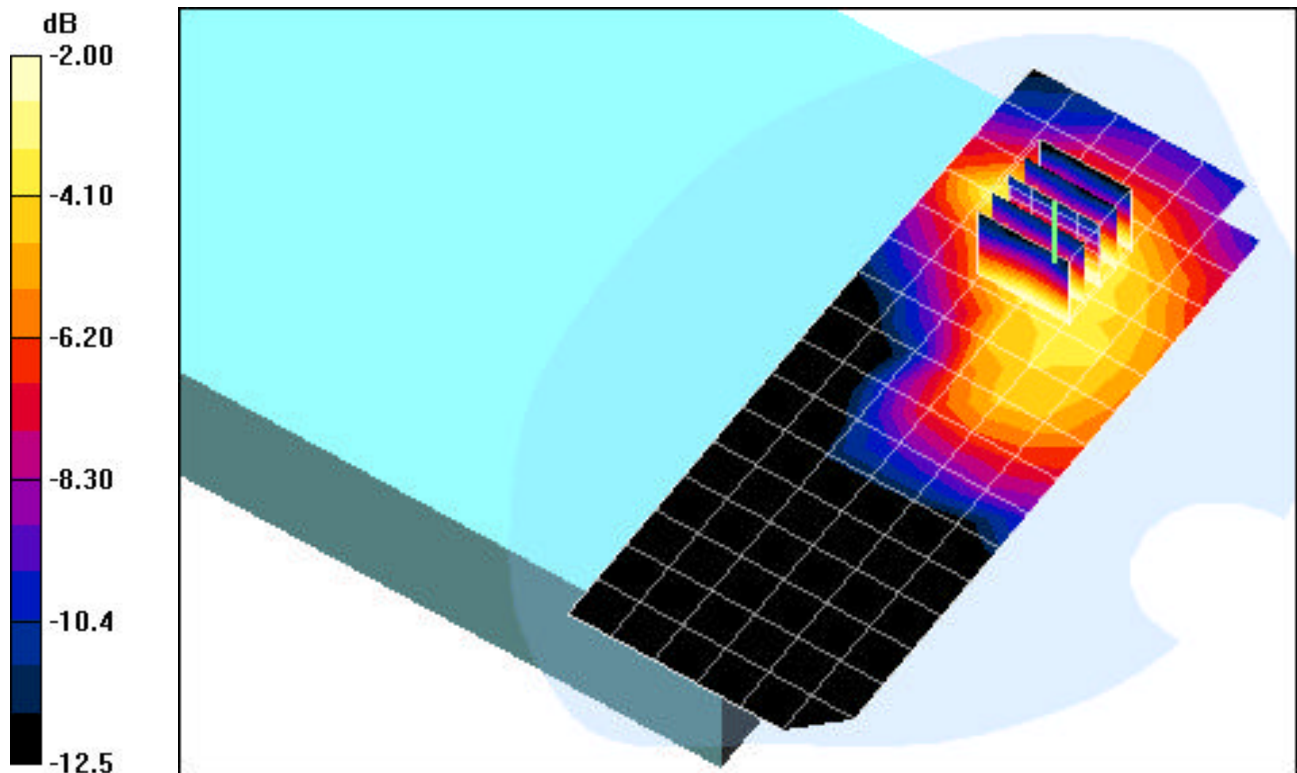
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 9.81 V/m

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.075 mW/g



0 dB = 0.147mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: GSM1900 GPRS; 4 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS1900, Tablet position, Left Side, LCD Flip, Mid ch, 4Tx Slot,

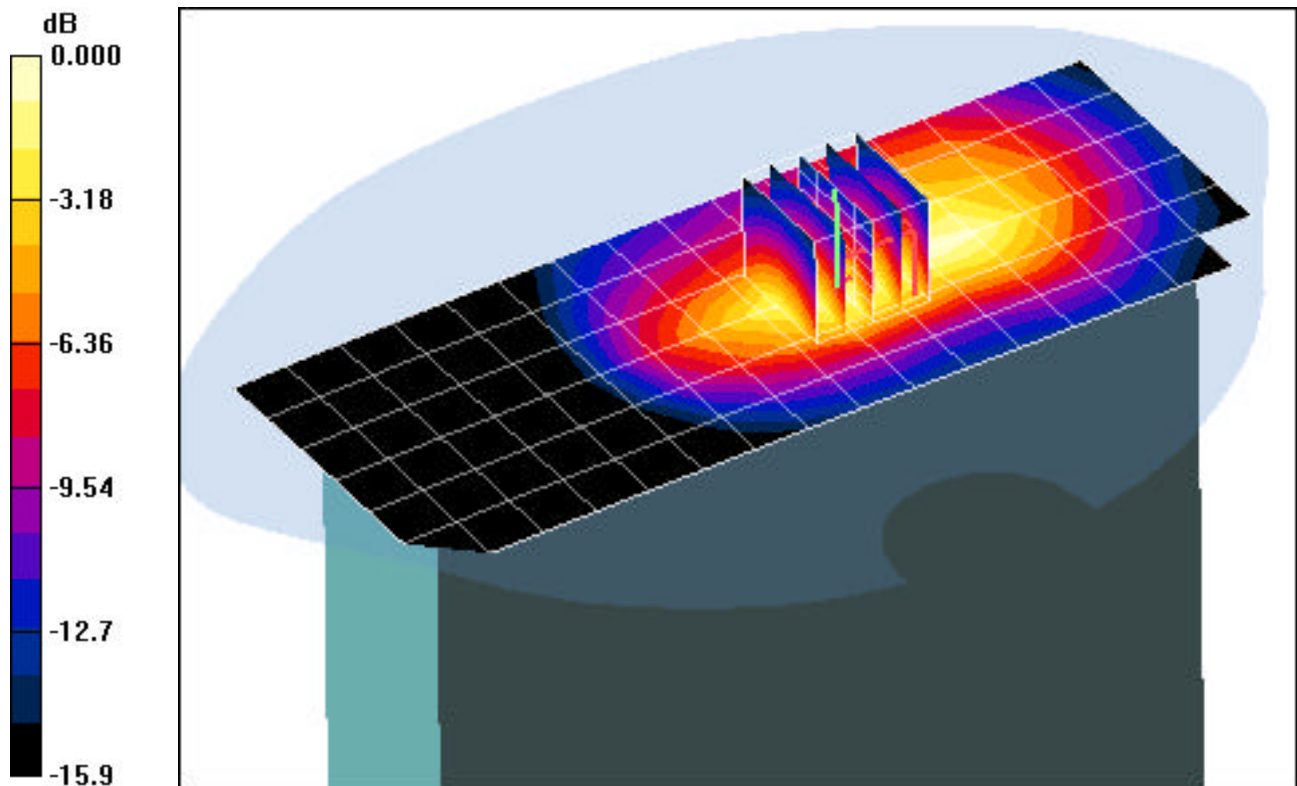
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.1 V/m

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.441 mW/g



0 dB = 0.945mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: GSM1900 GPRS; 4Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS1900, Tablet position, Top Side, LCD Flip, Mid ch, 4Tx Slot

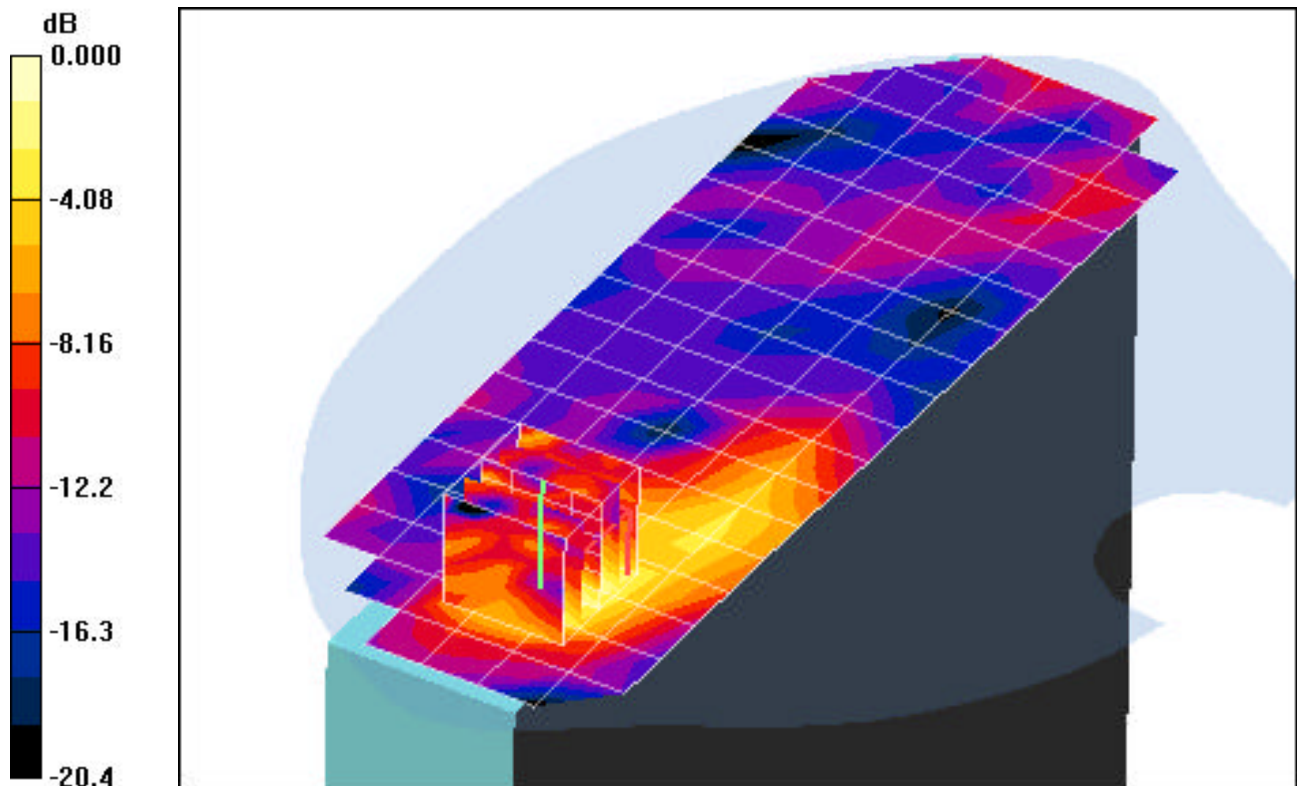
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.7 V/m

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.054 mW/g



0 dB = 0.164mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: GSM1900 GPRS; 4 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS1900, Tablet position, Bottom Side, LCD Flip, Mid ch, 4Tx Slot

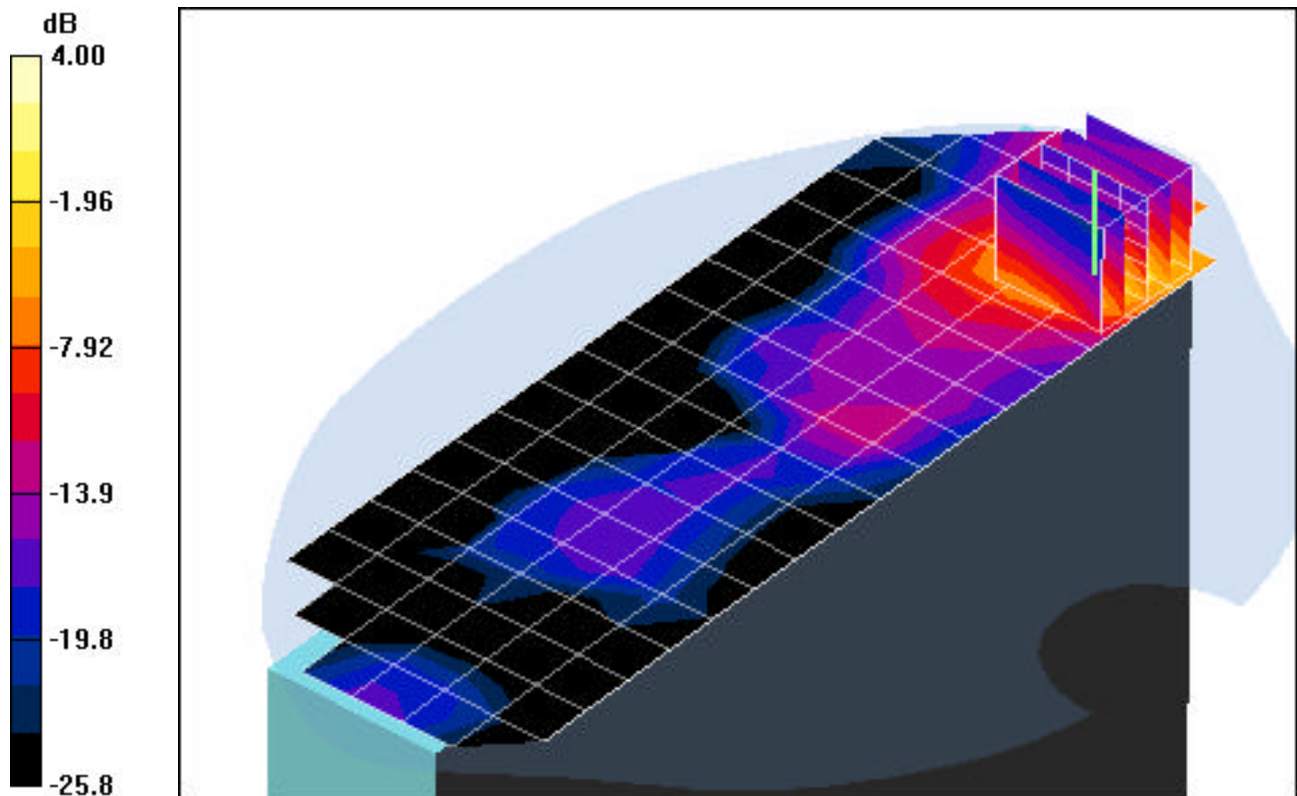
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 4.57 V/m

Peak SAR (extrapolated) = 0.027 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00548 mW/g



0 dB = 0.017mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: GSM1900 EGPRS; 4 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: EGPRS1900, Tablet position, Left Side, LCD Flip, Mid ch, 4Tx Slot

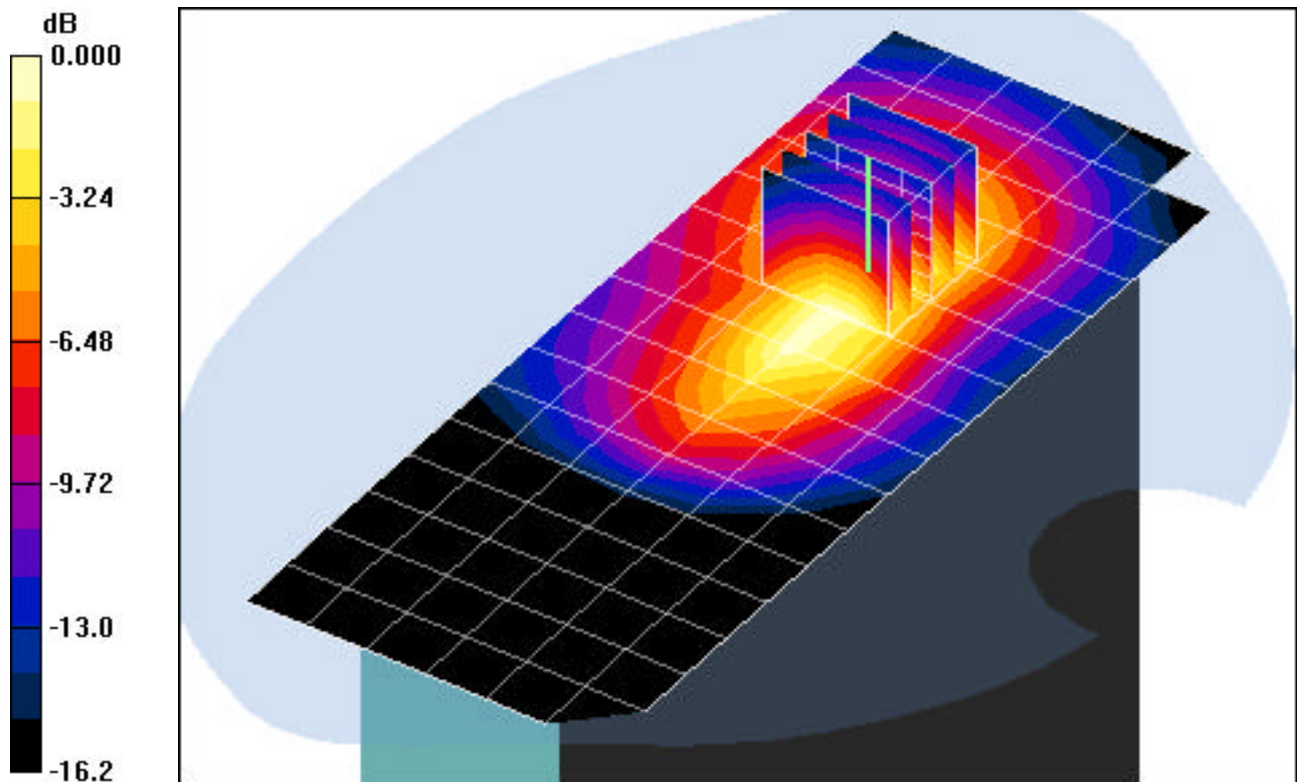
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 18.7 V/m

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.434 mW/g; SAR(10 g) = 0.250 mW/g



0 dB = 0.536mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.27, 8.27, 8.27); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA850, Laptop position, LCD Flip, Mid ch, HSDPA Inactive

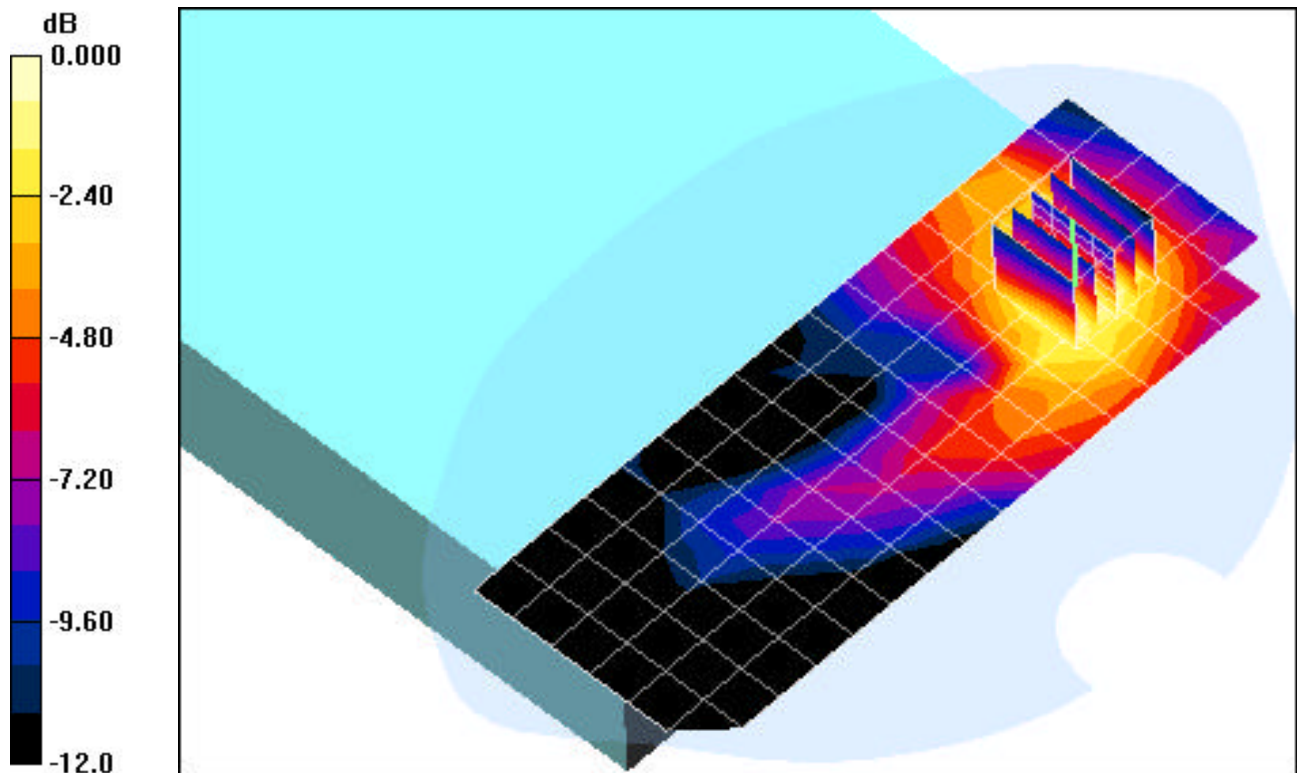
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 9.93 V/m

Peak SAR (extrapolated) = 0.124 W/kg

SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.053 mW/g



0 dB = 0.097mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA850, Tablet position, Left Side, LCD Flip, Mid ch, HSDPA Inactive

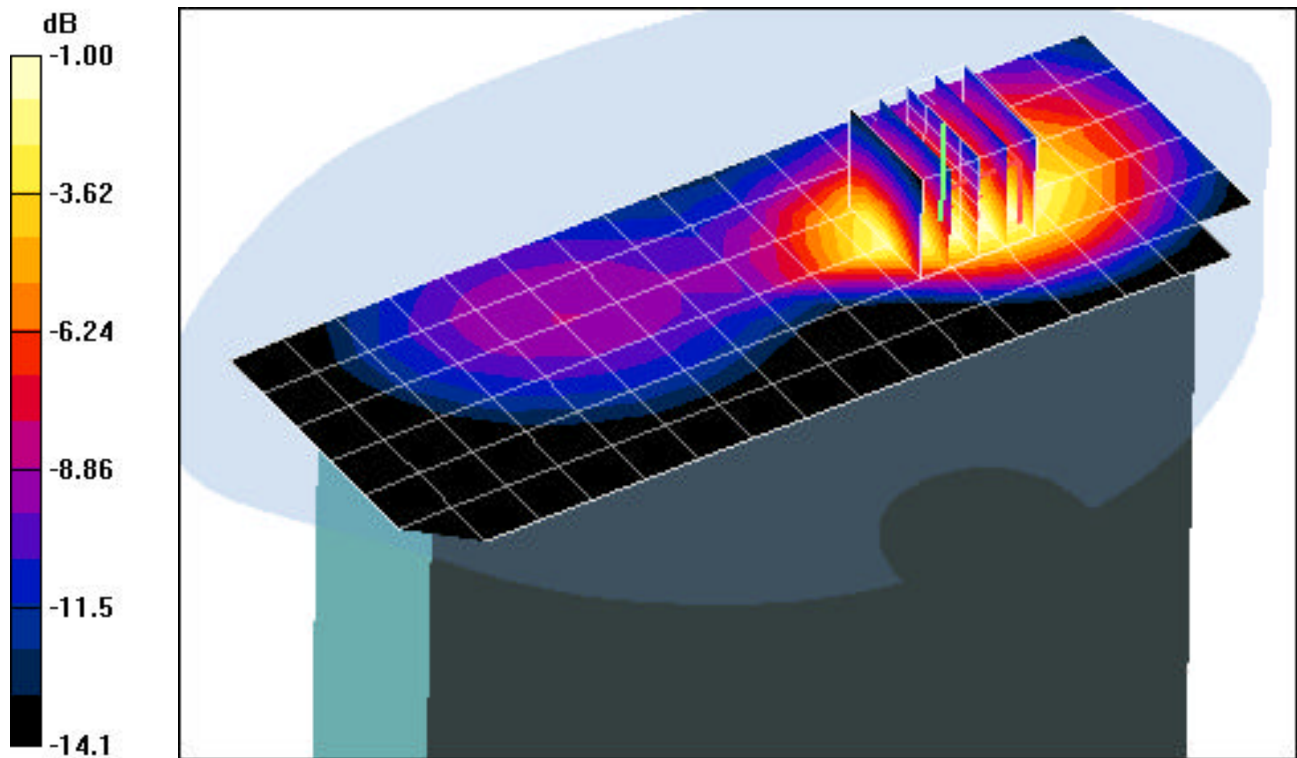
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 23.0 V/m

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.265 mW/g



0 dB = 0.515mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA850, Tablet position, Top Side, LCD Flip, Mid ch, HSDPA Inactive

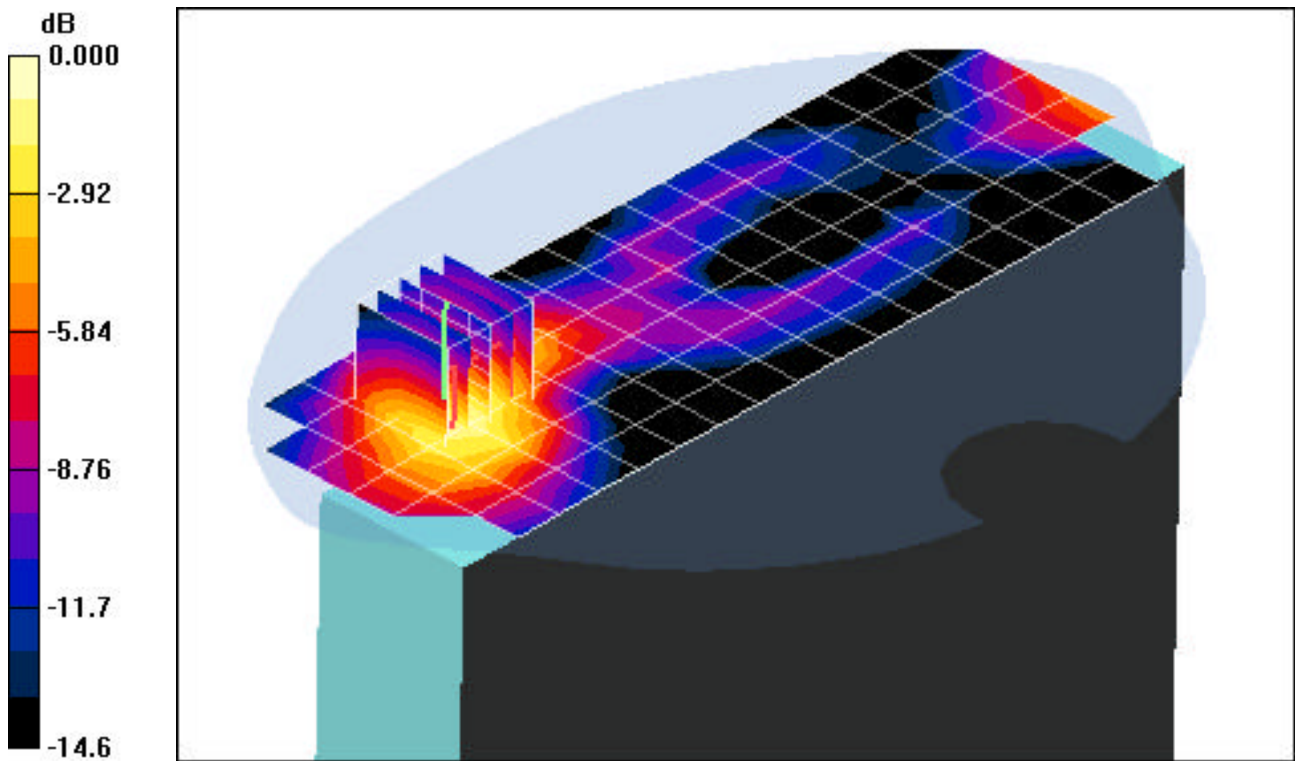
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.9 V/m

Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.206 mW/g; SAR(10 g) = 0.127 mW/g



0 dB = 0.250mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA850, Tablet position, Bottom Side, LCD Flip, Mid ch, HSDPA Inactive

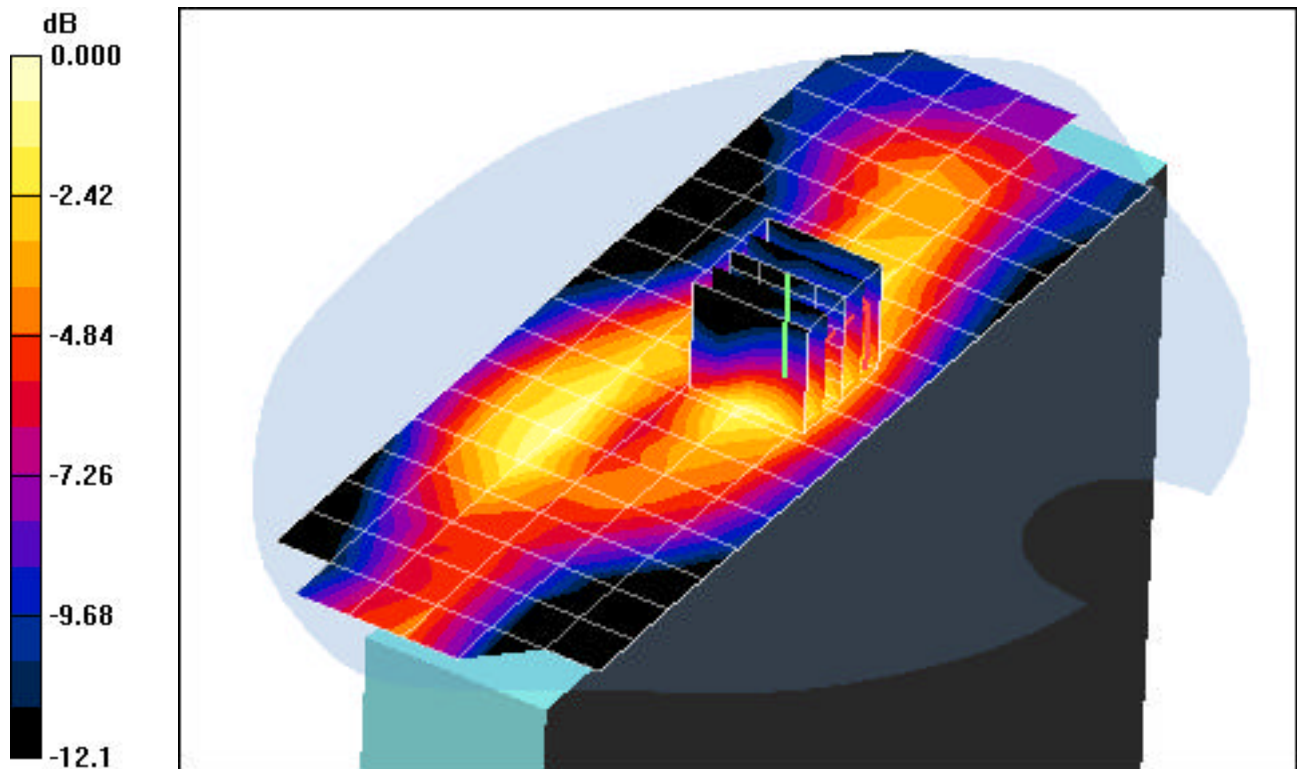
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 8.48 V/m

Peak SAR (extrapolated) = 0.100 W/kg

SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.033 mW/g



0 dB = 0.070mW/g

PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Laptop Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.6, 6.6, 6.6); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA1900, Laptop position, LCD Flip, Mid ch, HSDPA Inactive

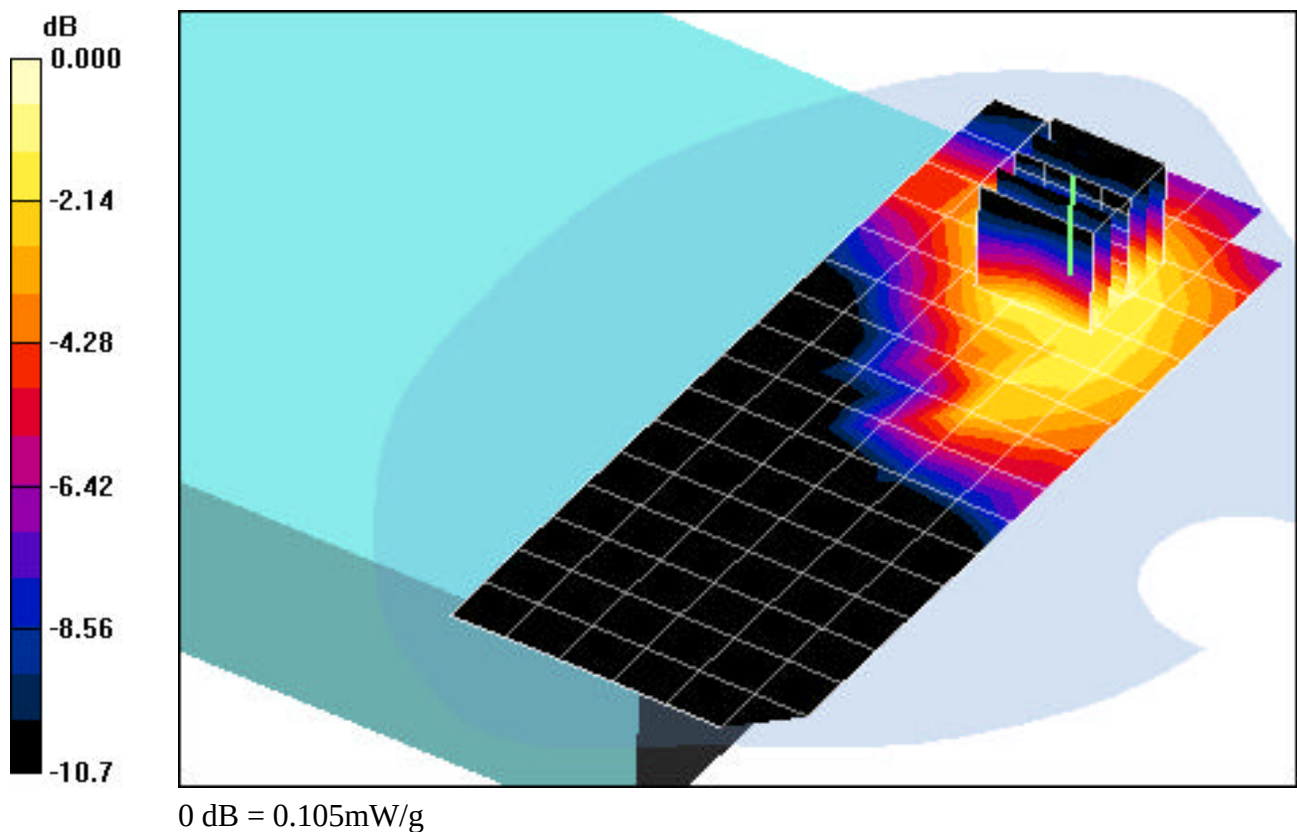
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 8.14 V/m

Peak SAR (extrapolated) = 0.132 W/kg

SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.054 mW/g



PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA1900, Tablet position, Left Side, LCD Flip, Mid ch, HSDPA Inactive

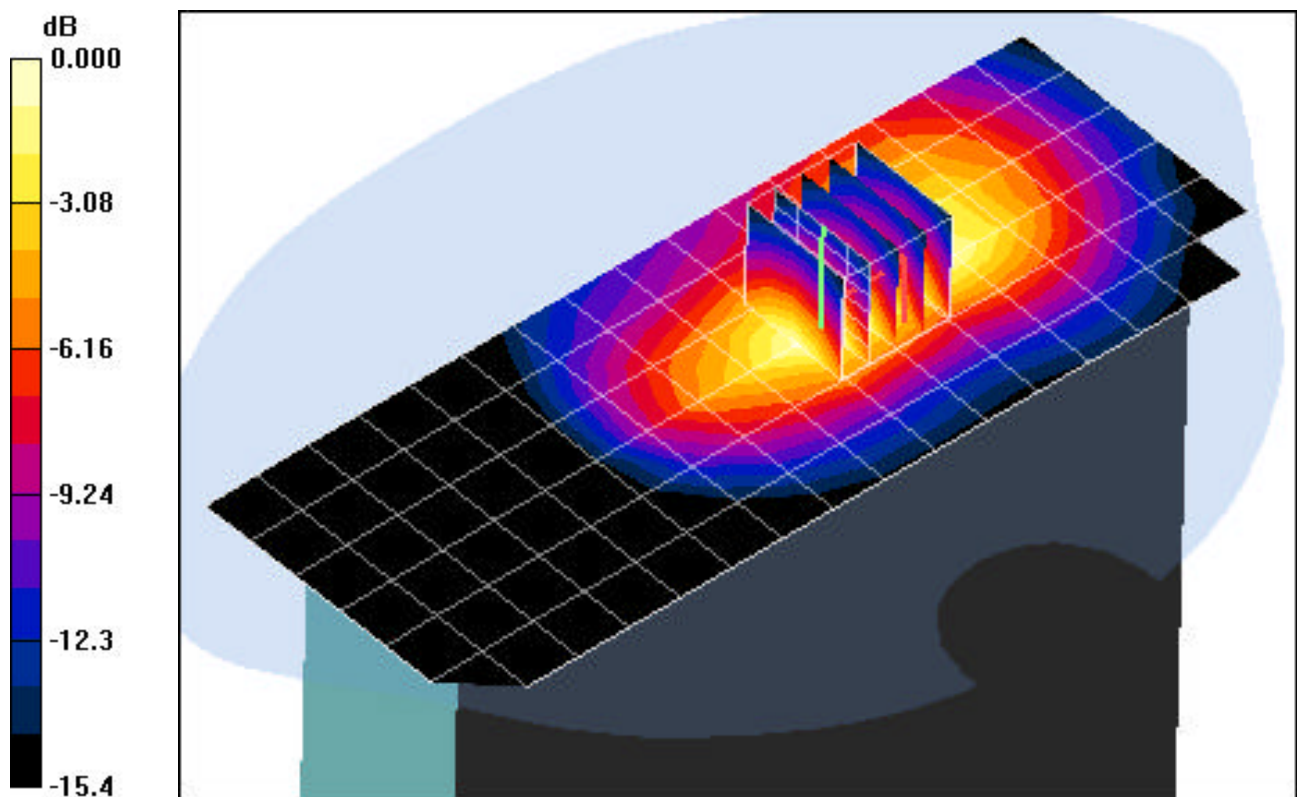
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 19.6 V/m

Peak SAR (extrapolated) = 0.809 W/kg

SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.273 mW/g



0 dB = 0.598mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

Phantom: SAM Main; Type: SAM 4.0; Serial: TP1114

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

Mode: WCDMA1900, Tablet position, Top Side, LCD Flip, Mid ch, HSDPA Inactive

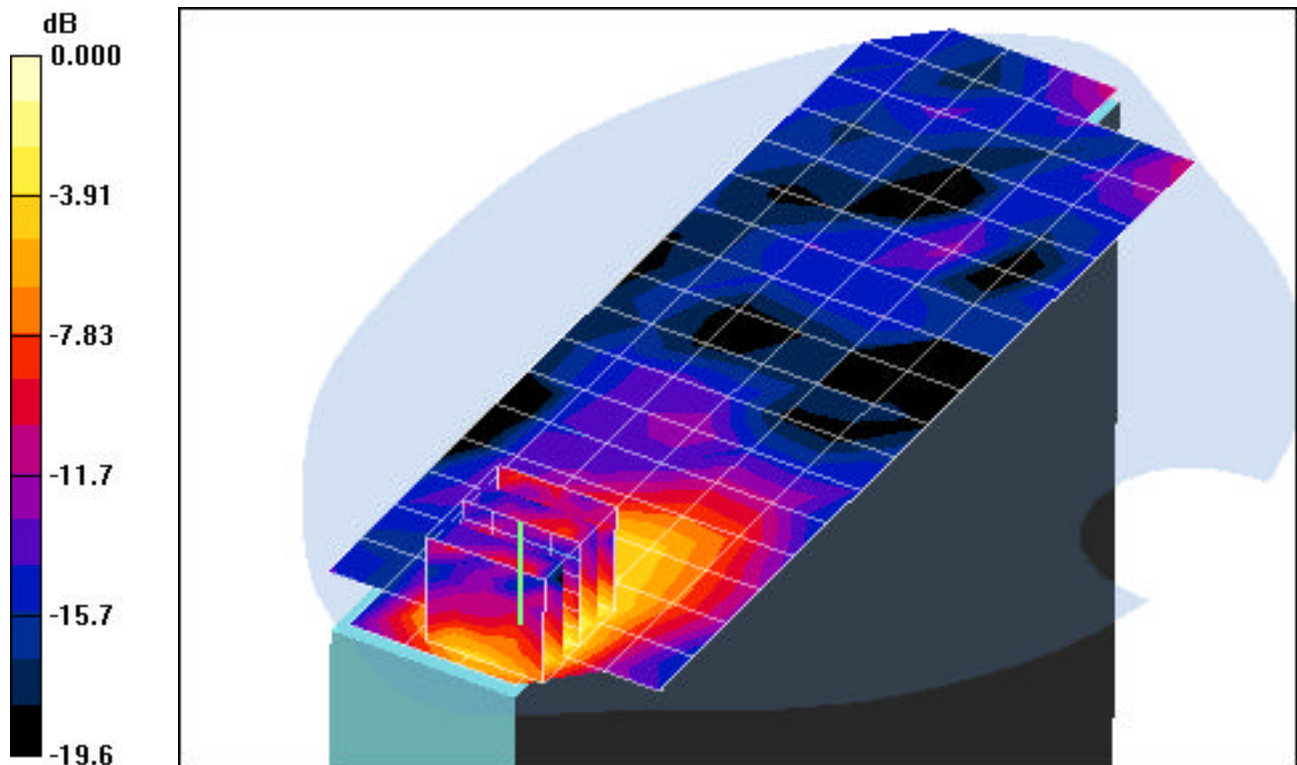
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 13.5 V/m

Peak SAR (extrapolated) = 0.092 W/kg

SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.026 mW/g



0 dB = 0.065mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: WCDMA1900, Tablet position, Bottom Side, LCD Flip, Mid ch, HSDPA Inactive

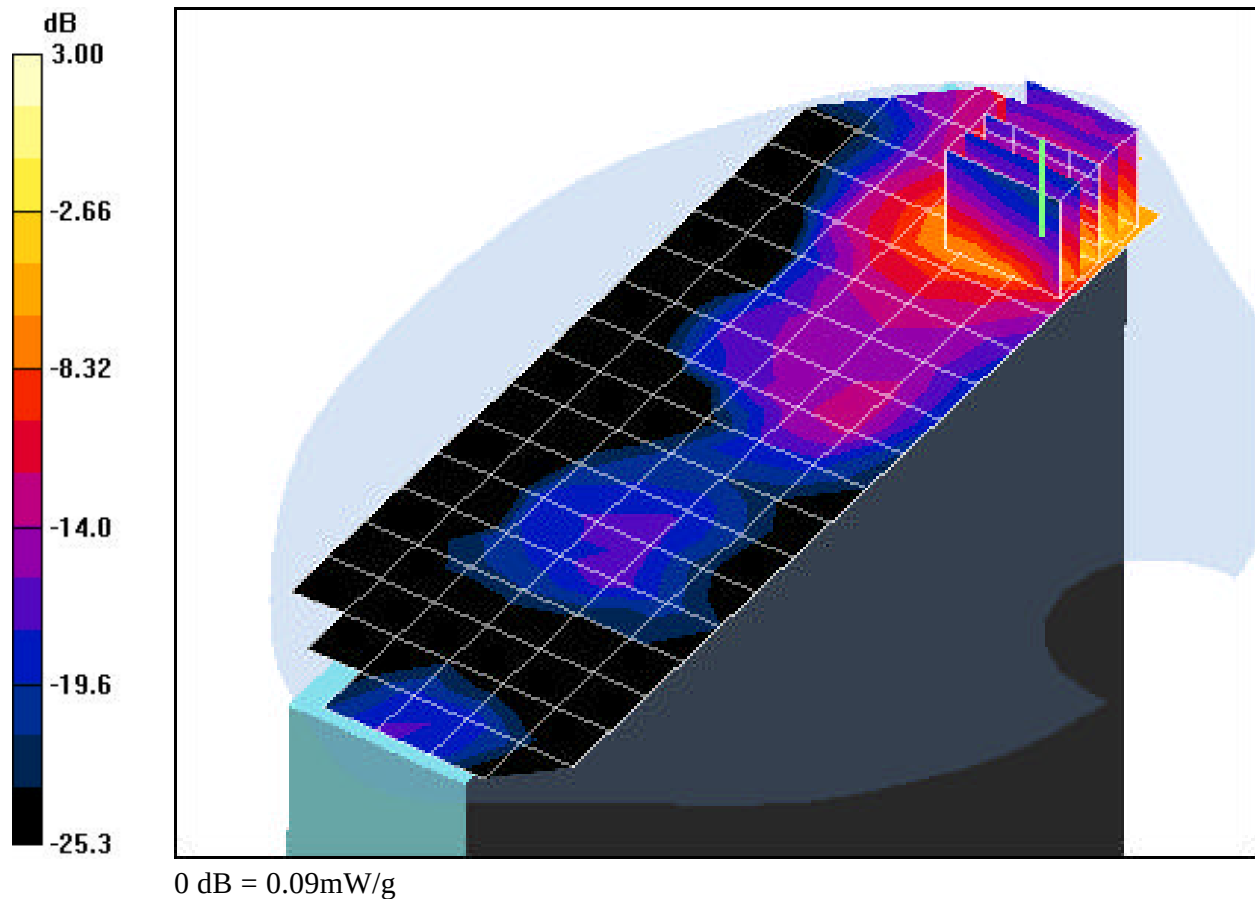
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 3.77 V/m

Peak SAR (extrapolated) = 0.018 W/kg

SAR(1 g) = 0.0303 mW/g; SAR(10 g) = 0.005 mW/g



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: IEEE 802.11g; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Muscle ($\sigma = 1.93$ mho/m, $\epsilon_r = 51.07$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.8°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(6.16, 6.16, 6.16); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: 802.11g, Tablet position, LCD Flip, Mid.ch, 6Mbps, Main Ant, Bottom Side

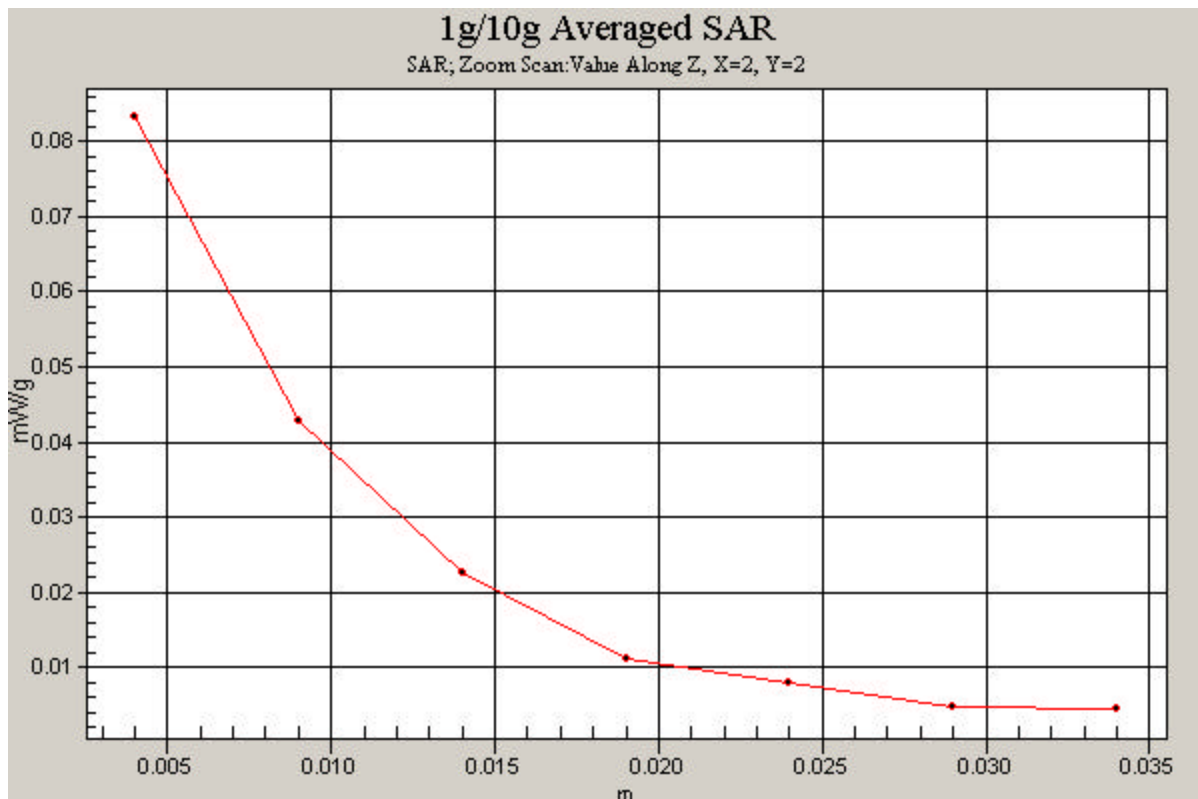
Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 3.68 V/m

Peak SAR (extrapolated) = 0.162 W/kg

SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.042 mW/g



PCTEST ENGINEERING LABORATORY, INC.

DUT: 5GHz SAR Validation Dipole; Type: D5GHzV2; Serial: 1007

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

5200MHz Dipole Validation

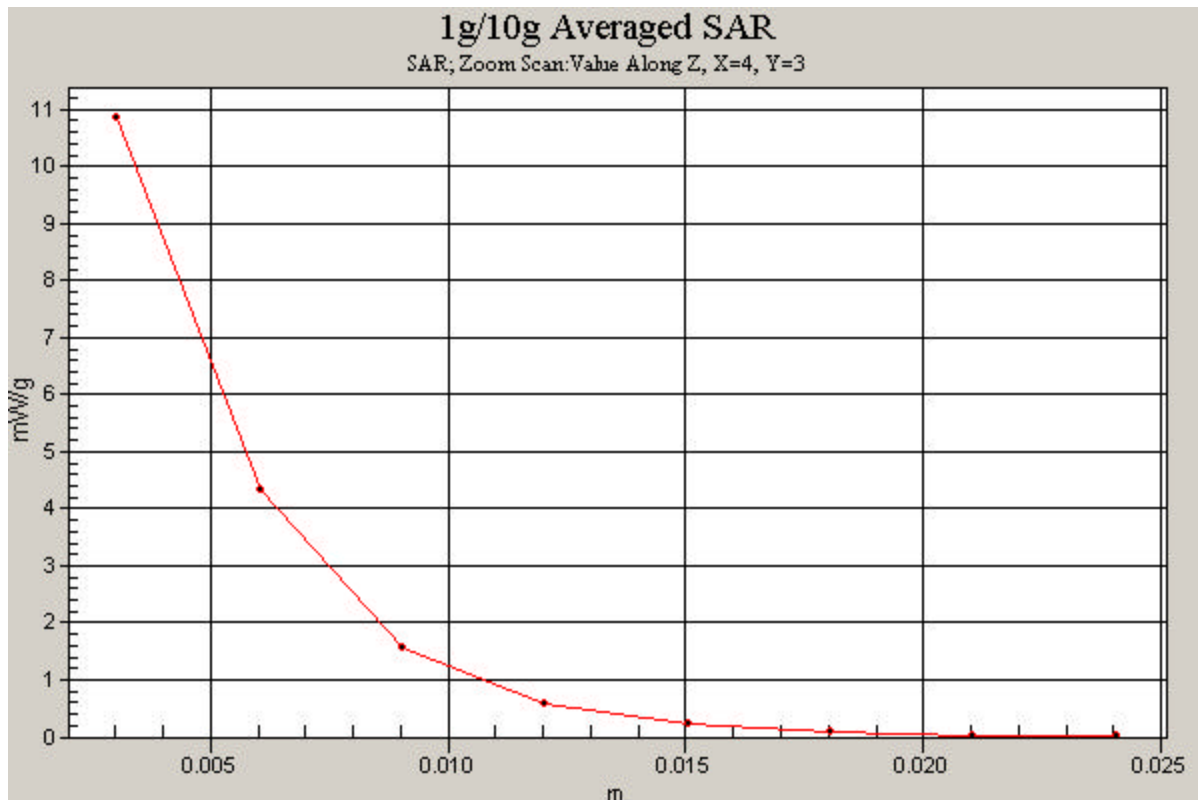
Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 7.43 mW/g; SAR(10 g) = 2.08 mW/g

Deviation = + 2.77 %



PCTEST ENGINEERING LABORATORY, INC.

DUT: 5GHz SAR Validation Dipole; Type: D5GHzV2; Serial: 1007

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.69, 3.69, 3.69); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

5500MHz Dipole Validation

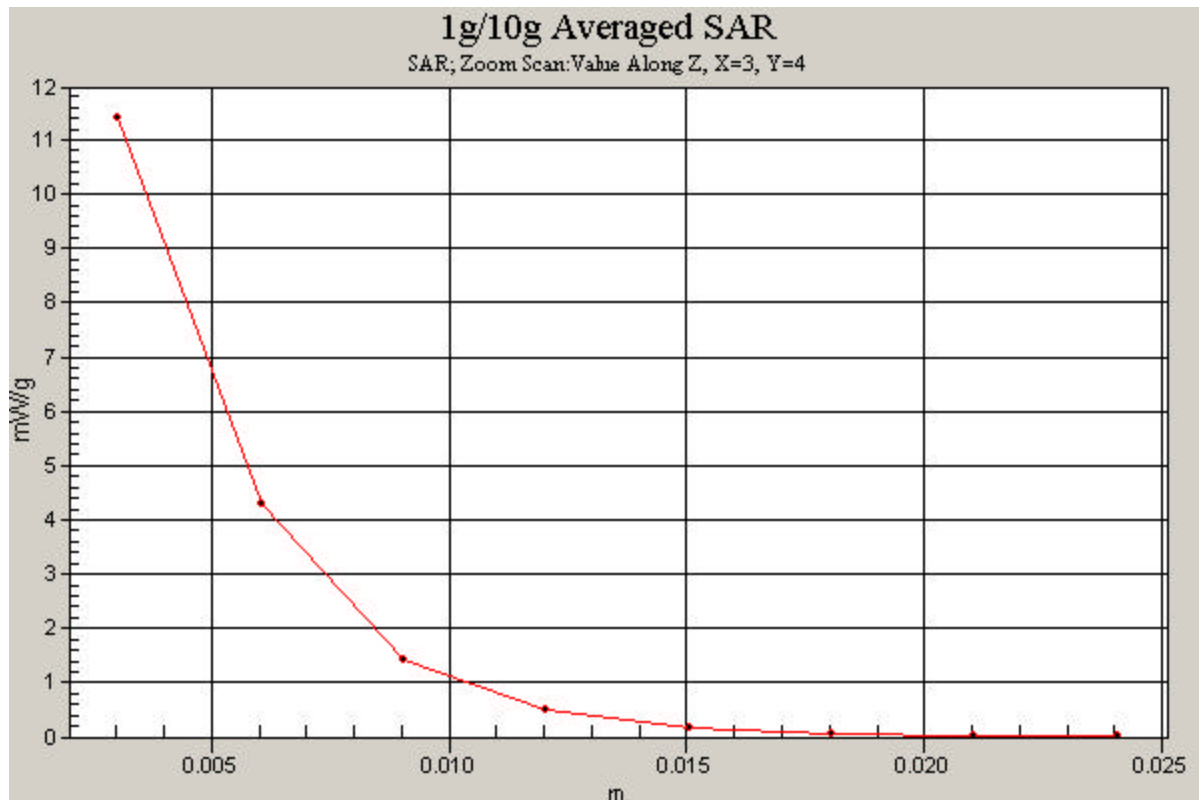
Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 8.01 mW/g; SAR(10 g) = 2.23 mW/g

Deviation = + 4.30 %



PCTEST ENGINEERING LABORATORY, INC.

DUT: 5GHz SAR Validation Dipole; Type: D5GHzV2; Serial: 1007

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

5800MHz Dipole Validation

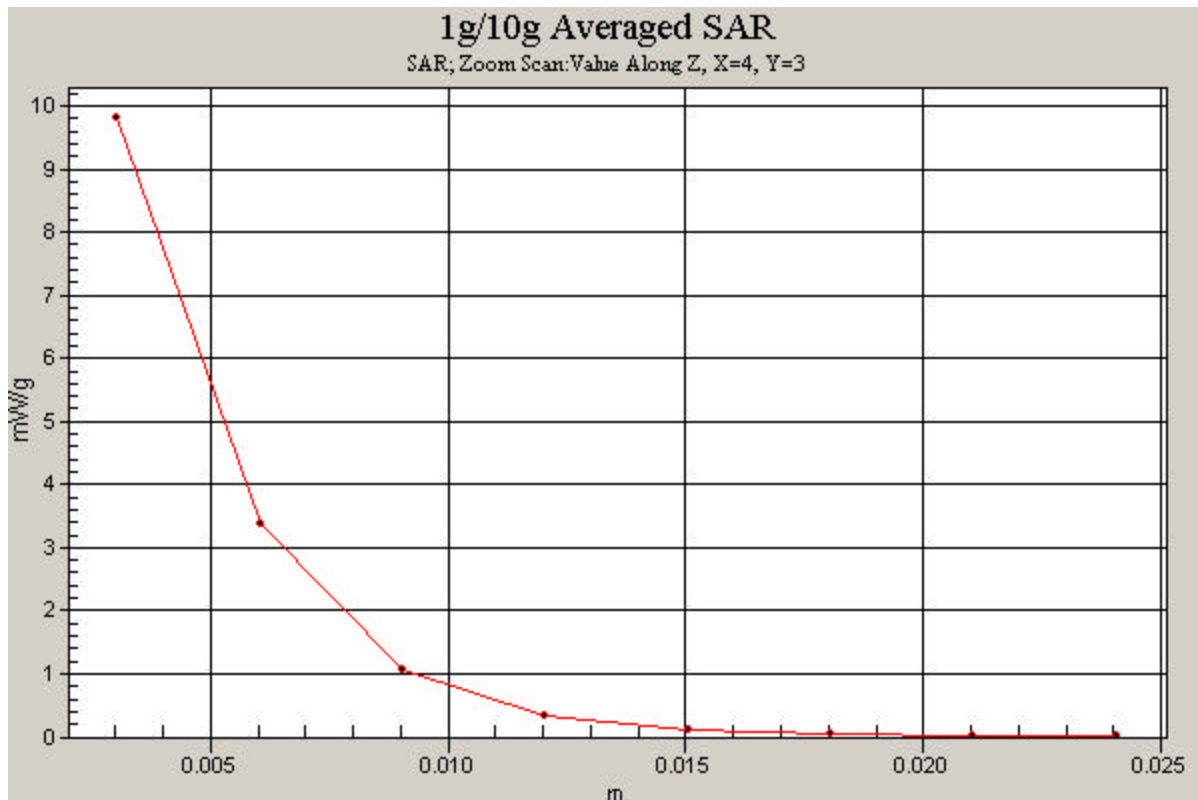
Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 7.19 mW/g; SAR(10 g) = 1.99 mW/g

Deviation = + 6.84 %



PCTEST ENGINEERING LABORATORY, INC.

**DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157**

Communication System: GSM850 GPRS; 3 Tx slots; Frequency: 824.2 MHz; Duty Cycle: 1:2.76

Medium: 835 Muscle ($\sigma = 1.01$ mho/m, $\epsilon_r = 57.59$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-02-2008; Ambient Temp: 23.6°C; Tissue Temp: 22.8°C

Probe: EX3DV4 - SN3561; ConvF(8.13, 8.13, 8.13); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS850, Tablet position, Left Side, LCD Flip, Mid ch, 3Tx Slot

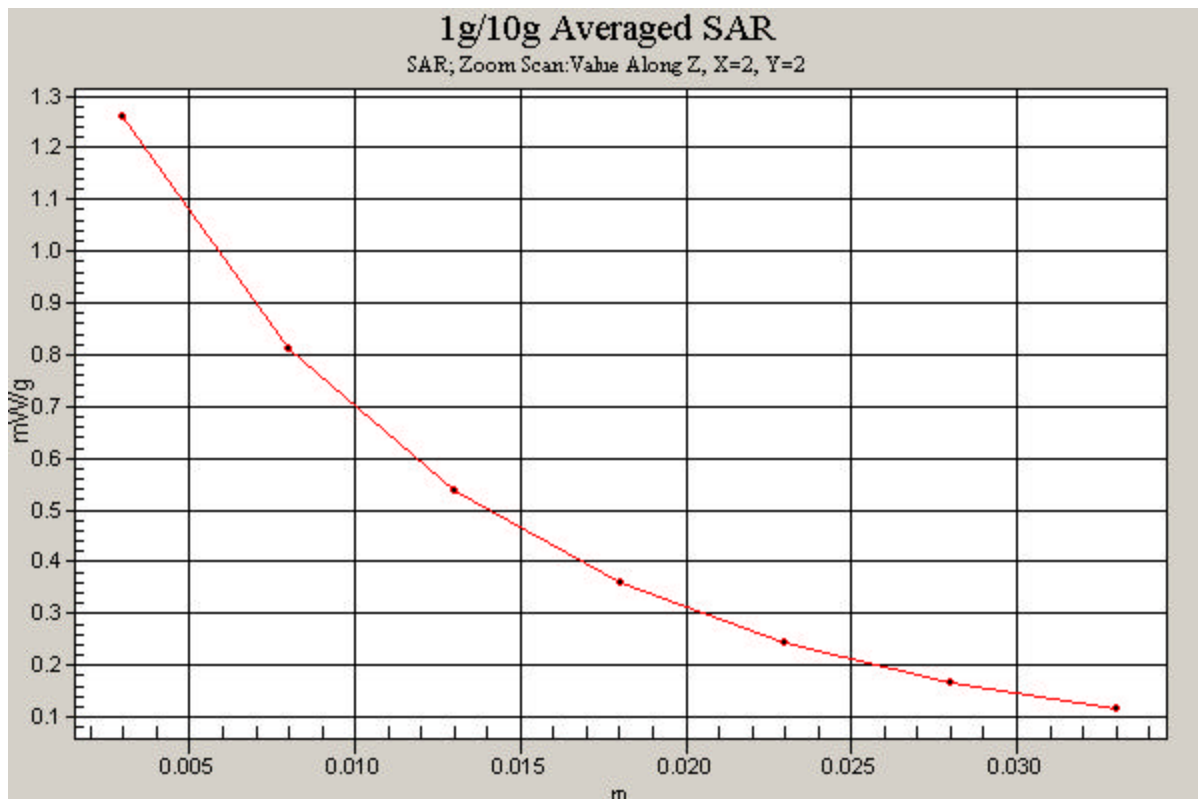
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 35.7 V/m

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.641 mW/g



PCTEST ENGINEERING LABORATORY, INC.

DUT: CF-19mk3; Type: Laptop/Tablet PC with 802.11abgn, GPRS, EDGE, HSDPA and Bluetooth
Serial: EVT2 000157

Communication System: GSM1900 GPRS; 4 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: 1900 Muscle ($\sigma = 1.54$ mho/m, $\epsilon_r = 54.64$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Tablet Position; Space: 0.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(6.7, 6.7, 6.7); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

Mode: GPRS1900, Tablet position, Left Side, LCD Flip, Mid ch, 4Tx Slot,

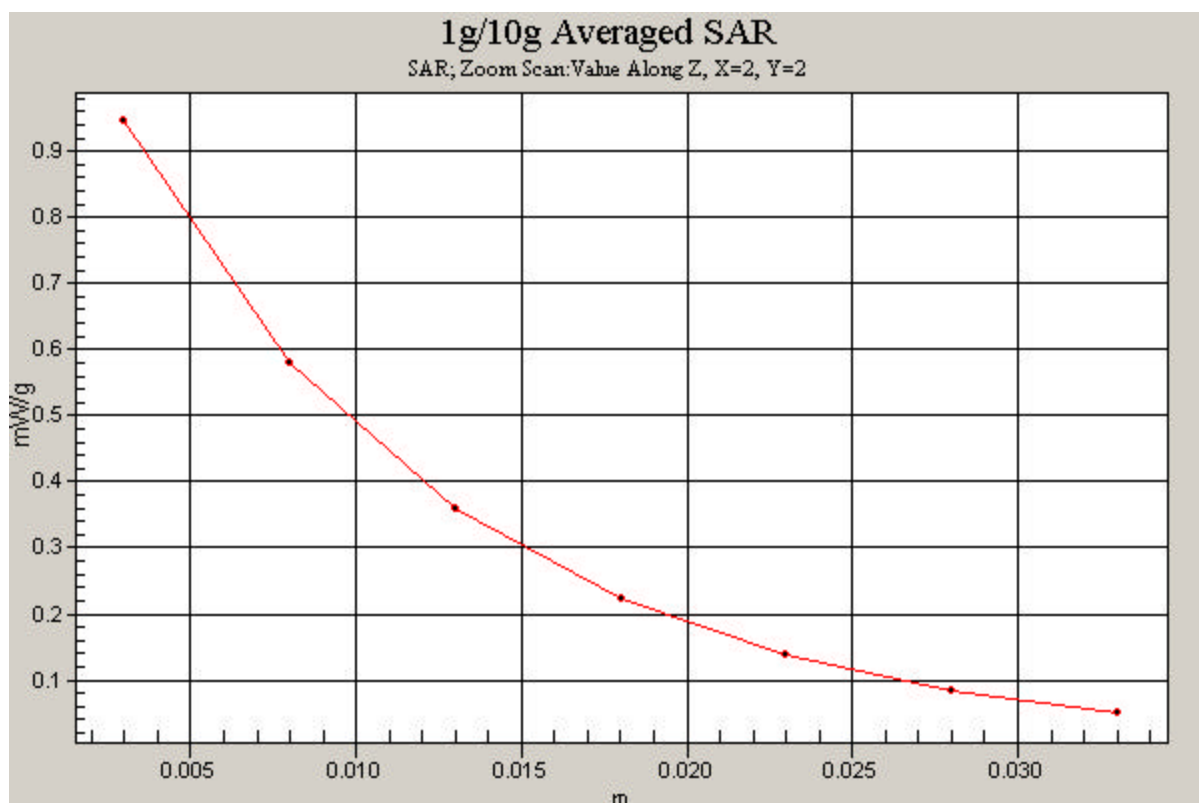
Area Scan (7x17x1): Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 25.1 V/m

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.441 mW/g



APPENDIX B: DIPOLE VALIDATION

PCTEST ENGINEERING LABORATORY, INC.

DUT: 2450MHz SAR Validation Dipole; Type: D2450V2; Serial: 797

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

Medium: 2450 Brain ($\sigma = 1.78$ mho/m, $\epsilon_r = 39.82$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-16-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN3561; ConvF(6.38, 6.38, 6.38); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

2450MHz Dipole Validation

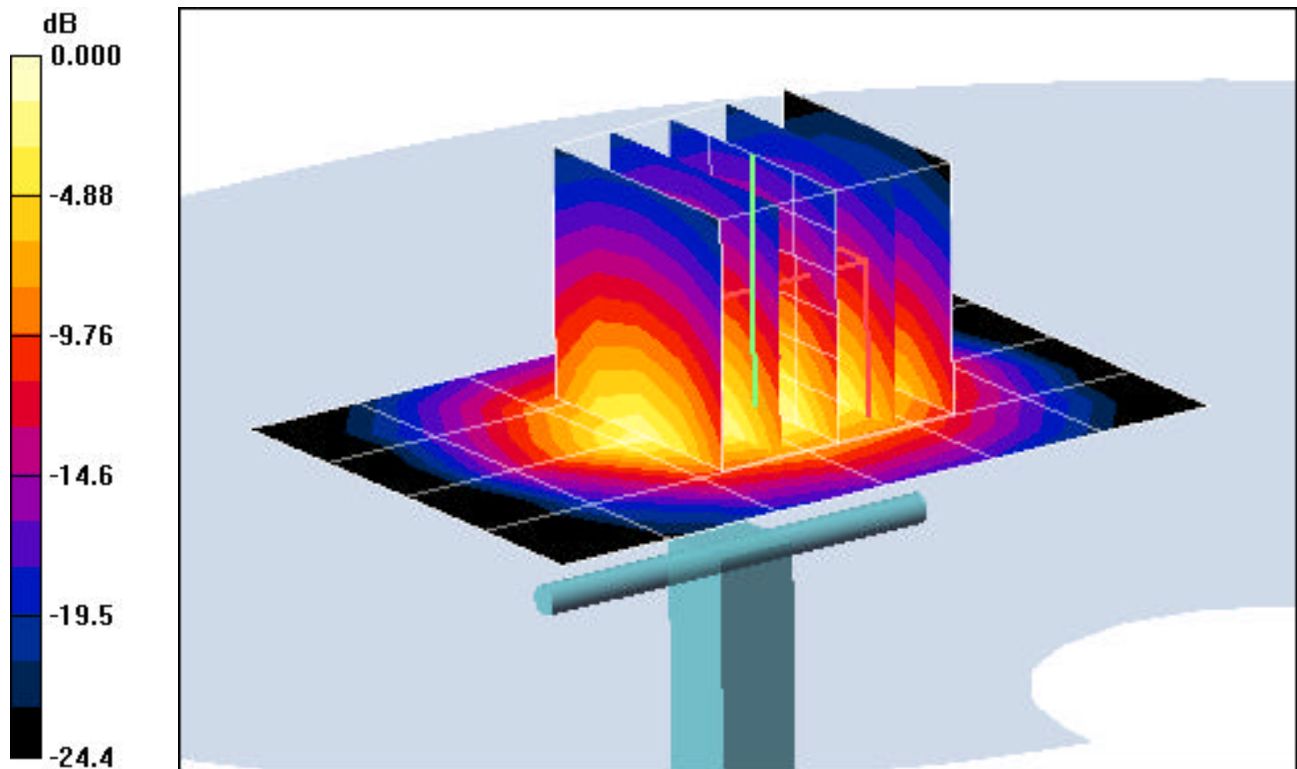
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 5.69 mW/g; SAR(10 g) = 2.58 mW/g

Deviation = + 5.18 %



0 dB = 7.40mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 2450MHz SAR Validation Dipole; Type: D2450V2; Serial: 797

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

Medium: 2450 Brain ($\sigma = 1.78$ mho/m, $\epsilon_r = 39.82$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-17-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.4°C

Probe: EX3DV4 - SN3561; ConvF(6.38, 6.38, 6.38); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

2450MHz Dipole Validation

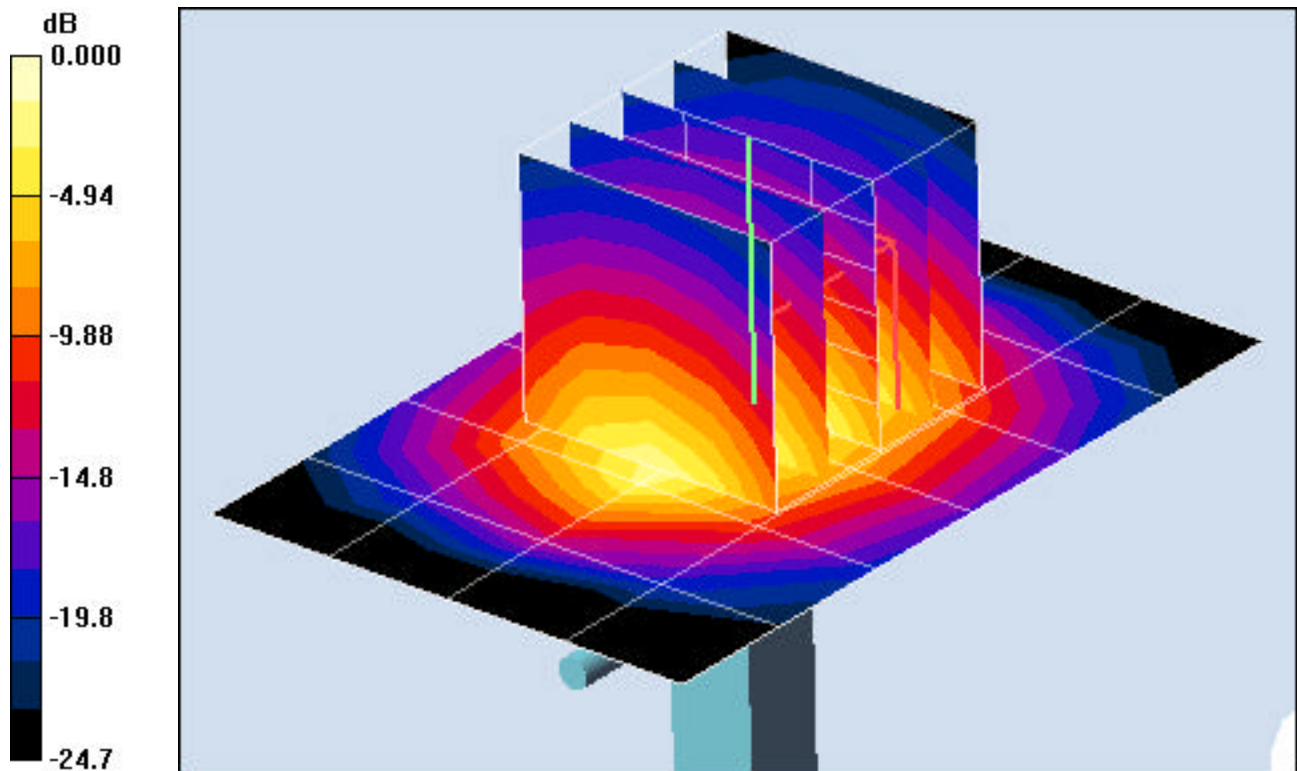
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 5.66 mW/g; SAR(10 g) = 2.57 mW/g

Deviation = + 4.62 %



0 dB = 7.38mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 5GHz SAR Validation Dipole; Type: D5GHzV2; Serial: 1007

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: 5300 Muscle ($\sigma = 5.54$ mho/m, $\epsilon_r = 51.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-18-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3561; ConvF(3.96, 3.96, 3.96); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

5200MHz Dipole Validation

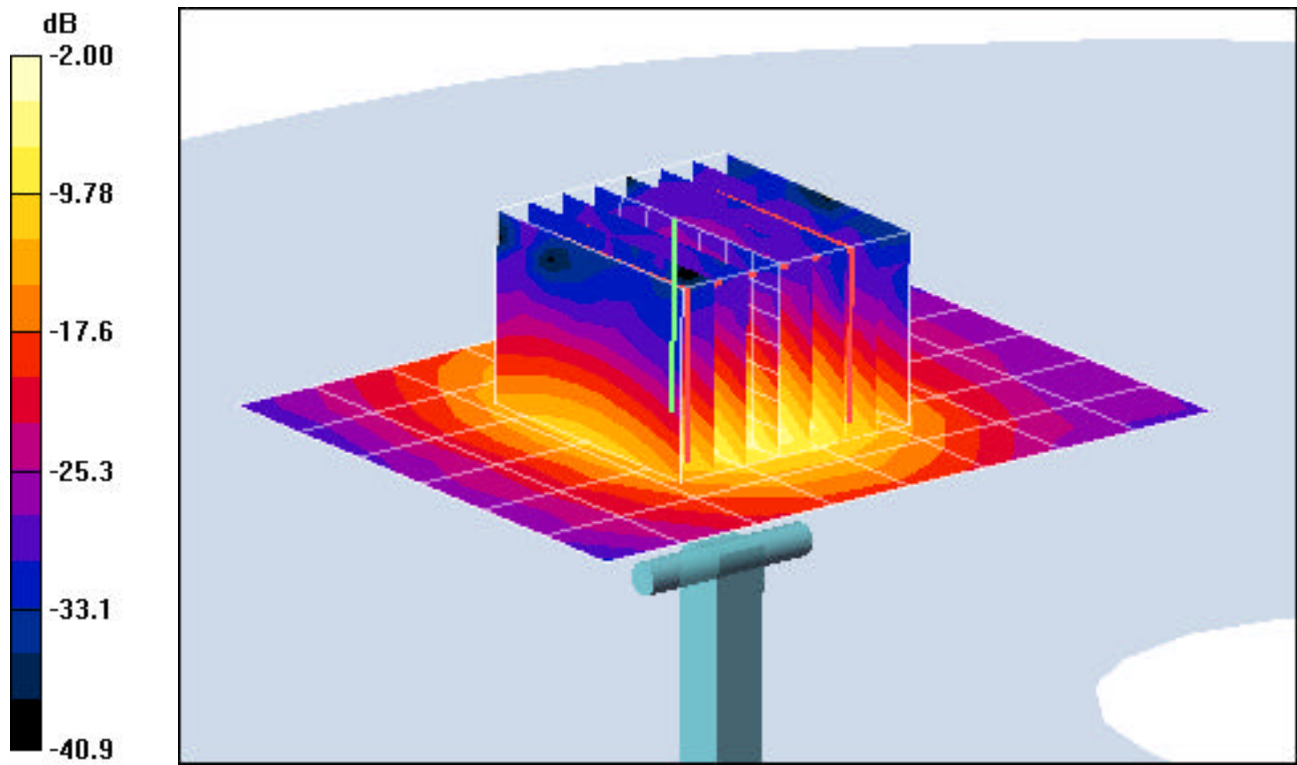
Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 7.43 mW/g; SAR(10 g) = 2.08 mW/g

Deviation = + 2.77 %



0 dB = 10.9mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 5GHz SAR Validation Dipole; Type: D5GHzV2; Serial: 1007

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: 5500 Muscle ($\sigma = 5.79$ mho/m, $\epsilon_r = 50.83$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-19-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(3.69, 3.69, 3.69); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

5500MHz Dipole Validation

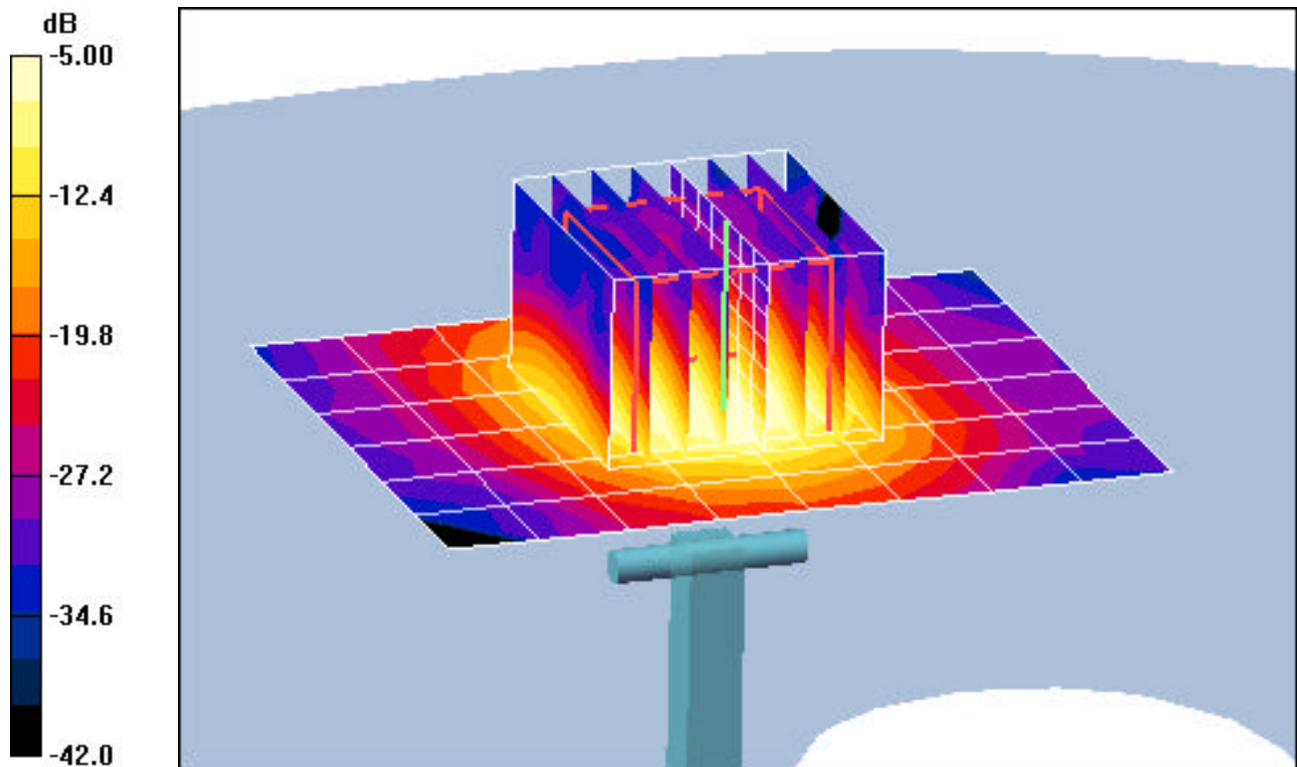
Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 8.01 mW/g; SAR(10 g) = 2.23 mW/g

Deviation = + 4.30 %



0 dB = 11.4mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 5GHz SAR Validation Dipole; Type: D5GHzV2; Serial: 1007

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: 5800 Muscle ($\sigma = 6.20$ mho/m, $\epsilon_r = 49.68$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 09-20-2008; Ambient Temp: 23.4°C; Tissue Temp: 22.6°C

Probe: EX3DV4 - SN3561; ConvF(3.65, 3.65, 3.65); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

5800MHz Dipole Validation

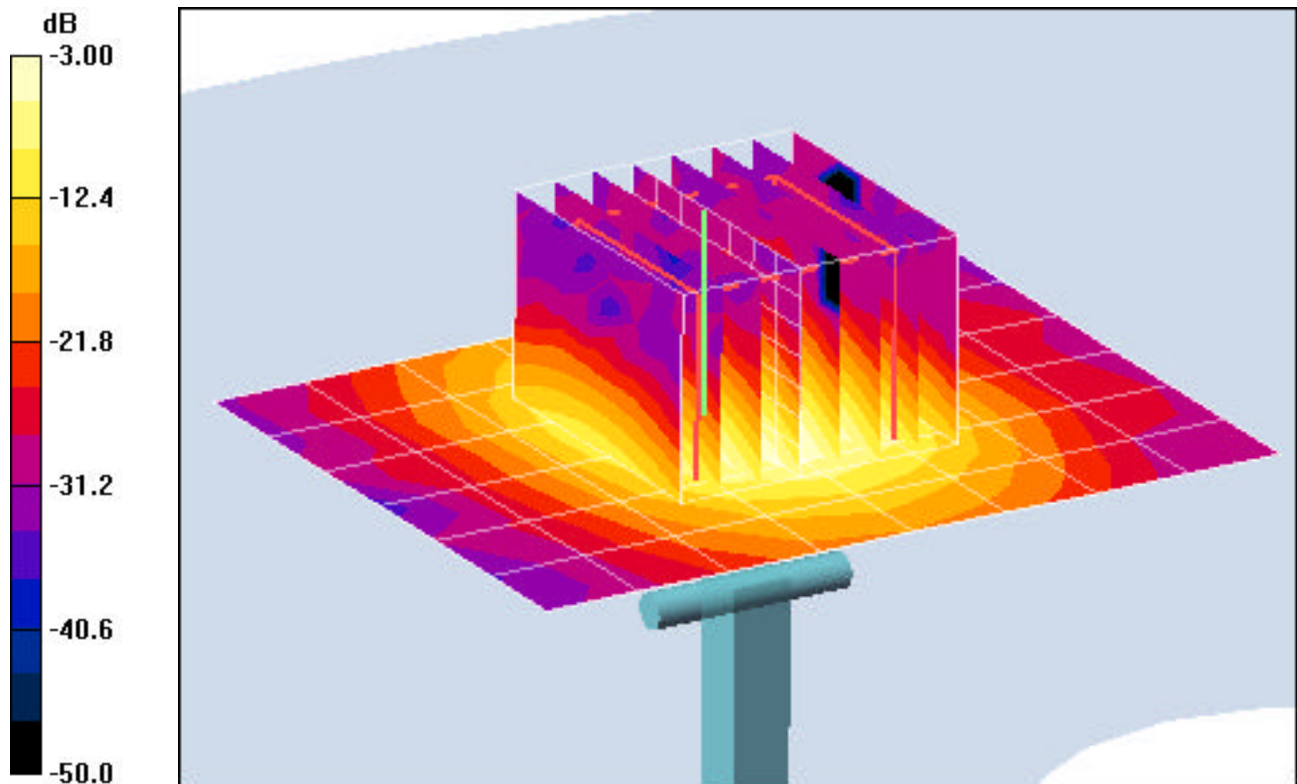
Area Scan (7x9x1): Measurement grid: dx=10mm, dy=10mm

Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 7.19 mW/g; SAR(10 g) = 1.99 mW/g

Deviation = + 6.84 %



0 dB = 9.81mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 835MHz SAR Validation Dipole; Type: D835V2; Serial: 4d026

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

Medium: 835 Brain ($\sigma = 0.94$ mho/m, $\epsilon_r = 43.08$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 10-02-2008; Ambient Temp: 23.5°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN3561; ConvF(8.22, 8.22, 8.22); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

835MHz Dipole Validation

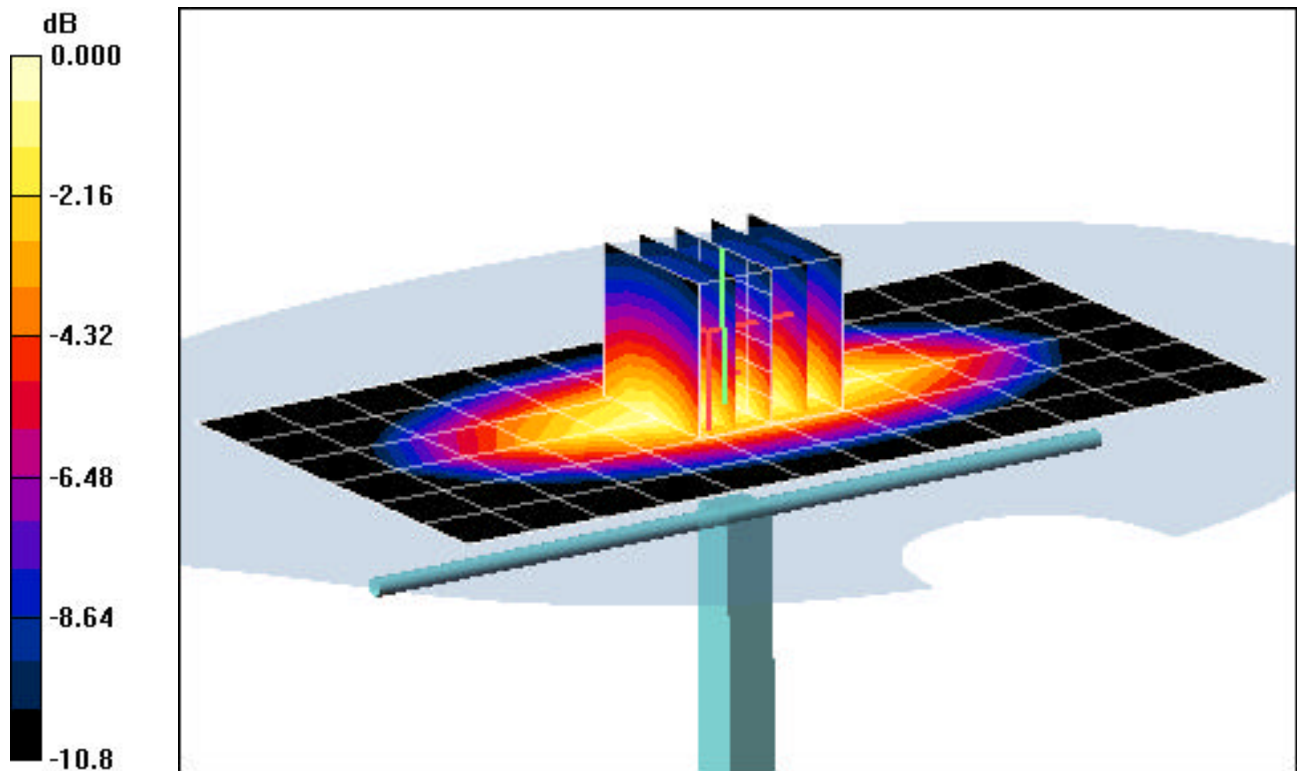
Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 0.958 mW/g; SAR(10 g) = 0.621 mW/g

Deviation = + 6.33 %



0 dB = 1.13mW/g

PCTEST ENGINEERING LABORATORY, INC.

DUT: 1900MHz SAR Validation Dipole; Type: D1900V2; Serial: 5d080

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

Medium: 1900 Brain ($\sigma = 1.43$ mho/m, $\epsilon_r = 41.19$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 10-06-2008; Ambient Temp: 23.2°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN3561; ConvF(7.01, 7.01, 7.01); Calibrated: 8/26/2008

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE4 Sn649; Calibrated: 1/30/2008

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

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

1900MHz Dipole Validation

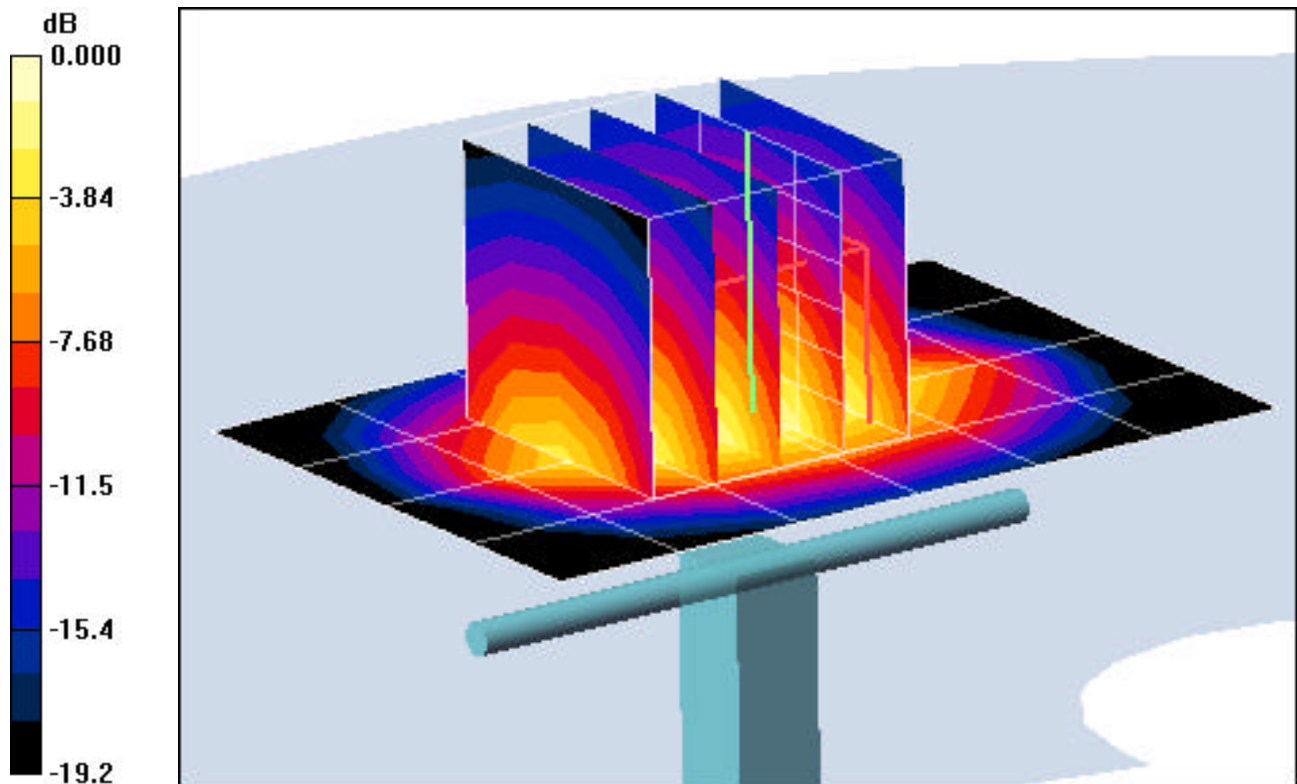
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 20.0 dBm (100 mW)

SAR(1 g) = 4.03 mW/g; SAR(10 g) = 2.07 mW/g

Deviation = + 6.90 %



0 dB = 5.04mW/g

APPENDIX C: PROBE CALIBRATION



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 108**

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Client **PC Test**

Certificate No: **EX3-3561_Aug08**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3561**

Calibration procedure(s) **QA CAL-01.v6, QA CAL-14.v3 and QA CAL-23.v3
Calibration procedure for dosimetric E-field probes**

Calibration date: **August 26, 2008**

Condition of the calibrated item **In Tolerance**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^\circ\text{C}$ and humidity $< 70\%$.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41495277	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41498087	1-Apr-08 (No. 217-00788)	Apr-09
Reference 3 dB Attenuator	SN: S5054 (3c)	1-Jul-08 (No. 217-00865)	Jul-09
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-08 (No. 217-00787)	Apr-09
Reference 30 dB Attenuator	SN: S5129 (30b)	1-Jul-08 (No. 217-00866)	Jul-09
Reference Probe ES3DV2	SN: 3013	2-Jan-08 (No. ES3-3013_Jan08)	Jan-09
DAE4	SN: 660	3-Sep-07 (No. DAE4-660_Sep07)	Sep-08

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Katja Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	

Issued: August 26, 2008

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 108**

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
Polarization ϕ	ϕ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}:** Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- DCP_{x,y,z}:** DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy):** in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset:** The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe EX3DV4

SN:3561

Manufactured:	February 14, 2005
Last calibrated:	August 30, 2007
Recalibrated:	August 26, 2008

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

DASY - Parameters of Probe: EX3DV4 SN:3561

Sensitivity in Free Space^A

NormX	0.43 ± 10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$
NormY	0.48 ± 10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	0.43 ± 10.1%	$\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression^B

DCP X	84 mV
DCP Y	87 mV
DCP Z	90 mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **835 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		2.0 mm	3.0 mm
SAR _{be} [%]	Without Correction Algorithm	8.9	4.7
SAR _{be} [%]	With Correction Algorithm	0.6	0.3

TSL **1810 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		2.0 mm	3.0 mm
SAR _{be} [%]	Without Correction Algorithm	7.8	3.9
SAR _{be} [%]	With Correction Algorithm	0.8	0.1

Sensor Offset

Probe Tip to Sensor Center **1.0 mm**

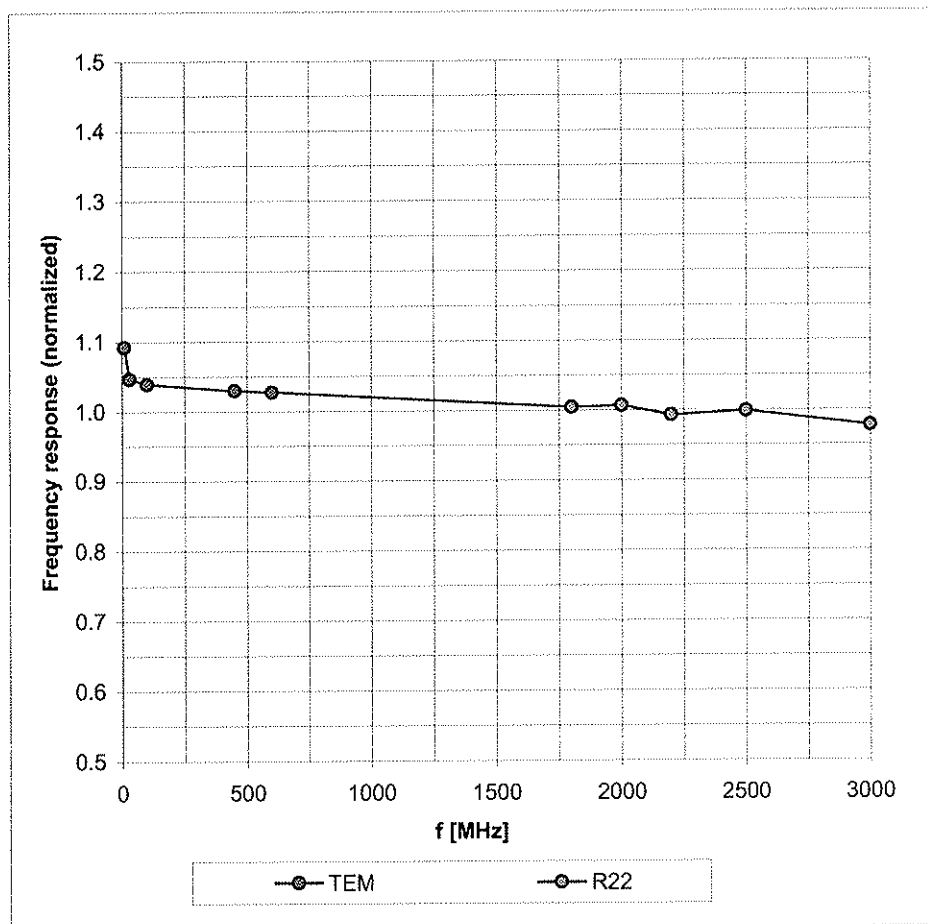
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of NormX,Y,Z do not affect the E²-field uncertainty inside TSL (see Page 8).

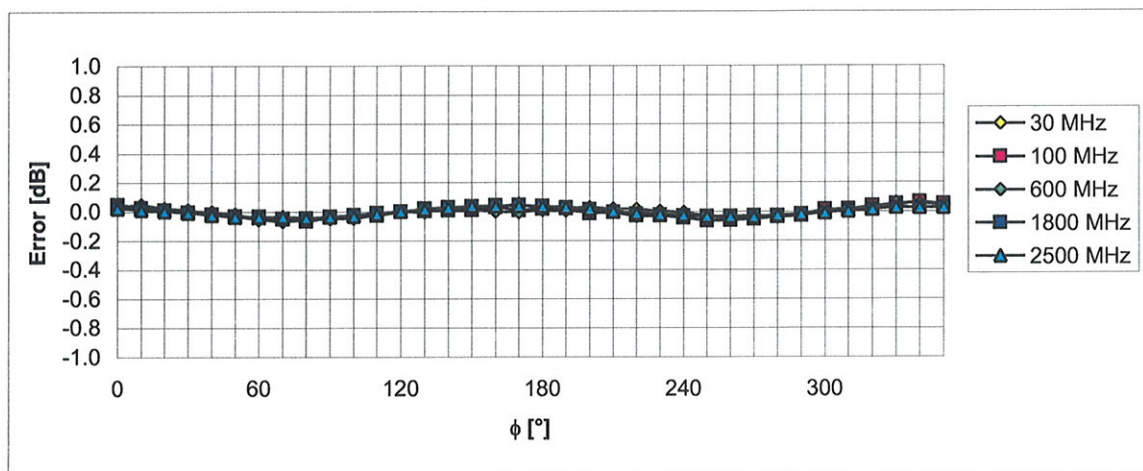
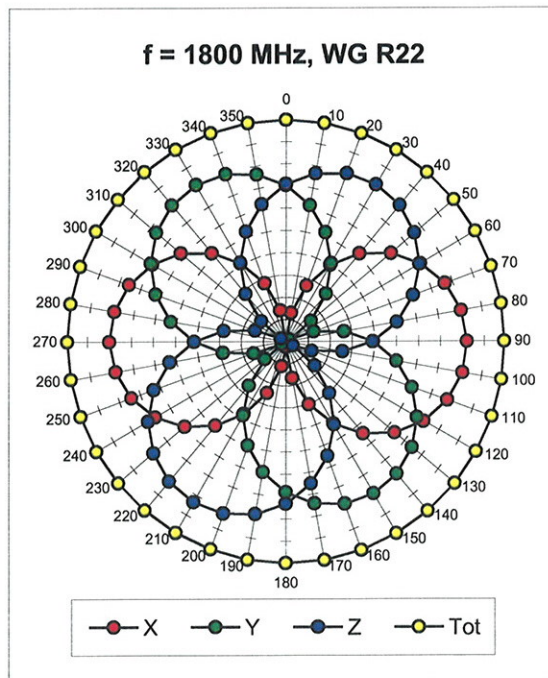
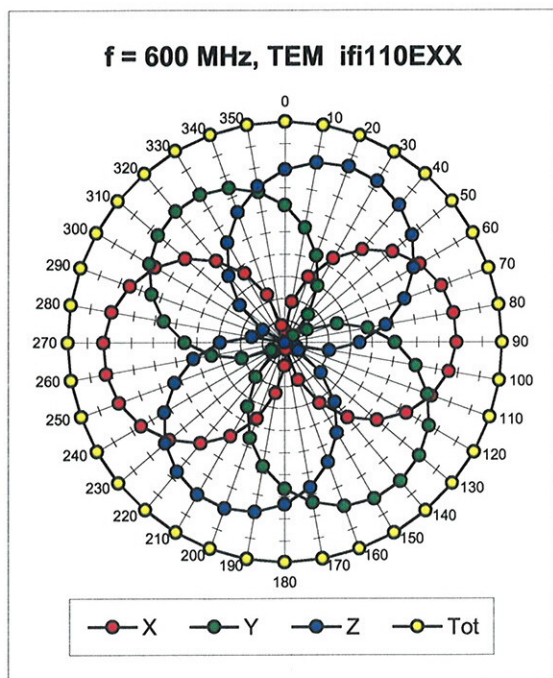
^B Numerical linearization parameter: uncertainty not required.

Frequency Response of E-Field

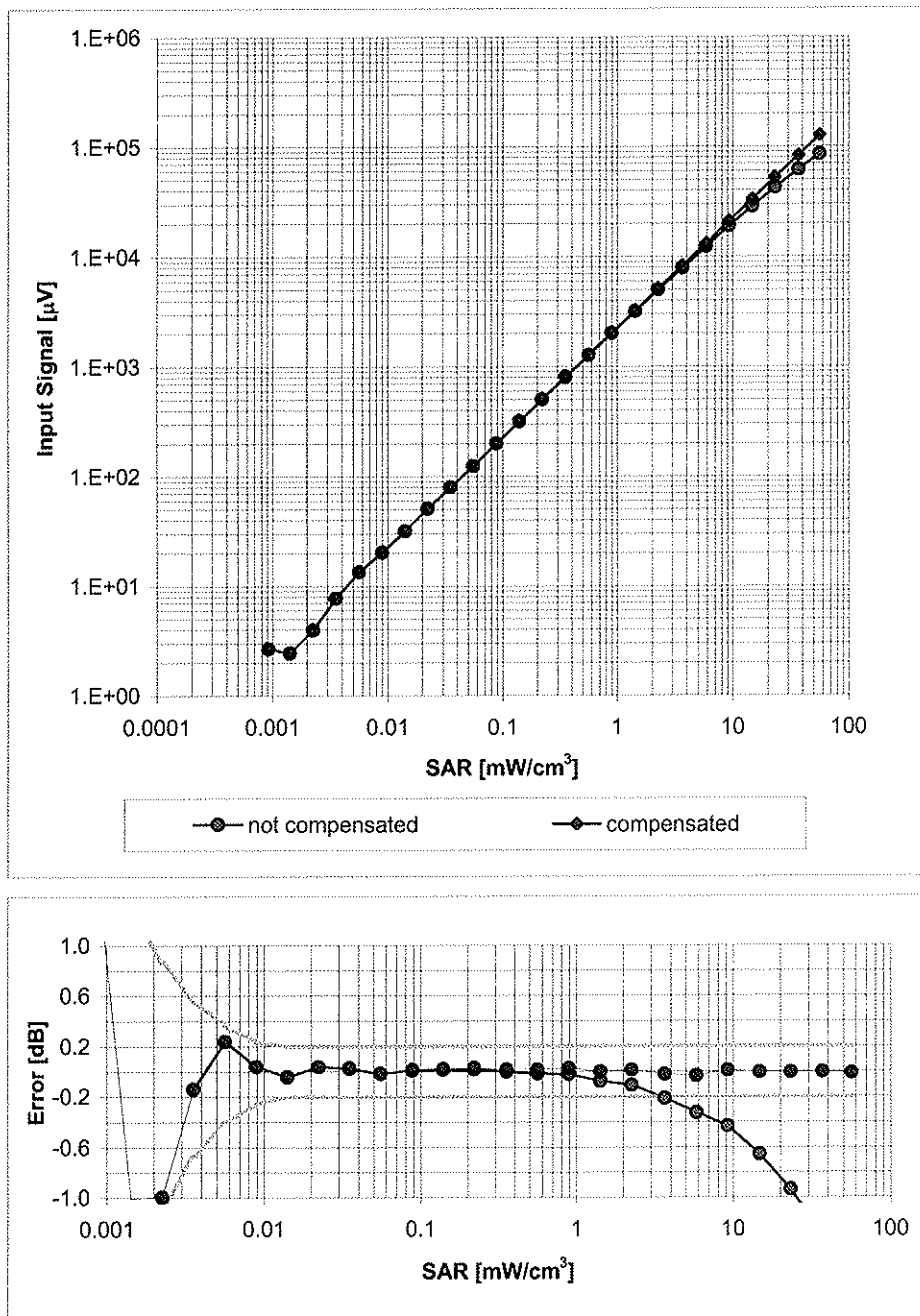
(TEM-Cell:ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\vartheta = 0^\circ$ Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (Waveguide R22, $f = 1800$ MHz)



Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

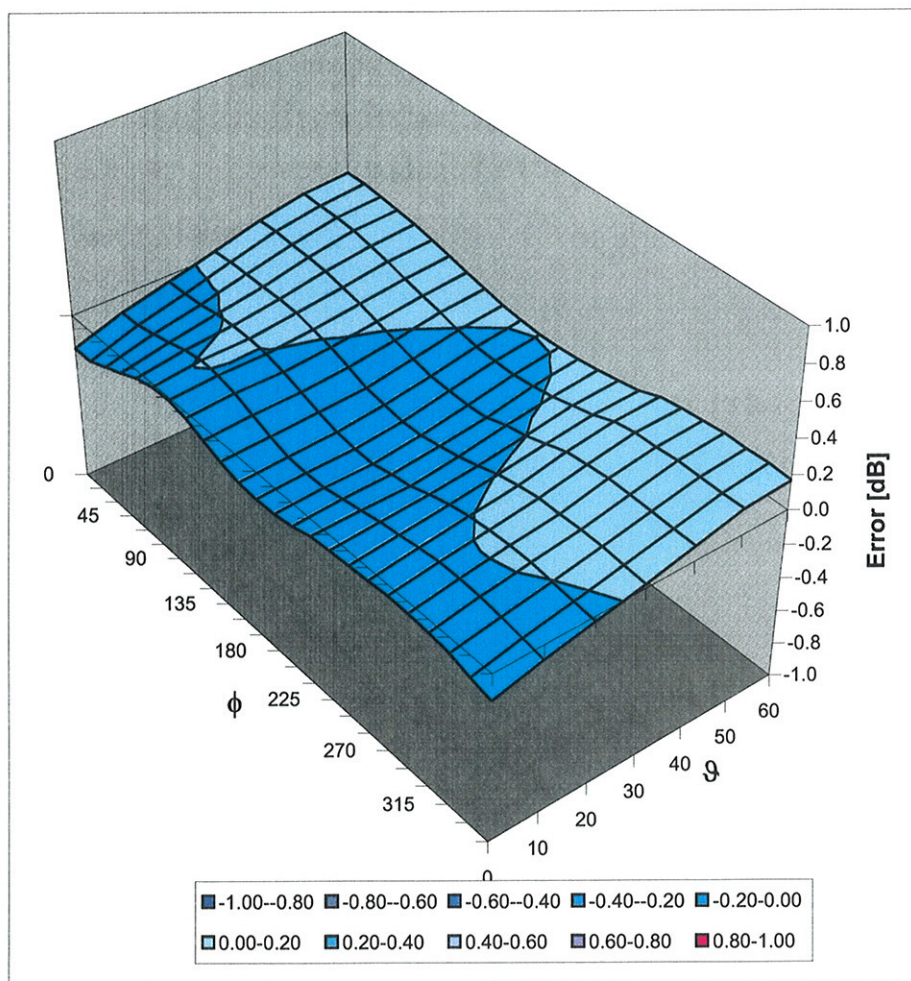
Conversion Factor Assessment

f [MHz]	Validity [MHz] ^c	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.50	0.75	8.22 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.50	0.70	7.01 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.66	0.63	6.38 ± 11.0% (k=2)
2600	± 50 / ± 100	Head	39.0 ± 5%	1.96 ± 5%	0.63	0.67	6.41 ± 11.0% (k=2)
4950	± 50 / ± 100	Head	36.3 ± 5%	4.40 ± 5%	0.43	1.60	4.84 ± 13.1% (k=2)
5200	± 50 / ± 100	Head	36.0 ± 5%	4.66 ± 5%	0.40	1.60	4.51 ± 13.1% (k=2)
5300	± 50 / ± 100	Head	35.9 ± 5%	4.76 ± 5%	0.40	1.60	4.29 ± 13.1% (k=2)
5500	± 50 / ± 100	Head	35.6 ± 5%	4.96 ± 5%	0.45	1.60	4.15 ± 13.1% (k=2)
5600	± 50 / ± 100	Head	35.5 ± 5%	5.07 ± 5%	0.45	1.60	3.97 ± 13.1% (k=2)
5800	± 50 / ± 100	Head	35.3 ± 5%	5.27 ± 5%	0.45	1.60	4.09 ± 13.1% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.50	0.80	8.13 ± 11.0% (k=2)
1640	± 50 / ± 100	Body	53.8 ± 5%	1.40 ± 5%	0.50	0.75	7.33 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.70	0.65	6.70 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.80	0.66	6.16 ± 11.0% (k=2)
2600	± 50 / ± 100	Body	52.5 ± 5%	2.16 ± 5%	0.76	0.69	6.22 ± 11.0% (k=2)
4950	± 50 / ± 100	Body	49.4 ± 5%	5.01 ± 5%	0.45	1.75	4.23 ± 13.1% (k=2)
5200	± 50 / ± 100	Body	49.0 ± 5%	5.30 ± 5%	0.50	1.75	3.96 ± 13.1% (k=2)
5300	± 50 / ± 100	Body	48.5 ± 5%	5.42 ± 5%	0.50	1.75	3.83 ± 13.1% (k=2)
5500	± 50 / ± 100	Body	48.6 ± 5%	5.65 ± 5%	0.50	1.75	3.69 ± 13.1% (k=2)
5600	± 50 / ± 100	Body	48.5 ± 5%	5.77 ± 5%	0.50	1.75	3.73 ± 13.1% (k=2)
5800	± 50 / ± 100	Body	48.2 ± 5%	6.00 ± 5%	0.45	1.75	3.65 ± 13.1% (k=2)

^c The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

Deviation from Isotropy in HSL

Error (ϕ , ϑ), $f = 900$ MHz



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ ($k=2$)