

APPENDIX C: DIPOLE VALIDATION

PCTEST [®] SAR REPORT		FCC CERTIFICATION			Reviewed by: Quality Manager
SAR Filename: SAR.240309236.AZ4	Test Dates: March 22-24, 2004	Phone Type: Dual-Mode PTT Phone (iDEN/ISM)	FCC ID: AZ489FT5831		

PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 406

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

Medium: 835 Brain ($\sigma = 0.92 \text{ mho/m}$, $\epsilon_r = 42.28$, $\rho = 1000 \text{ kg/m}^3$)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 03-22-2004; Ambient Temp: 21.8°C; Tissue Temp: 20.4°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Calibrated: 1/6/2004

Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

835 MHz Dipole Validation

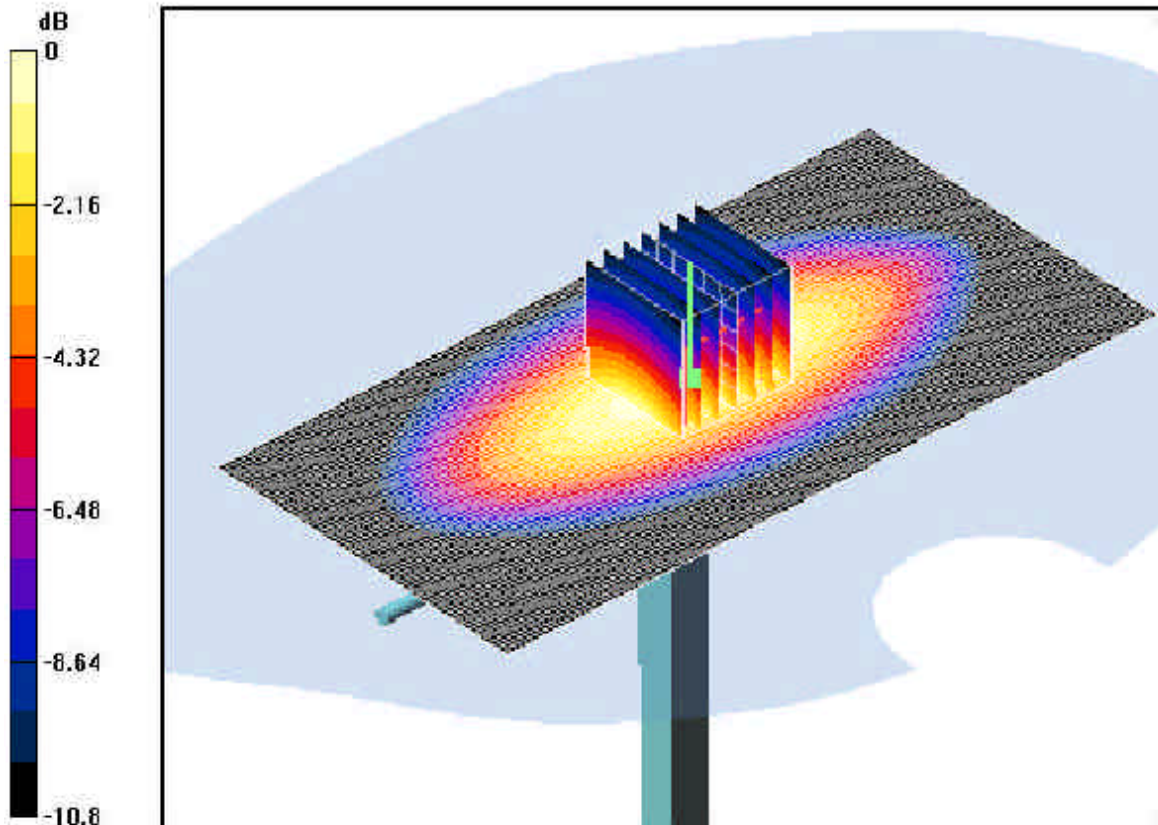
Area Scan (61x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Input Power = 24.0 dBm (250 mW)

SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.56 mW/g

Target SAR(1g) = 2.375 mW/g; Deviation = +1.05 %



0 dB = 2.84mW/g

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PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 406

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

Medium: 835 Brain ($\sigma = 0.92$ mho/m, $\epsilon_r = 42.28$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 03-23-2004; Ambient Temp: 22.2°C; Tissue Temp: 20.8°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Calibrated: 1/6/2004

Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

835 MHz Dipole Validation

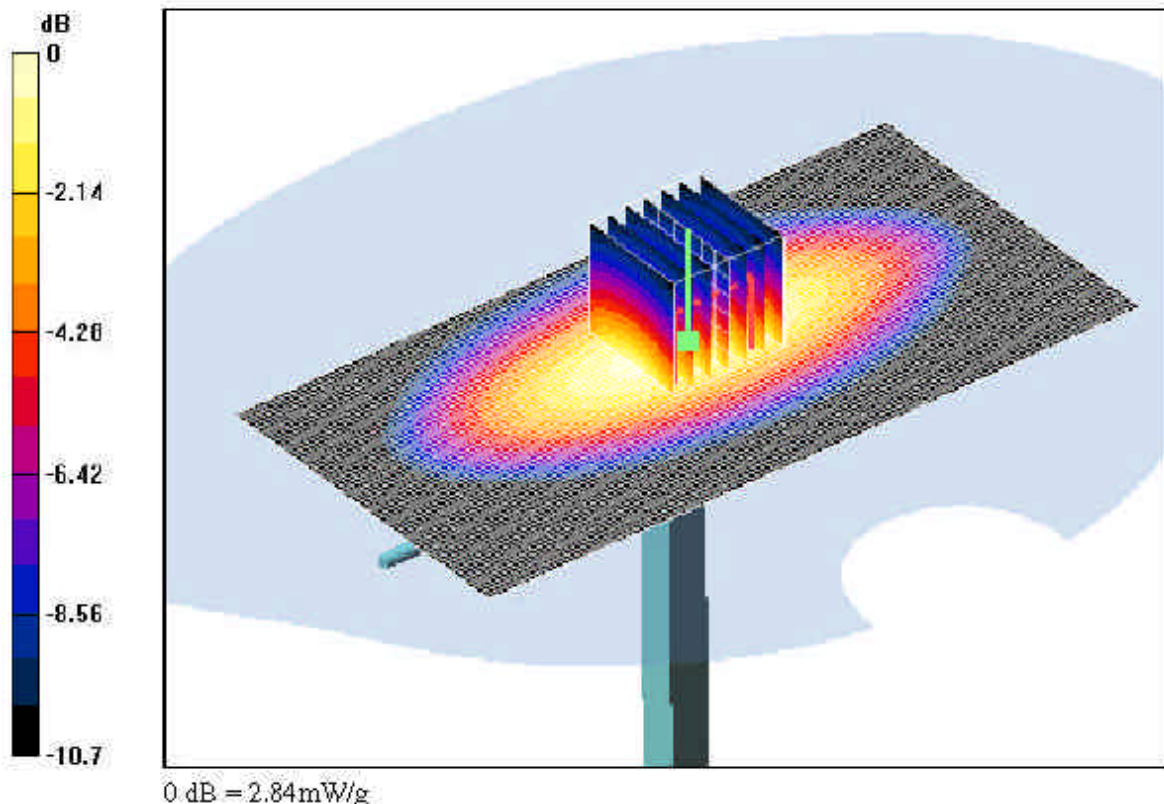
Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 24.0 dBm (250 mW)

SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.58 mW/g

Target SAR(1g) = 2.375 mW/g; Deviation = +2.31 %



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PCTEST ENGINEERING LABORATORY, INC.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 406

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

Medium: 835 Brain ($\sigma = 0.92$ mho/m, $\epsilon_r = 42.28$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 03-24-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.6°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Calibrated: 1/6/2004

Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

835 MHz Dipole Validation

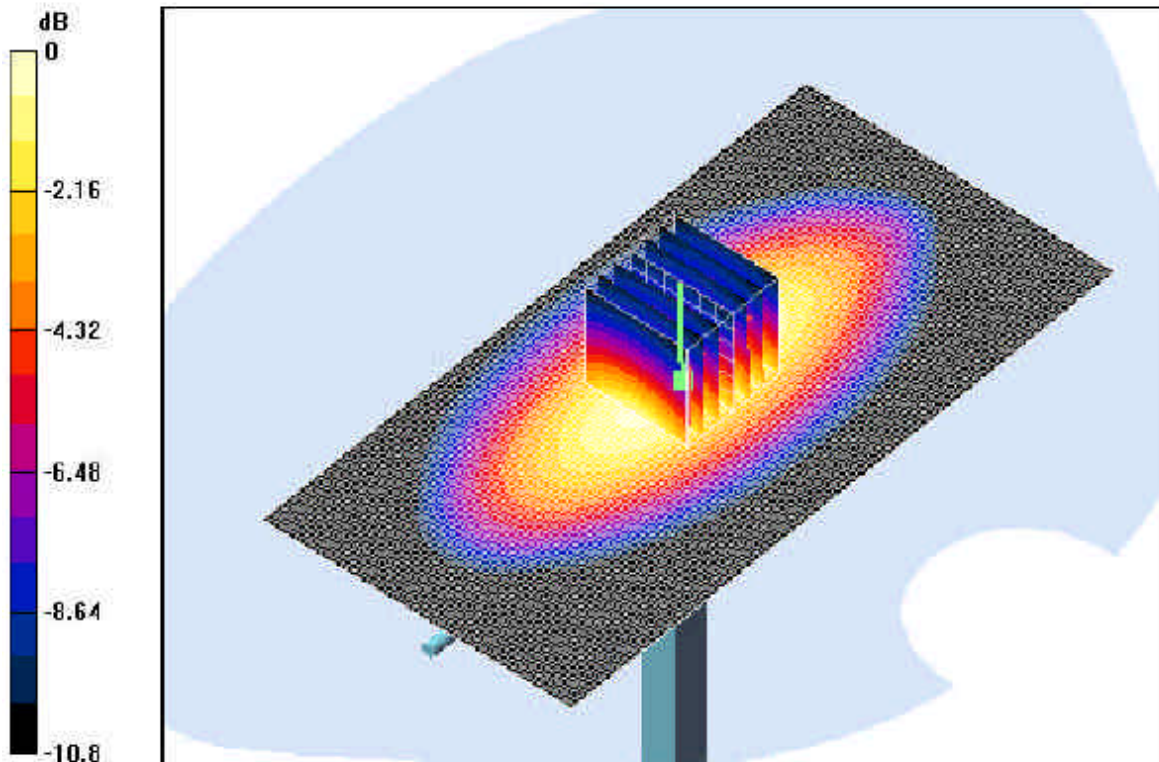
Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

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

Input Power = 24.0 dBm (250 mW)

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

Target SAR(1g) = 2.375 mW/g; Deviation = +1.89 %



0 dB = 2.86mW/g

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