

Test Date: 11 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna A Bluetooth Off 11-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.30043$ mho/m, $\epsilon_r = 45.9776$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 149 Test/Area Scan (161x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2.14 mW/g

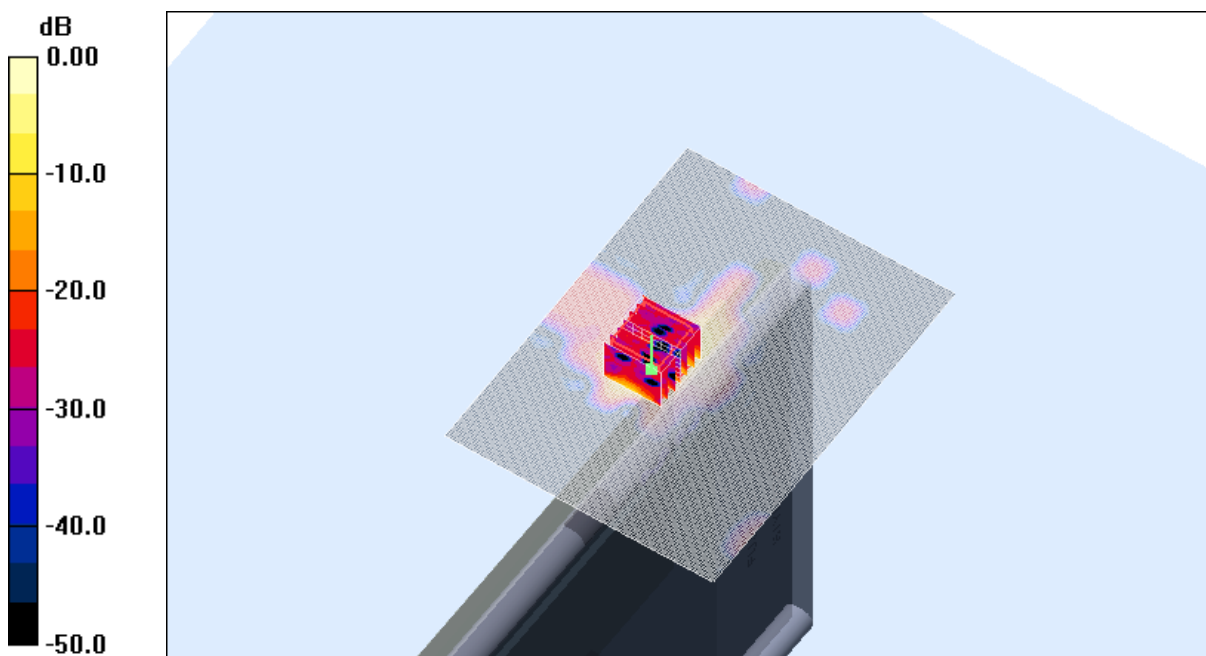
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 2.26 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 6.12 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.213 mW/g

Maximum value of SAR (measured) = 2.74 mW/g



0 dB = 2.74mW/g

SAR MEASUREMENT PLOT 30

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.5 Degrees Celsius
37.0 %

Test Date: 11 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna A Bluetooth Off 11-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.38216$ mho/m, $\epsilon_r = 45.8448$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 157 Test/Area Scan (161x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2.48 mW/g

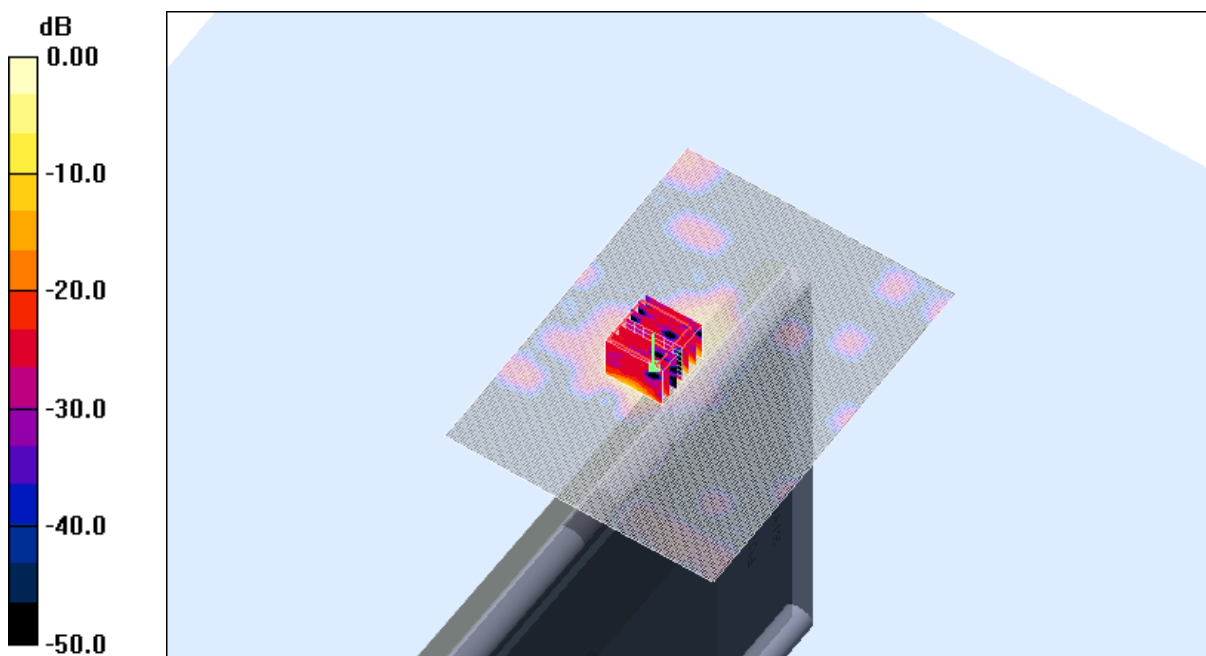
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.78 V/m; Power Drift = 0.090 dB

Peak SAR (extrapolated) = 7.54 W/kg

SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.253 mW/g

Maximum value of SAR (measured) = 3.23 mW/g



0 dB = 3.23mW/g

SAR MEASUREMENT PLOT 31

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.5 Degrees Celsius
37.0 %

Test Date: 14 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna A Bluetooth Off 14-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5825 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.28543$ mho/m, $\epsilon_r = 46.0314$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 165 Test/Area Scan (161x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 3.59 mW/g

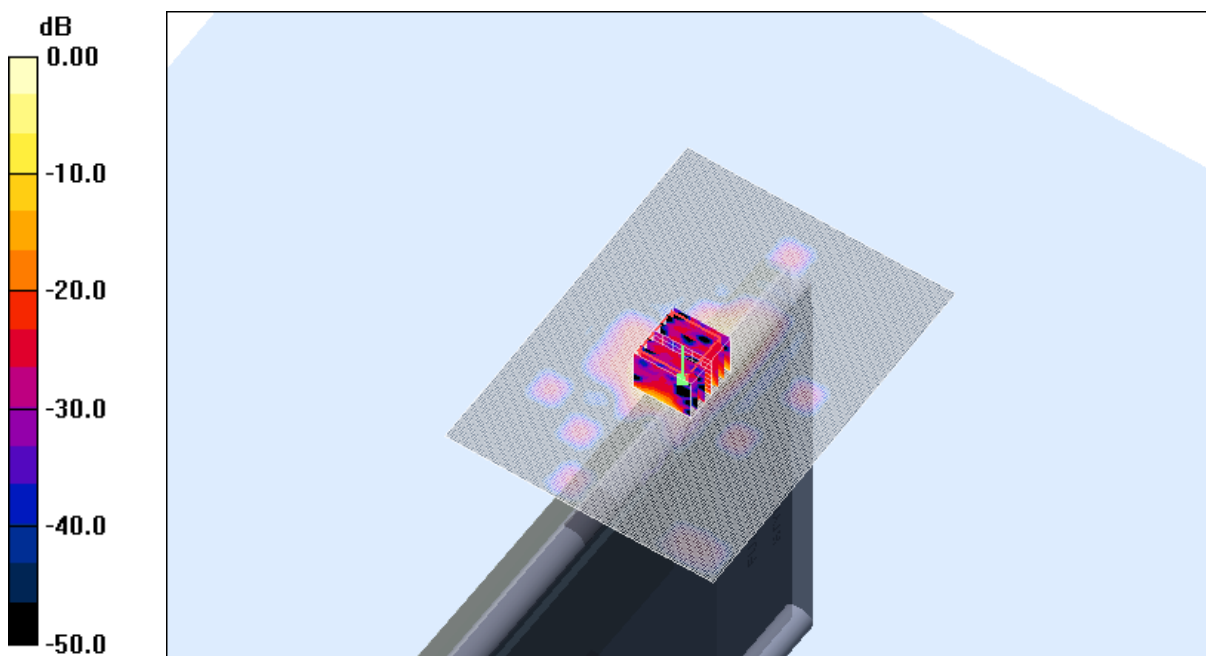
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 21.9 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 7.97 W/kg

SAR(1 g) = 1.37 mW/g; SAR(10 g) = 0.274 mW/g

Maximum value of SAR (measured) = 3.48 mW/g



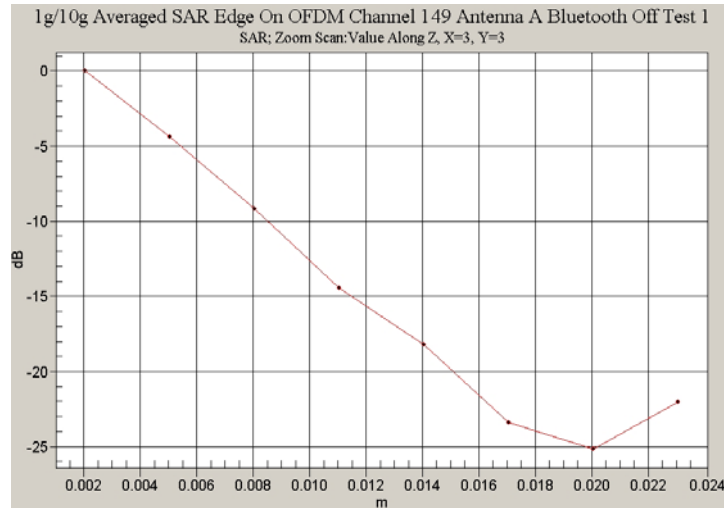
0 dB = 3.48mW/g

SAR MEASUREMENT PLOT 32

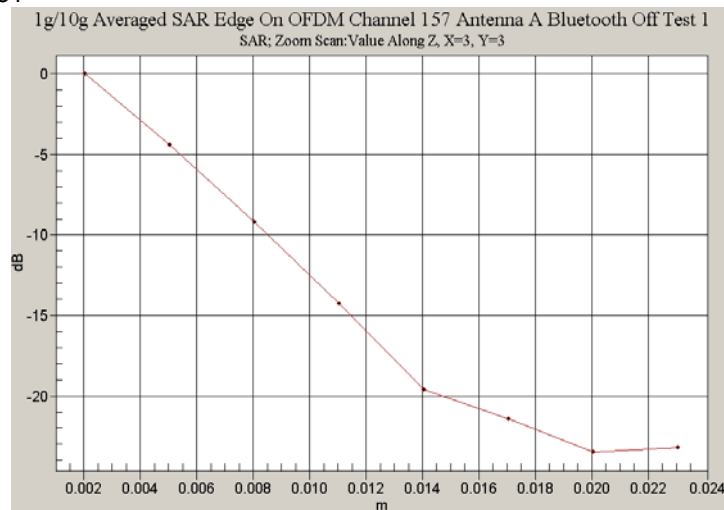
Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
20.0 Degrees Celsius
35.0 %

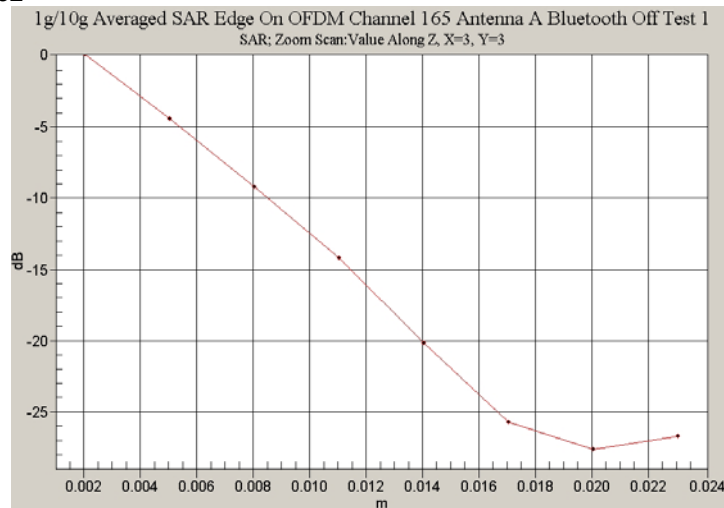
Z-Axis Graph for Plot 30



Z-Axis Graph for Plot 31



Z-Axis Graph for Plot 32



Test Date: 14 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna B Bluetooth Off 14-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.13093$ mho/m, $\epsilon_r = 46.3183$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 149 Test/Area Scan (121x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.91 mW/g

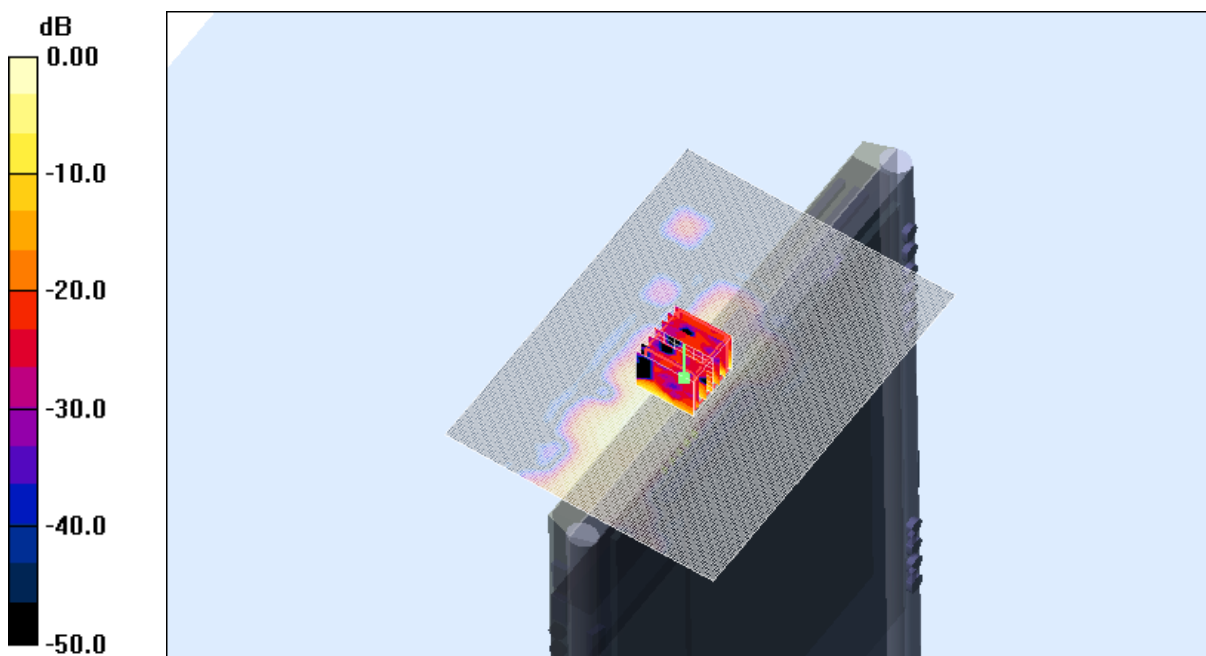
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 12.7 V/m; Power Drift = -0.385 dB

Peak SAR (extrapolated) = 4.26 W/kg

SAR(1 g) = 0.925 mW/g; SAR(10 g) = 0.249 mW/g

Maximum value of SAR (measured) = 1.96 mW/g



0 dB = 1.96mW/g

SAR MEASUREMENT PLOT 33

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
20.0 Degrees Celsius
35.0 %

Test Date: 14 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna B Bluetooth Off 14-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.21951$ mho/m, $\epsilon_r = 46.1885$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 157 Test/Area Scan (121x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.66 mW/g

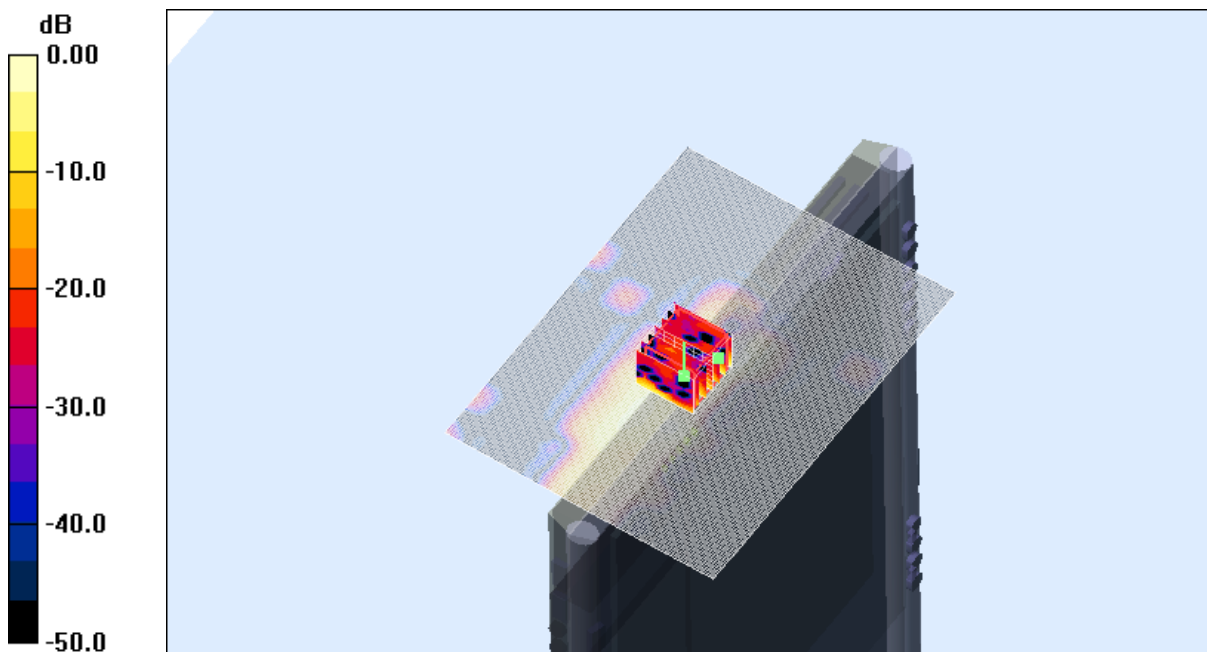
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 12.2 V/m; Power Drift = -0.205 dB

Peak SAR (extrapolated) = 3.57 W/kg

SAR(1 g) = 0.779 mW/g; SAR(10 g) = 0.212 mW/g

Maximum value of SAR (measured) = 1.65 mW/g



0 dB = 1.65mW/g

SAR MEASUREMENT PLOT 34

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
20.0 Degrees Celsius
35.0 %

Test Date: 14 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna B Bluetooth Off 14-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5825 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.28543$ mho/m, $\epsilon_r = 46.0314$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 165 Test/Area Scan (121x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.40 mW/g

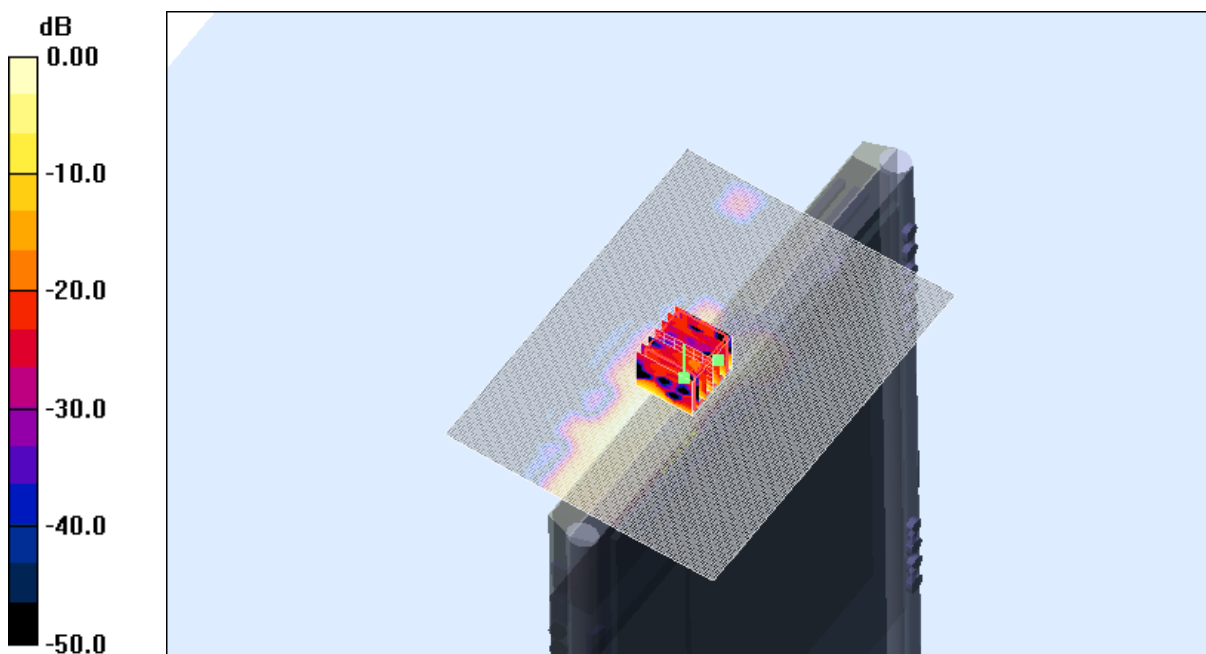
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 9.16 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 0.659 mW/g; SAR(10 g) = 0.181 mW/g

Maximum value of SAR (measured) = 1.44 mW/g



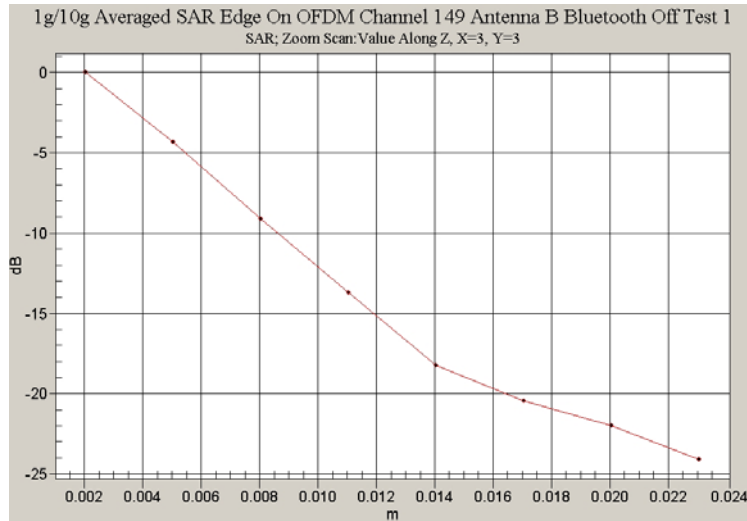
0 dB = 1.44mW/g

SAR MEASUREMENT PLOT 35

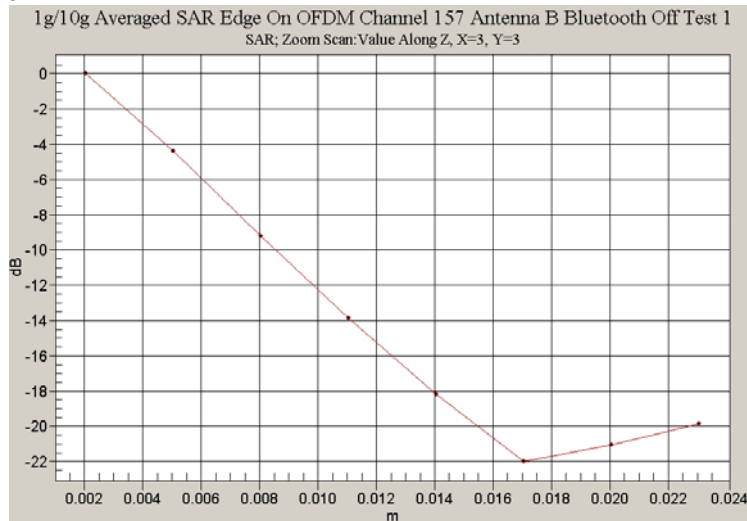
Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
20.0 Degrees Celsius
35.0 %

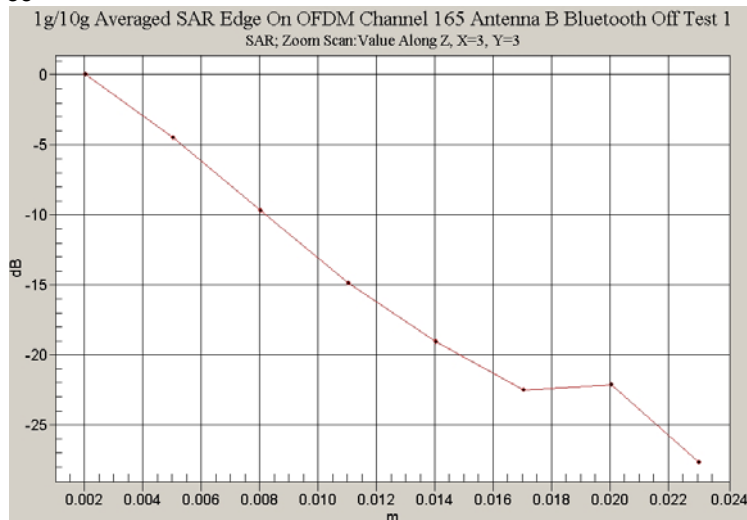
Z-Axis Graph for Plot 33



Z-Axis Graph for Plot 34



Z-Axis Graph for Plot 35



Test Date: 15 August 2006

File Name: [Arm Held OFDM 5.6 GHz Antenna B Bluetooth On 15-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.25028$ mho/m, $\epsilon_r = 46.1545$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 149 Test/Area Scan (161x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2.36 mW/g

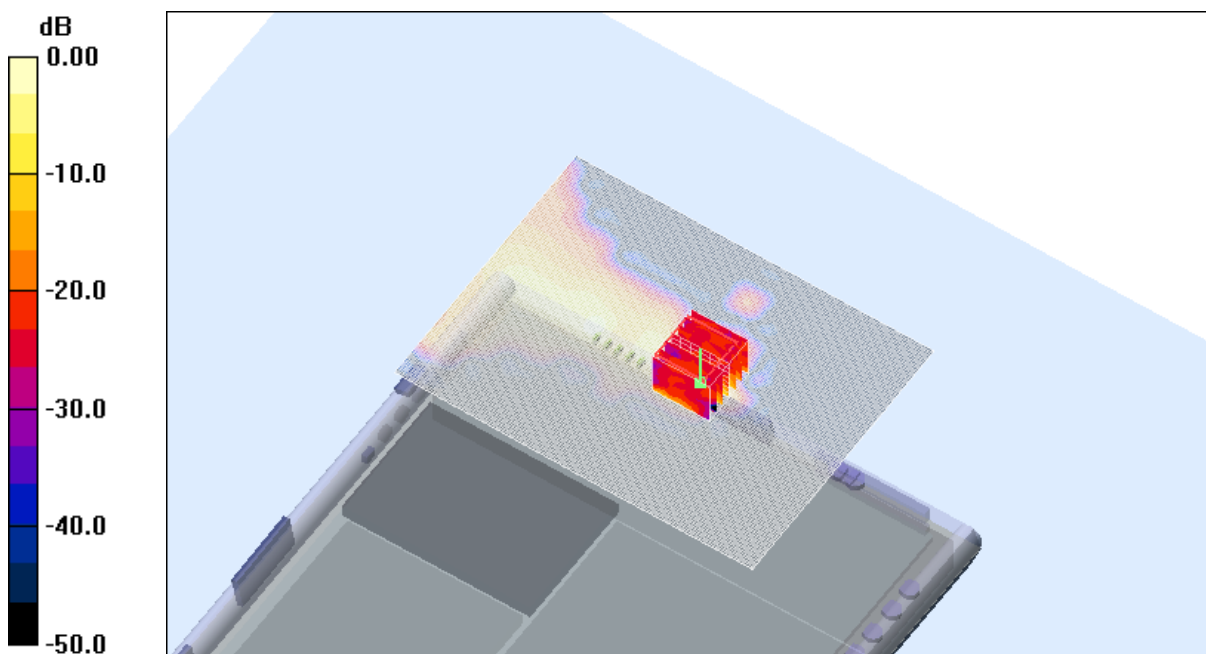
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 18.4 V/m; Power Drift = -0.264 dB

Peak SAR (extrapolated) = 5.47 W/kg

SAR(1 g) = 0.950 mW/g; SAR(10 g) = 0.208 mW/g

Maximum value of SAR (measured) = 2.27 mW/g



0 dB = 2.27mW/g

SAR MEASUREMENT PLOT 36

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.9 Degrees Celsius
41.0 %

Test Date: 15 August 2006

File Name: [Tablet OFDM 5.6 GHz Antenna A Bluetooth On 15-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5825 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.38915$ mho/m, $\epsilon_r = 45.8694$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 165 Test/Area Scan (161x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2.01 mW/g

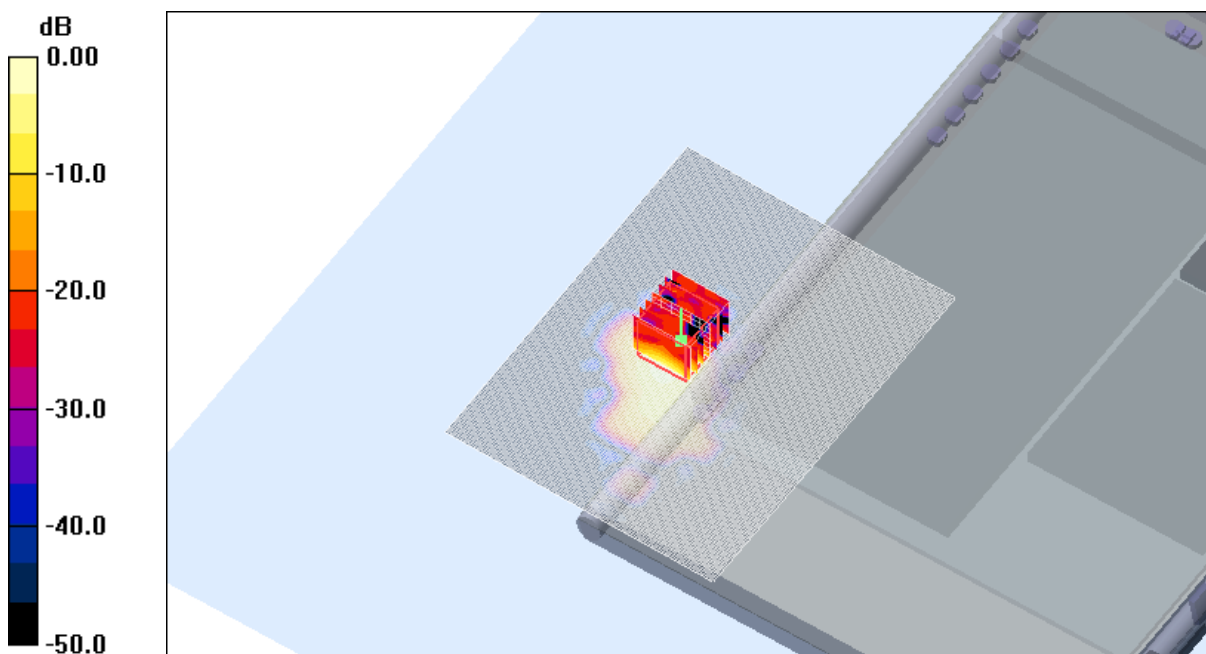
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 16.8 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 3.75 W/kg

SAR(1 g) = 0.803 mW/g; SAR(10 g) = 0.193 mW/g

Maximum value of SAR (measured) = 1.74 mW/g



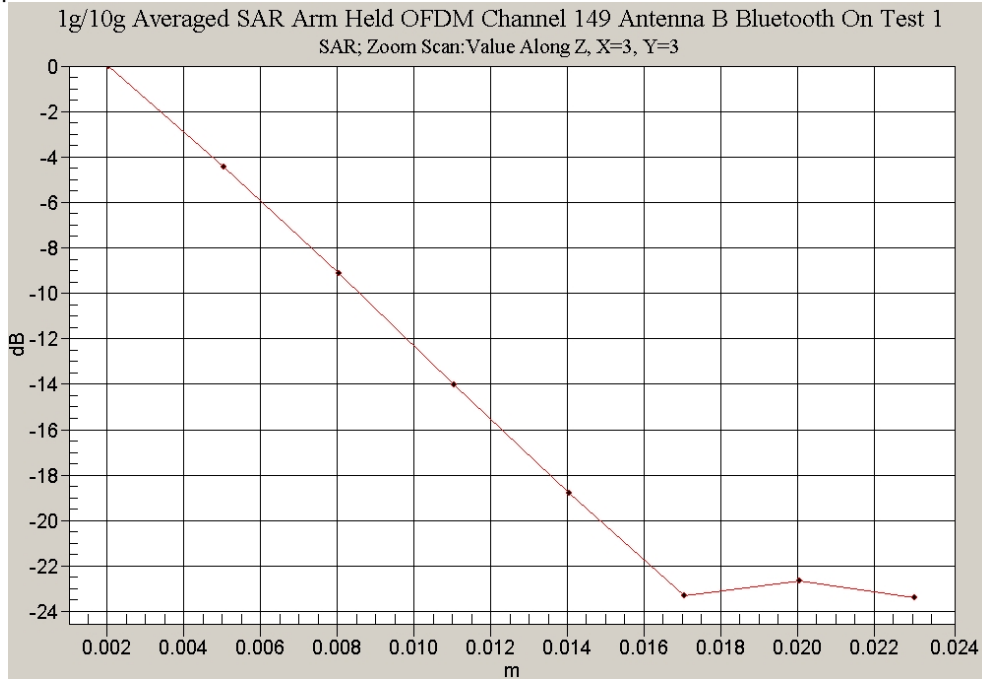
0 dB = 1.74mW/g

SAR MEASUREMENT PLOT 37

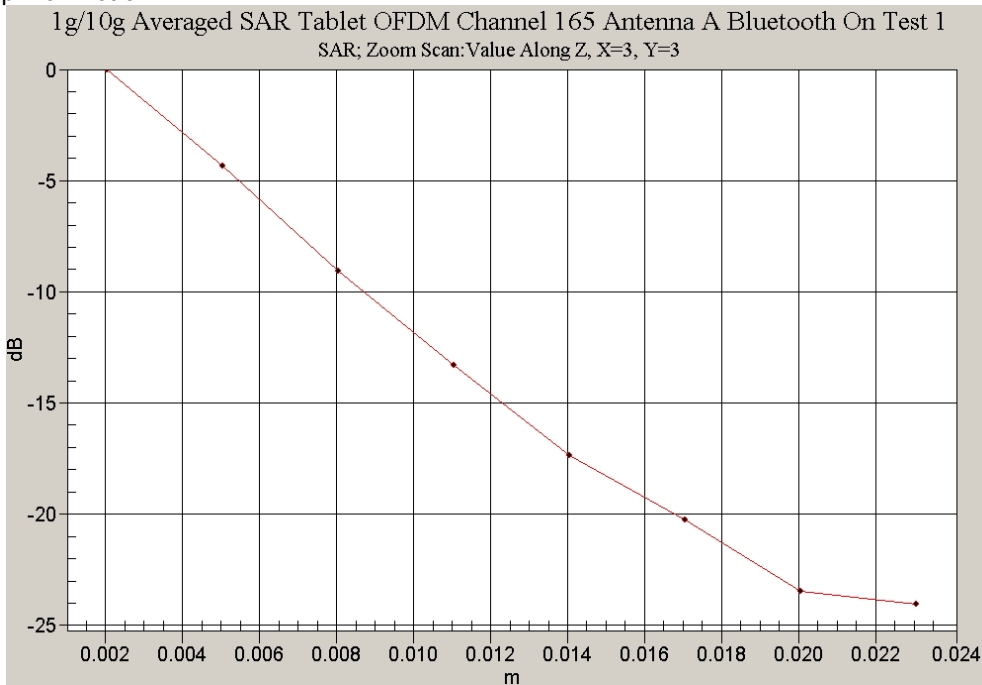
Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
19.9 Degrees Celsius
41.0 %

Z-Axis Graph for Plot 36



Z-Axis Graph for Plot 37



Test Date: 14 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna A Bluetooth On 14-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5825 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.28543$ mho/m, $\epsilon_r = 46.0314$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 165 Test/Area Scan (161x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 3.15 mW/g

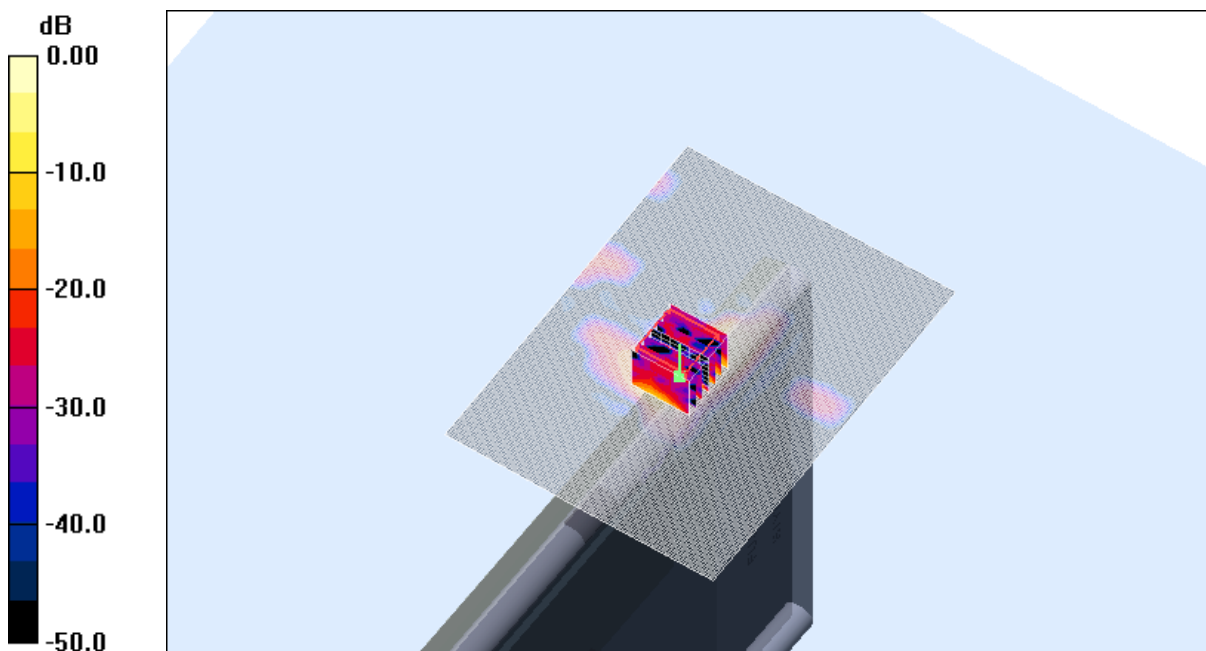
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 18.0 V/m; Power Drift = 0.299 dB

Peak SAR (extrapolated) = 7.61 W/kg

SAR(1 g) = 1.33 mW/g; SAR(10 g) = 0.269 mW/g

Maximum value of SAR (measured) = 3.34 mW/g



SAR MEASUREMENT PLOT 38

Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
20.0 Degrees Celsius
35.0 %

Test Date: 14 August 2006

File Name: [Edge On OFDM 5.6 GHz Antenna B Bluetooth On 14-08-06.da4](#)

DUT: Fujitsu Tablet Osian with Atheros XB62 11abg Module; Type: XB62; Serial: MAC:0011F5-D82570

* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.13093$ mho/m, $\epsilon_r = 46.3183$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.64, 3.64, 3.64)

- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 149 Test/Area Scan (121x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.76 mW/g

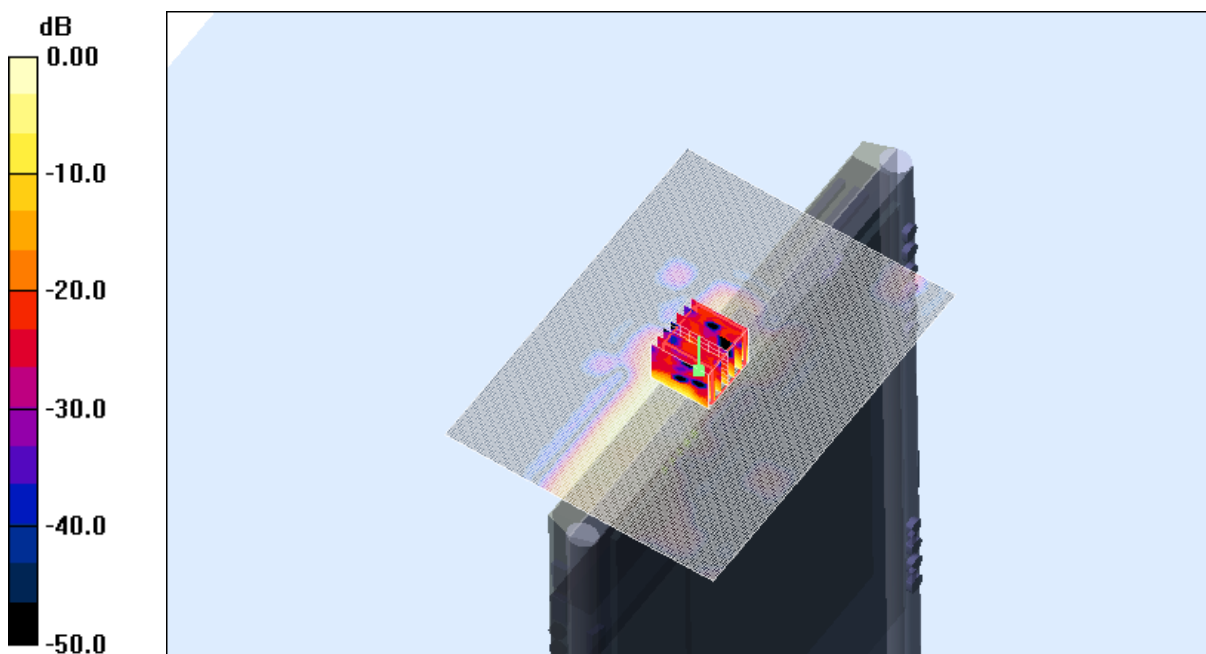
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 14.7 V/m; Power Drift = -0.301 dB

Peak SAR (extrapolated) = 4.39 W/kg

SAR(1 g) = 0.944 mW/g; SAR(10 g) = 0.266 mW/g

Maximum value of SAR (measured) = 1.92 mW/g



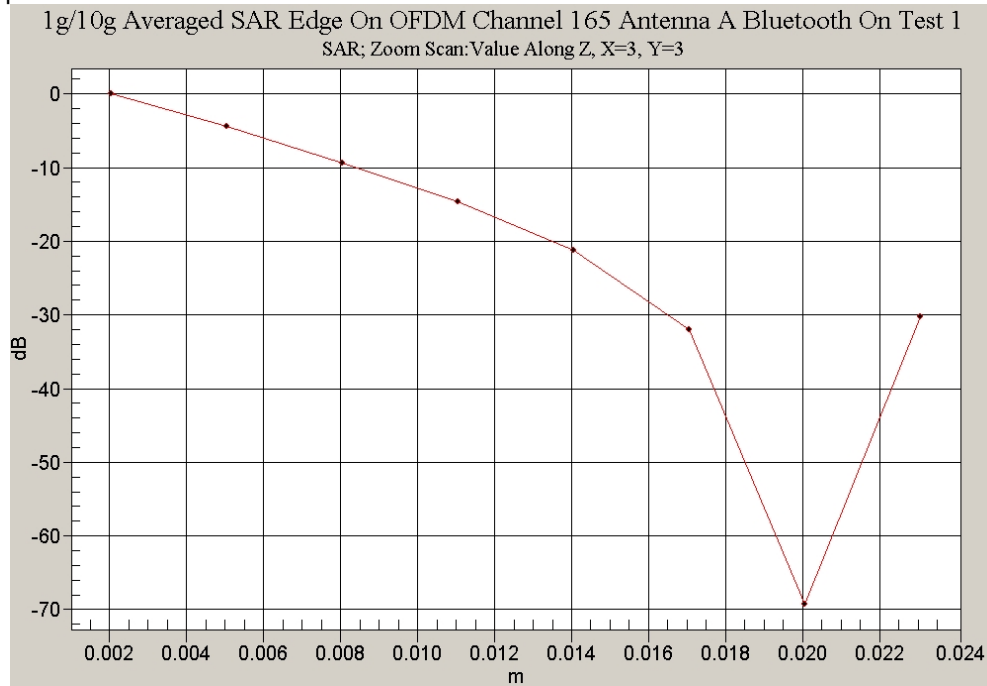
0 dB = 1.92mW/g

SAR MEASUREMENT PLOT 39

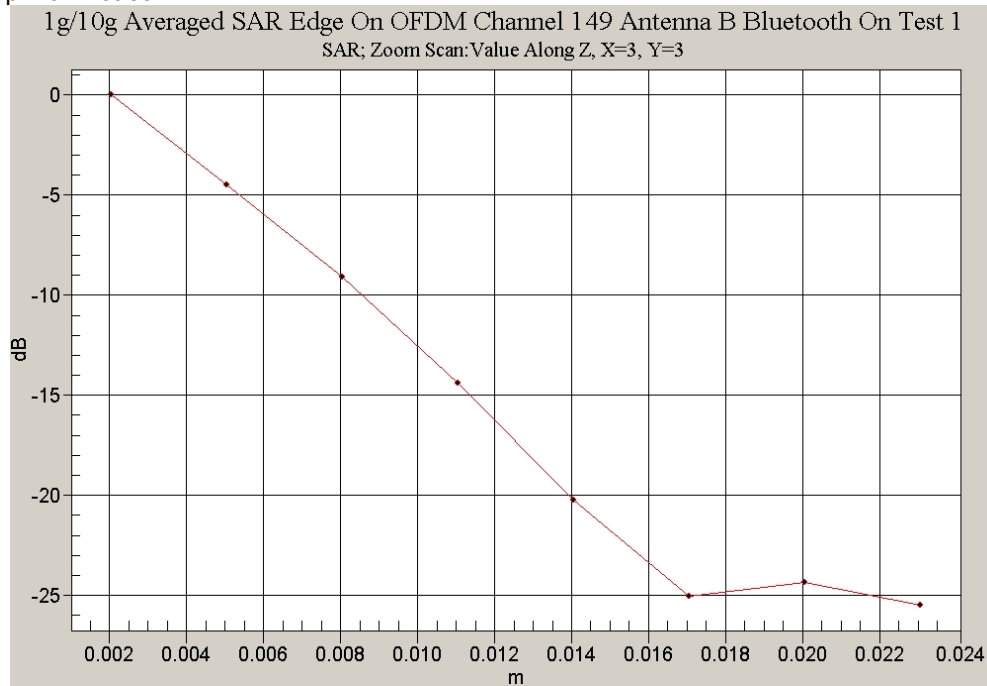
Ambient Temperature
Liquid Temperature
Humidity

20.4 Degrees Celsius
20.0 Degrees Celsius
35.0 %

Z-Axis Graph for Plot 38



Z-Axis Graph for Plot 39



Test Date: 11 August 2006

File Name: [Validation 5800MHz \(DAE 442 Probe EX3DV4\) 11-08-06.da4](#)

DUT: Dipole 5200_5800 MHz; Type: D5GHzV2; Serial: 1008

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

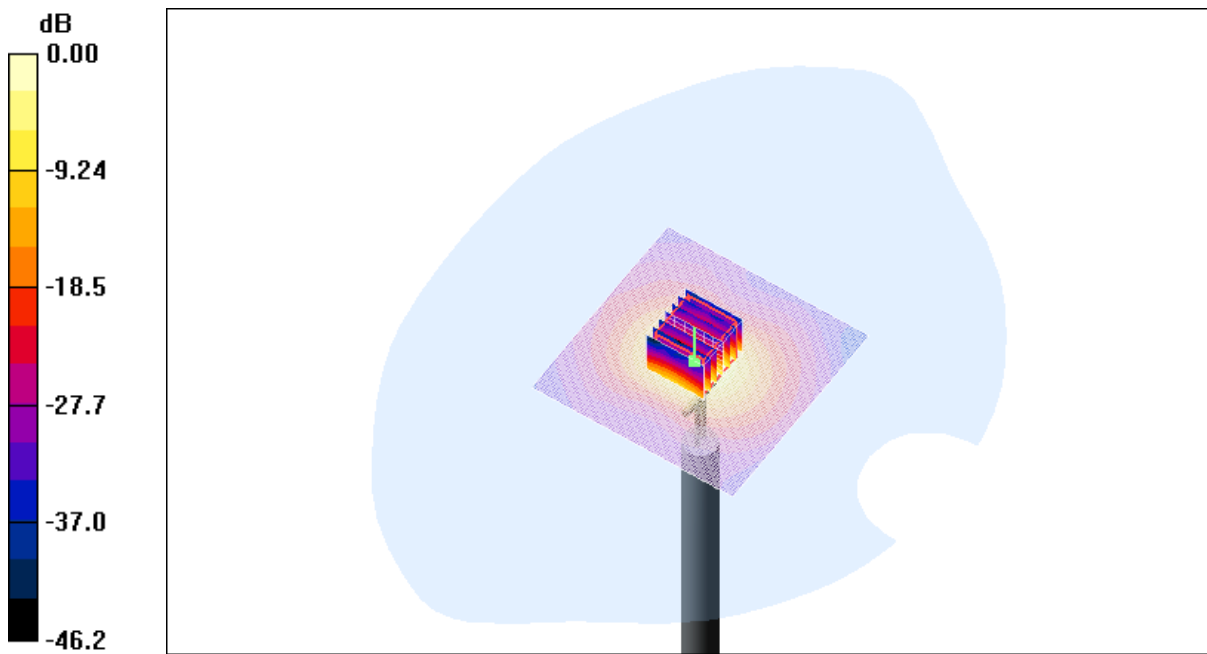
* Medium parameters used: $\sigma = 5.37519$ mho/m, $\epsilon_r = 33.7002$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.66, 3.66, 3.66)

- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

Channel 1 Test/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 42.2 mW/g

Channel 1 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 91.4 V/m; Power Drift = 0.145 dB
Peak SAR (extrapolated) = 86.5 W/kg
SAR(1 g) = 19.4 mW/g; SAR(10 g) = 5.47 mW/g
Maximum value of SAR (measured) = 41.3 mW/g



0 dB = 41.3mW/g

SAR MEASUREMENT PLOT 40

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.5 Degrees Celsius
37.0 %

Test Date: 14 August 2006

File Name: [Validation 5800MHz \(DAE 442 Probe EX3DV4\) 14-08-06.da4](#)

DUT: Dipole 5200_5800 MHz; Type: D5GHzV2; Serial: 1008

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

* Medium parameters used: $\sigma = 5.23759$ mho/m, $\epsilon_r = 34.1135$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.66, 3.66, 3.66)

- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

Channel 1 Test/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 42.5 mW/g

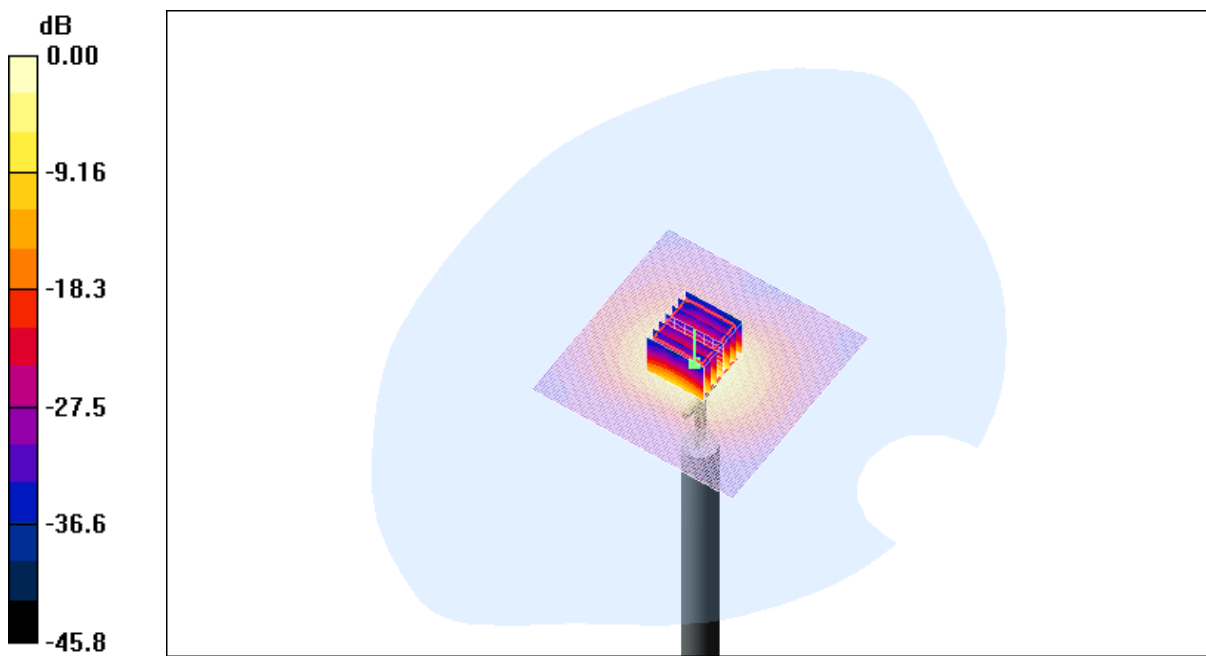
Channel 1 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 92.2 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 86.8 W/kg

SAR(1 g) = 19.4 mW/g; SAR(10 g) = 5.5 mW/g

Maximum value of SAR (measured) = 41.3 mW/g



0 dB = 41.3mW/g

SAR MEASUREMENT PLOT 41

Ambient Temperature

20.4 Degrees Celsius

Liquid Temperature

20.0 Degrees Celsius

Humidity

35.0 %

Test Date: 15 August 2006

File Name: [Validation 5800MHz \(DAE 442 Probe EX3DV4\) 15-08-06.da4](#)

DUT: Dipole 5200_5800 MHz; Type: D5GHzV2; Serial: 1008

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

* Medium parameters used: $\sigma = 5.3658$ mho/m, $\epsilon_r = 33.725$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.66, 3.66, 3.66)

- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

Channel 1 Test/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 42.8 mW/g

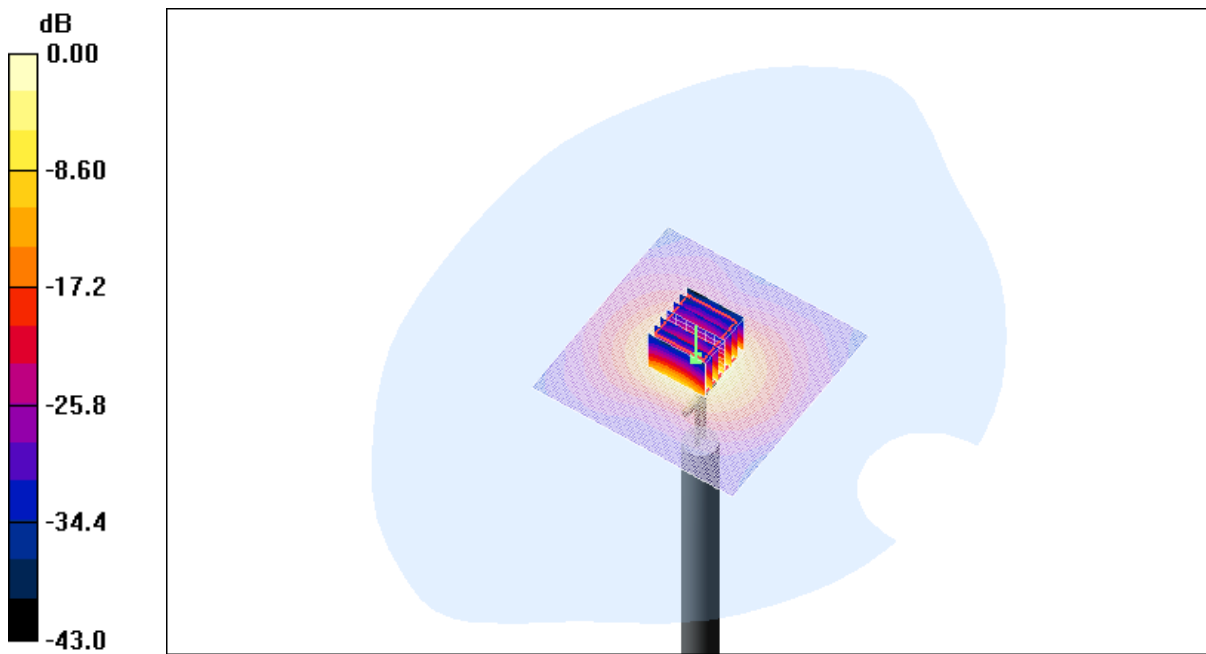
Channel 1 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 92.3 V/m; Power Drift = 0.175 dB

Peak SAR (extrapolated) = 87.9 W/kg

SAR(1 g) = 19.7 mW/g; SAR(10 g) = 5.51 mW/g

Maximum value of SAR (measured) = 42.2 mW/g



0 dB = 42.2mW/g

SAR MEASUREMENT PLOT 42

Ambient Temperature

20.4 Degrees Celsius

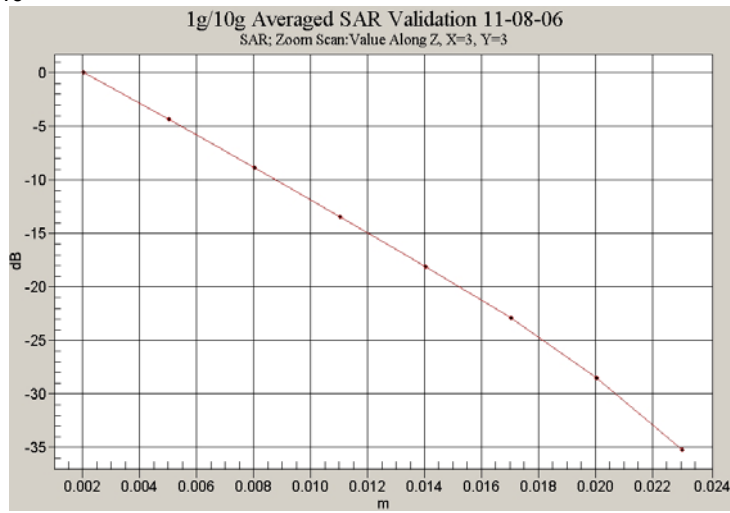
Liquid Temperature

19.9 Degrees Celsius

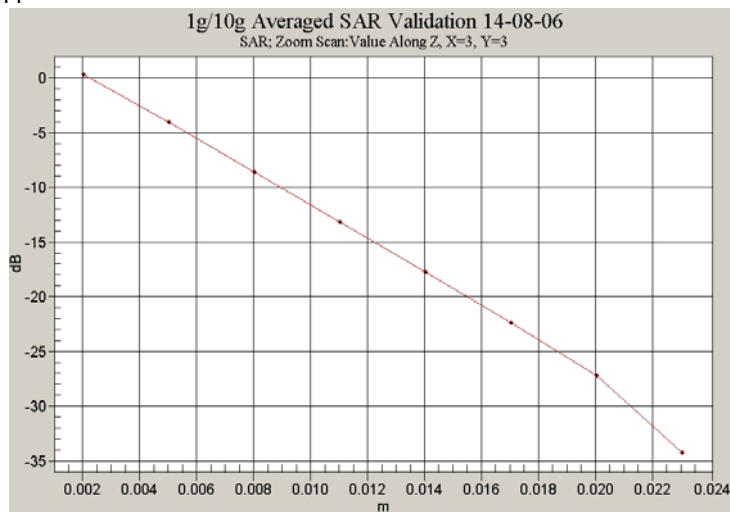
Humidity

41.0 %

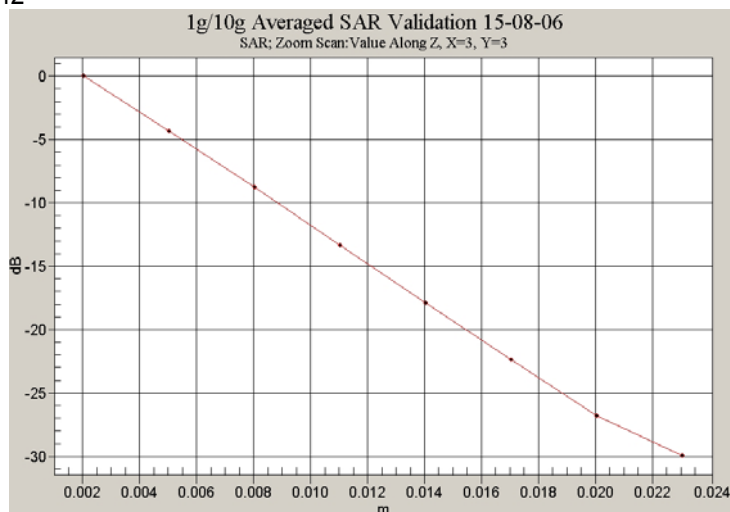
Z-Axis Graph for Plot 40



Z-Axis Graph for Plot 41



Z-Axis Graph for Plot 42



APPENDIX D

SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

1. 2450MHz E-Field Probe Calibration Sheet	8 Pages
2. 2450MHz Dipole Calibration Sheet	5 pages
3. 5800MHz E-Field Probe Calibration Sheet	8 Pages
4. 5GHz Dipole Calibration Sheet	7 Pages