

APPENDIX B PLOTS OF THE SAR MEASUREMENTS

Plots of the measured SAR distributions inside the phantom are given in this Appendix for the “Lap Arm Held” and “Tablet” tested configurations. The spatial peak SAR values were assessed with the procedure described in this report.

Table 21: 5800 MHz Band SAR Measurement Plot Numbers

Plot 1	Lap Arm Held Position – Ant A -- Prescan	CH#157
Plot 2	Lap Arm Held Position – Ant B -- Prescan	CH#157
Plot 3	Lap Arm Held Position – Ant A	CH#149
Plot 4	Lap Arm Held Position – Ant A	CH#157
Plot 5	Lap Arm Held Position – Ant A	CH#165
Z-Axis graphs	Z-Axis graphs for Plots 3 to 5	
Plot 6	Lap Arm Held Position – Ant B	CH#149
Plot 7	Lap Arm Held Position – Ant B	CH#157
Plot 8	Lap Arm Held Position – Ant B	CH#165
Z-axis graphs	Z-Axis graphs for Plots 6 to 8	
Plot 9	Edge On Position – Ant A	CH#149
Plot 10	Edge On Position – Ant A	CH#157
Plot 11	Edge On Position – Ant A	CH#165
Z-axis graphs	Z-Axis graphs for Plots 9 - 11	
Plot 12	Edge On Position – Ant B	CH#149
Plot 13	Edge On Position – Ant B	CH#157
Plot 14	Edge On Position – Ant B	CH#165
Z-axis graphs	Z-Axis graphs for Plots 12 -14	
	WLAN with Bluetooth On	
Plot 15	Lap Arm Held Position With Blue tooth Ant A BTCH#40	CH#165
Plot 16	Lap Arm Held Position With Blue tooth Ant B BTCH#40	CH#149
Z-axis graphs	Z-Axis graphs for Plots 15 to 16	
Plot 17	Edge On Position With Blue tooth Ant A BTCH#40	CH#165
Plot 18	Edge On Position With Blue tooth Ant B BTCH#40	CH#157

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Z-axis graphs

Z-Axis graphs for Plots 17 to 18

Table 22: 5200 MHz Band SAR Measurement Plot Numbers

Plot 19	Lap Arm Held Position – Ant A	CH#52
Plot 20	Lap Arm Held Position – Ant B	CH#36
Z-axis graphs	Z-Axis graphs for Plots 19 to 20	
Plot 21	Lap Arm Held Position – Ant B	CH#52
Plot 22	Lap Arm Held Position – Ant B	CH#64
Z-axis graphs	Z-Axis graphs for Plots 21 to 22	
Plot 23	Edge On Position – Ant A	CH#52
Plot 24	Edge On Position – Ant B	CH#36
Z-axis graphs	Z-Axis graphs for Plots 23 to 24	
Plot 25	Edge On Position – Ant B	CH#52
Plot 26	Edge On Position – Ant B	CH#64
Z-axis graphs	Z-Axis graphs for Plots 25 to 26	
WLAN with Bluetooth On		
Plot 27	Lap Arm Held Position With Blue tooth Ant B BTCH#40	CH#52
Plot 28	Edge On Position With Blue tooth Ant B BTCH#40	CH#64
Z-axis graphs	Z-Axis graphs for Plots 27 to 28	

Table 23: Validation Plot

Plot 29	Validation 5800 MHz 10 th March 2006
Plot 30	Validation 5800 MHz 14 th March 2006
Z-Axis Graphs	Z-Axis graphs for Plots 29 - 30
Plot 31	Validation 5800 MHz 15 th March 2006
Plot 32	Validation 5800 MHz 16 th March 2006
Plot 33	Validation 5200 MHz 17 th March 2006
Z-Axis Graphs	Z-Axis graphs for Plots 31 - 33

Test Date: 10 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalius Antenna A Bluetooth On Prescan 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

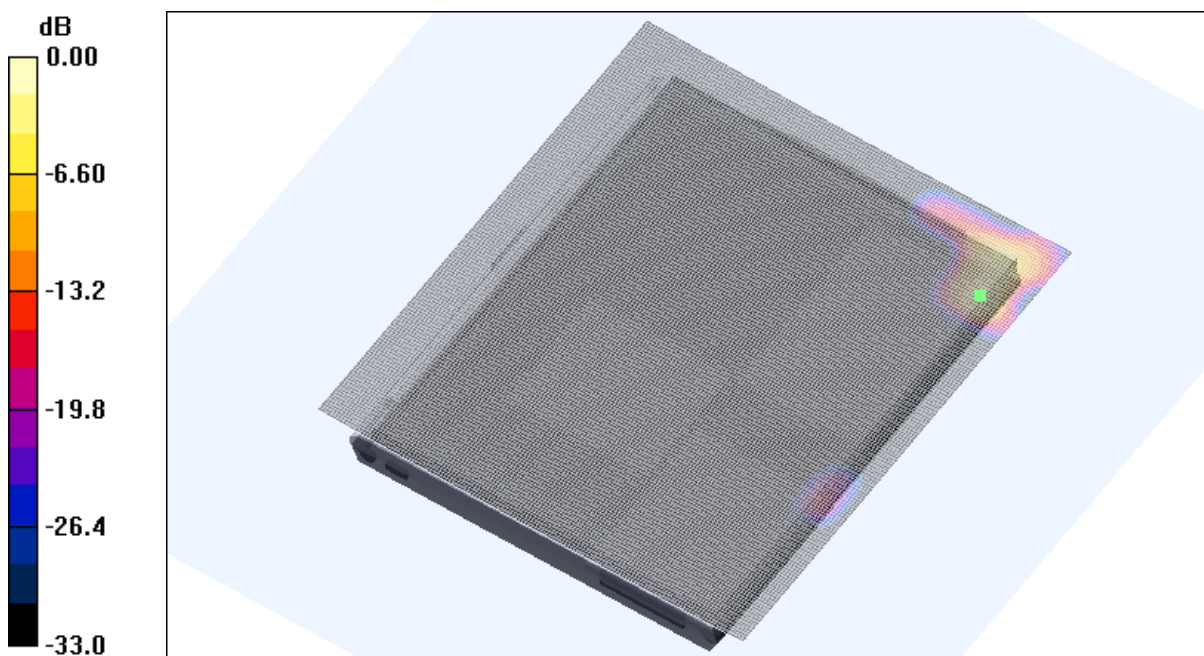
* Medium parameters used: $\sigma = 6.45114$ mho/m, $\epsilon_r = 47.4091$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 157 Test/Area Scan (141x161x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.16 mW/g



0 dB = 2.48mW/g

SAR MEASUREMENT PLOT 1

Ambient Temperature

21.4 Degrees Celsius

Liquid Temperature

20.9 Degrees Celsius

Humidity

62.0 %

Test Date: 14 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalius Antenna B Bluetooth Off Prescan 14-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

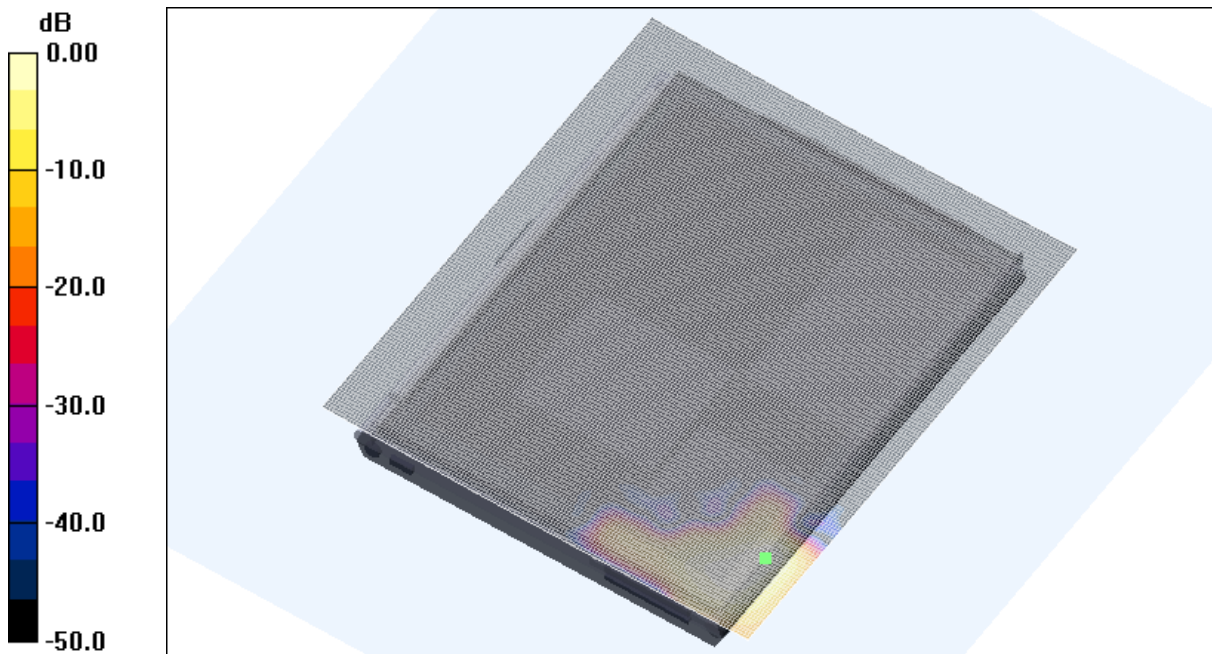
* Medium parameters used: $\sigma = 6.45848$ mho/m, $\epsilon_r = 47.192$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 157 Test/Area Scan (141x161x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.34 mW/g



SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

21.1 Degrees Celsius
20.7 Degrees Celsius
51.0 %

Test Date: 10 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalium Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalium with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.36078$ mho/m, $\epsilon_r = 47.5596$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 149 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.46 mW/g

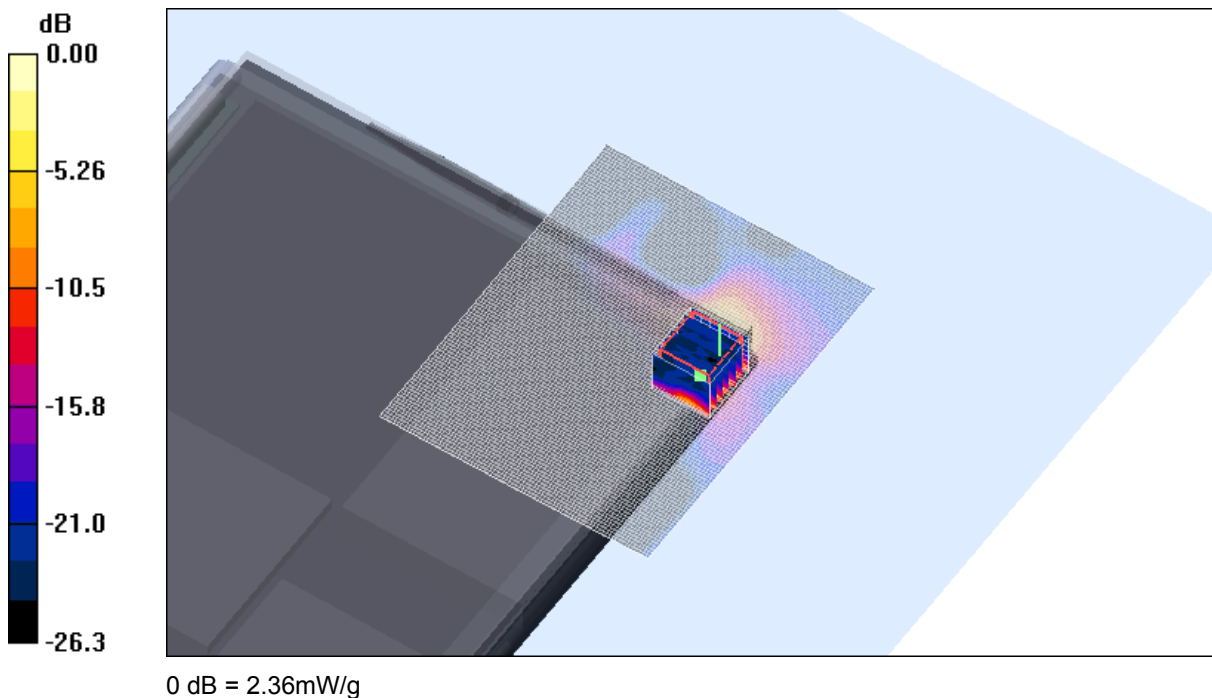
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 13.1 V/m; Power Drift = -0.246 dB

Peak SAR (extrapolated) = 4.79 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.316 mW/g

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



SAR MEASUREMENT PLOT 3

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.9 Degrees Celsius
62.0 %

Test Date: 10 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalium Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalium with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.45114$ mho/m, $\epsilon_r = 47.4091$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 157 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.33 mW/g

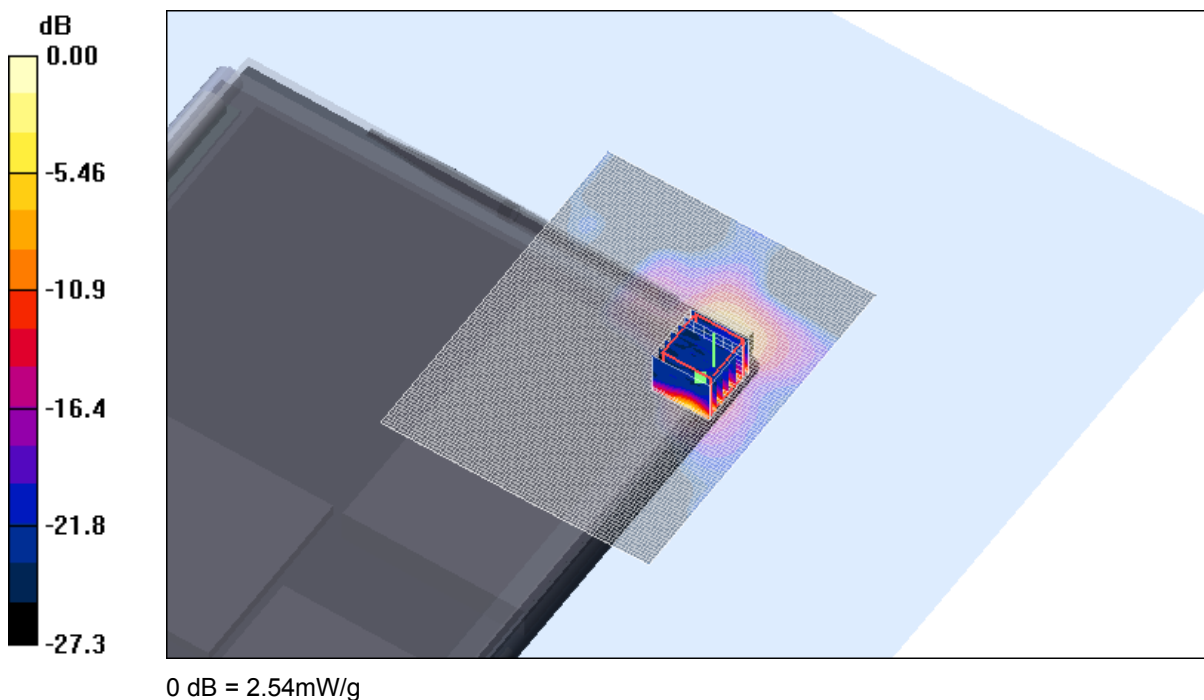
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 13.6 V/m; Power Drift = -0.176 dB

Peak SAR (extrapolated) = 4.99 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.338 mW/g

Maximum value of SAR (measured) = 2.54 mW/g



SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.9 Degrees Celsius
62.0 %

Test Date: 10 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalium Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalium with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.52161$ mho/m, $\epsilon_r = 47.2619$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 165 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.33 mW/g

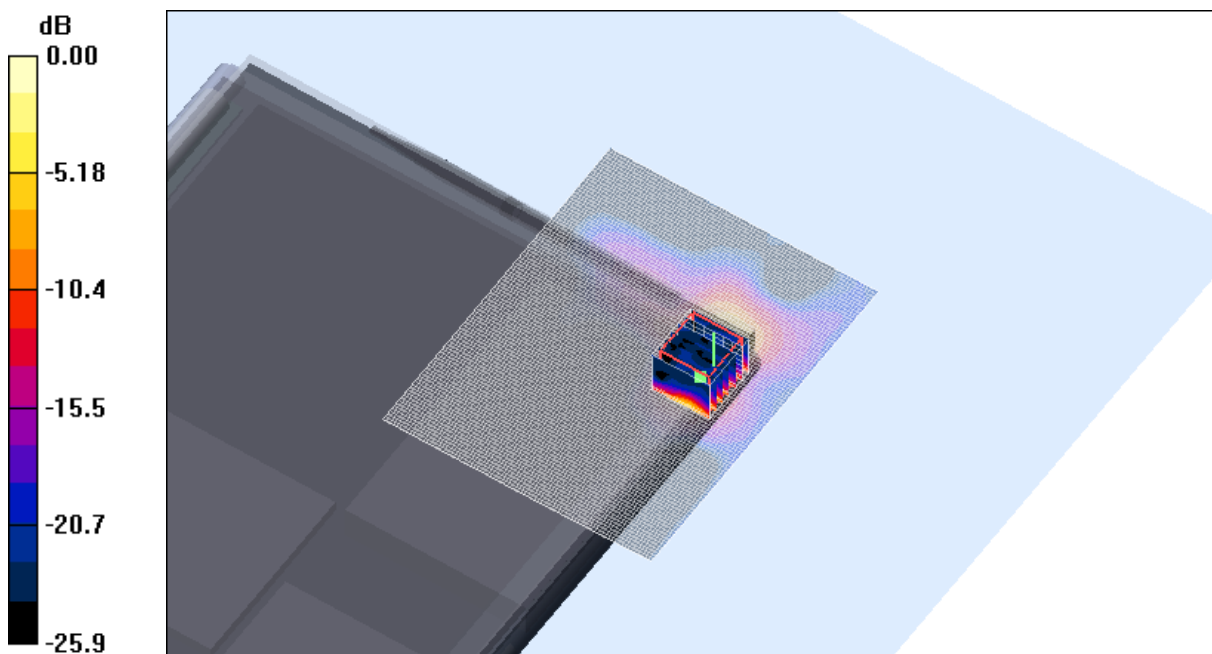
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 14.7 V/m; Power Drift = -0.217 dB

Peak SAR (extrapolated) = 5.20 W/kg

SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.356 mW/g

Maximum value of SAR (measured) = 2.54 mW/g



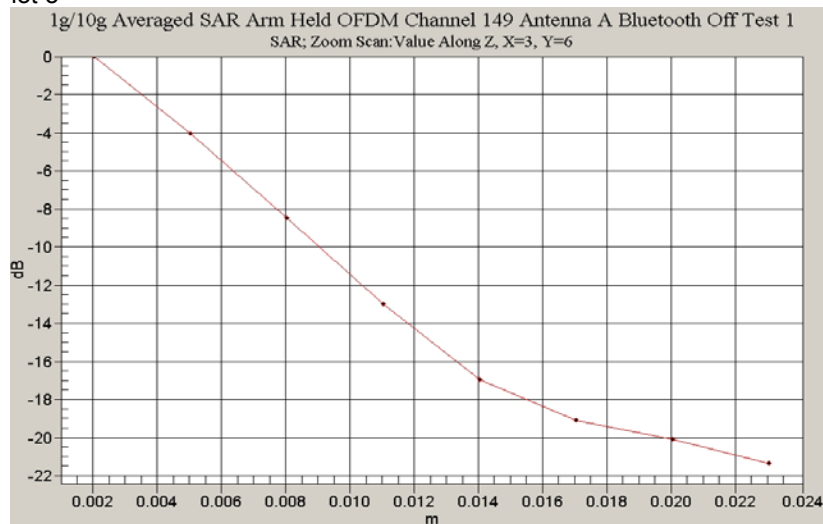
0 dB = 2.54mW/g

SAR MEASUREMENT PLOT 5

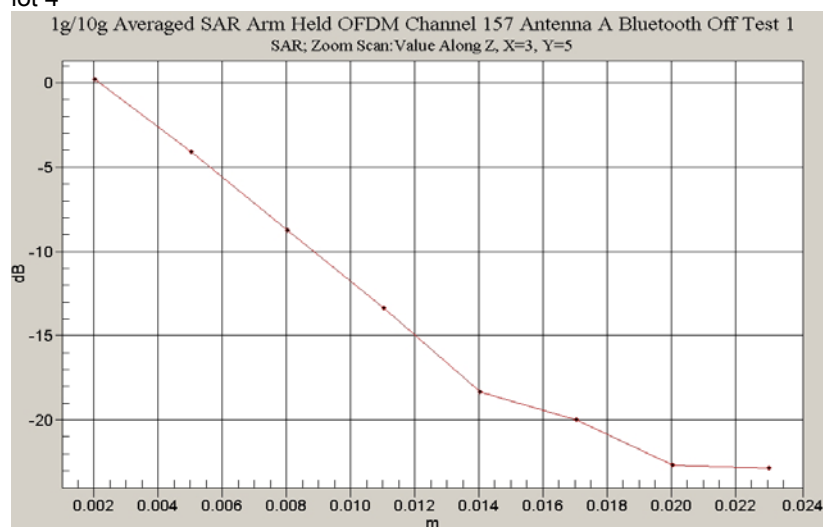
Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.9 Degrees Celsius
62.0 %

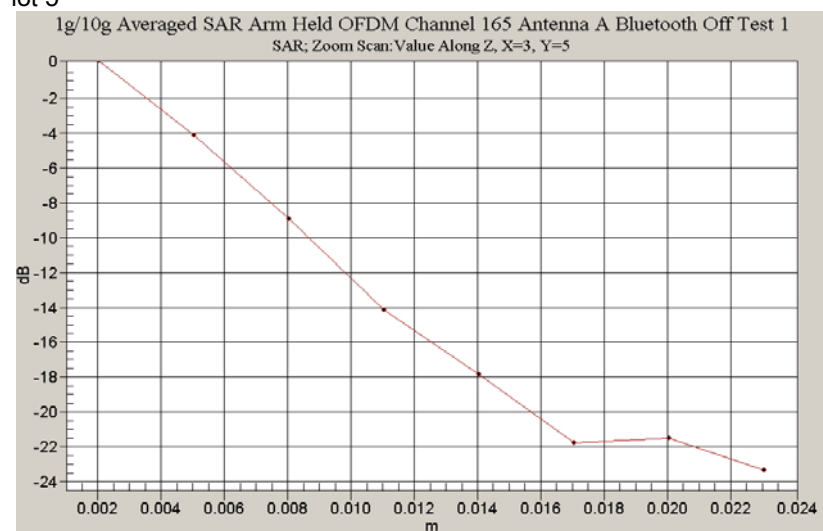
Z-Axis Graph for Plot 3



Z-Axis Graph for Plot 4



Z-Axis Graph for Plot 5



Test Date: 14 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalius Antenna B Bluetooth Off 14-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.37007$ mho/m, $\epsilon_r = 47.3582$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 149 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.56 mW/g

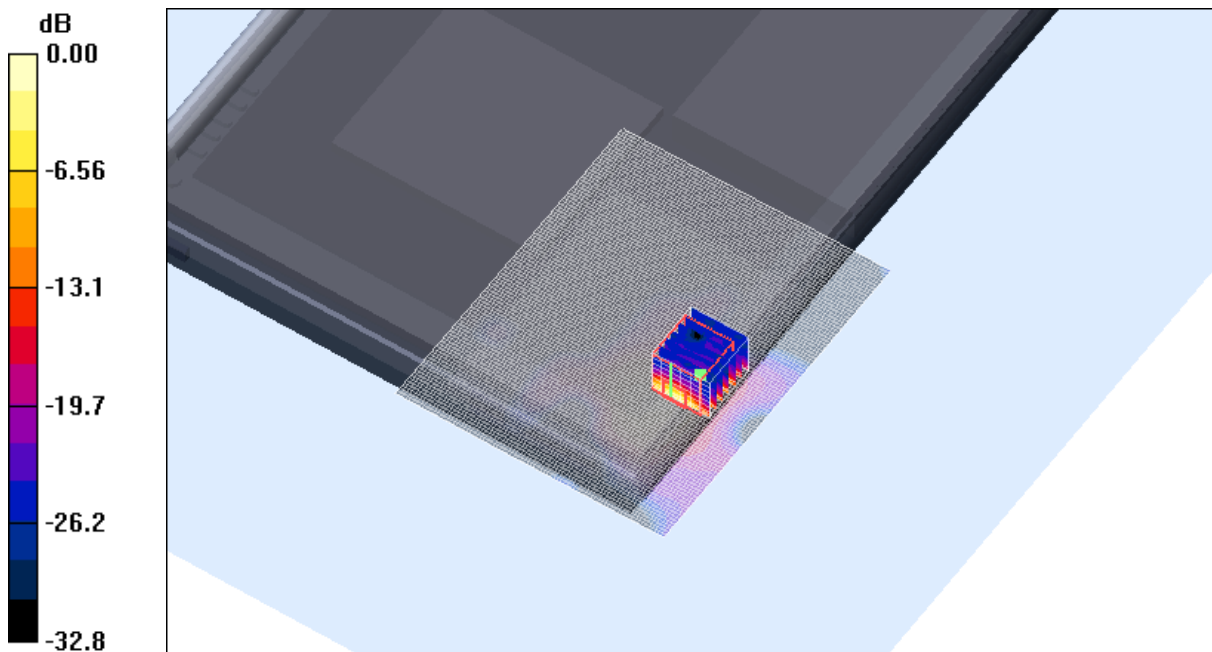
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 18.4 V/m; Power Drift = -0.233 dB

Peak SAR (extrapolated) = 7.17 W/kg

SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.376 mW/g

Maximum value of SAR (measured) = 3.52 mW/g



0 dB = 3.52mW/g

SAR MEASUREMENT PLOT 6

Ambient Temperature
Liquid Temperature
Humidity

21.1 Degrees Celsius
20.7 Degrees Celsius
51.0 %

Test Date: 14 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalium Antenna B Bluetooth Off 14-03-06.da4](#)

DUT: Fujitsu Tablet Versalium with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.45848$ mho/m, $\epsilon_r = 47.192$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 157 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.95 mW/g

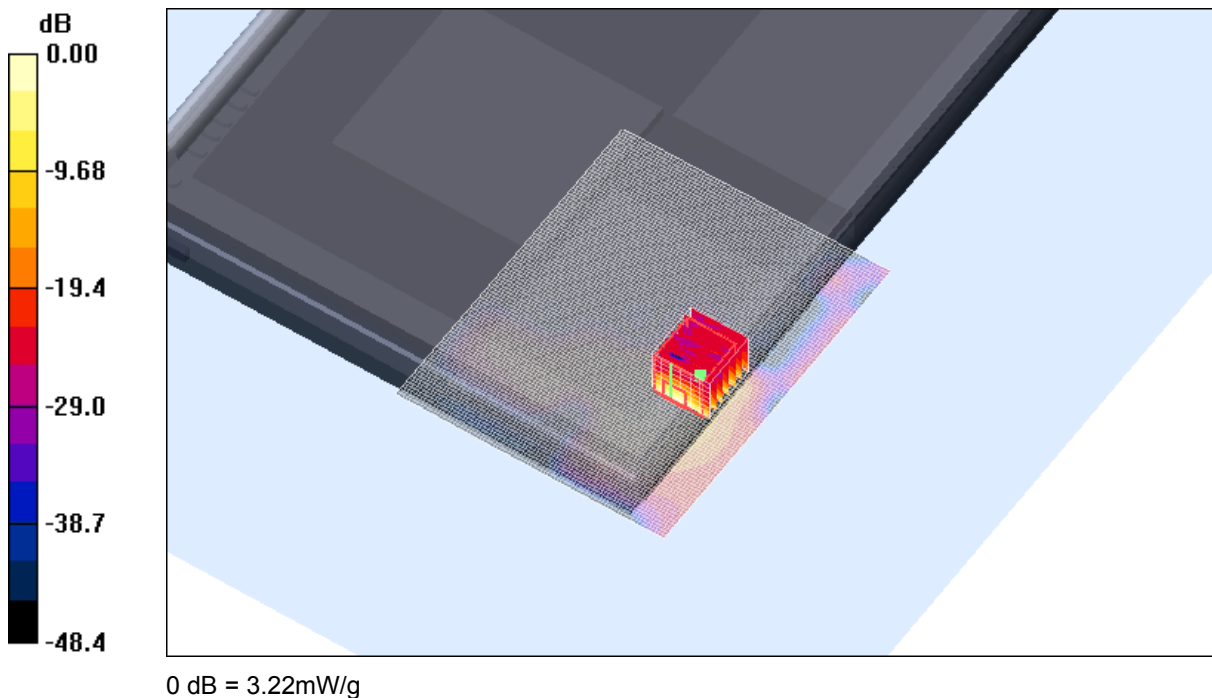
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 17.0 V/m; Power Drift = -0.282 dB

Peak SAR (extrapolated) = 6.77 W/kg

SAR(1 g) = 1.36 mW/g; SAR(10 g) = 0.372 mW/g

Maximum value of SAR (measured) = 3.22 mW/g



SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

21.1 Degrees Celsius
20.7 Degrees Celsius
51.0 %

Test Date: 14 March 2006

File Name: [Arm Held OFDM 5.77 GHz Versalius Antenna B Bluetooth Off 14-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

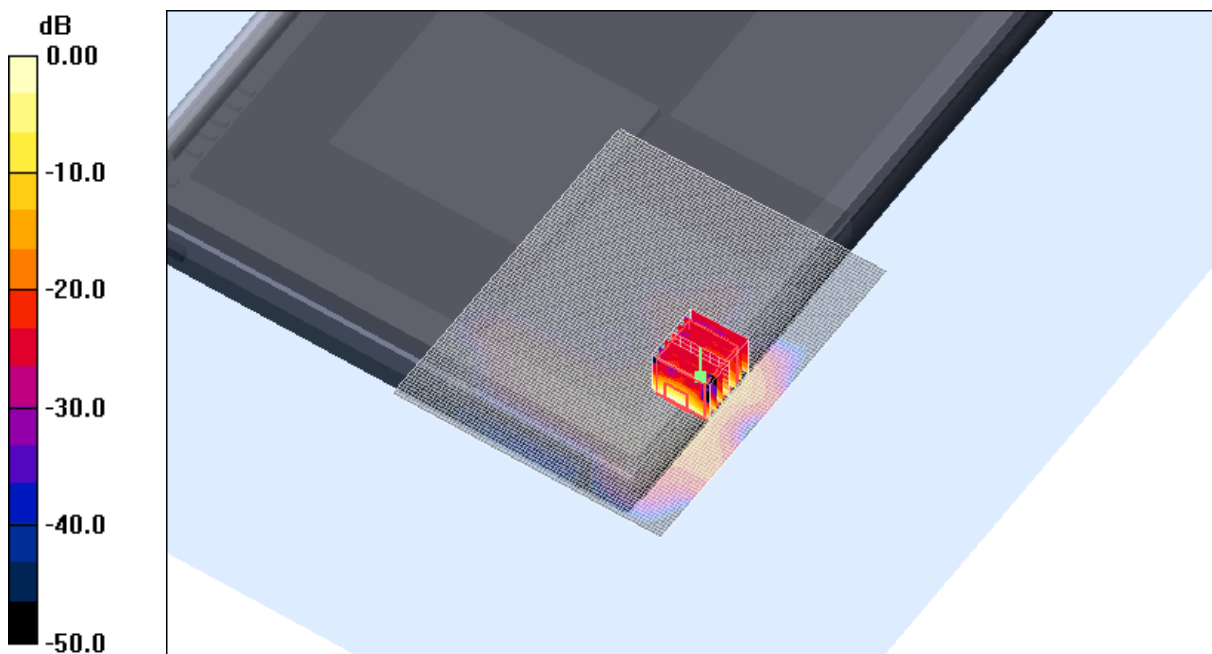
* Medium parameters used: $\sigma = 6.52822$ mho/m, $\epsilon_r = 47.0404$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 165 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.98 mW/g

Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 13.9 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 6.40 W/kg
SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.379 mW/g
Maximum value of SAR (measured) = 3.00 mW/g

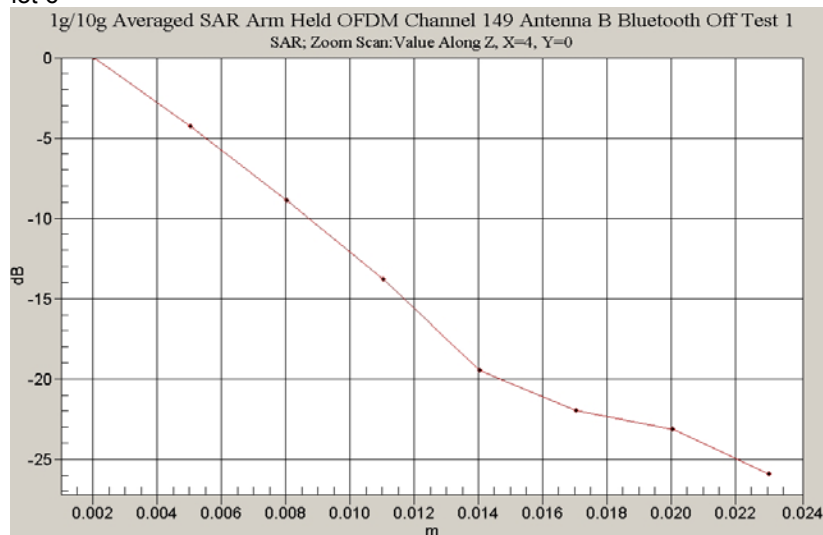


SAR MEASUREMENT PLOT 8

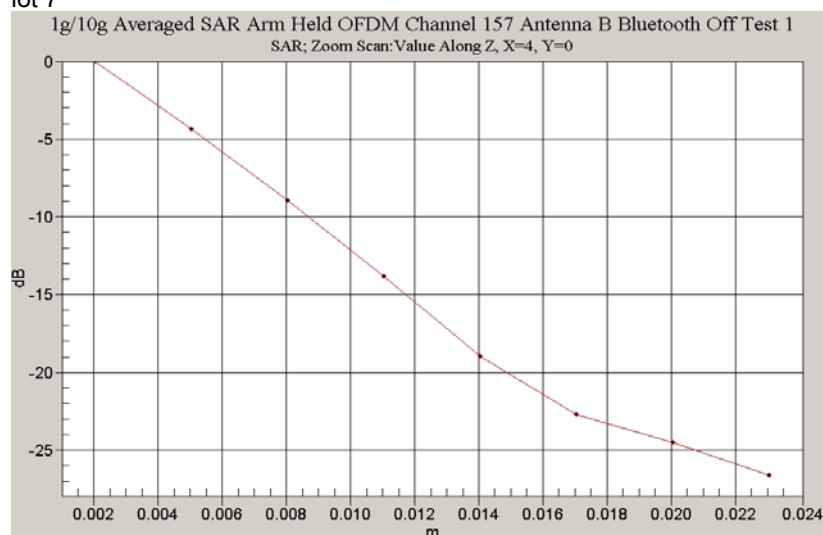
Ambient Temperature
Liquid Temperature
Humidity

21.1 Degrees Celsius
20.7 Degrees Celsius
51.0 %

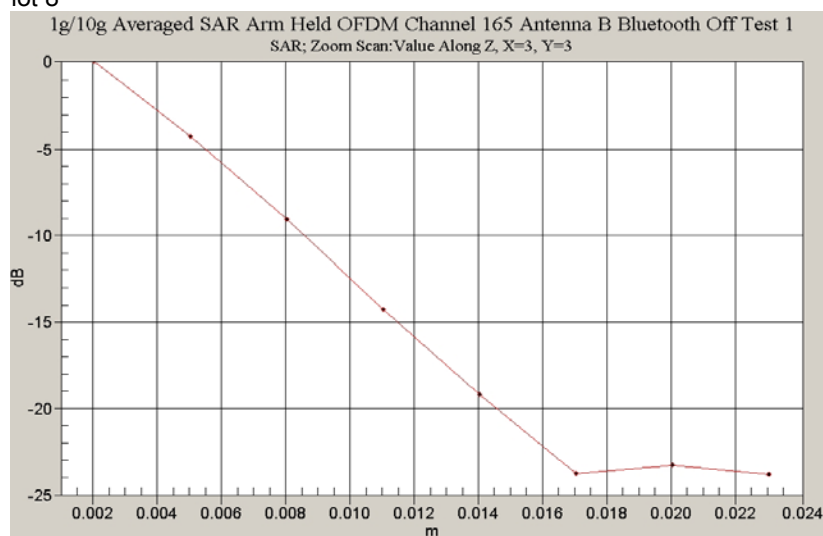
Z-Axis Graph for Plot 6



Z-Axis Graph for Plot 7



Z-Axis Graph for Plot 8



Test Date: 10 March 2006

File Name: [Edge On OFDM 5.77 GHz Versalius Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.36078$ mho/m, $\epsilon_r = 47.5596$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 149 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.30 mW/g

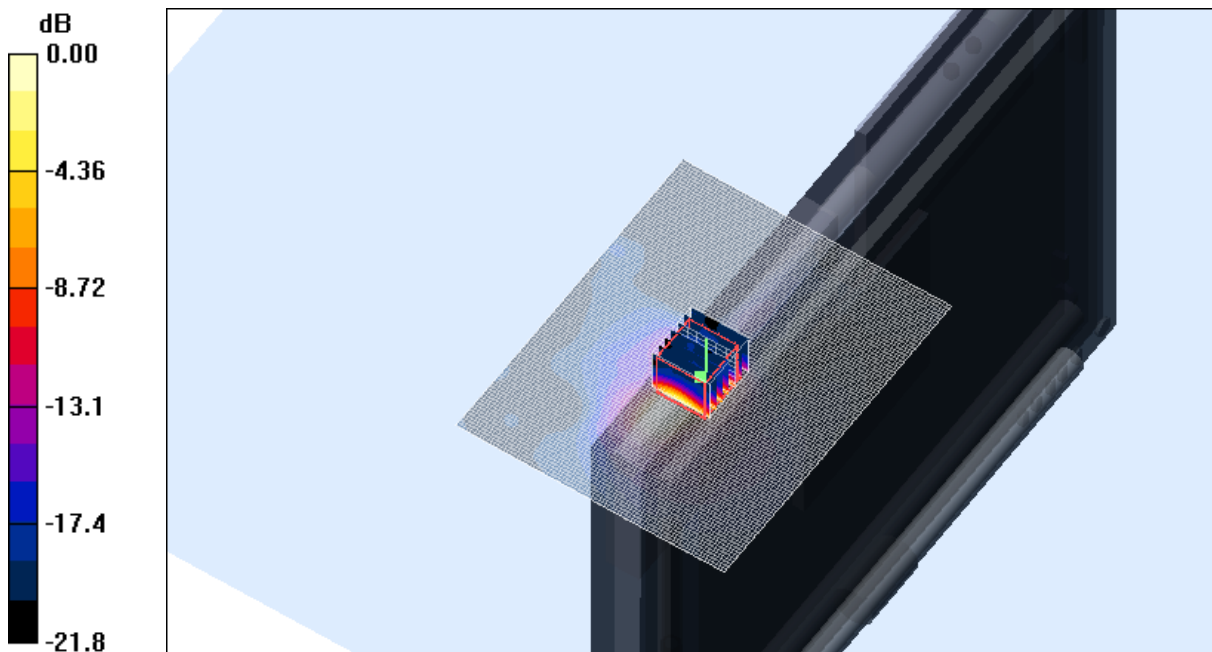
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 18.3 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 3.81 W/kg

SAR(1 g) = 0.982 mW/g; SAR(10 g) = 0.337 mW/g

Maximum value of SAR (measured) = 1.93 mW/g



0 dB = 1.93mW/g

SAR MEASUREMENT PLOT 9

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.9 Degrees Celsius
62.0 %

Test Date: 10 March 2006

File Name: [Edge On OFDM 5.77 GHz Versalius Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.45114$ mho/m, $\epsilon_r = 47.4091$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 157 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.30 mW/g

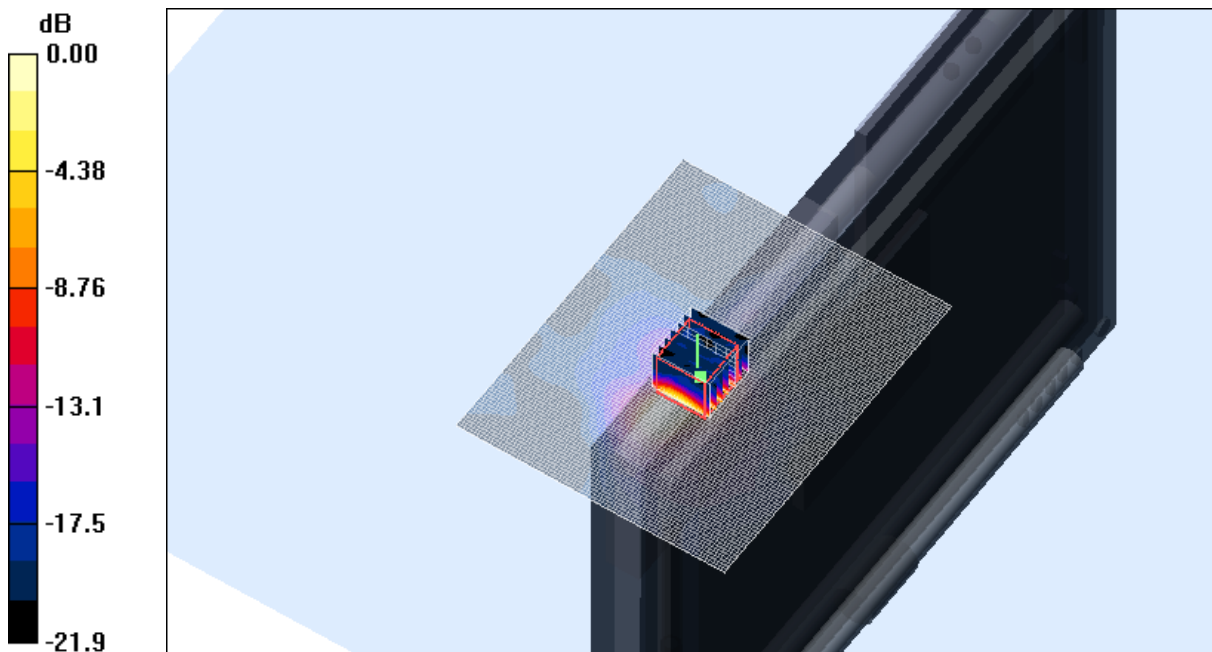
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 18.4 V/m; Power Drift = -0.202 dB

Peak SAR (extrapolated) = 3.92 W/kg

SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.334 mW/g

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



0 dB = 1.96mW/g

SAR MEASUREMENT PLOT 10

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.9 Degrees Celsius
62.0 %

Test Date: 10 March 2006

File Name: [Edge On OFDM 5.77 GHz Versalius Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalius with Atheros 11abg and Bluetooth; Type: XB62; Serial: MAC: 0011F5-C22B36

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

* Medium parameters used: $\sigma = 6.52161$ mho/m, $\epsilon_r = 47.2619$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.99, 3.99, 3.99)

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

Channel 165 Test/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.36 mW/g

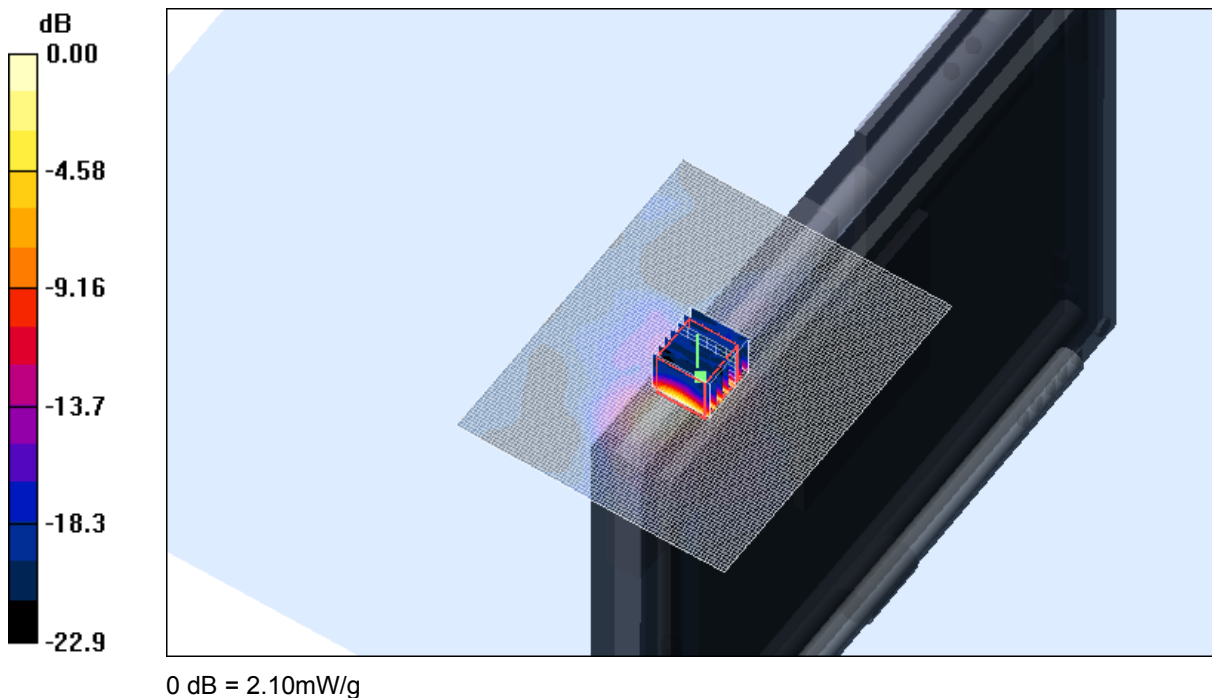
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 18.8 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 4.17 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.341 mW/g

Maximum value of SAR (measured) = 2.10 mW/g

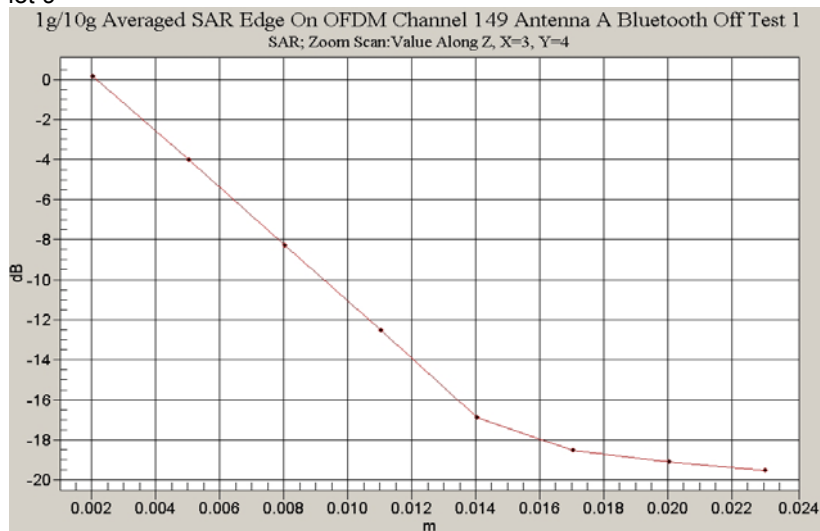


SAR MEASUREMENT PLOT 11

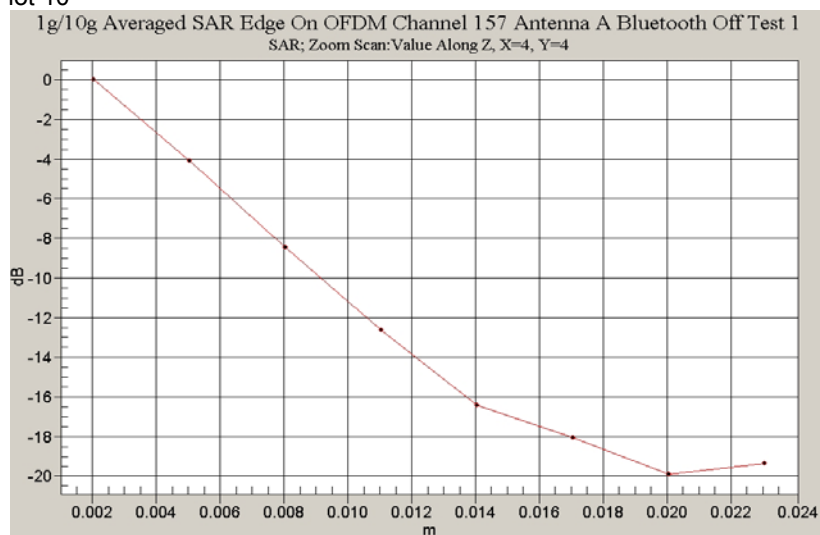
Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
20.9 Degrees Celsius
62.0 %

Z-Axis Graph for Plot 9



Z-Axis Graph for Plot 10



Z-Axis Graph for Plot 11

