

## 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**

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

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

**Table 23: Validation Plot**

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

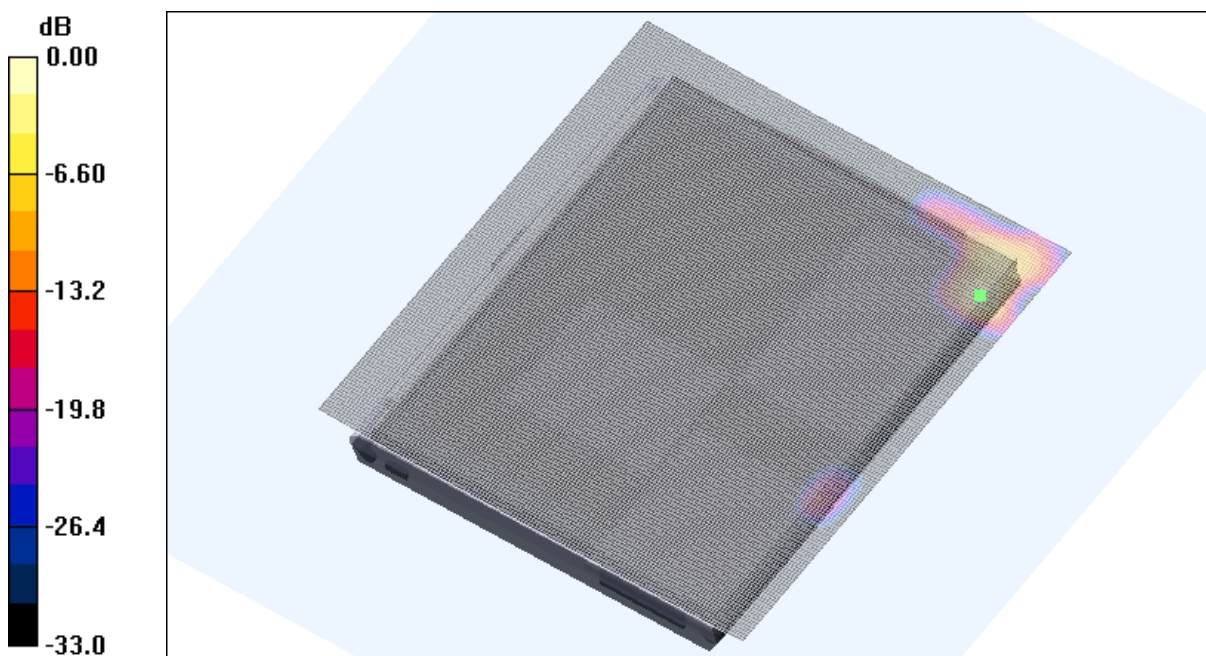
\* Medium parameters used:  $\sigma = 6.45114$  mho/m,  $\epsilon_r = 47.4091$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- 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

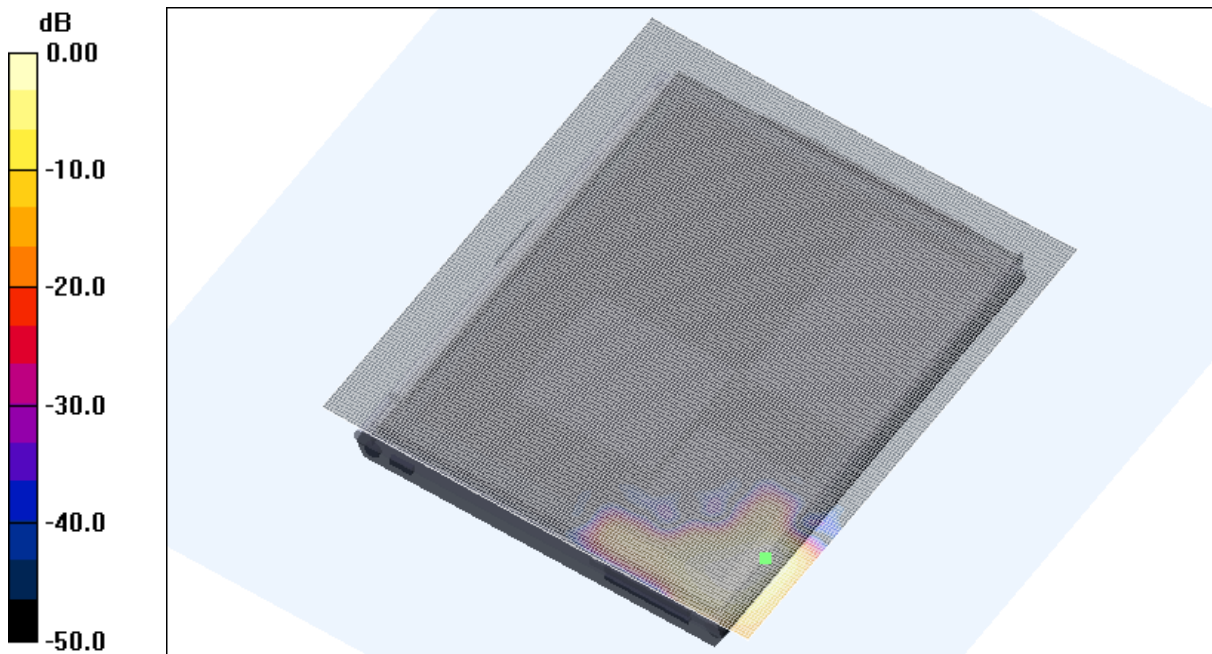
\* Medium parameters used:  $\sigma = 6.45848$  mho/m,  $\epsilon_r = 47.192$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- 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 Versalious Antenna A Bluetooth Off 10-03-06.da4](#)

DUT: Fujitsu Tablet Versalious 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/m<sup>3</sup>

- 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

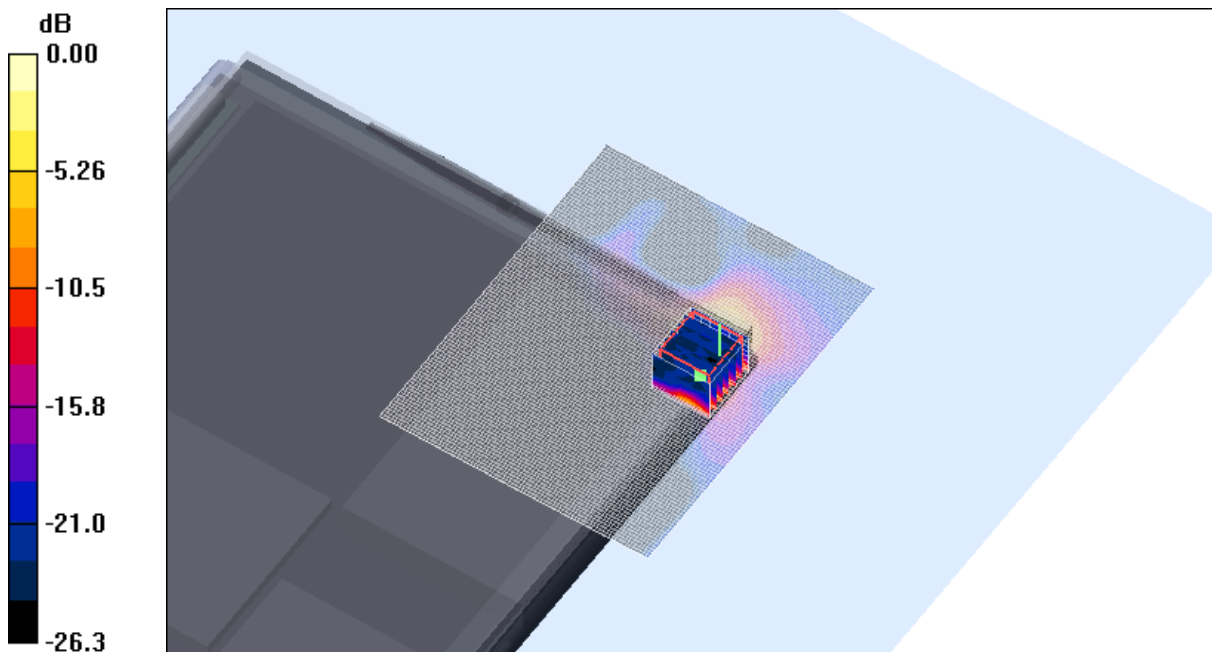
**Channel 149 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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/m<sup>3</sup>

- 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

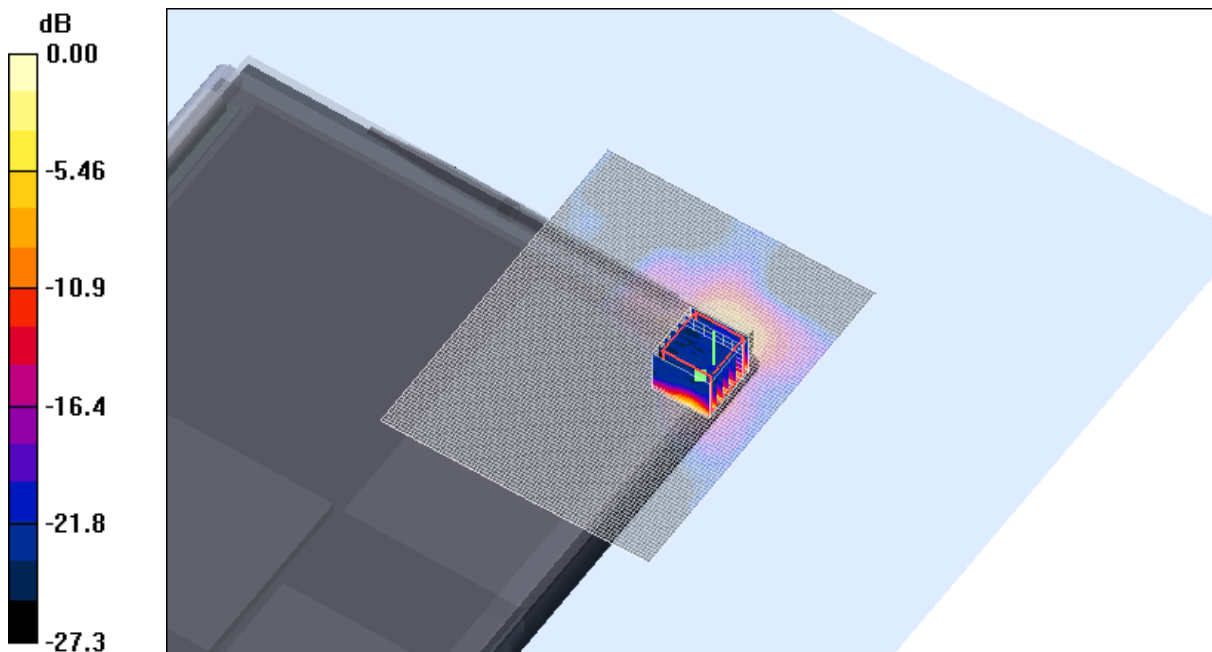
**Channel 157 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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



0 dB = 2.54mW/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/m<sup>3</sup>

- 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

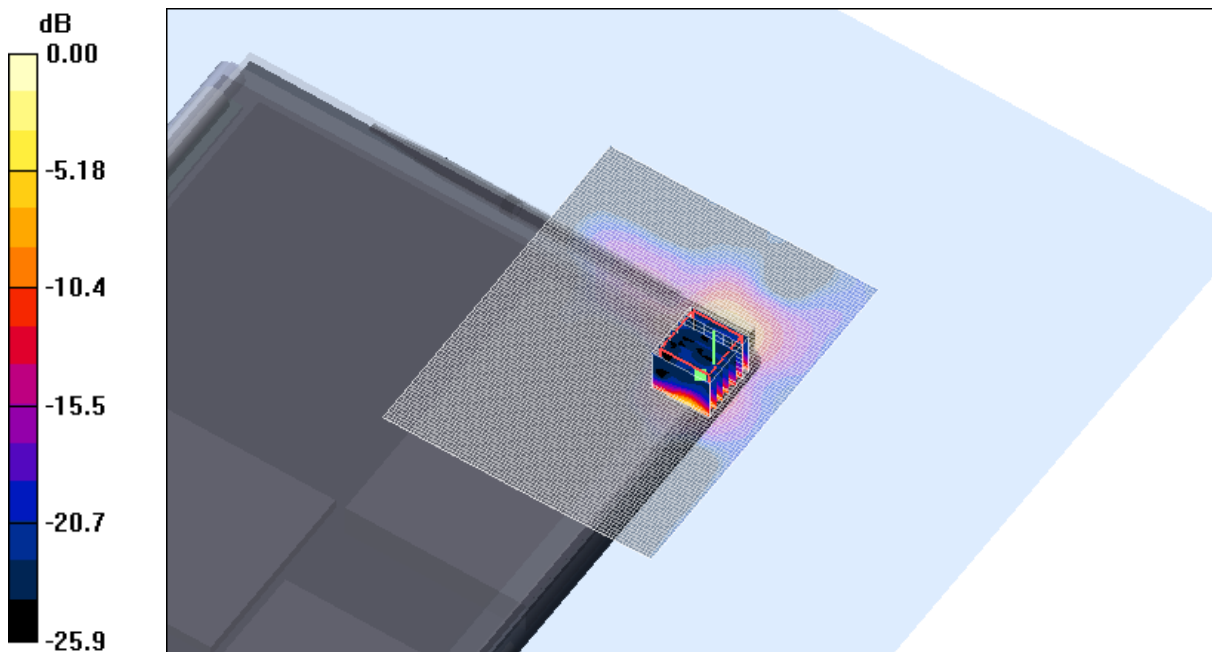
**Channel 165 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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

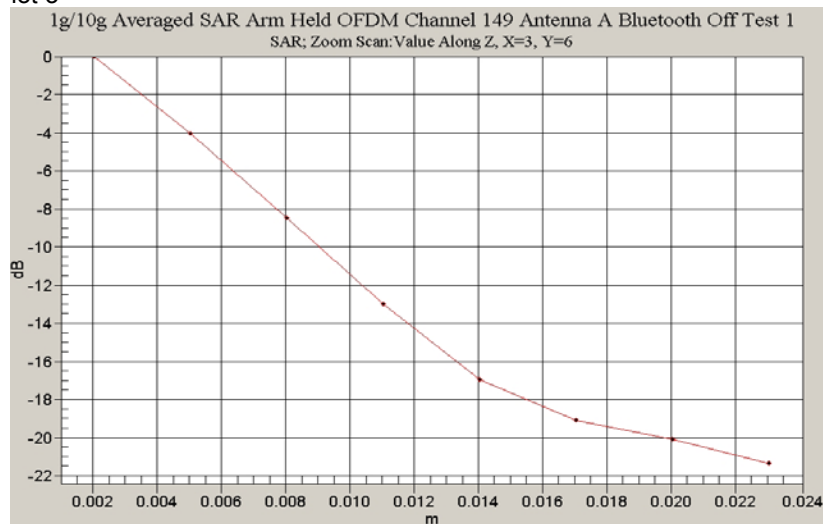
**SAR MEASUREMENT PLOT 5**

Ambient Temperature  
Liquid Temperature  
Humidity

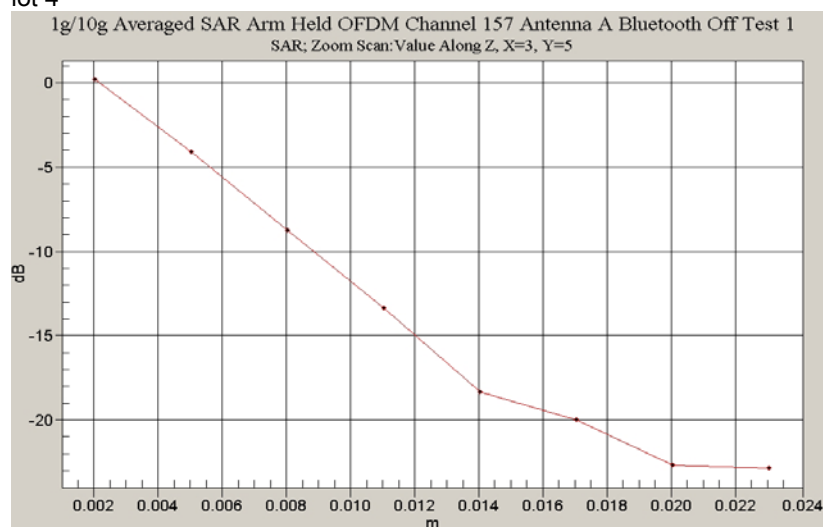
21.4 Degrees Celsius  
20.9 Degrees Celsius  
62.0 %



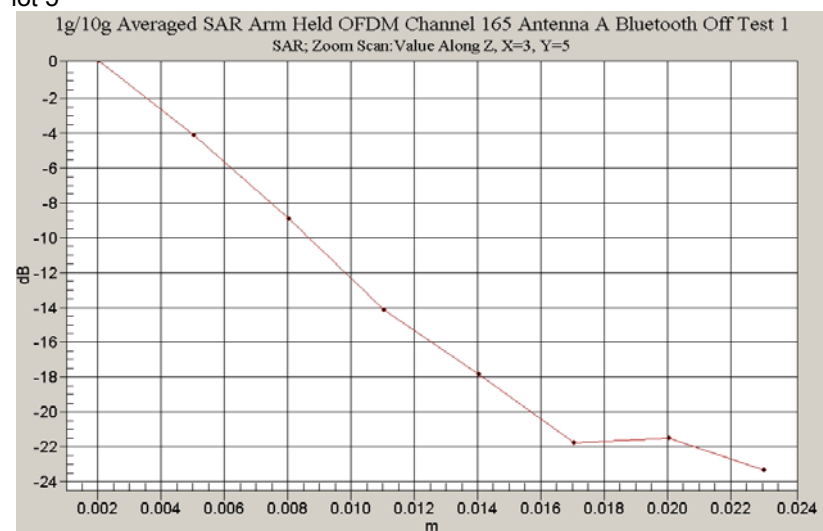
Z-Axis Graph for Plot 3



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/m<sup>3</sup>

- 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

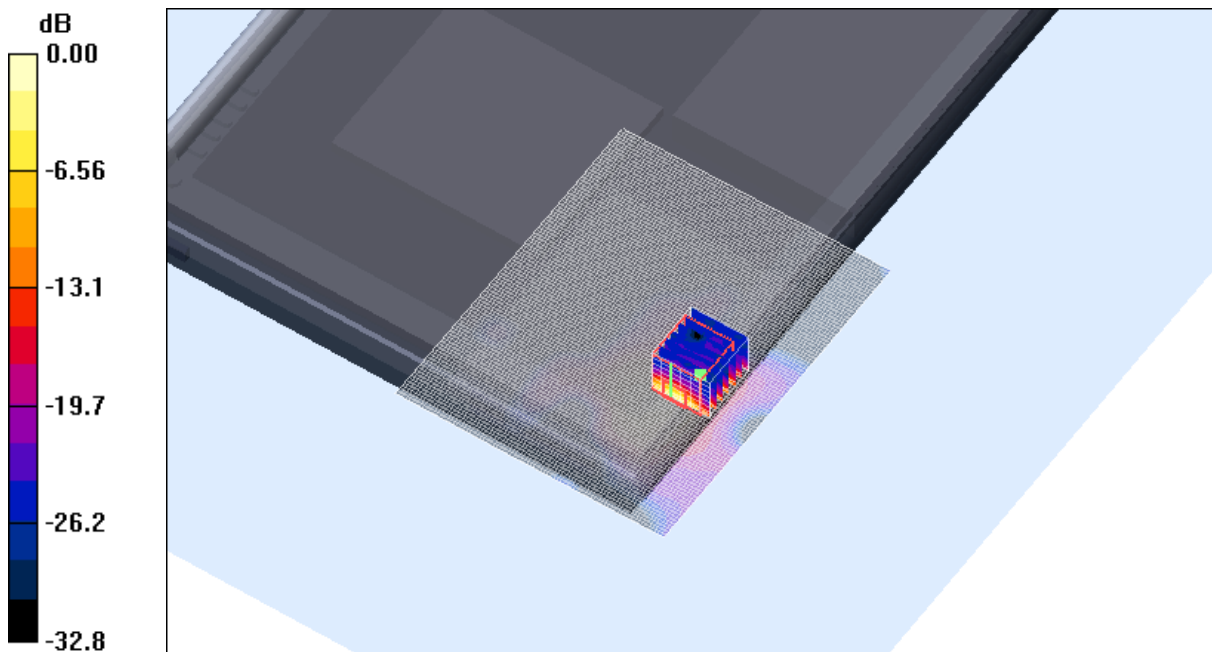
**Channel 149 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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/m<sup>3</sup>

- 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

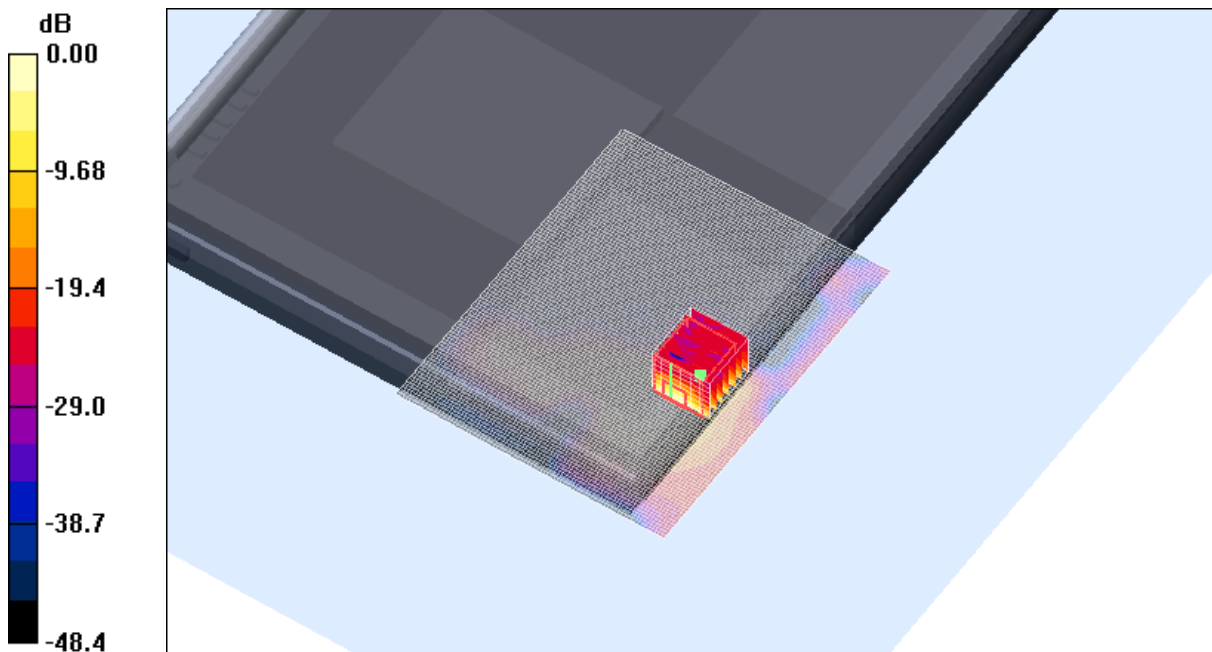
**Channel 157 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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



0 dB = 3.22mW/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

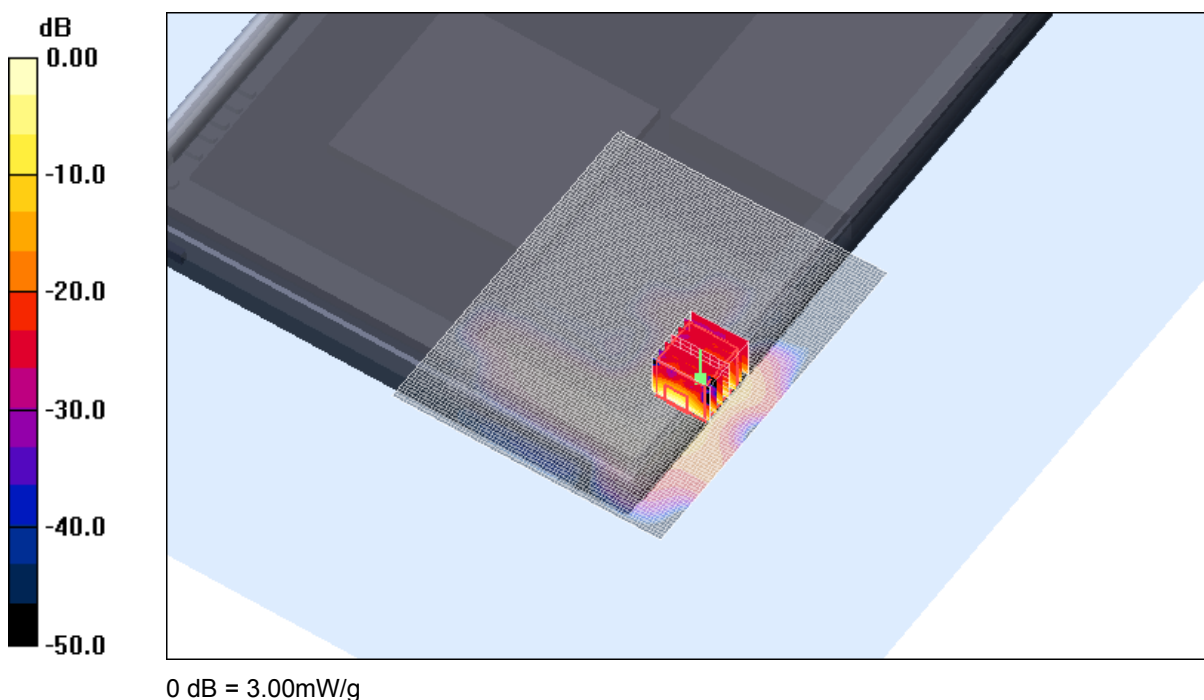
\* Medium parameters used:  $\sigma = 6.52822$  mho/m,  $\epsilon_r = 47.0404$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- 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

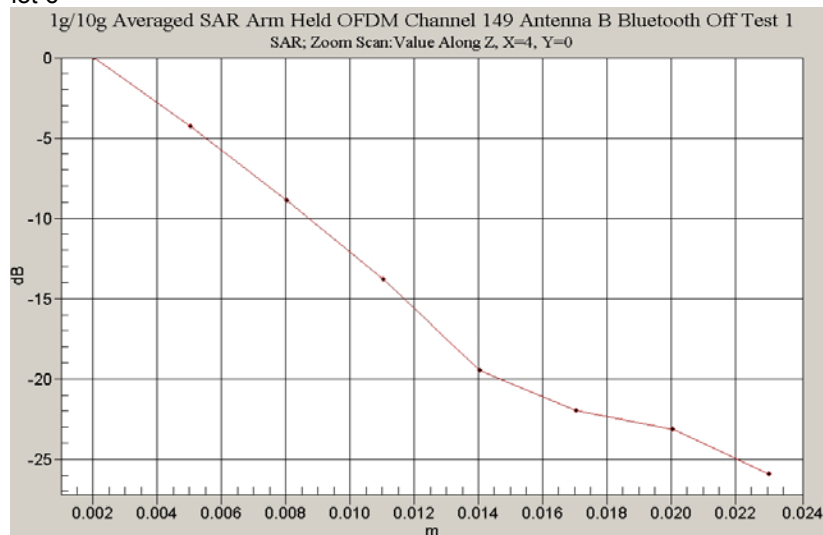


SAR MEASUREMENT PLOT 8

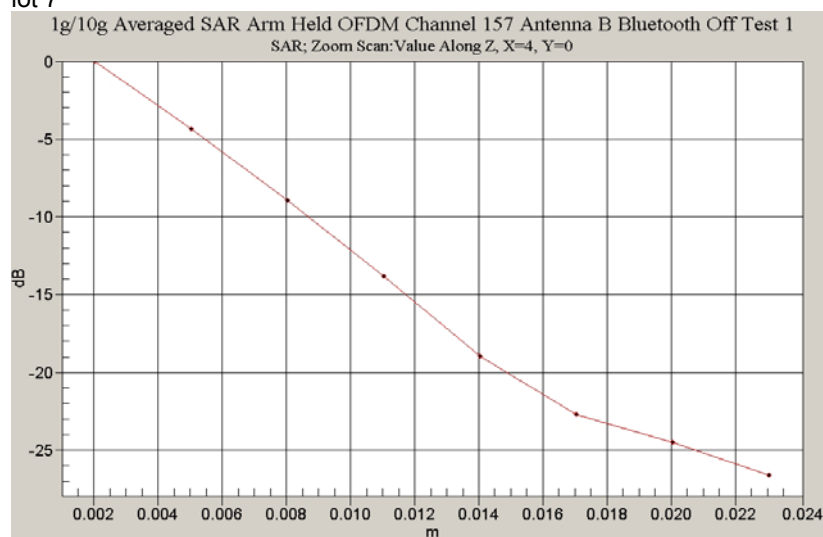
Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.7 Degrees Celsius  
51.0 %

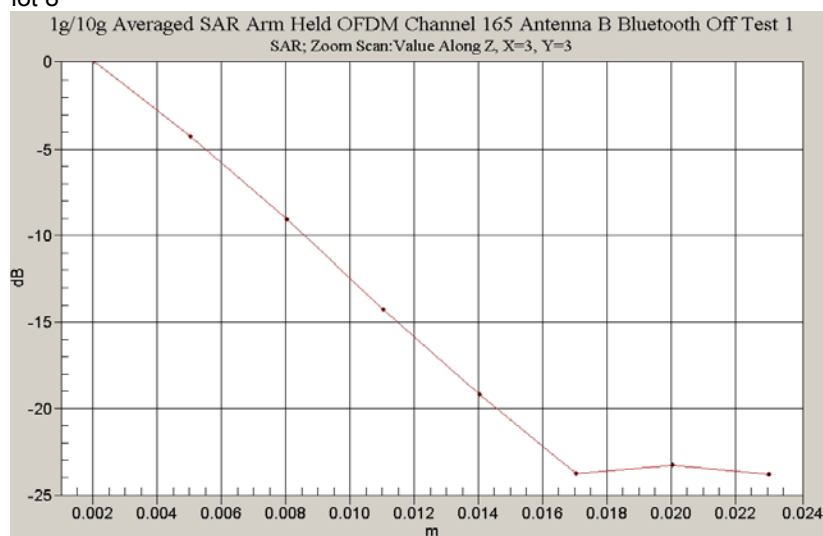
Z-Axis Graph for Plot 6



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/m<sup>3</sup>

- 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

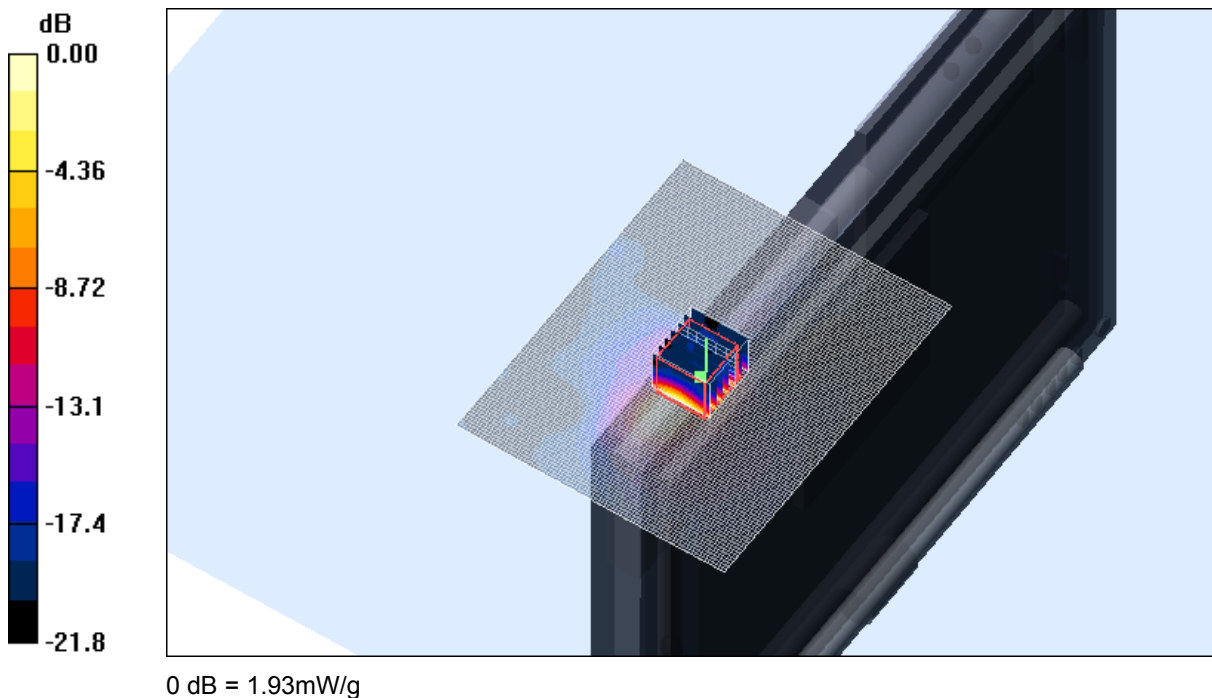
**Channel 149 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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



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/m<sup>3</sup>

- 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

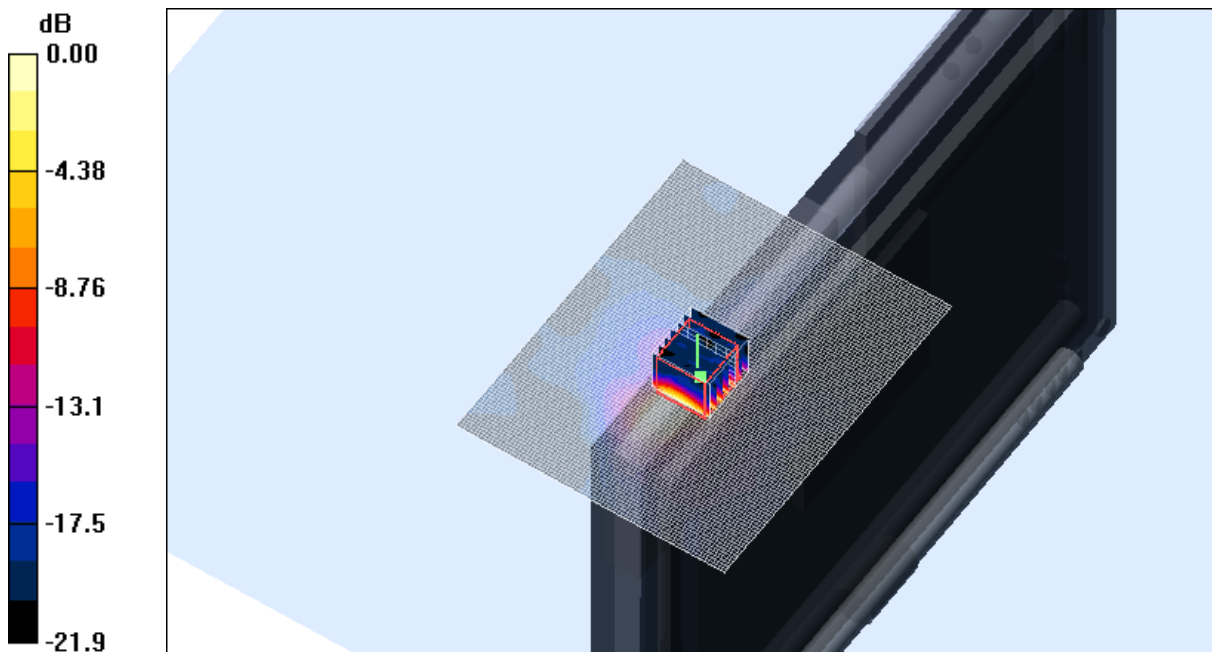
**Channel 157 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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/m<sup>3</sup>

- 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

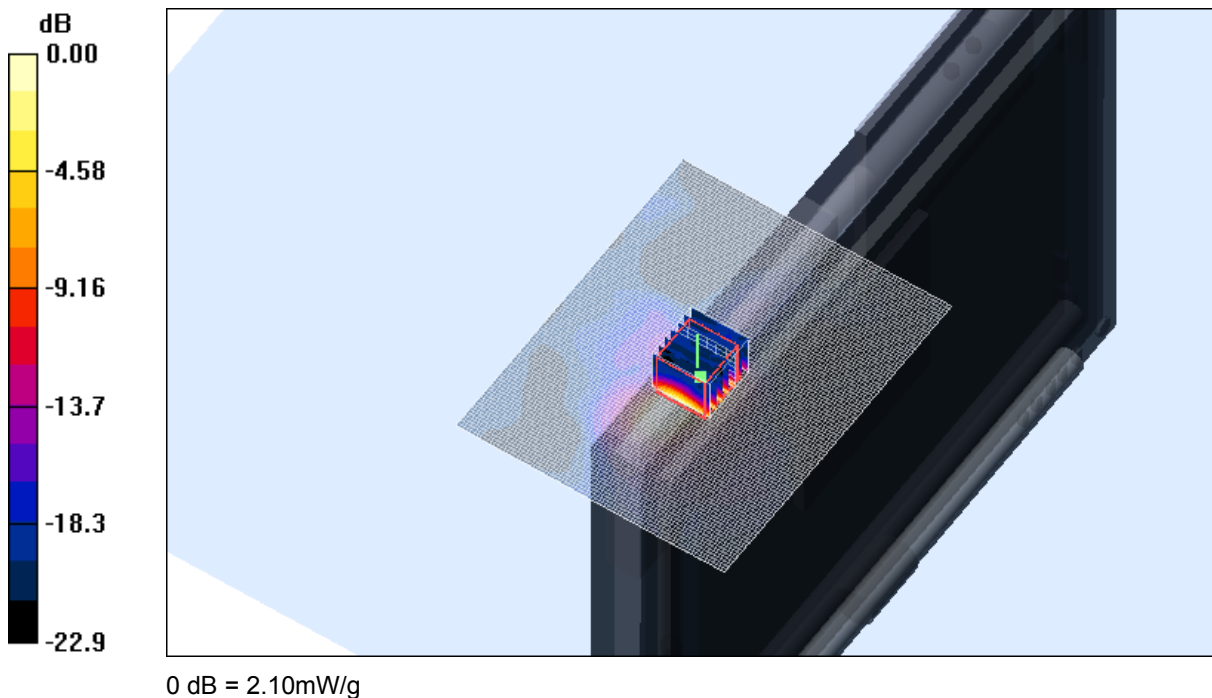
**Channel 165 Test/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

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



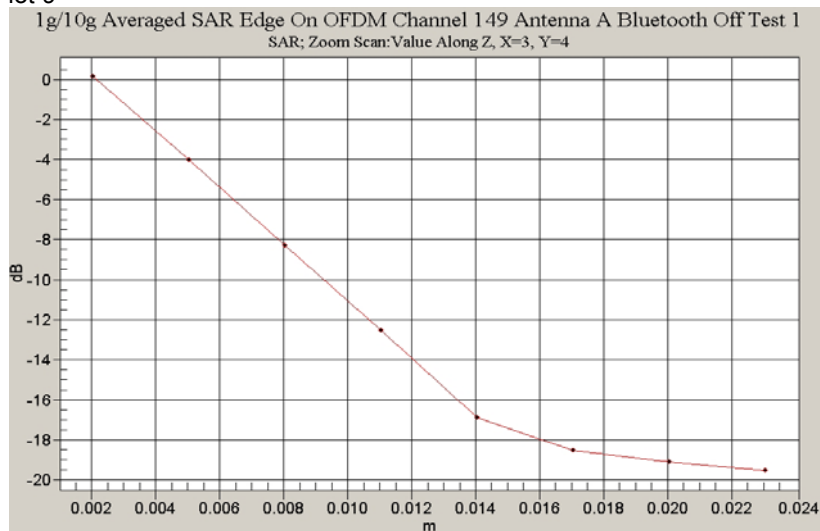
**SAR MEASUREMENT PLOT 11**

Ambient Temperature  
Liquid Temperature  
Humidity

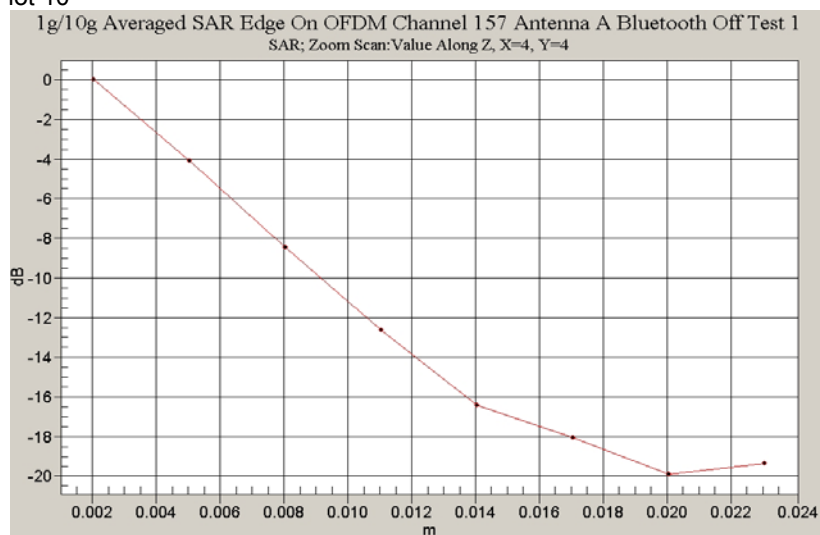
21.4 Degrees Celsius  
20.9 Degrees Celsius  
62.0 %



Z-Axis Graph for Plot 9



Z-Axis Graph for Plot 10



Z-Axis Graph for Plot 11

