

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 B -- Prescan	CH#157
Plot 2	Lap Arm Held Position – Ant B	CH#149
Plot 3	Lap Arm Held Position – Ant B	CH#157
Plot 4	Lap Arm Held Position – Ant B	CH#165
Z-Axis graphs	Z-Axis graphs for Plots 2 to 4	
Plot 5	Tablet Position – Ant A	CH#157
Plot 6	Tablet Position – Ant A	CH#149
Plot 7	Tablet Position – Ant A	CH#157
Plot 8	Tablet Position – Ant A	CH#165
Plot 9	Tablet Position – Ant A with Ext Batt	CH#157
Z-Axis graphs	Z-Axis graphs for Plots 5 to 9	

Table 22: 5200 MHz Band SAR Measurement Plot Numbers

Plot 10	Tablet Position – Ant A	CH#36
Plot 11	Tablet Position – Ant A	CH#48
Plot 12	Tablet Position – Ant A	CH#64
Plot 13	Tablet with Extended Battery – Ant A	CH#52
Z-axis graphs	Z-Axis graphs for Plots 10 to 13	
Plot 14	Lap Arm Held Position – Ant B	CH#36
Plot 15	Lap Arm Held Position – Ant B	CH#48
Plot 16	Lap Arm Held Position – Ant B	CH#64
Z-axis graphs	Z-Axis graphs for Plots 14 to 16	

Table 23: 5200/5800 MHz Band SAR Measurement Plot Numbers with BT

Plot 17	Tablet Position With Blue tooth Ant A BTCH#40	CH#157
Plot 18	Tablet Position With Blue tooth Ant A BTCH#40	CH#157
Plot 19	Tablet Position With Blue tooth Ant A BTCH#40	CH#48
Z-axis graphs	Z-Axis graphs for Plots 17 to 19	

Table 24: 2450MHz Validation Plot

Plot 20	Validation 5800 MHz 26 th May 2005
Plot 21	Validation 5800 MHz 27 th May 2005
Plot 22	Validation 5200 MHz 31 st May 2005
Z-Axis Graphs	Z-Axis graphs for Plots 20 & 22

Test Date: 27 May 2005

File Name: [Arm Held OFDM 5.6 GHz Antenna B Bluetooth Off Prescan 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

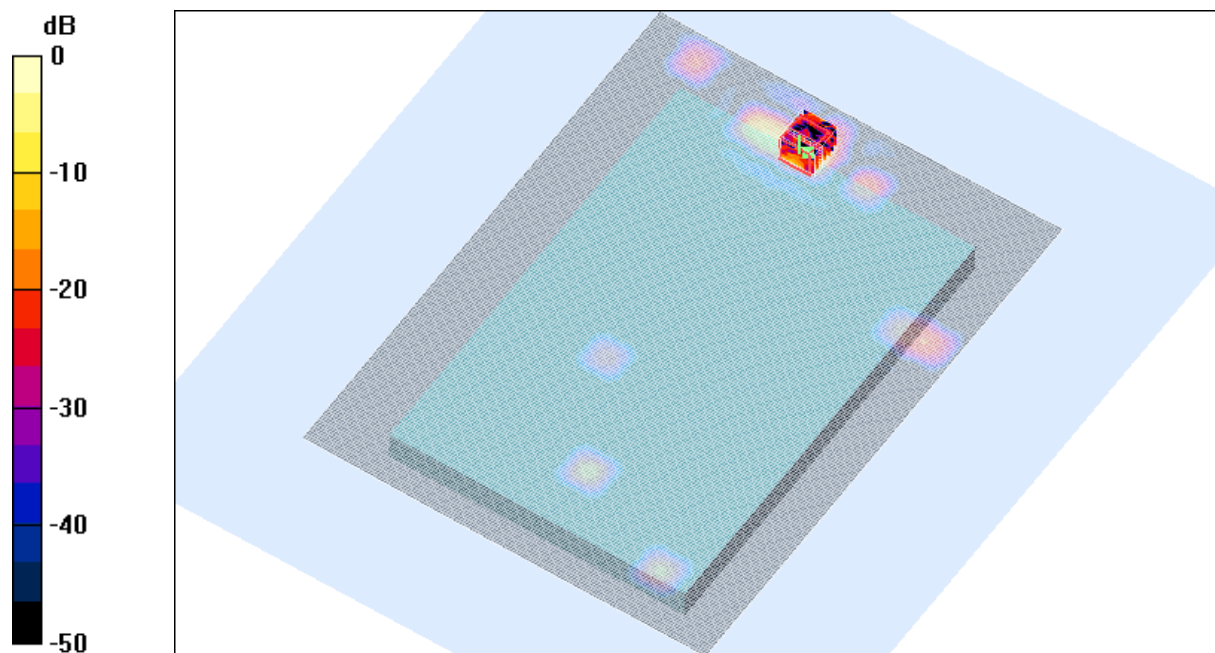
* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.1094$; mho/m, $\epsilon_r = 44.3914$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 157 Test/Area Scan (151x201x1): Measurement grid: dx=20mm, dy=20mm



0 dB = 2.88mW/g

SAR MEASUREMENT PLOT 1

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 27 May 2005

File Name: [Arm Held OFDM 5.6 GHz Antenna B Bluetooth Off 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.04097$; mho/m, $\epsilon_r = 44.5547$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 149 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.54 mW/g

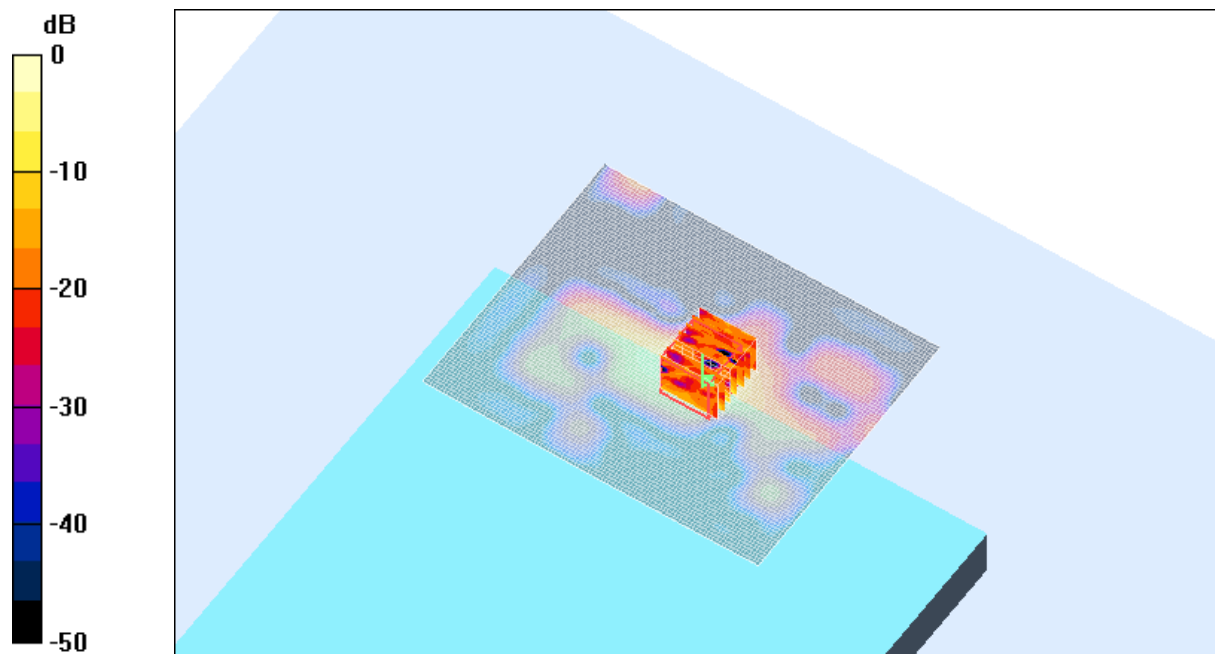
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 12.3 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 13.7 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.248 mW/g

Maximum value of SAR (measured) = 2.03 mW/g



0 dB = 2.03mW/g

SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 27 May 2005

File Name: [Arm Held OFDM 5.6 GHz Antenna B Bluetooth Off 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.1094$; mho/m, $\epsilon_r = 44.3914$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 157 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.89 mW/g

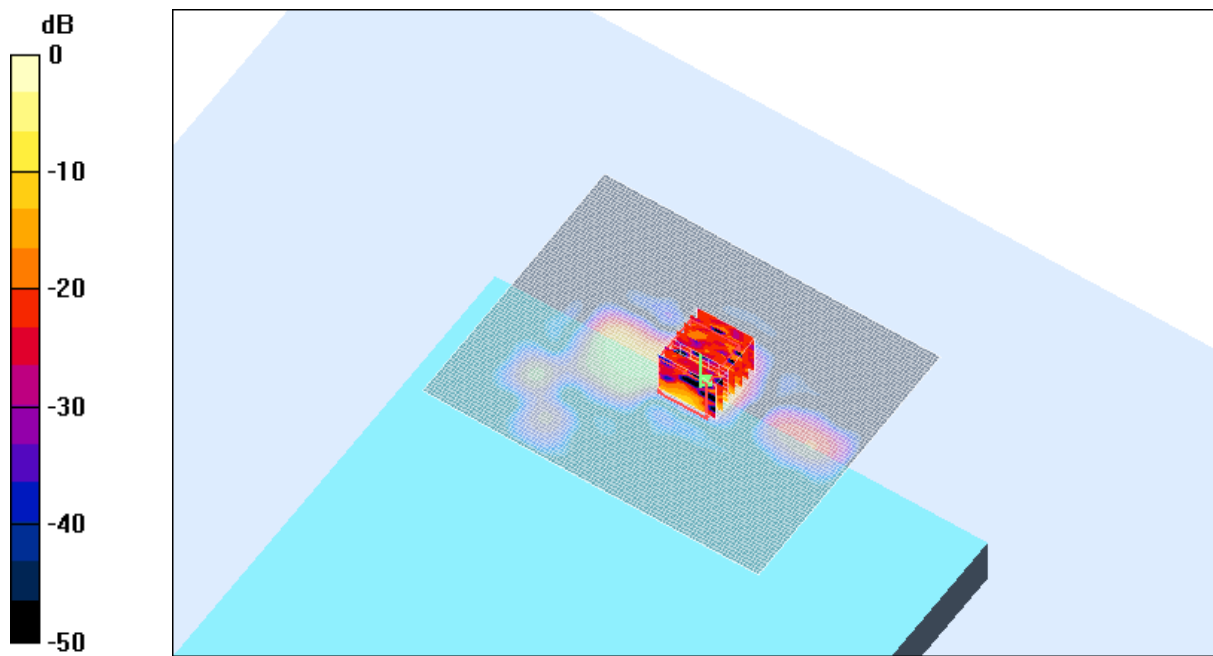
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 14.7 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 8.8 W/kg

SAR(1 g) = 1.49 mW/g; SAR(10 g) = 0.295 mW/g

Maximum value of SAR (measured) = 2.68 mW/g



0 dB = 2.68mW/g

SAR MEASUREMENT PLOT 3

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 27 May 2005

File Name: [Arm Held OFDM 5.6 GHz Antenna B Bluetooth Off 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.17193$; mho/m, $\epsilon_r = 44.2779$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 165 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.41 mW/g

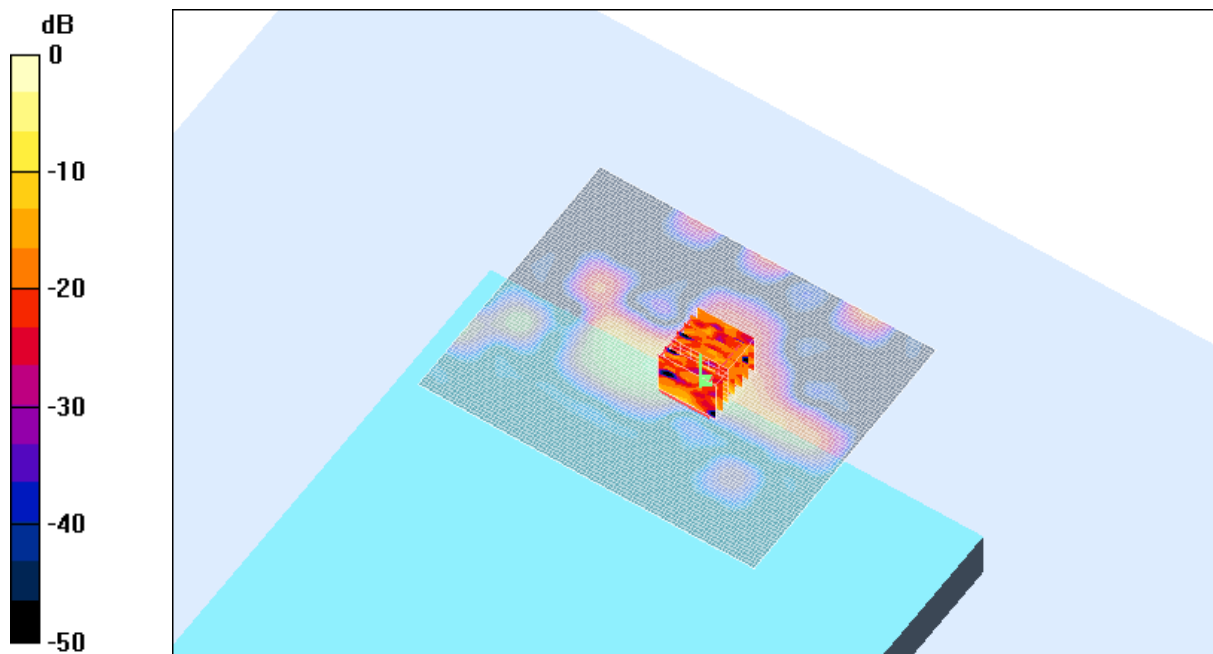
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 12.4 V/m; Power Drift = -0.2 dB

Peak SAR (extrapolated) = 966725.3 W/kg

SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.295 mW/g

Maximum value of SAR (measured) = 2.19 mW/g



0 dB = 2.19mW/g

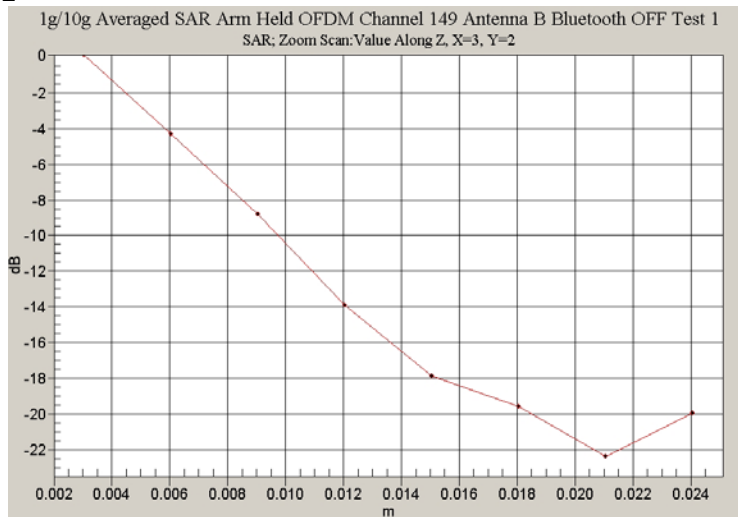
SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

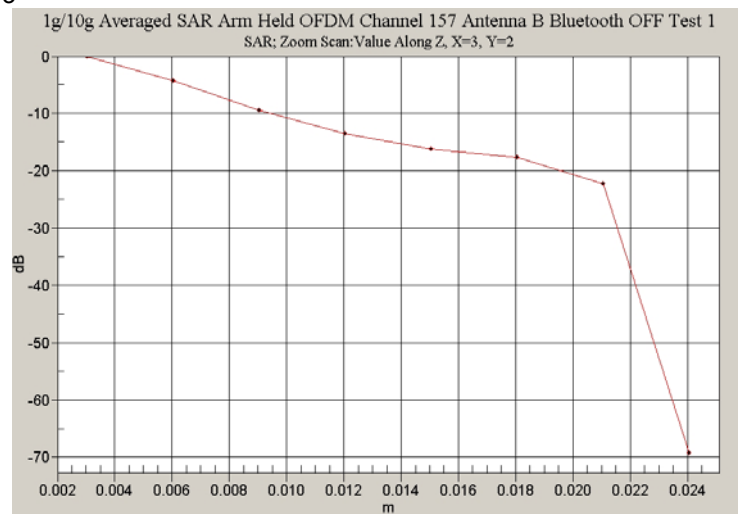
20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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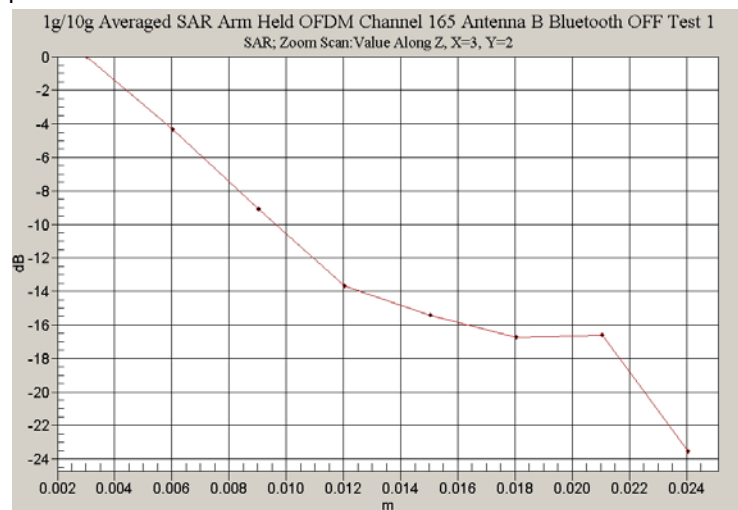
Z-Axis Graph for Plot 2



Z-Axis Graph for Plot 3



Z-Axis Graph for Plot 4



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Test Date: 27 May 2005

File Name: [Tablet OFDM 5.6 GHz Antenna A Bluetooth On Prescan 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

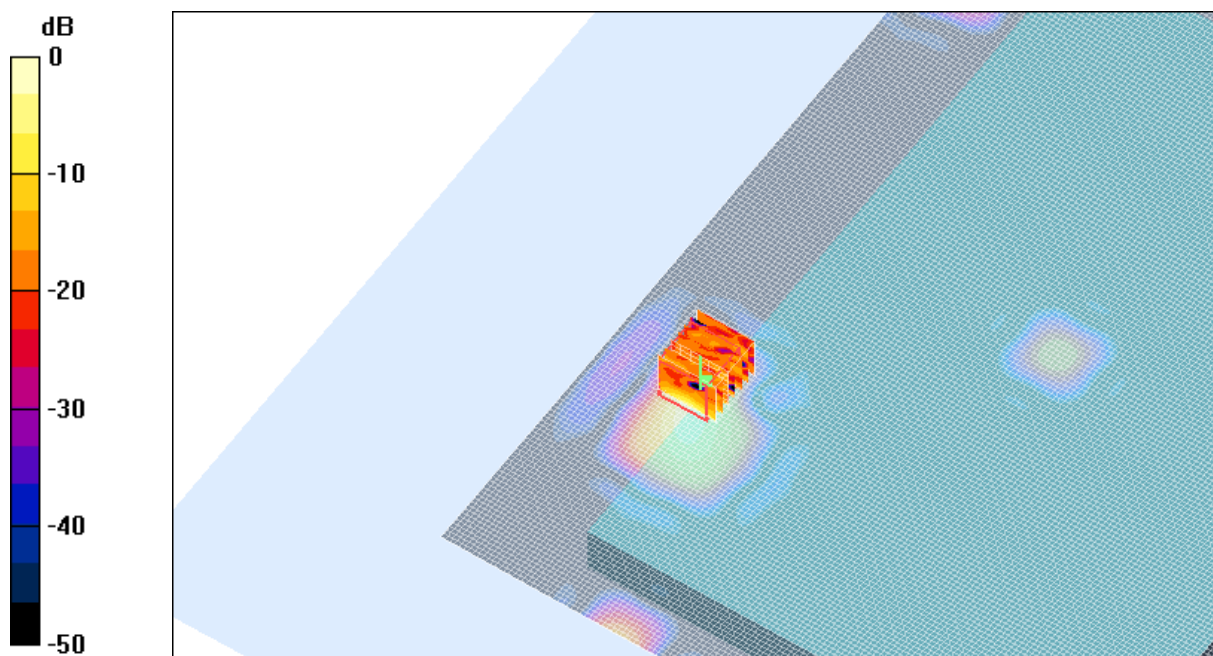
* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 6.1094$; mho/m, $\epsilon_r = 44.3914$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 157 Test/Area Scan (151x201x1): Measurement grid: dx=20mm, dy=20mm



0 dB = 2.05mW/g

SAR MEASUREMENT PLOT 5

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 27 May 2005

File Name: [Tablet OFDM 5.6 GHz Antenna A Bluetooth Off 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.04097$; mho/m, $\epsilon_r = 44.5547$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

- 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) = 1.34 mW/g

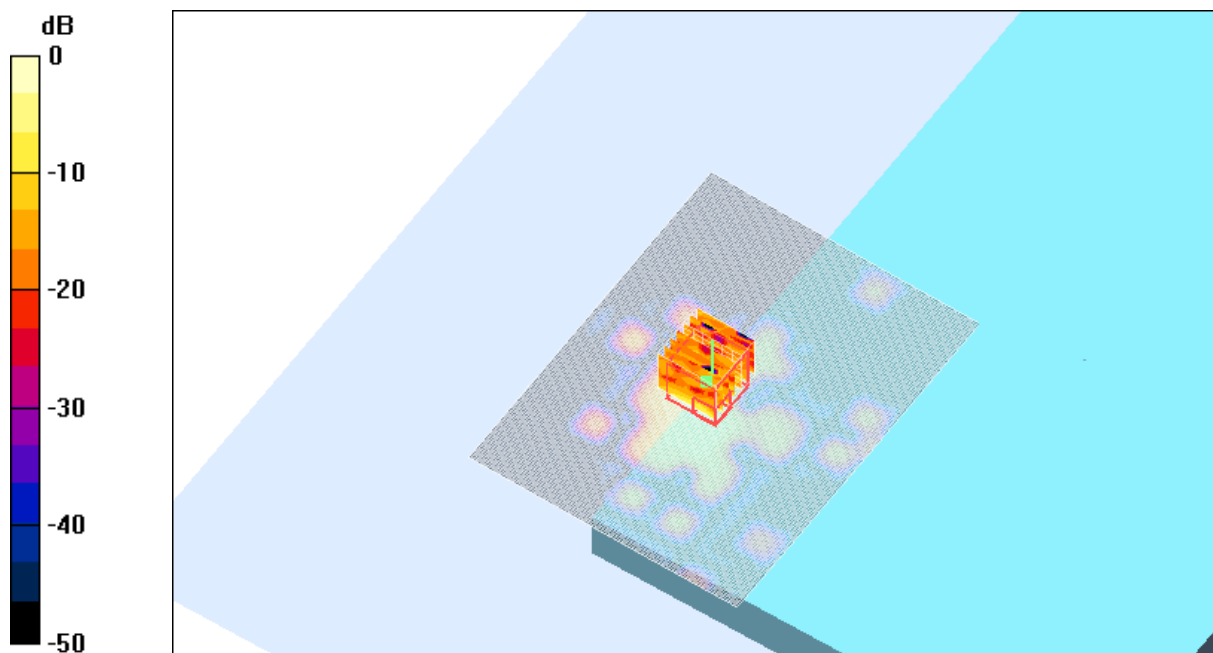
Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 23.1 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 115831.0 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.249 mW/g

Maximum value of SAR (measured) = 1.38 mW/g



SAR MEASUREMENT PLOT 6

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

Test Date: 27 May 2005

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File Name: [Tablet OFDM 5.6 GHz Antenna A Bluetooth Off 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.1094$; mho/m, $\epsilon_r = 44.3914$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 157 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.11 mW/g

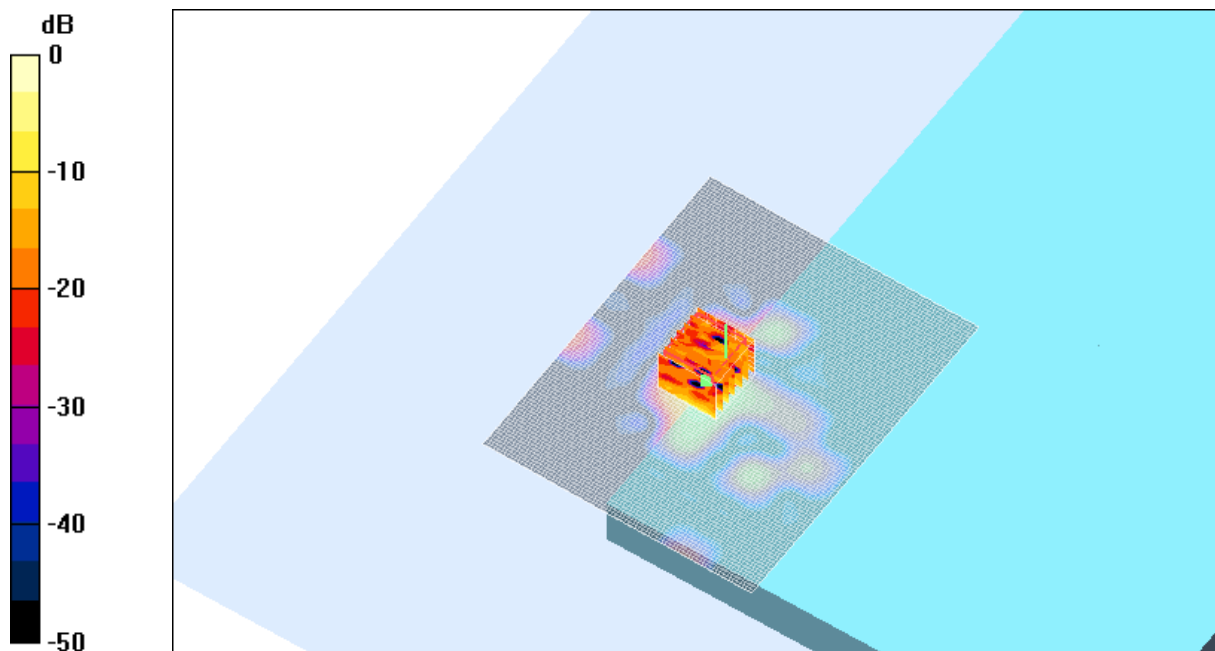
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 28.6 V/m; Power Drift = 0.2 dB

Peak SAR (extrapolated) = 664.4 W/kg

SAR(1 g) = 1.53 mW/g; SAR(10 g) = 0.276 mW/g

Maximum value of SAR (measured) = 2.08 mW/g



0 dB = 2.08mW/g

SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 27 May 2005

File Name: [Tablet OFDM 5.6 GHz Antenna A Bluetooth Off 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.17193$; mho/m, $\epsilon_r = 44.2779$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 165 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.39 mW/g

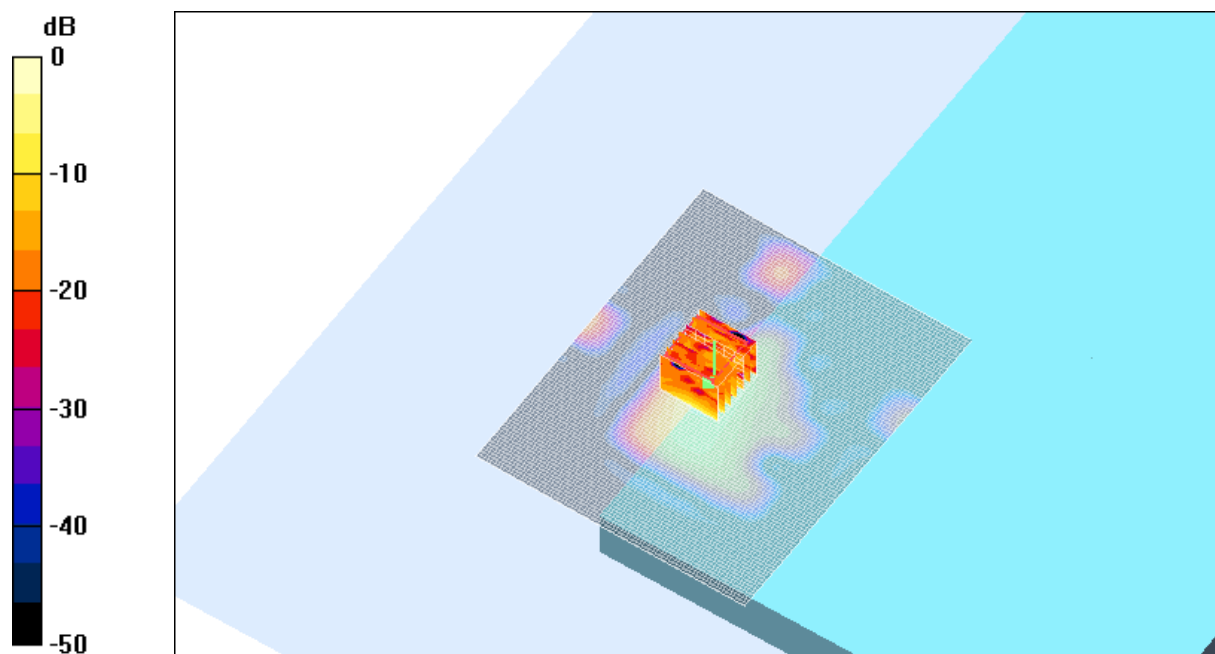
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 28.7 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.284 mW/g

Maximum value of SAR (measured) = 2.25 mW/g



0 dB = 2.25mW/g

SAR MEASUREMENT PLOT 8

Ambient Temperature
Liquid Temperature
Humidity

20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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Test Date: 27 May 2005

File Name: [Tablet OFDM 5.6 GHz Antenna A Bluetooth Off Extended Battery 27-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

* Medium parameters used: $\sigma = 6.1094$; mho/m, $\epsilon_r = 44.3914$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ES3DV3 - SN3029; ConvF(1.98, 1.98, 1.98)

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

Channel 157 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.23 mW/g

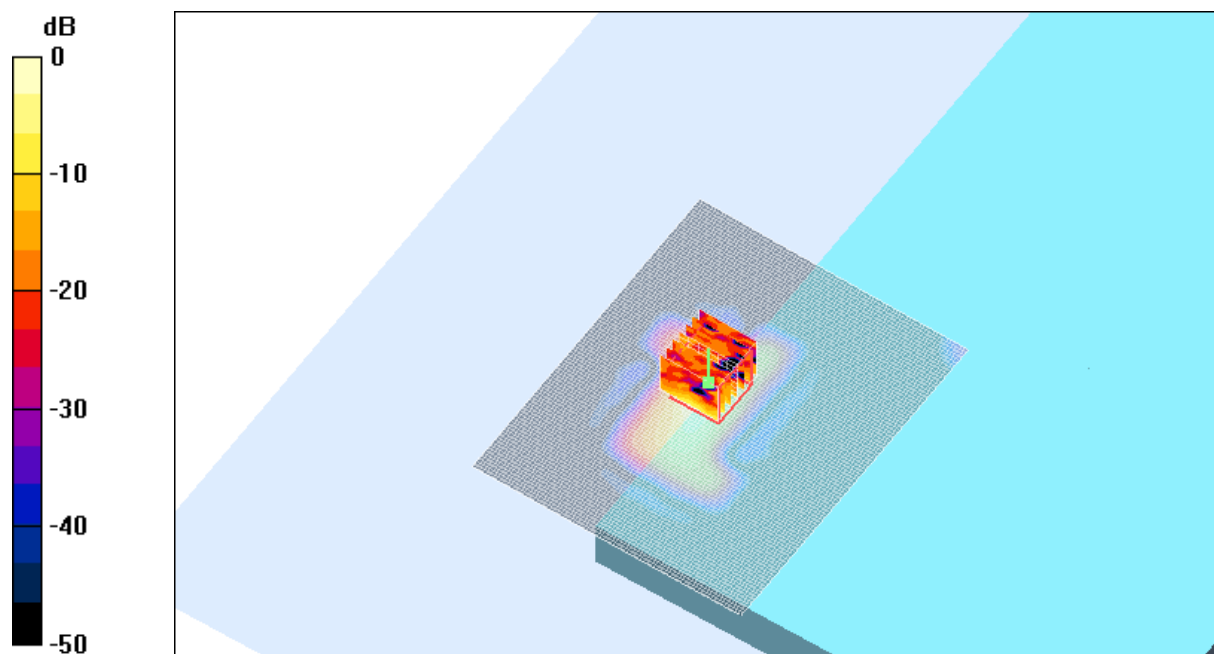
Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 28.7 V/m; Power Drift = -0.3 dB

Peak SAR (extrapolated) = 8.5 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.265 mW/g

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



0 dB = 1.96mW/g

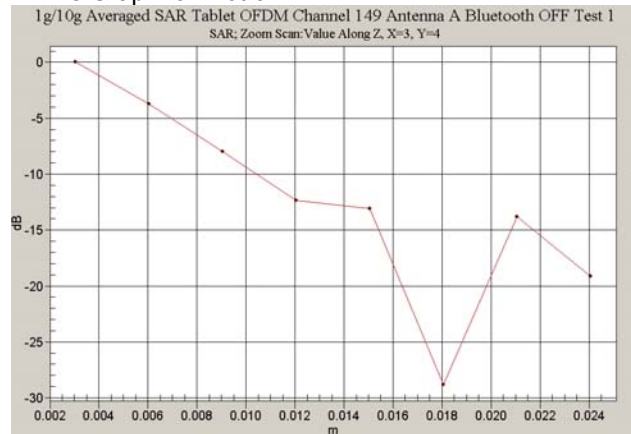
SAR MEASUREMENT PLOT 9

Ambient Temperature
Liquid Temperature
Humidity

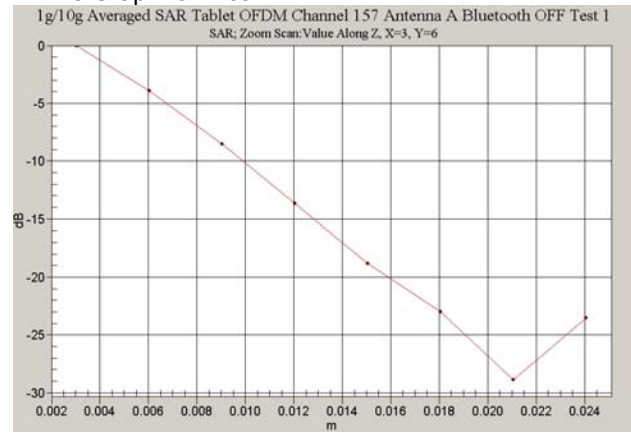
20.2 Degrees Celsius
19.7 Degrees Celsius
47.0 %

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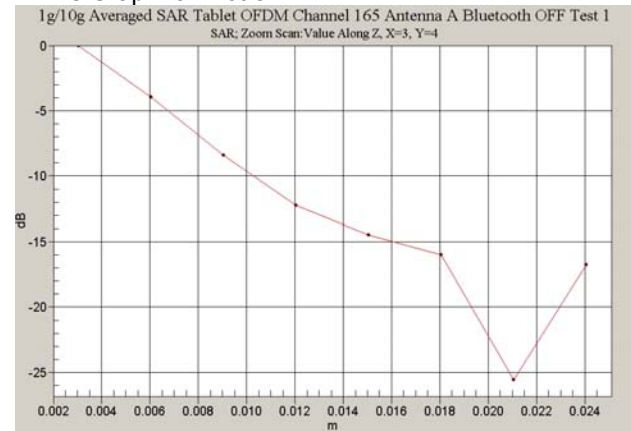
Z-Axis Graph for Plot 6



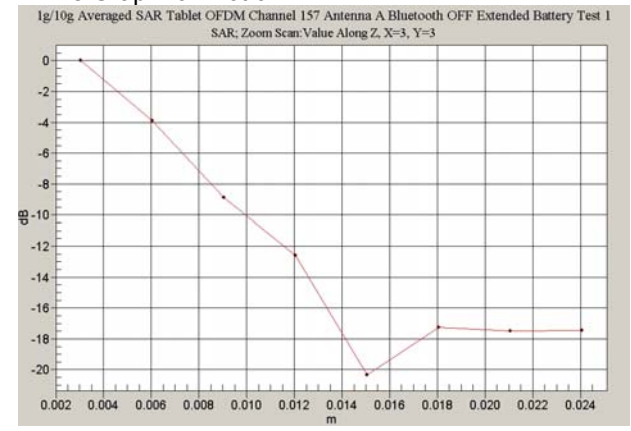
Z-Axis Graph for Plot 7



Z-Axis Graph for Plot 8



Z-Axis Graph for Plot 9



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