

APPENDIX H1

EUT Plots – 2.4 GHz

APPENDIX B PLOTS OF THE SAR MEASUREMENTS

Plots of the measured SAR distributions inside the phantom are given in this Appendix for all tested configurations. The spatial peak SAR values were assessed with the procedure described in this report.

Table: 2450 MHz DSSS Band SAR Measurement Plot Numbers

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Laps On	1	C	6	-	01
	2	C	6	-	06
	3	C	6	-	11
Z-Axis graphs for Plots 1 to 4					
Laps On Bluetooth ON	4	C	6	-	06

Table: 2450 MHz OFDM Band SAR Measurement Plot Numbers

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Laps On	5	C	6	-	06
	6	C	HT0	20	06
	7	C	HT0	40	06

Table: 2450MHz Validation Plot

Plot 8	Validation 2450 MHz 18 th March 2008
Z-Axis graphs for Plots 5 to 8	

Test Date: 18 March 2008

File Name: Laps On DSSS 2450 MHz Gordon Antenna C Bluetooth Off 18-03-08.da4

DUT: Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716

* Communication System: DSSS 2450 MHz; Frequency: 2412 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.89924$ mho/m, $\epsilon_r = 51.6469$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 1 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.024 mW/g

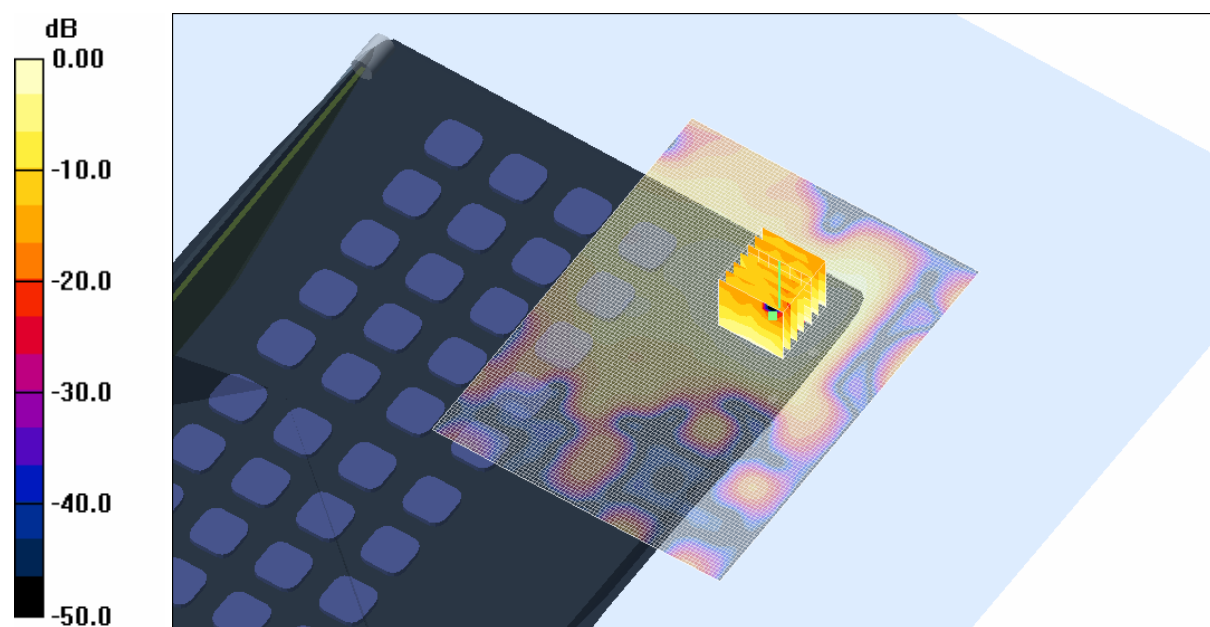
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.14 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.046 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.025 mW/g



SAR MEASUREMENT PLOT 1

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

Test Date: 18 March 2008

File Name: Laps On DSSS 2450 MHz Gordon Antenna C Bluetooth Off 18-03-08.da4

DUT: Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716

* Communication System: DSSS 2450 MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.93426$ mho/m, $\epsilon_r = 51.5076$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.00 V/m; Power Drift = -0.195 dB

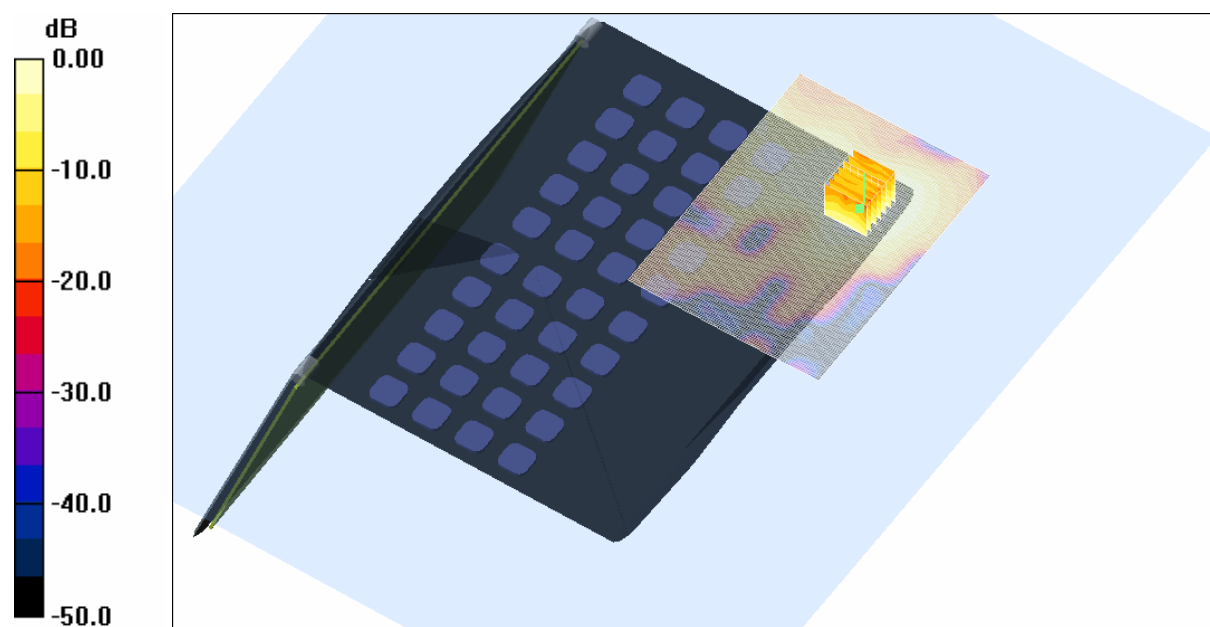
Peak SAR (extrapolated) = 0.121 W/kg

SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.032 mW/g

Maximum value of SAR (measured) = 0.063 mW/g

Channel 6 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.058 mW/g



SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

Test Date: 18 March 2008

File Name: Laps On DSSS 2450 MHz Gordon Antenna C Bluetooth Off 18-03-08.da4

DUT: Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716

* Communication System: DSSS 2450 MHz; Frequency: 2462 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.96686$ mho/m, $\epsilon_r = 51.3824$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 11 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.019 mW/g

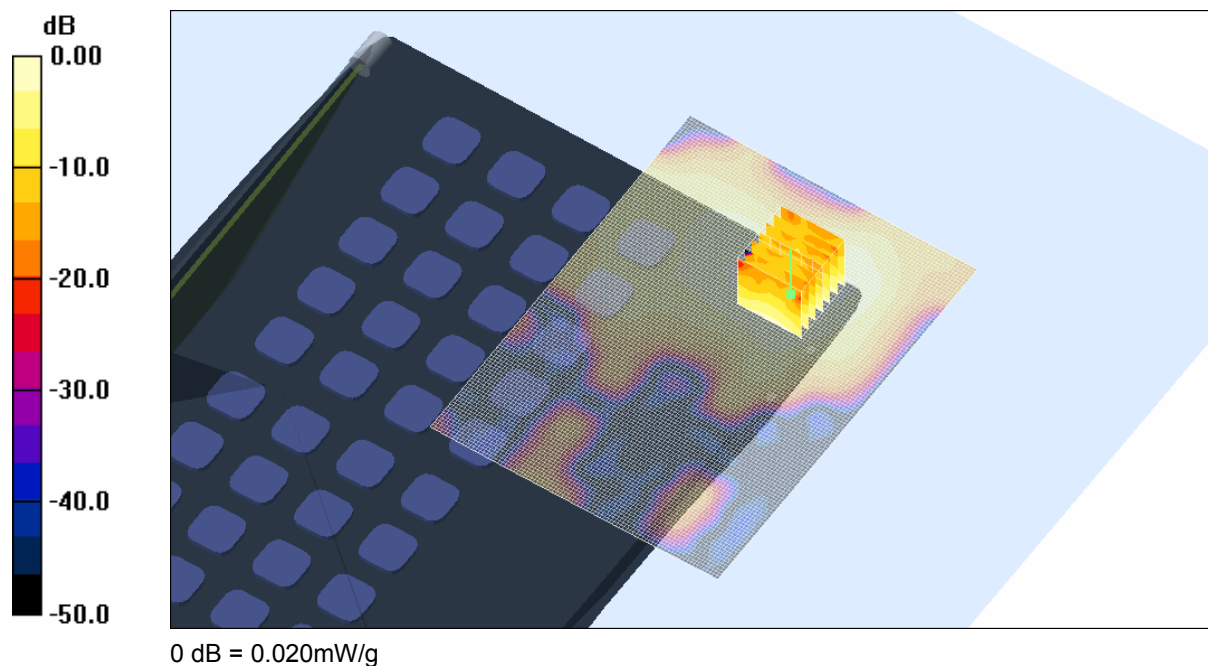
Channel 11 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.46 V/m; Power Drift = 0.322 dB

Peak SAR (extrapolated) = 0.040 W/kg

SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.010 mW/g

Maximum value of SAR (measured) = 0.020 mW/g



SAR MEASUREMENT PLOT 3

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

Test Date: 18 March 2008

File Name: Laps On DSSS 2450 MHz Gordon Antenna C Bluetooth On 18-03-08.da4

DUT: Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716

* Communication System: DSSS 2450 MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.93426$ mho/m, $\epsilon_r = 51.5076$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 6 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.023 mW/g

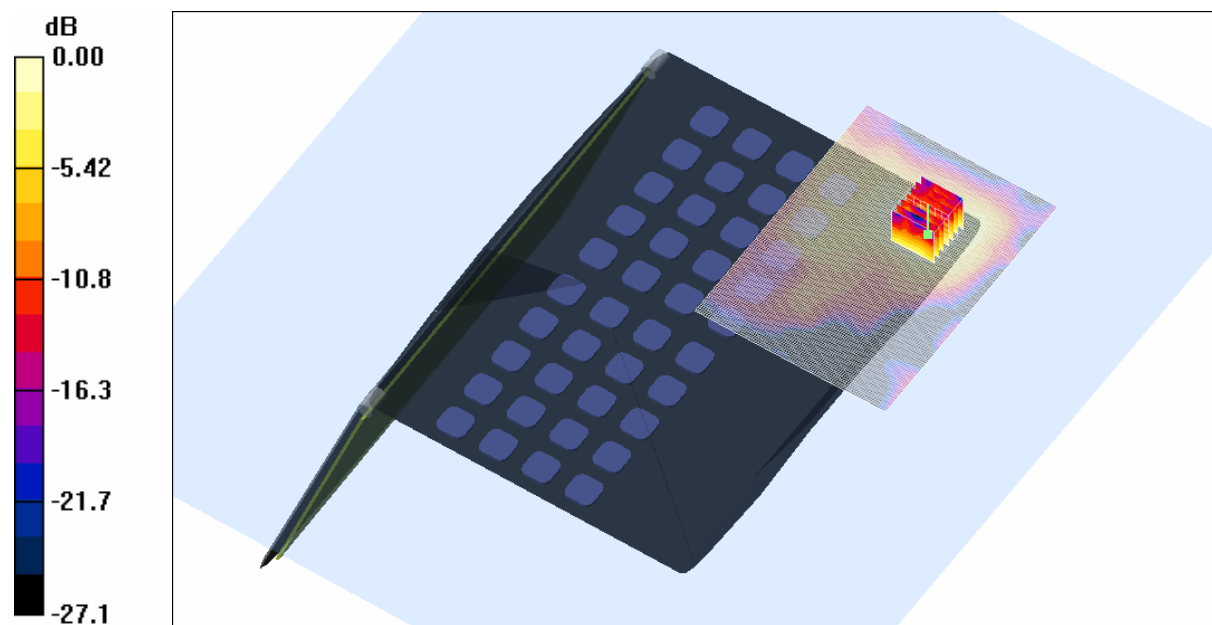
Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.28 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.024 mW/g

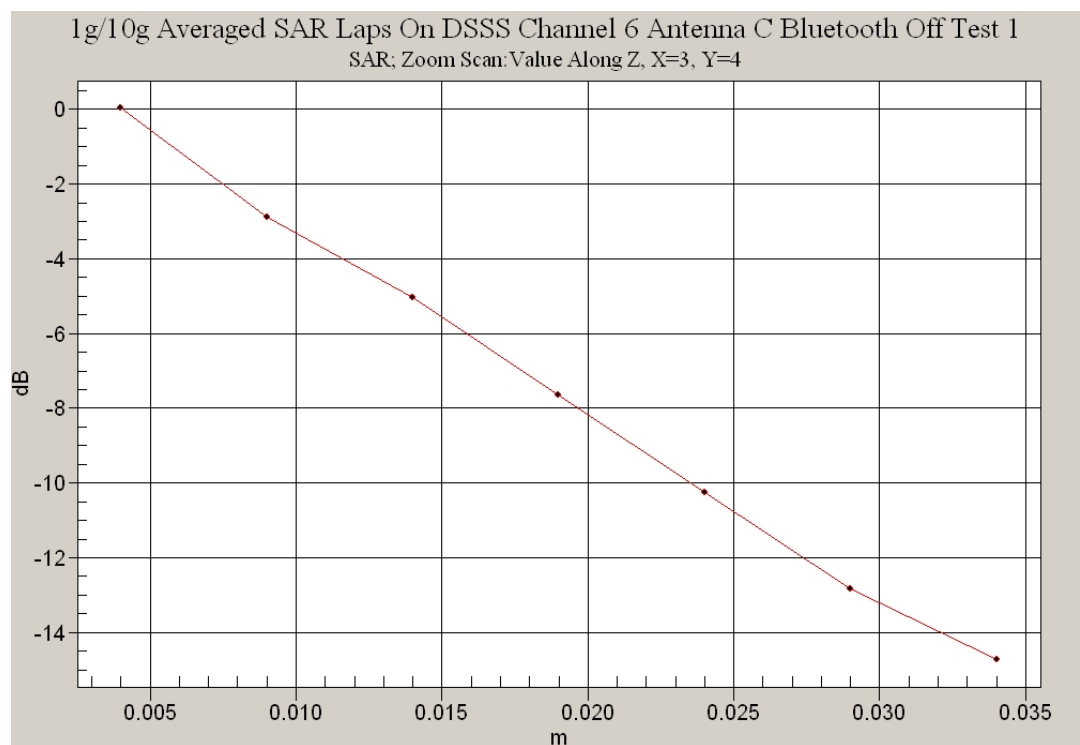
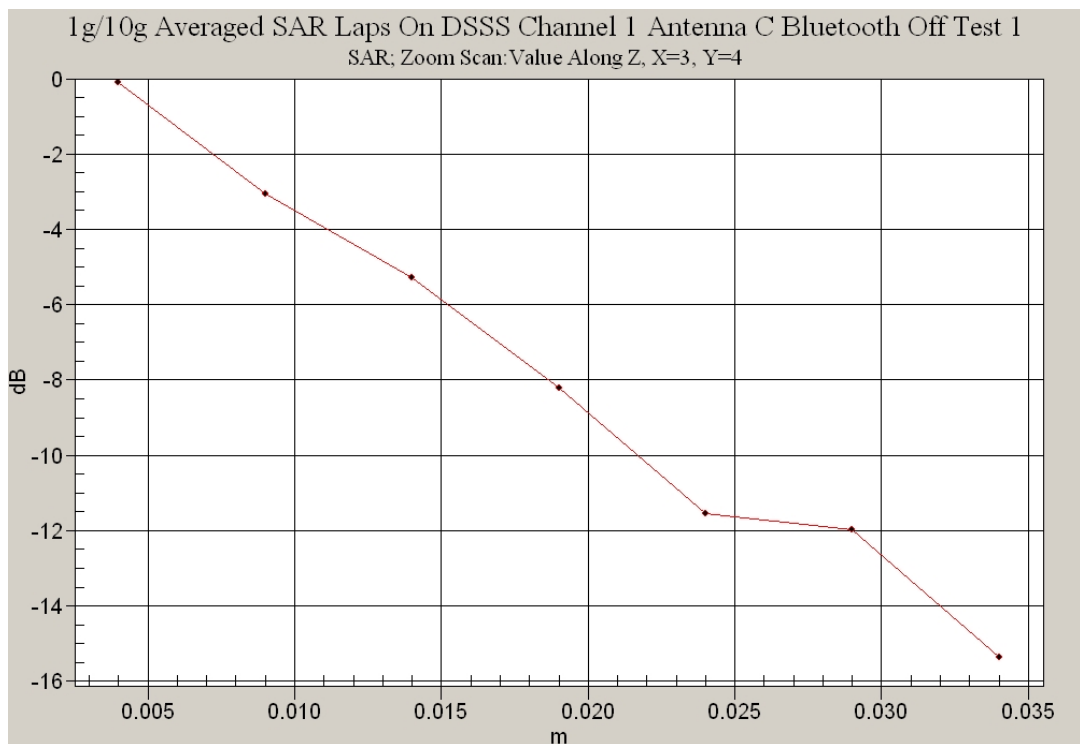


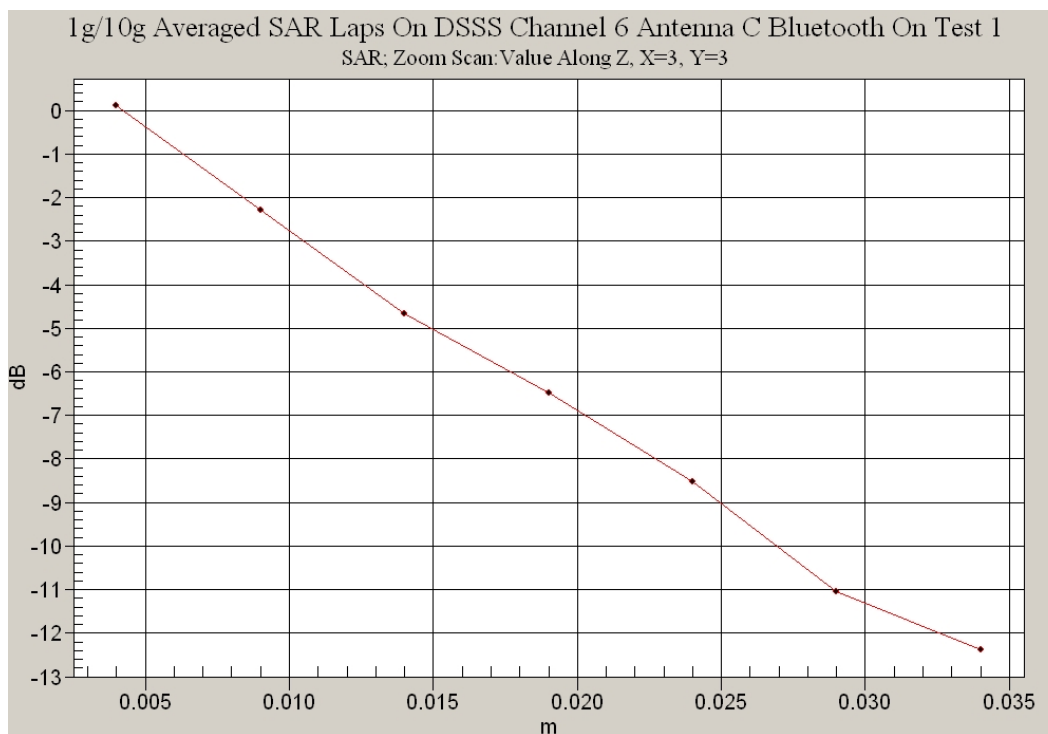
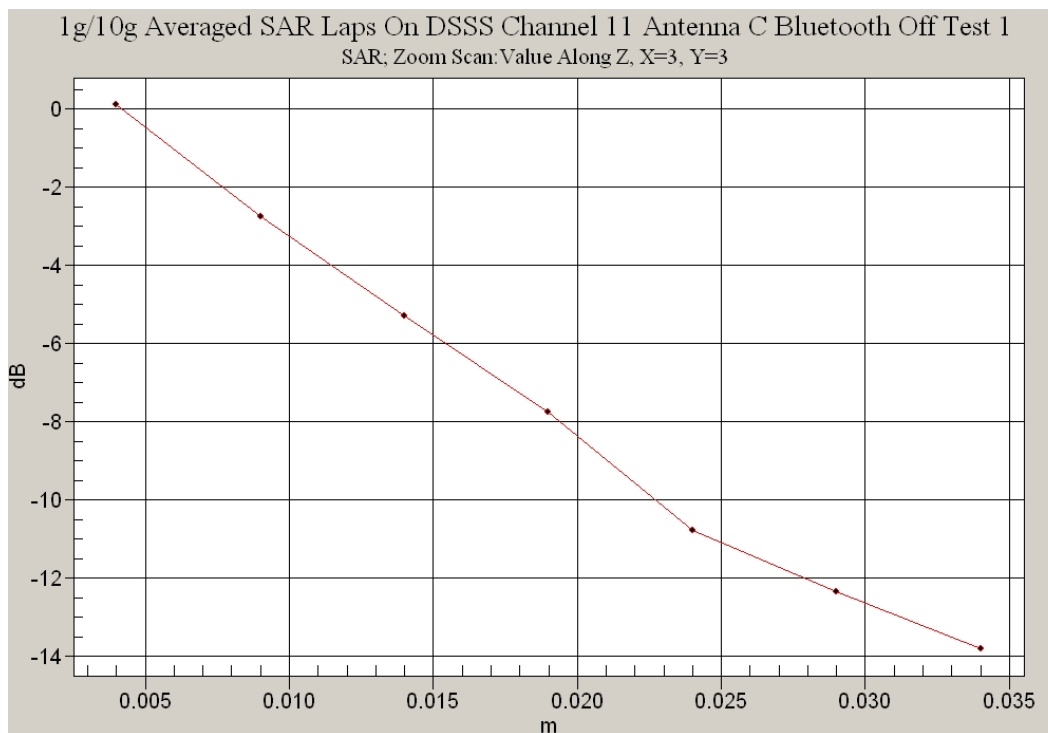
0 dB = 0.024mW/g

SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %





Test Date: 18 March 2008

File Name: Laps On OFDM 2450 MHz Gordon Antenna C Bluetooth Off 18-03-08.da4

DUT: **Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716**

* Communication System: OFDM 2450 MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.93426$ mho/m, $\epsilon_r = 51.5076$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 6 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.049 mW/g

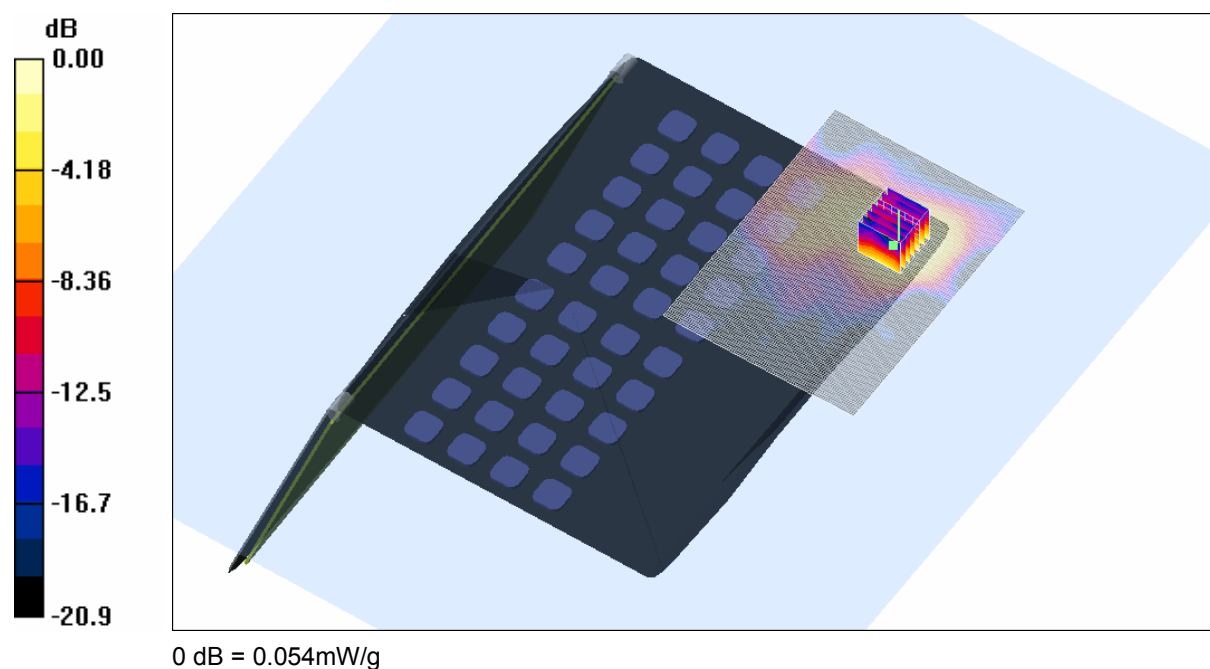
Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.72 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.101 W/kg

SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.027 mW/g

Maximum value of SAR (measured) = 0.054 mW/g



SAR MEASUREMENT PLOT 5

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

Test Date: 18 March 2008

File Name: Laps On OFDM (20MHz HT0) 2450 MHz Gordon Antenna C Bluetooth Off 18-03-08.da4

DUT: Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716

* Communication System: 20MHz HT0 2450 MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.93426$ mho/m, $\epsilon_r = 51.5076$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 6 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.041 mW/g

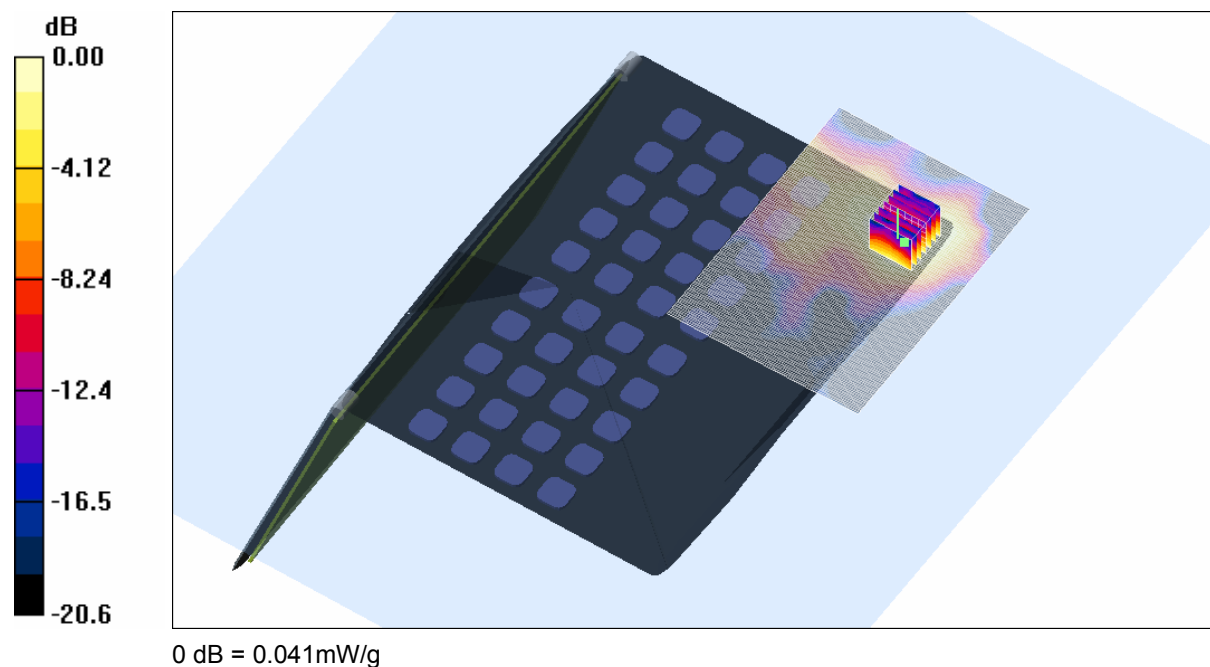
Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.45 V/m; Power Drift = 0.114 dB

Peak SAR (extrapolated) = 0.075 W/kg

SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.041 mW/g



SAR MEASUREMENT PLOT 6

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

Test Date: 18 March 2008

File Name: Laps On OFDM (40MHz HT0) 2450 MHz Gordon Antenna C Bluetooth Off 18-03-08.da4

DUT: Fujitsu Notebook Gordon with Shirley Peak 11abgn and Bluetooth; Type: 533AN_HMW; Serial: MAC: 0016EA042716

* Communication System: 40MHz HT0 2450 MHz; Frequency: 2437 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.93426$ mho/m, $\epsilon_r = 51.5076$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(3.98, 3.98, 3.98)

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

Channel 6 Test/Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.060 mW/g

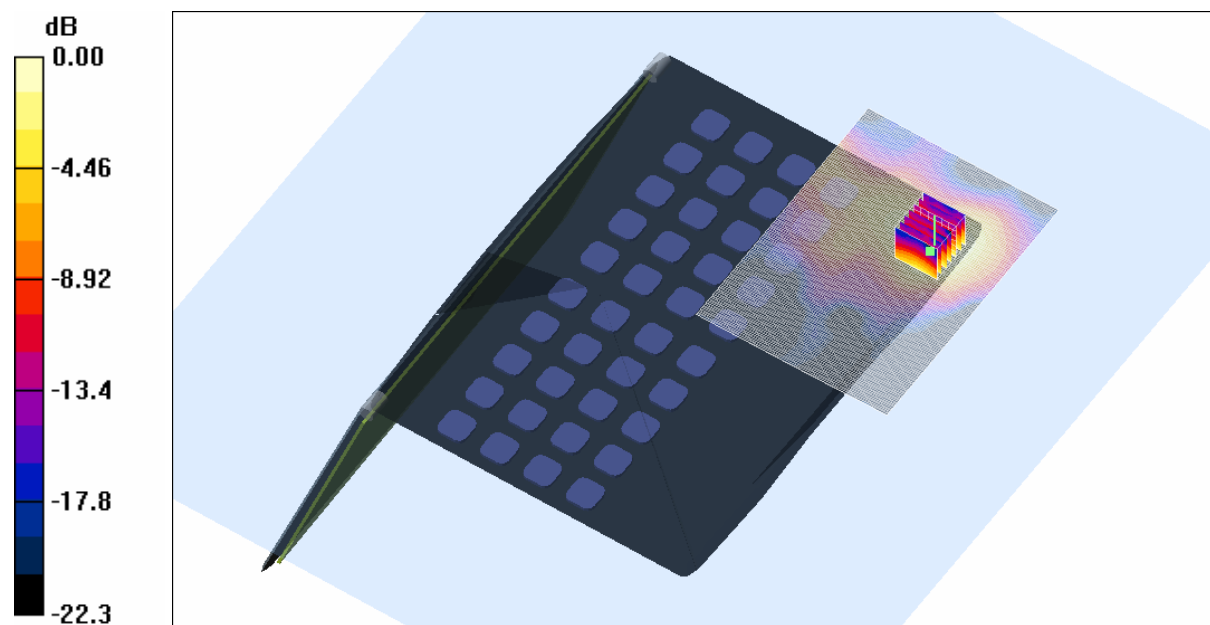
Channel 6 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.95 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.030 mW/g

Maximum value of SAR (measured) = 0.058 mW/g



0 dB = 0.058mW/g

SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

Test Date: 18 March 2008

File Name: Validation 2450 MHz (DAE442 Probe1377) 18-03-07.da4

DUT: Dipole 2450 MHz; Type: DV2450V2; Serial: 724

* Communication System: CW 2450 MHz; Frequency: 2450 MHz; Duty Cycle: 1:1

* Medium parameters used: $\sigma = 1.79516$ mho/m, $\epsilon_r = 39.5166$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1377; ConvF(4.45, 4.45, 4.45)

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

Channel 1 Test/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 19.1 mW/g

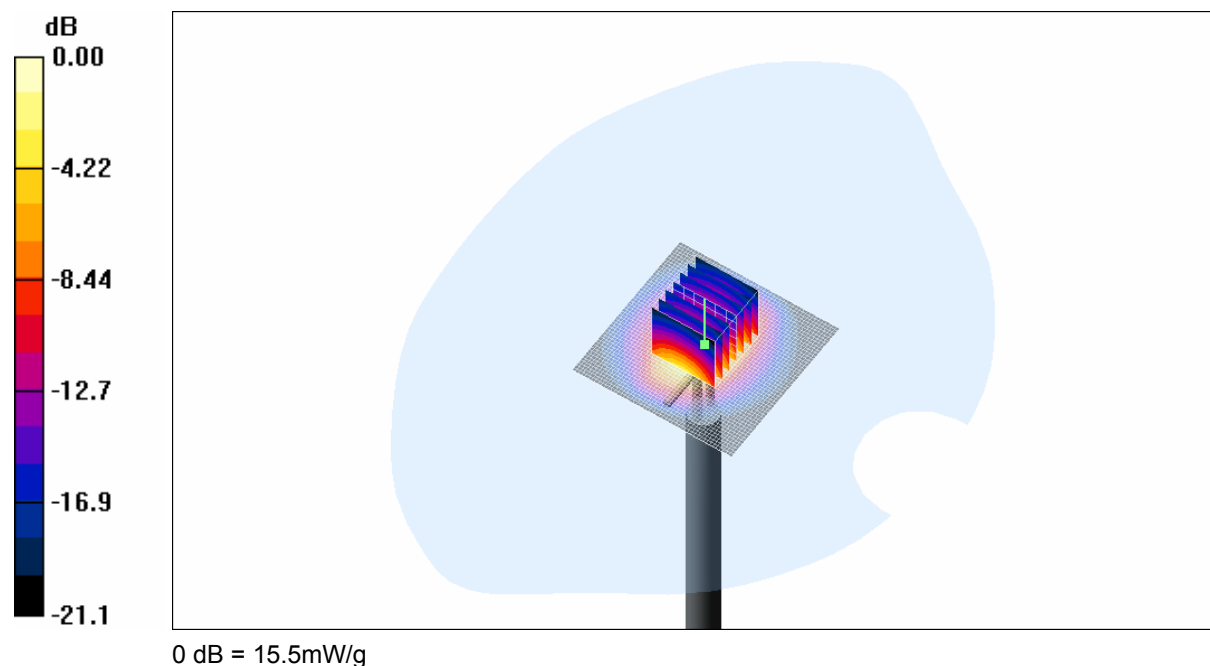
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.0 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 29.6 W/kg

SAR(1 g) = 13.8 mW/g; SAR(10 g) = 6.49 mW/g

Maximum value of SAR (measured) = 15.5 mW/g



SAR MEASUREMENT PLOT 8

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.0 Degrees Celsius
57.0 %

