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: 5200 MHz Band SAR Measurement Plot Numbers

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Laps On	1	C	6	-	36
	2	C			52
	3	C			64
Z-Axis graphs for Plots 1 to 3					

Table: 5600 MHz Band SAR Measurement Plot Numbers

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Laps On	4	C	6	-	100
	5	C			120
	6	C			140
Z-Axis graphs for Plots 4 to 6					

Table: 5800 MHz Band SAR Measurement Plot Numbers

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Laps On	7	C	6	-	149
	8	C			157
	9	C			165
Z-Axis graphs for Plots 7 to 9					

Table: Validation Plots

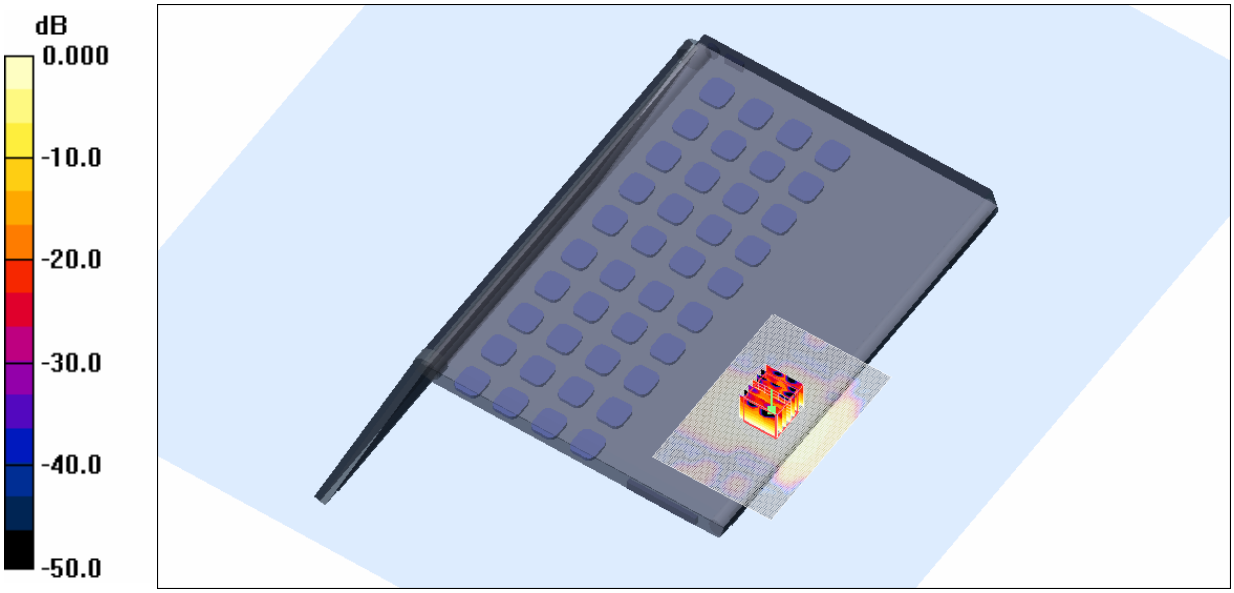
Plot 10	Validation 5500 MHz 4th August 2008
Plot 11	Validation 5200 MHz 5th August 2008
Plot 12	Validation 5800 MHz 13th August 2008
Z-Axis graphs for Plots 10 to 12	

Test Date: 05 August 2008
File Name: Laps On OFDM 5.2 WiFi Antenna C 05-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5250 MHz; Frequency: 5180 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5173 MHz; σ = 5.09 mho/m; ε_r = 45; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.72, 3.72, 3.72)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 36 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.531 mW/g

Channel 36 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 12.0 V/m; Power Drift = -0.093 dB
Peak SAR (extrapolated) = 1.58 W/kg
SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.221 mW/g
Maximum value of SAR (measured) = 0.925 mW/g



0 dB = 0.925mW/g

SAR MEASUREMENT PLOT 1

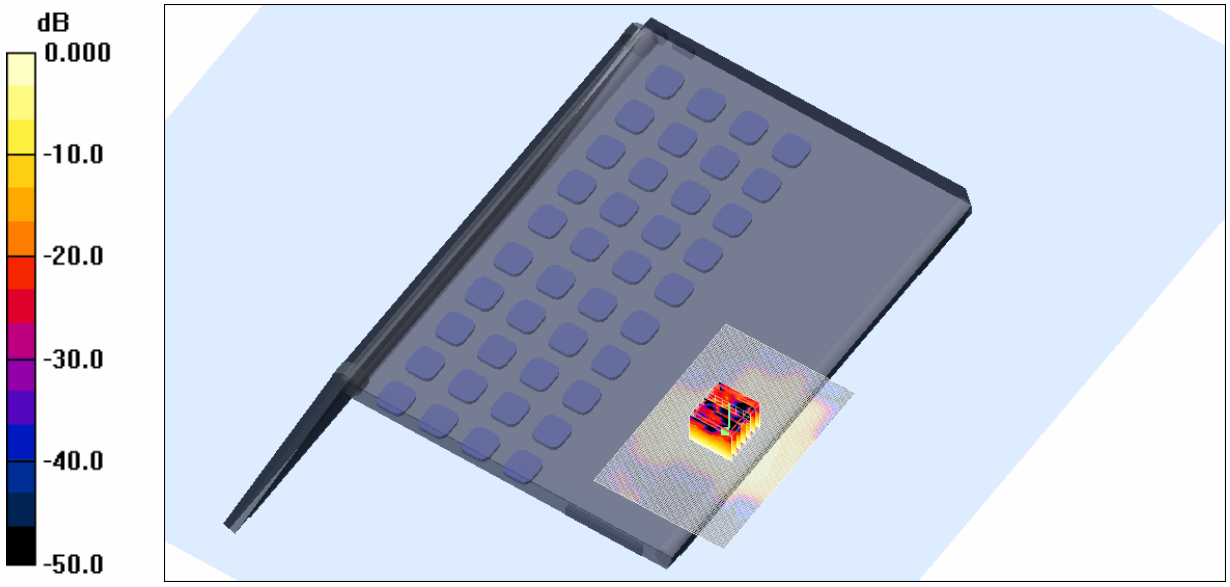
Ambient Temperature	**20.3 Degrees Celsius**
Liquid Temperature	**20.2 Degrees Celsius**
Humidity	**34.0 %**

Test Date: 05 August 2008
File Name: Laps On OFDM 5.2 WiFi Antenna C 05-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5250 MHz; Frequency: 5260 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5260.6 MHz; σ = 5.23 mho/m; ε_r = 44.8; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.72, 3.72, 3.72)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 52 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.475 mW/g

Channel 52 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 10.7 V/m; Power Drift = 0.101 dB
Peak SAR (extrapolated) = 1.47 W/kg
SAR(1 g) = 0.461 mW/g; SAR(10 g) = 0.192 mW/g
Maximum value of SAR (measured) = 0.825 mW/g



0 dB = 0.825mW/g

SAR MEASUREMENT PLOT 2

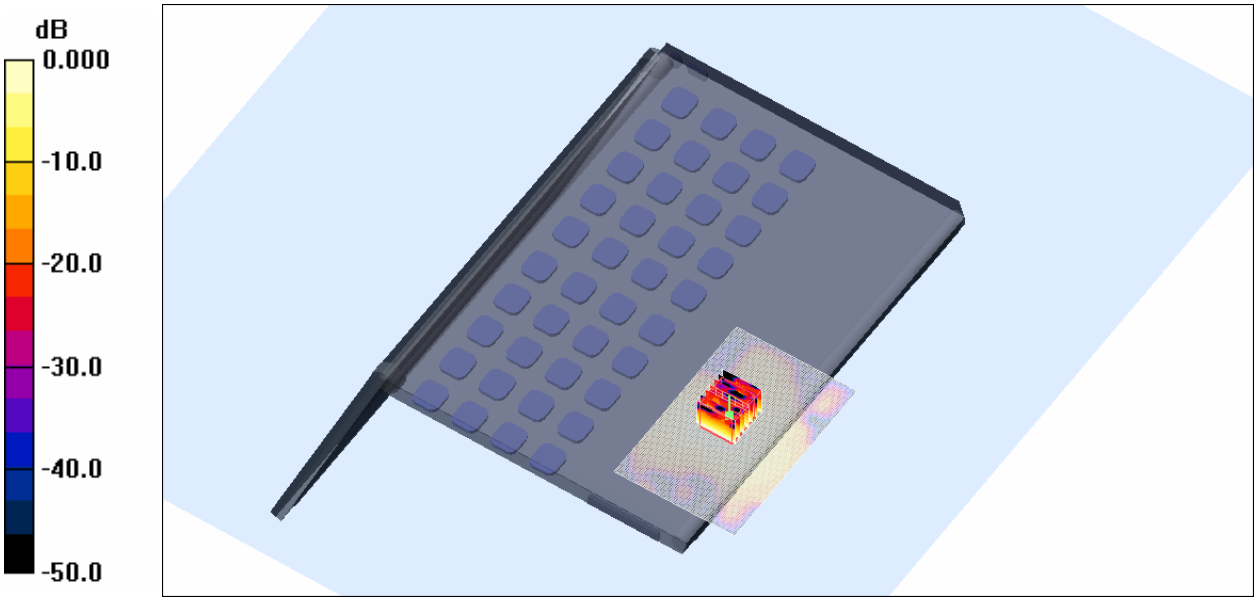
Ambient Temperature	**20.3 Degrees Celsius**
Liquid Temperature	**20.2 Degrees Celsius**
Humidity	**34.0 %**

Test Date: 05 August 2008
File Name: Laps On OFDM 5.2 WiFi Antenna C 05-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5250 MHz; Frequency: 5320 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5319 MHz; σ = 5.33 mho/m; ε_r = 44.6; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.72, 3.72, 3.72)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 64 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.544 mW/g

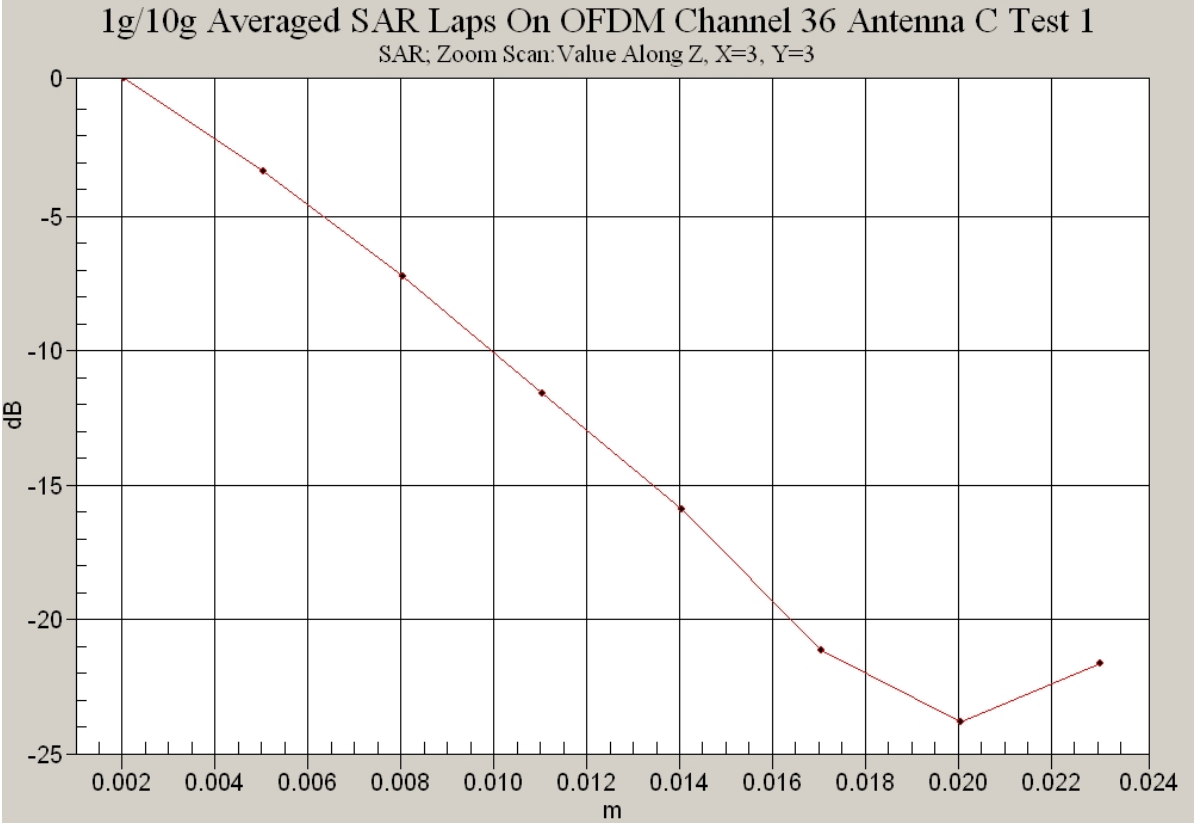
Channel 64 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 9.16 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.945 mW/g

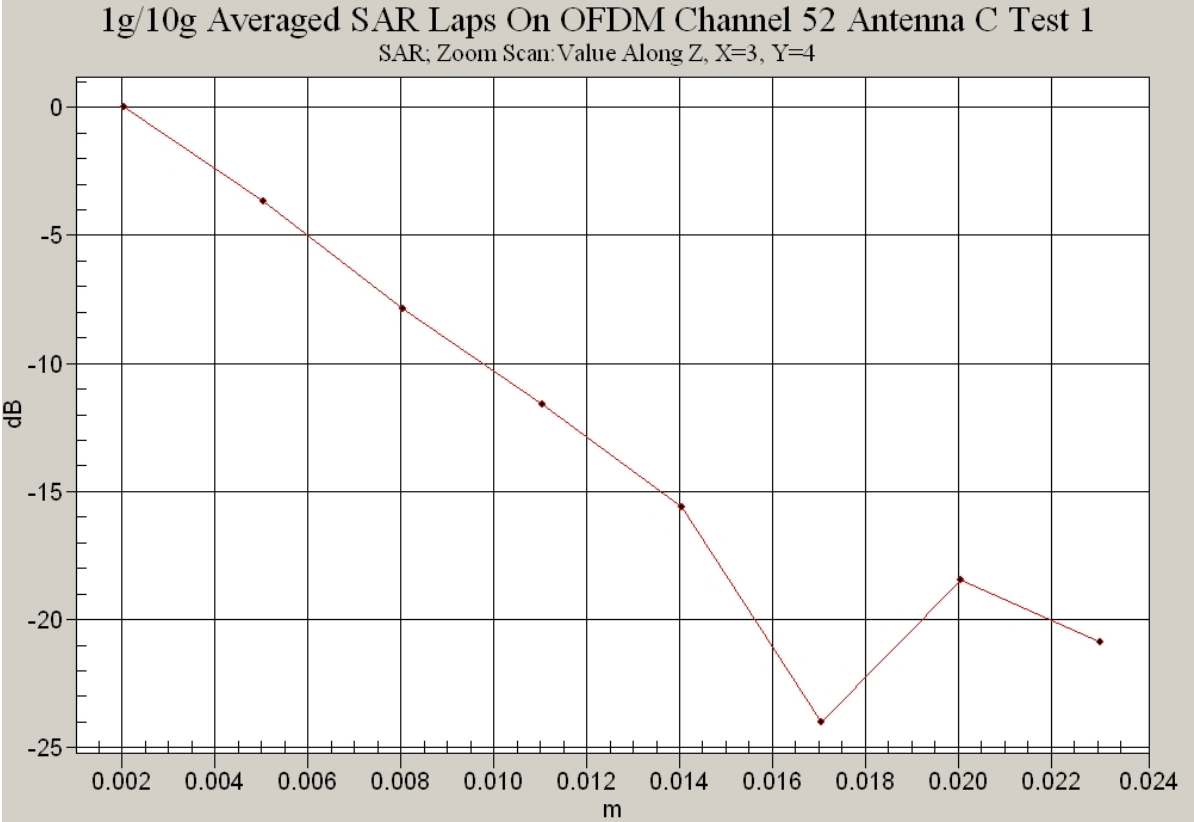


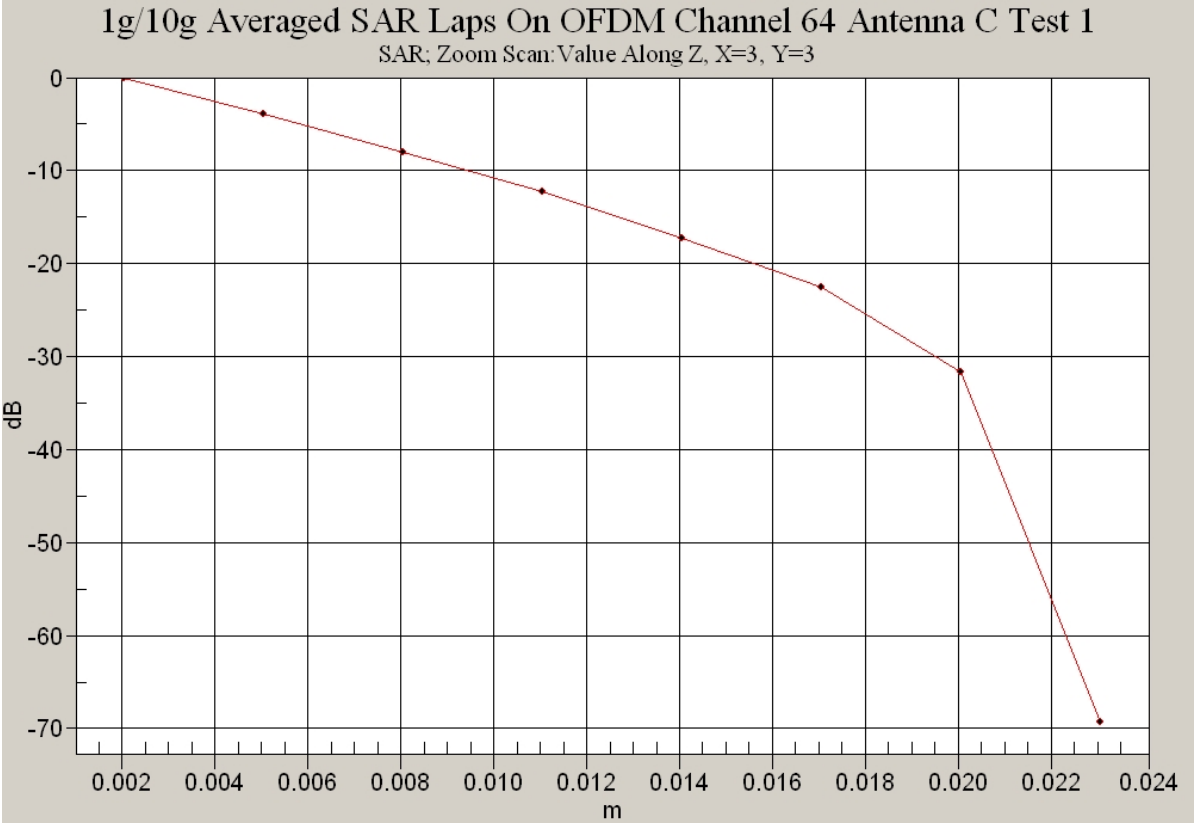
0 dB = 0.945mW/g

SAR MEASUREMENT PLOT 3

Ambient Temperature	**20.3 Degrees Celsius**
Liquid Temperature	**20.2 Degrees Celsius**
Humidity	**34.0 %**





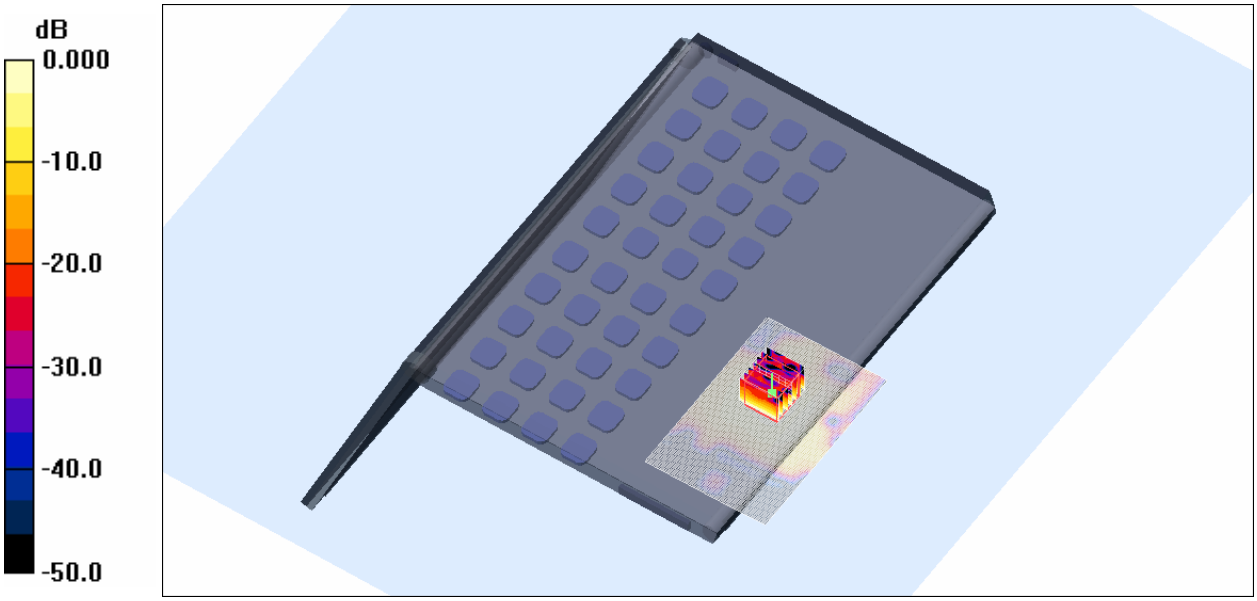


Test Date: 04 August 2008
File Name: Laps On OFDM 5.6 WiFi Antenna C 04-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5600 MHz; Frequency: 5500 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5494.2 MHz; σ = 5.68 mho/m; ε_r = 44.8; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.75, 3.75, 3.75)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 100 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.799 mW/g

Channel 100 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 9.89 V/m; Power Drift = 0.137 dB
Peak SAR (extrapolated) = 3.07 W/kg
SAR(1 g) = 0.791 mW/g; SAR(10 g) = 0.297 mW/g
Maximum value of SAR (measured) = 1.55 mW/g



0 dB = 1.55mW/g

SAR MEASUREMENT PLOT 4

Ambient Temperature	**20.7 Degrees Celsius**
Liquid Temperature	**20.3 Degrees Celsius**
Humidity	**41.0 %**

Test Date: 04 August 2008

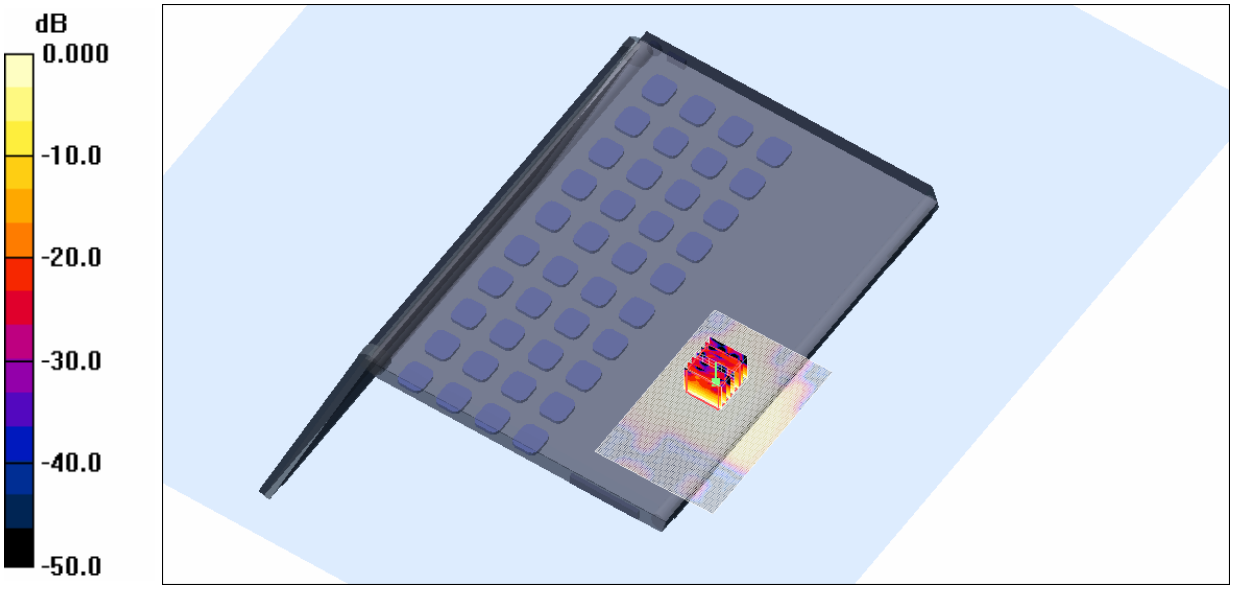
File Name: Laps On OFDM 5.6 WiFi Antenna C 04-08-08.da4

DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5600 MHz; Frequency: 5600 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5596.4 MHz; σ = 5.86 mho/m; ε_r = 44.5; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.75, 3.75, 3.75)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 120 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.641 mW/g

Channel 120 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 8.28 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 2.56 W/kg
SAR(1 g) = 0.658 mW/g; SAR(10 g) = 0.243 mW/g
Maximum value of SAR (measured) = 1.25 mW/g



0 dB = 1.25mW/g

SAR MEASUREMENT PLOT 5

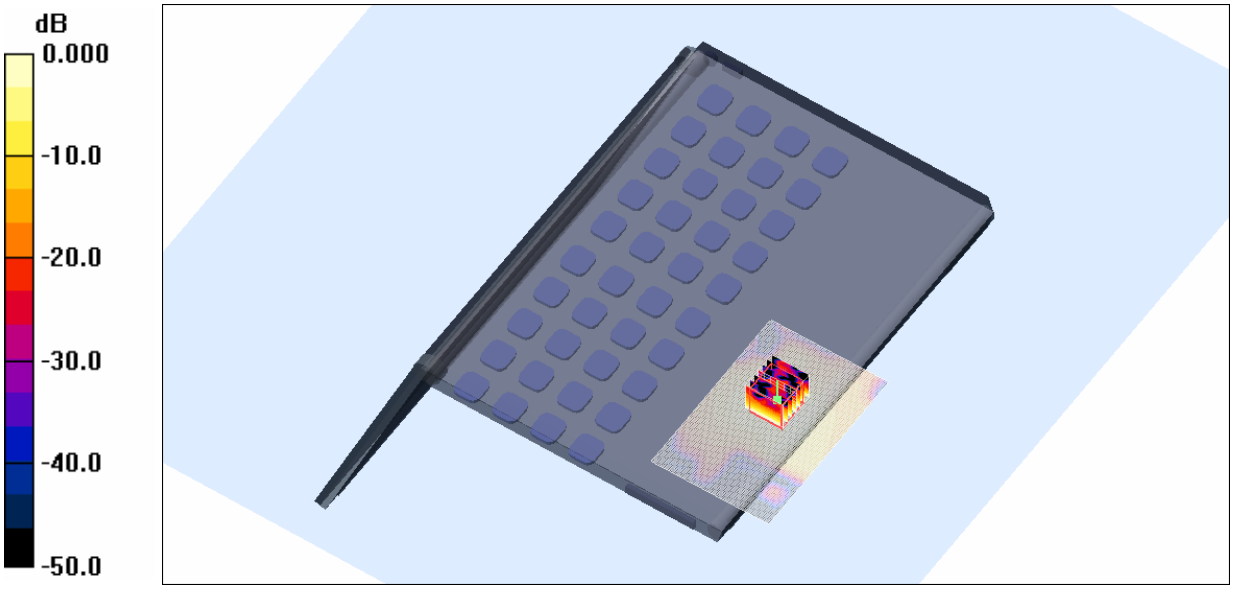
Ambient Temperature	**20.7 Degrees Celsius**
Liquid Temperature	**20.3 Degrees Celsius**
Humidity	**41.0 %**

Test Date: 04 August 2008
File Name: Laps On OFDM 5.6 WiFi Antenna C 04-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5600 MHz; Frequency: 5700 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5698.6 MHz; σ = 6.03 mho/m; ε_r = 44.2; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.75, 3.75, 3.75)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 140 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.652 mW/g

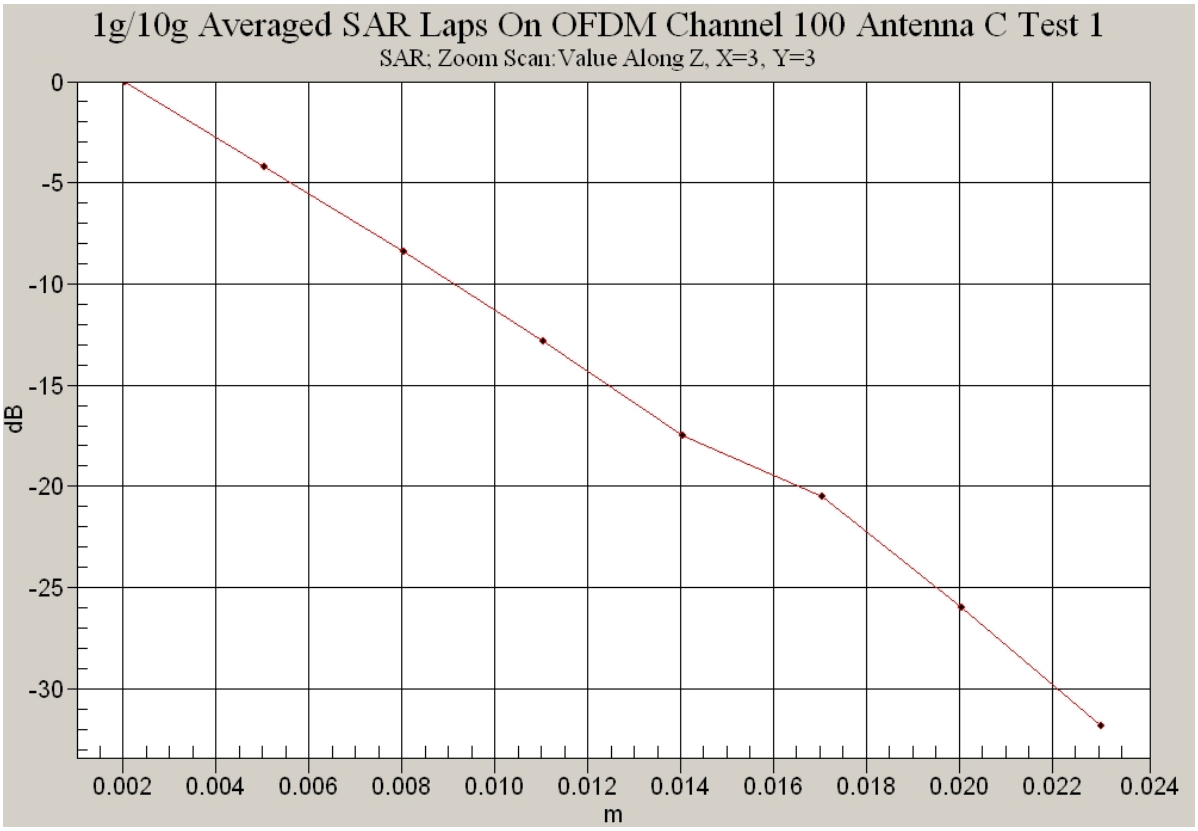
Channel 140 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 9.94 V/m; Power Drift = -0.465 dB
Peak SAR (extrapolated) = 2.55 W/kg
SAR(1 g) = 0.661 mW/g; SAR(10 g) = 0.244 mW/g
Maximum value of SAR (measured) = 1.27 mW/g

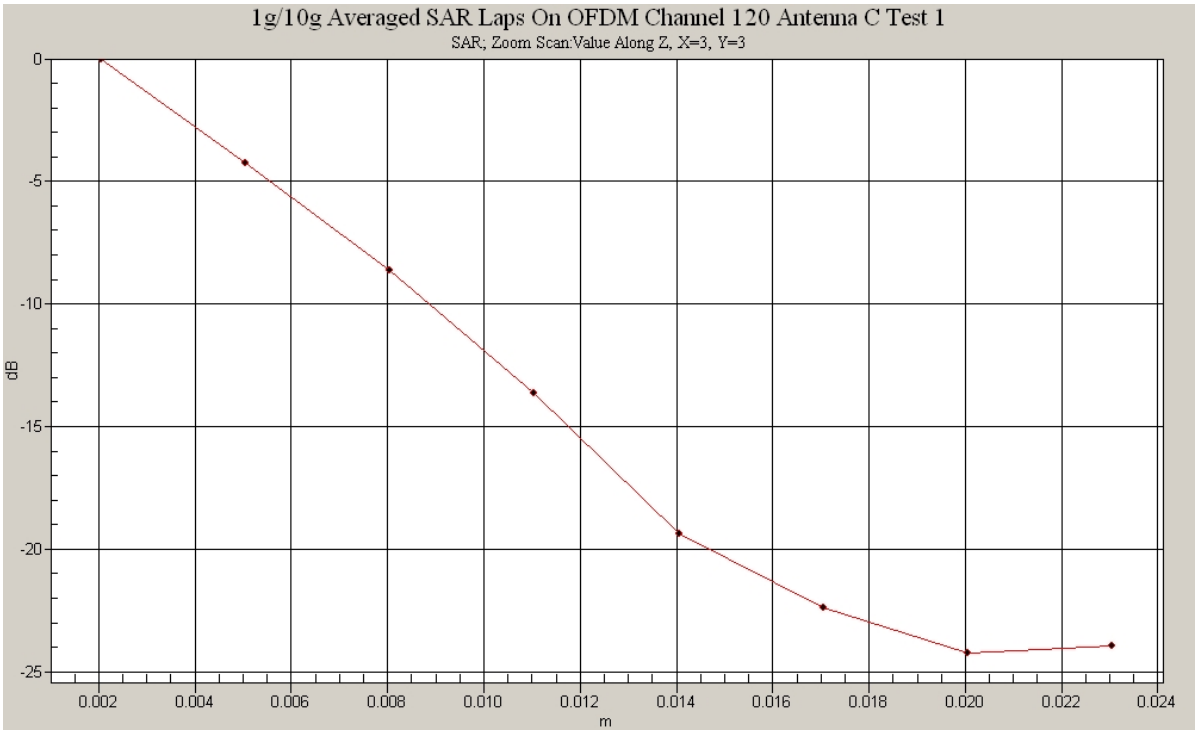


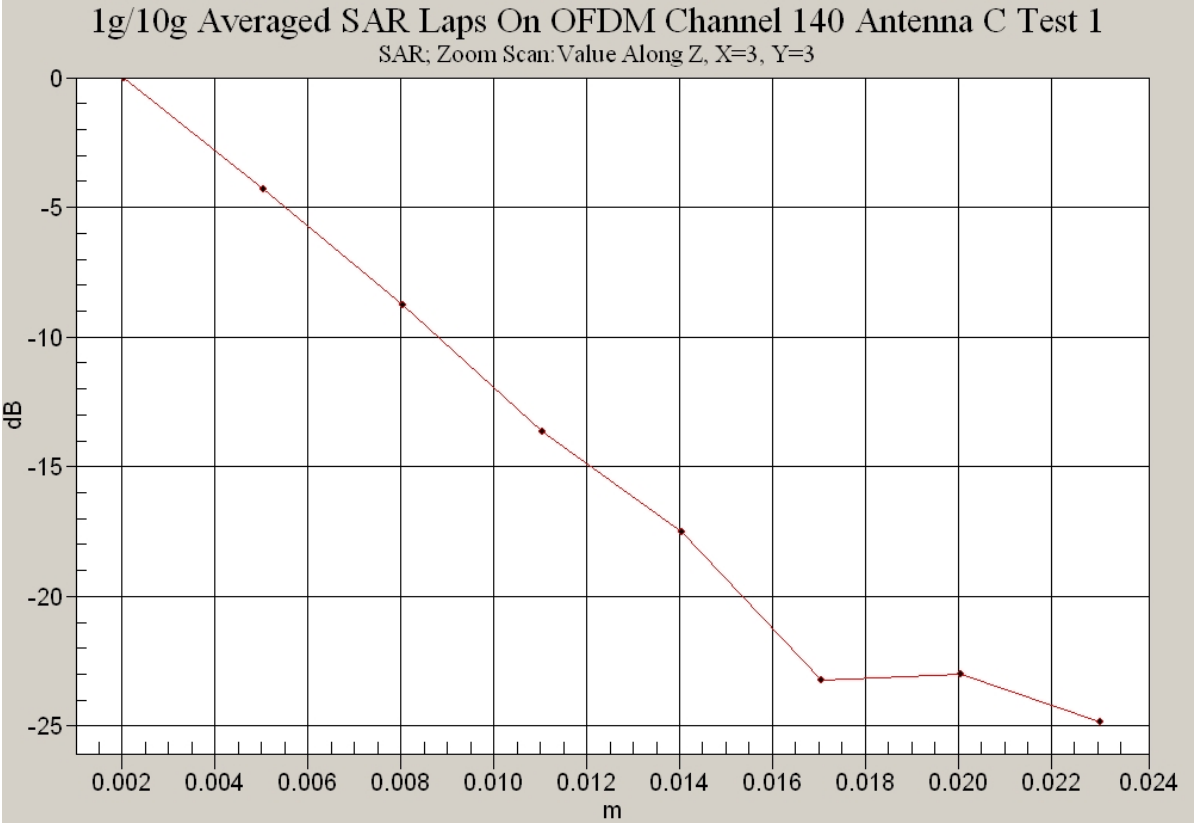
0 dB = 1.27mW/g

SAR MEASUREMENT PLOT 6

Ambient Temperature	**20.7 Degrees Celsius**
Liquid Temperature	**20.3 Degrees Celsius**
Humidity	**41.0 %**







Test Date: 13 August 2008

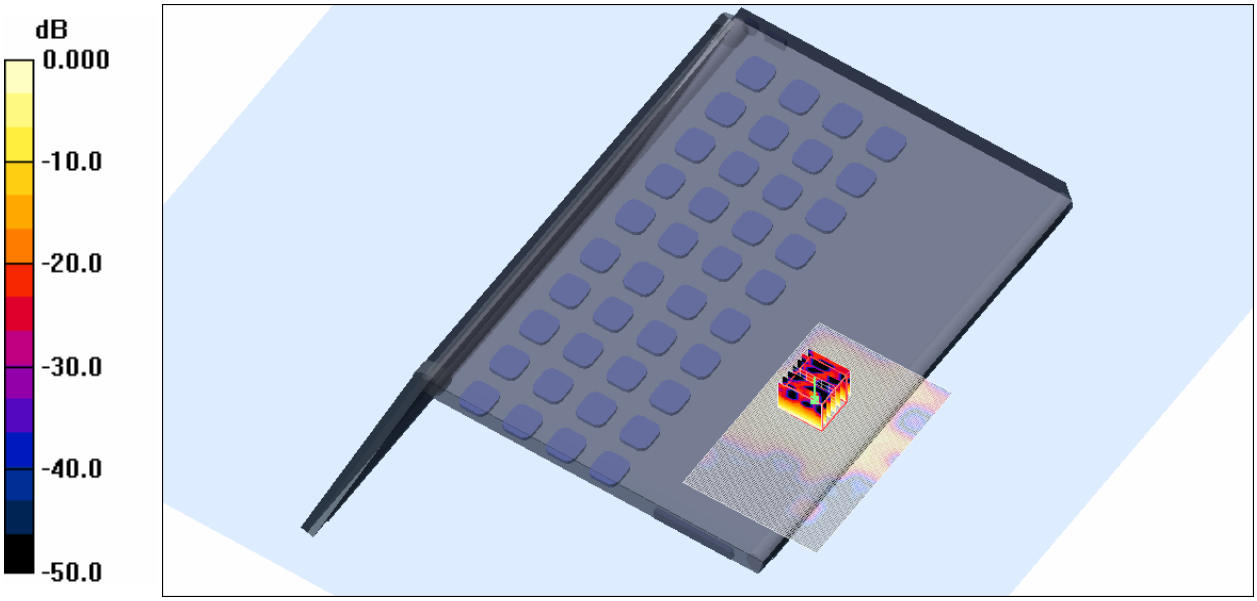
File Name: Laps On OFDM 5.8 WiFi Antenna C 13-08-08.da4

DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5742.4 MHz; σ = 5.65 mho/m; ε_r = 43.9; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.71, 3.71, 3.71)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 149 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.490 mW/g

Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 6.39 V/m; Power Drift = -0.109 dB
Peak SAR (extrapolated) = 1.96 W/kg
SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.187 mW/g
Maximum value of SAR (measured) = 0.979 mW/g



0 dB = 0.979mW/g

SAR MEASUREMENT PLOT 7

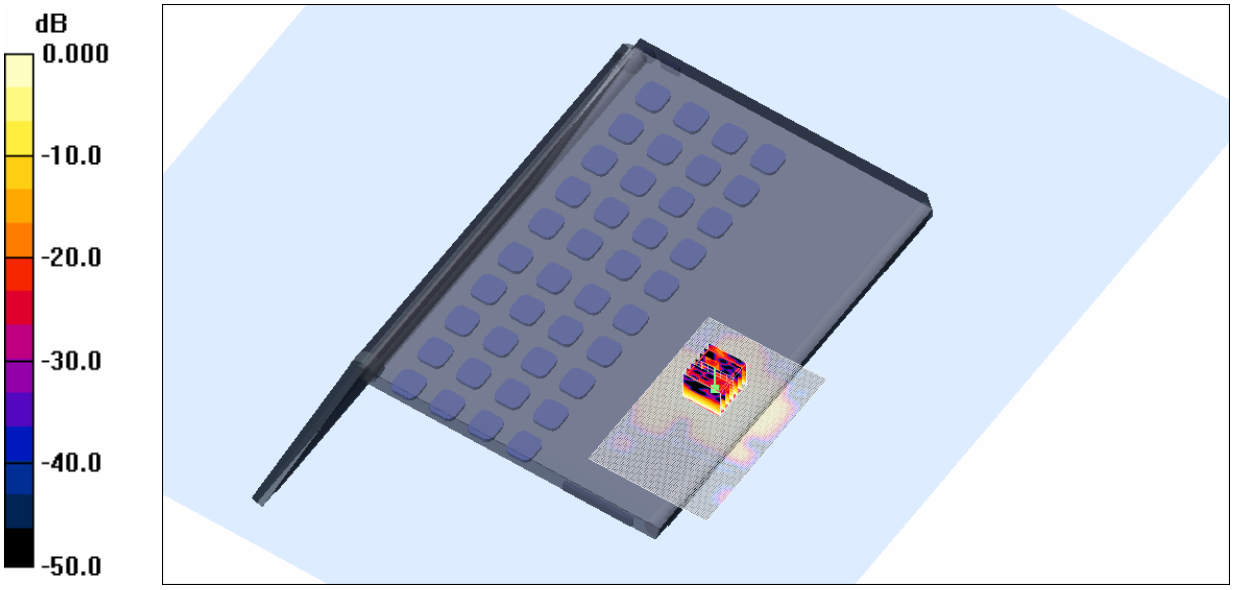
Ambient Temperature	**20.8 Degrees Celsius**
Liquid Temperature	**20.4 Degrees Celsius**
Humidity	**41.0 %**

Test Date: 13 August 2008
File Name: Laps On OFDM 5.8 WiFi Antenna C 13-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5786.2 MHz; σ = 5.73 mho/m; ε_r = 43.8; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.71, 3.71, 3.71)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 157 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.445 mW/g

Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 6.86 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 1.79 W/kg
SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.172 mW/g
Maximum value of SAR (measured) = 0.881 mW/g



0 dB = 0.881mW/g

SAR MEASUREMENT PLOT 8

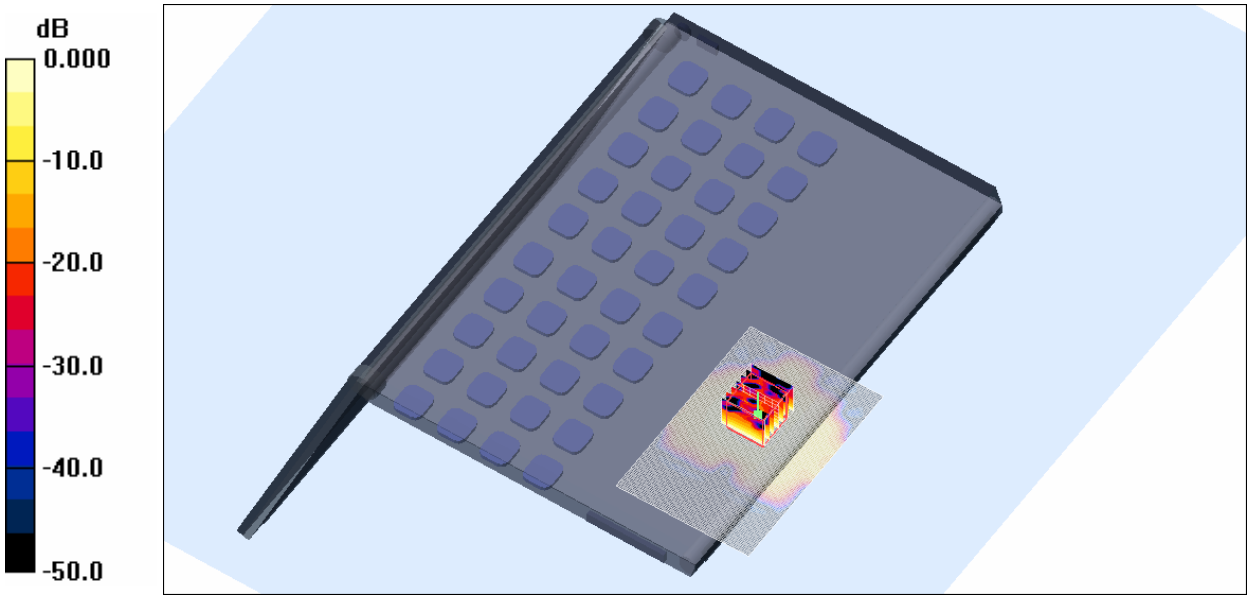
Ambient Temperature	**20.8 Degrees Celsius**
Liquid Temperature	**20.4 Degrees Celsius**
Humidity	**41.0 %**

Test Date: 13 August 2008
File Name: Laps On OFDM 5.8 WiFi Antenna C 13-08-08.da4
DUT: Fujitsu Tablet Relena with Shirley Peak 11abgn (3x3); Type: 533AN_HMW; Serial: 0016EA042224

* Communication System: OFDM 5770 MHz; Frequency: 5825 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5830 MHz; σ = 5.78 mho/m; ε_r = 43.8; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.71, 3.71, 3.71)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 165 Test/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.448 mW/g

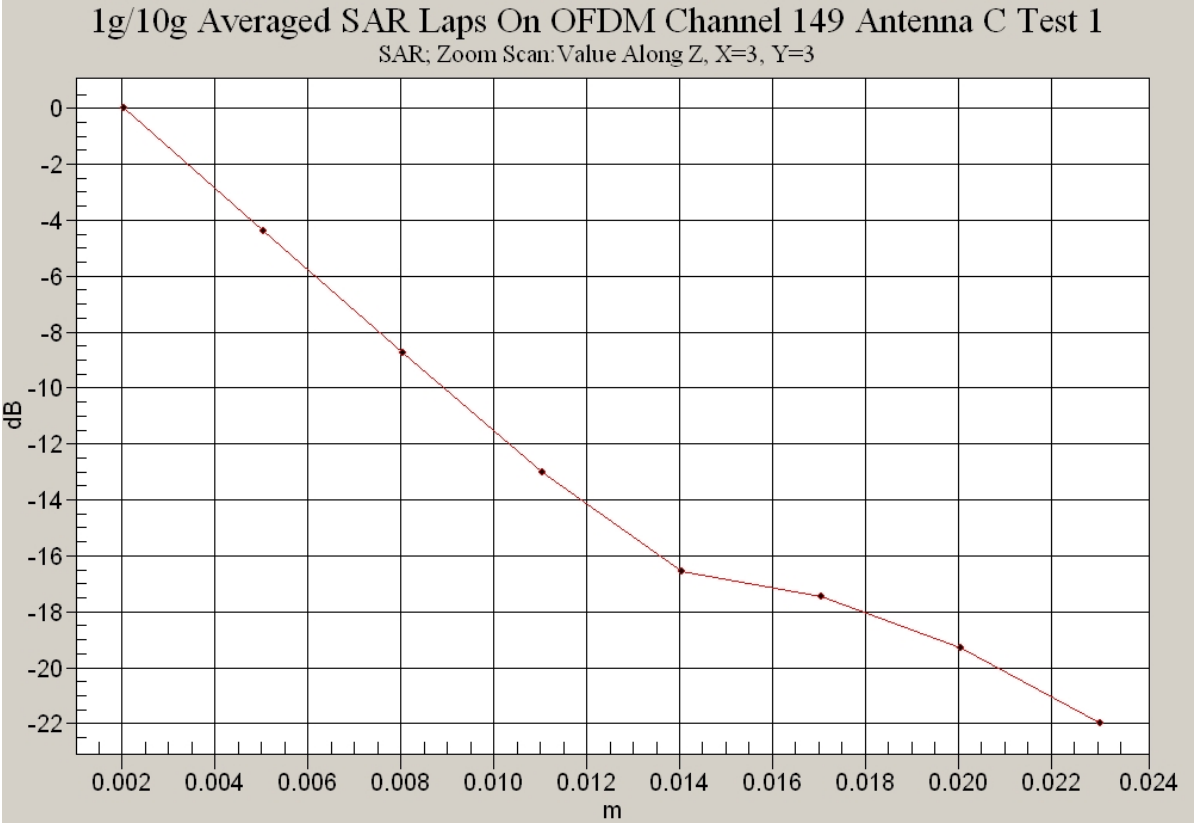
Channel 165 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 8.61 V/m; Power Drift = -0.210 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 0.454 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.877 mW/g

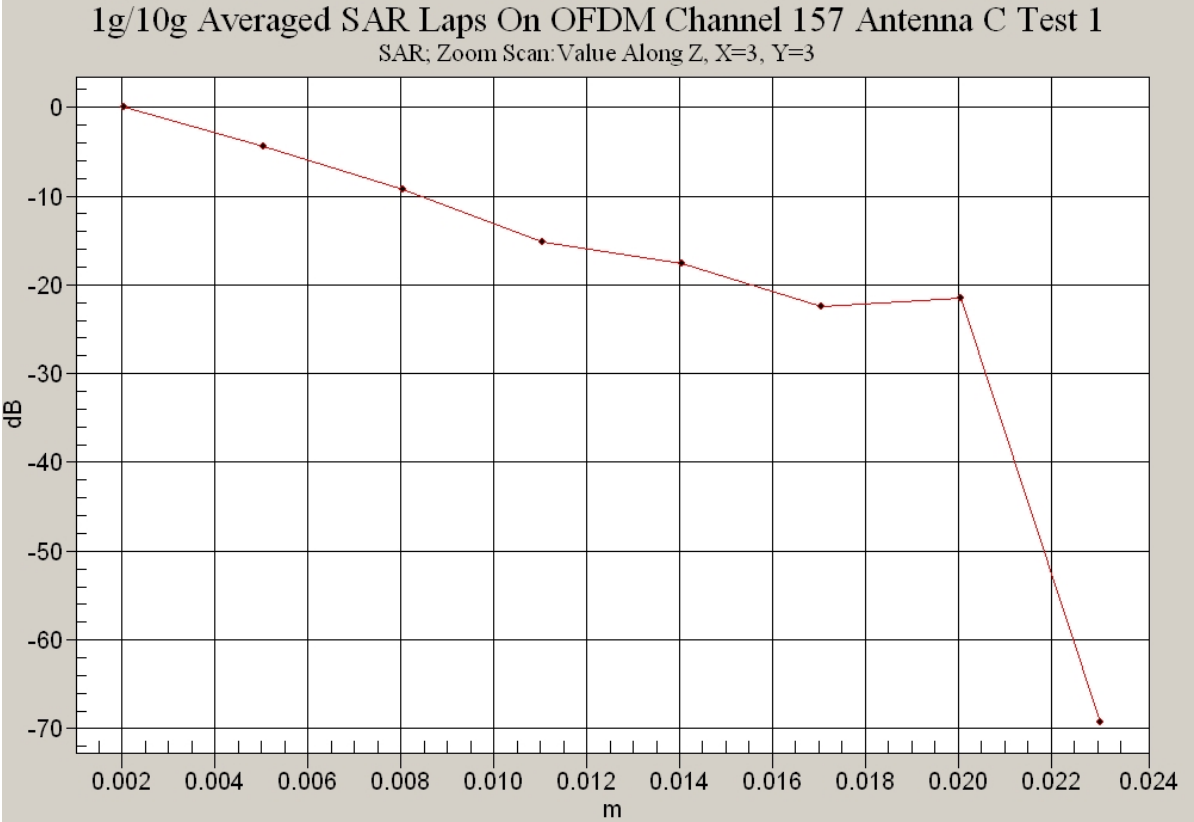


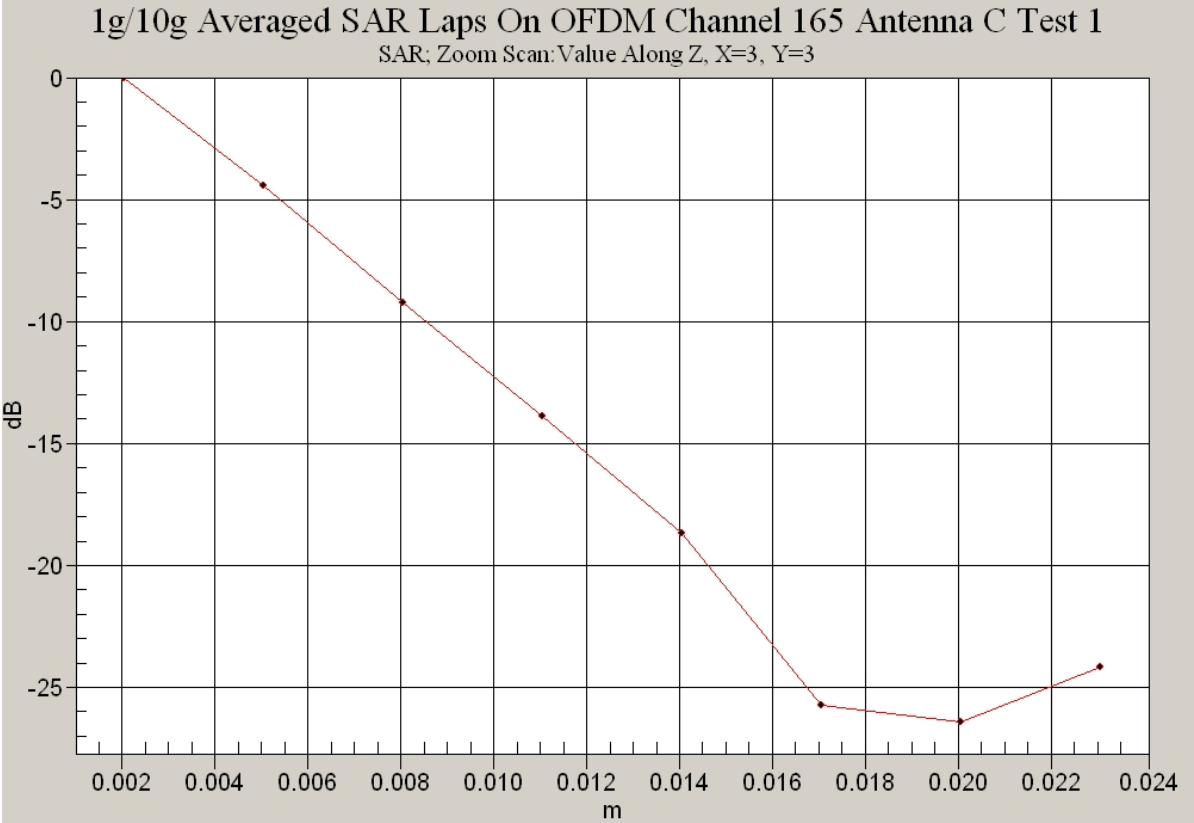
0 dB = 0.877mW/g

SAR MEASUREMENT PLOT 9

Ambient Temperature	**20.8 Degrees Celsius**
Liquid Temperature	**20.4 Degrees Celsius**
Humidity	**41.0 %**





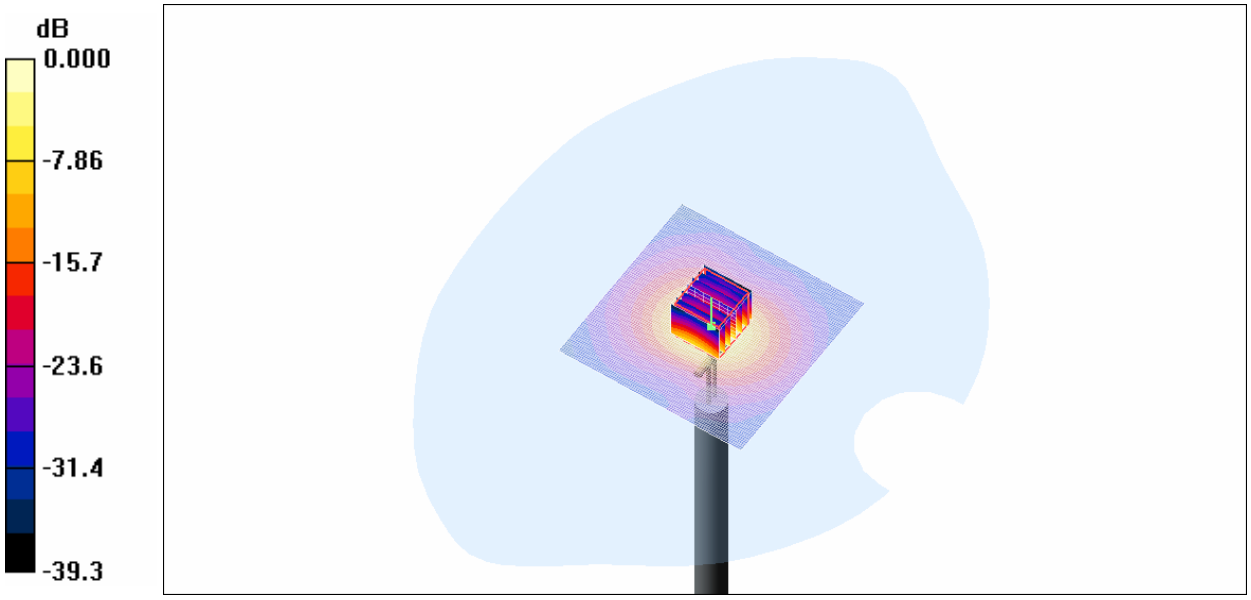


Test Date: 04 August 2008
File Name: Validation 5500MHz (DAE 442 Probe EX3DV4) 04-08-08.da4
DUT: Dipole 5200_5800 MHz; Type: D5GHzV2; Serial: 1008

* Communication System: CW 5500 MHz; Frequency: 5500 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5494.2 MHz; σ = 5.06 mho/m; ε_r = 35.1; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(4, 4, 4)
- 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) = 45.4 mW/g

Channel 1 Test/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 101.3 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 87.5 W/kg
SAR(1 g) = 21.3 mW/g; SAR(10 g) = 6.08 mW/g
Maximum value of SAR (measured) = 45.1 mW/g



0 dB = 45.1mW/g

SAR MEASUREMENT PLOT 10

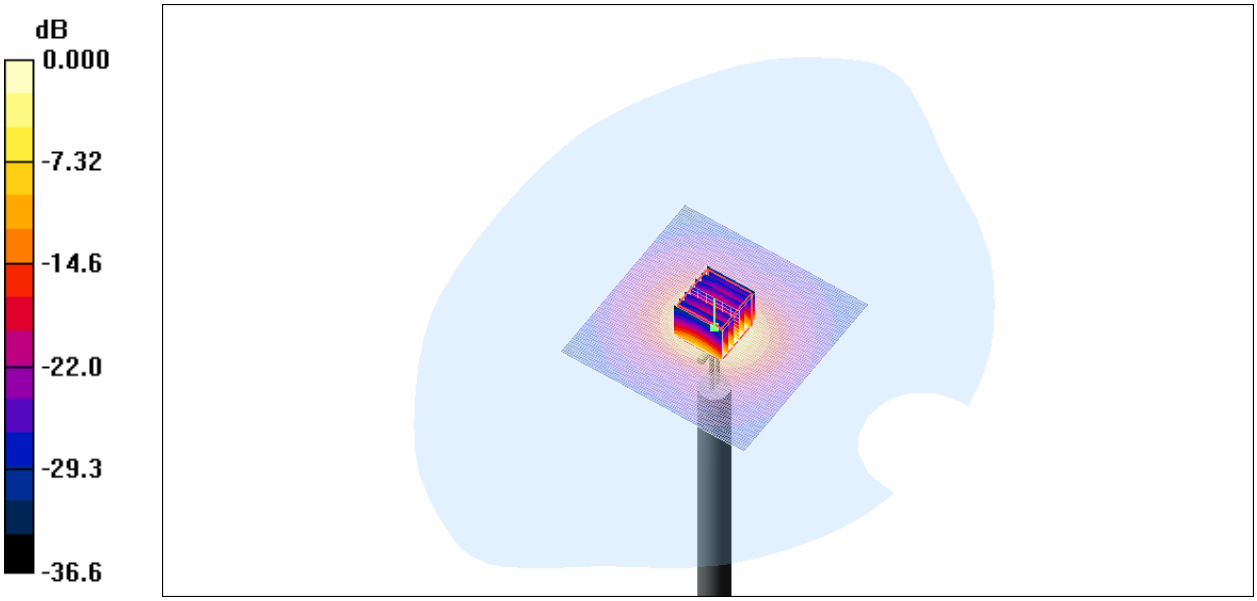
Ambient Temperature	**20.7 Degrees Celsius**
Liquid Temperature	**20.3 Degrees Celsius**
Humidity	**41.0 %**

Test Date: 05 August 2008
File Name: Validation 5200MHz (DAE 442 Probe EX3DV4) 05-08-08.da4
DUT: Dipole 5200_5800 MHz; Type: D5GHzV2; Serial: 1008

* Communication System: CW 5200 MHz; Frequency: 5200 MHz; Duty Cycle: 1:1
* Medium parameters used: f = 5202.2 MHz; σ = 4.67 mho/m; ε_r = 35.8; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(4.3, 4.3, 4.3)
- 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) = 48.1 mW/g

Channel 1 Test/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 106.1 V/m; Power Drift = 0.037 dB
Peak SAR (extrapolated) = 86.4 W/kg
SAR(1 g) = 22.4 mW/g; SAR(10 g) = 6.38 mW/g
Maximum value of SAR (measured) = 46.6 mW/g



0 dB = 46.6mW/g

SAR MEASUREMENT PLOT 11

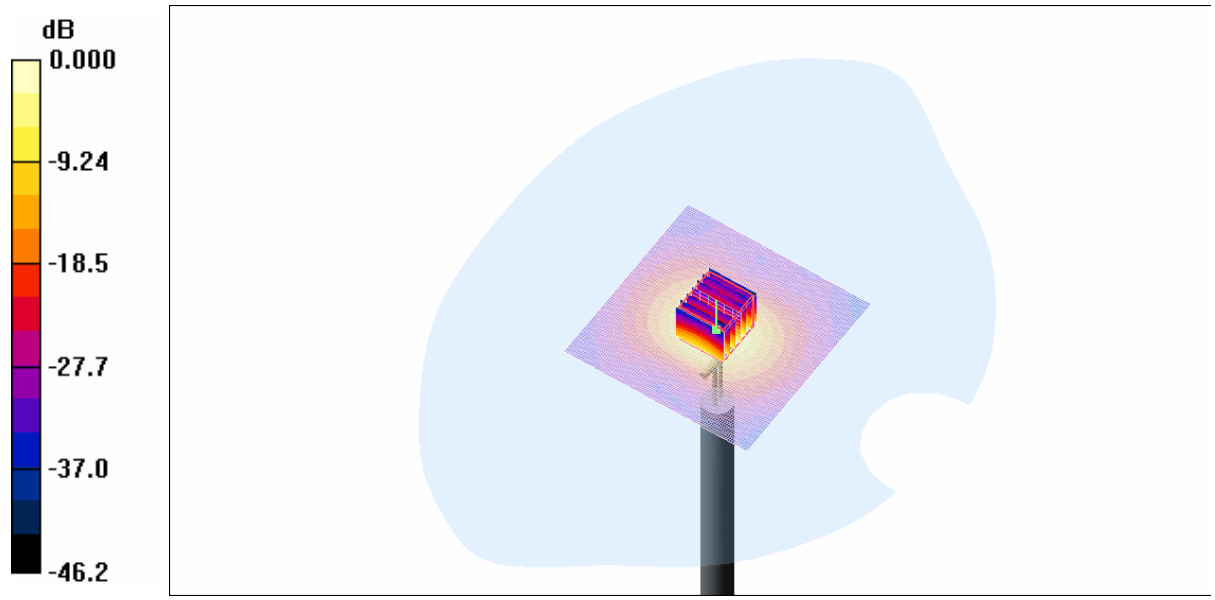
Ambient Temperature	**20.3 Degrees Celsius**
Liquid Temperature	**20.2 Degrees Celsius**
Humidity	**34.0 %**

Test Date: 13 August 2008
File Name: Validation 5800MHz (DAE 442 Probe EX3DV4) 13-08-08.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: f = 5800.8 MHz; σ = 5.35 mho/m; ε_r = 34.2; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.87, 3.87, 3.87)
- 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) = 47.8 mW/g

Channel 1 Test/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 99.9 V/m; Power Drift = 0.114 dB
Peak SAR (extrapolated) = 98.7 W/kg
SAR(1 g) = 22.5 mW/g; SAR(10 g) = 6.34 mW/g
Maximum value of SAR (measured) = 48.1 mW/g



0 dB = 48.1mW/g

SAR MEASUREMENT PLOT 12

Ambient Temperature	**20.8 Degrees Celsius**
Liquid Temperature	**20.4 Degrees Celsius**
Humidity	**41.0 %**