

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

1. Test Position	2. Plot No.	3. Antenna	4. Test Channel
*Notebook	1	A	06
* Notebook	2	B	06
Notebook	3	A	06
	4	B	01
	5	B	06
	6	B	11
Z-Axis graphs for Plots 3 to 6			
Notebook with Bluetooth On	7	B	11
Z-Axis graphs for Plot 7			

Table: 2450 MHz OFDM Band SAR Measurement Plot Numbers

1. Test Position	2. Plot No.	3. Antenna	4. Test Channel
Notebook	8	B	06
Z-Axis graphs for Plot 8			

Table: 2450MHz Validation Plot

Plot 9	Validation 2450 MHz 18 th October 2006
Z-Axis graphs for Plot 9	

Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna A Bluetooth Off Prescan 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

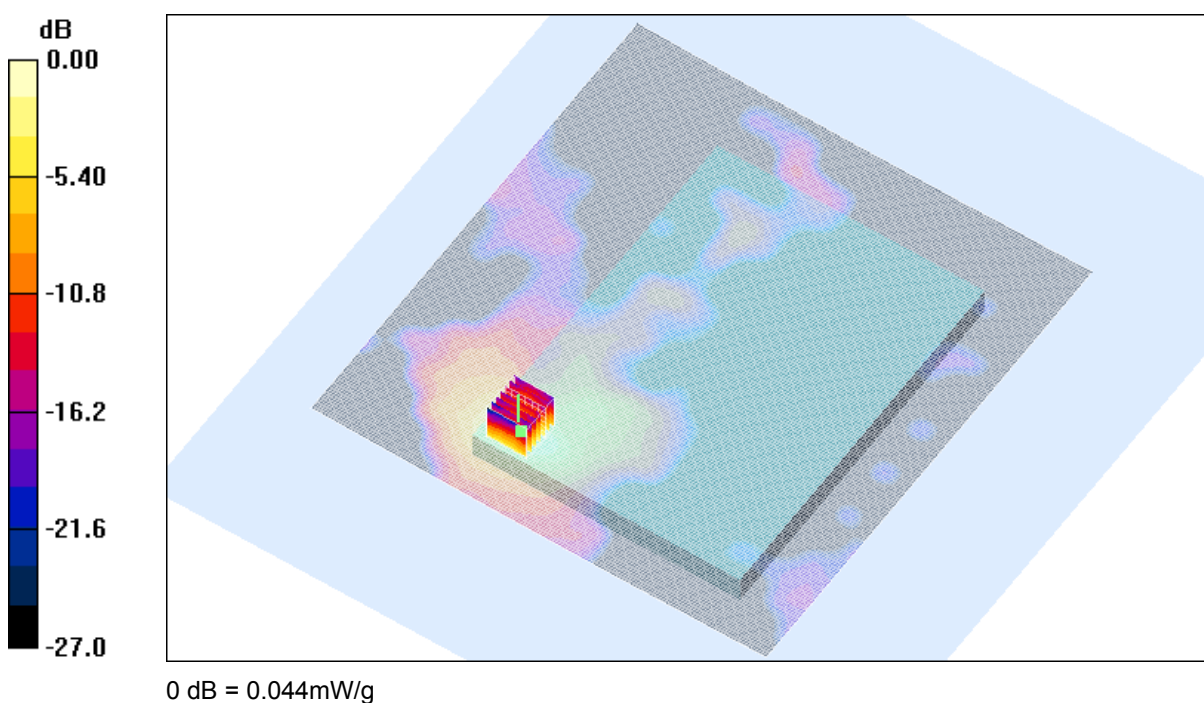
* Medium parameters used: $\sigma = 1.9096$ mho/m, $\epsilon_r = 51.7714$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 06 Test/Area Scan (171x181x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.037 mW/g



SAR MEASUREMENT PLOT 1

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna B Bluetooth On Prescan 18-10-06.da4](#)

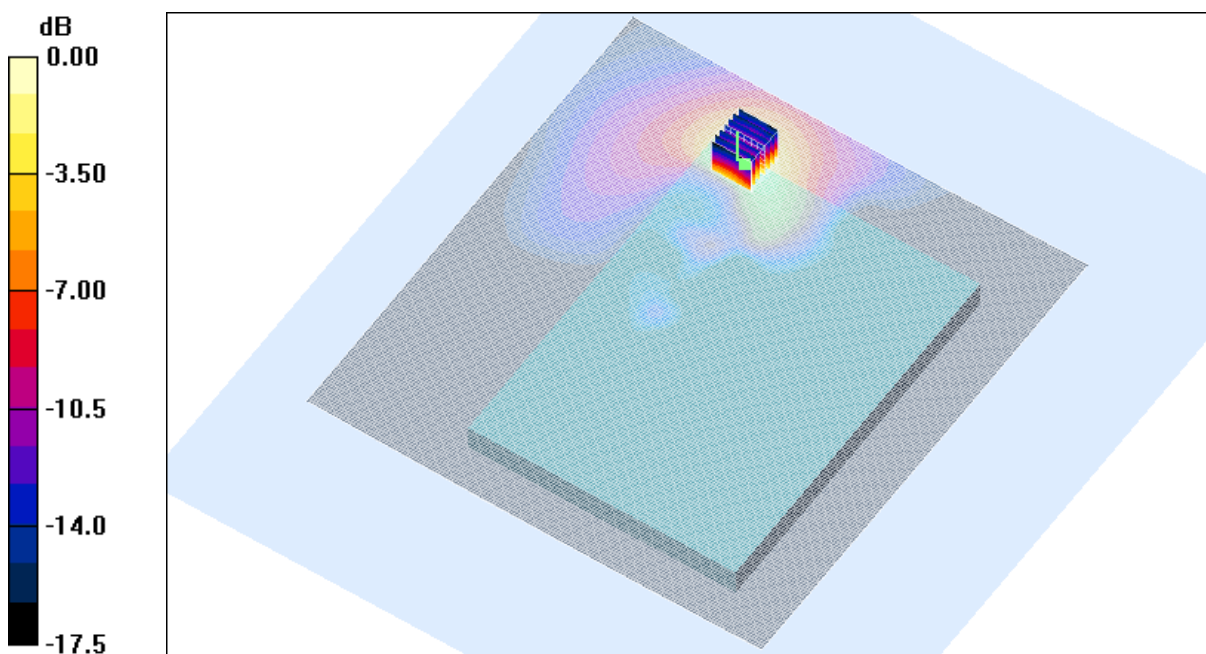
DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

* Medium parameters used: $\sigma = 1.9096$ mho/m, $\epsilon_r = 51.7714$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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



0 dB = 0.186mW/g

SAR MEASUREMENT PLOT 2

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

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Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna A Bluetooth Off 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

* Medium parameters used: $\sigma = 1.9096$ mho/m, $\epsilon_r = 51.7714$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 06 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.046 mW/g

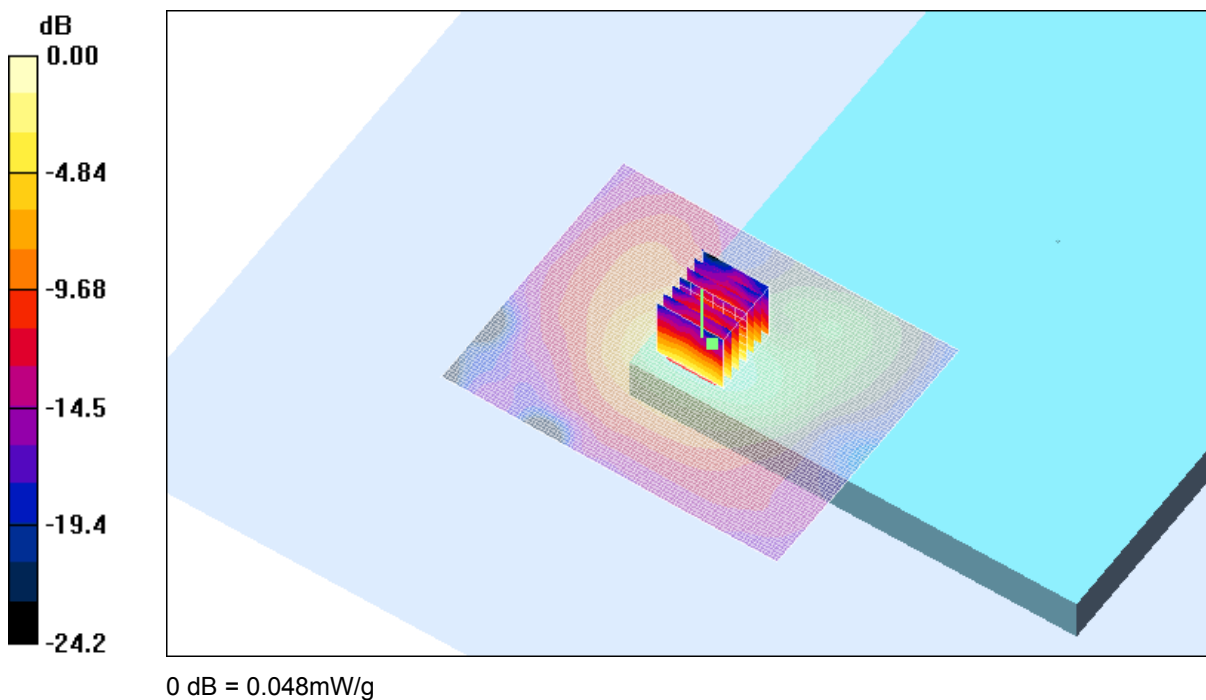
Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.24 V/m; Power Drift = 0.103 dB

Peak SAR (extrapolated) = 0.079 W/kg

SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.048 mW/g



SAR MEASUREMENT PLOT 3

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna B Bluetooth Off 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

* Medium parameters used: $\sigma = 1.86669$ mho/m, $\epsilon_r = 51.8808$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 01 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.210 mW/g

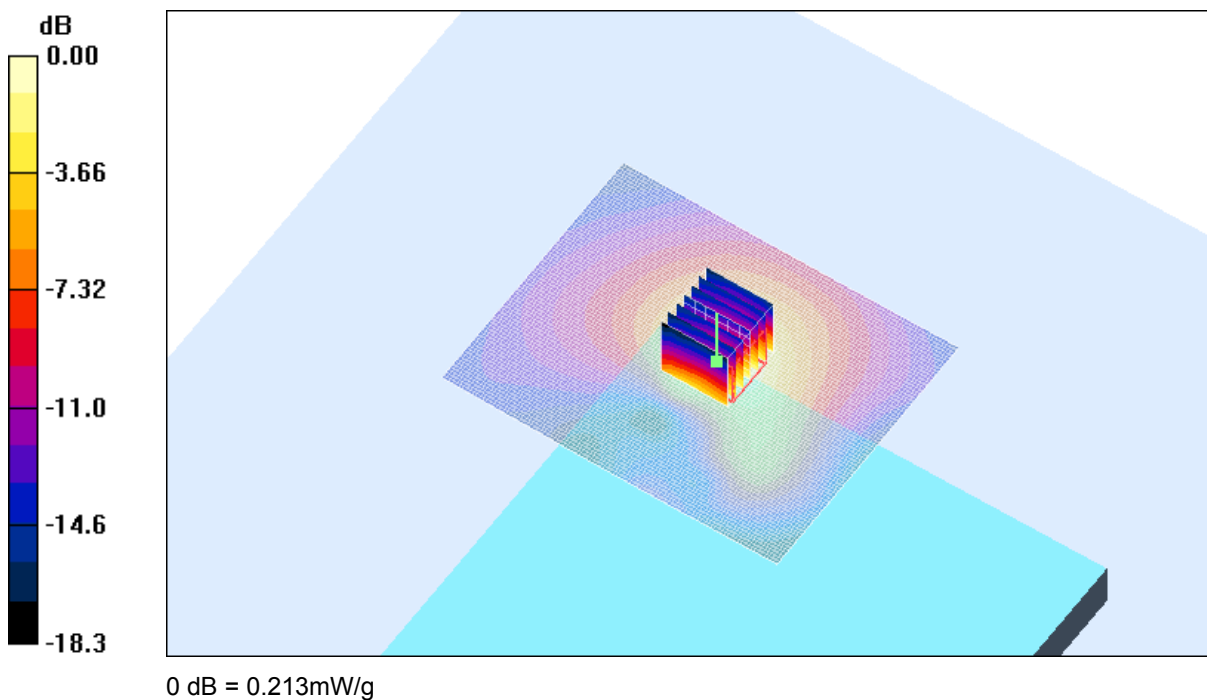
Channel 01 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.106 mW/g

Maximum value of SAR (measured) = 0.213 mW/g



SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna B Bluetooth Off 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

* Medium parameters used: $\sigma = 1.9096$ mho/m, $\epsilon_r = 51.7714$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 06 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.203 mW/g

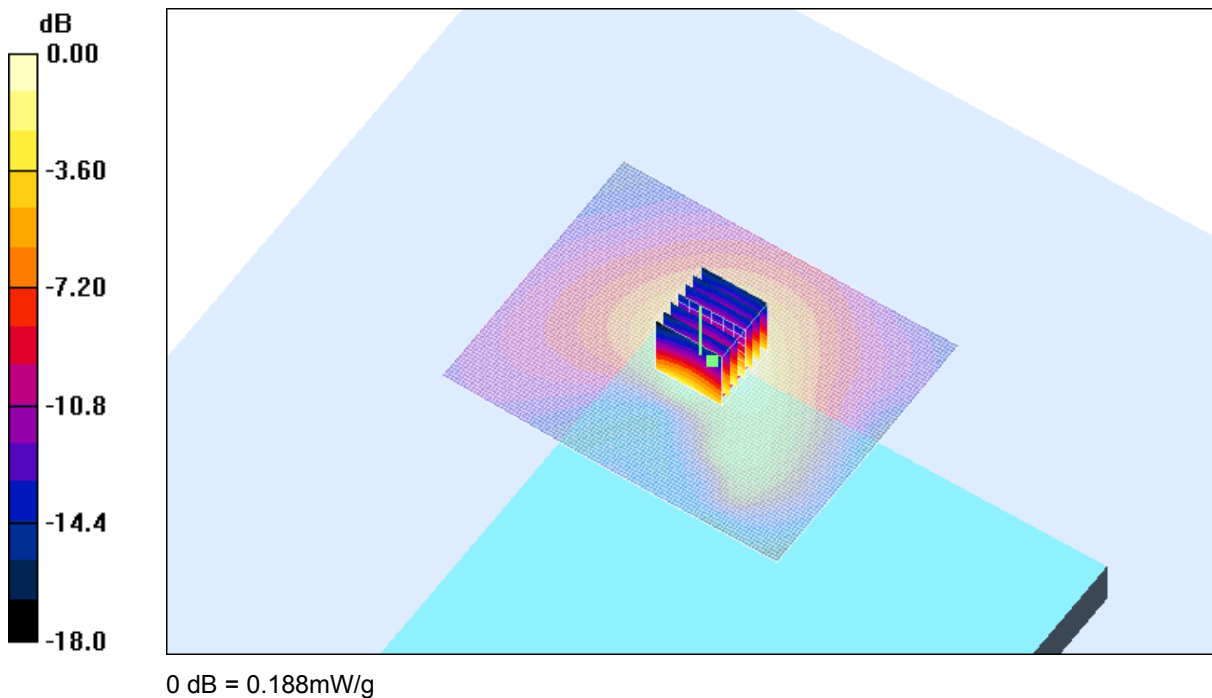
Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.0 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.334 W/kg

SAR(1 g) = 0.175 mW/g; SAR(10 g) = 0.097 mW/g

Maximum value of SAR (measured) = 0.188 mW/g



SAR MEASUREMENT PLOT 5

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna B Bluetooth Off 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

* Medium parameters used: $\sigma = 1.95011$ mho/m, $\epsilon_r = 51.6383$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 11 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.248 mW/g

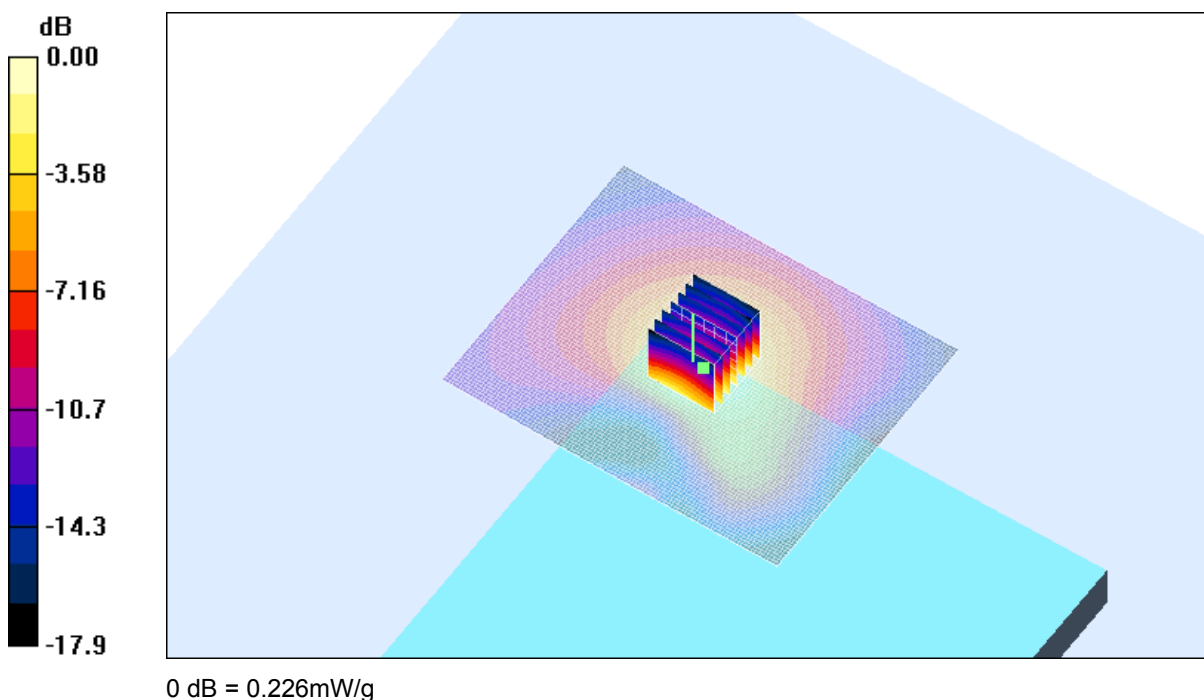
Channel 11 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.0 V/m; Power Drift = -0.232 dB

Peak SAR (extrapolated) = 0.399 W/kg

SAR(1 g) = 0.212 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.226 mW/g

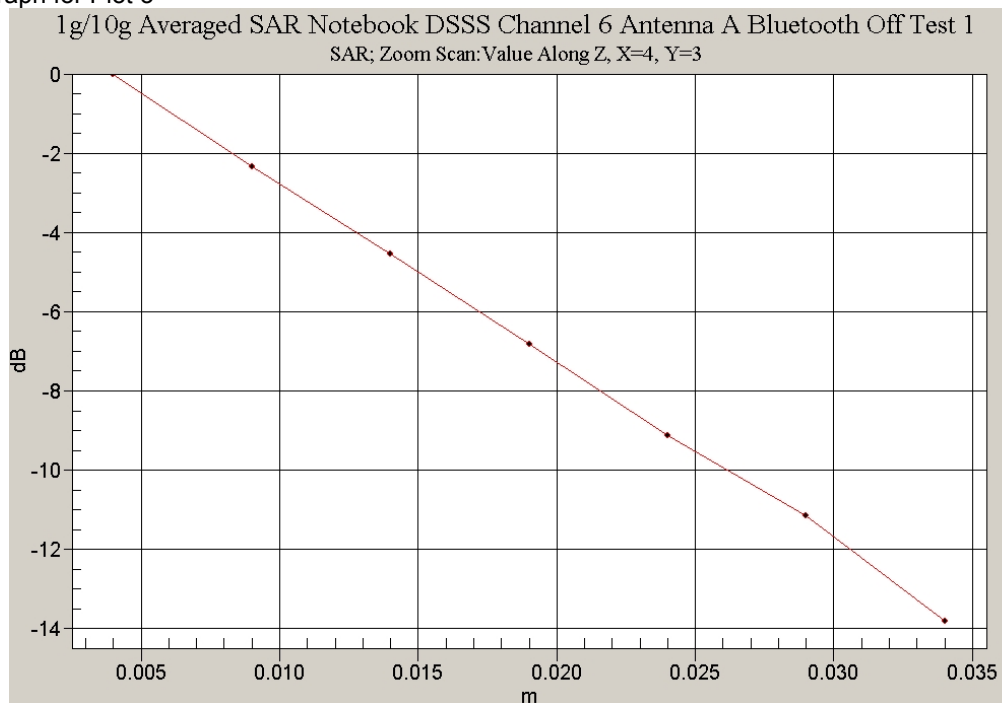


SAR MEASUREMENT PLOT 6

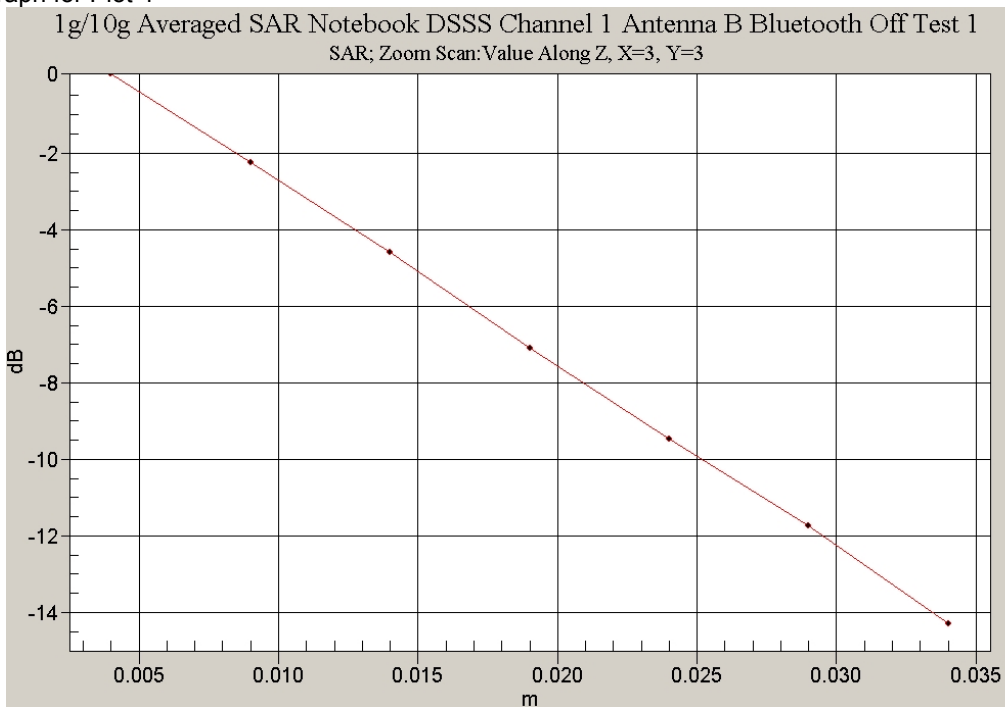
Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

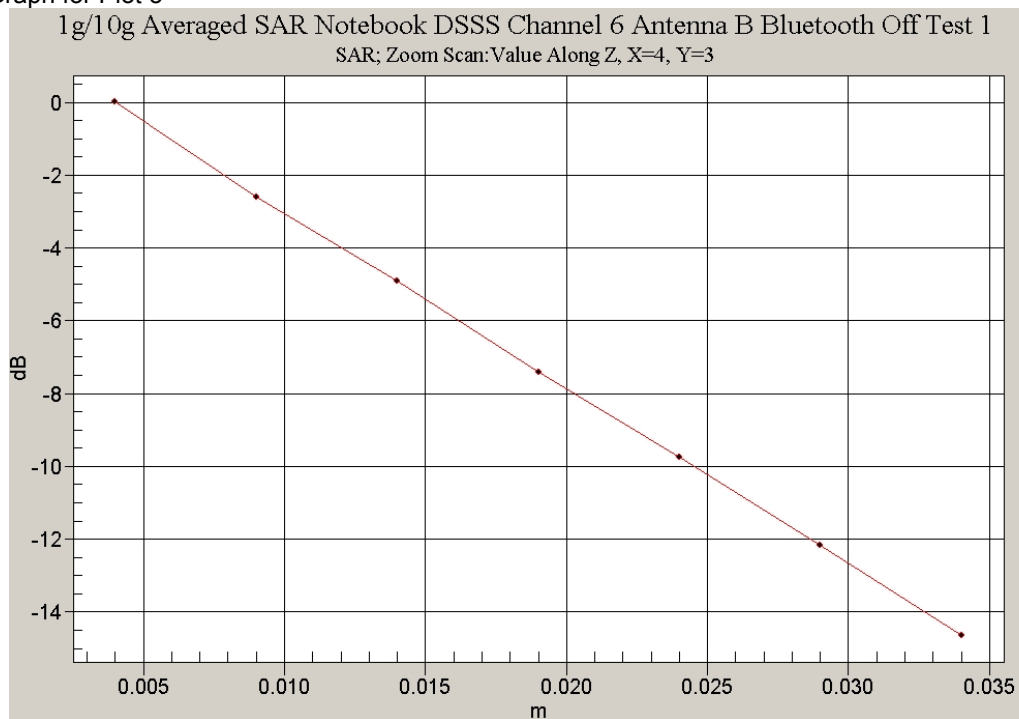
Z-Axis Graph for Plot 3



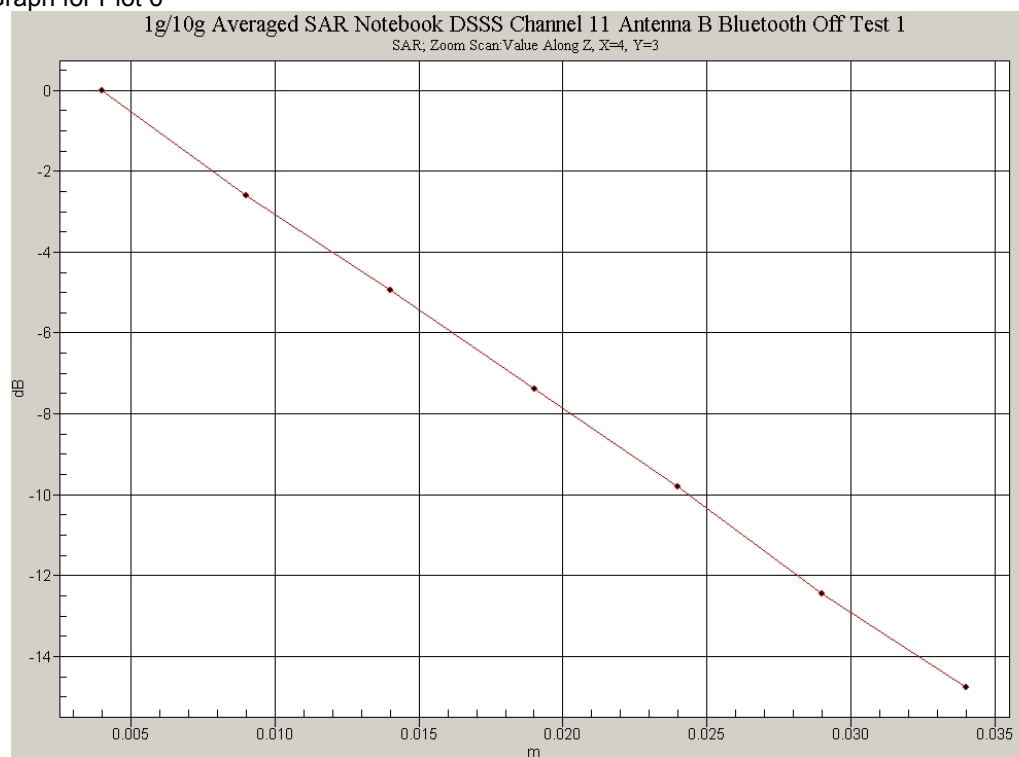
Z-Axis Graph for Plot 4



Z-Axis Graph for Plot 5



Z-Axis Graph for Plot 6



Test Date: 18 October 2006

File Name: [Notebook DSSS 2.45 GHz Antenna B Bluetooth On 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

* Medium parameters used: $\sigma = 1.95011$ mho/m, $\epsilon_r = 51.6383$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 11 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.195 mW/g

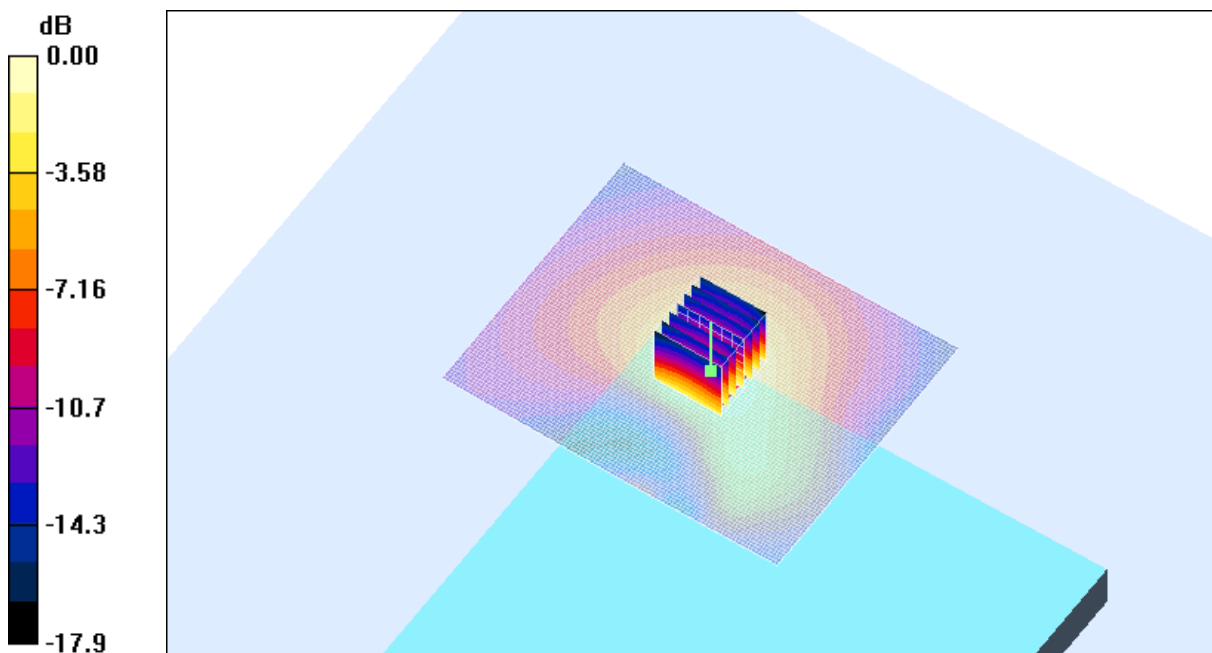
Channel 11 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.176 mW/g; SAR(10 g) = 0.100 mW/g

Maximum value of SAR (measured) = 0.189 mW/g



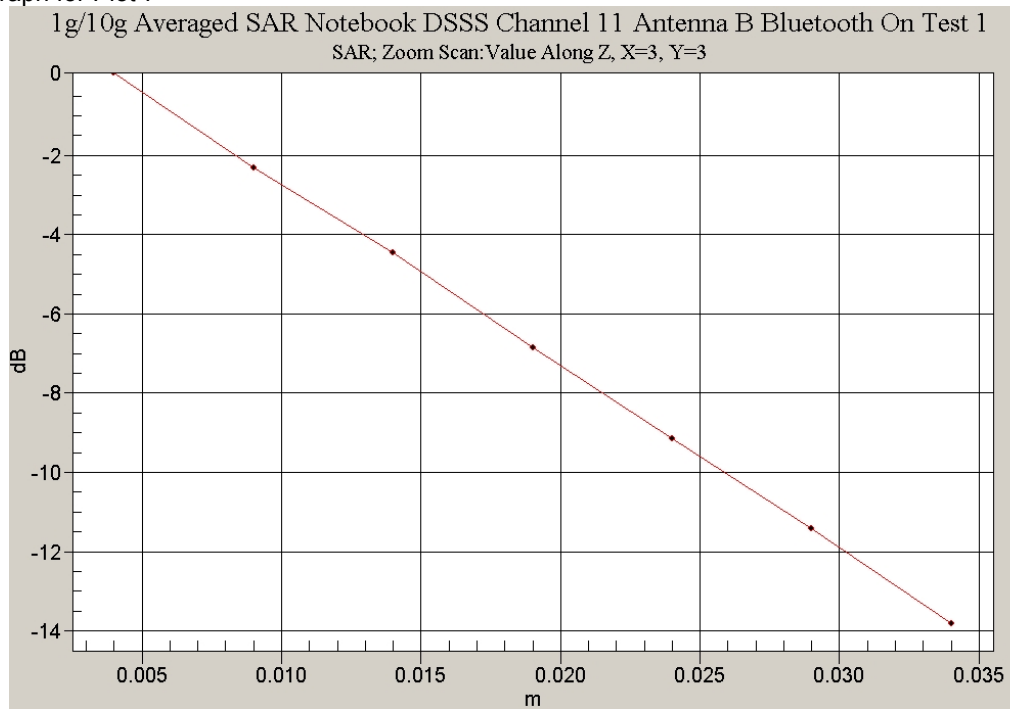
0 dB = 0.189mW/g

SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Z-Axis Graph for Plot 7



Test Date: 18 October 2006

File Name: [Notebook OFDM 2.45 GHz Antenna B Bluetooth Off 18-10-06.da4](#)

DUT: Fujitsu Notebook Mistletoe with 11abg WLAN; Type: XB62; Serial: MAC: 0011F5-D8250F

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

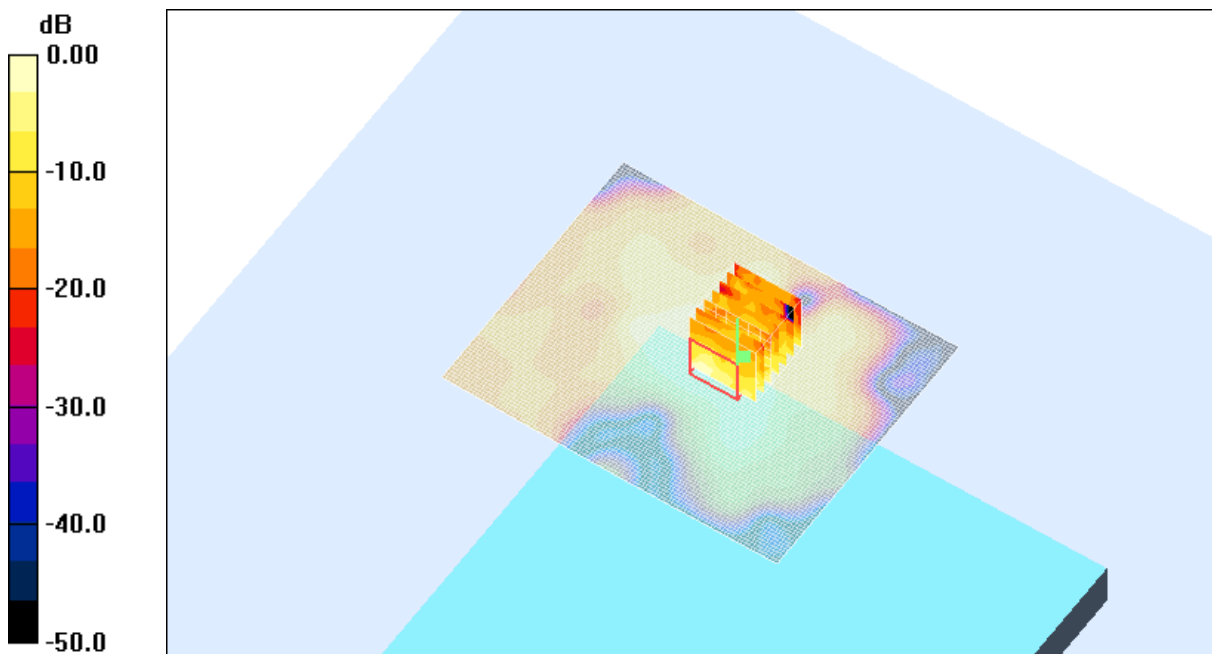
* Medium parameters used: $\sigma = 1.9096$ mho/m, $\epsilon_r = 51.7714$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.2, 4.2, 4.2)

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

Channel 06 Test/Area Scan (101x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.015 mW/g

Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.53 V/m; Power Drift = 0.419 dB
Peak SAR (extrapolated) = 0.030 W/kg
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00592 mW/g
Maximum value of SAR (measured) = 0.019 mW/g



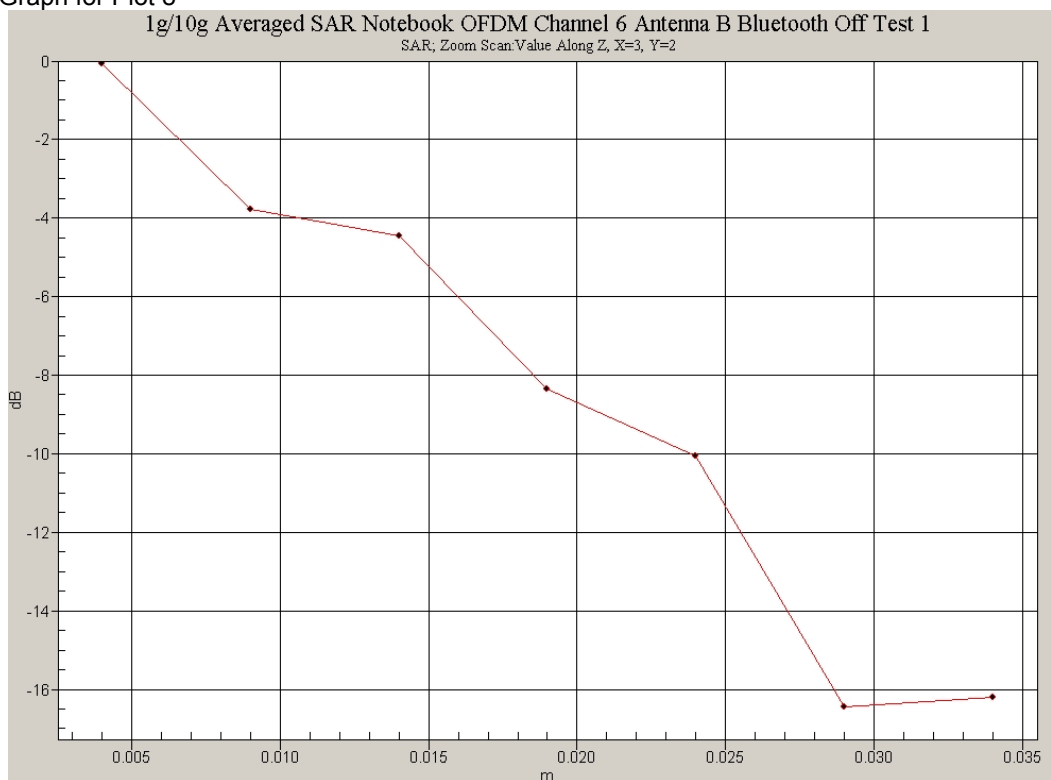
0 dB = 0.019mW/g

SAR MEASUREMENT PLOT 8

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Z-Axis Graph for Plot 8



Test Date: 18 October 2006

File Name: [Validation 2450 MHz \(DAE359 Probe1377\) 18-10-06.da4](#)

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

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

* Medium parameters used: $\sigma = 1.75662$ mho/m, $\epsilon_r = 40.04$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1377; ConvF(4.49, 4.49, 4.49)

- 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) = 16.2 mW/g

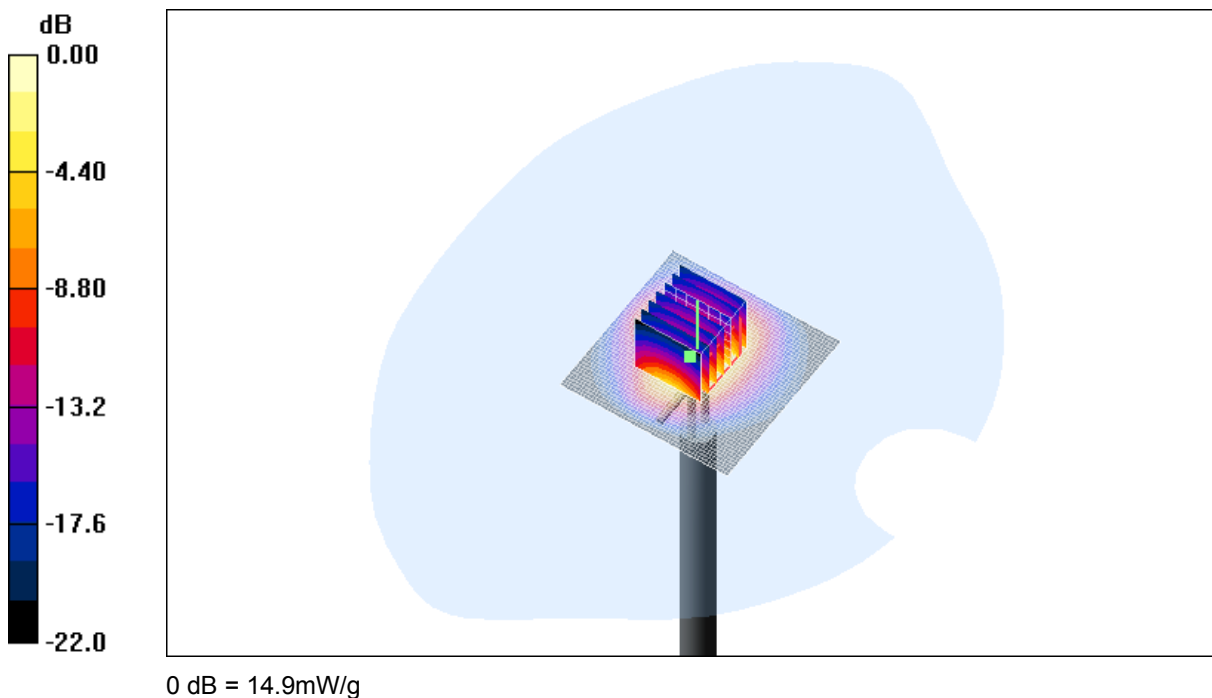
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.2 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.35 mW/g

Maximum value of SAR (measured) = 14.9 mW/g

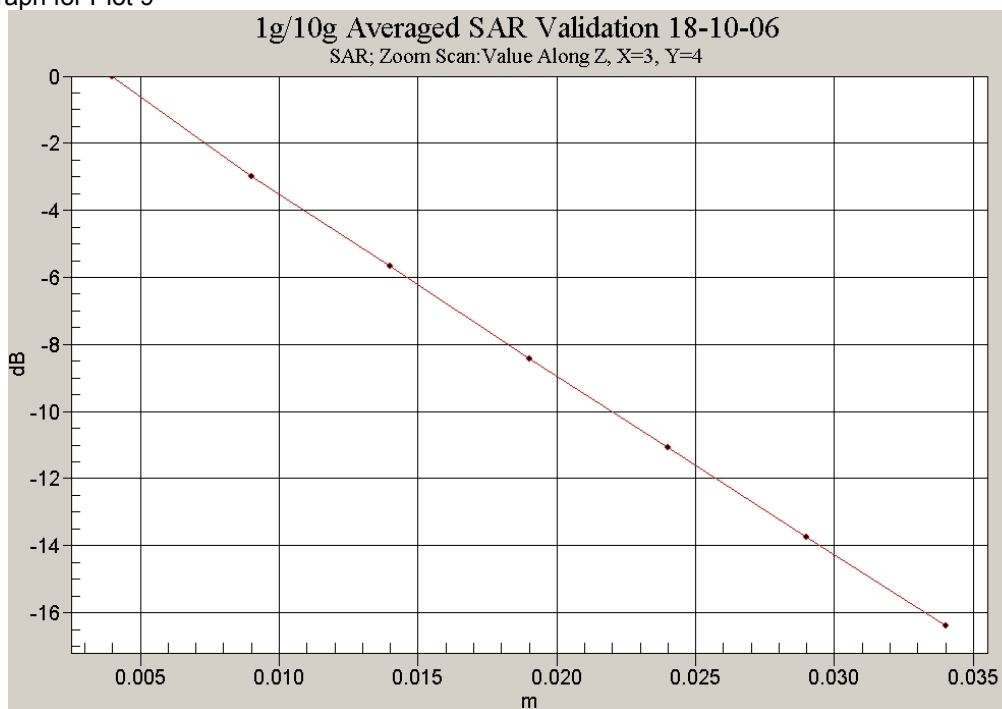


SAR MEASUREMENT PLOT 9

Ambient Temperature
Liquid Temperature
Humidity

21.4 Degrees Celsius
21.2 Degrees Celsius
52.0 %

Z-Axis Graph for Plot 9



APPENDIX C

SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

1. 2450MHz E-Field Probe Calibration Sheet
2. 2.5GHz Dipole Calibration Sheet