

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 23: 2450 MHz DSSS Band SAR Measurement Plot Numbers

Plot 1	Tablet Position No Blue tooth CH#01	Page 28
Plot 2	Tablet Position No Blue tooth CH#06	Page 29 – 30
Plot 3	Tablet Position No Blue tooth CH#11	Page 31
Z-Axis Graphs	Z-Axis graphs for Plots 1 to 3	Page 32
Plot 4	Tablet Position With Blue tooth BTCH#2402	Page 33
Plot 5	Tablet Position With Blue tooth BTCH#2441	Page 34
Plot 6	Tablet Position With Blue tooth BTCH#2441	Page 35 – 36
Z-Axis Graphs	Z-Axis graphs for Plots 4 to 6	Page 37
Plot 7	Arm Held Position With Blue Tooth BTCH#2441	Page 38
Z-Axis Graphs	Z-Axis graphs for Plots 7 to 9	Page 39
Plot 8	Tablet Position – OFDM – No Bluetooth	Page 40
Plot 9	Validation 22 nd June 2004	Page 41
Plot 10	Validation 23 rd June 2004	Page 42
Z-Axis Graphs	Z-Axis graphs for Plots 9 to 10	Page 43

Test Date: 23 June 2004

File Name: [Tablet DSSS 2.45 GHz No Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 1.96864$; mho/m, $\epsilon_r = 50.9145$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

- 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

Reference Value = 12.7 V/m; Power Drift = 0.0 dB

Maximum value of SAR (interpolated) = 0.593 mW/g

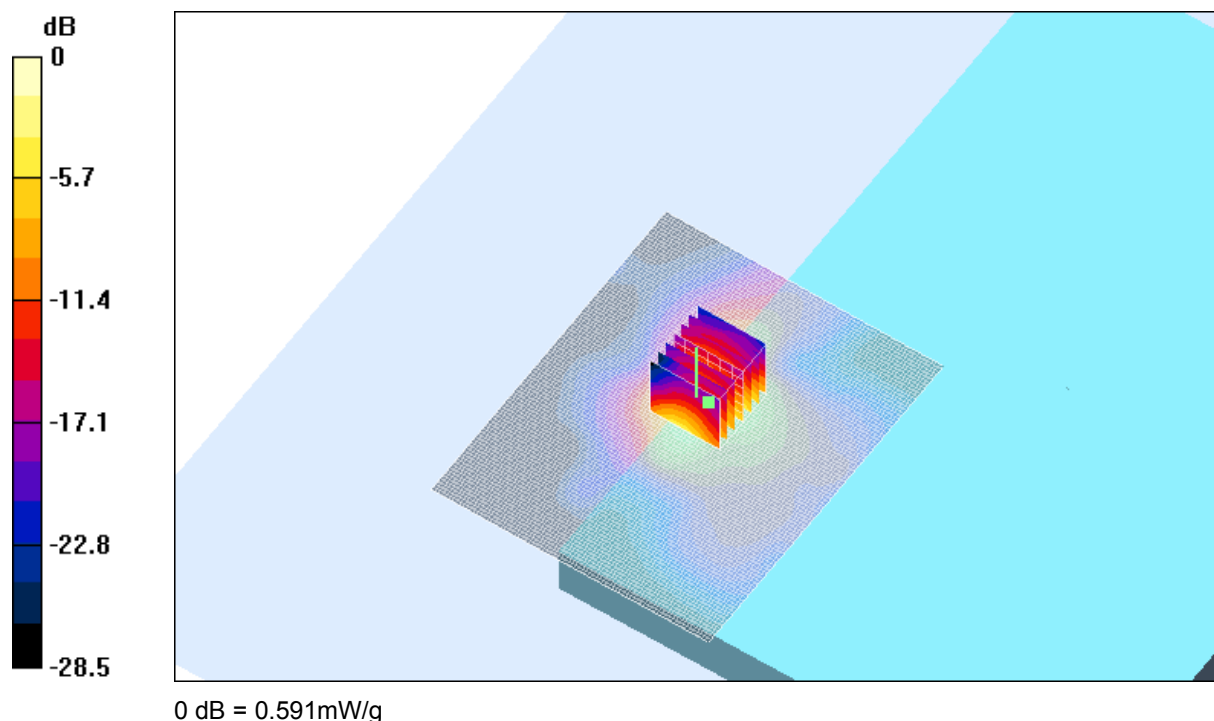
Channel 01 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = 0.0 dB

Maximum value of SAR (measured) = 0.591 mW/g

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.529 mW/g; SAR(10 g) = 0.230 mW/g



SAR MEASUREMENT PLOT 1

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Test Date: 23 June 2004

File Name: [Tablet DSSS 2.45 GHz No Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 2.00136$; mho/m, $\epsilon_r = 50.7994$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

- 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

Reference Value = 12.1 V/m; Power Drift = 0.2 dB

Maximum value of SAR (interpolated) = 0.529 mW/g

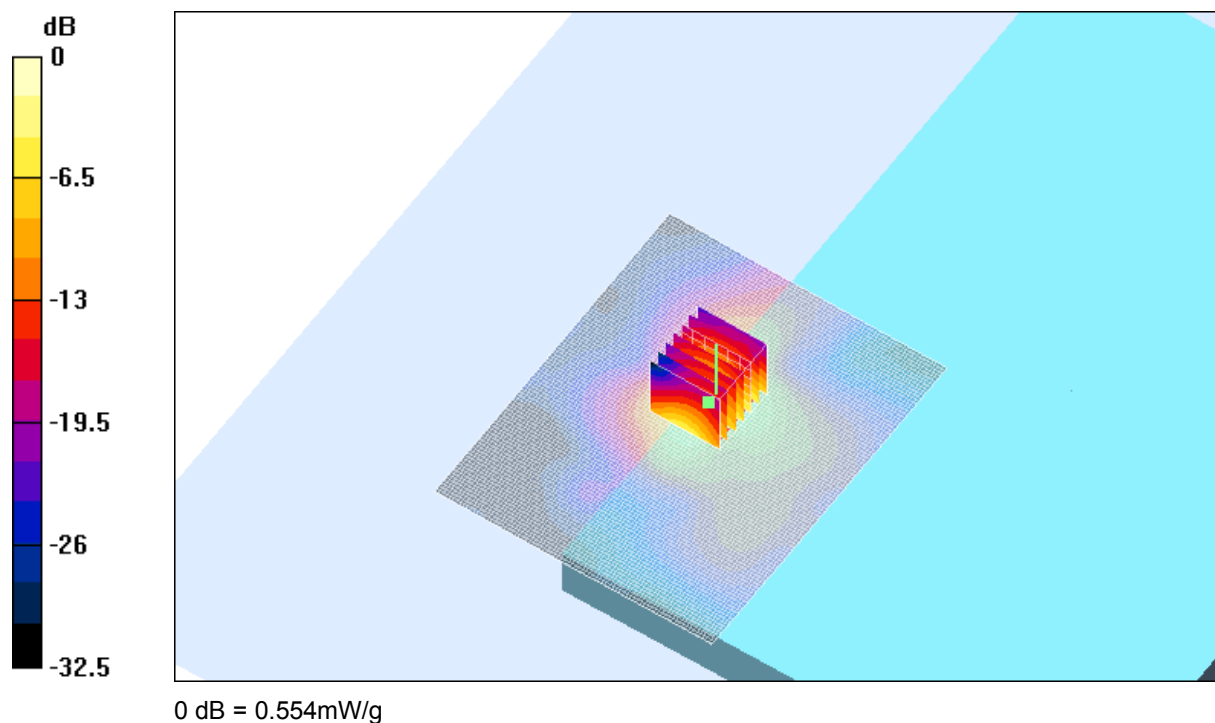
Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

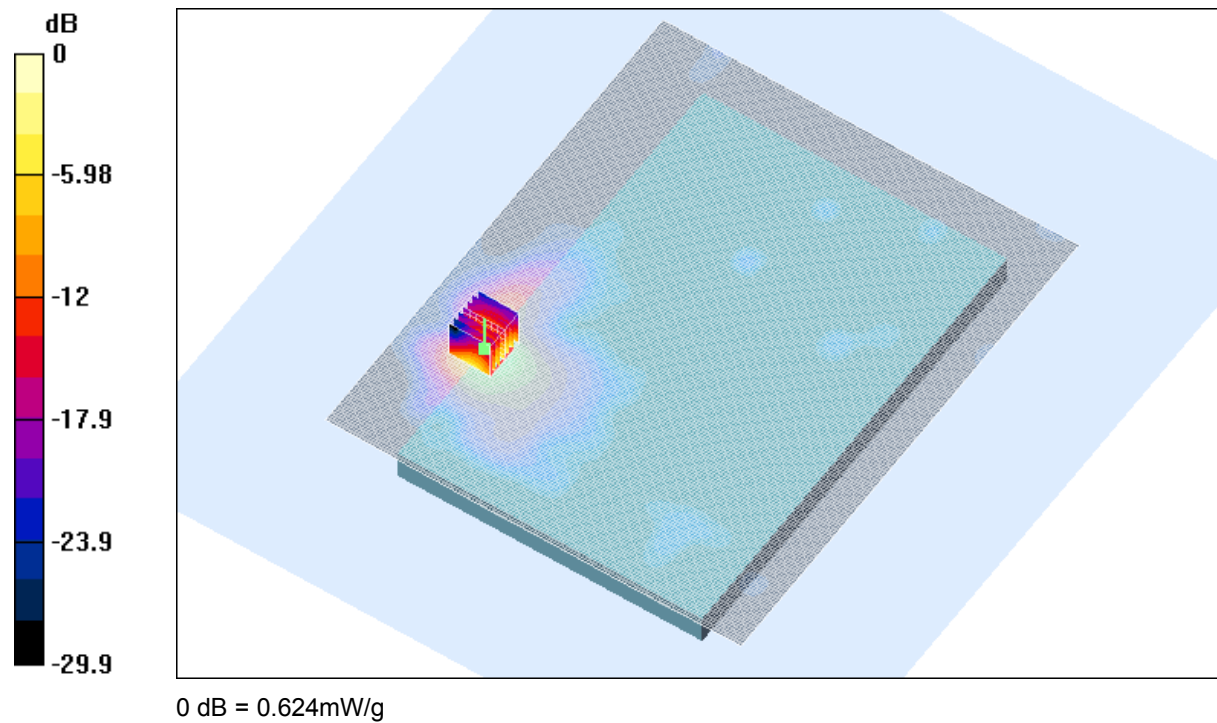
Reference Value = 12.1 V/m; Power Drift = 0.2 dB

Maximum value of SAR (measured) = 0.554 mW/g

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.488 mW/g; SAR(10 g) = 0.210 mW/g



**SAR MEASUREMENT PLOT 2**

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Test Date: 23 June 2004

File Name: [Tablet DSSS 2.45 GHz No Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 2.03504$; mho/m, $\epsilon_r = 50.6298$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

- 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

Reference Value = 14.4 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 0.589 mW/g

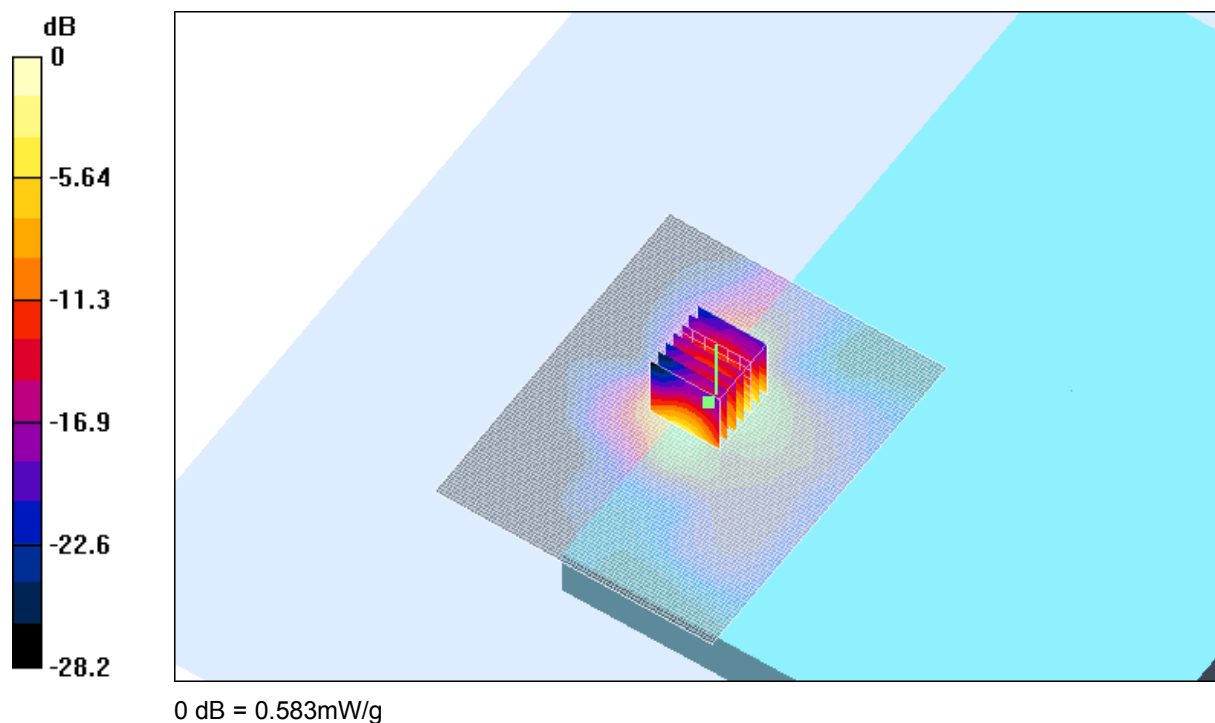
Channel 11 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.583 mW/g

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.227 mW/g

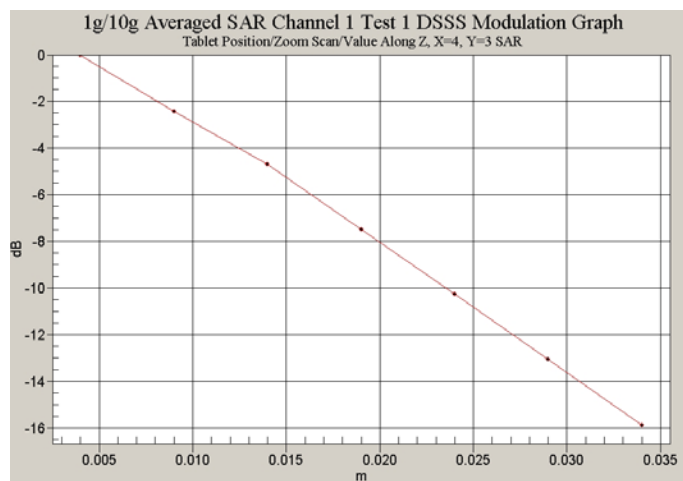


SAR MEASUREMENT PLOT 3

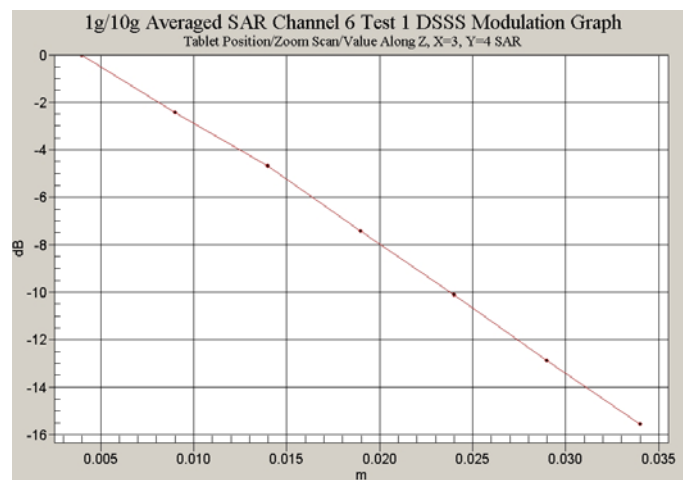
Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

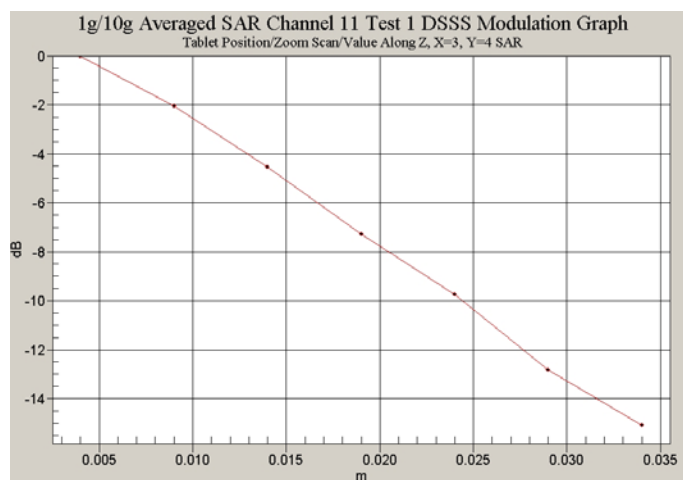
Z-Axis graph for Plot 1



Z-Axis graph for Plot 2



Z-Axis graph for Plot 3



Test Date: 23 June 2004

File Name: [Tablet DSSS 2.45 GHz With Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 1.96864$; mho/m, $\epsilon_r = 50.9145$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

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

Channel 01 Bluetooth Frequency 2402 MHz Test/Area Scan (101x81x1):

Measurement grid: dx=15mm, dy=15mm

Reference Value = 12.6 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 0.707 mW/g

Channel 01 Bluetooth Frequency 2402 MHz Test/Zoom Scan (7x7x7)/Cube 0:

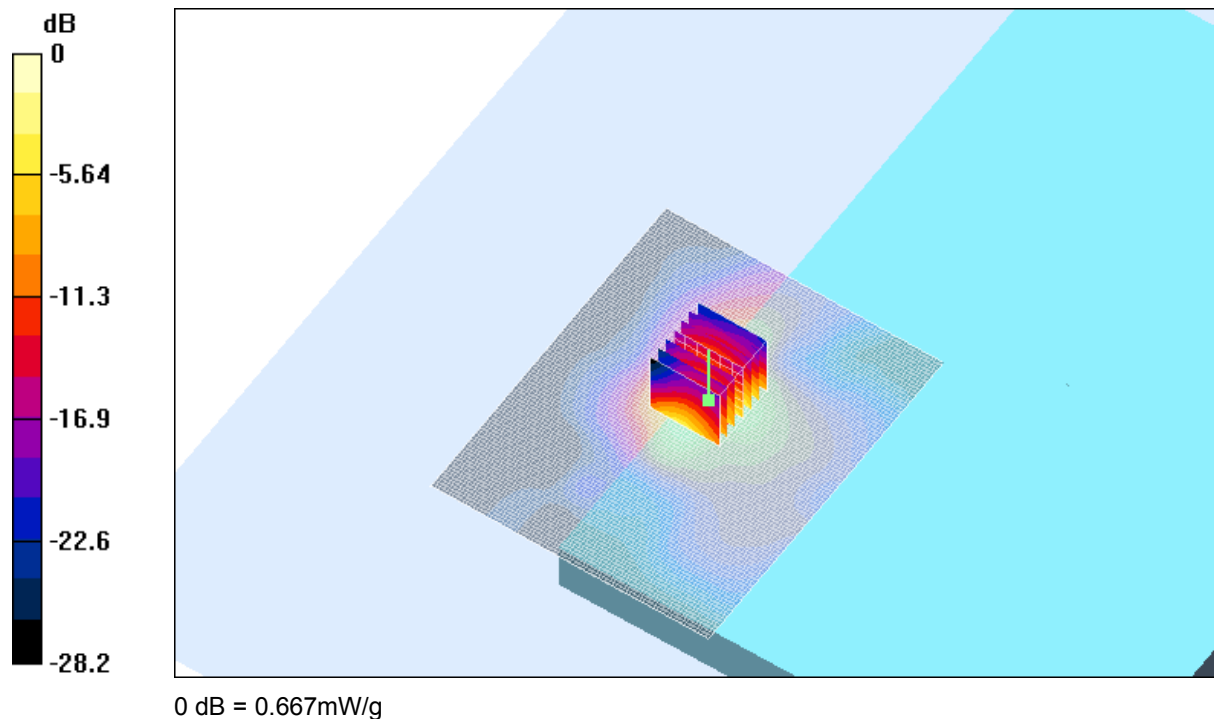
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.6 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.667 mW/g

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.601 mW/g; SAR(10 g) = 0.260 mW/g



SAR MEASUREMENT PLOT 4

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Test Date: 23 June 2004

File Name: [Tablet DSSS 2.45 GHz With Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 1.96864$; mho/m, $\epsilon_r = 50.9145$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

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

Channel 01 Bluetooth Frequency 2441 MHz Test/Area Scan (101x81x1):

Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.704 mW/g

Channel 01 Bluetooth Frequency 2441 MHz Test/Zoom Scan (7x7x7)/Cube 0:

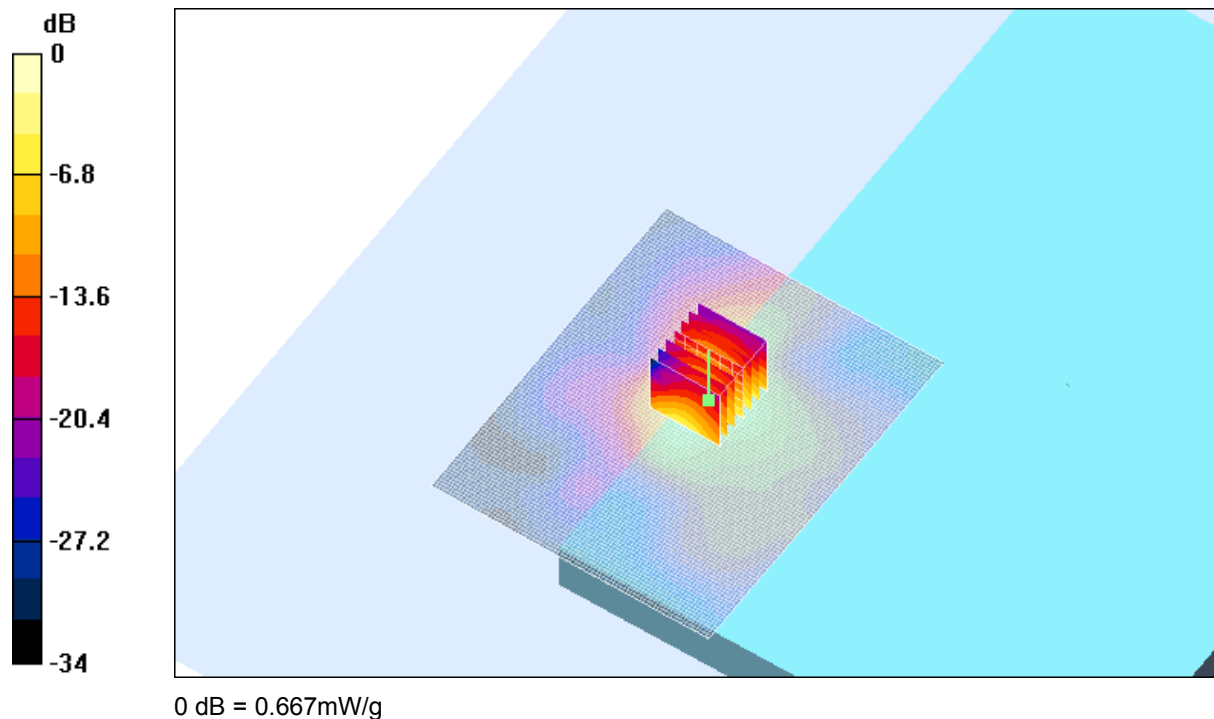
Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Maximum value of SAR (measured) = 0.667 mW/g

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.603 mW/g; SAR(10 g) = 0.259 mW/g



SAR MEASUREMENT PLOT 5

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Test Date: 23 June 2004

File Name: [Tablet DSSS 2.45 GHz With Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 1.96864$; mho/m, $\epsilon_r = 50.9145$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

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

Channel 01 Bluetooth Frequency 2480 MHz Test/Area Scan (101x81x1):

Measurement grid: dx=15mm, dy=15mm

Reference Value = 12.4 V/m; Power Drift = 0.006 dB

Maximum value of SAR (interpolated) = 0.710 mW/g

Channel 01 Bluetooth Frequency 2480 MHz Test/Zoom Scan (7x7x7)/Cube 0:

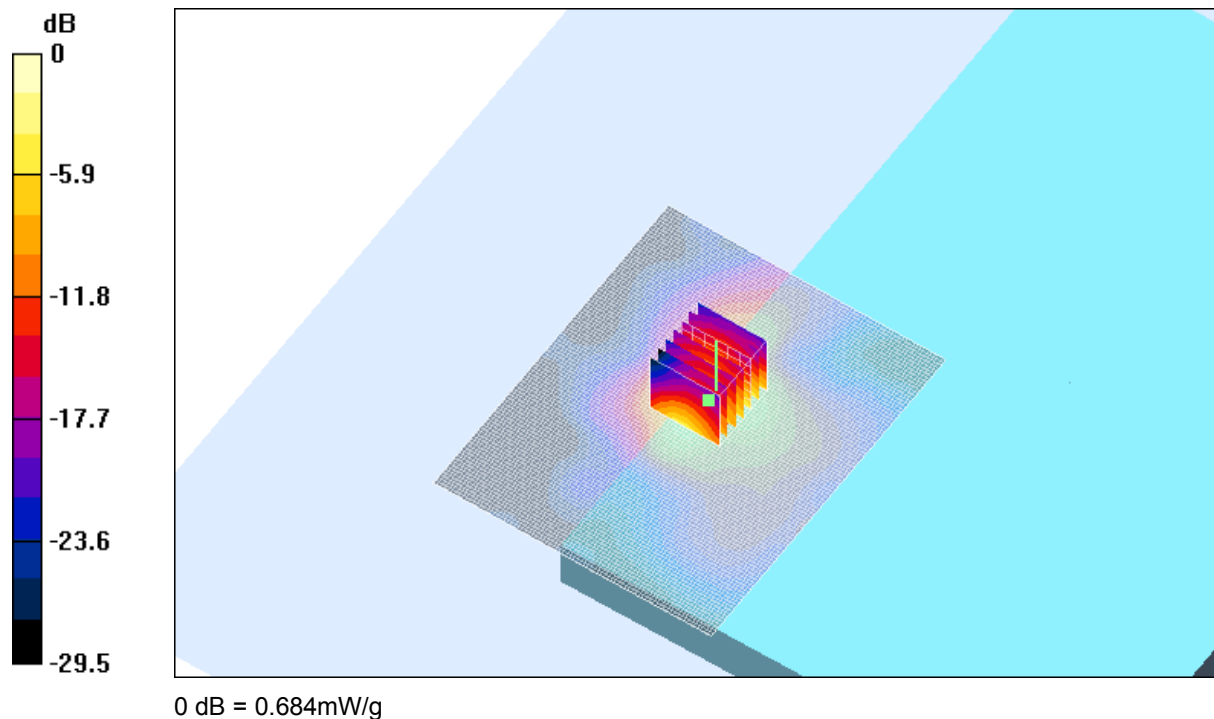
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.4 V/m; Power Drift = 0.006 dB

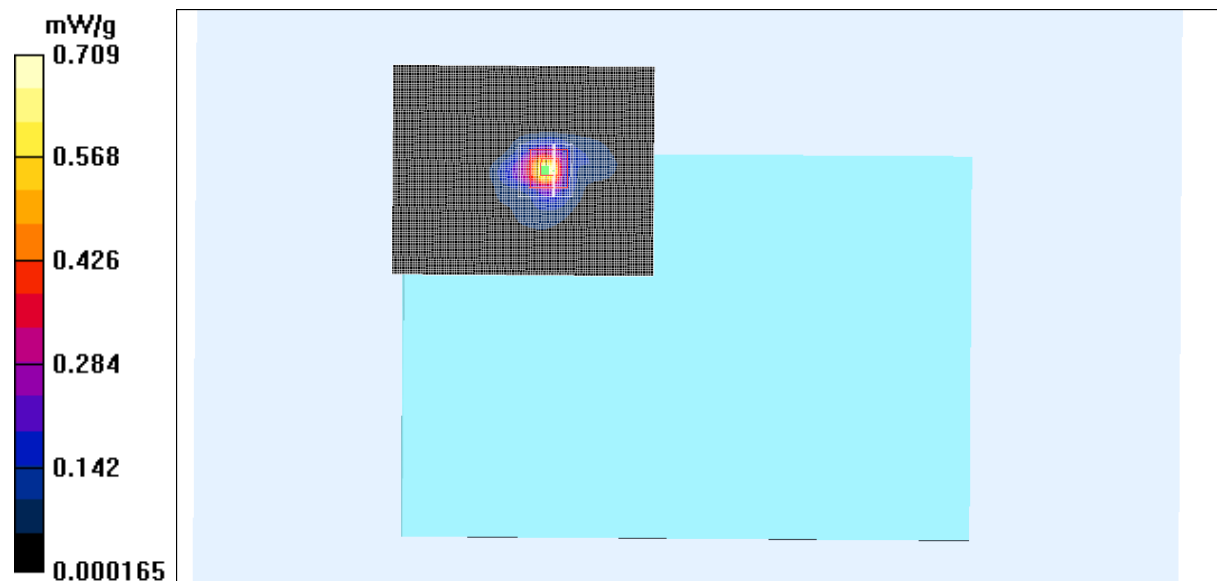
Maximum value of SAR (measured) = 0.684 mW/g

Peak SAR (extrapolated) = 1.31 W/kg

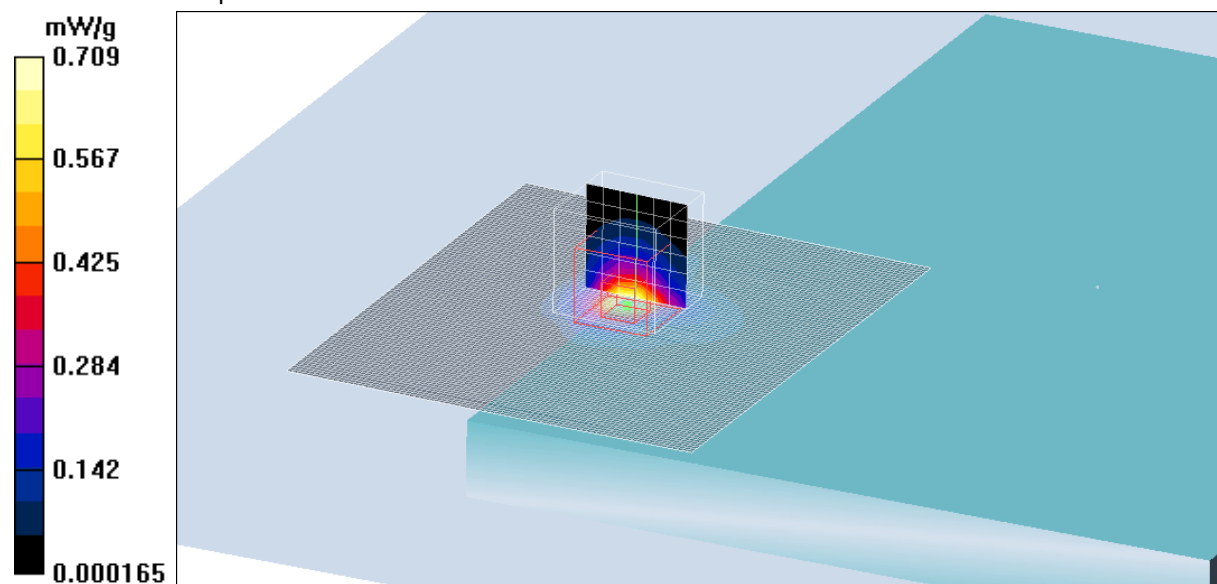
SAR(1 g) = 0.606 mW/g; SAR(10 g) = 0.259 mW/g



2D Area Scan



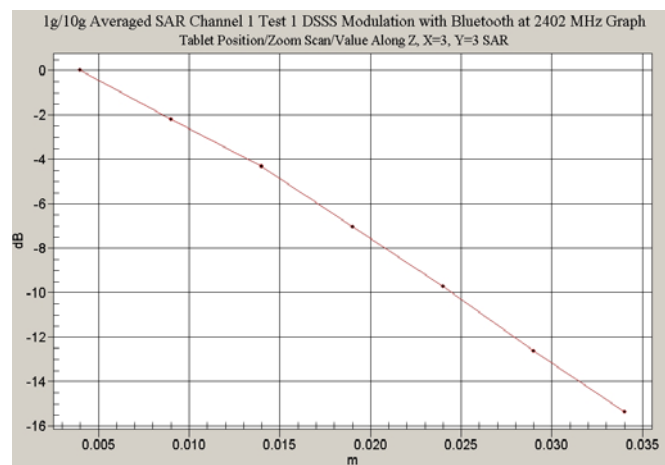
Zoom scan slice in plane of maximum SAR

**SAR MEASUREMENT PLOT 6**

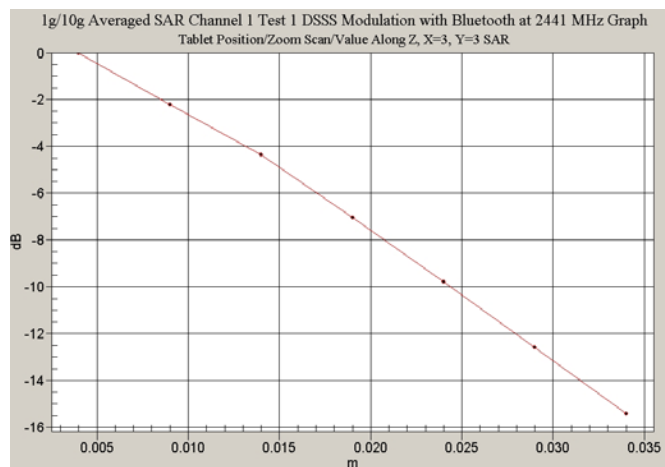
Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

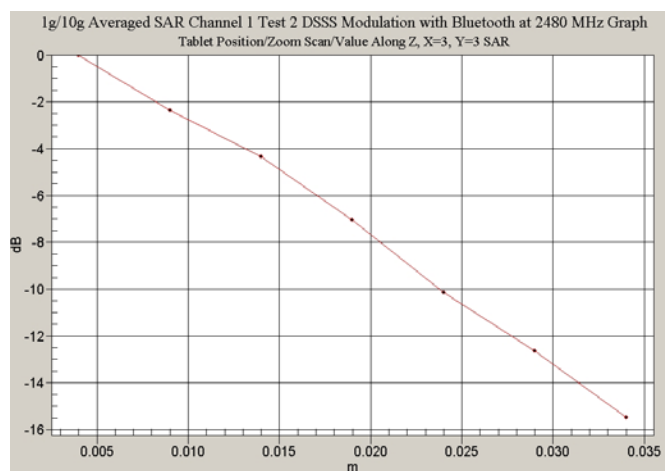
Z-Axis graph for Plot 4



Z-Axis graph for Plot 5



Z-Axis graph for Plot 6



Test Date: 23 June 2004

File Name: [Arm Held DSSS 2.45 GHz With Bluetooth Batt 4400MAh Prescan.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 1.96864$; mho/m, $\epsilon_r = 50.9145$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

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

Channel 06 Test/Area Scan (151x181x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 2.98 V/m; Power Drift = -0.5 dB

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

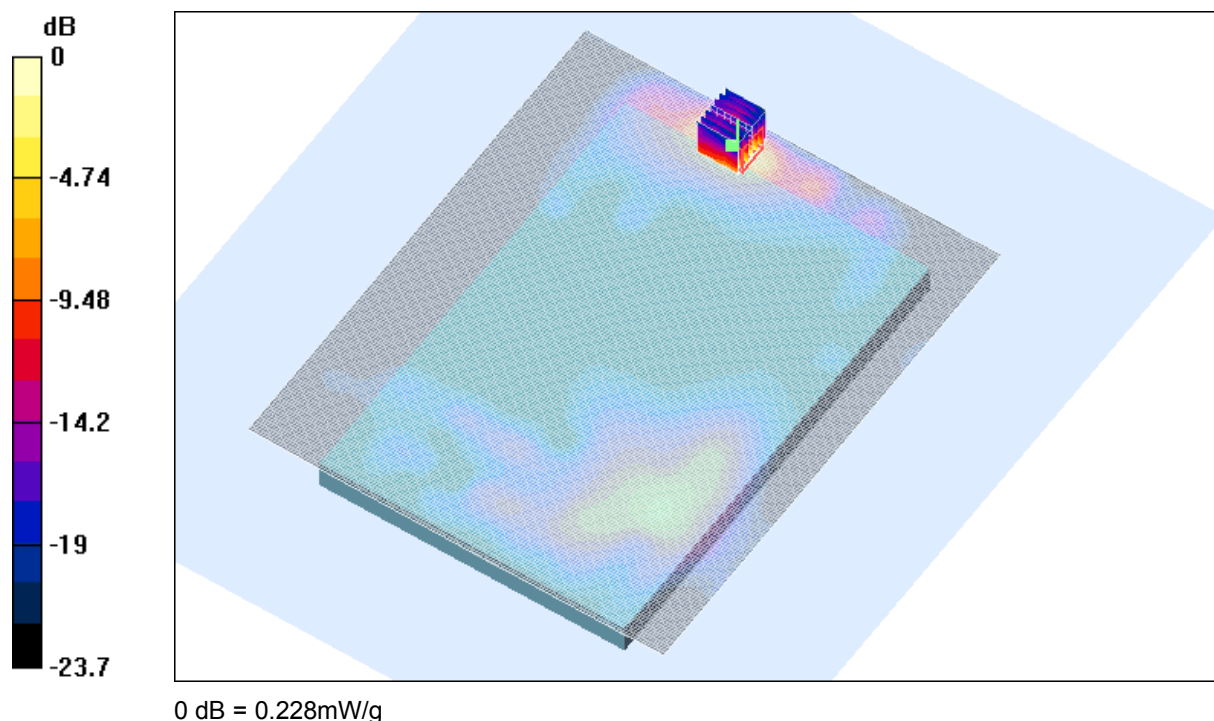
Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.98 V/m; Power Drift = -0.5 dB

Maximum value of SAR (measured) = 0.228 mW/g

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.078 mW/g

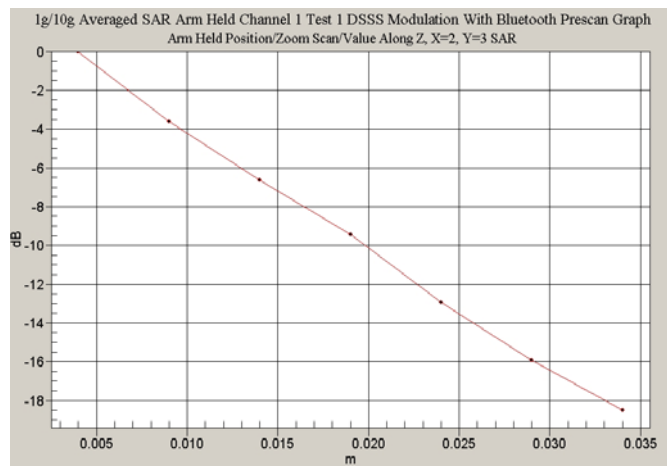


SAR MEASUREMENT PLOT 7

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Z-Axis graph for Plot 7



Test Date: 23 June 2004

File Name: [Tablet OFDM 2.45 GHz No Bluetooth Batt 4400MAh 23-06-04.da4](#)

DUT: Fujitsu Tablet Ocampa 3 with WLAN and Bluetooth; Type: Atheros 11abg Module; Serial: No.2

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

* Medium parameters used: $\sigma = 2.00136$; mho/m, $\epsilon_r = 50.7994$; $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

- 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

Reference Value = 8.06 V/m; Power Drift = 0.2 dB

Maximum value of SAR (interpolated) = 0.563 mW/g

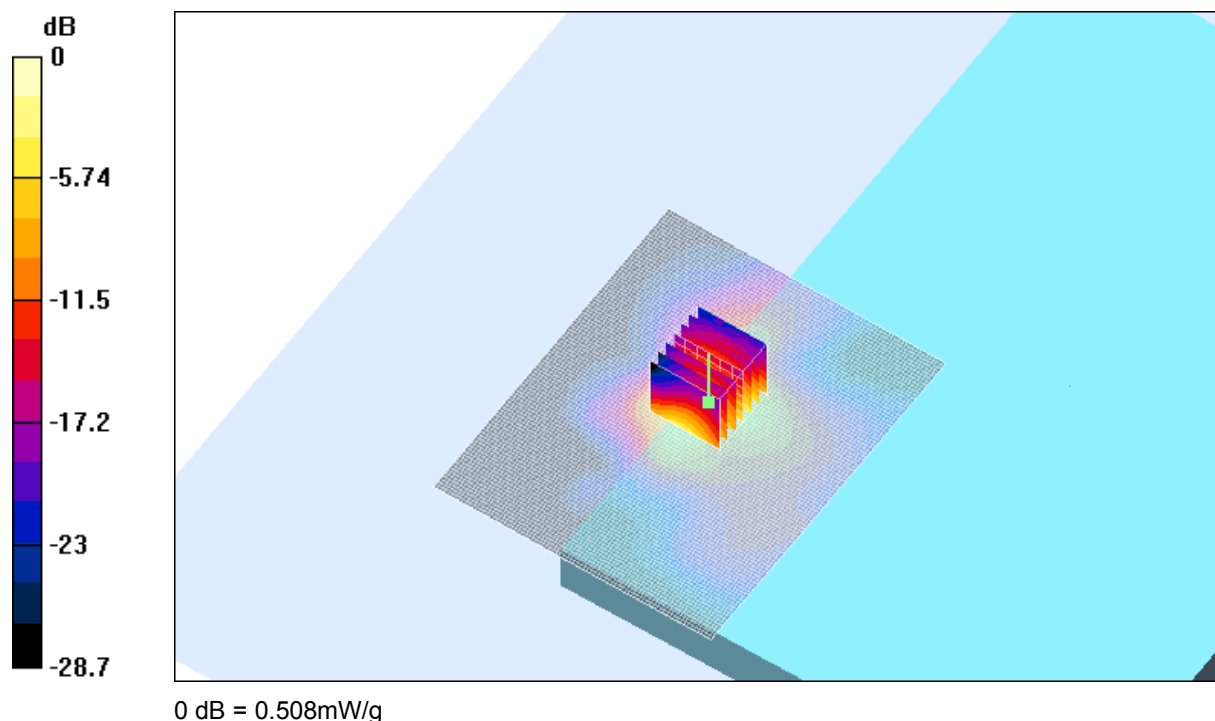
Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.06 V/m; Power Drift = 0.2 dB

Maximum value of SAR (measured) = 0.508 mW/g

Peak SAR (extrapolated) = 0.942 W/kg

SAR(1 g) = 0.449 mW/g; SAR(10 g) = 0.194 mW/g



SAR MEASUREMENT PLOT 8

Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Test Date: 22 June 2004

File Name: [Validation 2450 MHz \(DAE442 Probe1380\) 22-06-04.da4](#)

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

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

* Medium parameters used: $\sigma = 1.82646$; mho/m, $\epsilon_r = 38.5361$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.8, 4.8, 4.8)

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

Channel 1 Test/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 95.3 V/m; Power Drift = 0.0 dB

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

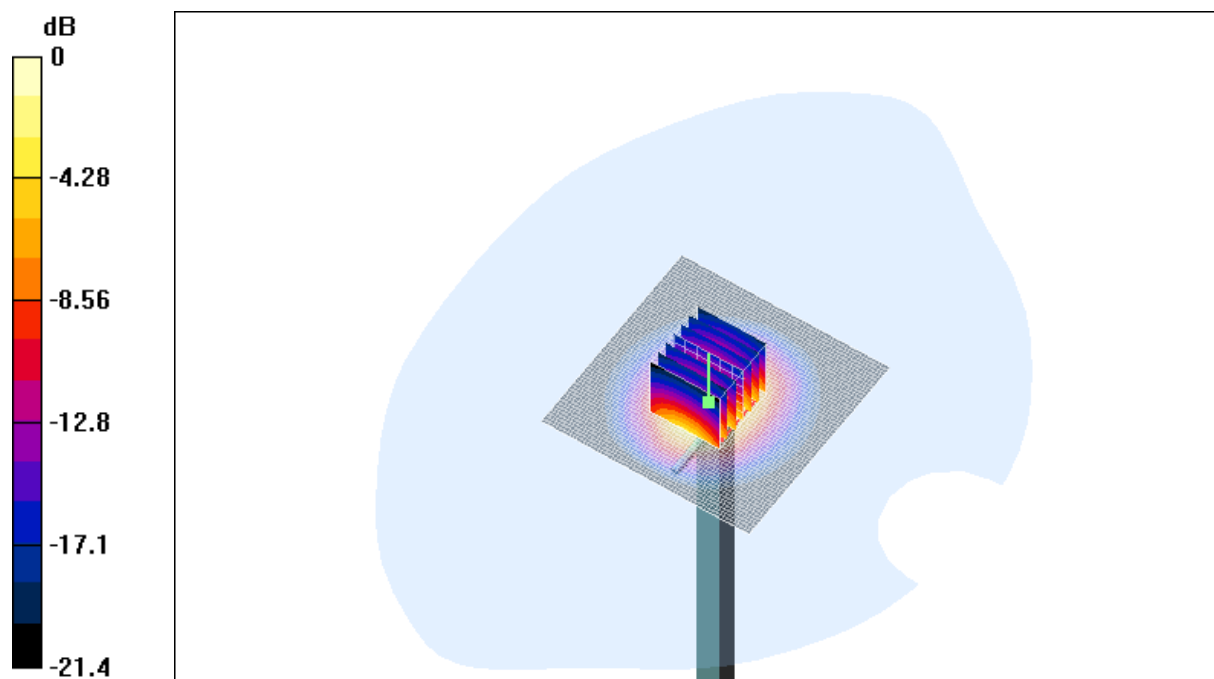
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.3 V/m; Power Drift = 0.0 dB

Maximum value of SAR (measured) = 14.6 mW/g

Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 13 mW/g; SAR(10 g) = 6.15 mW/g



0 dB = 14.6mW/g

SAR MEASUREMENT PLOT 9

Ambient Temperature
Liquid Temperature
Humidity

20.1 Degrees Celsius
19.6 Degrees Celsius
45 %

Test Date: 23 June 2004

File Name: [Validation 2450 MHz \(DAE442 Probe1380\) 23-06-04.da4](#)

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

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

* Medium parameters used: $\sigma = 1.84348$; mho/m, $\epsilon_r = 38.4058$; $\rho = 1000$ kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.8, 4.8, 4.8)

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

Channel 1 Test/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 95.3 V/m; Power Drift = 0.0 dB

Maximum value of SAR (interpolated) = 15.6 mW/g

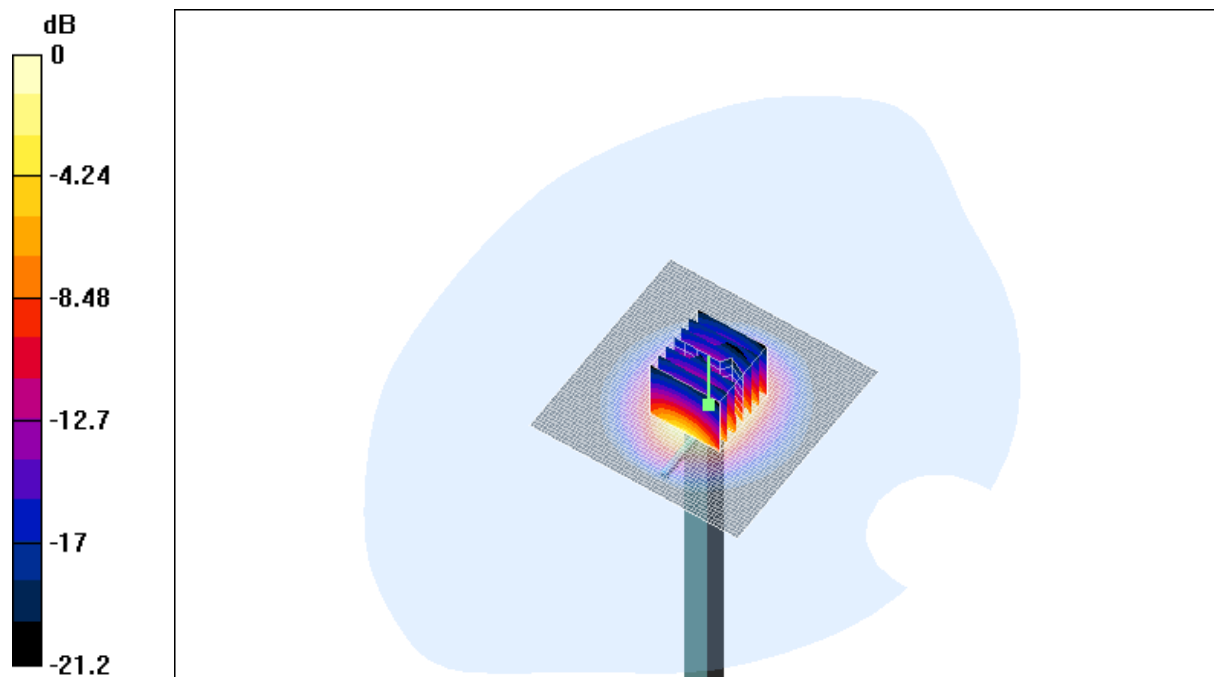
Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.3 V/m; Power Drift = 0.0 dB

Maximum value of SAR (measured) = 15.6 mW/g

Peak SAR (extrapolated) = 38.9 W/kg

SAR(1 g) = 12.6 mW/g; SAR(10 g) = 5.7 mW/g



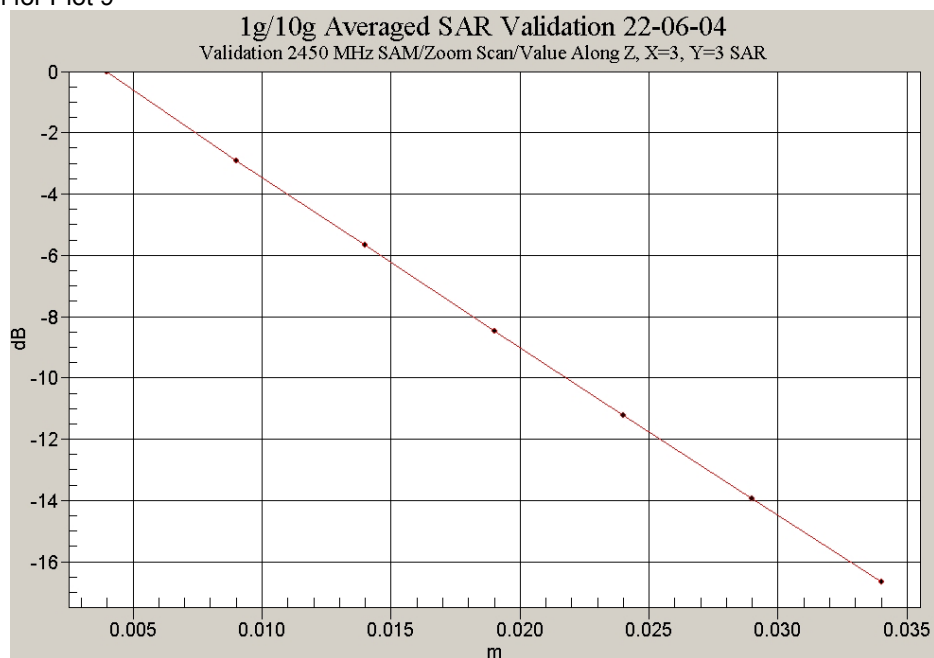
0 dB = 15.6mW/g

SAR MEASUREMENT PLOT 10

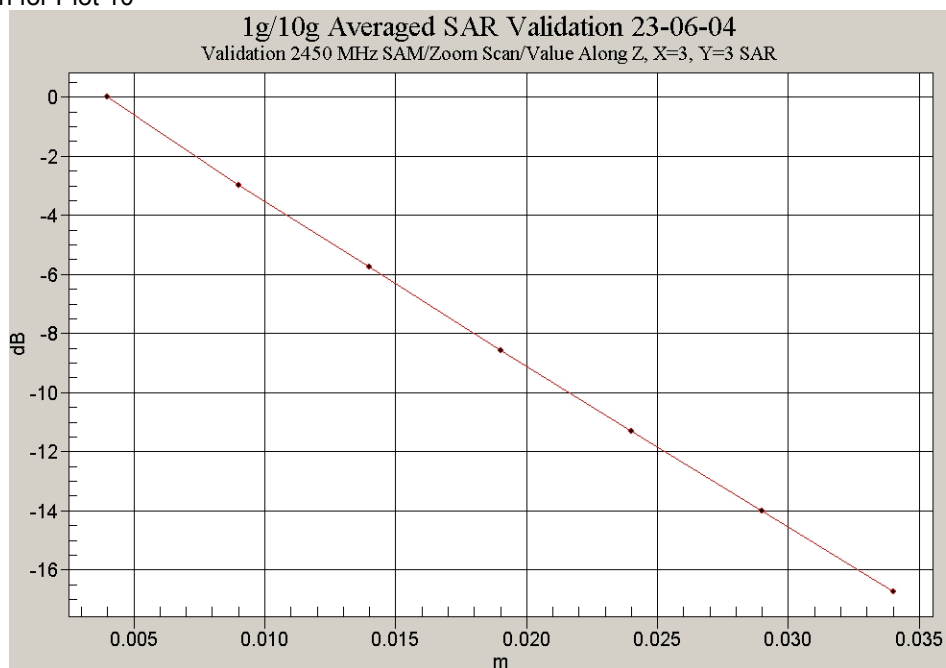
Ambient Temperature
Liquid Temperature
Humidity

20.0 Degrees Celsius
19.3 Degrees Celsius
43 %

Z-Axis graph for Plot 9



Z-Axis graph for Plot 10



APPENDIX C

SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

1. 2450 MHz Dipole Calibration Sheet	6 Pages
2. 2450 MHz E-Field Probe Calibration Sheet	4 Pages
3. Dielectric Properties of Flat phantom PL550 Phantom	1 Page