

## 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.	Mode	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Tablet	1	OFDM	Aux	6	-	06
Tablet	2	OFDM	Main	6	-	06
Z-Axis graphs for Plots 1 to 2						
Edge On Side	3	OFDM	Aux	6	-	01
	4	OFDM	Aux	6	-	06
	5	OFDM	Aux	6	-	11
	Z-Axis graphs for Plots 3 to 4					

**Table: 2450MHz Validation Plot**

Plot 6	Validation 2450 MHz 30 <sup>th</sup> April 2008
Z-Axis graphs for Plots 5 to 6	



**Test Date: 30 April 2008**

File Name: Tablet OFDM 2450 MHz Seneca Antenna Aux 30-04-08.da4

**DUT: Fujitsu Notebook Seneca with Atheros 11abgn; Type: HB92; Serial: MAC: 001B9E-C850F4**

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

\* Medium parameters used:  $\sigma = 1.90152 \text{ mho/m}$ ,  $\epsilon_r = 52.3501$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 (81x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.028 mW/g

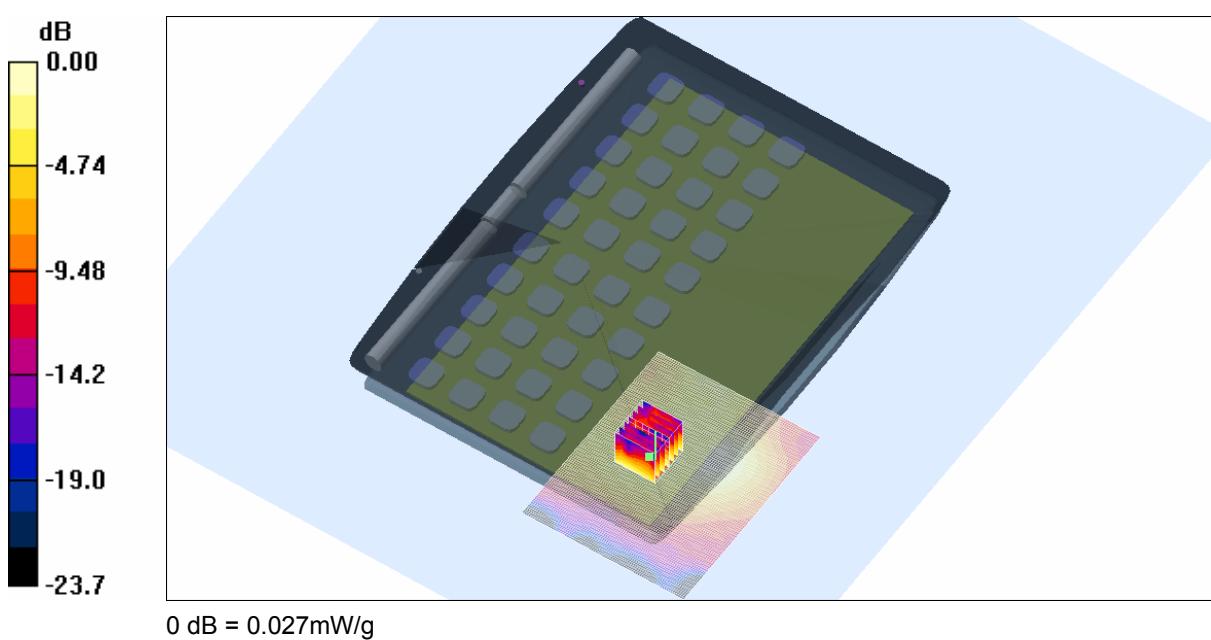
**Channel 6 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.52 V/m; Power Drift = 0.481 dB

Peak SAR (extrapolated) = 0.048 W/kg

**SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.014 mW/g**

Maximum value of SAR (measured) = 0.027 mW/g



**SAR MEASUREMENT PLOT 1**

**Ambient Temperature**

**21.5 Degrees Celsius**

**Liquid Temperature**

**21.2 Degrees Celsius**

**Humidity**

**35.0 %**



Test Date: 30 April 2008

File Name: Tablet OFDM 2450 MHz Seneca Antenna Main 30-04-08.da4

DUT: **Fujitsu Notebook Seneca with Atheros 11abgn**; Type: **HB92**; Serial: **MAC: 001B9E-C850F4**

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

\* Medium parameters used:  $\sigma = 1.90152 \text{ mho/m}$ ,  $\epsilon_r = 52.3501$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 (81x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.026 mW/g

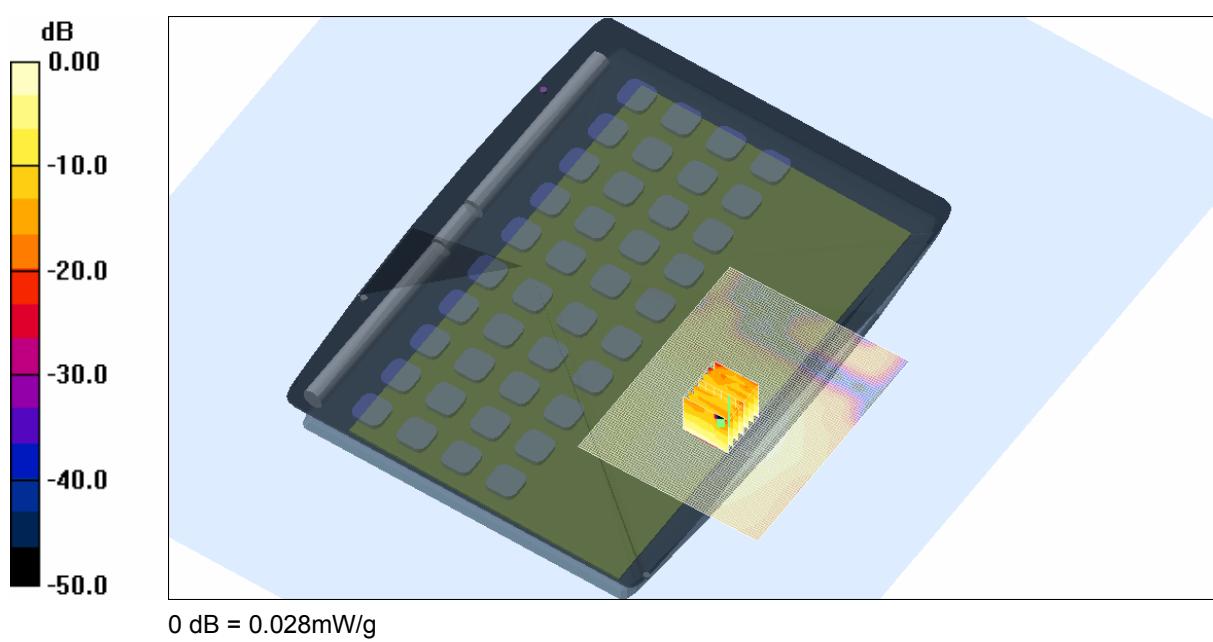
**Channel 6 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.48 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.056 W/kg

**SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.015 mW/g**

Maximum value of SAR (measured) = 0.028 mW/g



Ambient Temperature

21.5 Degrees Celsius

Liquid Temperature

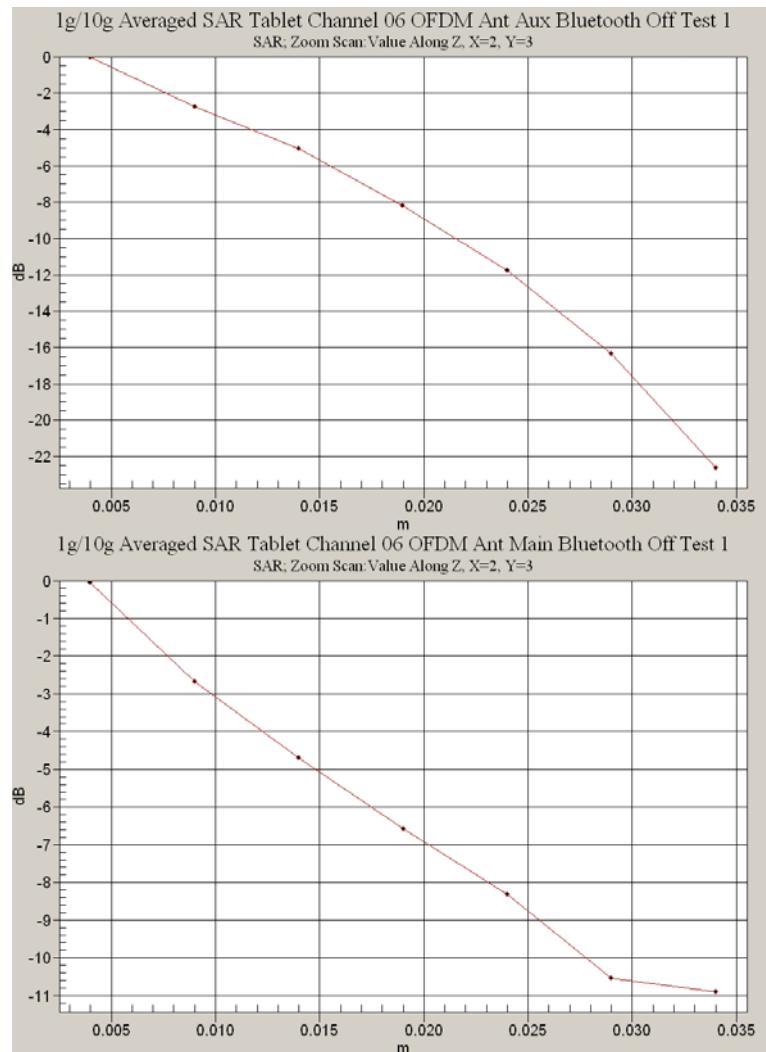
21.2 Degrees Celsius

Humidity

35.0 %



This document must not be copied or reproduced, except in full without the written permission of the Manager, EMC Technologies Pty Ltd. The certificate on page 3 may be reproduced in full.  
[www.emctech.com.au](http://www.emctech.com.au)



**Test Date: 30 April 2008**

File Name: Edge On Side OFDM 2450 MHz Seneca Antenna Aux 30-04-08.da4

**DUT: Fujitsu Notebook Seneca with Atheros 11abgn; Type: HB92; Serial: MAC: 001B9E-C850F4**

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

\* Medium parameters used:  $\sigma = 1.86567 \text{ mho/m}$ ,  $\epsilon_r = 52.5055$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 (81x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.220 mW/g

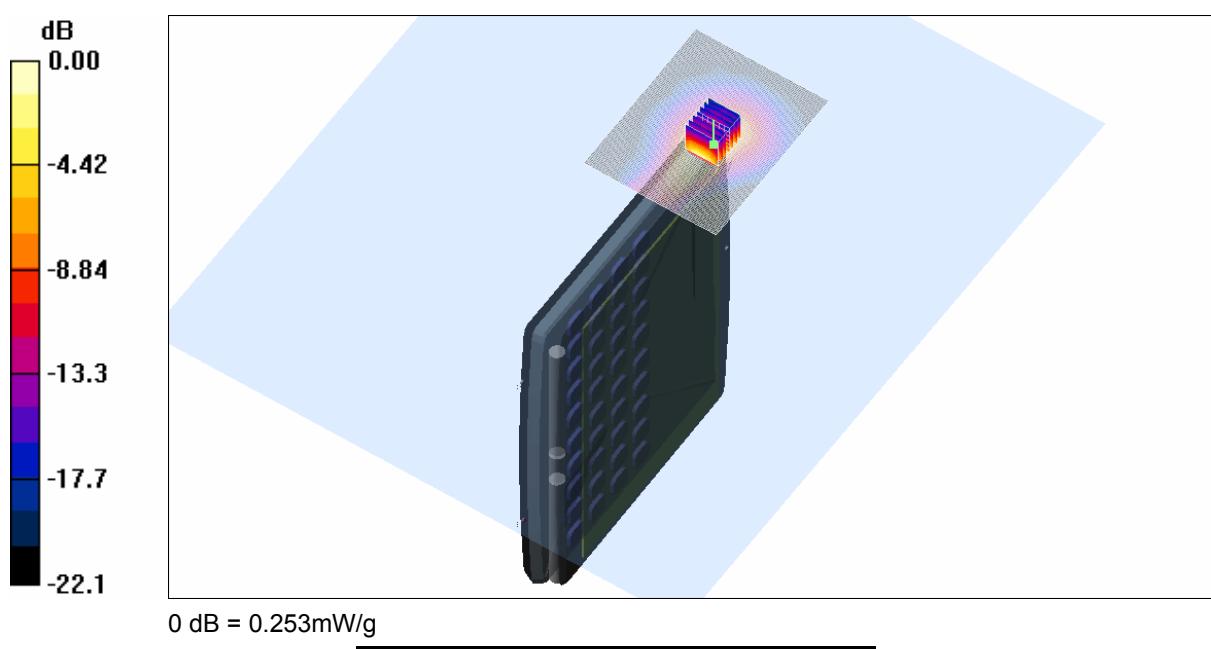
**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 7.35 V/m; Power Drift = -0.301 dB

Peak SAR (extrapolated) = 0.517 W/kg

**SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.106 mW/g**

Maximum value of SAR (measured) = 0.253 mW/g



Ambient Temperature  
Liquid Temperature  
Humidity

21.5 Degrees Celsius  
21.2 Degrees Celsius  
35.0 %



This document must not be copied or reproduced, except in full without the written permission of the Manager, EMC Technologies Pty Ltd. The certificate on page 3 may be reproduced in full.  
[www.emctech.com.au](http://www.emctech.com.au)

Test Date: 30 April 2008

File Name: Edge On Side OFDM 2450 MHz Seneca Antenna Aux 30-04-08.da4

DUT: Fujitsu Notebook Seneca with Atheros 11abgn; Type: HB92; Serial: MAC: 001B9E-C850F4

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

\* Medium parameters used:  $\sigma = 1.90152 \text{ mho/m}$ ,  $\epsilon_r = 52.3501$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 (81x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.137 mW/g

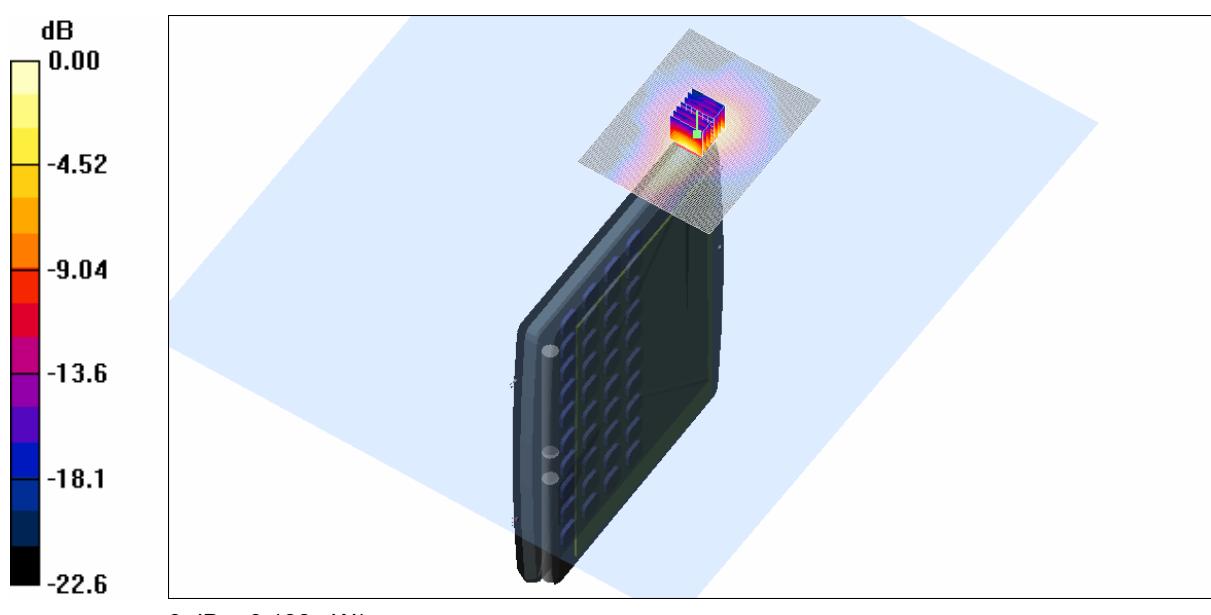
**Channel 6 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.07 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 0.270 W/kg

**SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.057 mW/g**

Maximum value of SAR (measured) = 0.138 mW/g



Ambient Temperature

21.5 Degrees Celsius

Liquid Temperature

21.2 Degrees Celsius

Humidity

35.0 %



This document must not be copied or reproduced, except in full without the written permission of the Manager, EMC Technologies Pty Ltd. The certificate on page 3 may be reproduced in full.  
[www.emctech.com.au](http://www.emctech.com.au)

**Test Date: 30 April 2008**

File Name: Edge On Side OFDM 2450 MHz Seneca Antenna Aux 30-04-08.da4

**DUT: Fujitsu Notebook Seneca with Atheros 11abgn; Type: HB92; Serial: MAC: 001B9E-C850F4**

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

\* Medium parameters used:  $\sigma = 1.93742 \text{ mho/m}$ ,  $\epsilon_r = 52.198$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 (81x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.125 mW/g

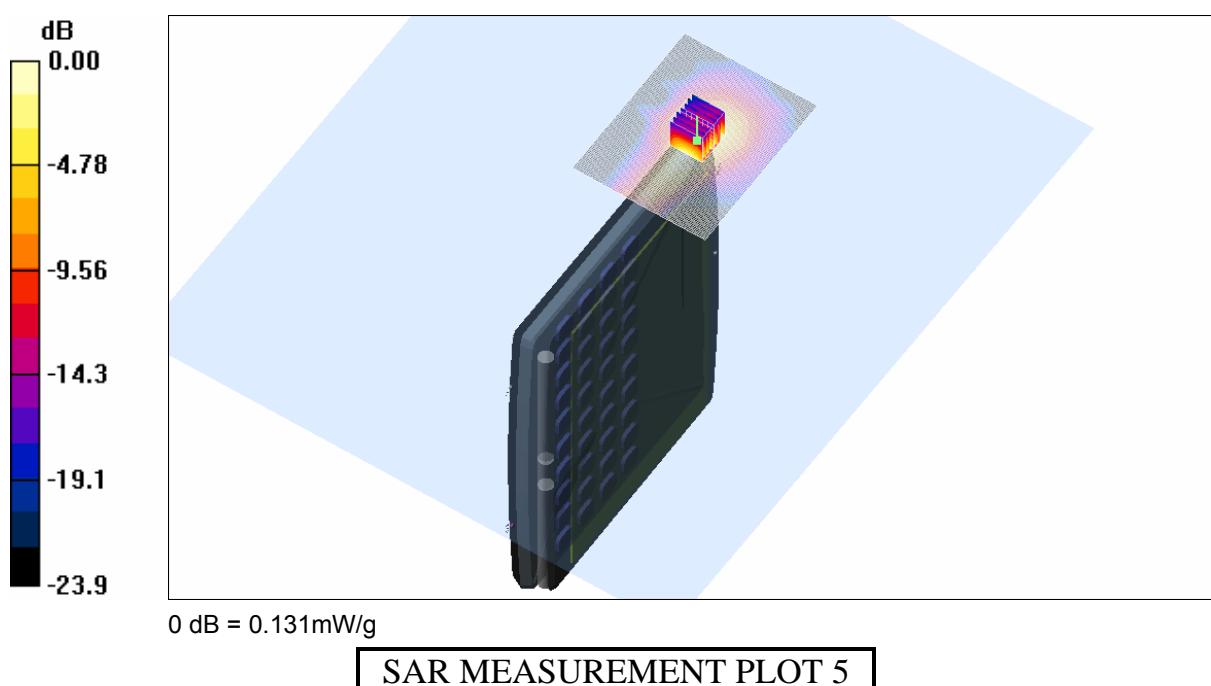
**Channel 11 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.93 V/m; Power Drift = -0.475 dB

Peak SAR (extrapolated) = 0.261 W/kg

**SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.057 mW/g**

Maximum value of SAR (measured) = 0.131 mW/g



**Ambient Temperature**

**21.5 Degrees Celsius**

**Liquid Temperature**

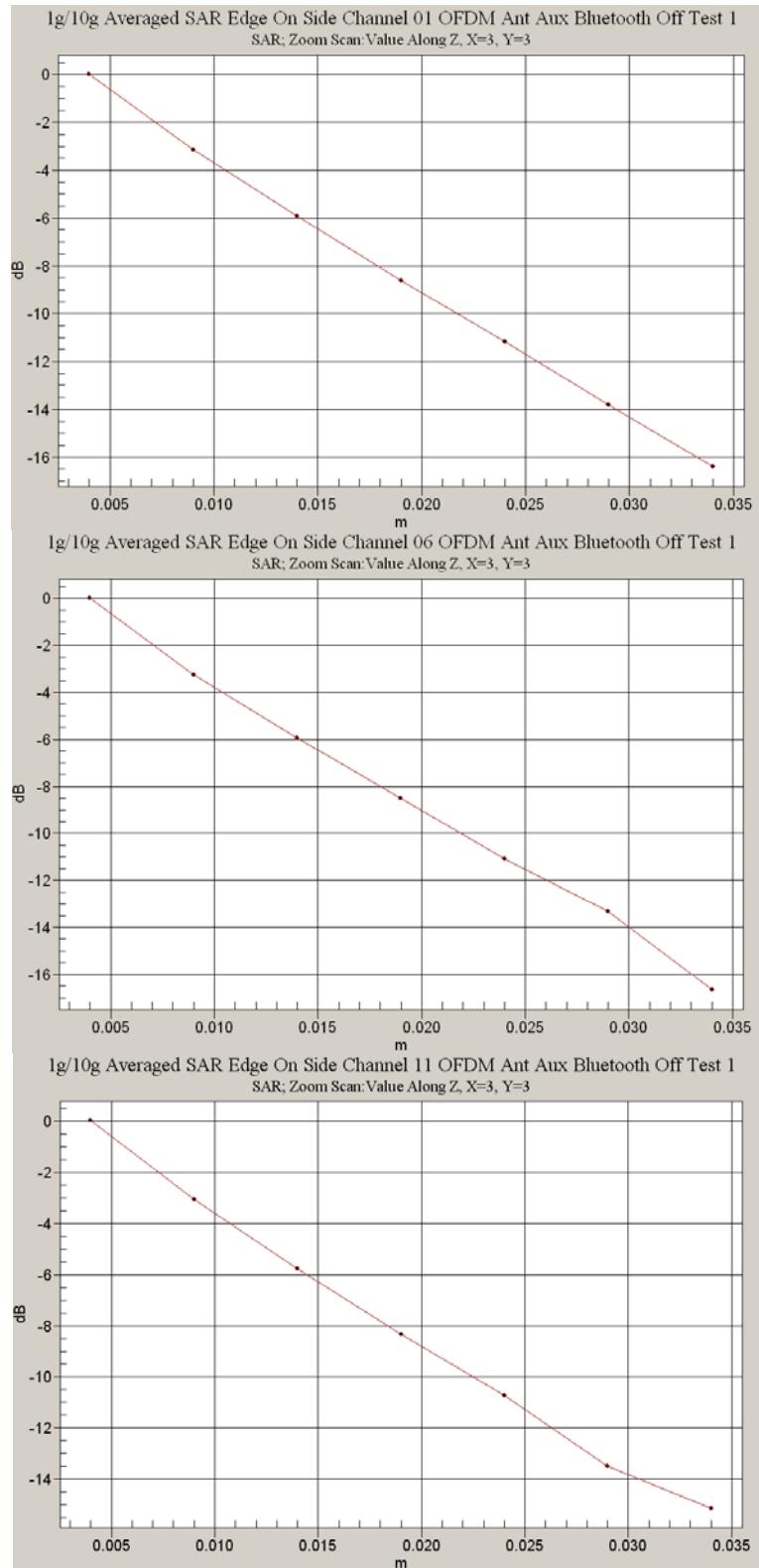
**21.2 Degrees Celsius**

**Humidity**

**35.0 %**



This document must not be copied or reproduced, except in full without the written permission of the Manager, EMC Technologies Pty Ltd. The certificate on page 3 may be reproduced in full.  
[www.emctech.com.au](http://www.emctech.com.au)



Test Date: 30 April 2008

File Name: Validation 2450 MHz (DAE442 Probe1377) 30-04-08.da4

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

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

\* Medium parameters used:  $\sigma = 1.74423 \text{ mho/m}$ ,  $\epsilon_r = 39.5284$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 19.2 mW/g

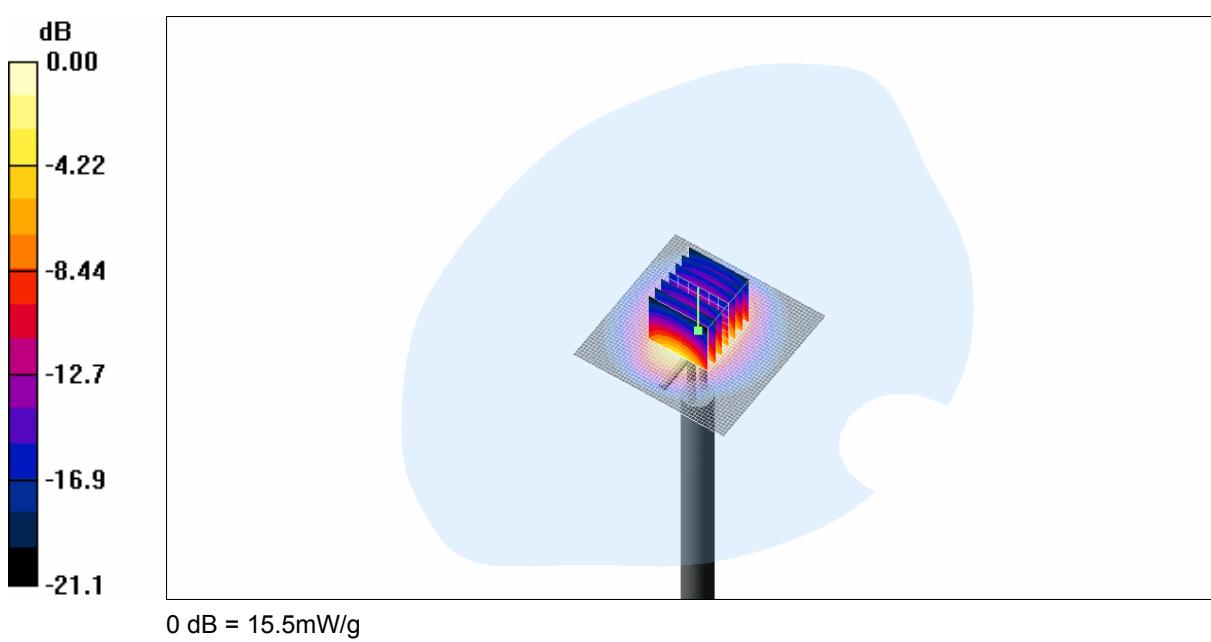
**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.7 V/m; Power Drift = -0.086 dB

Peak SAR (extrapolated) = 29.4 W/kg

**SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6.47 mW/g**

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



Ambient Temperature

21.5 Degrees Celsius

Liquid Temperature

21.2 Degrees Celsius

Humidity

35.0 %



This document must not be copied or reproduced, except in full without the written permission of the Manager, EMC Technologies Pty Ltd. The certificate on page 3 may be reproduced in full.  
[www.emctech.com.au](http://www.emctech.com.au)

