

## 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 22: 2450 MHz DSSS Band SAR Measurement Plot Numbers**

Test Position	Plot No.	Antenna	Test Channel
Lap Arm Held Prescan	1	B	06
Lap Arm Held	2	B	06
<b>Z-Axis Graphs</b> Z-Axis graphs for Plot 2			
Tablet Prescan	3	A	06
Tablet	4	A	01
	5	A	06
	6	A	11
<b>Z-Axis Graphs</b> Z-Axis graphs for Plots 4 to 6			
Tablet Extended Battery	7	A	01
<b>Z-Axis Graphs</b> Z-Axis graphs for Plot 7			
Tablet with Bluetooth On	8	A	01
<b>Z-Axis Graphs</b> Z-Axis graphs for Plot 8			

**Table 23: 2450 MHz OFDM Band SAR Measurement Plot Numbers**

Test Position	Plot No.	Antenna	Test Channel
Lap Arm Held	9	B	06
Tablet	10	A	06
<b>Z-Axis Graphs</b> Z-Axis graphs for Plots 9 to 10			

**Table 24: 2450MHz Validation Plot**

Test	Plot No.
Validation 25 <sup>th</sup> May 2004 2450 MHz	11
Validation 26 <sup>th</sup> May 2004 2450 MHz	12
<b>Z-Axis Graphs</b> Z-Axis graphs for Plots 11 to 12	

Test Date: 25 May 2005

File Name: [Arm Held DSSS 2.45 GHz Antenna B Bluetooth Off Prescan 25-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.94254$ ; mho/m,  $\epsilon_r = 50.6965$ ;  $\rho = 1000 \text{ kg/m}^3$

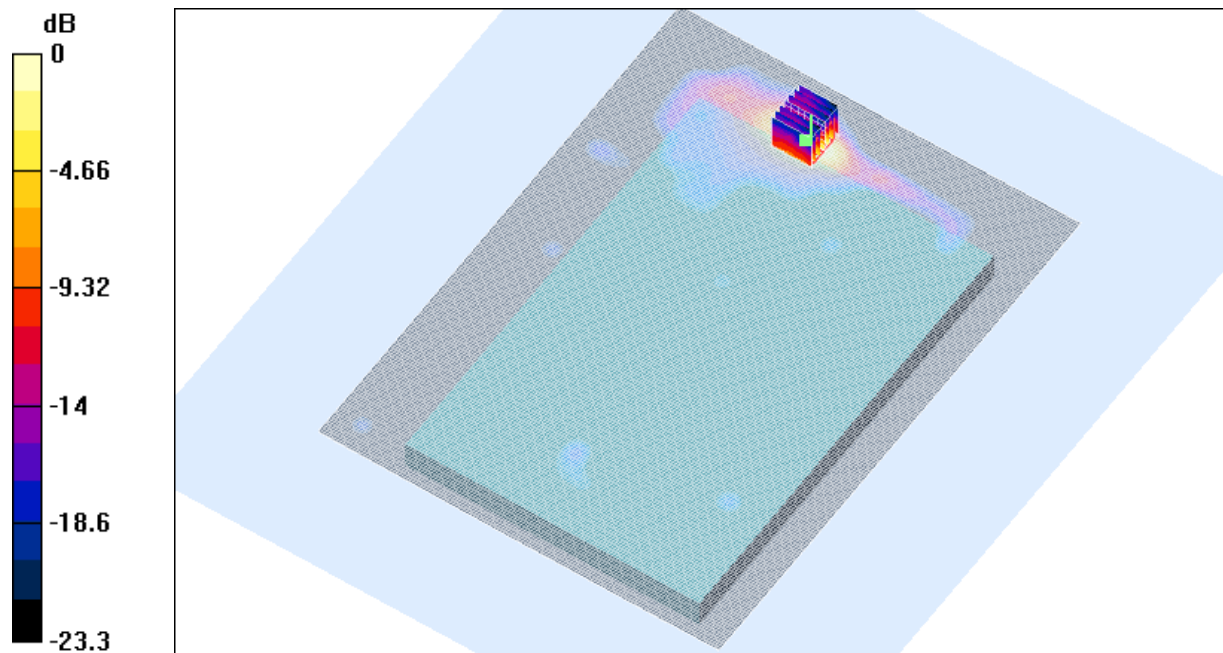
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

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

**Channel 06 Test/Area Scan (151x201x1):** Measurement grid: dx=20mm, dy=20mm

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

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



0 dB = 0.262mW/g

**SAR MEASUREMENT PLOT 1**

Ambient Temperature  
Liquid Temperature  
Humidity

20.4 Degrees Celsius  
19.4 Degrees Celsius  
49.0 %

Test Date: 25 May 2005

File Name: [Arm Held DSSS 2.45 GHz Antenna B Bluetooth Off 25-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.94254$ ; mho/m,  $\epsilon_r = 50.6965$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

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

**Channel 06 Test/Area Scan (81x61x1):** Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.278 mW/g

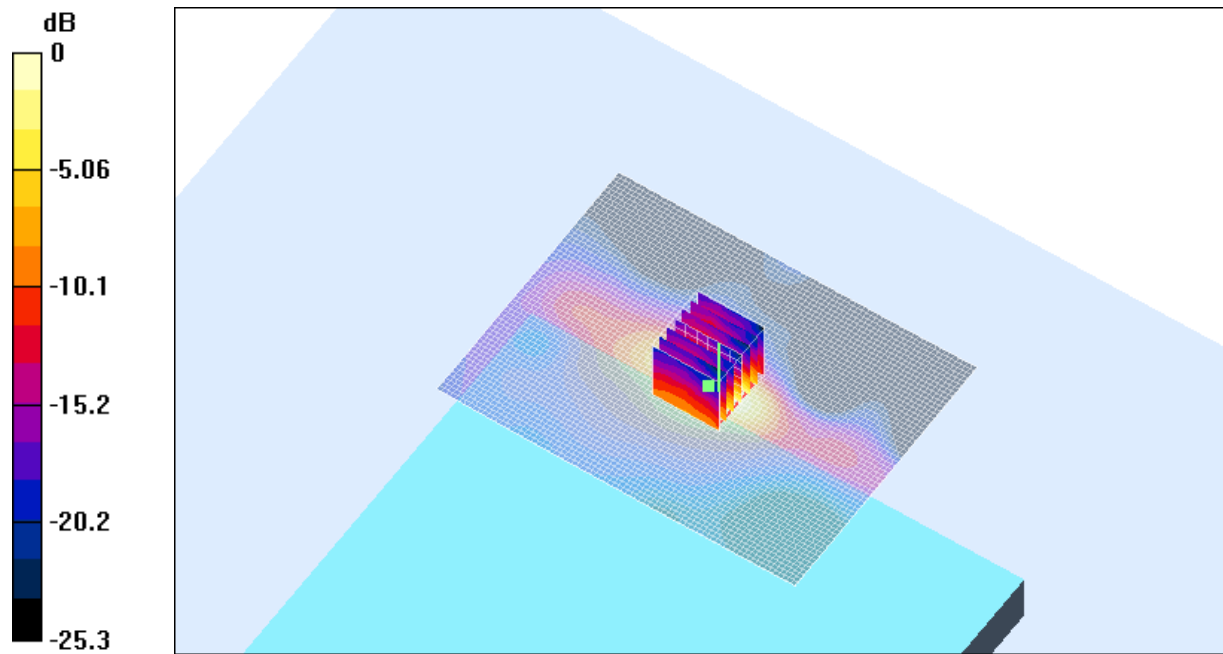
**Channel 06 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 0.735 W/kg

**SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.102 mW/g**

Maximum value of SAR (measured) = 0.276 mW/g



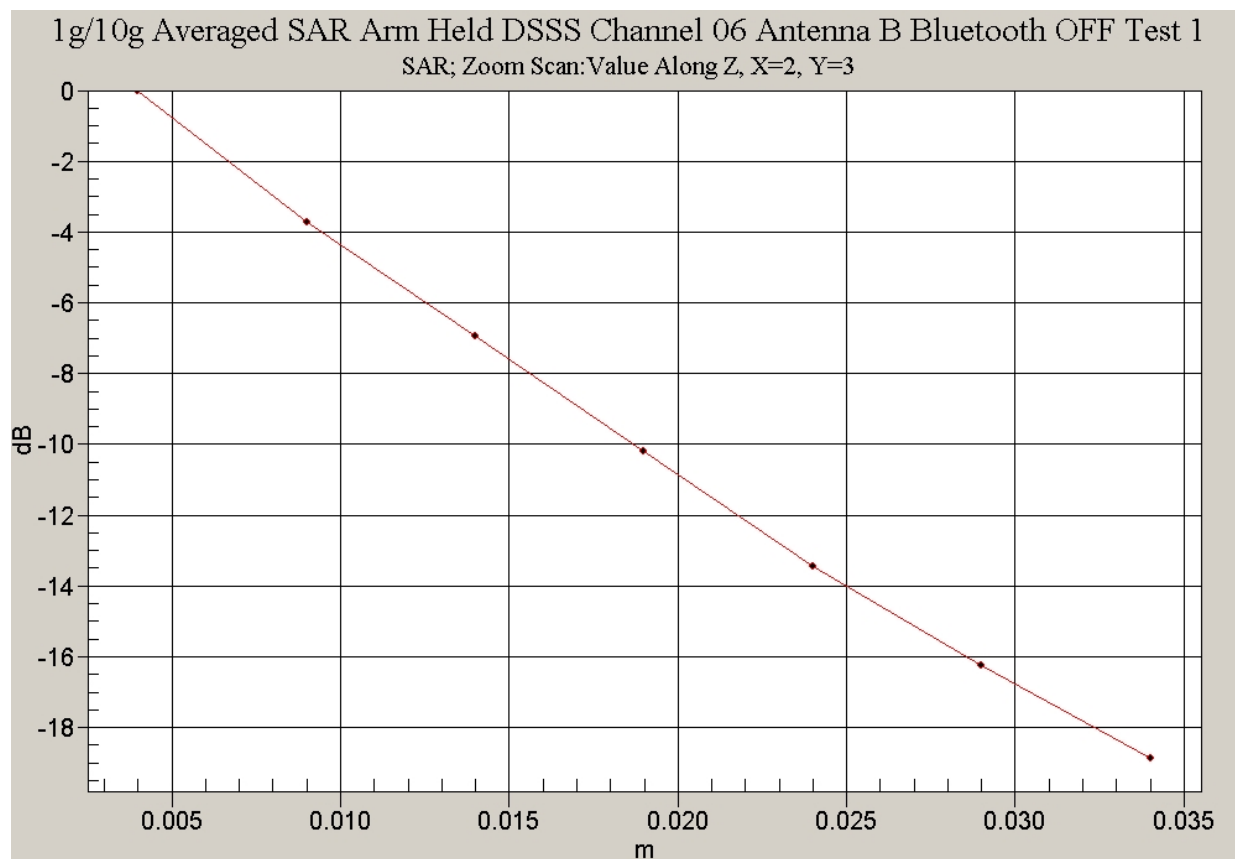
0 dB = 0.276mW/g

**SAR MEASUREMENT PLOT 2**

Ambient Temperature  
Liquid Temperature  
Humidity

20.4 Degrees Celsius  
19.4 Degrees Celsius  
49.0 %

This document shall not be copied or reproduced, except in full without the written permission of the Technical Director, EMC Technologies Pty. Ltd.



This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.

Test Date: 25 May 2005

File Name: [Tablet DSSS 2.45 GHz Antenna A Bluetooth On Prescan 25-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.94254$ ; mho/m,  $\epsilon_r = 50.6965$ ;  $\rho = 1000 \text{ kg/m}^3$

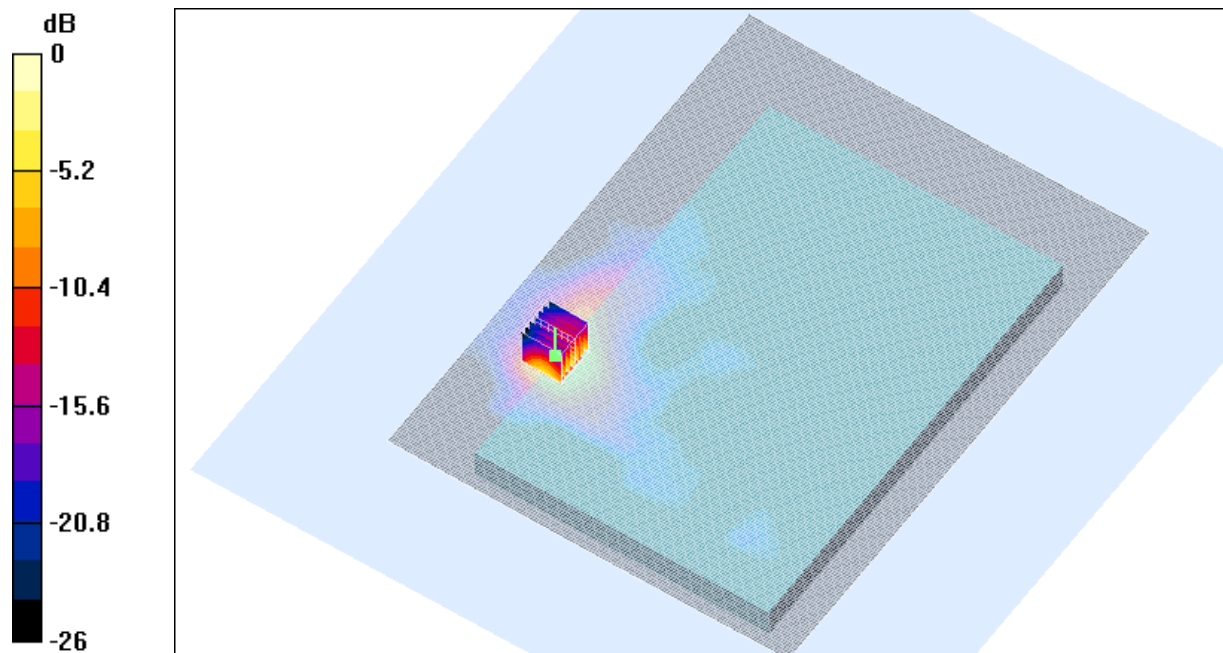
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

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

**Channel 06 Test/Area Scan (151x201x1):** Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.594 mW/g

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



0 dB = 0.933mW/g

**SAR MEASUREMENT PLOT 3**

Ambient Temperature  
Liquid Temperature  
Humidity

20.4 Degrees Celsius  
19.4 Degrees Celsius  
49.0 %

Test Date: 26 May 2005

File Name: [Tablet DSSS 2.45 GHz Ant A Bluetooth Off 26-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.95893$ ; mho/m,  $\epsilon_r = 50.6278$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

- 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) = 0.996 mW/g

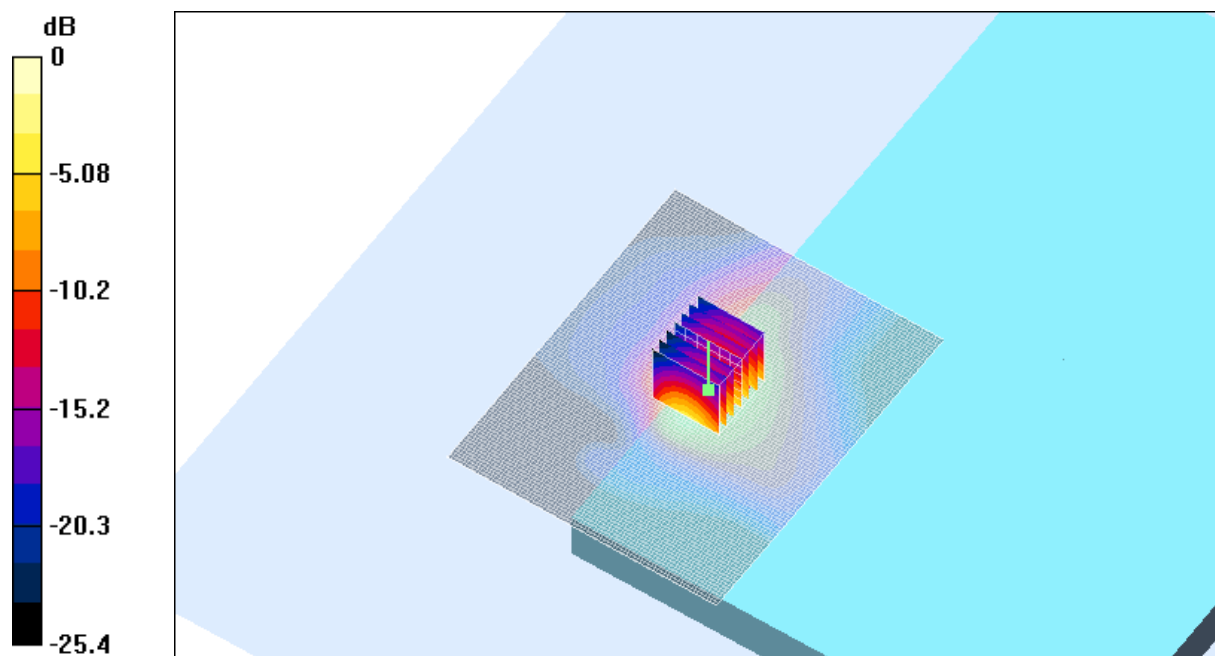
**Channel 01 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.2 V/m; Power Drift = -0.2 dB

Peak SAR (extrapolated) = 2.44 W/kg

**SAR(1 g) = 0.942 mW/g; SAR(10 g) = 0.409 mW/g**

Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

**SAR MEASUREMENT PLOT 4**

Ambient Temperature  
Liquid Temperature  
Humidity

20.0 Degrees Celsius  
19.6 Degrees Celsius  
42.0 %

This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.

Test Date: 25 May 2005

File Name: [Tablet DSSS 2.45 GHz Ant A Bluetooth Off 25-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.94254$ ; mho/m,  $\epsilon_r = 50.6965$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

- 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) = 0.818 mW/g

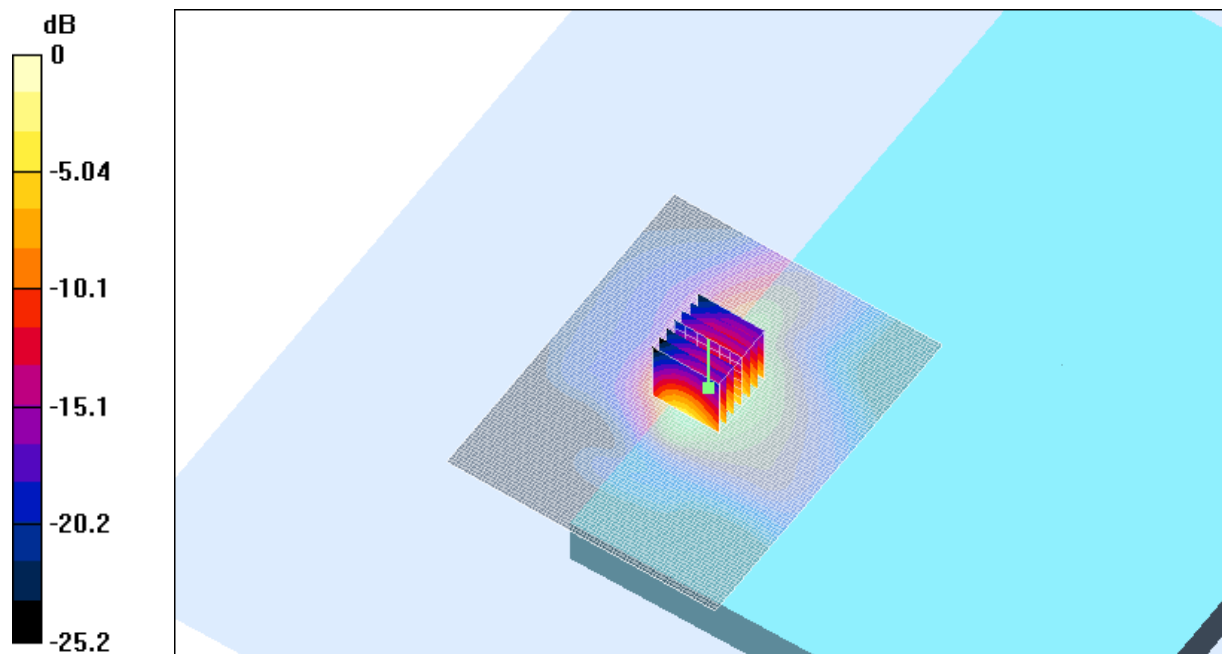
**Channel 06 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 2.22 W/kg

**SAR(1 g) = 0.834 mW/g; SAR(10 g) = 0.361 mW/g**

Maximum value of SAR (measured) = 0.921 mW/g



0 dB = 0.921mW/g

**SAR MEASUREMENT PLOT 5**

Ambient Temperature  
Liquid Temperature  
Humidity

20.4 Degrees Celsius  
19.4 Degrees Celsius  
49.0 %

This document shall not be copied or reproduced, except in full without the written permission of the Technical Director, EMC Technologies Pty. Ltd.

Test Date: 25 May 2005

File Name: [Tablet DSSS 2.45 GHz Ant A Bluetooth Off 25-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.98197$ ; mho/m,  $\epsilon_r = 50.5761$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

- 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) = 0.848 mW/g

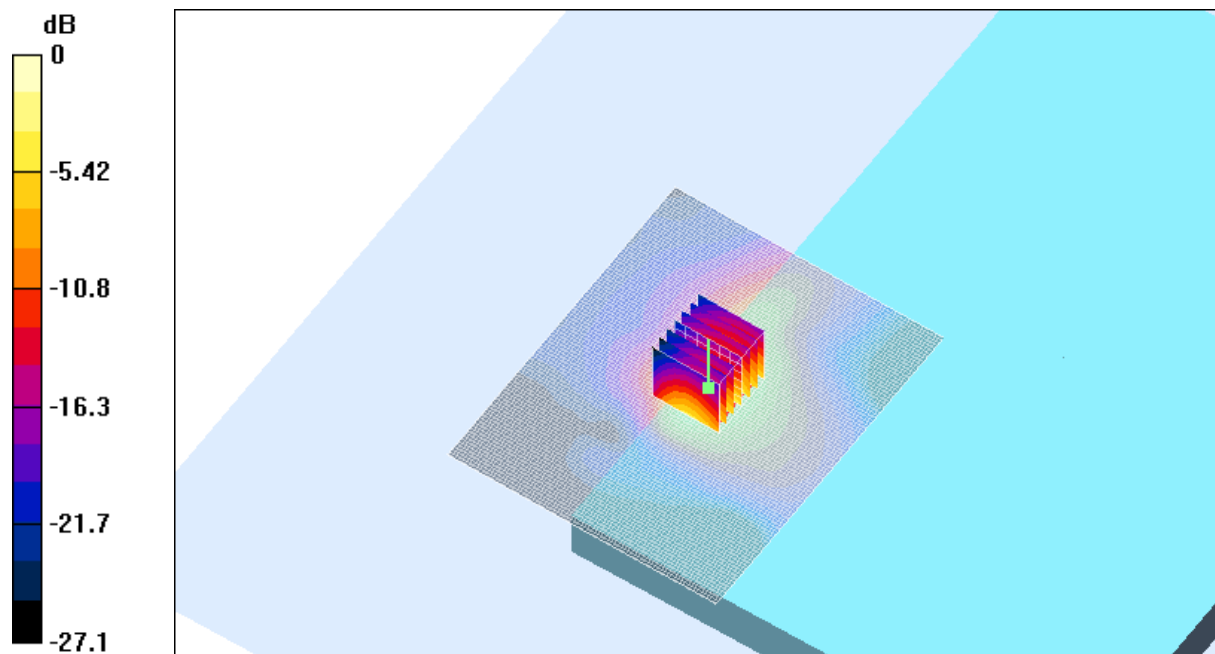
**Channel 11 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 2.12 W/kg

**SAR(1 g) = 0.822 mW/g; SAR(10 g) = 0.356 mW/g**

Maximum value of SAR (measured) = 0.932 mW/g



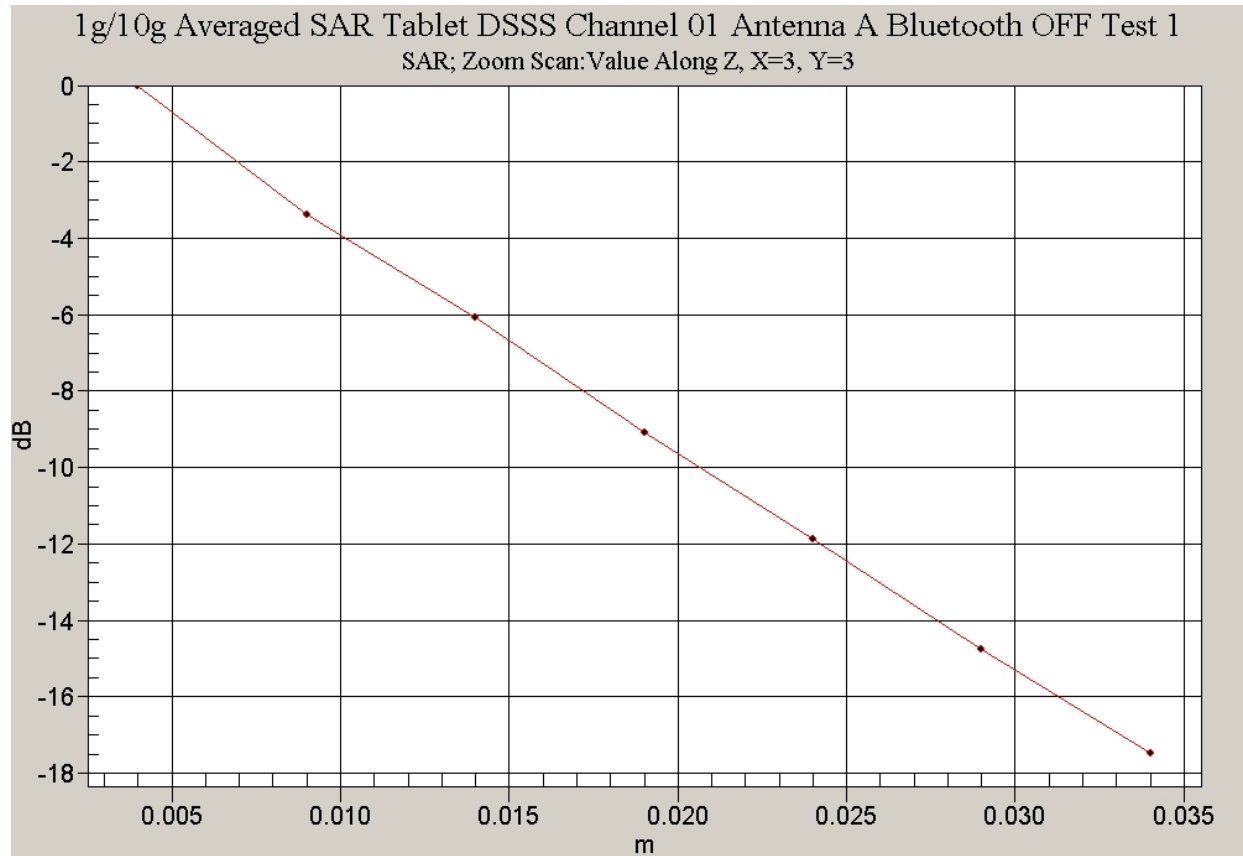
0 dB = 0.932mW/g

**SAR MEASUREMENT PLOT 6**

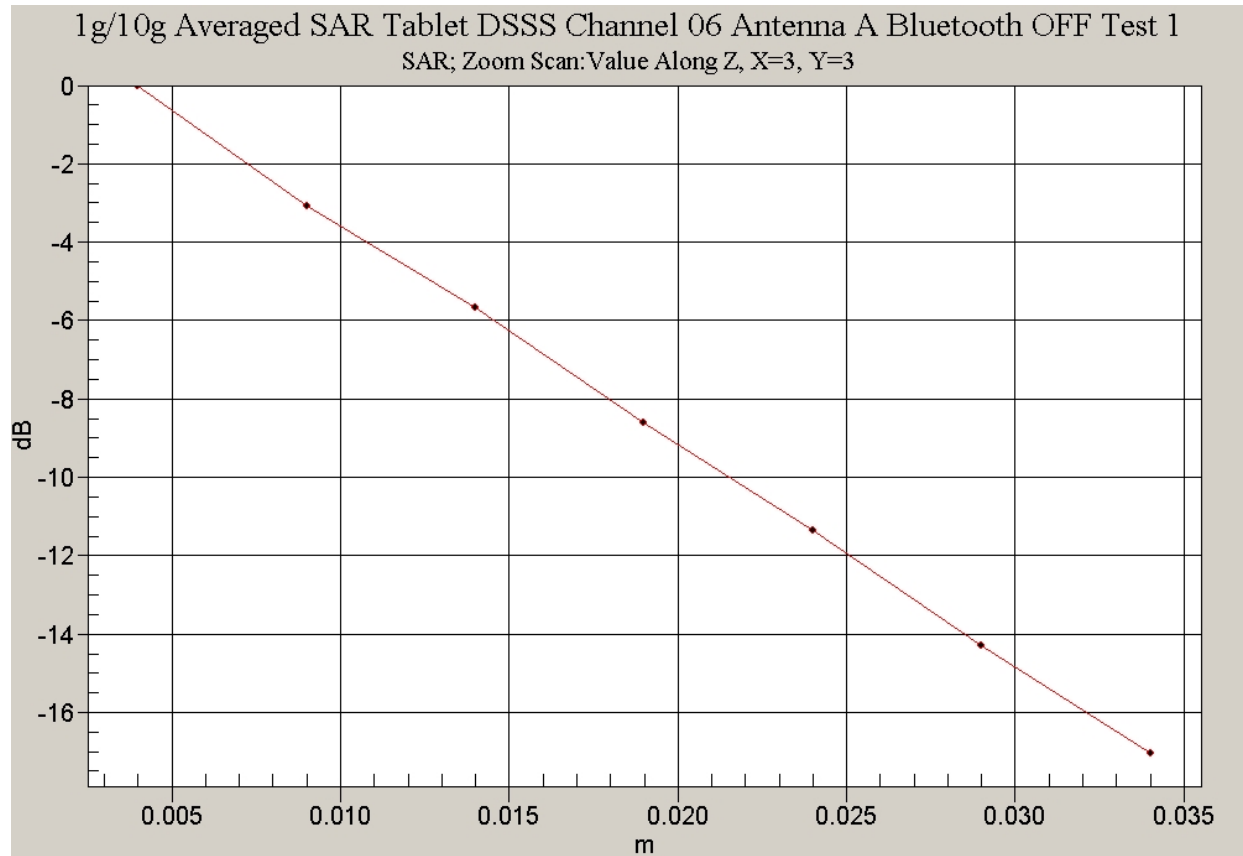
Ambient Temperature  
Liquid Temperature  
Humidity

20.4 Degrees Celsius  
19.4 Degrees Celsius  
49.0 %

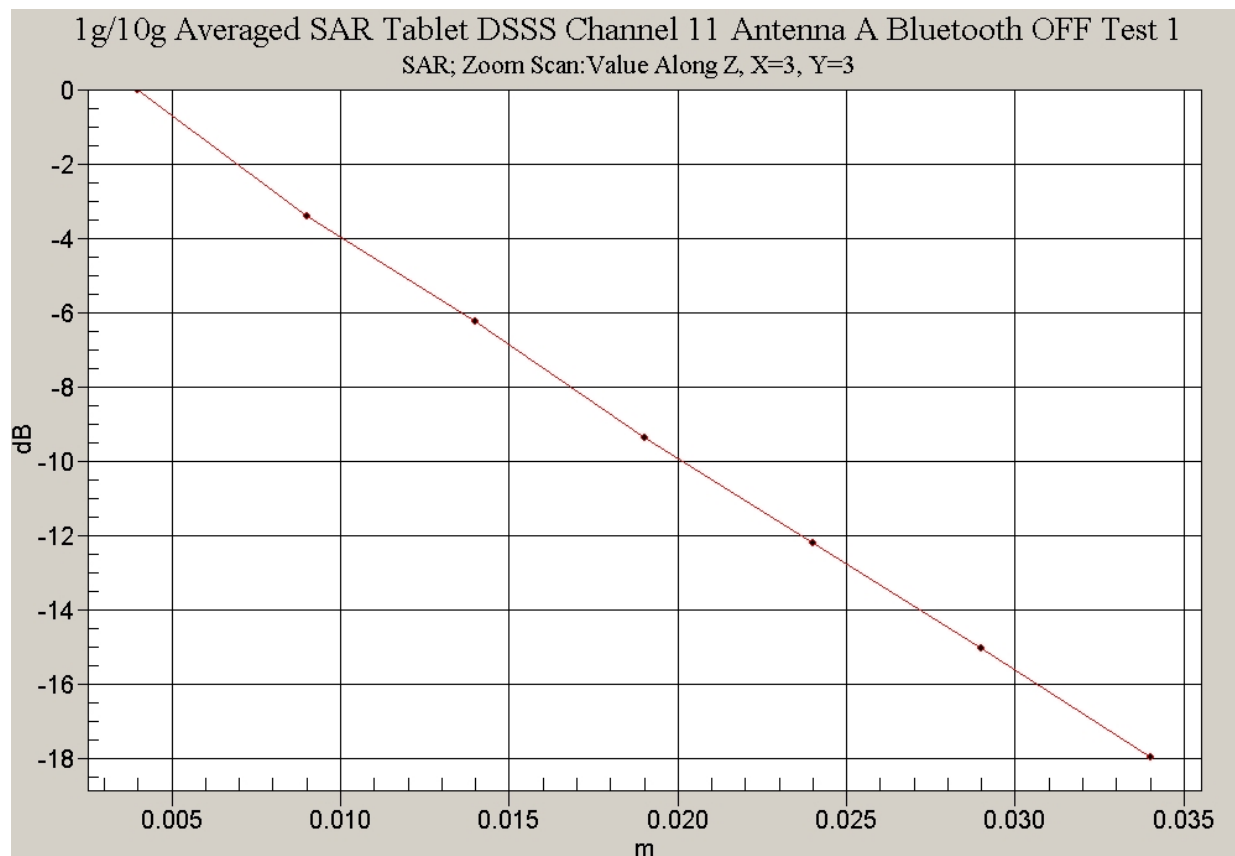




This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.



This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.



This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.

Test Date: 26 May 2005

File Name: [Tablet DSSS 2.45 GHz Ant A Bluetooth Off Extended Battery 26-05-05.da4](#)

DUT: Fujitsu Tablet Niechen with Atheros 11abg Module; Type: WLL 4070; Serial: MAC:0011F5-49FE74

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

\* Medium parameters used:  $\sigma = 1.95893$ ; mho/m,  $\epsilon_r = 50.6278$ ;  $\rho = 1000 \text{ kg/m}^3$

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.16, 4.16, 4.16)

- 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) = 0.839 mW/g

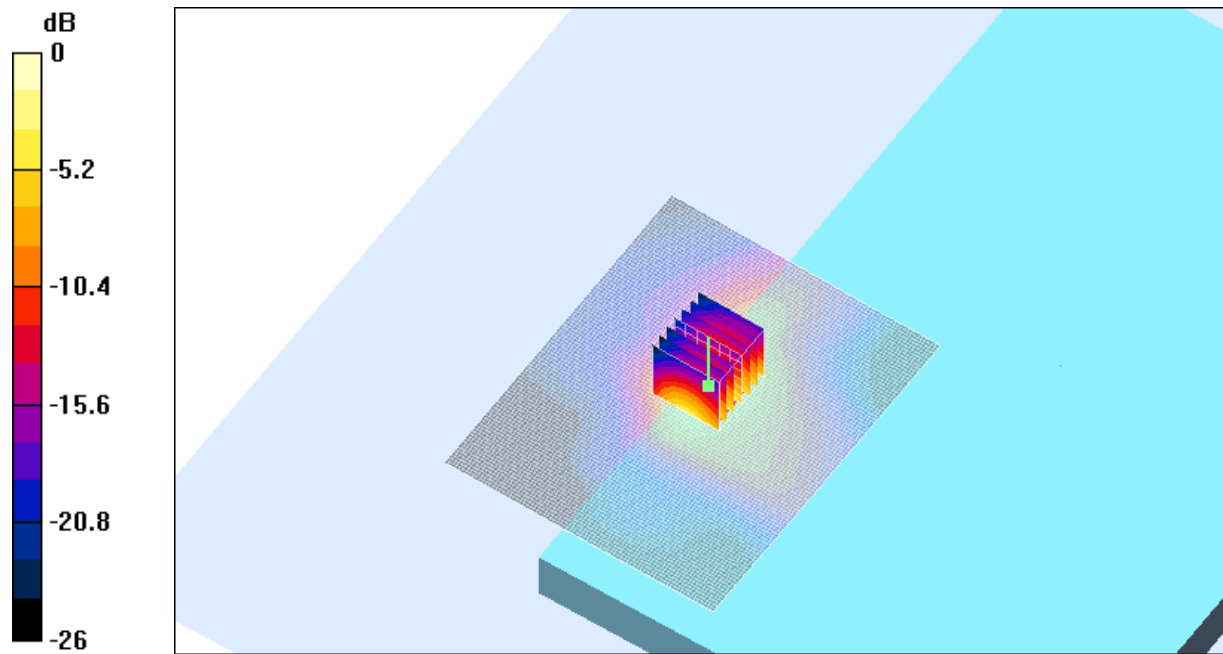
**Channel 01 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = -0.2 dB

Peak SAR (extrapolated) = 2.09 W/kg

**SAR(1 g) = 0.806 mW/g; SAR(10 g) = 0.353 mW/g**

Maximum value of SAR (measured) = 0.895 mW/g



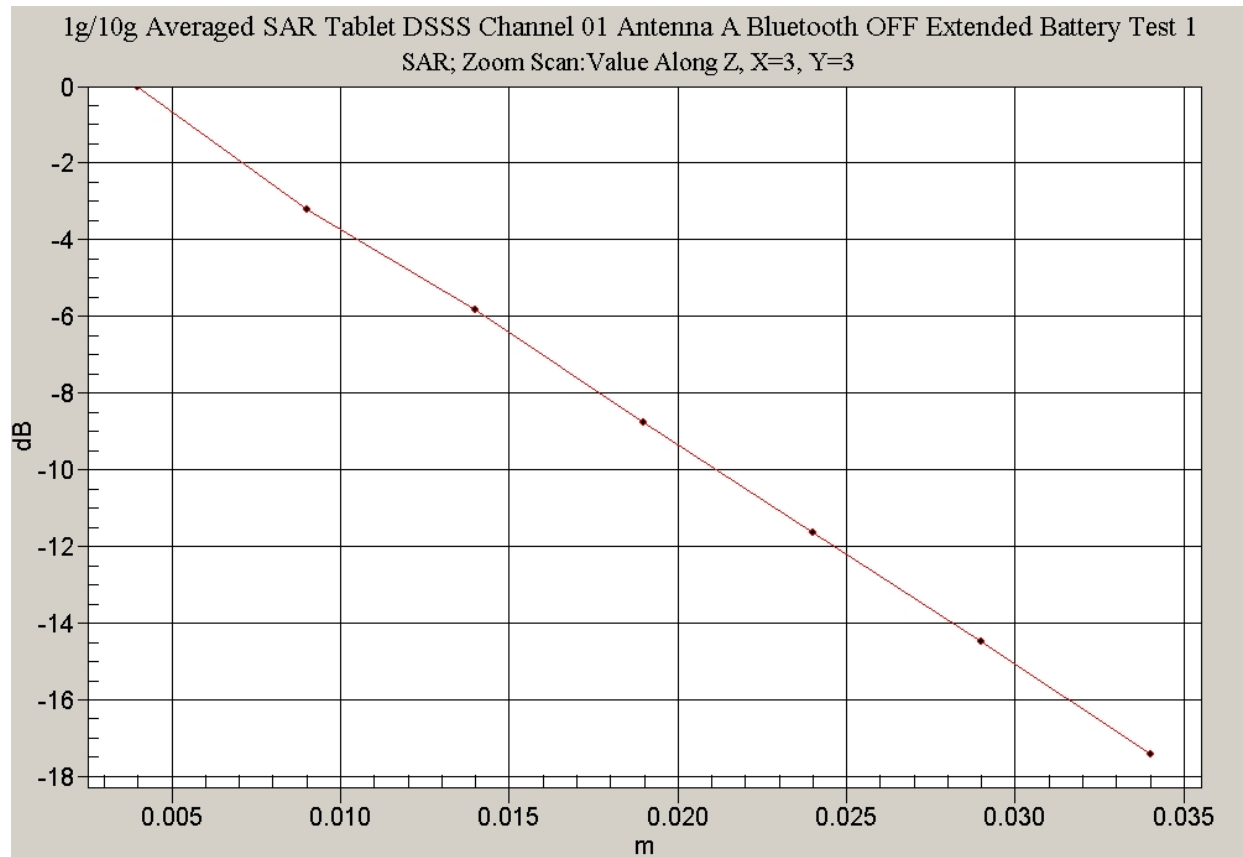
0 dB = 0.895mW/g

**SAR MEASUREMENT PLOT 7**

Ambient Temperature  
Liquid Temperature  
Humidity

20.0 Degrees Celsius  
19.6 Degrees Celsius  
42.0 %

This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.



This document shall not be copied or reproduced, except in full without the written permission of the Technical Director , EMC Technologies Pty. Ltd.