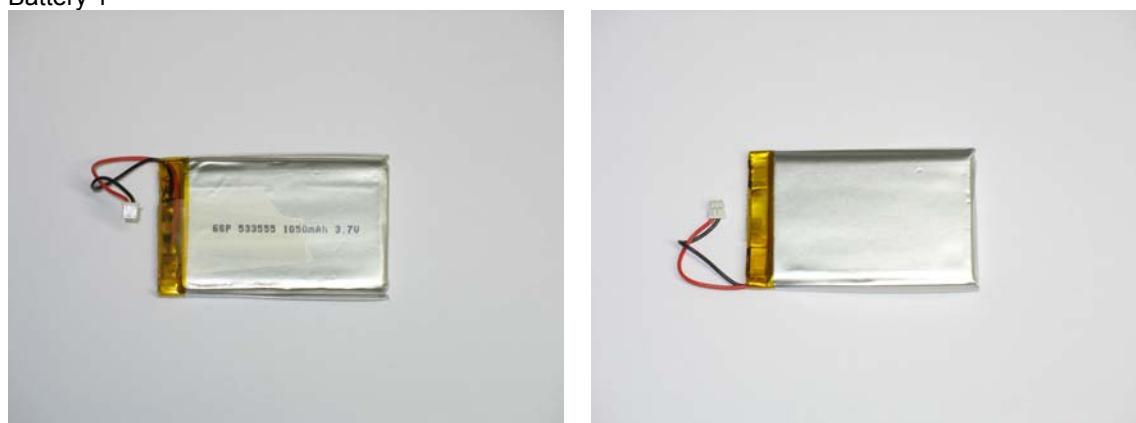


## APPENDIX A1 Test Sample Photographs

Battery 1



DUT



DUT

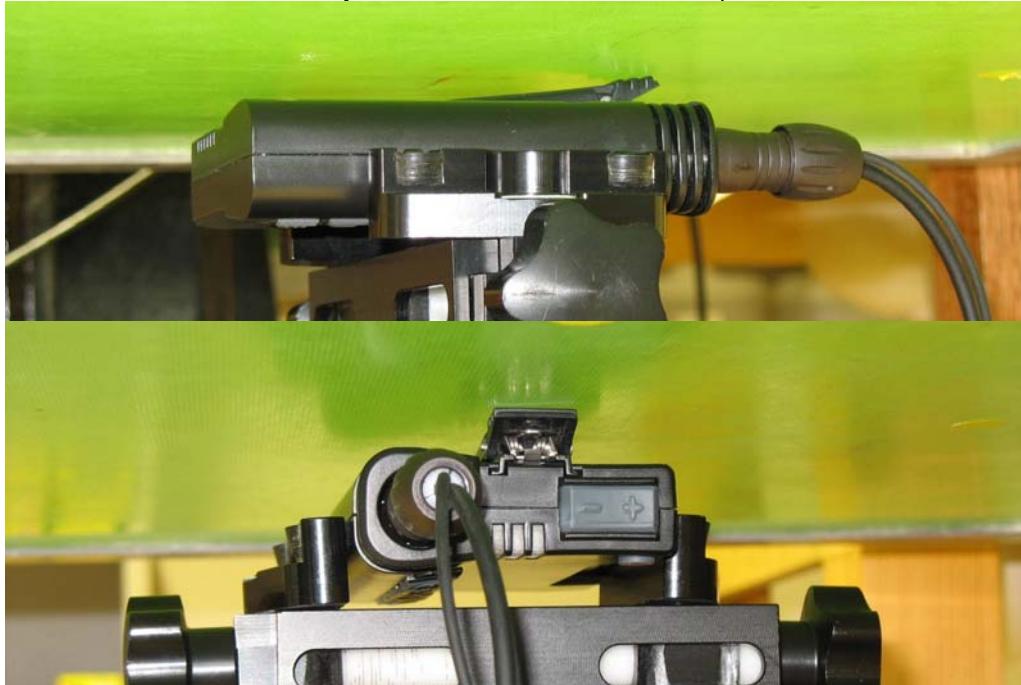


## APPENDIX A2 Test Setup Photographs

Body Worn Position Back



Body Worn Position Back with Belt Clip

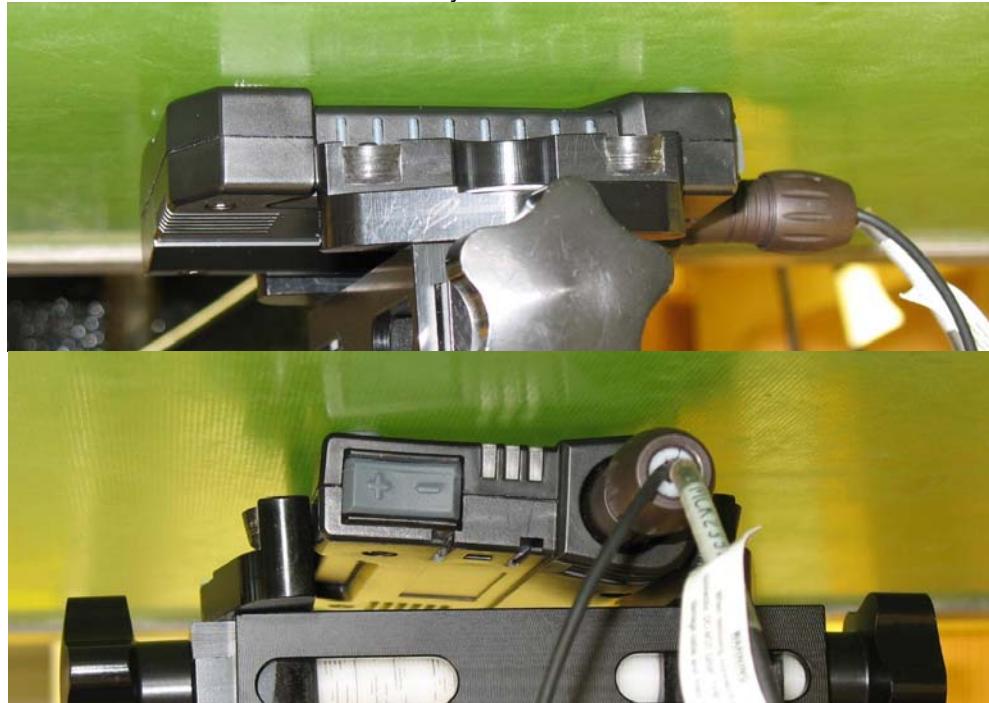


## APPENDIX A5 Test Setup Photograph

Body Worn Position Back with Belt Clip Tilted



Body Worn Front



## 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 SAR Plots**

Test Position	Plot Number	Test Channel
Body Worn Position Front	1	01
	2	40
	3	79
Body Worn Position Back	4	40
Belt Clip	5	40
Belt Clip Tilted	6	40

**Table: SAR Validation Plots**

Date	Plot Number	Frequency
18 <sup>th</sup> March 2009	7	2450 MHz

Test Date: 18 March 2009

File Name: M090333 Body Worn Front 2.45 Bluetooth 18-03-09.da4

DUT: Phicomm Bluetooth Transmitter; Type: XSports2400; Serial: Production Prototype Sample

\* Communication System: FHSS 2450 MHz; Frequency: 2402 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 2402$  MHz;  $\sigma = 1.89$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(3.96, 3.96, 3.96)

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

**Channel 1 Test/Area Scan (81x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.044 mW/g

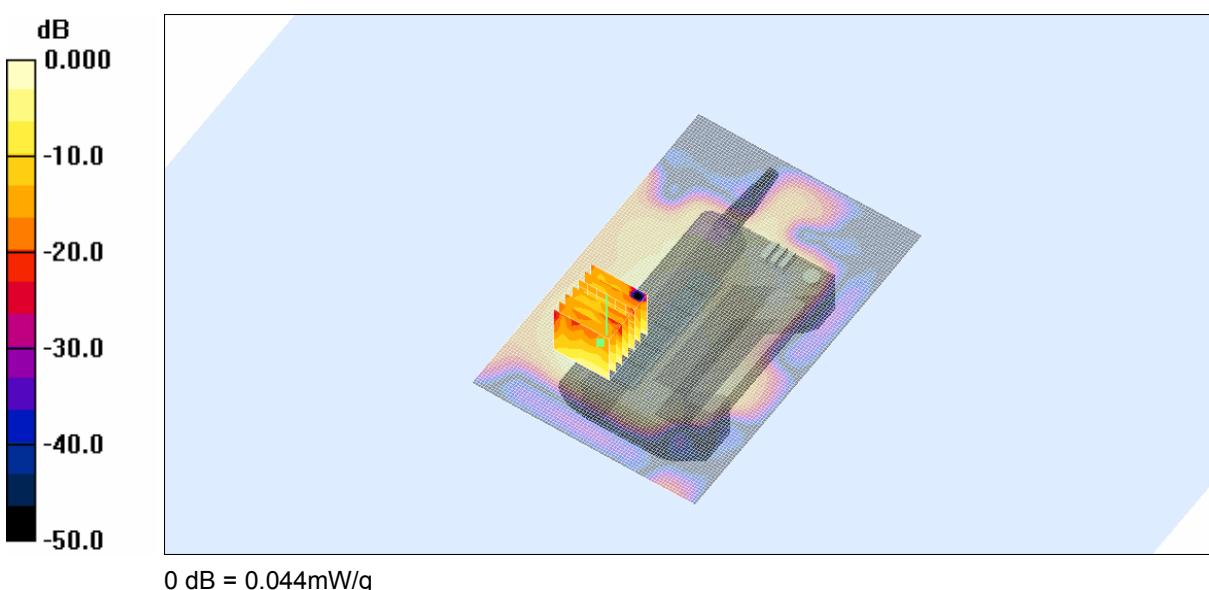
**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.53 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.086 W/kg

**SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.019 mW/g**

Maximum value of SAR (measured) = 0.044 mW/g



Ambient Temperature

19.5 Degrees Celsius

Liquid Temperature

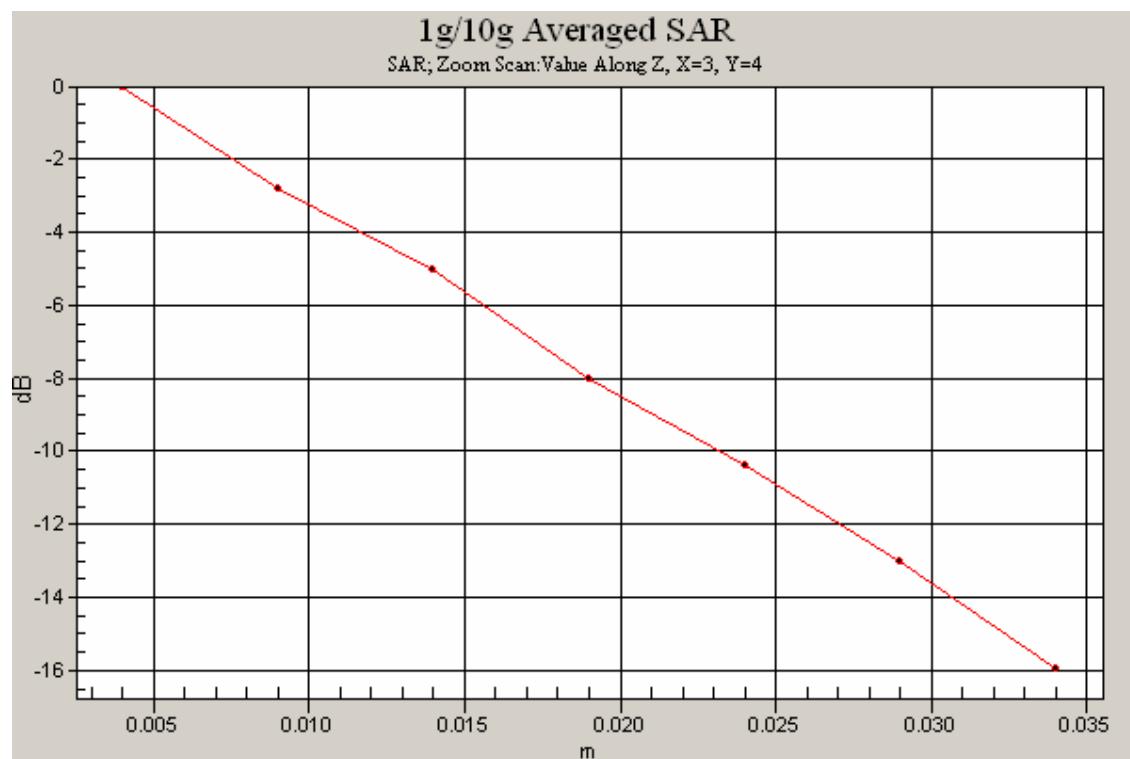
19.3 Degrees Celsius

Humidity

57.0 %



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: 18 March 2009**

**File Name: M090333 Body Worn Front 2.45 Bluetooth 18-03-09.da4**

**DUT: Phicomm Bluetooth Transmitter; Type: XSports2400; Serial: Production Prototype Sample**

\* Communication System: FHSS 2450 MHz; Frequency: 2441 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 2442$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(3.96, 3.96, 3.96)

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

**Channel 40 Test/Area Scan (81x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.060 mW/g

**Channel 40 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

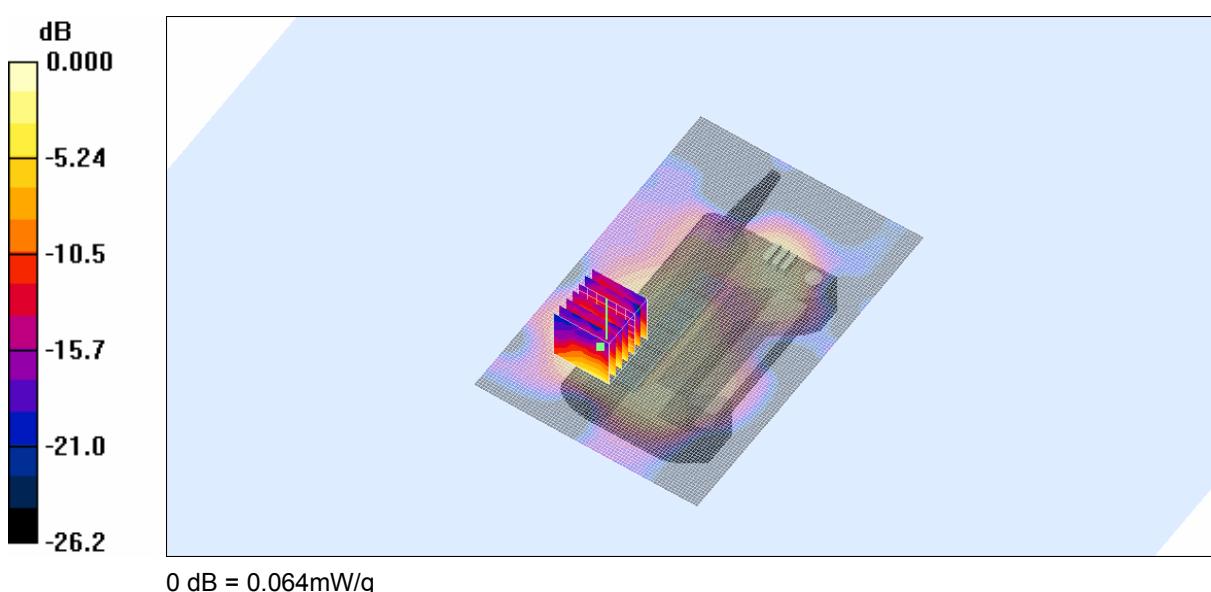
dy=5mm, dz=5mm

Reference Value = 2.79 V/m; Power Drift = 0.104 dB

Peak SAR (extrapolated) = 0.123 W/kg

**SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.027 mW/g**

Maximum value of SAR (measured) = 0.064 mW/g



Ambient Temperature

19.5 Degrees Celsius

Liquid Temperature

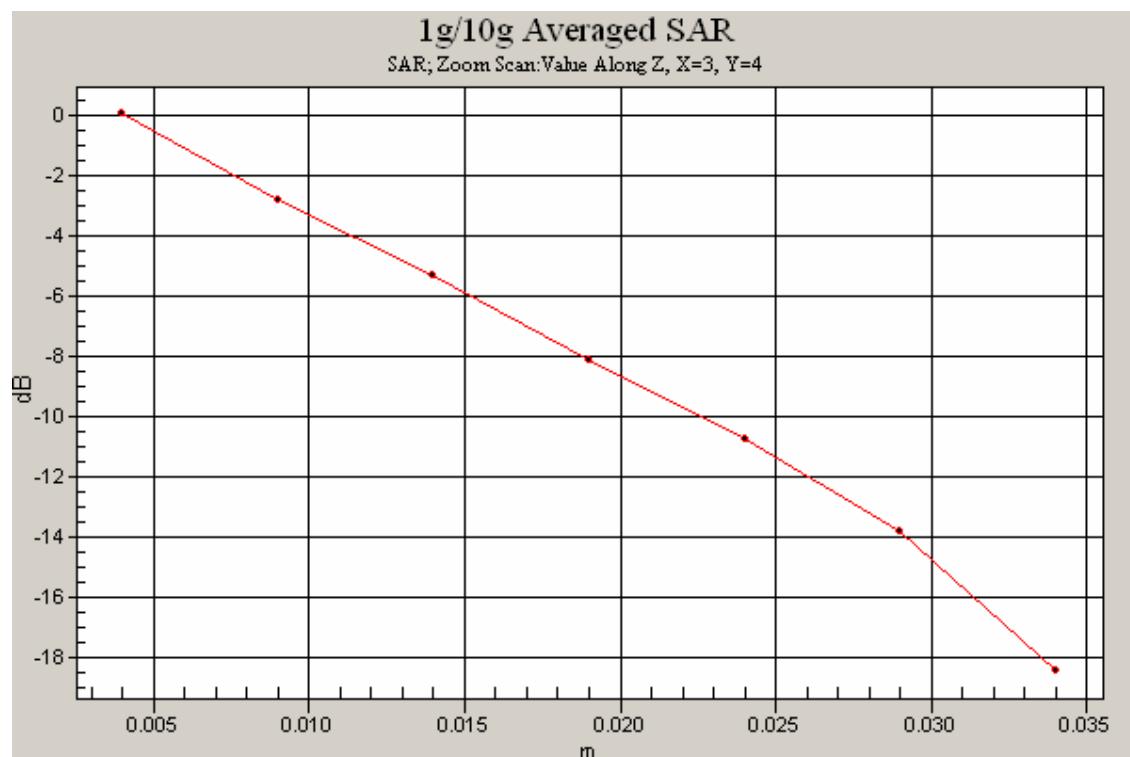
19.3 Degrees Celsius

Humidity

57.0 %



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: 18 March 2009**

**File Name: M090333 Body Worn Front 2.45 Bluetooth 18-03-09.da4**

**DUT: Phicomm Bluetooth Transmitter; Type: XSports2400; Serial: Production Prototype Sample**

\* Communication System: FHSS 2450 MHz; Frequency: 2480 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 2478$  MHz;  $\sigma = 2$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(3.96, 3.96, 3.96)

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

**Channel 79 Test/Area Scan (81x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.056 mW/g

**Channel 79 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

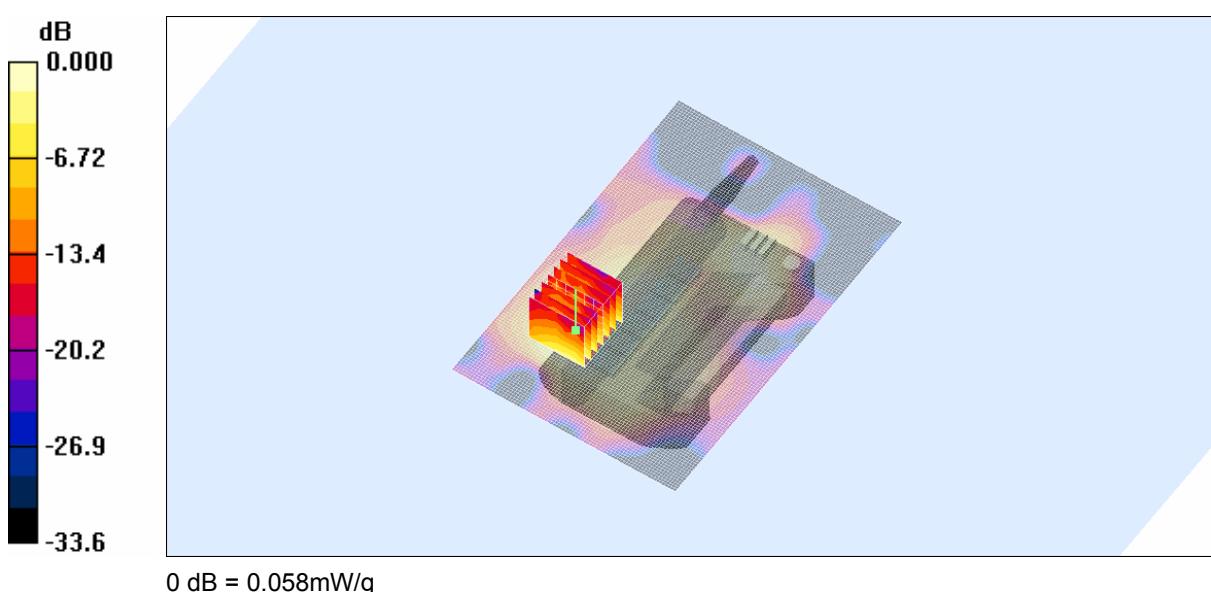
dy=5mm, dz=5mm

Reference Value = 2.58 V/m; Power Drift = 0.292 dB

Peak SAR (extrapolated) = 0.110 W/kg

**SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.025 mW/g**

Maximum value of SAR (measured) = 0.058 mW/g



**SAR MEASUREMENT PLOT 3**

**Ambient Temperature**

**19.5 Degrees Celsius**

**Liquid Temperature**

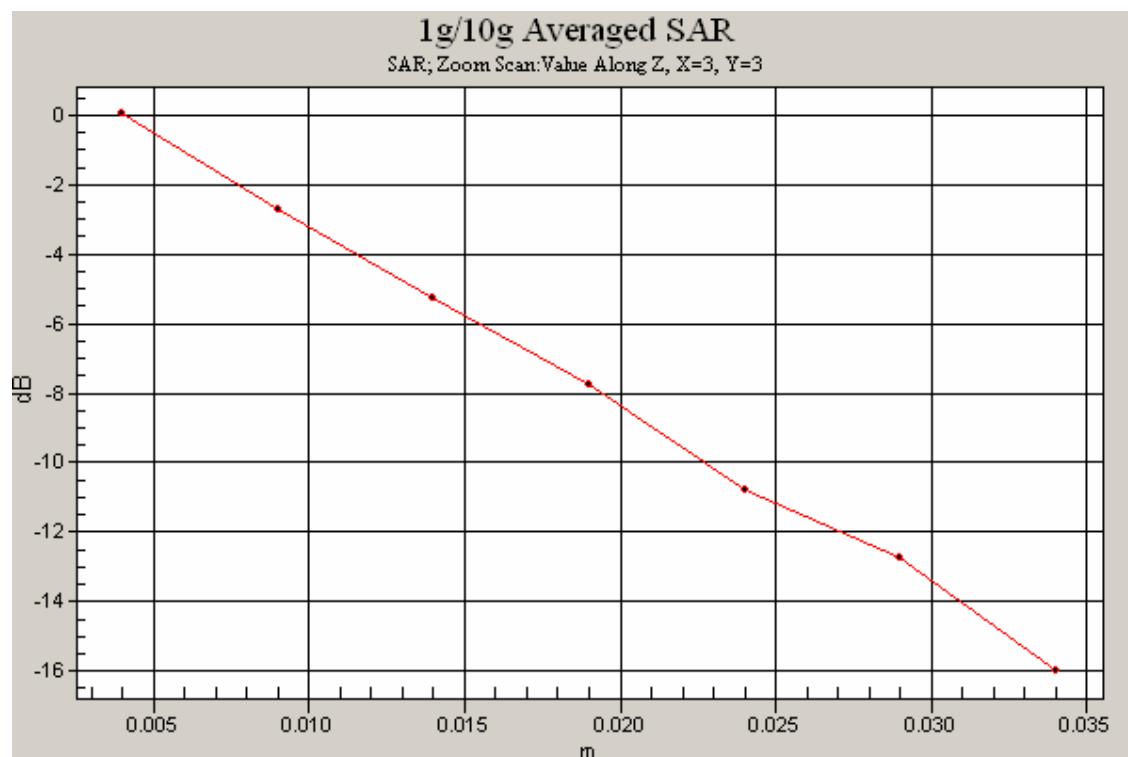
**19.3 Degrees Celsius**

**Humidity**

**57.0 %**



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: 18 March 2009**

**File Name: M090333 Body Worn 2.45 Bluetooth 18-03-09.da4**

**DUT: Phicomm Bluetooth Transmitter; Type: XSports2400; Serial: Production Prototype Sample**

\* Communication System: FHSS 2450 MHz; Frequency: 2441 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 2442$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(3.96, 3.96, 3.96)

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

**Channel 40 Test/Area Scan (81x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.044 mW/g

**Channel 40 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

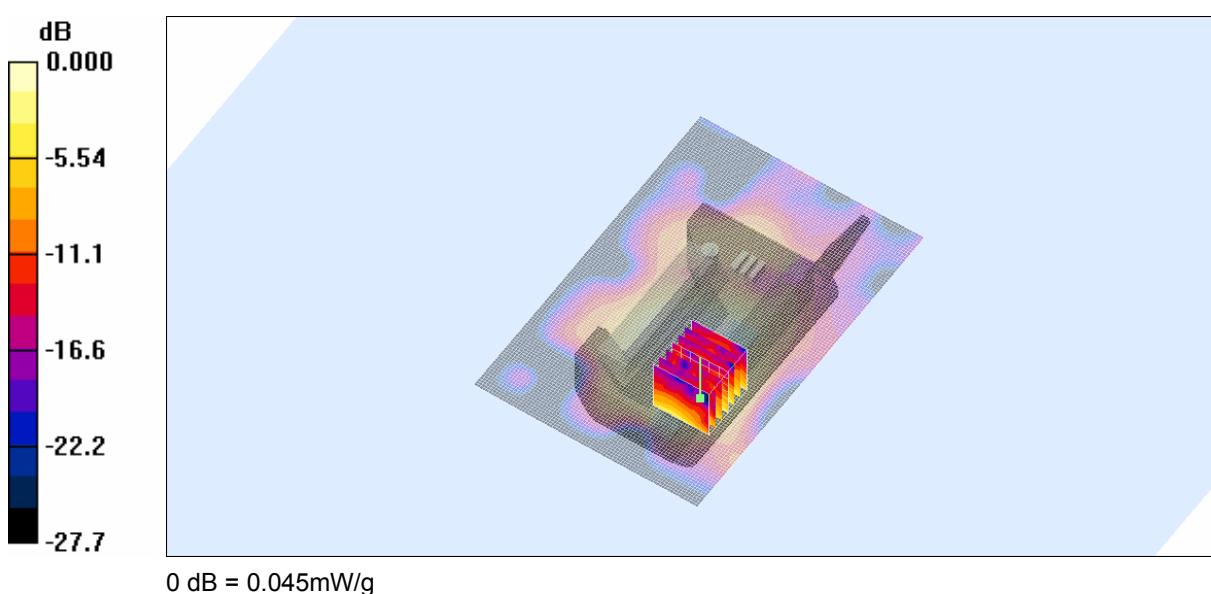
dy=5mm, dz=5mm

Reference Value = 4.01 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.092 W/kg

**SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.020 mW/g**

Maximum value of SAR (measured) = 0.045 mW/g



**Ambient Temperature**

**19.5 Degrees Celsius**

**Liquid Temperature**

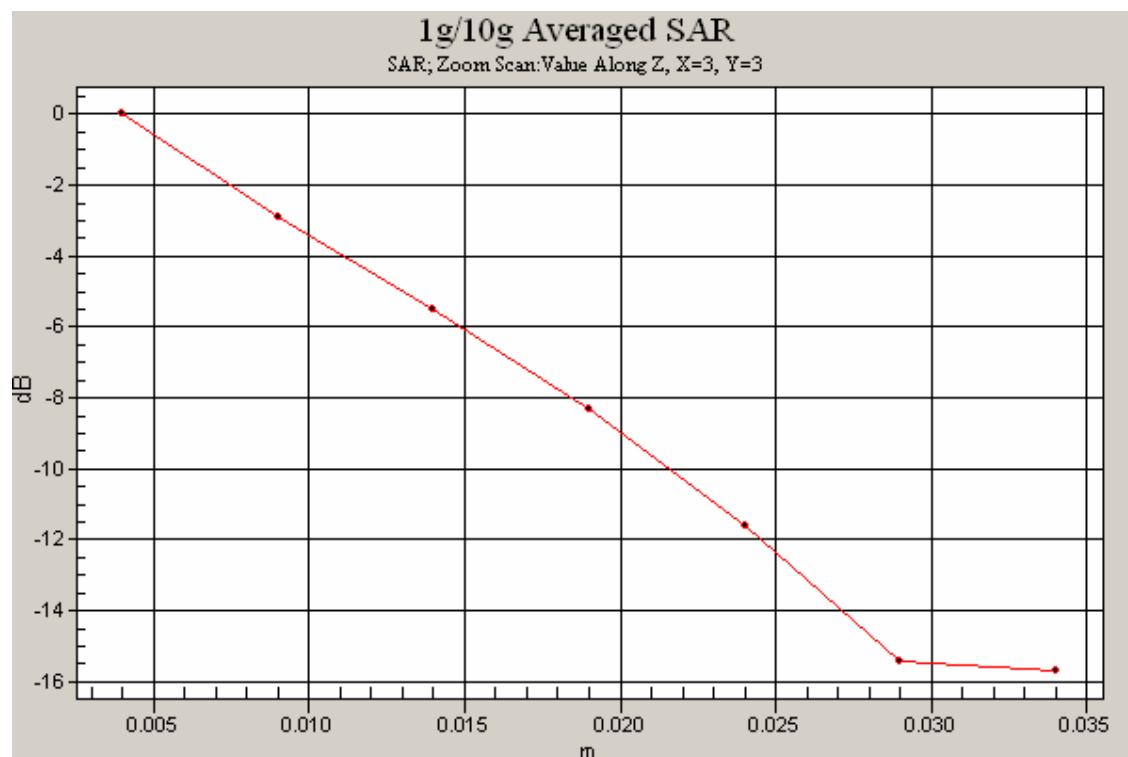
**19.3 Degrees Celsius**

**Humidity**

**57.0 %**



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: 18 March 2009**

File Name: M090333 Belt Clip 2.45 Bluetooth 18-03-09.da4

**DUT: Phicomm Bluetooth Transmitter; Type: XSports2400; Serial: Production Prototype Sample**

\* Communication System: FHSS 2450 MHz; Frequency: 2441 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 2442$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(3.96, 3.96, 3.96)

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

**Channel 40 Test/Area Scan (81x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.016 mW/g

**Channel 40 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

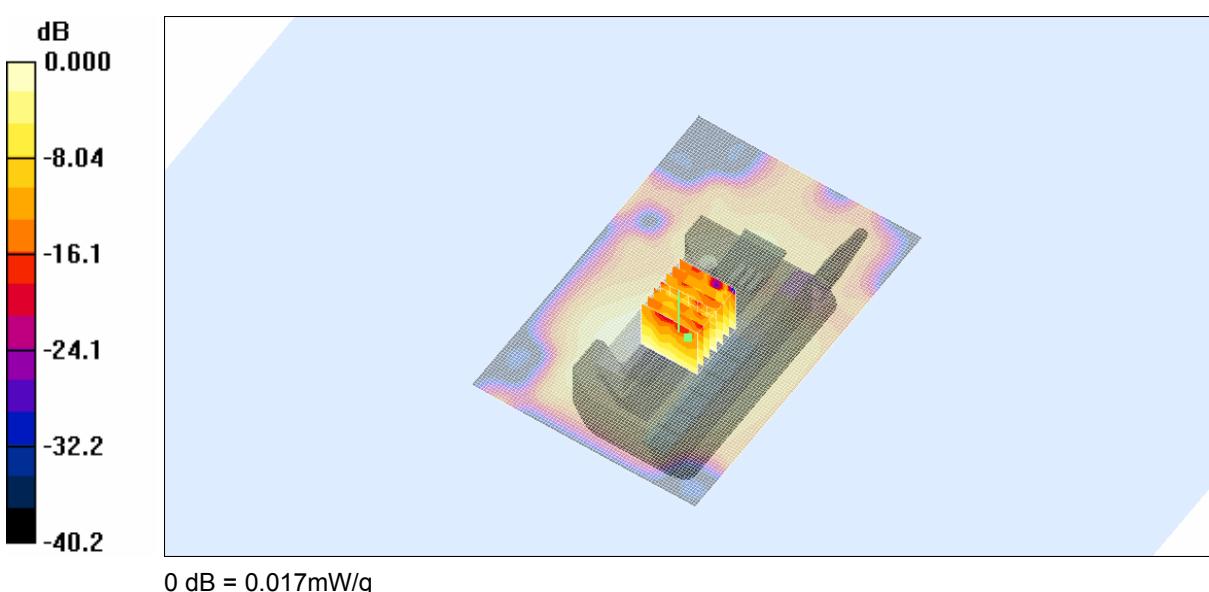
dy=5mm, dz=5mm

Reference Value = 2.39 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 0.032 W/kg

**SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00879 mW/g**

Maximum value of SAR (measured) = 0.017 mW/g



**SAR MEASUREMENT PLOT 5**

Ambient Temperature

19.5 Degrees Celsius

Liquid Temperature

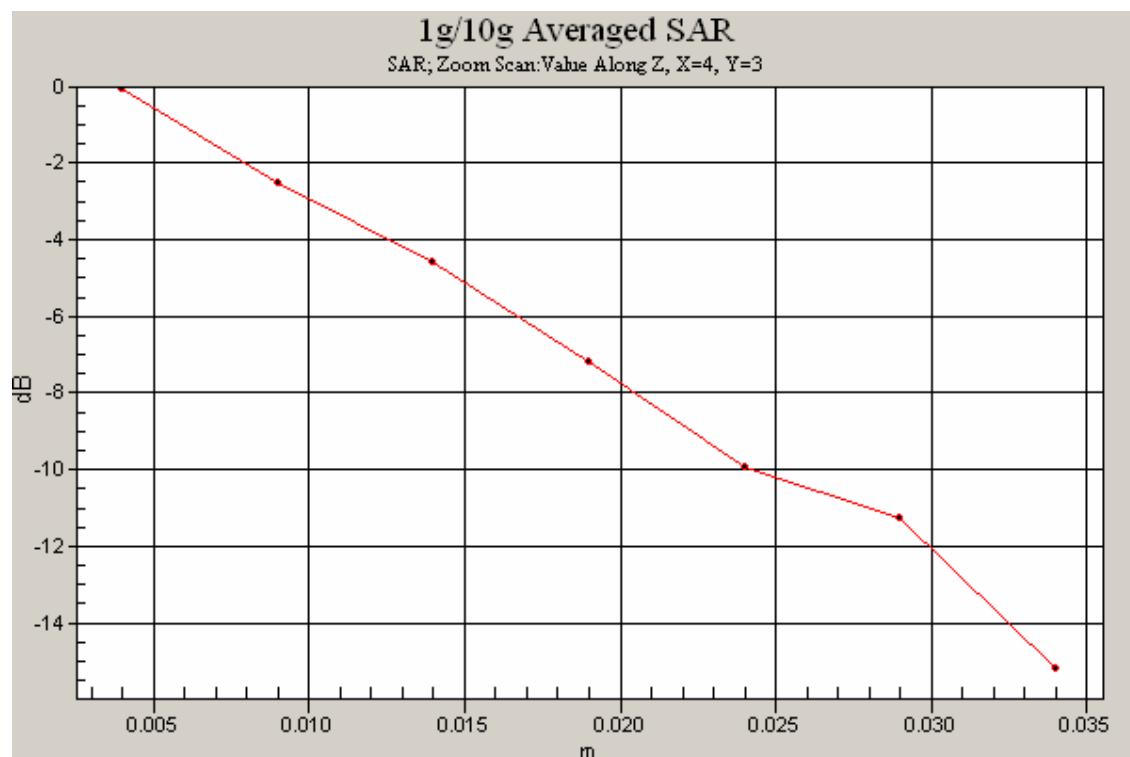
19.3 Degrees Celsius

Humidity

57.0 %



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: 18 January 2009**

File Name: M090333 Belt Clip Tilted 2.45 Bluetooth 18-03-09.da4

**DUT: Phicomm Bluetooth Transmitter; Type: XSports2400; Serial: Production Prototype Sample**

\* Communication System: FHSS 2450 MHz; Frequency: 2441 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 2442$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(3.96, 3.96, 3.96)

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

**Channel 40 Test/Area Scan (81x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.035 mW/g

**Channel 40 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

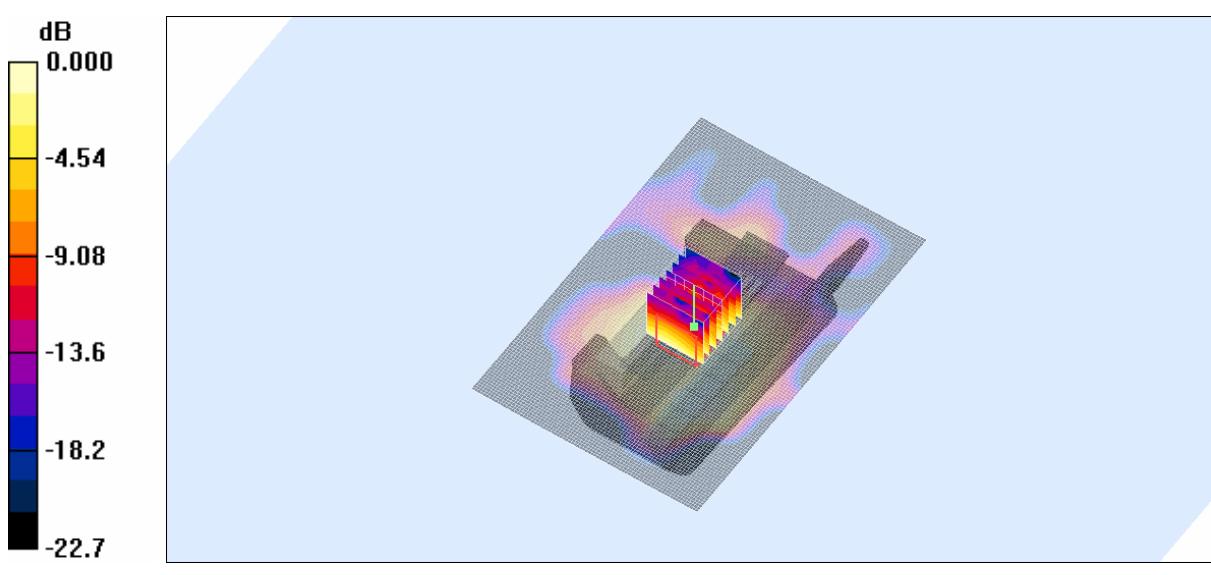
dy=5mm, dz=5mm

Reference Value = 3.74 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.057 W/kg

**SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.017 mW/g**

Maximum value of SAR (measured) = 0.032 mW/g



**SAR MEASUREMENT PLOT 6**

**Ambient Temperature**

**19.7 Degrees Celsius**

**Liquid Temperature**

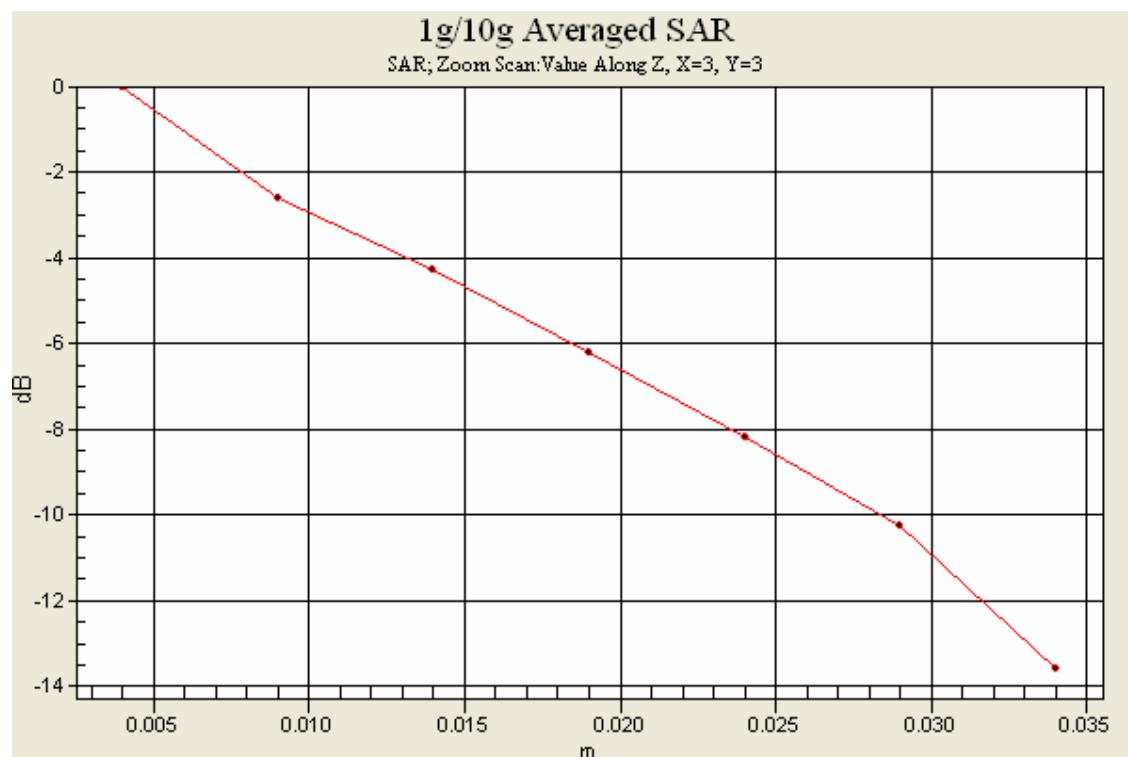
**19.5 Degrees Celsius**

**Humidity**

**51.0 %**



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: 18 March 2009**

**File Name: Validation 2450 MHz (DAE442 Probe1380) 18-03-09.da4**

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

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

\* Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.83$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.52, 4.52, 4.52)

- 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) = 18.6 mW/g

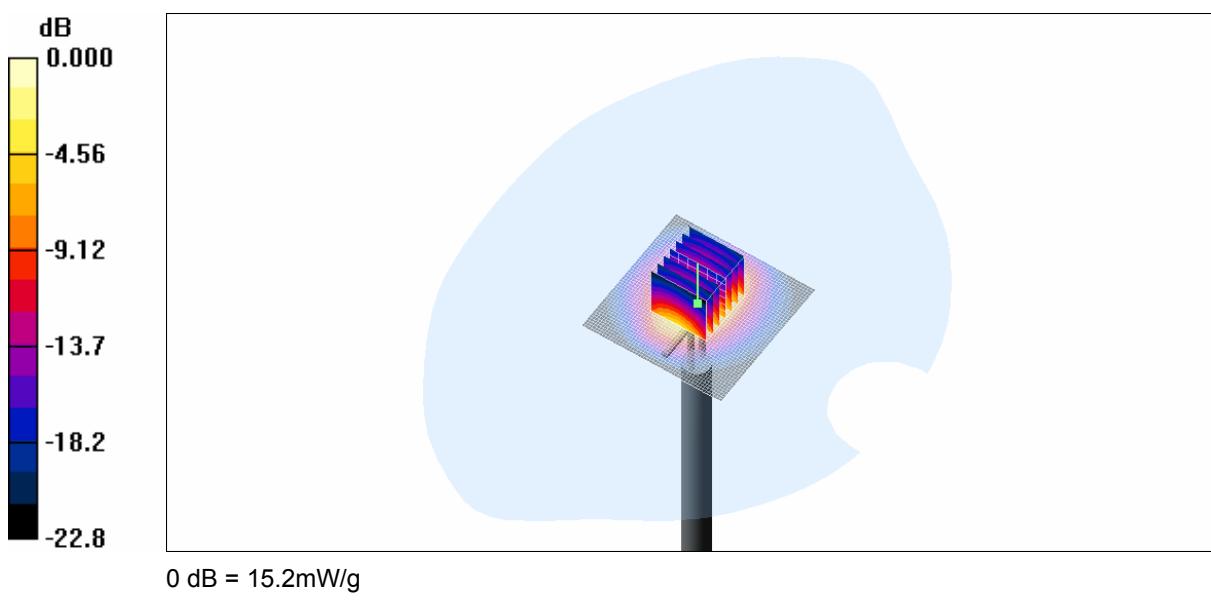
**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.3 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 30.8 W/kg

**SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6.28 mW/g**

Maximum value of SAR (measured) = 15.2 mW/g



Ambient Temperature

19.5 Degrees Celsius

Liquid Temperature

19.3 Degrees Celsius

Humidity

57.0 %



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)

Accreditation No. 5292

