

## 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: 5200 MHz Band SAR Measurement Plot Numbers**

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Primary Portrait	1	B	6	-	52

**Table: 5600 MHz Band SAR Measurement Plot Numbers**

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Primary Portrait	2	A	6	-	120
	3	B	6	-	120
Tablet	4	B	6	-	120

**Table: 5800 MHz Band SAR Measurement Plot Numbers**

Test Position	Plot No.	Ant	Bit rate Mode (Mbps)	Channel Bandwidth (MHz)	Test Channel
Primary Portrait	5	A	6	-	157
	6	B	6	-	157
	7	B	HT0	20	157
	8	B	HT0	40	159
Tablet	9	B	6	-	157

**Table: Validation Plots**

Plot 10	Validation 5200 MHz 6 <sup>th</sup> November 2009
Plot 11	Validation 5500 MHz 5 <sup>th</sup> November 2009
Plot 12	Validation 5800 MHz 4 <sup>th</sup> November 2009



Test Date: 6 November 2009

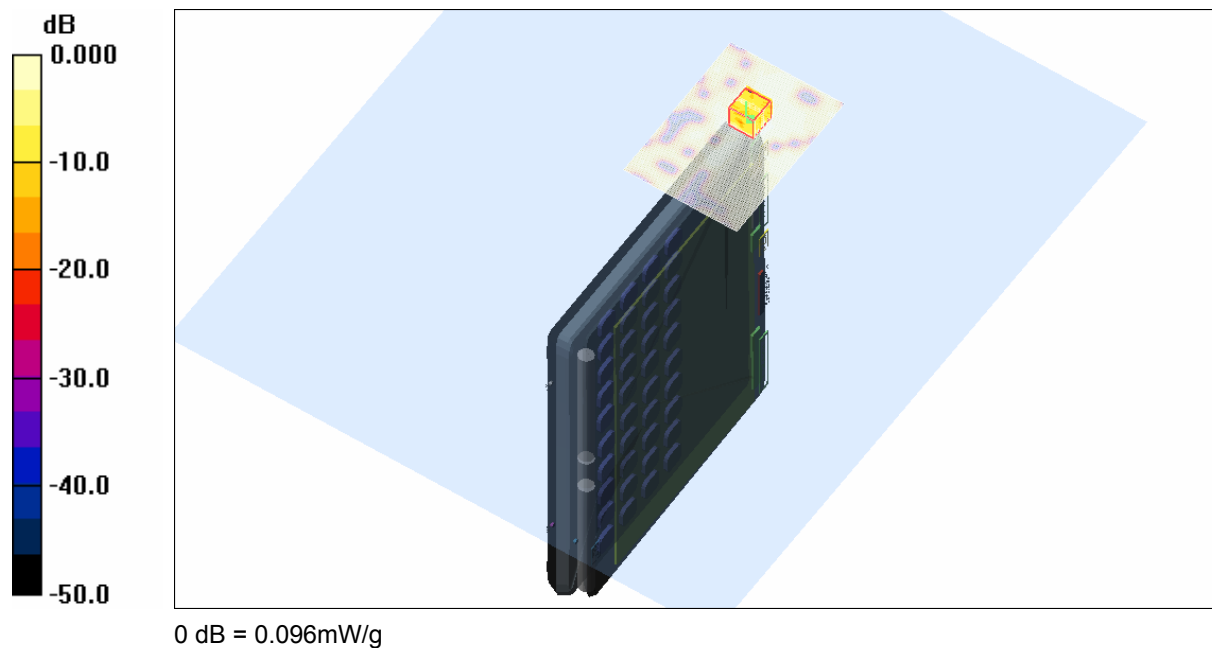
File Name: M091069 Edge On Primary Portrait OFDM 5200 MHz Antenna B (2) 06-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5250 MHz; Frequency: 5260 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5256$  MHz;  $\sigma = 5.37$  mho/m;  $\epsilon_r = 47.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.92, 3.92, 3.92)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 052 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.095 mW/g

**Channel 052 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 2.93 V/m; Power Drift = 0.261 dB  
Peak SAR (extrapolated) = 0.175 W/kg  
**SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.022 mW/g**  
Maximum value of SAR (measured) = 0.096 mW/g

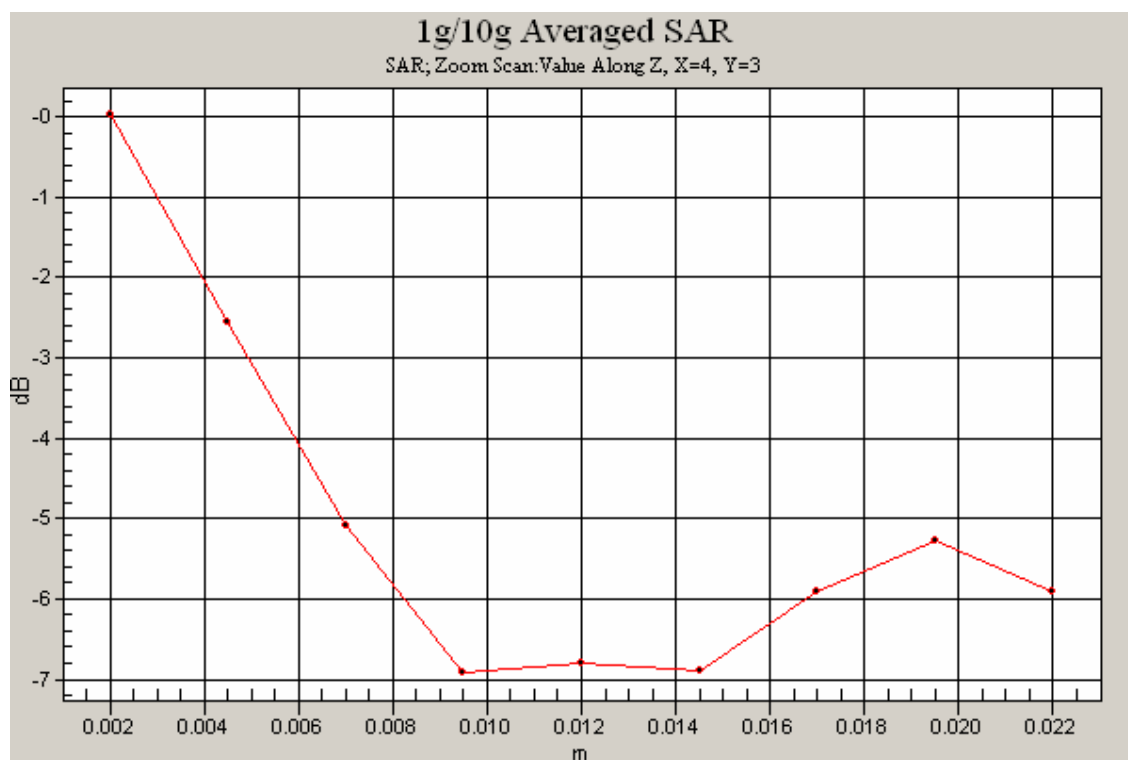


**SAR MEASUREMENT PLOT 1**

Ambient Temperature  
Liquid Temperature  
Humidity

21.9 Degrees Celsius  
21.5 Degrees Celsius  
41.0 %





Test Date: 5 November 2009

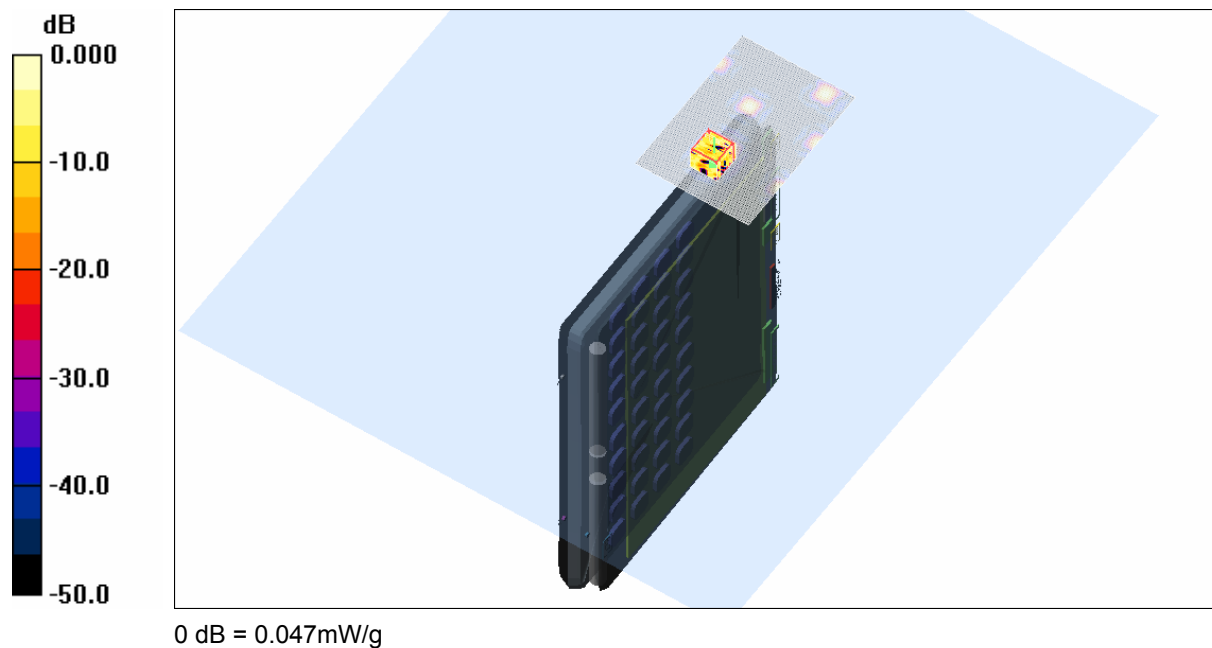
File Name: M091069 Edge On Primary Portrait OFDM 5600 MHz Antenna A (1) 05-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5600 MHz; Frequency: 5600 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.89$  mho/m;  $\epsilon_r = 45.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.36, 3.36, 3.36)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 120 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.053 mW/g

**Channel 120 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 1.02 V/m; Power Drift = 0.378 dB  
Peak SAR (extrapolated) = 0.127 W/kg  
**SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00302 mW/g**  
Maximum value of SAR (measured) = 0.047 mW/g

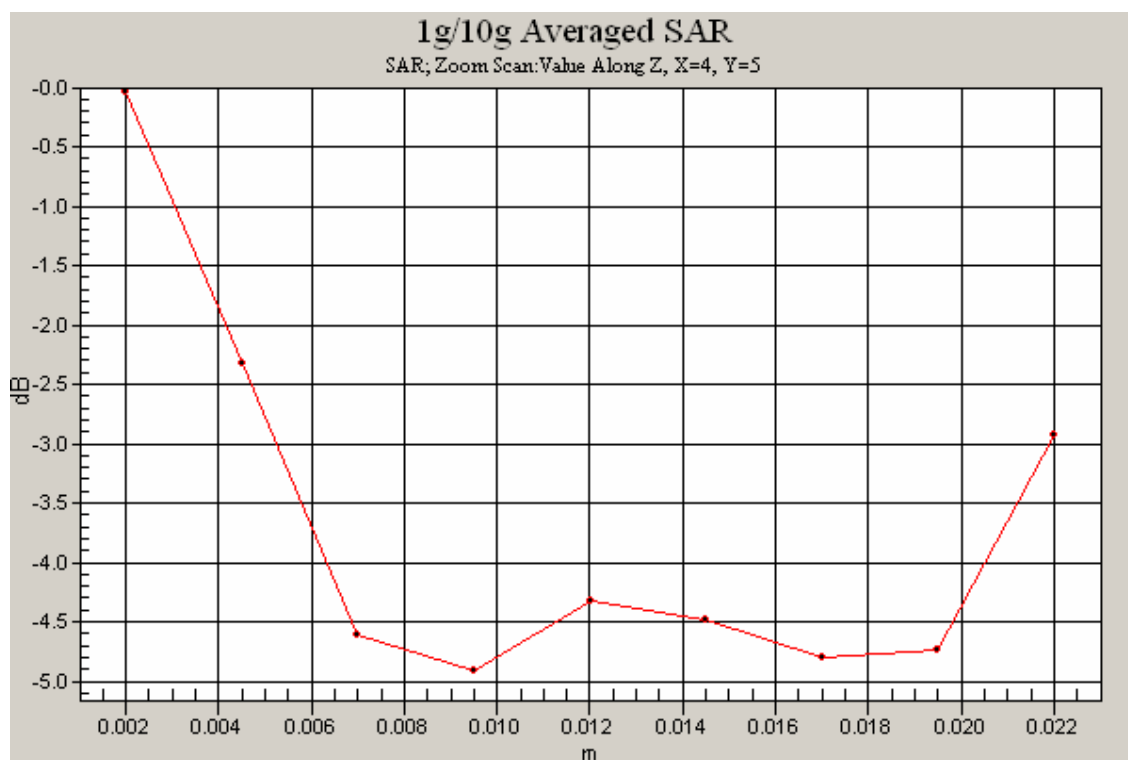


**SAR MEASUREMENT PLOT 2**

Ambient Temperature  
Liquid Temperature  
Humidity

21.0 Degrees Celsius  
20.8 Degrees Celsius  
43.0 %





Test Date: 5 November 2009

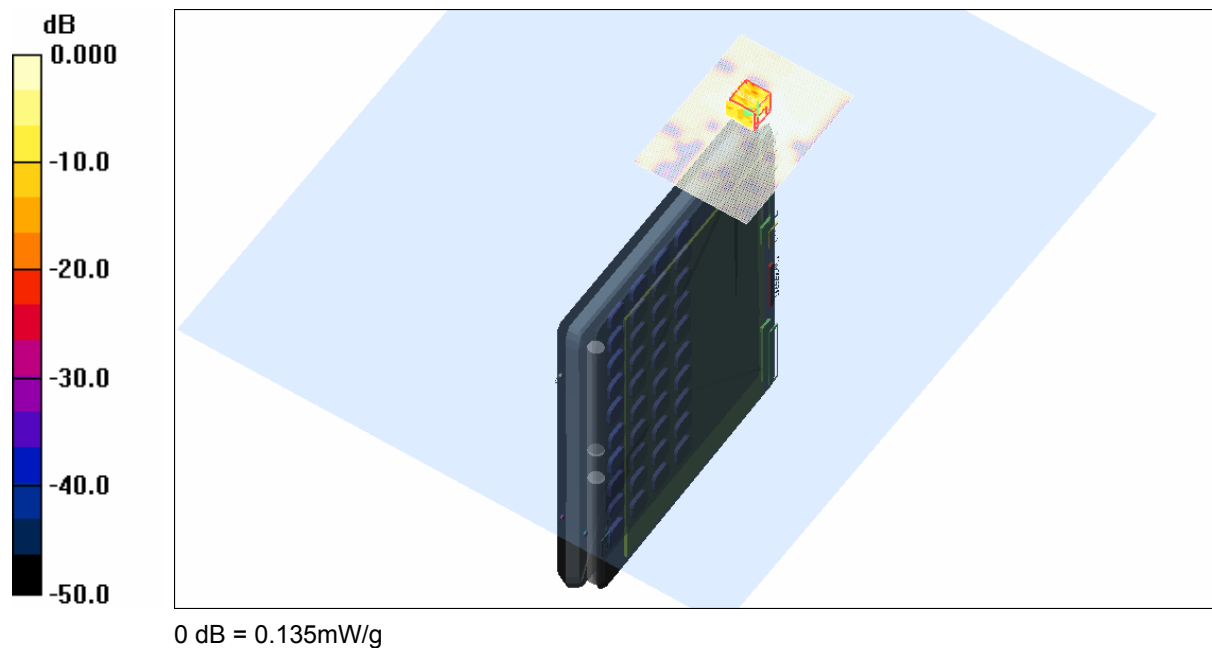
File Name: M091069 Edge On Primary Portrait OFDM 5600 MHz Antenna B (2) 05-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5600 MHz; Frequency: 5600 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.89$  mho/m;  $\epsilon_r = 45.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.36, 3.36, 3.36)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 120 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.189 mW/g

**Channel 120 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 4.20 V/m; Power Drift = 0.028 dB  
Peak SAR (extrapolated) = 0.260 W/kg  
**SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.033 mW/g**  
Maximum value of SAR (measured) = 0.135 mW/g

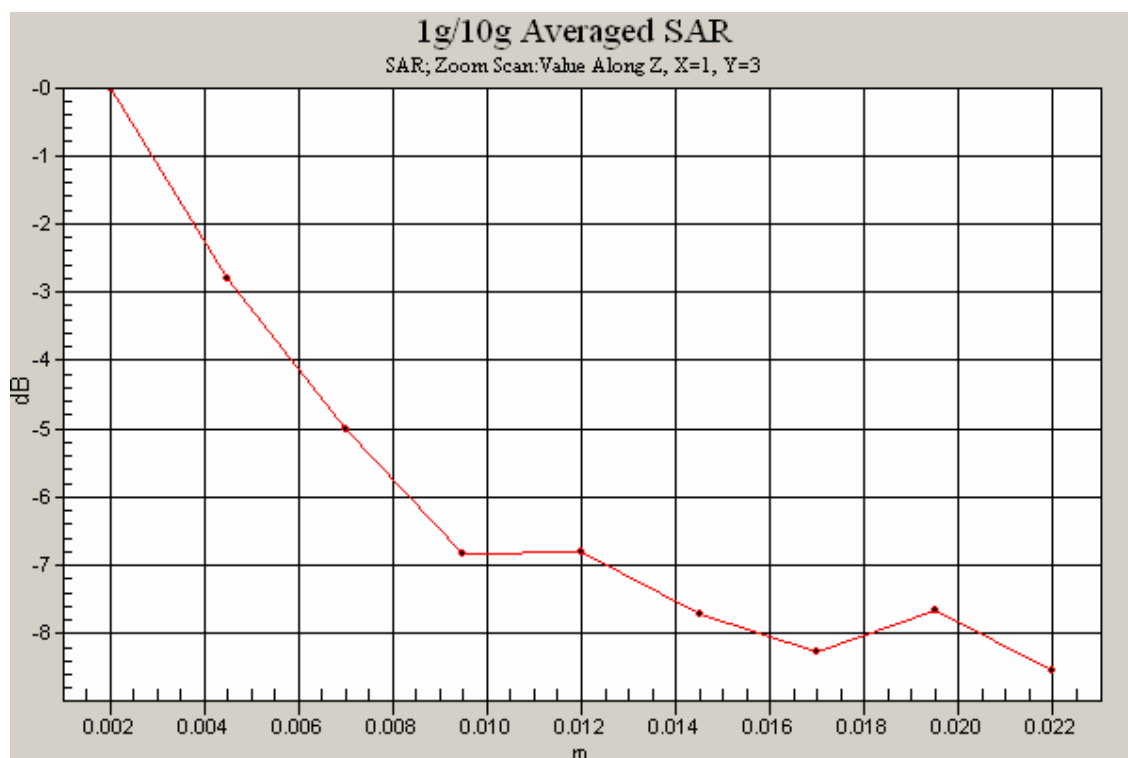


**SAR MEASUREMENT PLOT 3**

Ambient Temperature  
Liquid Temperature  
Humidity

21.0 Degrees Celsius  
20.8 Degrees Celsius  
43.0 %





Test Date: 5 November 2009

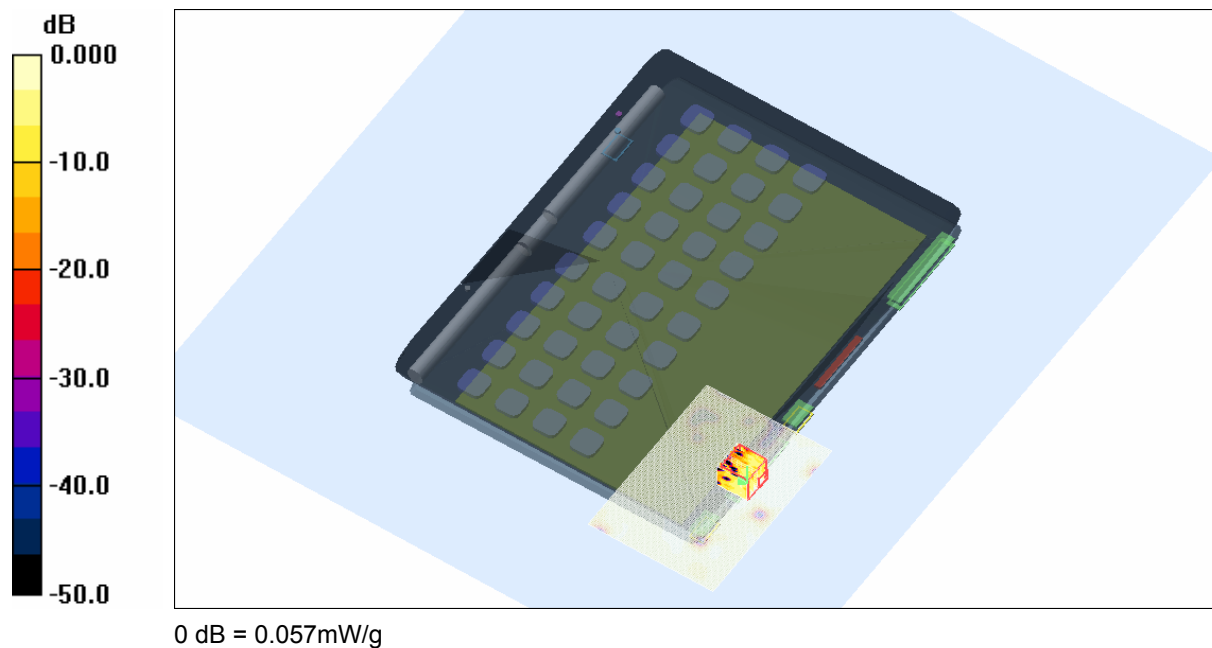
File Name: M091069 Tablet OFDM 5600 MHz Antenna B (2) 05-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5600 MHz; Frequency: 5600 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.89$  mho/m;  $\epsilon_r = 45.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.36, 3.36, 3.36)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 120 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.076 mW/g

**Channel 120 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 1.36 V/m; Power Drift = -0.492 dB  
Peak SAR (extrapolated) = 0.268 W/kg  
**SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.00627 mW/g**  
Maximum value of SAR (measured) = 0.057 mW/g



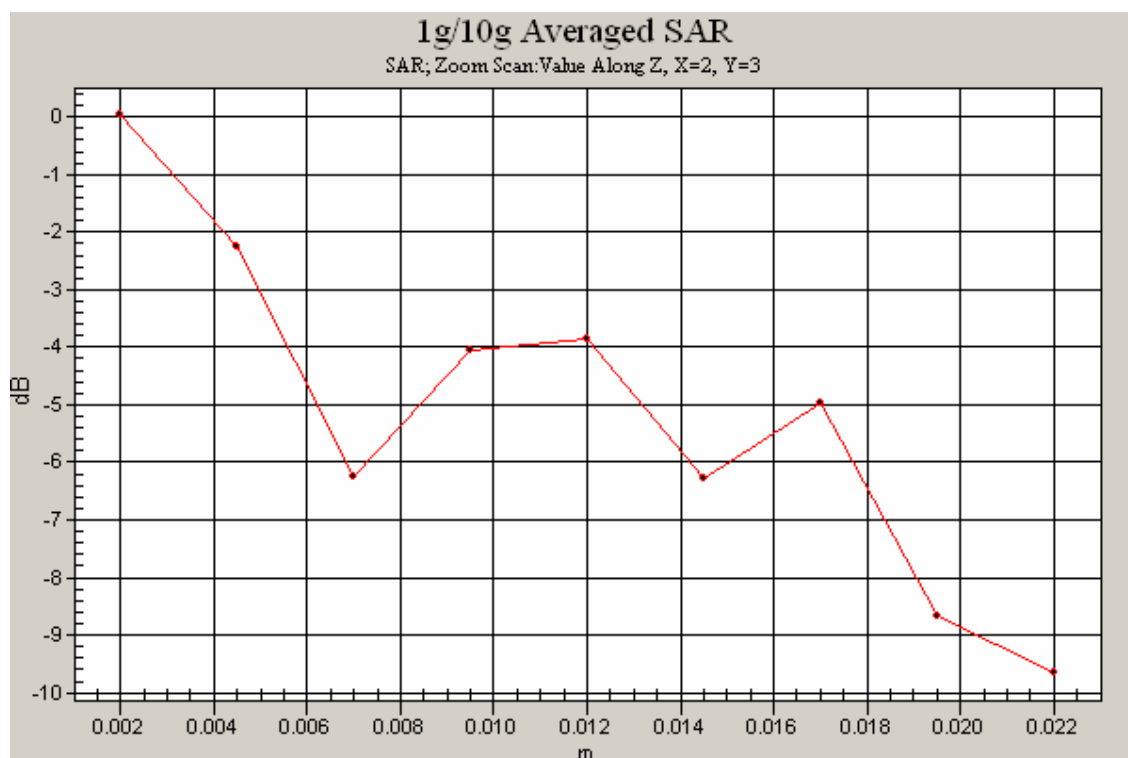
**SAR MEASUREMENT PLOT 4**

Ambient Temperature  
Liquid Temperature  
Humidity

21.0 Degrees Celsius  
20.8 Degrees Celsius  
43.0 %







Test Date: 4 November 2009

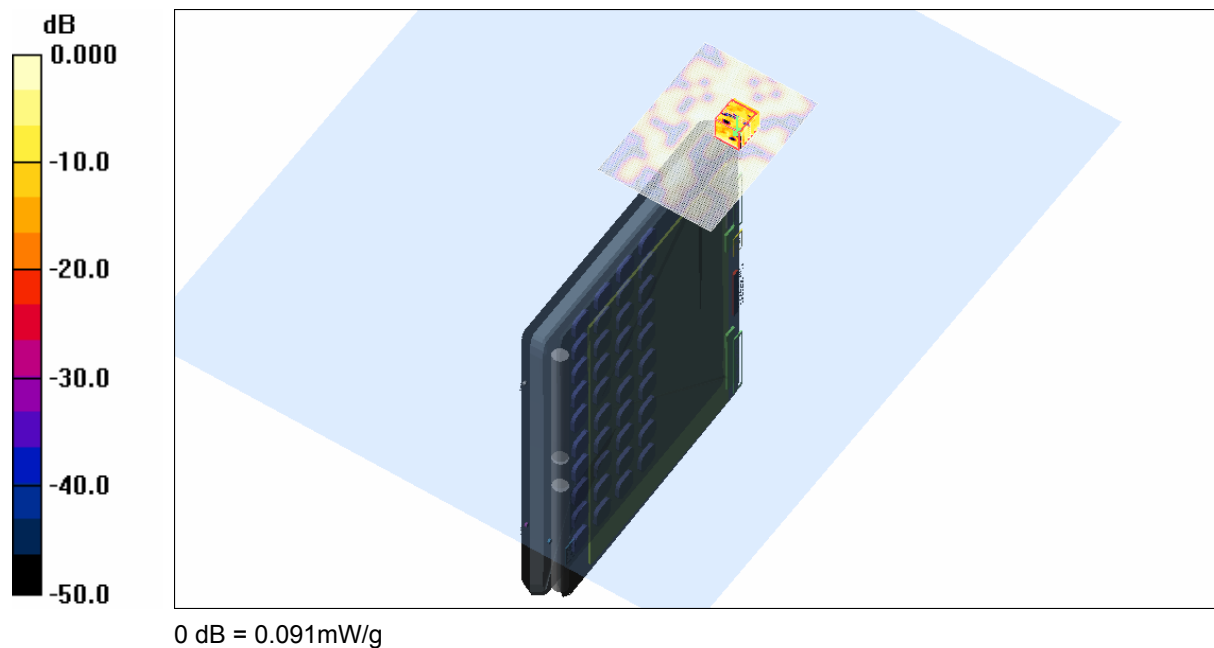
File Name: M091069 Edge On Primary Portrait OFDM 5800 MHz Antenna A (1) 04-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5786.2$  MHz;  $\sigma = 6.38$  mho/m;  $\epsilon_r = 44.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.26, 3.26, 3.26)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 157 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.126 mW/g

**Channel 157 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 3.11 V/m; Power Drift = 0.080 dB  
Peak SAR (extrapolated) = 0.251 W/kg  
**SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.012 mW/g**  
Maximum value of SAR (measured) = 0.091 mW/g



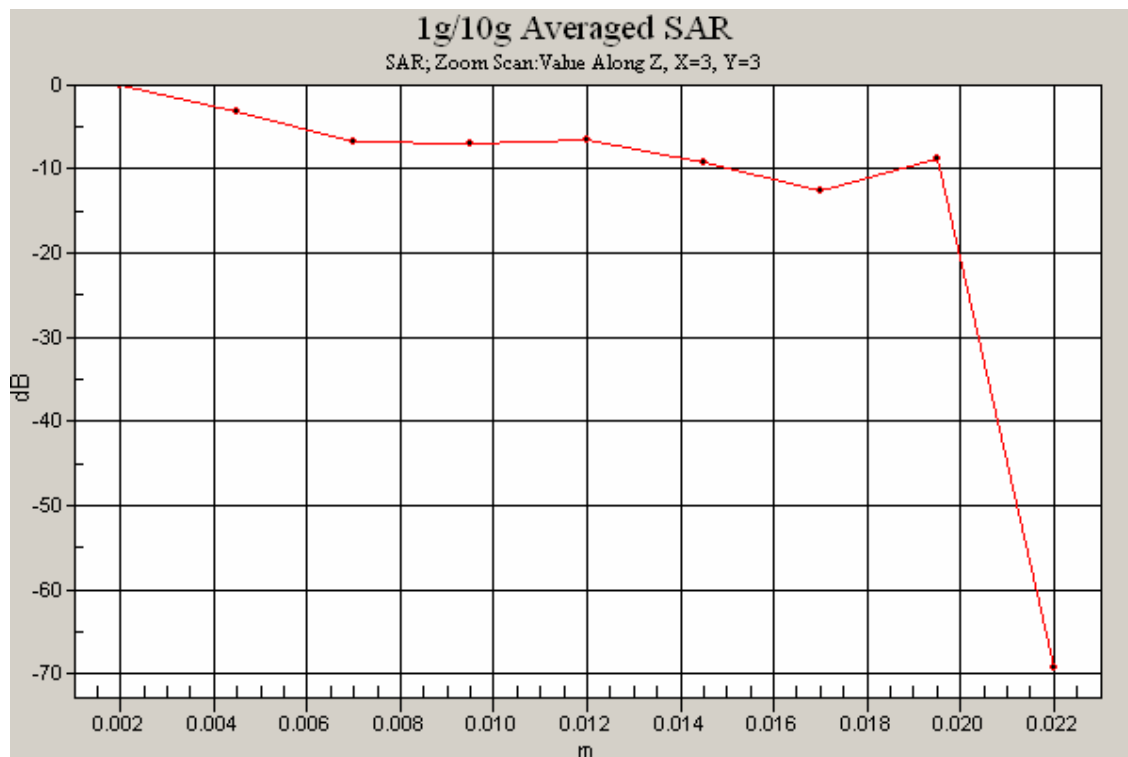
**SAR MEASUREMENT PLOT 5**

Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.8 Degrees Celsius  
47.0 %



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Test Date: 4 November 2009

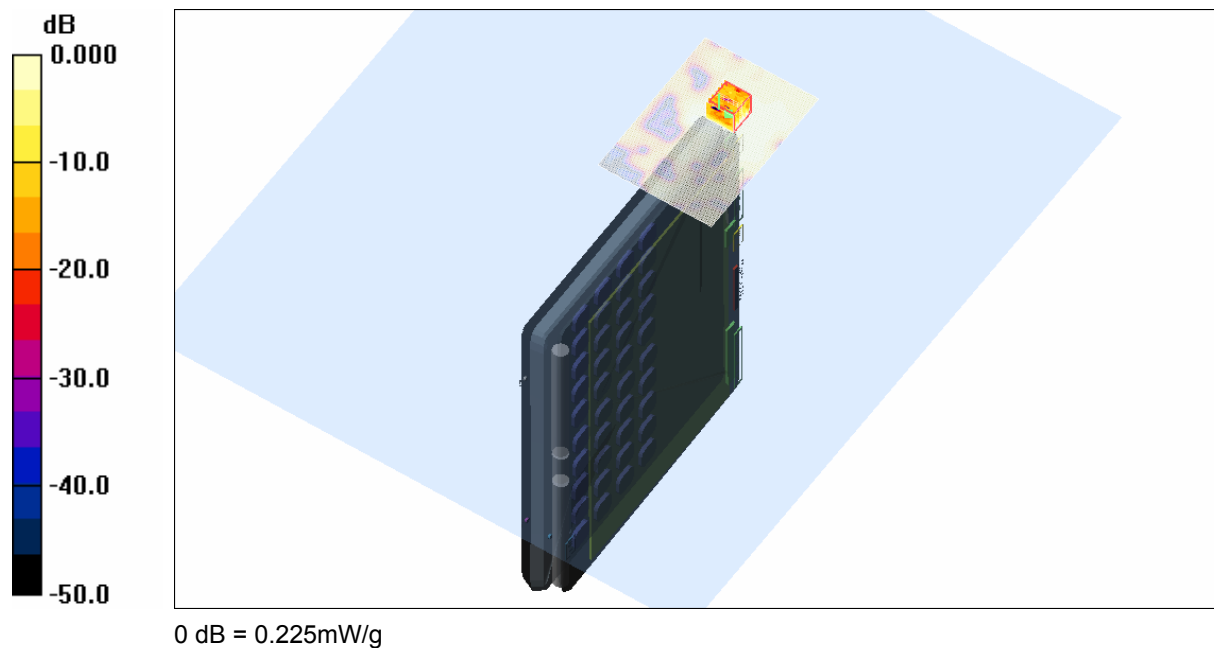
File Name: M091069 Edge On Primary Portrait OFDM 5800 MHz Antenna B (2) 04-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5786.2$  MHz;  $\sigma = 6.38$  mho/m;  $\epsilon_r = 44.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.26, 3.26, 3.26)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 157 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.221 mW/g

**Channel 157 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 5.03 V/m; Power Drift = 0.306 dB  
Peak SAR (extrapolated) = 0.366 W/kg  
**SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.044 mW/g**  
Maximum value of SAR (measured) = 0.225 mW/g

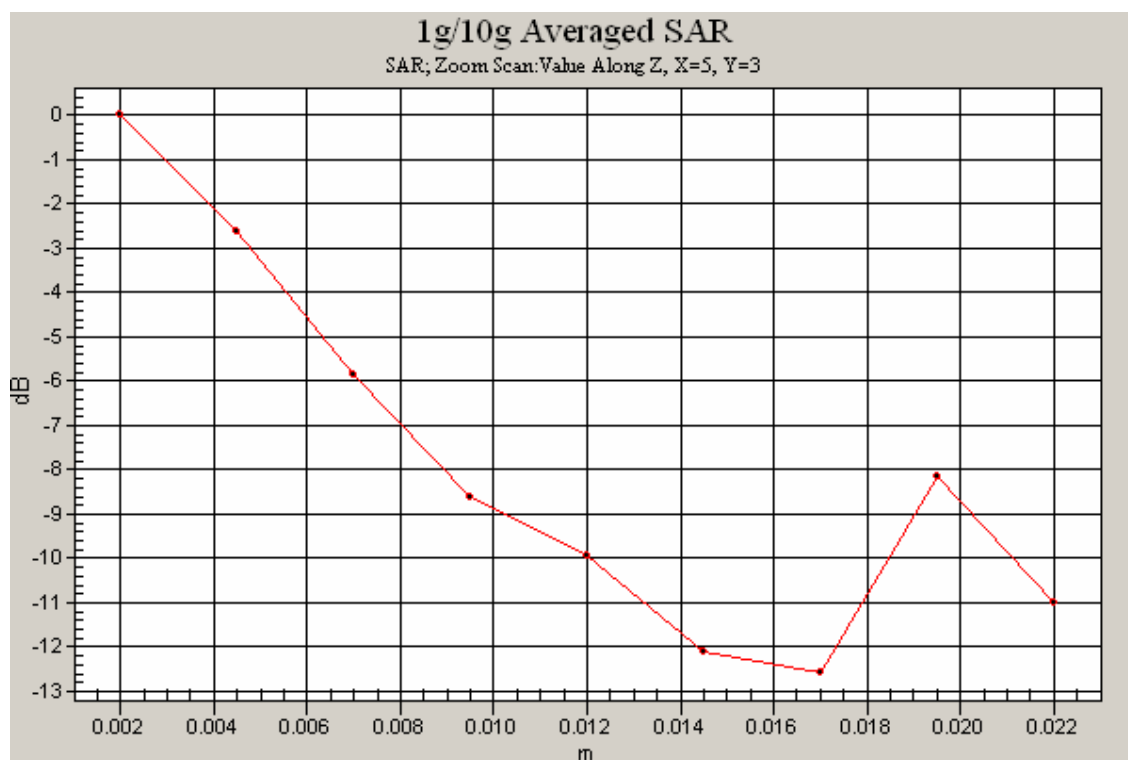


**SAR MEASUREMENT PLOT 6**

Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.8 Degrees Celsius  
47.0 %





Test Date: 4 November 2009

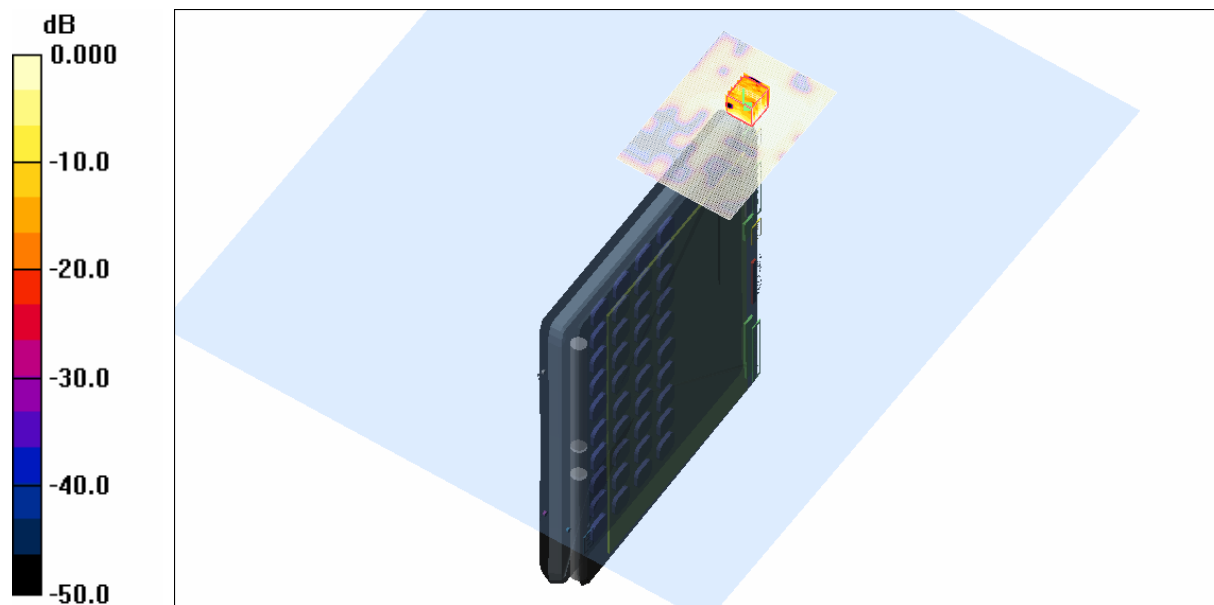
File Name: M091069 Edge On Primary Portrait HT0 20MHz 5800 MHz Antenna B (2) 04-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5786.2$  MHz;  $\sigma = 6.38$  mho/m;  $\epsilon_r = 44.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.26, 3.26, 3.26)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 157 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.214 mW/g

**Channel 157 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 5.31 V/m; Power Drift = -0.233 dB  
Peak SAR (extrapolated) = 0.355 W/kg  
**SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.044 mW/g**  
Maximum value of SAR (measured) = 0.214 mW/g



0 dB = 0.214mW/g

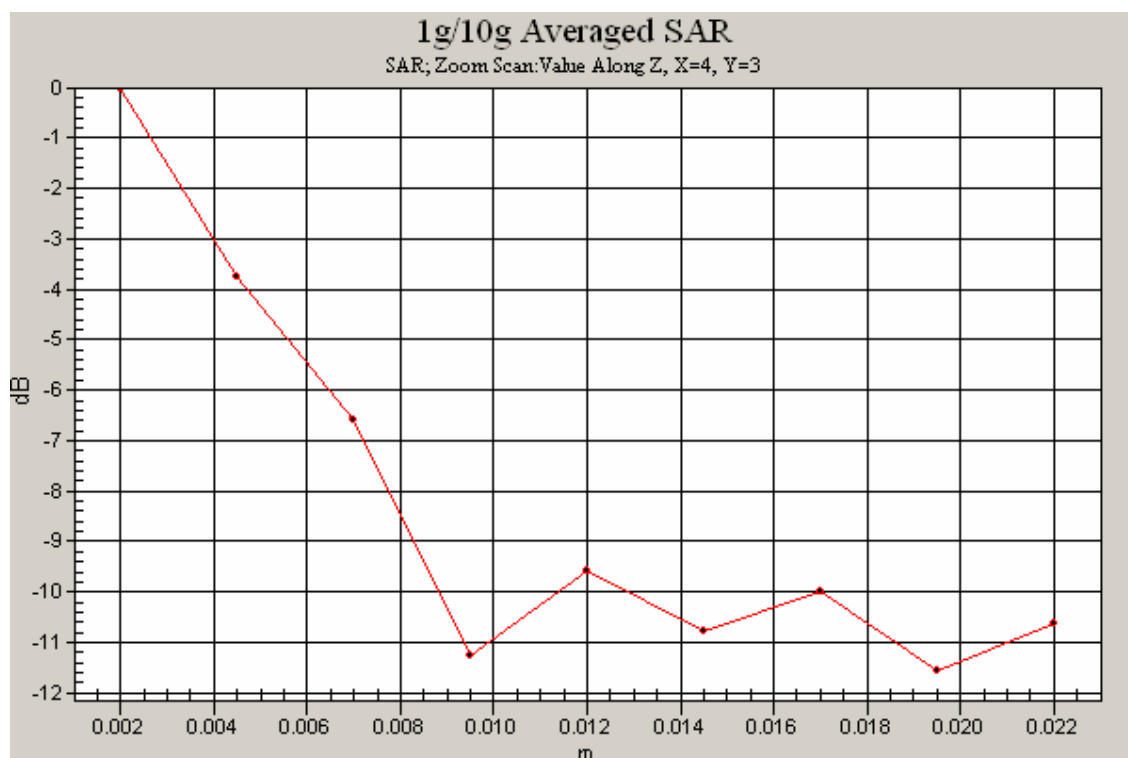
**SAR MEASUREMENT PLOT 7**

Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.8 Degrees Celsius  
47.0 %



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Test Date: 4 November 2009

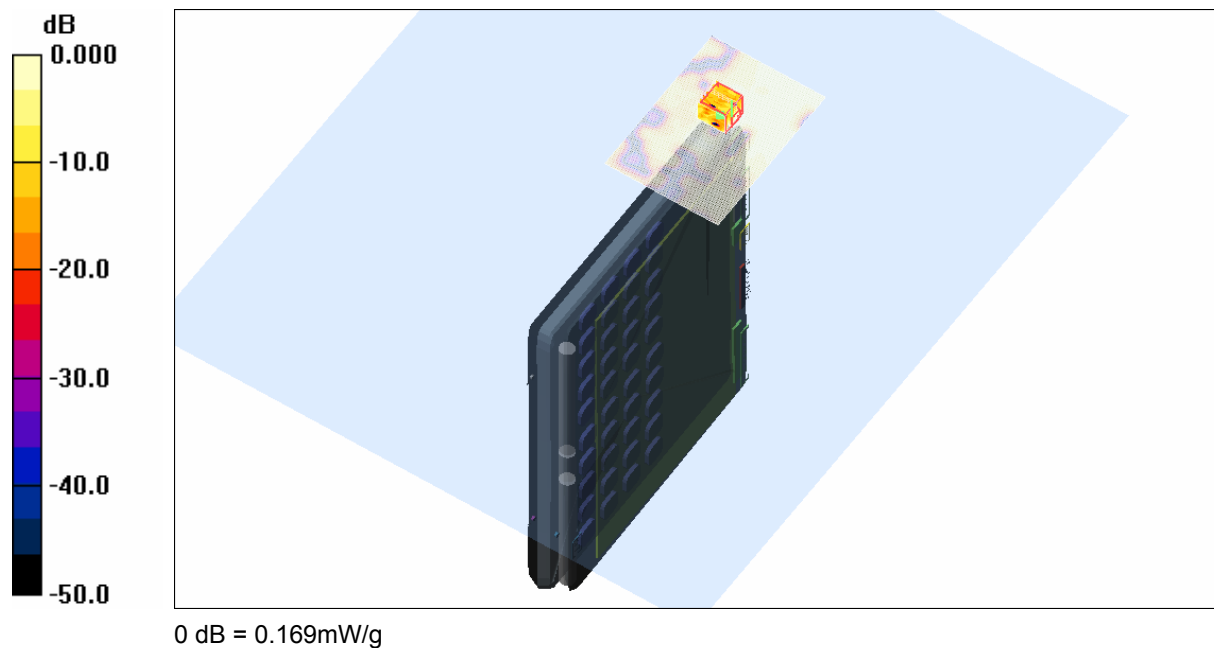
File Name: M091069 Edge On Primary Portrait HT0 40MHz 5800 MHz Antenna B (2) 04-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5770 MHz; Frequency: 5795 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5800.8$  MHz;  $\sigma = 6.4$  mho/m;  $\epsilon_r = 44.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.26, 3.26, 3.26)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 159 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.239 mW/g

**Channel 159 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 4.66 V/m; Power Drift = -0.457 dB  
Peak SAR (extrapolated) = 0.283 W/kg  
**SAR(1 g) = 0.094 mW/g; SAR(10 g) = 0.033 mW/g**  
Maximum value of SAR (measured) = 0.169 mW/g



**SAR MEASUREMENT PLOT 8**

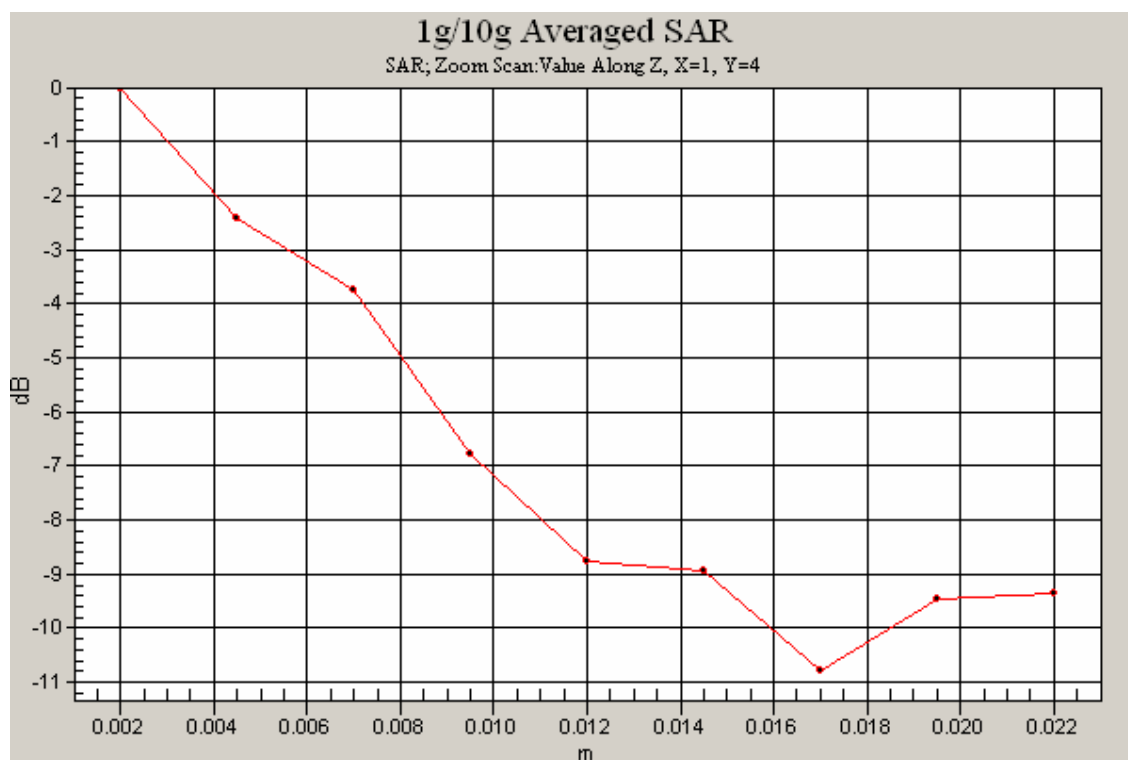
Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.8 Degrees Celsius  
47.0 %



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Test Date: 4 November 2009

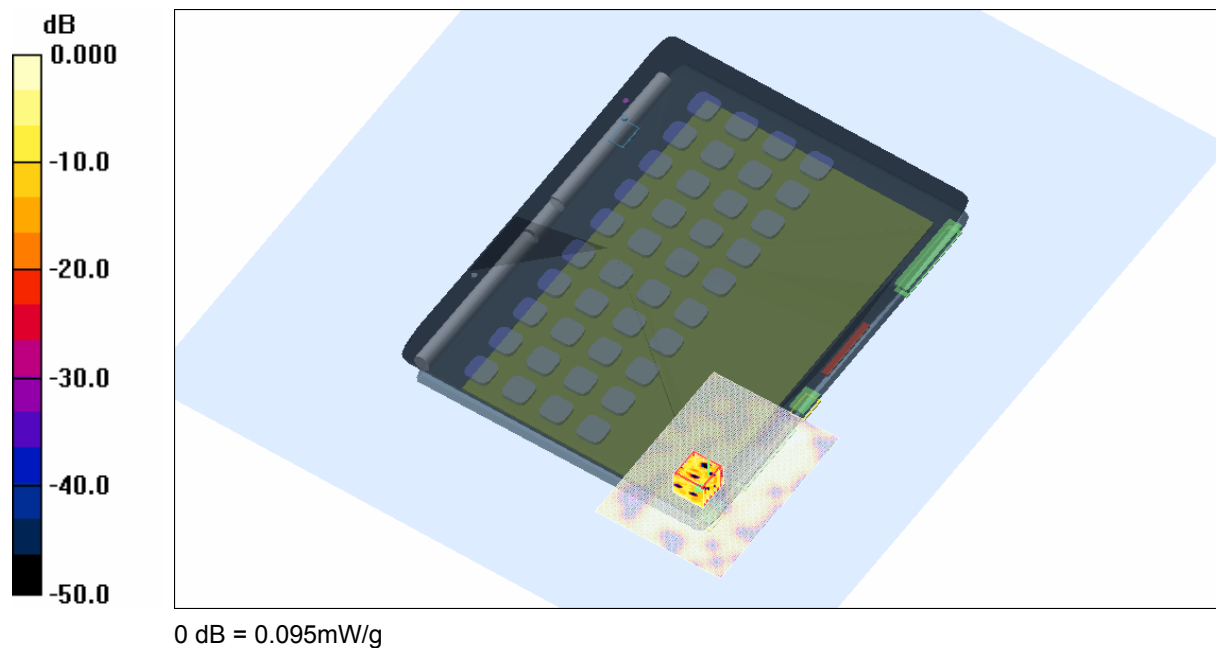
File Name: M091069 Tablet OFDM 5800 MHz Antenna B (2) 04-11-09.da4

DUT: **Fujitsu Tablet Souther with Puma 11abgn; Type: 622ANHMW; Serial: MAC: 0015005BE890**

- \* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5786.2$  MHz;  $\sigma = 6.38$  mho/m;  $\epsilon_r = 44.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.26, 3.26, 3.26)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

**Channel 157 Test/Area Scan (101x141x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.097 mW/g

**Channel 157 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 2.86 V/m; Power Drift = 0.153 dB  
Peak SAR (extrapolated) = 0.188 W/kg  
**SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.015 mW/g**  
Maximum value of SAR (measured) = 0.095 mW/g

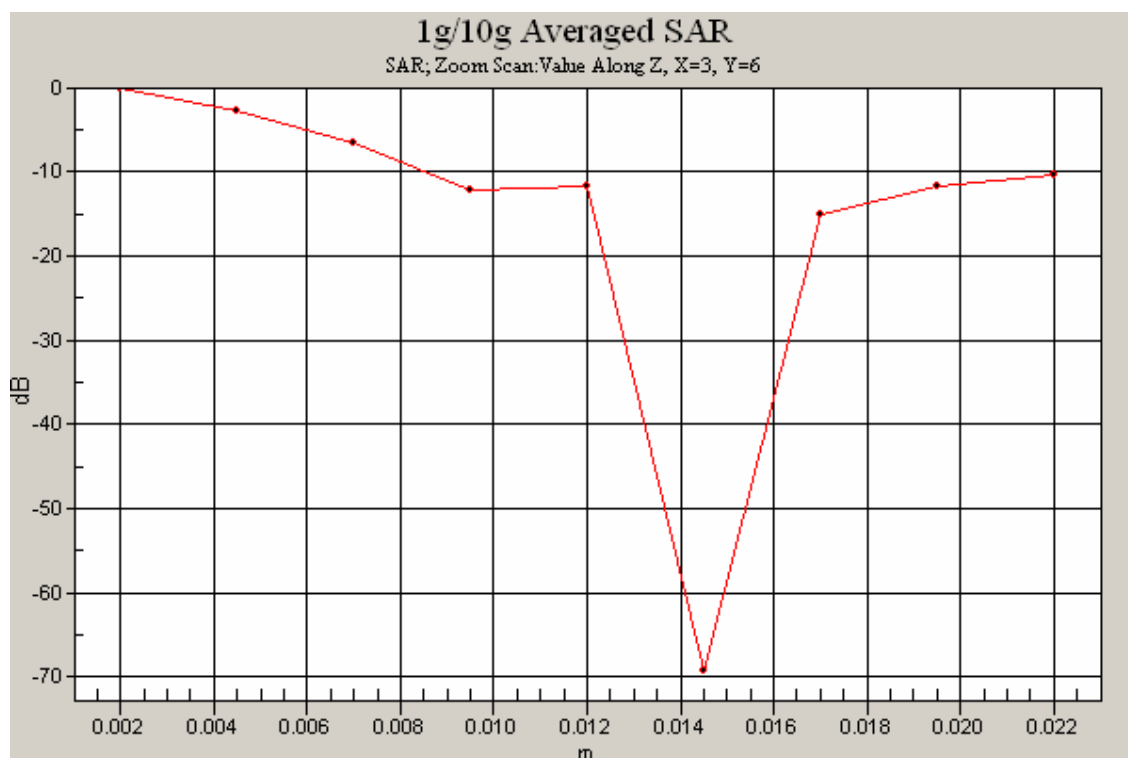


**SAR MEASUREMENT PLOT 9**

Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.8 Degrees Celsius  
47.0 %





Test Date: 6 November 2009

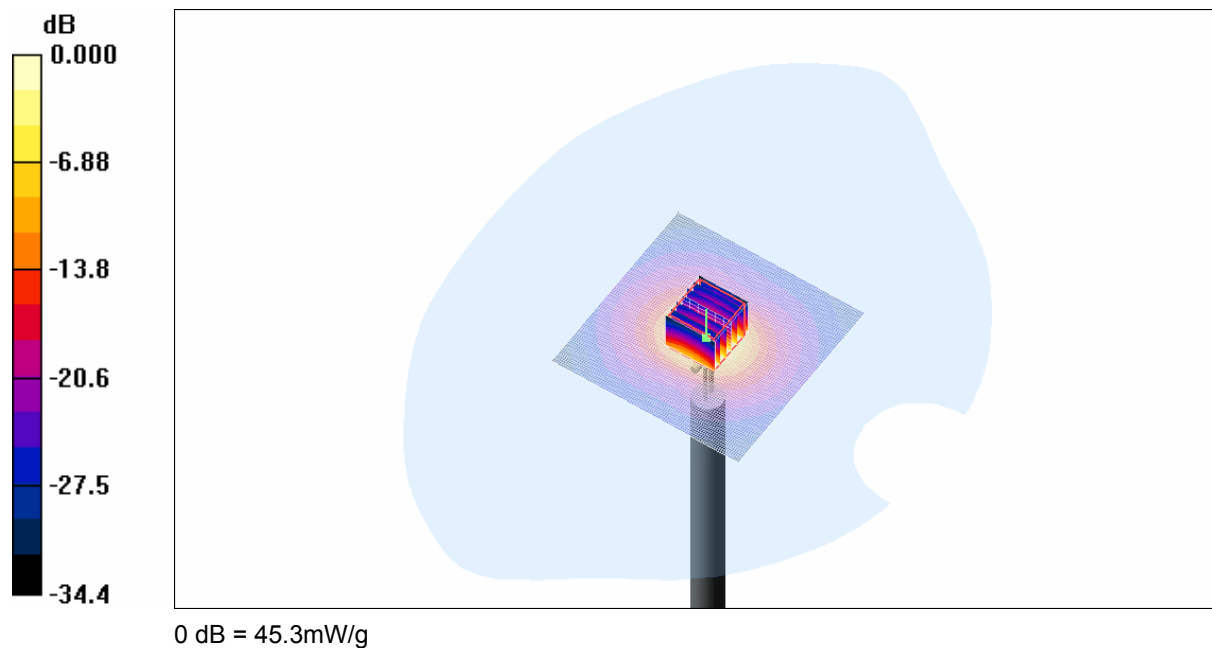
File Name: Validation 5200MHz (DAE 442 Probe EX3DV4) 06-11-09.da4

**DUT: Dipole 5200\_5800 MHz; Type: D5GHzV2; Serial: 1008**

- \* Communication System: CW 5200 MHz; Frequency: 5200 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5204$  MHz;  $\sigma = 4.8$  mho/m;  $\epsilon_r = 37$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(4.32, 4.32, 4.32)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

**Channel 1 Test/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 46.3 mW/g

**Channel 1 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 104.7 V/m; Power Drift = -0.075 dB  
Peak SAR (extrapolated) = 82.2 W/kg  
**SAR(1 g) = 21.9 mW/g; SAR(10 g) = 6.26 mW/g**  
Maximum value of SAR (measured) = 45.3 mW/g

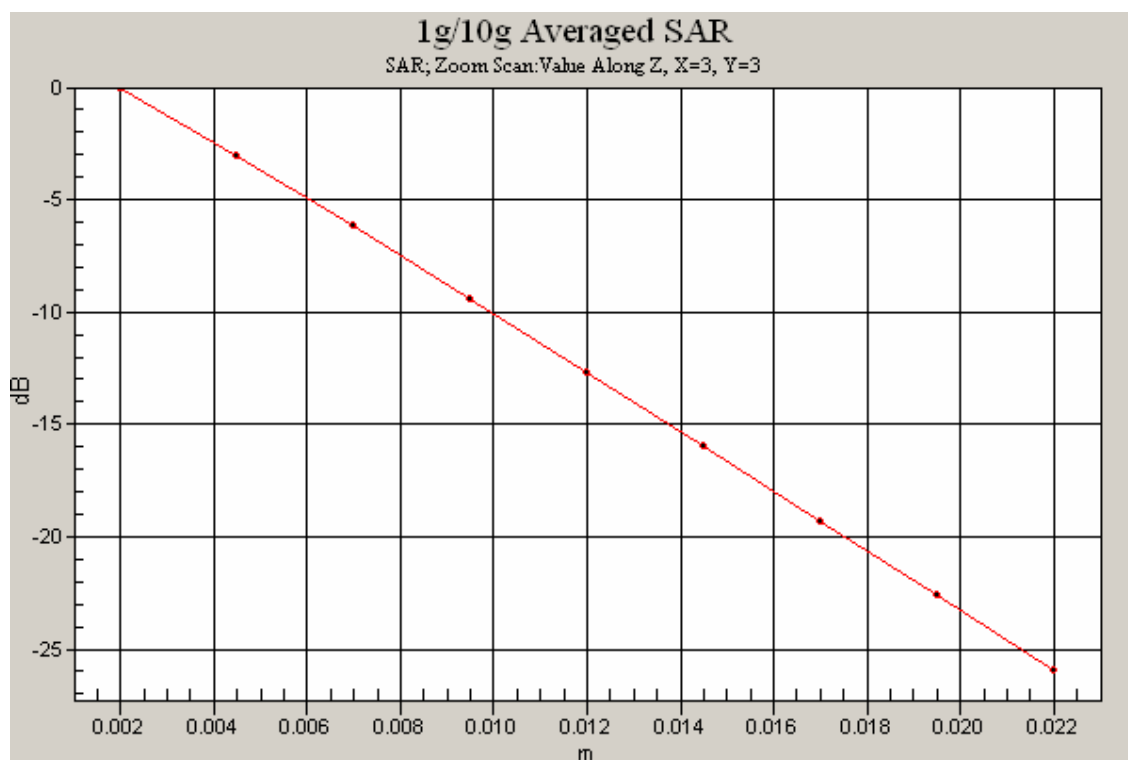


**SAR MEASUREMENT PLOT 10**

Ambient Temperature  
Liquid Temperature  
Humidity

21.9 Degrees Celsius  
21.5 Degrees Celsius  
41.0 %





**Test Date: 5 November 2009**

File Name: Validation 5500MHz (DAE 442 Probe EX3DV4) 05-11-09.da4

**DUT: Dipole 5200\_5800 MHz; Type: D5GHzV2; Serial: 1008**

\* Communication System: CW 5500 MHz; Frequency: 5500 MHz; Duty Cycle: 1:1

\* Medium parameters used:  $f = 5498$  MHz;  $\sigma = 5.17$  mho/m;  $\epsilon_r = 36.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.76, 3.76, 3.76)

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

**Channel 1 Test/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 47.5 mW/g

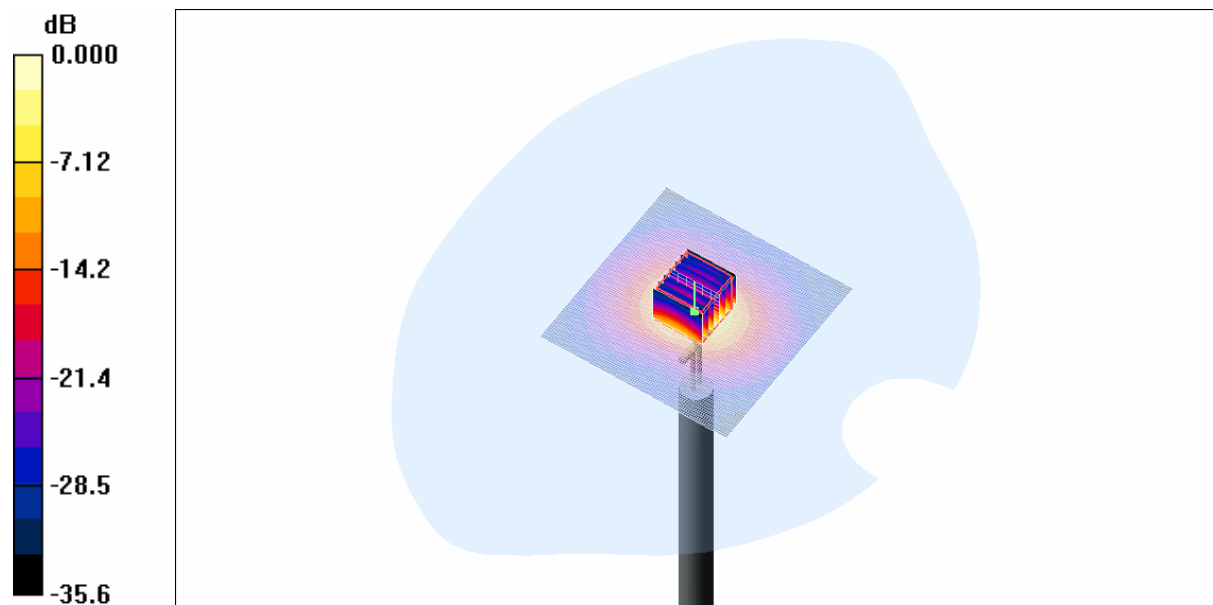
**Channel 1 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 100.1 V/m; Power Drift = 0.147 dB

Peak SAR (extrapolated) = 88.6 W/kg

**SAR(1 g) = 22.1 mW/g; SAR(10 g) = 6.24 mW/g**

Maximum value of SAR (measured) = 46.6 mW/g



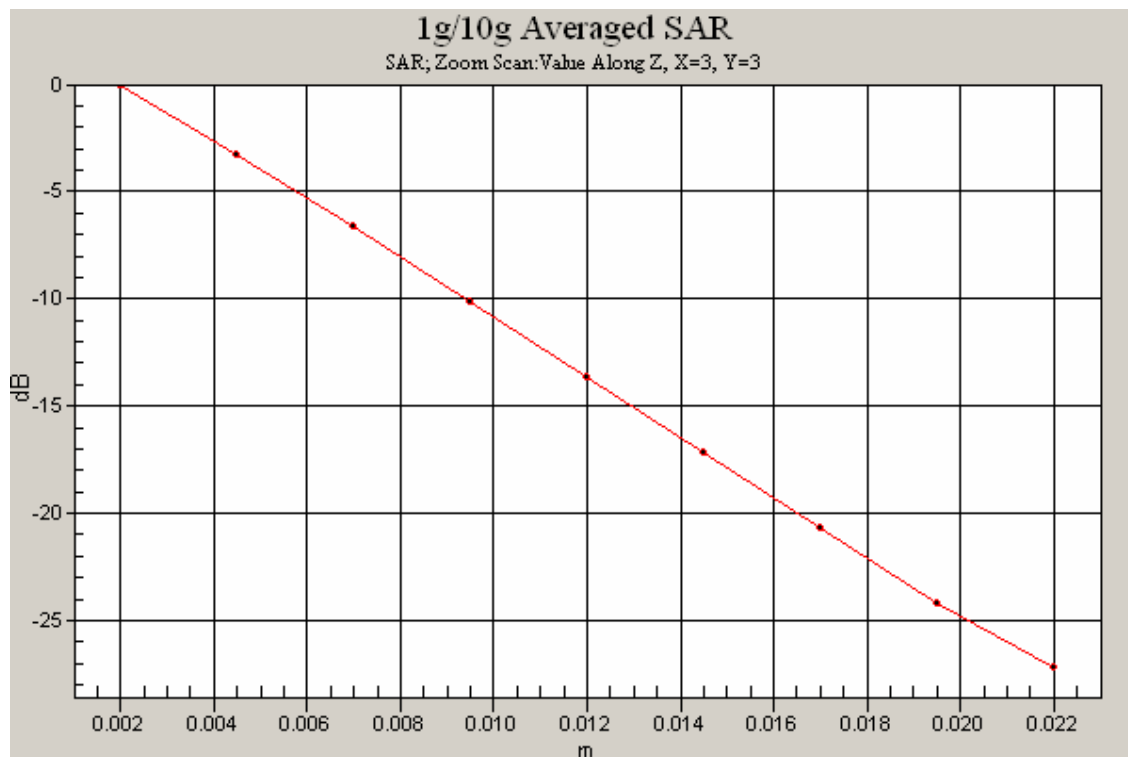
0 dB = 46.6mW/g

**SAR MEASUREMENT PLOT 11**

**Ambient Temperature**  
**Liquid Temperature**  
**Humidity**

**21.0 Degrees Celsius**  
**20.8 Degrees Celsius**  
**43.0 %**





Test Date: 4 November 2009

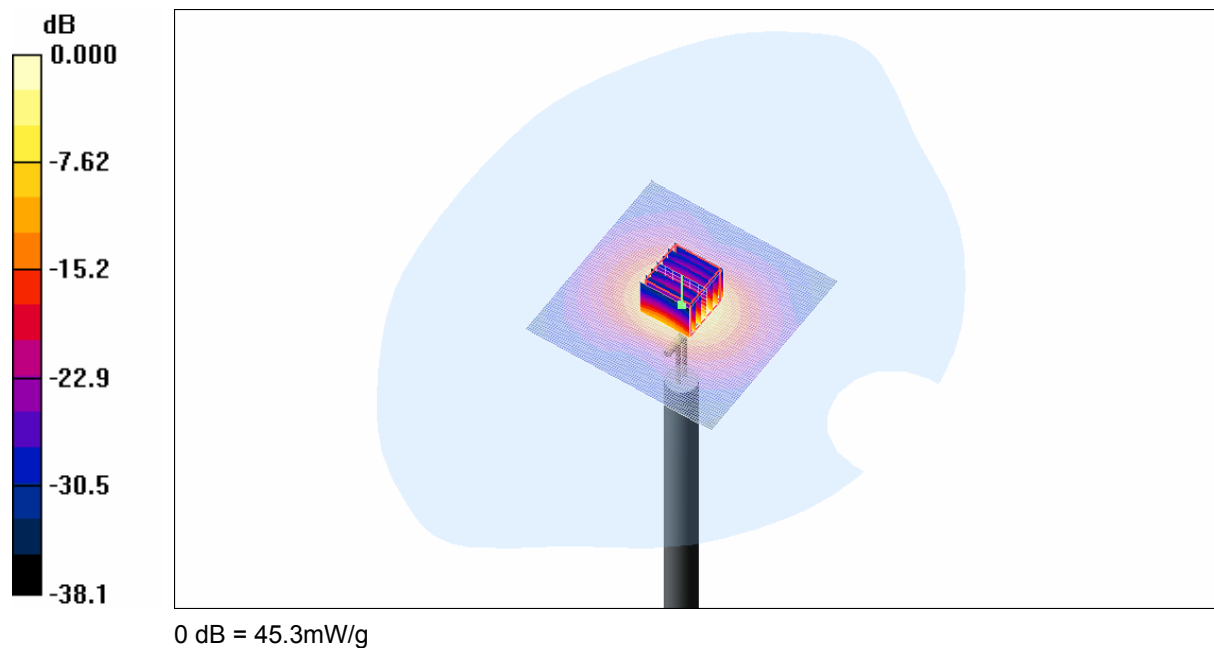
File Name: Validation 5800MHz (DAE 442 Probe EX3DV4) 04-11-09.da4

**DUT: Dipole 5200\_5800 MHz; Type: D5GHzV2; Serial: 1008**

- \* Communication System: CW 5800 MHz; Frequency: 5800 MHz; Duty Cycle: 1:1
- \* Medium parameters used:  $f = 5800.8$  MHz;  $\sigma = 5.14$  mho/m;  $\epsilon_r = 35.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>
- Electronics: DAE3 Sn442; Probe: EX3DV4 - SN3563; ConvF(3.65, 3.65, 3.65)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

**Channel 1 Test/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 44.7 mW/g

**Channel 1 Test/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm  
Reference Value = 102.2 V/m; Power Drift = 0.081 dB  
Peak SAR (extrapolated) = 86.3 W/kg  
**SAR(1 g) = 21.1 mW/g; SAR(10 g) = 5.99 mW/g**  
Maximum value of SAR (measured) = 45.3 mW/g



**SAR MEASUREMENT PLOT 12**

Ambient Temperature  
Liquid Temperature  
Humidity

21.1 Degrees Celsius  
20.8 Degrees Celsius  
47.0 %





