# 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.

**NOTE on SAR Plots:** The measured SAR levels in the Tablet position were < 0.1mW/g and consequently the "hotspot" was not always clearly defined. The measurement results are only just above the noise floor and the measurement sensitivity of the SAR system. The plots and graphs for these positions were included for information.

**NOTE on SAR Graphs:** The Z-axis scans listed in this appendix do not always show a consistent decay over distance. This is not due to an incorrect liquid level but is due to the very steep field gradients in the 5-6 GHz band. At distances of greater than 20mm, the SAR levels are in the noise floor, and the calculated levels should be ignored. This is an artefact caused by the DASY4 SEMCAD software algorithms. According to the DASY4 manufacturer the artifact is "...due to the very rapid decay of the fields within the liquid at this frequency, the values far away from the phantom's surface are so low, that SEMCAD currently identifies them as noise." SPEAG has advised that this problem will be rectified in the next build of the software.

For reference the Validation Z-axis scans show the expected field decay over distance.

#### Table 21: 5200 MHz Band SAR Measurement Plot Numbers

Plot 1	Lap Arm Held Position – CH#36 – 4400mAh	Page 26-27		
Plot 2	Lap Arm Held Position – CH#36 – 6600mAh	Page 28		
Plot 3	Lap Arm Held Position – CH#48 – 4400mAh	Page 29		
Plot 4	Lap Arm Held Position – CH#48 – 6600mAh	Page 30		
Plot 5	Lap Arm Held Position – CH#64 – 4400mAh	Page 31		
Plot 6	Lap Arm Held Position – CH#64 – 6600mAh	Page 32		
Plot 7	Tablet Position – CH#48 - 4400mAh	Page 33		
Z-Axis Graphs	Z-Axis graphs for Plots 1 to 7	Pages 34-37		
Table 22: 5200MHz Validation Plot				

Plot 8	Validation 5200MHz 15 <sup>th</sup> October 2003	Page 38
Z-Axis Graphs	Z-Axis graphs for Plot 8	Pages 39

### Table 23: 5800 MHz Band SAR Measurement Plot Numbers

Plot 9	Lap Arm Held Position – CH#149	– 4400mAh	Page 40
Plot 10	Lap Arm Held Position – CH#149	– 6600mAh	Page 41-42
Plot 11	Lap Arm Held Position – CH#157	– 4400mAh	Page 43
Plot 12	Lap Arm Held Position – CH#157	– 6600mAh	Page 44
Plot 13	Lap Arm Held Position – CH#161	– 4400mAh	Page 45
Plot 14	Lap Arm Held Position – CH#161	– 6600mAh	Page 46
Z-Axis Graphs	Z-Axis graphs for Plots 9 to 14		Pages 47-50

#### **Table 24: 5800MHz Validation Plot**

Plot 15	Validation 5800MHz 17 <sup>th</sup> October 2003	Page 51
Z-Axis Graphs	Z-Axis graphs for Plot 15	Pages 52

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File Name: Arm-Held OFDM 5.25 GHz Batt 4400MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5180 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma$  = 5.32533 mho/m,  $\varepsilon_r$  = 51.3295,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 36 Test 2/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 6.59 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 2.38 mW/g

Channel 36 Test 2/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

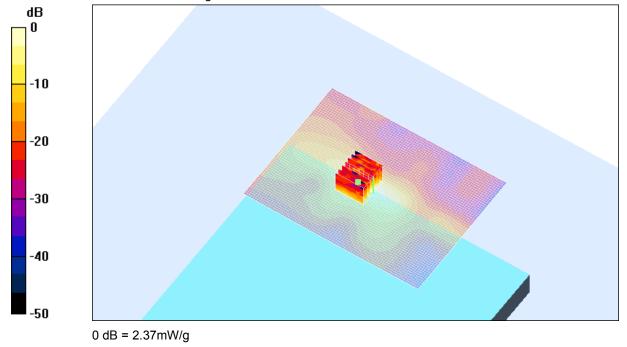
Peak SAR (extrapolated) = 6.97 W/kg

SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.340 mW/g

Reference Value = 6.59 V/m

Power Drift = 0.3 dB

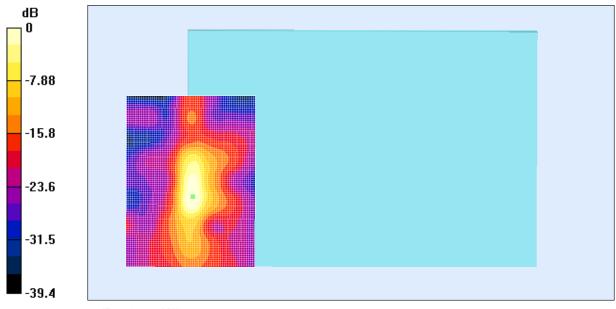
Maximum value of SAR = 2.37 mW/g



# SAR MEASUREMENT PLOT 1

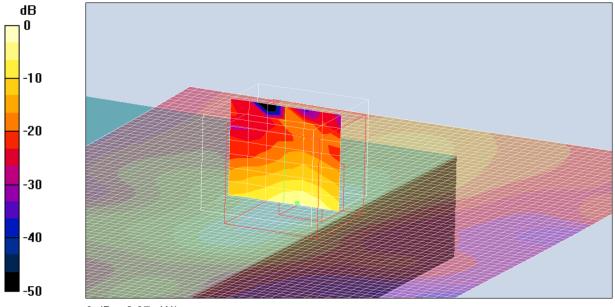
Ambient Temperature Liquid Temperature Humidity





0 dB = 2.37 mW/g

### Zoom Scan slice in plane of maximum SAR



0 dB = 2.37 mW/g

File Name: Arm-Held OFDM 5.25 GHz Batt 6600MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5180 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma$  = 5.32533 mho/m,  $\varepsilon_r$  = 51.3295,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 36 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 6.07 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 2.04 mW/g

#### Channel 36 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

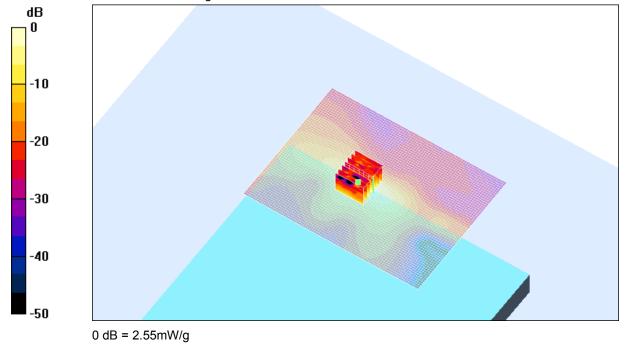
Peak SAR (extrapolated) = 7.35 W/kg

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.328 mW/g

Reference Value = 6.07 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 2.55 mW/g



# SAR MEASUREMENT PLOT 2

**Ambient Temperature Liquid Temperature** Humidity

File Name: Arm-Held OFDM 5.25 GHz Batt 4400MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5240 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma = 5.43083 \text{ mho/m}, \epsilon_r = 51.1854, \rho = 1000 \text{ kg/m}^3$ )
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 48 Test 2/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 6.48 V/m

Power Drift = -0.001 dB

Maximum value of SAR = 2.08 mW/g

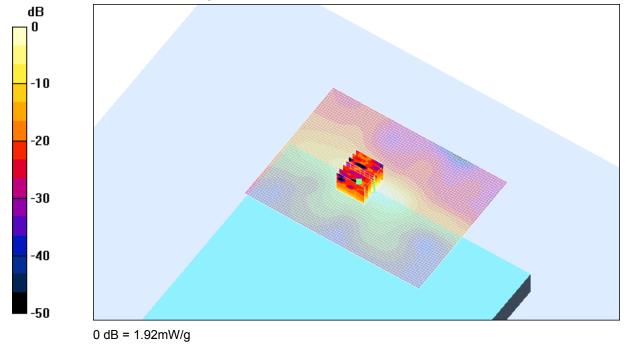
Channel 48 Test 2/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Peak SAR (extrapolated) = 7.19 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.285 mW/g

Reference Value = 6.48 V/m Power Drift = -0.001 dB

Maximum value of SAR = 1.92 mW/g



SAR MEASUREMENT PLOT 3

Ambient Temperature Liquid Temperature Humidity

File Name: Arm-Held OFDM 5.25 GHz Batt 6600MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5240 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma$  = 5.43083 mho/m,  $\epsilon_r$  = 51.1854,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 48 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 5.4 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 1.7 mW/g

Channel 48 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

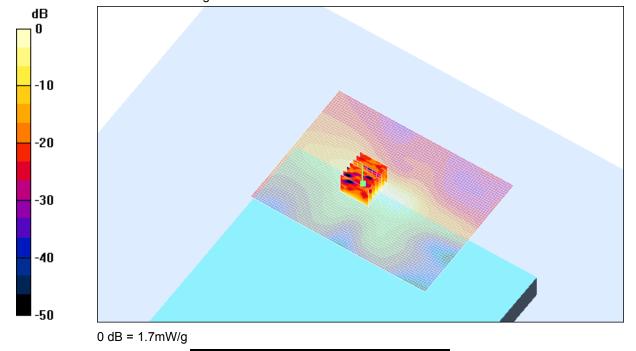
Peak SAR (extrapolated) = 4.78 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.289 mW/g

Reference Value = 5.4 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 1.7 mW/g



## SAR MEASUREMENT PLOT 4

Ambient Temperature Liquid Temperature Humidity

File Name: Arm-Held OFDM 5.25 GHz Batt 4400MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5320 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma$  = 5.5819 mho/m,  $\epsilon_r$  = 50.9937,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 64 Test 2/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 6.11 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.92 mW/g

Channel 64 Test 2/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

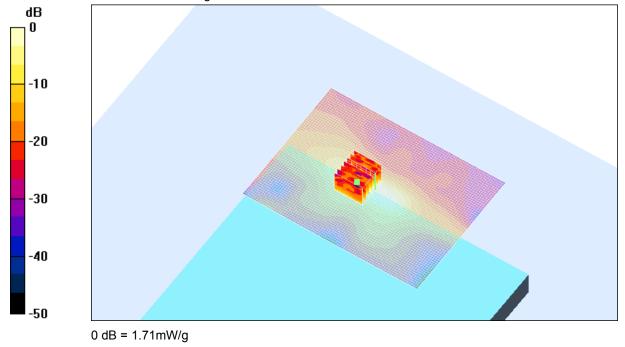
Peak SAR (extrapolated) = 6.02 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.267 mW/g

Reference Value = 6.11 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 1.71 mW/g



# SAR MEASUREMENT PLOT 5

Ambient Temperature Liquid Temperature Humidity

File Name: Arm-Held OFDM 5.25 GHz Batt 6600MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5320 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma = 5.5819 \text{ mho/m}, \epsilon_r = 50.9937, \rho = 1000 \text{ kg/m}^3$ )
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section Channel 64 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Channel 64 Test/Area Scan (61x61x1): Weasurement gnu. ux-20mm, uy-20m

Reference Value = 4.81 V/m

Power Drift = -0.0 dB

Maximum value of SAR = 1.42 mW/g

Channel 64 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

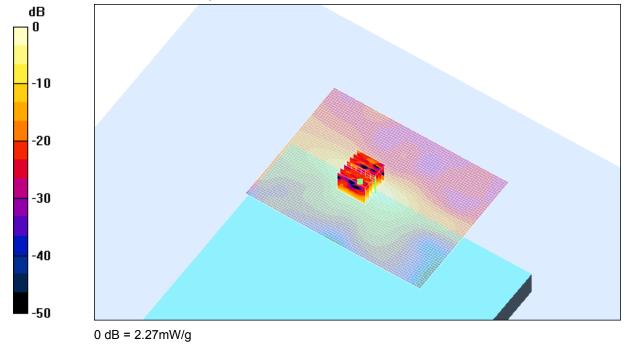
Peak SAR (extrapolated) = 7.14 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.277 mW/g

Reference Value = 4.81 V/m

Power Drift = -0.0 dB

Maximum value of SAR = 2.27 mW/g



SAR MEASUREMENT PLOT 6

Ambient Temperature Liquid Temperature Humidity

File Name: Tablet OFDM 5.25 GHz Batt 4400MAh 15-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5250 MHz; Frequency: 5240 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma = 5.43083 \text{ mho/m}, \epsilon_r = 51.1854, \rho = 1000 \text{ kg/m}^3$ )
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 48 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 0.626 V/m

Power Drift = 0.7 dB

Maximum value of SAR = 0.094 mW/g

Channel 48 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

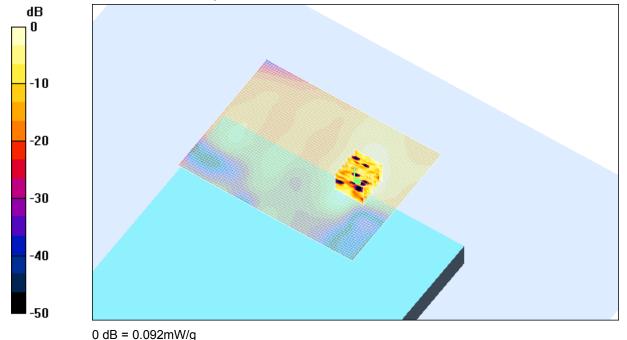
Peak SAR (extrapolated) = 2.64 W/kg

SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.036 mW/g

Reference Value = 0.626 V/m

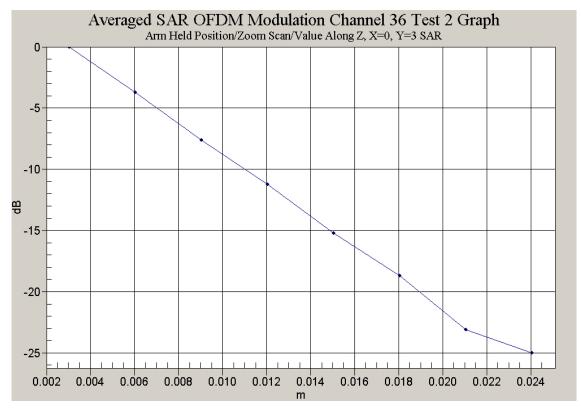
Power Drift = 0.7 dB

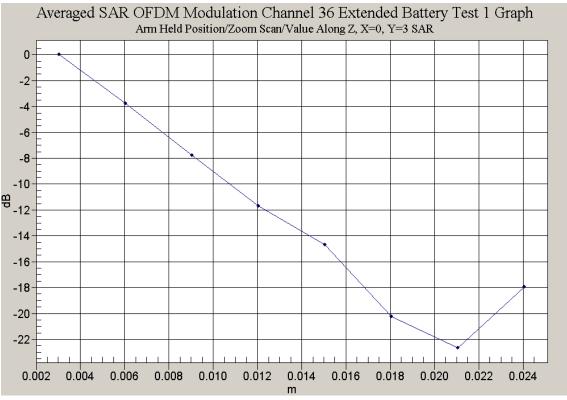
Maximum value of SAR = 0.092 mW/g



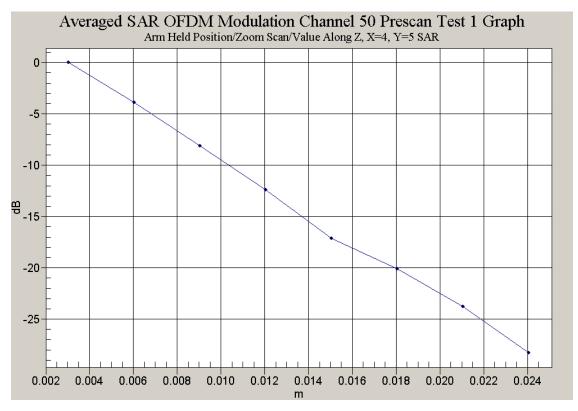
SAR MEASUREMENT PLOT 7

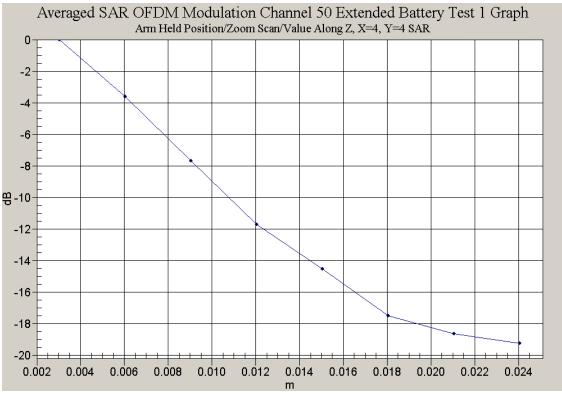
**Ambient Temperature Liquid Temperature** Humidity

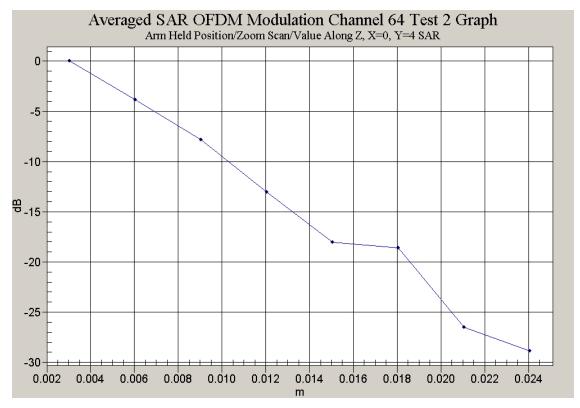


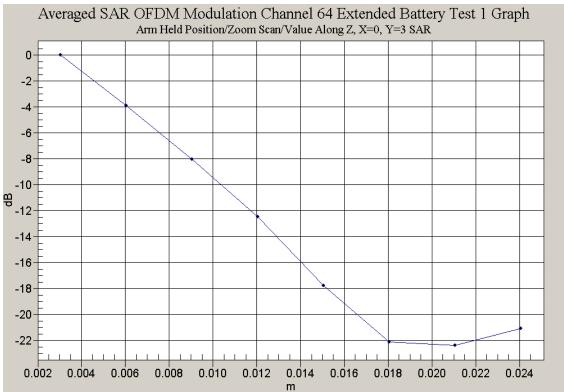


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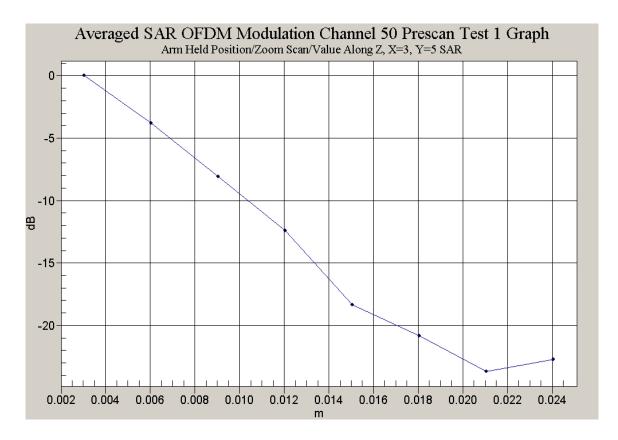








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File Name: Validation 5200 MHz (DAE442 ProbeES3DV3) 15-10-03.da4

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

- \* Communication System: CW 5200 MHz; Frequency: 5200 MHz; Duty Cycle: 1:1
- \* Medium: 5200 5800MHz Validation; ( $\sigma = 5.35772 \text{ mho/m}, \varepsilon_r = 48.3597, \rho = 1000 \text{ kg/m}^3$ )
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(2.05, 2.05, 2.05)
- Phantom: SAM 12; Serial: 1060; Phantom section: Flat Section

Channel 1 Test 2/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 44.8 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 33.7 mW/g

Channel 1 Test 2/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

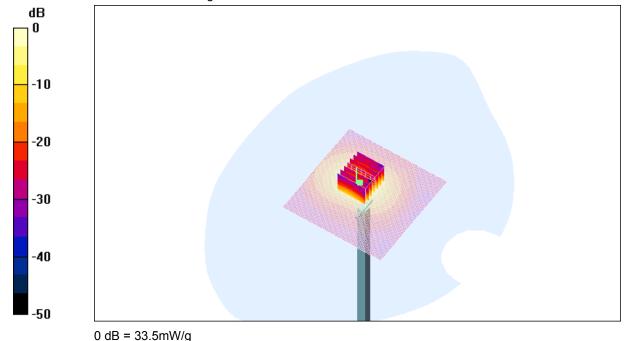
Peak SAR (extrapolated) = 91.9 W/kg

SAR(1 g) = 22.8 mW/g; SAR(10 g) = 6.36 mW/g

Reference Value = 44.8 V/m

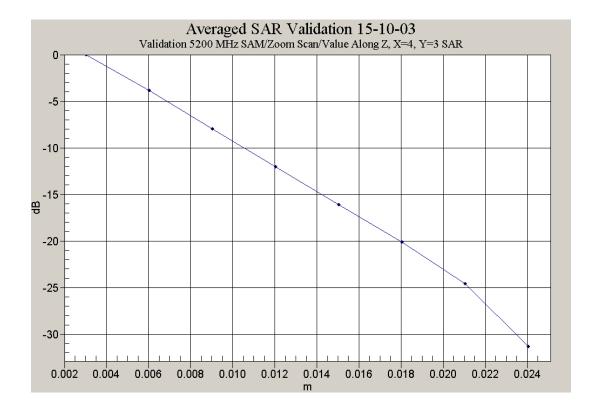
Power Drift = 0.2 dB

Maximum value of SAR = 33.5 mW/g



SAR MEASUREMENT PLOT 8

Ambient Temperature Liquid Temperature Humidity



File Name: Arm-Held OFDM 5.77 GHz Batt 4400MAh 17-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz:  $(\sigma = 6.01871 \text{ mho/m}, \epsilon_r = 44.0547, \rho = 1000 \text{ kg/m}^3)$
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section Channel 149 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 5.11 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 2.01 mW/g

Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

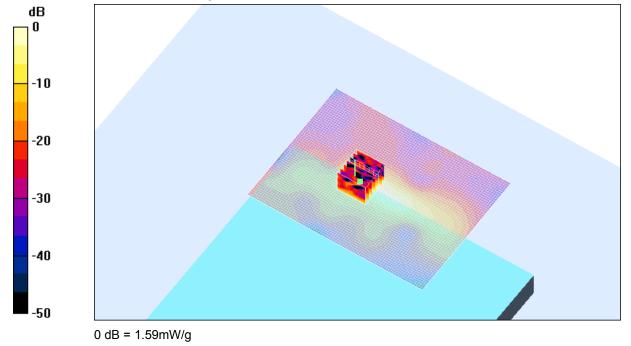
Peak SAR (extrapolated) = 5.36 W/kg

SAR(1 g) = 0.946 mW/g; SAR(10 g) = 0.192 mW/g

Reference Value = 5.11 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 1.59 mW/g



SAR MEASUREMENT PLOT 9

**Ambient Temperature Liquid Temperature** Humidity

File Name: Arm-Held OFDM 5.77 GHz Batt 6600MAh 17-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz:  $(\sigma = 6.01871 \text{ mho/m}, \epsilon_r = 44.0547, \rho = 1000 \text{ kg/m}^3)$
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 149 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 5.37 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 1.74 mW/g

Channel 149 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

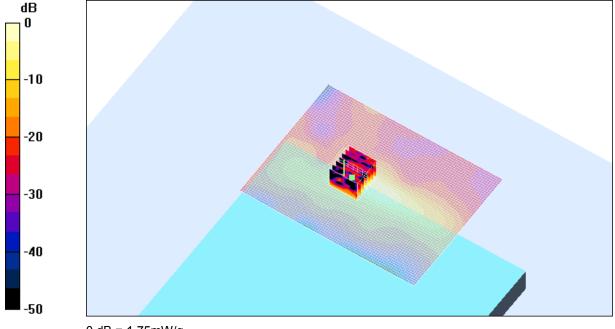
Peak SAR (extrapolated) = 5.8 W/kg

SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.195 mW/g

Reference Value = 5.37 V/m

Power Drift = 0.2 dB

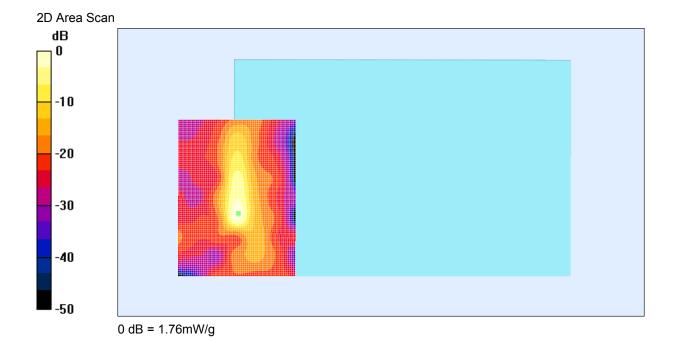
Maximum value of SAR = 1.75 mW/g



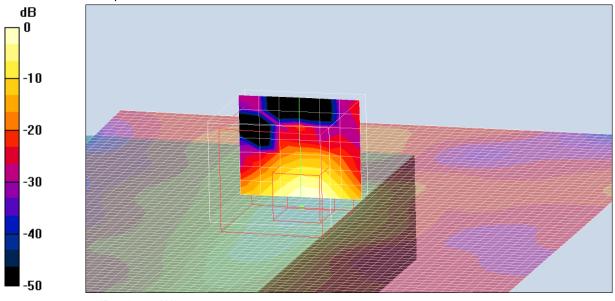
0 dB = 1.75 mW/g

SAR MEASUREMENT PLOT 10

**Ambient Temperature Liquid Temperature** Humidity



# Zoom Scan slice in plane of maximum SAR



0 dB = 1.76 mW/g

File Name: Arm-Held OFDM 5.77 GHz Batt 4400MAh 17-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma$  = 6.08654 mho/m,  $\varepsilon_r$  = 43.922,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section Channel 157 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 4.81 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 1.57 mW/g

Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

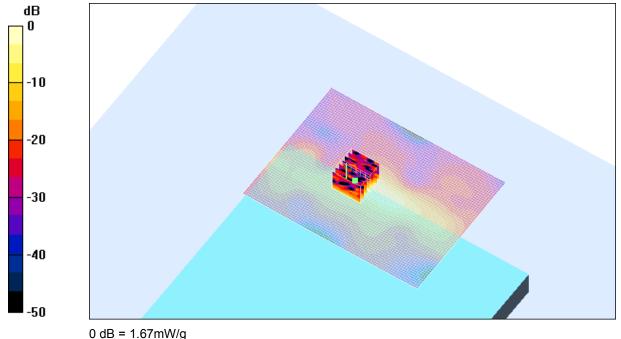
Peak SAR (extrapolated) = 5.71 W/kg

SAR(1 g) = 0.928 mW/g; SAR(10 g) = 0.193 mW/g

Reference Value = 4.81 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 1.67 mW/g



*\_\_\_\_\_* 

SAR MEASUREMENT PLOT 11

Ambient Temperature Liquid Temperature Humidity

File Name: Arm-Held OFDM 5.77 GHz Batt 6600MAh 17-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma = 6.08654 \text{ mho/m}, \epsilon_r = 43.922, \rho = 1000 \text{ kg/m}^3$ )
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section Channel 157 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 4.64 V/m

Power Drift = 0.8 dB

Maximum value of SAR = 1.7 mW/g

Channel 157 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

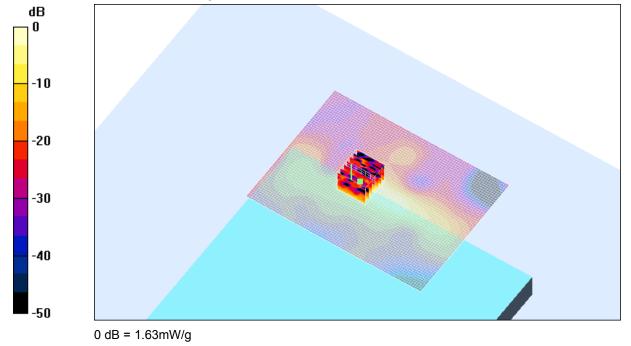
Peak SAR (extrapolated) = 5.83 W/kg

SAR(1 g) = 0.907 mW/g; SAR(10 g) = 0.187 mW/g

Reference Value = 4.64 V/m

Power Drift = 0.4 dB

Maximum value of SAR = 1.63 mW/g



SAR MEASUREMENT PLOT 12

**Ambient Temperature Liquid Temperature** Humidity

File Name: Arm-Held OFDM 5.77 GHz Batt 4400MAh 17-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5770 MHz; Frequency: 5805 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma$  = 6.11566 mho/m,  $\varepsilon_r$  = 43.8831,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section

Channel 161 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 3.48 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 1.77 mW/g

Channel 161 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

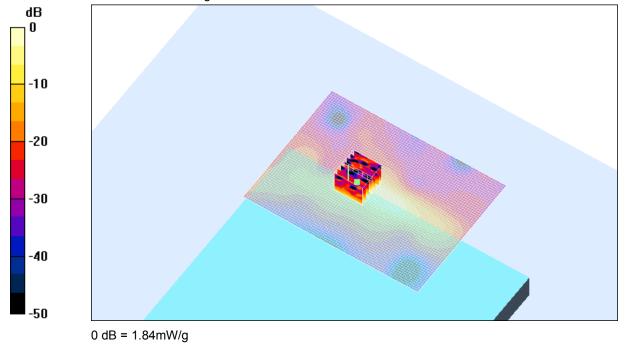
Peak SAR (extrapolated) = 5.5 W/kg

SAR(1 g) = 0.942 mW/g; SAR(10 g) = 0.204 mW/g

Reference Value = 3.48 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 1.84 mW/g



# SAR MEASUREMENT PLOT 13

Ambient Temperature Liquid Temperature Humidity

File Name: Arm-Held OFDM 5.77 GHz Batt 6600MAh 17-10-03.da4

DUT: Fujitsu Tablet Ocampa B1 with WLAN; Type: Atheros 11abg Module; Serial: No.16

- \* Communication System: OFDM 5770 MHz; Frequency: 5805 MHz; Duty Cycle: 1:1
- \* Medium: Body 5600 MHz; ( $\sigma = 6.11566 \text{ mho/m}$ ,  $\epsilon_r = 43.8831$ ,  $\rho = 1000 \text{ kg/m}^3$ )
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section Channel 161 Test/Area Scan (81x61x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 4.28 V/m

Power Drift = 0.3 dB

Maximum value of SAR = 0.976 mW/g

Channel 161 Test/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

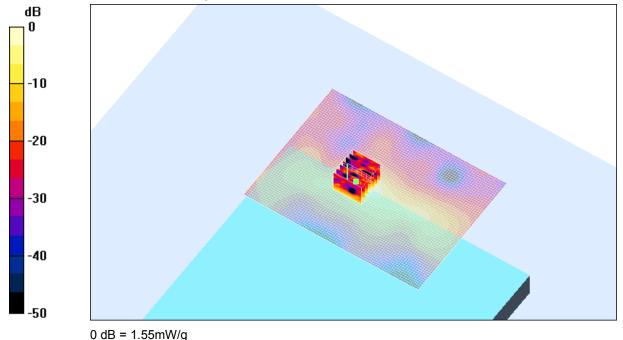
Peak SAR (extrapolated) = 5.62 W/kg

SAR(1 g) = 0.896 mW/g; SAR(10 g) = 0.191 mW/g

Reference Value = 4.28 V/m

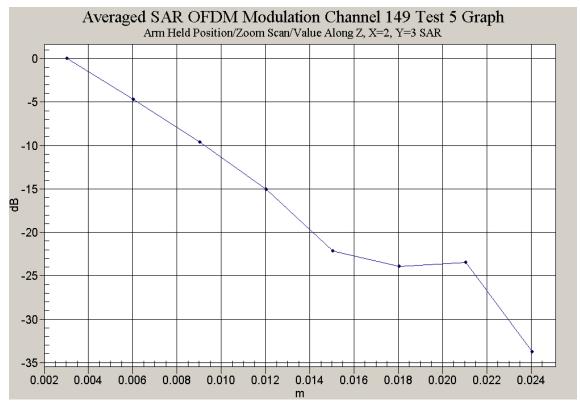
Power Drift = 0.3 dB

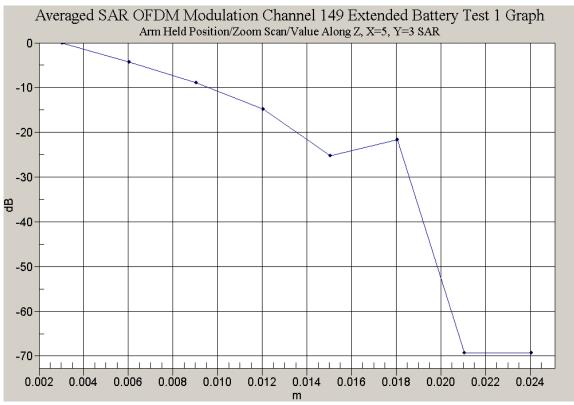
Maximum value of SAR = 1.55 mW/g



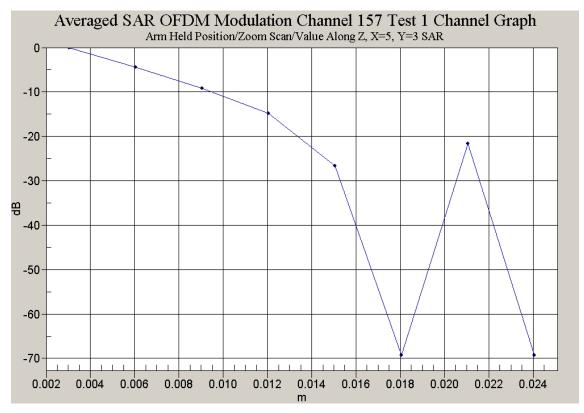
SAR MEASUREMENT PLOT 14

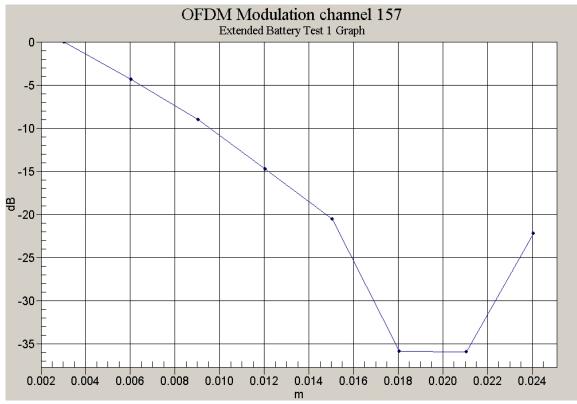
**Ambient Temperature Liquid Temperature** Humidity

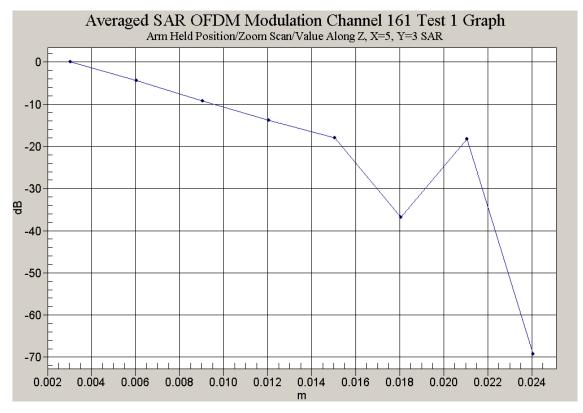


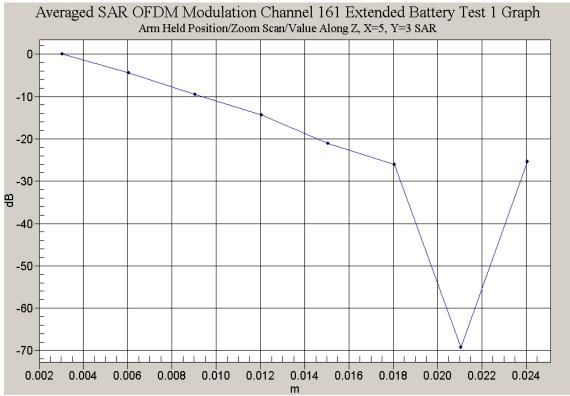


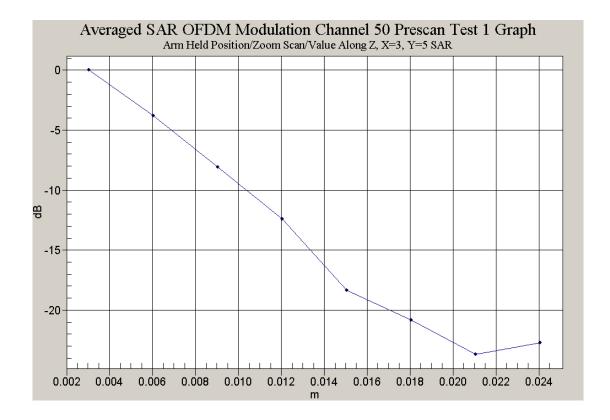
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File Name: Validation 5800MHz (DAE 442 Probe ES3DV3) 17-10-03.da4

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

- \* Communication System: CW 5800 MHz; Frequency: 5800 MHz; Duty Cycle: 1:1
- \* Medium: 5200 5800MHz Validation; ( $\sigma$  = 6.21327 mho/m,  $\varepsilon_r$  = 47.0844,  $\rho$  = 1000 kg/m<sup>3</sup>)
- Electronics: DAE3 Sn442; Probe: ES3DV3- SN3029; ConvF(1.8, 1.8, 1.8)
- Phantom: SAM 12; Serial: 1060; Phantom section: Flat Section

Channel 1 Test 2/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 43.7 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 29.9 mW/g

Channel 1 Test 2/Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

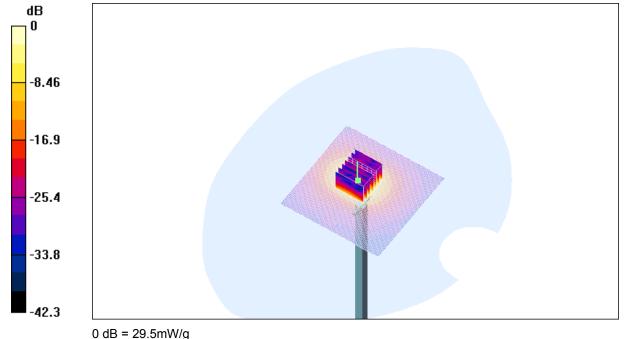
Peak SAR (extrapolated) = 90.7 W/kg

SAR(1 g) = 20.5 mW/g; SAR(10 g) = 5.57 mW/g

Reference Value = 43.7 V/m

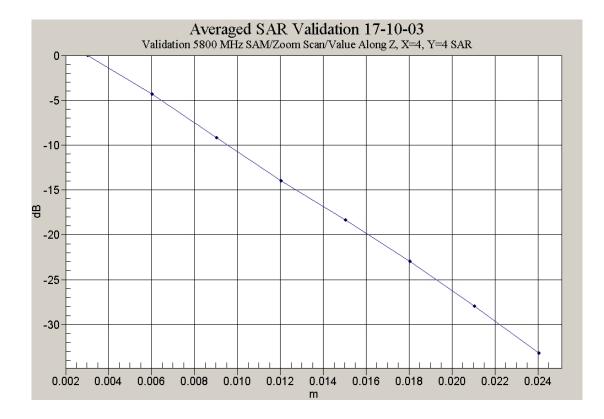
Power Drift = 0.1 dB

Maximum value of SAR = 29.5 mW/g



SAR MEASUREMENT PLOT 15

Ambient Temperature Liquid Temperature Humidity



# APPENDIX C SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

#### **Calibration Certificate Attachments**

5GHz E-Field Probe Calibration Sheet
 5200\_5800MHz Dipole Calibration Sheet

9 Pages 6 pages

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