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 not included.

Test Date: 10 February 2004

File Name: Arm Held DSSS 2.45 GHz Mace 2 Atheros 11abg Antenna B Prescan 10-02-04.da4

DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F
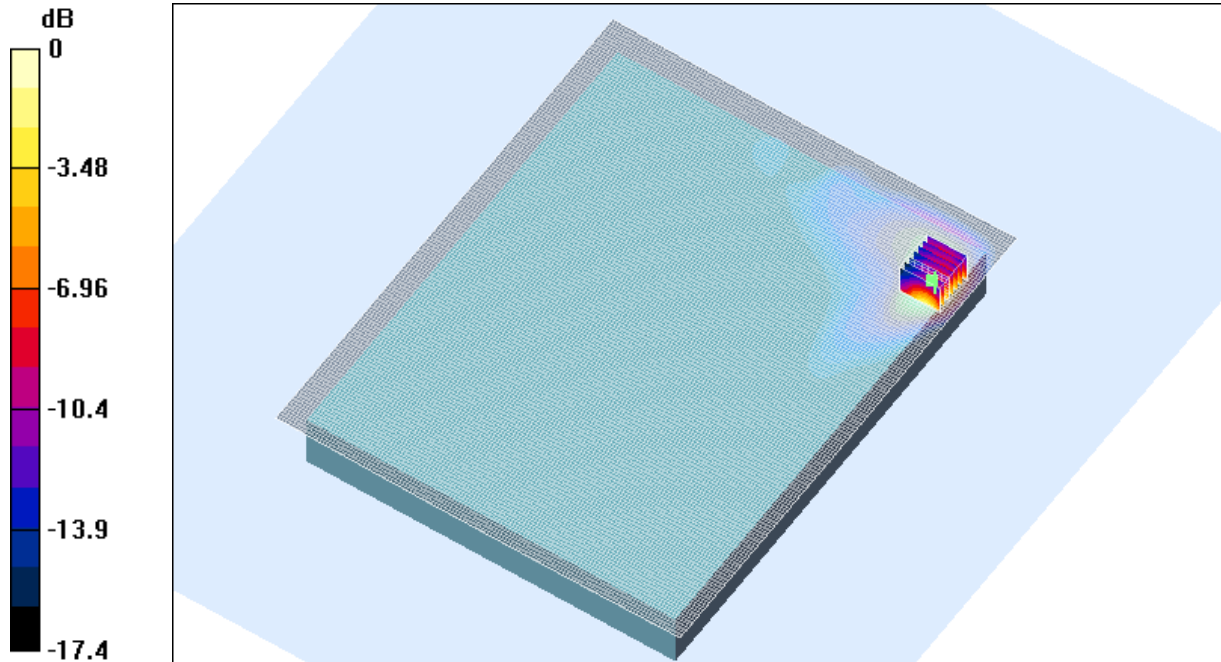
0 dB = 0.231mW/g

SAR MEASUREMENT PLOT 1

Ambient Temperature	**21.4 Degrees Celsius**
Liquid Temperature	**20.6 Degrees Celsius**
Humidity	**49 %**

Test Date: 10 February 2004
File Name: Arm Held DSSS 2.45 GHz Mace 2 Atheros 11abg Antenna A Prescan 10-02-04.da4
DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F

0 dB = 0.341mW/g

SAR MEASUREMENT PLOT 2
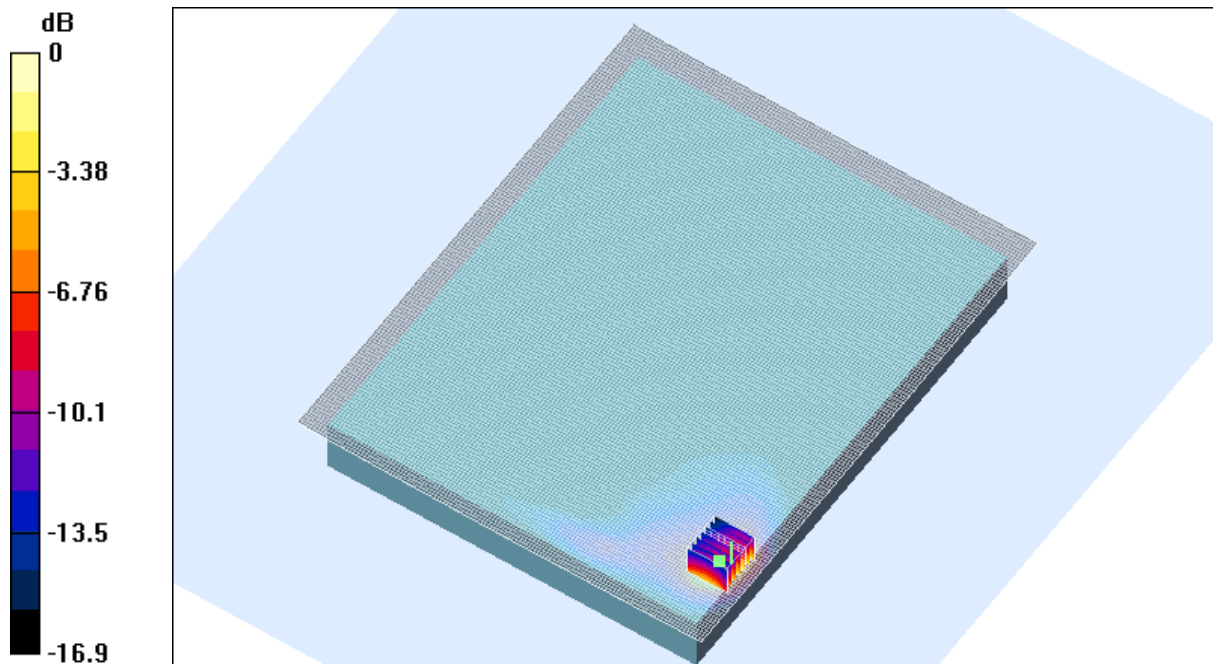
Ambient Temperature	**21.4 Degrees Celsius**
Liquid Temperature	**20.6 Degrees Celsius**
Humidity	**49 %**

Test Date: 3rd March 2004

File Name: Arm Held DSSS 2.45 GHz Mace 2 Atheros 11abg Antenna A 3-03-04 #2.da4

DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F

 * Communication System: DSSS 2450 MHz; Frequency: 2412 MHz; Duty Cycle: 1:1
 * Medium: Body 2450 MHz; Medium parameters used (interpolated): f = 2412 MHz; σ = 1.93 mho/m; ε$_r$ = 52.6; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section
 Channel 01 Test/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Reference Value = 11.3 V/m
Power Drift = 0.4 dB
Maximum value of SAR = 0.250 mW/g

Channel 01 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
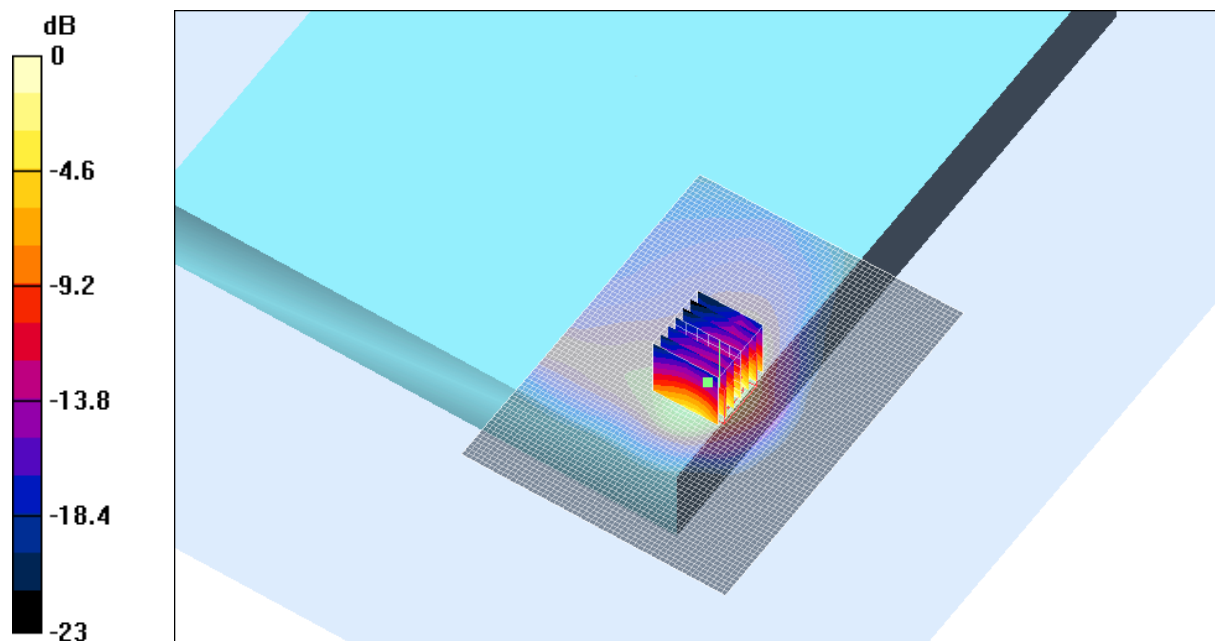Peak SAR (extrapolated) = 0.645 W/kg
SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.108 mW/g
Reference Value = 11.3 V/m
Power Drift = 0.4 dB
Maximum value of SAR = 0.287 mW/g

0 dB = 0.287mW/g

SAR MEASUREMENT PLOT 3

Ambient Temperature   **21.5 Degrees Celsius**
Liquid Temperature   **19.8 Degrees Celsius**
Humidity   **63 %**

Test Date: 3rd March 2004

File Name: Arm Held DSSS 2.45 GHz Mace 2 Atheros 11abg Antenna A 3-03-04 #2.da4

DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F

 * Communication System: DSSS 2450 MHz; Frequency: 2437 MHz; Duty Cycle: 1:1
 * Medium: Body 2450 MHz; Medium parameters used (interpolated): f = 2437 MHz; σ = 1.96 mho/m; ε$_r$ = 52.5; ρ = 1000 kg/m^3
- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section
 Channel 06 Test/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Reference Value = 11.2 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.232 mW/g
Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
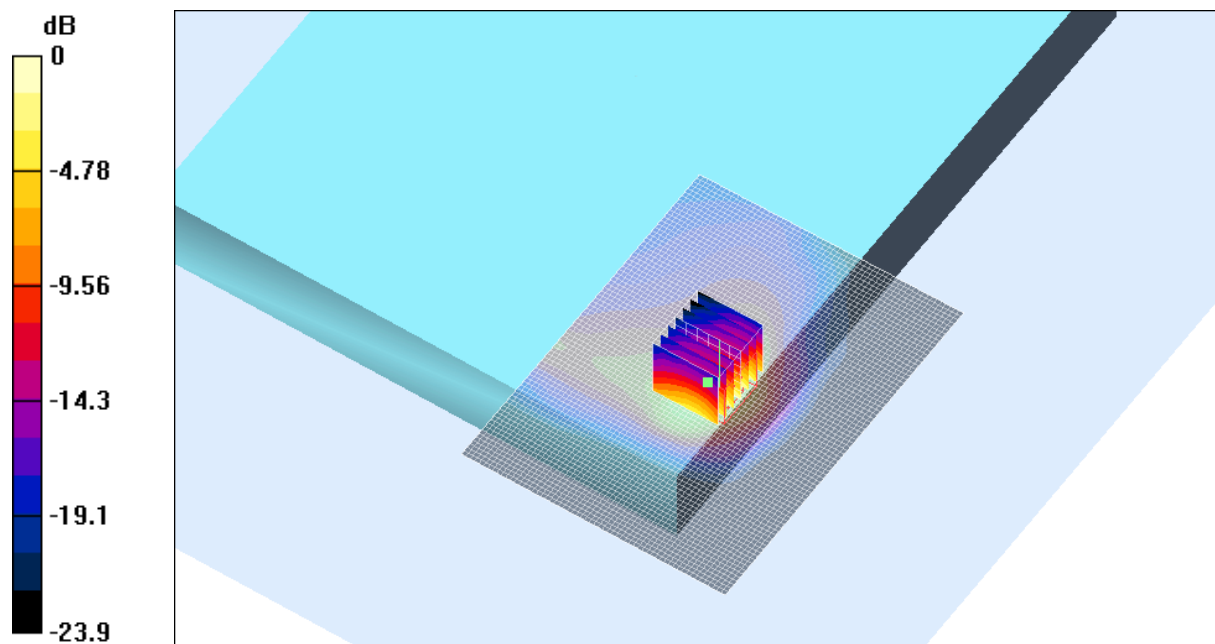Peak SAR (extrapolated) = 0.638 W/kg
SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.109 mW/g
Reference Value = 11.2 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.279 mW/g

0 dB = 0.279mW/g

SAR MEASUREMENT PLOT 4

Ambient Temperature   **21.5 Degrees Celsius**
Liquid Temperature   **19.8 Degrees Celsius**
Humidity   **63 %**

Test Date: 3rd March 2004

Test Date: 3rd March 2004

File Name: Arm Held DSSS 2.45 GHz Mace 2 Atheros 11abg Antenna A 3-03-04 #2.da4
DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F

 * Communication System: DSSS 2450 MHz; Frequency: 2462 MHz; Duty Cycle: 1:1
 * Medium: Body 2450 MHz; Medium parameters used (interpolated): f = 2462 MHz; σ = 1.99 mho/m; $ε_r$ = 52.3;
ρ = 1000 kg/m^3
- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)
- Phantom: Flat Phantom 10.1; Serial: P 10.1; Phantom section: Flat 2.2 Section
 Channel 11 Test/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Reference Value = 11.6 V/m
Power Drift = 0.3 dB
Maximum value of SAR = 0.274 mW/g
Channel 11 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
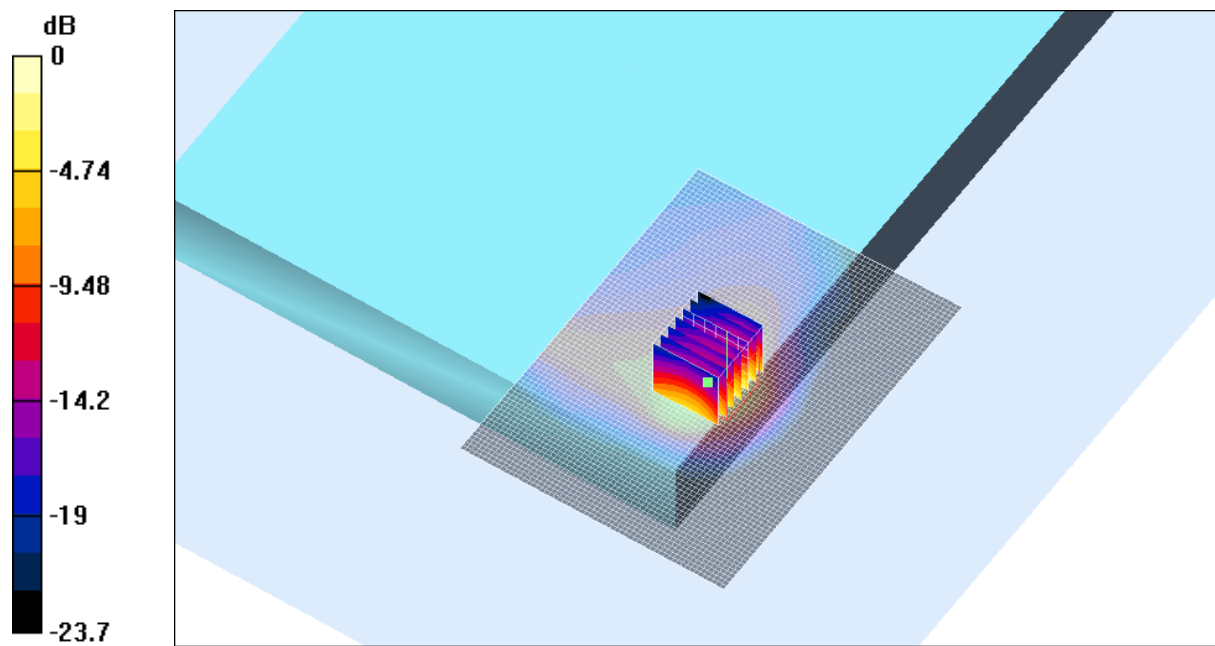Peak SAR (extrapolated) = 0.810 W/kg
SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.137 mW/g
Reference Value = 11.6 V/m
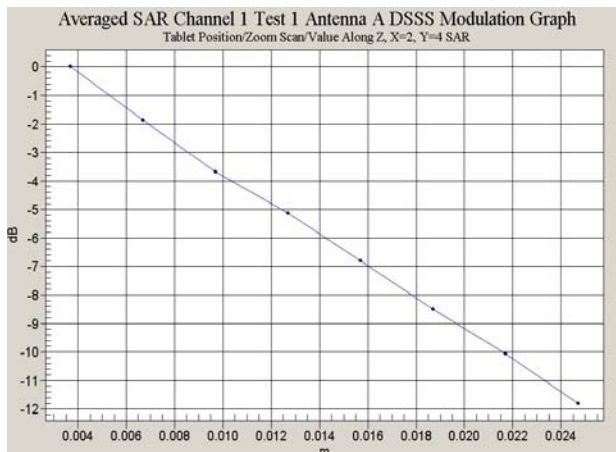Power Drift = 0.3 dB
Maximum value of SAR = 0.362 mW/g

0 dB = 0.362mW/g

SAR MEASUREMENT PLOT 5

Ambient Temperature	**21.5 Degrees Celsius**
Liquid Temperature	**19.8 Degrees Celsius**
Humidity	**63 %**

Z-axis scan for Plot 4

Z-Axis scan for Plot 5

Z-axis scan for Plot 6

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

www. emctech.com.au
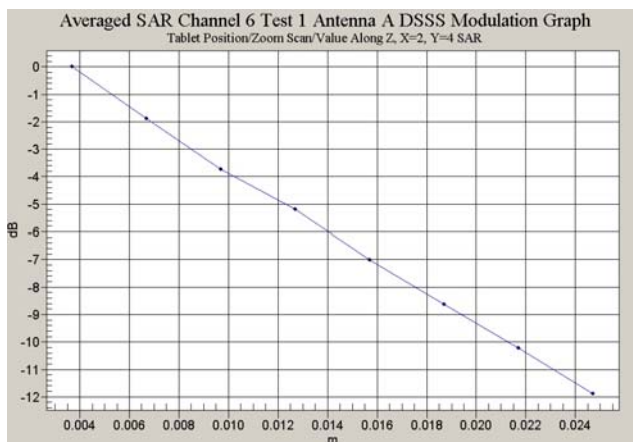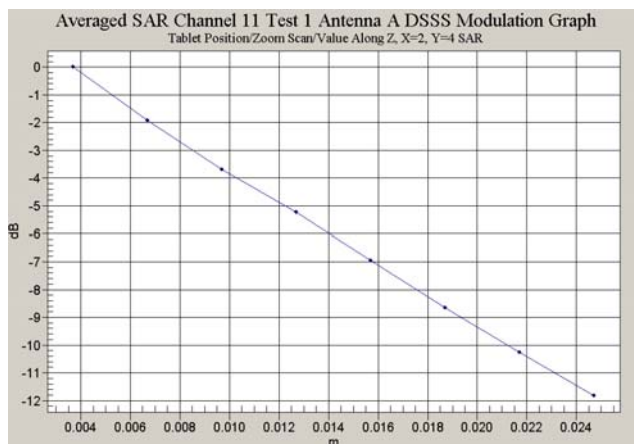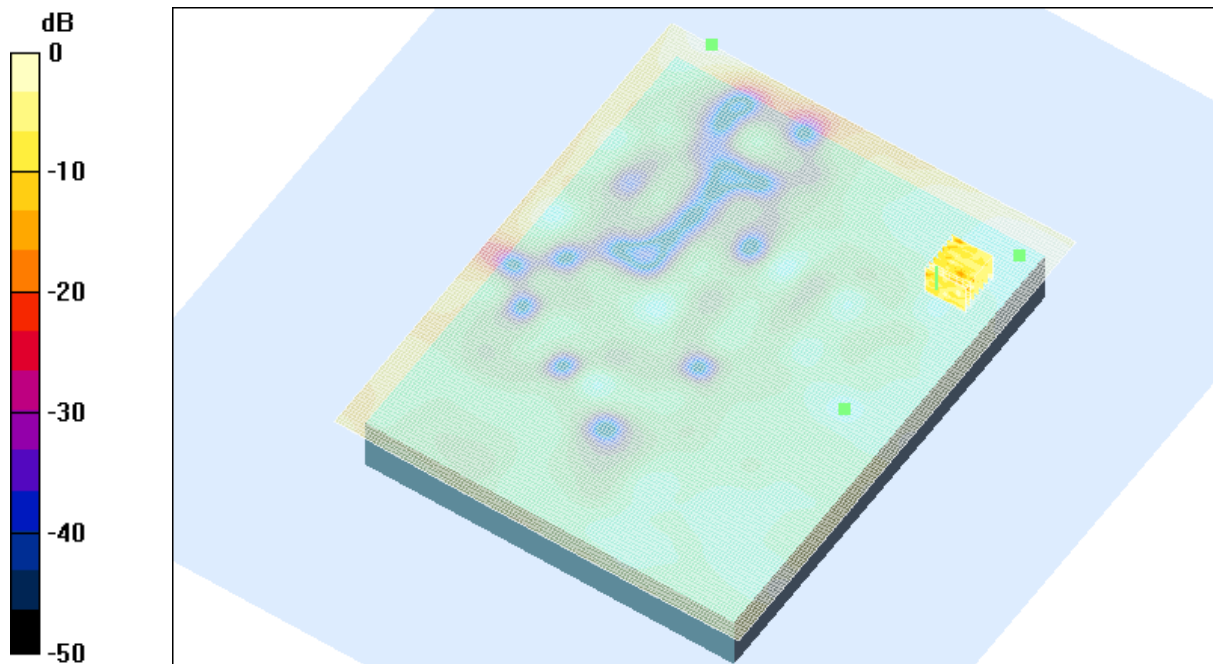
Test Date: 10 February 2004
File Name: Tablet DSSS 2.45 GHz Mace 2 Atheros 11abg Antenna A Prescan 10-02-04.da4
DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F

0 dB = 0.00339mW/g

SAR MEASUREMENT PLOT 6

Ambient Temperature   **21.4 Degrees Celsius**
Liquid Temperature   **20.6 Degrees Celsius**
Humidity   **49 %**

Test Date: 3rd March 2004

File Name: Arm Held OFDM 2.45 GHz Mace 2 Atheros 11abg Antenna A 3-03-04 #2.da4

DUT: Fujitsu Tablet MACE/MACE2 with Atheros 11abg Module; Type: WLL 4030 Module; Serial: MAC: 009096-6CAE3F

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

 * Medium: Body 2450 MHz; Medium parameters used (interpolated): f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

- Electronics: DAE3 Sn359; Probe: ET3DV6 - SN1380; ConvF(4.5, 4.5, 4.5)

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

 Channel 06 Test/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 11.9 V/m

Power Drift = -0.3 dB

Maximum value of SAR = 0.253 mW/g

Channel 06 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
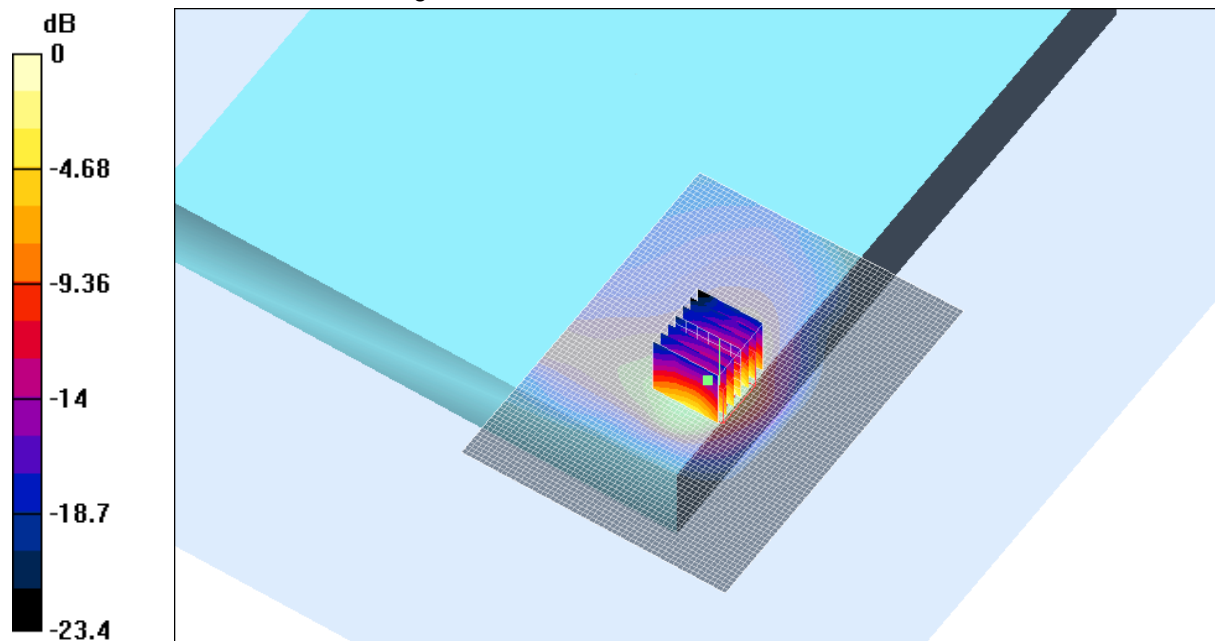
Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.109 mW/g

Reference Value = 11.9 V/m

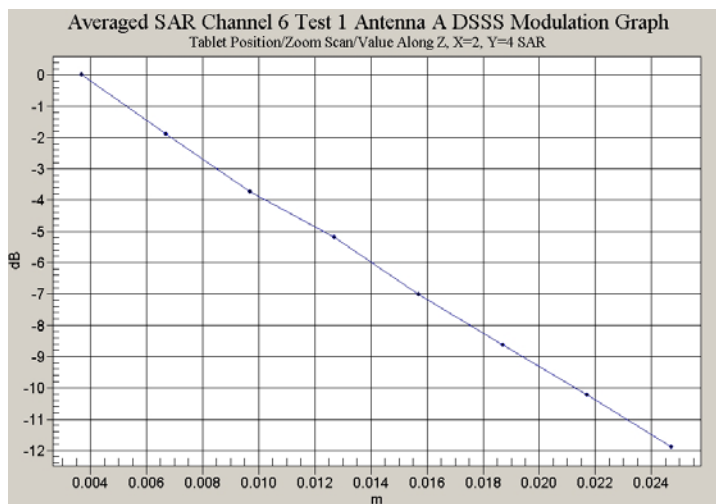Power Drift = -0.3 dB

Maximum value of SAR = 0.289 mW/g

0 dB = 0.289mW/g

SAR MEASUREMENT PLOT 7

Ambient Temperature   **21.5 Degrees Celsius**
Liquid Temperature   **19.8 Degrees Celsius**
Humidity   **63 %**

SAR Z-axis graph for Plot 7

Averaged SAR Channel 6 Test 1 Antenna A DSSS Modulation Graph
Tablet Position/Zoom Scan/Value Along Z, X=2, Y=4 SAR

Test Date: 10 February 2004
File Name: Validation 2450 MHz (DAE442 Probe1380) 10-02-04.da4
DUT: Dipole 2450 MHz; Type: DV2450V2; Serial: 724

 * Communication System: CW 2450 MHz; Frequency: 2450 MHz; Duty Cycle: 1:1
 * Medium: Head 2450 MHz; (σ = 1.7979 mho/m, ε_r = 39.422, ρ = 1000 kg/m^3)
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.8, 4.8, 4.8)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section
 Channel 1 Test/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 94.9 V/m
Power Drift = 0.1 dB
Maximum value of SAR = 14.7 mW/g

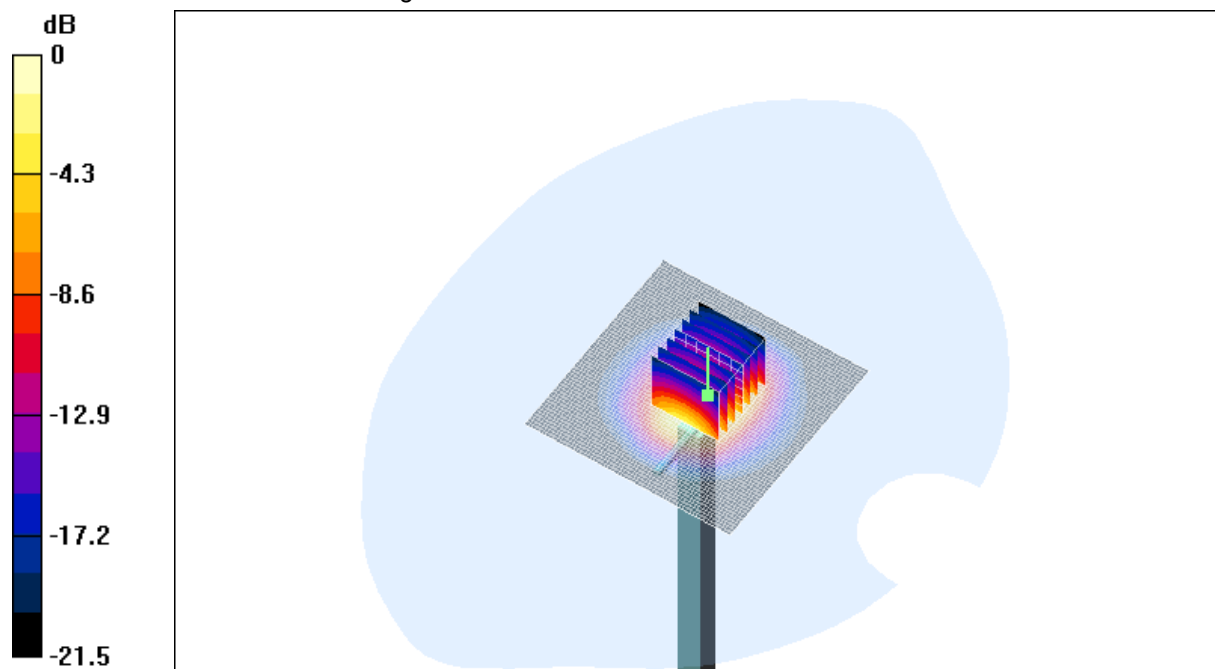**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 26.7 W/kg
SAR(1 g) = 12.9 mW/g; SAR(10 g) = 6.12 mW/g
Reference Value = 94.9 V/m
Power Drift = 0.1 dB
Maximum value of SAR = 14.7 mW/g

0 dB = 14.7mW/g

SAR MEASUREMENT PLOT 8

Ambient Temperature   **21.4 Degrees Celsius**
Liquid Temperature   **20.6 Degrees Celsius**
Humidity   **49 %**

Test Date: 11 February 2004
File Name: Validation 2450 MHz (DAE442 Probe1380) 11-02-04.da4
DUT: Dipole 2450 MHz; Type: DV2450V2; Serial: 724

 * Communication System: CW 2450 MHz; Frequency: 2450 MHz; Duty Cycle: 1:1
 * Medium: Head 2450 MHz; (σ = 1.79138 mho/m, ε_r = 39.4646, ρ = 1000 kg/m^3)
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.8, 4.8, 4.8)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section
 Channel 1 Test/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 94 V/m
Power Drift = 0.0 dB
Maximum value of SAR = 14.8 mW/g

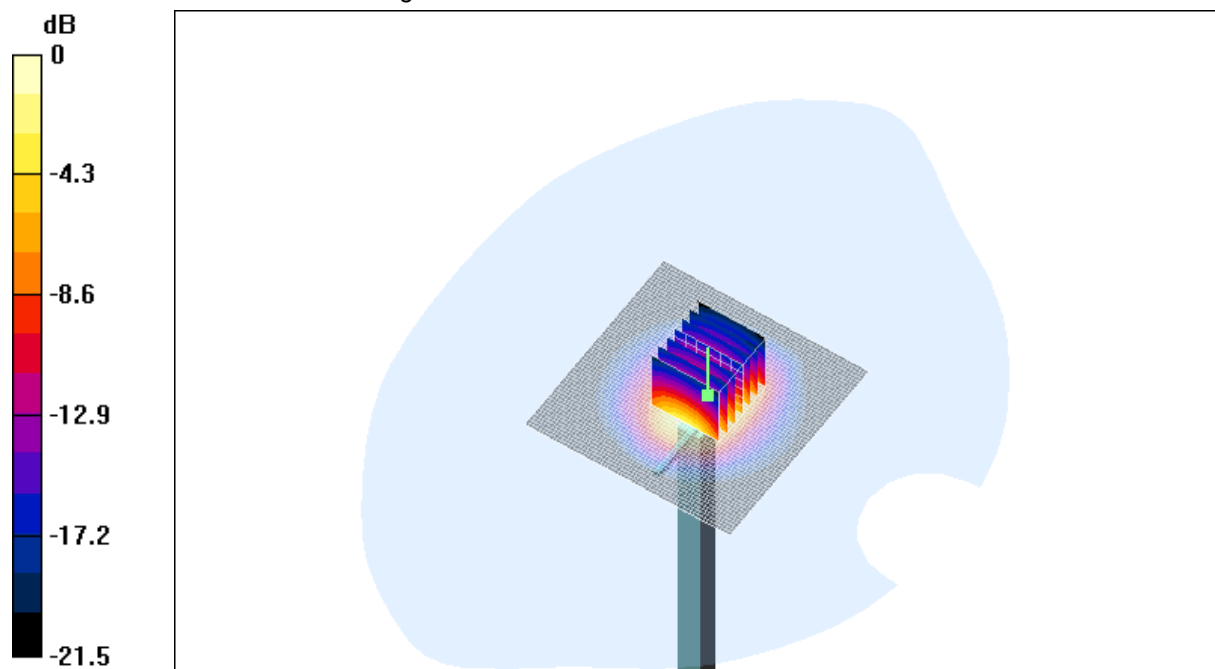**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 26.5 W/kg
SAR(1 g) = 12.8 mW/g; SAR(10 g) = 6.03 mW/g
Reference Value = 94 V/m
Power Drift = 0.0 dB
Maximum value of SAR = 14.6 mW/g

0 dB = 14.6mW/g

SAR MEASUREMENT PLOT 9

Ambient Temperature	**21.9 Degrees Celsius**
Liquid Temperature	**20.8 Degrees Celsius**
Humidity	**63 %**

Test Date: 03 March 2004
File Name: Validation 2450 MHz (DAE442 Probe1380) 03-03-04.da4
DUT: Dipole 2450 MHz; Type: DV2450V2; Serial: 724

 * Communication System: CW 2450 MHz; Frequency: 2450 MHz; Duty Cycle: 1:1
 * Medium: Head 2450 MHz; (σ = 1.8475 mho/m, ε_r = 39.912, ρ = 1000 kg/m^3)
- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(4.8, 4.8, 4.8)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section
 Channel 1 Test/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 94.6 V/m
Power Drift = -0.004 dB
Maximum value of SAR = 15.6 mW/g

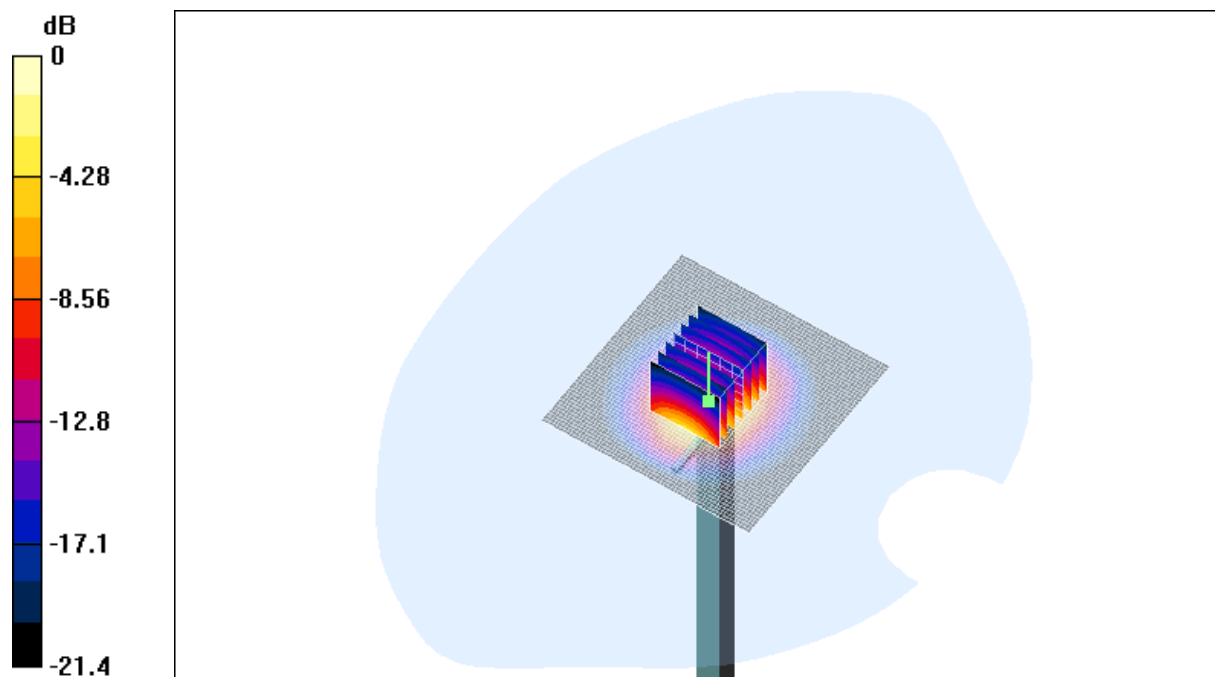**Channel 1 Test/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 27.3 W/kg
SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.29 mW/g
Reference Value = 94.6 V/m
Power Drift = -0.004 dB
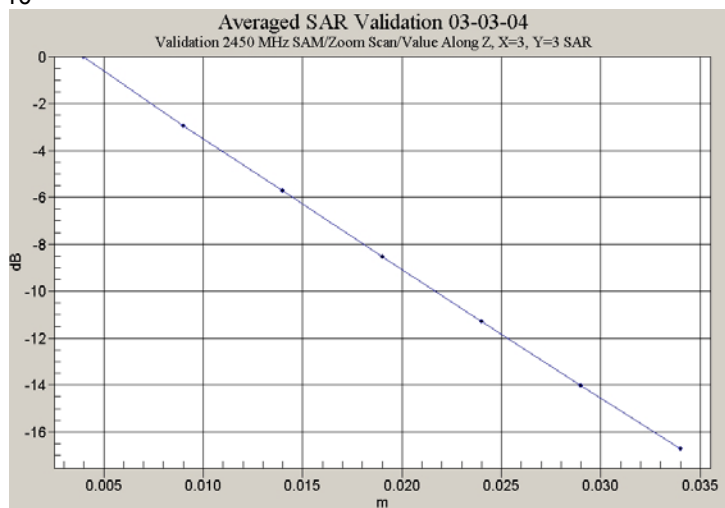Maximum value of SAR = 14.9 mW/g

0 dB = 14.9mW/g

SAR MEASUREMENT PLOT 10

Ambient Temperature   **21.5 Degrees Celsius**
Liquid Temperature   **19.8 Degrees Celsius**
Humidity   **63 %**

Z-Axis Graph For Plot 10

Averaged SAR Validation 03-03-04
Validation 2450 MHz SAM/Zoom Scan/Value Along Z, X=3, Y=3 SAR

APPENDIX C
SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

1. 2450 MHz Dipole Calibration Sheet	6 Pages
2. 2450 MHz E-Field Probe Calibration Sheet	4 Pages
3. Dielectric Properties of Flat phantom PL550 Phantom	1 Page