

Test Date: 21 January 2004

File Name: [Arm Held OFDM 5.77 GHz Mace 2 Atheros 11abg Antenna A - 22-01-04.da4](#)

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

* Communication System: OFDM 5770 MHz; Frequency: 5805 MHz; Duty Cycle: 1:1

* Medium: Body 5600 MHz; ($\sigma = 6.3593$ mho/m, $\epsilon_r = 43.7069$, $\rho = 1000$ kg/m³)

- 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 (61x81x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 4.13 V/m

Power Drift = 0.4 dB

Maximum value of SAR = 1.72 mW/g

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

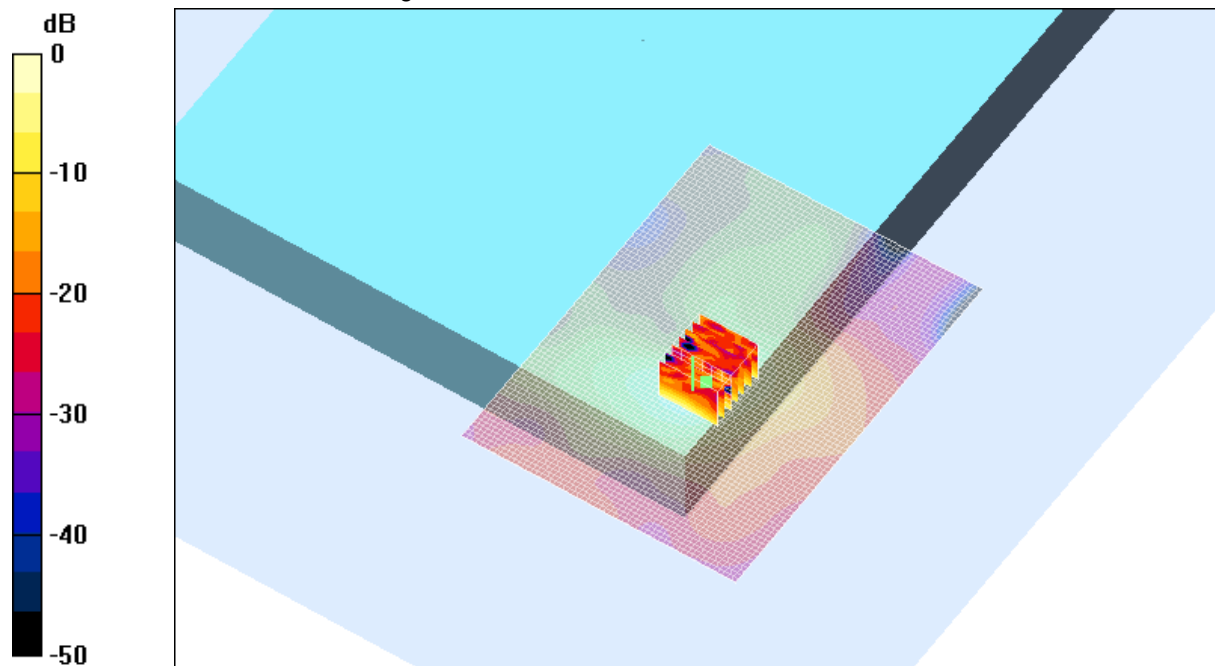
Peak SAR (extrapolated) = 4.22 W/kg

SAR(1g) = 1.03 mW/g; SAR(10 g) = 0.333 mW/g

Reference Value = 4.13 V/m

Power Drift = 0.4 dB

Maximum value of SAR = 1.53 mW/g



0 dB = 1.53mW/g

SAR MEASUREMENT PLOT 11

Ambient Temperature

21.5 Degrees Celsius

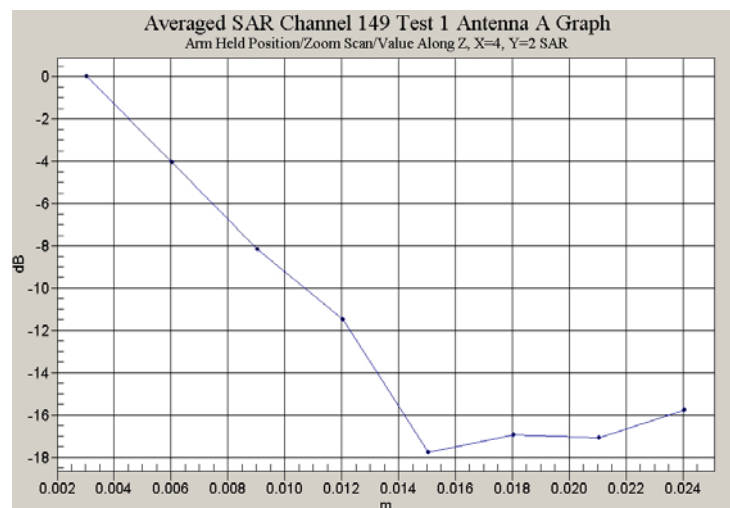
Liquid Temperature

20.9 Degrees Celsius

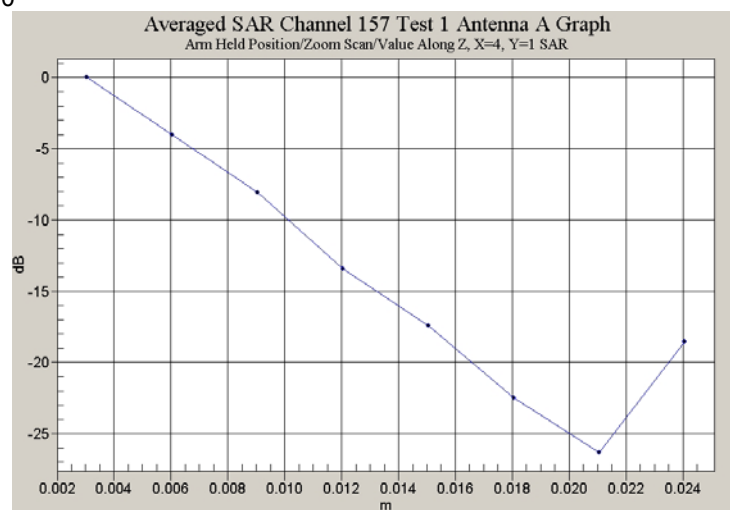
Humidity

51 %

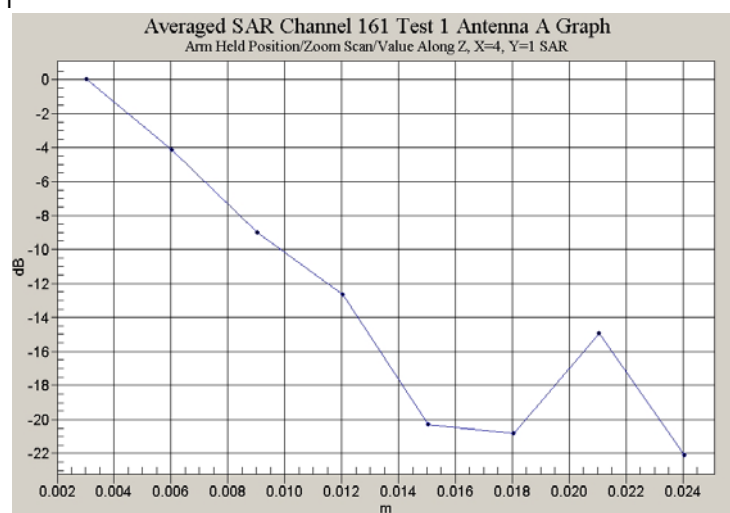
Z-axis graph for plot 9



Z-axis graph for plot 10



Z-axis graph for plot 11



Test Date: 22 January 2004

File Name: [Arm Held OFDM 5.77 GHz Mace 2 Atheros 11abg Antenna B - 22-01-04.da4](#)

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

* Communication System: OFDM 5770 MHz; Frequency: 5745 MHz; Duty Cycle: 1:1

* Medium: Body 5600 MHz; ($\sigma = 6.22359$ mho/m, $\epsilon_r = 43.9324$, $\rho = 1000$ kg/m³)

- 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 (61x81x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 2.69 V/m

Power Drift = 0.5 dB

Maximum value of SAR = 0.597 mW/g

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

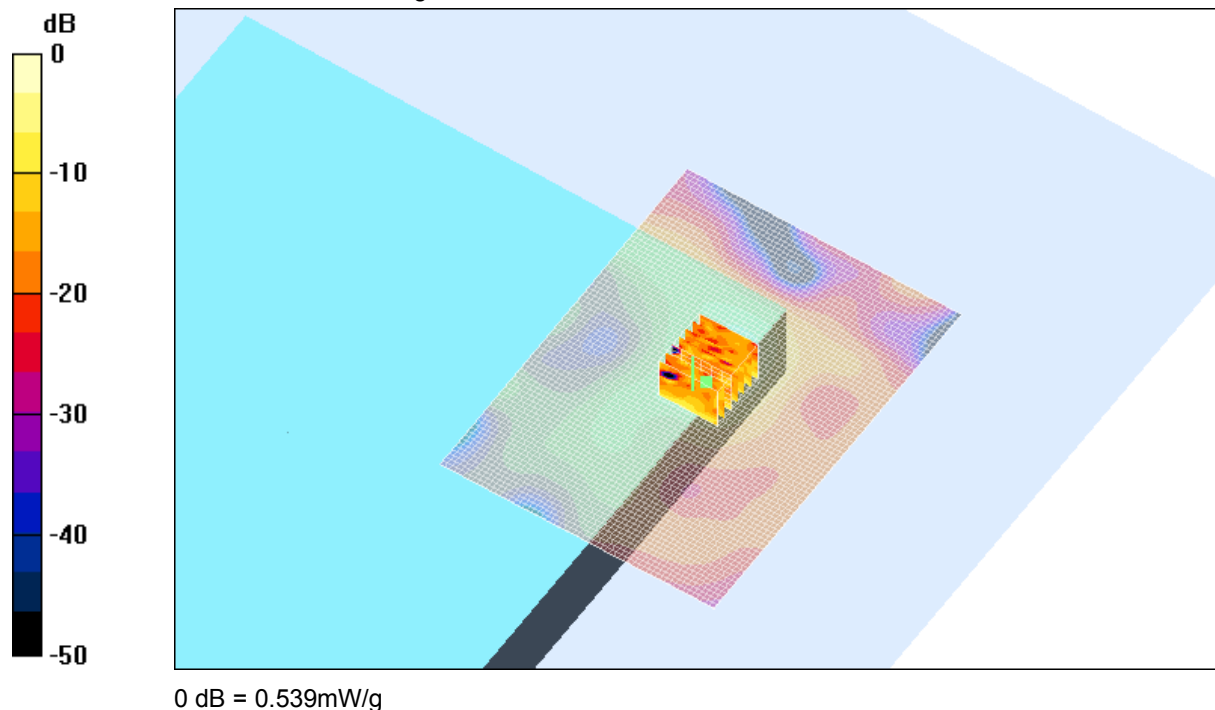
Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.350 mW/g; SAR(10 g) = 0.110 mW/g

Reference Value = 2.69 V/m

Power Drift = 0.5 dB

Maximum value of SAR = 0.539 mW/g



SAR MEASUREMENT PLOT 12

Ambient Temperature

21.5 Degrees Celsius

Liquid Temperature

20.9 Degrees Celsius

Humidity

51 %

Test Date: 22 January 2004

File Name: [Arm Held OFDM 5.77 GHz Mace 2 Atheros 11abg Antenna B - 22-01-04.da4](#)

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

* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium: Body 5600 MHz; ($\sigma = 6.30754$ mho/m, $\epsilon_r = 43.8248$, $\rho = 1000$ kg/m³)

- 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 (61x81x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 2.81 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.621 mW/g

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

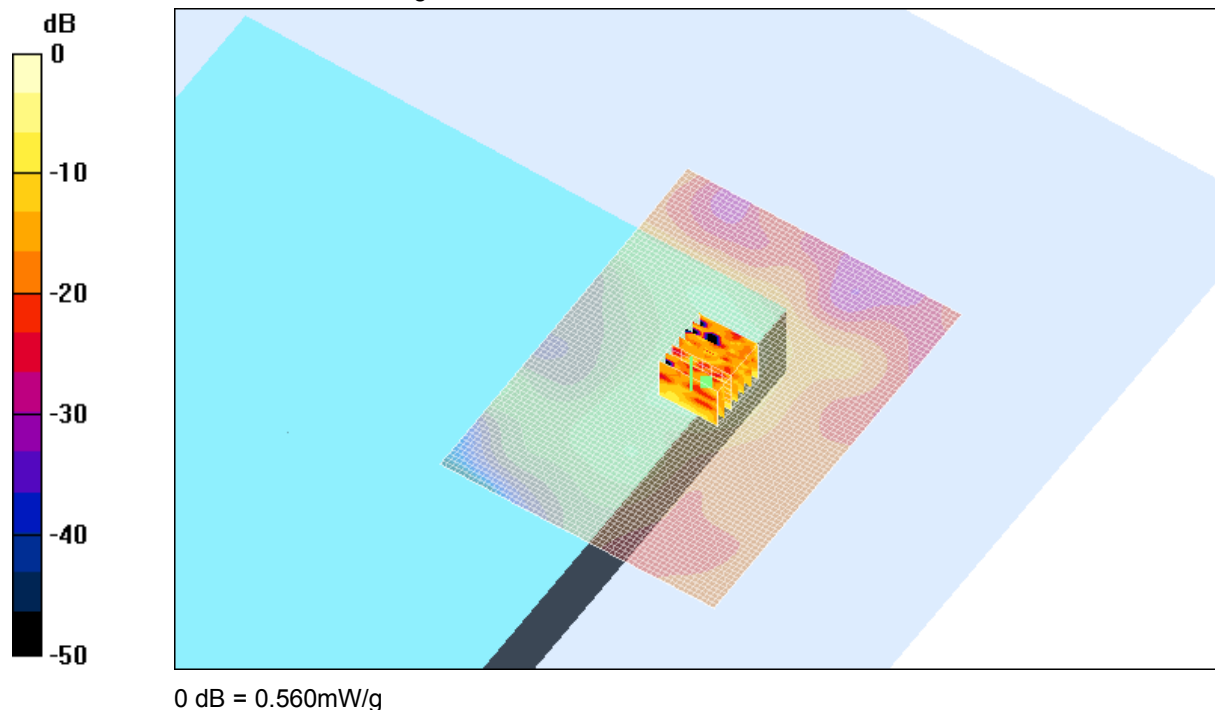
Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.119 mW/g

Reference Value = 2.81 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.560 mW/g



SAR MEASUREMENT PLOT 13

Ambient Temperature

21.5 Degrees Celsius

Liquid Temperature

20.9 Degrees Celsius

Humidity

51 %

Test Date: 22 January 2004

File Name: [Arm Held OFDM 5.77 GHz Mace 2 Atheros 11abg Antenna B - 22-01-04.da4](#)

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

* Communication System: OFDM 5770 MHz; Frequency: 5805 MHz; Duty Cycle: 1:1

* Medium: Body 5600 MHz; ($\sigma = 6.34339$ mho/m, $\epsilon_r = 43.7529$, $\rho = 1000$ kg/m³)

- 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 (61x81x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 2.57 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.497 mW/g

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

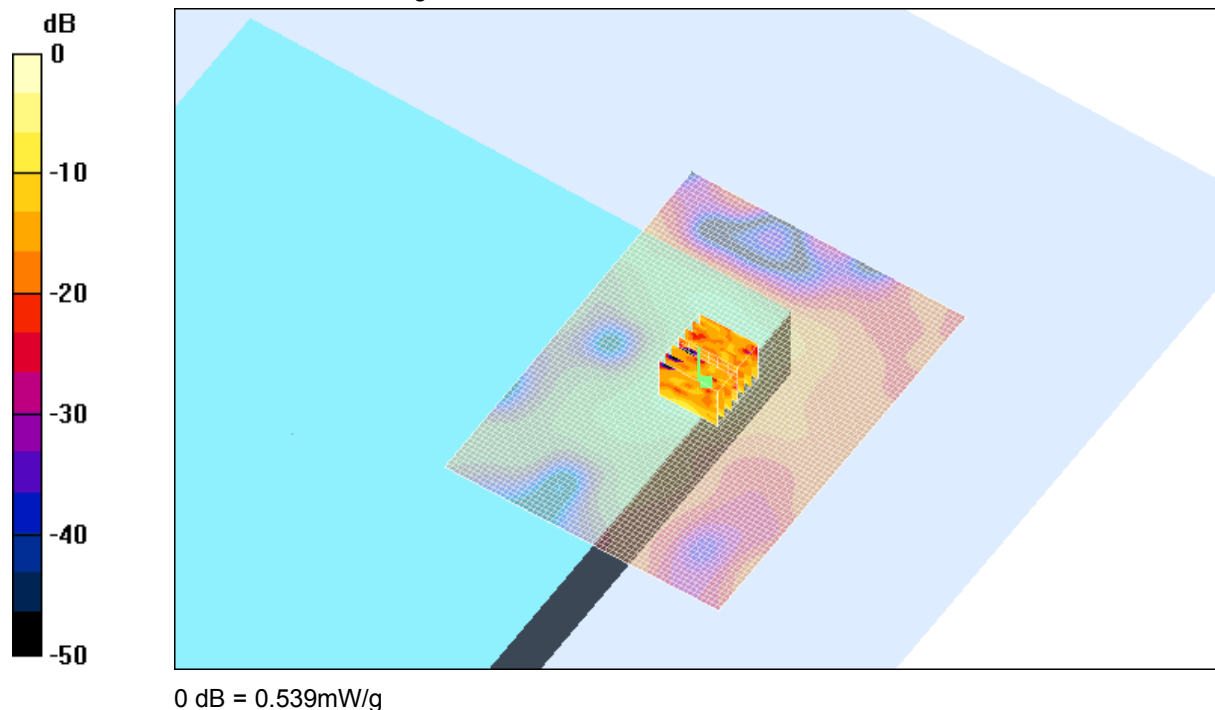
Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.114 mW/g

Reference Value = 2.57 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 0.539 mW/g



SAR MEASUREMENT PLOT 14

Ambient Temperature

21.5 Degrees Celsius

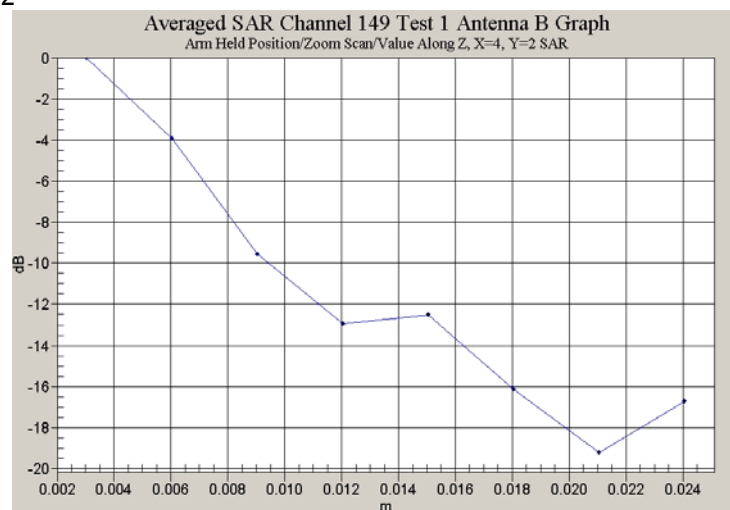
Liquid Temperature

20.9 Degrees Celsius

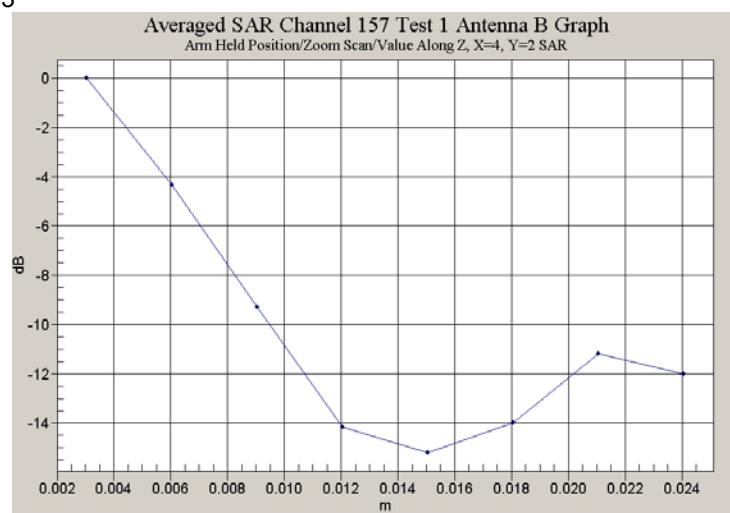
Humidity

51 %

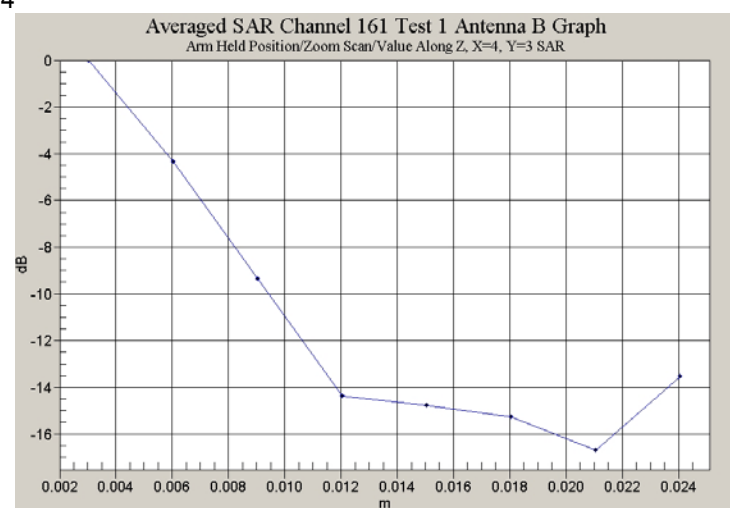
Z-axis graph for plot 12



Z-axis graph for plot 13



Z-axis graph for plot 14



Test Date: 21 January 2004

File Name: [Tablet OFDM 5.77 GHz Mace 2 Atheros 11abg Antenna A Prescan - 21-01-04.da4](#)

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

* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium: Body 5600 MHz; ($\sigma = 5.97776$ mho/m, $\epsilon_r = 43.6271$, $\rho = 1000$ kg/m³)

- 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 (131x161x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 0.774 V/m

Power Drift = 1.0 dB

Maximum value of SAR = 0.039 mW/g

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

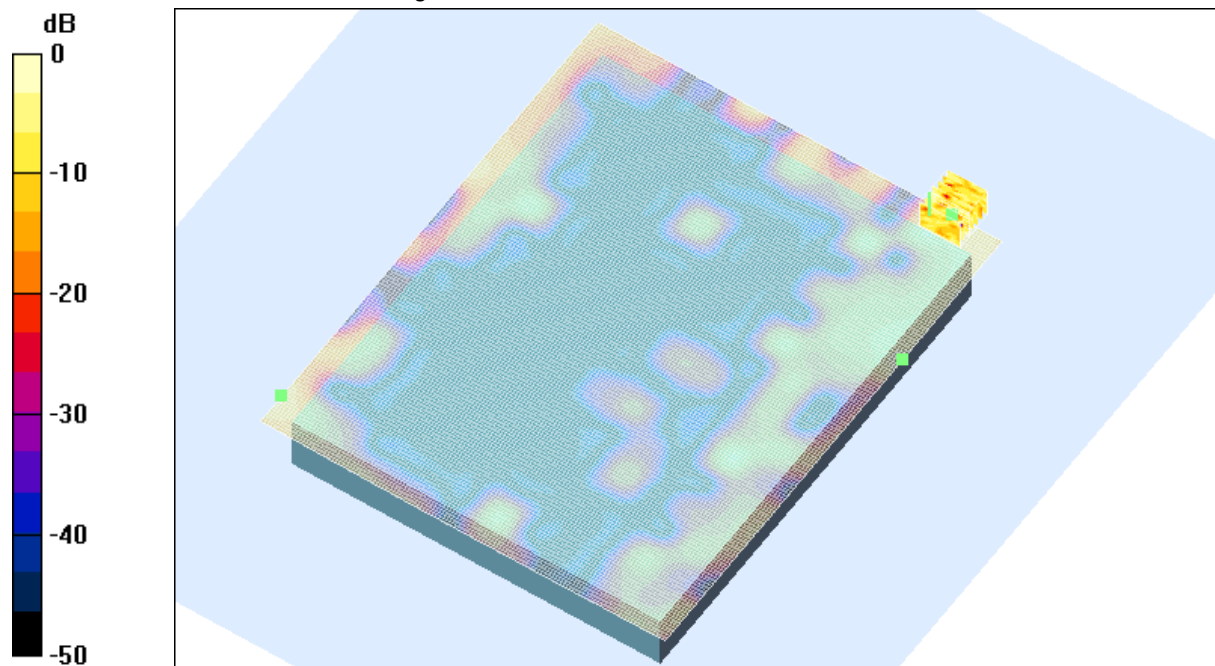
Peak SAR (extrapolated) = 0.391 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.017 mW/g

Reference Value = 0.774 V/m

Power Drift = 1.0 dB

Maximum value of SAR = 0.092 mW/g



0 dB = 0.092mW/g

SAR MEASUREMENT PLOT 15

Ambient Temperature

21.6 Degrees Celsius

Liquid Temperature

20.8 Degrees Celsius

Humidity

53 %

Test Date: 22 January 2004

File Name: [Tablet OFDM 5.77 GHz Mace 2 Atheros 11abg Antenna B Prescan - 22-01-04.da4](#)

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

* Communication System: OFDM 5770 MHz; Frequency: 5785 MHz; Duty Cycle: 1:1

* Medium: Body 5600 MHz; ($\sigma = 6.30754$ mho/m, $\epsilon_r = 43.8248$, $\rho = 1000$ kg/m³)

- 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 (131x161x1): Measurement grid: dx=20mm, dy=20mm

Reference Value = 0.768 V/m

Power Drift = 0.4 dB

Maximum value of SAR = 0.026 mW/g

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

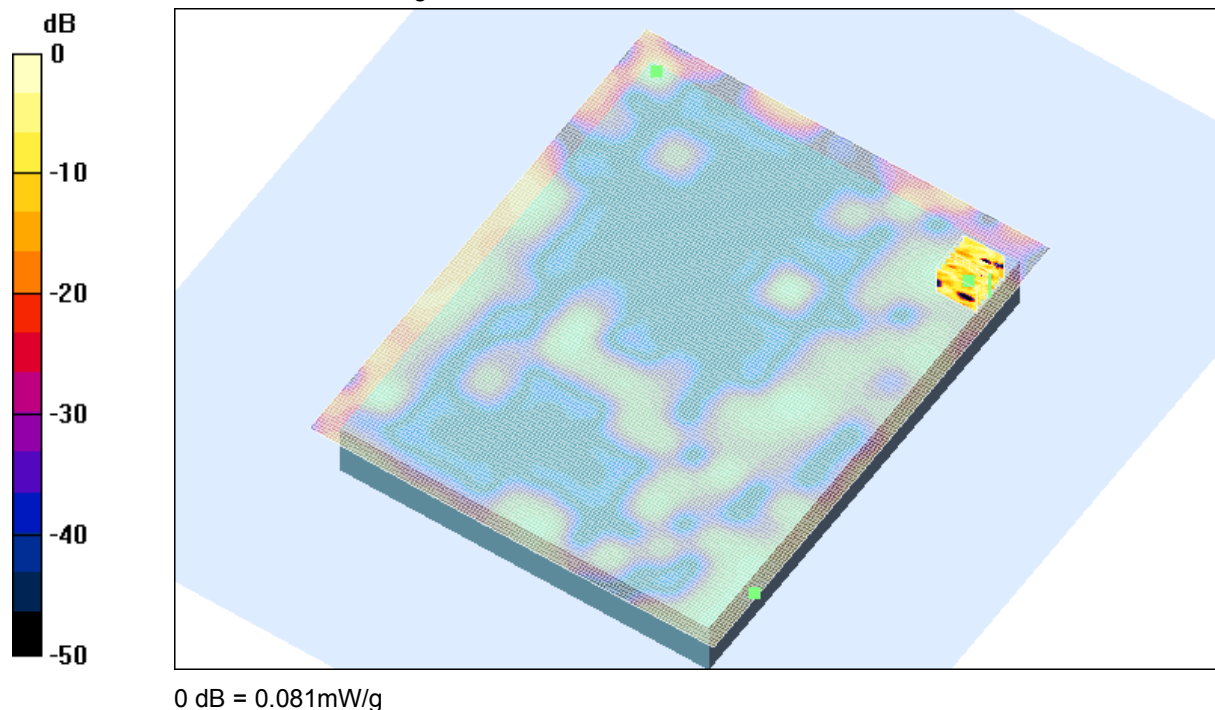
Peak SAR (extrapolated) = 0.528 W/kg

SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.010 mW/g

Reference Value = 0.768 V/m

Power Drift = 0.4 dB

Maximum value of SAR = 0.081 mW/g



SAR MEASUREMENT PLOT 16

Ambient Temperature

21.5 Degrees Celsius

Liquid Temperature

20.9 Degrees Celsius

Humidity

51 %

Test Date: 21 January 2004

File Name: [Validation 5800MHz \(DAE 442 Probe ES3DV3\) 21-01-04.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; ($\sigma = 6.17448$ mho/m, $\epsilon_r = 47.1419$, $\rho = 1000$ kg/m³)

- 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/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 82 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 33.8 mW/g

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

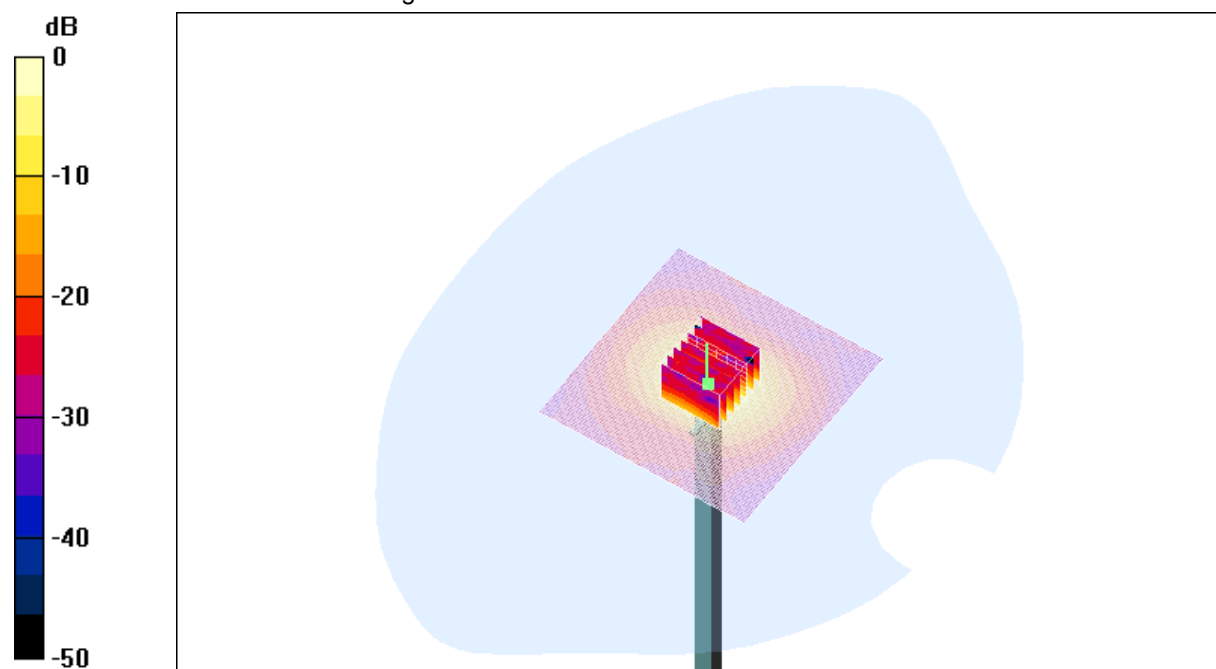
Peak SAR (extrapolated) = 99 W/kg

SAR(1 g) = 21.6 mW/g; SAR(10 g) = 5.85 mW/g

Reference Value = 82 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 31.4 mW/g



SAR MEASUREMENT PLOT 17

Ambient Temperature
Liquid Temperature
Humidity

21.6 Degrees Celsius
20.8 Degrees Celsius
53 %

Test Date: 22 January 2004

File Name: [Validation 5800MHz \(DAE 442 Probe ES3DV3\) 22-01-04.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; ($\sigma = 6.24446$ mho/m, $\epsilon_r = 47.2245$, $\rho = 1000$ kg/m³)

- 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/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 77.6 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 31.5 mW/g

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

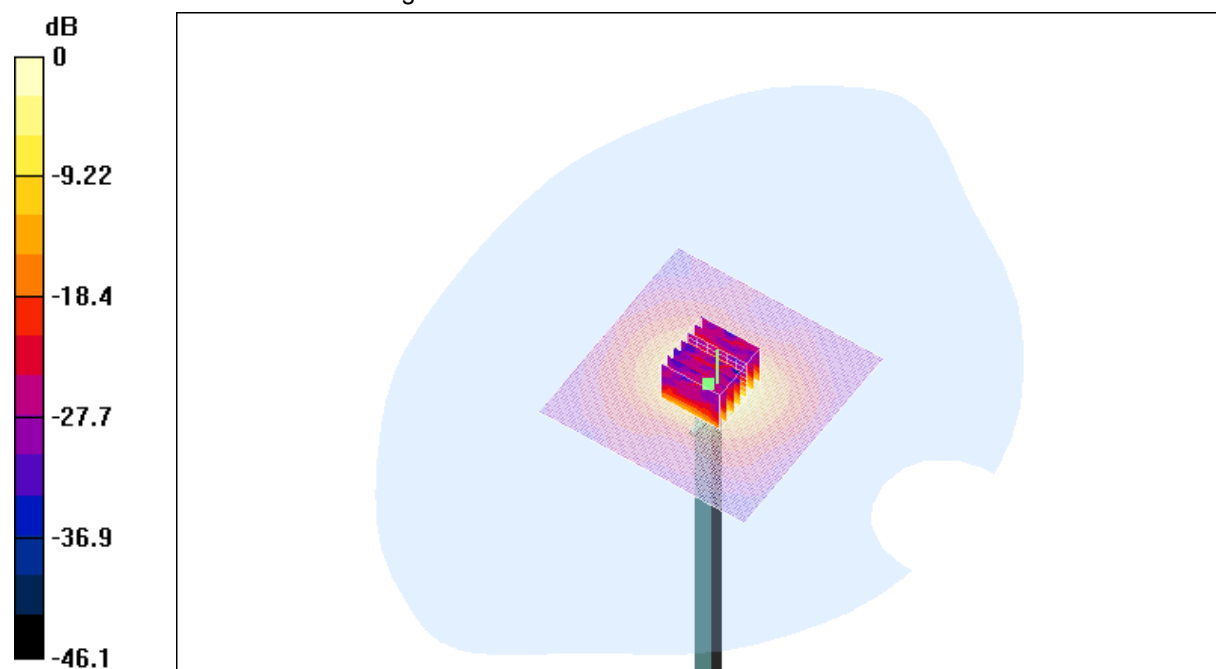
Peak SAR (extrapolated) = 91.2 W/kg

SAR(1 g) = 20.4 mW/g; SAR(10 g) = 5.58 mW/g

Reference Value = 77.6 V/m

Power Drift = 0.1 dB

Maximum value of SAR = 30.6 mW/g



0 dB = 30.6mW/g

SAR MEASUREMENT PLOT 18

Ambient Temperature
Liquid Temperature
Humidity

21.5 Degrees Celsius
20.9 Degrees Celsius
51 %

Test Date: 09 February 2004

File Name: [Validation 5200MHz \(DAE 442 Probe ES3DV3\) 09-02-04.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; ($\sigma = 5.42432$ mho/m, $\epsilon_r = 49.0659$, $\rho = 1000$ kg/m³)

- 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/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 89.6 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 36.3 mW/g

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

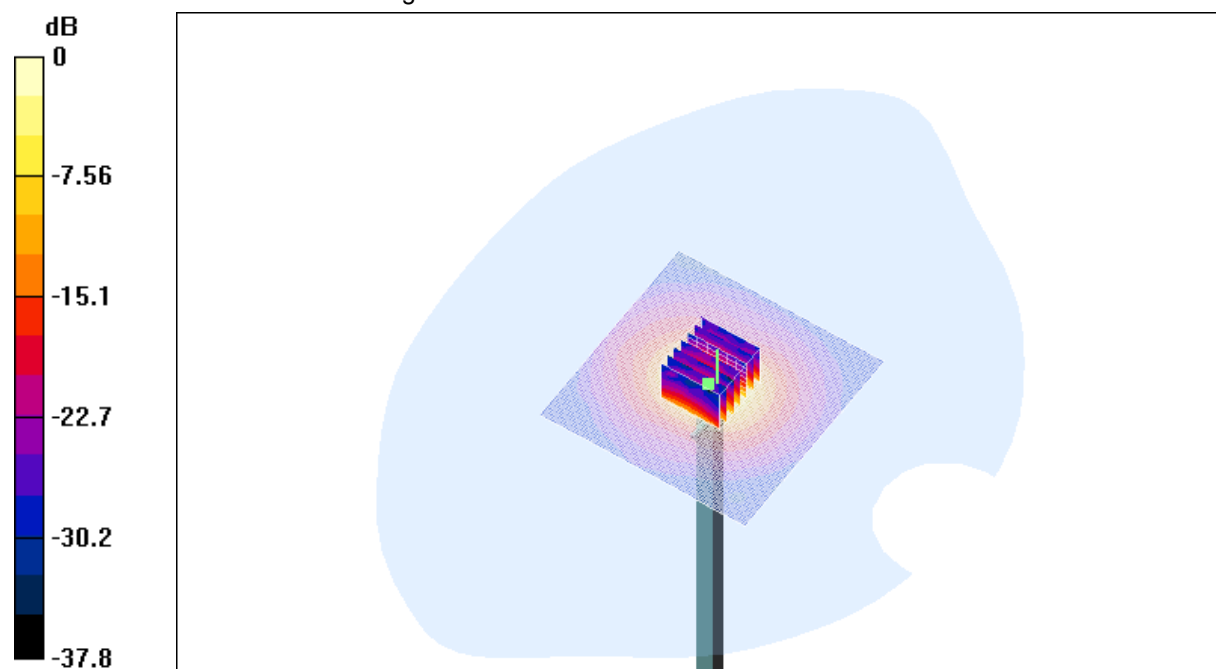
Peak SAR (extrapolated) = 90.5 W/kg

SAR(1 g) = 22.6 mW/g; SAR(10 g) = 6.36 mW/g

Reference Value = 89.6 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 33.7 mW/g

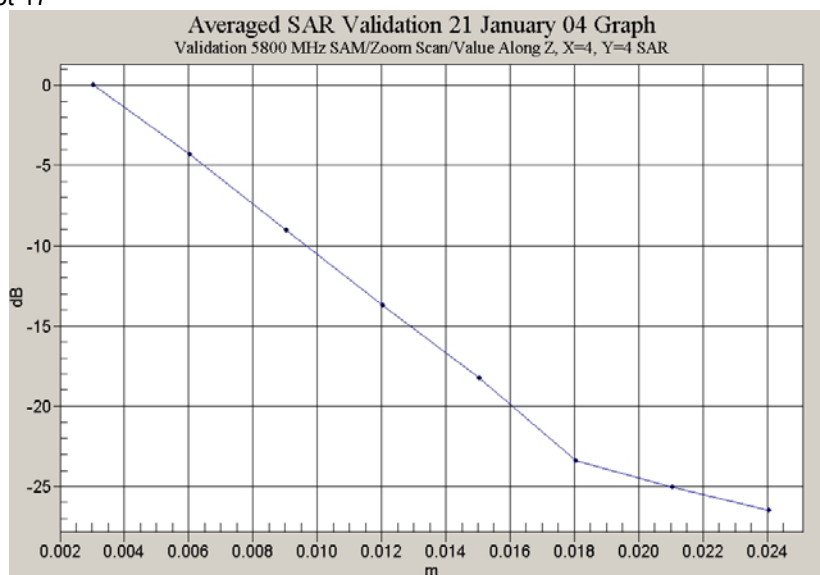


SAR MEASUREMENT PLOT 19

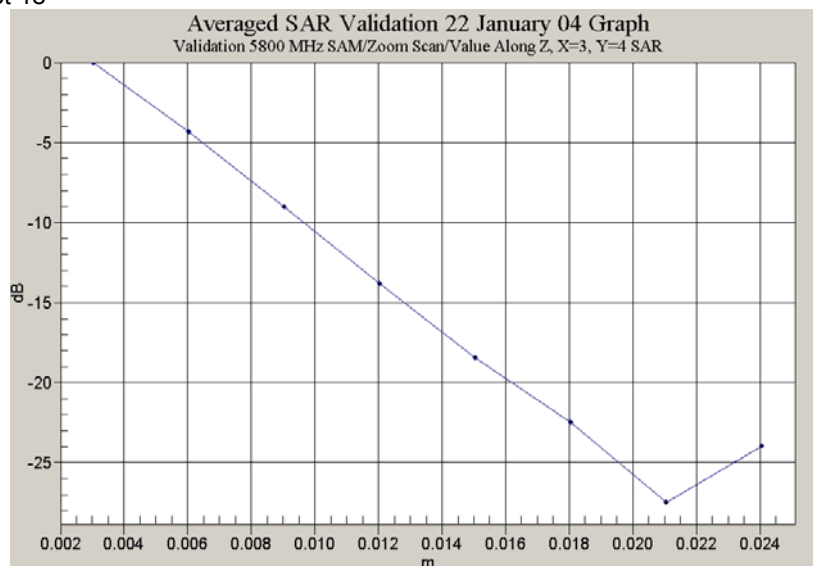
Ambient Temperature
Liquid Temperature
Humidity

21.6 Degrees Celsius
20.8 Degrees Celsius
61 %

Z-axis scan for plot 17



Z-axis scan for plot 18



APPENDIX C

SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

- | | |
|--|---------|
| 1. 5200_5800MHz Dipole Calibration Sheet | 6 pages |
| 2. 5GHz E-Field Probe Calibration Sheet | 9 Pages |