

Appendix D

SAR Measurement Data

of

Product Name

Portable Data Collection Terminal

Model

PA500

1 802.11b+BT link 2450MHz SAR Measurement Data

SAR Test Report

Report Date : 21-Mar-2007
Measurement Date : 21-Mar-2007

Product Data

Device Name : Pa500
Serial No. :
Type : Other
Frequency : 2450.00 MHz
Max. Transmit Pwr : 18.74 dBm
Drift Time : 0 min(s)
Length : 20 mm
Width : 75 mm
Depth : 125 mm
Antenna Type : Internal

Phantom Data

Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Location : Center

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 21-Mar-2007
Temperature : 21.10 °C
Ambient Temp. : 21.30 °C
Humidity : 53.00 RH%
Epsilon : 52.287 F/m
Sigma : 1.92 S/m
Density : 1000.00 kg/cu. m

Probe Data

Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5.02
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

1.1 2450 MHz, EUT Position: Top

Measurement Date : 21-Mar-2007

Crest Factor : 1

Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm

Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

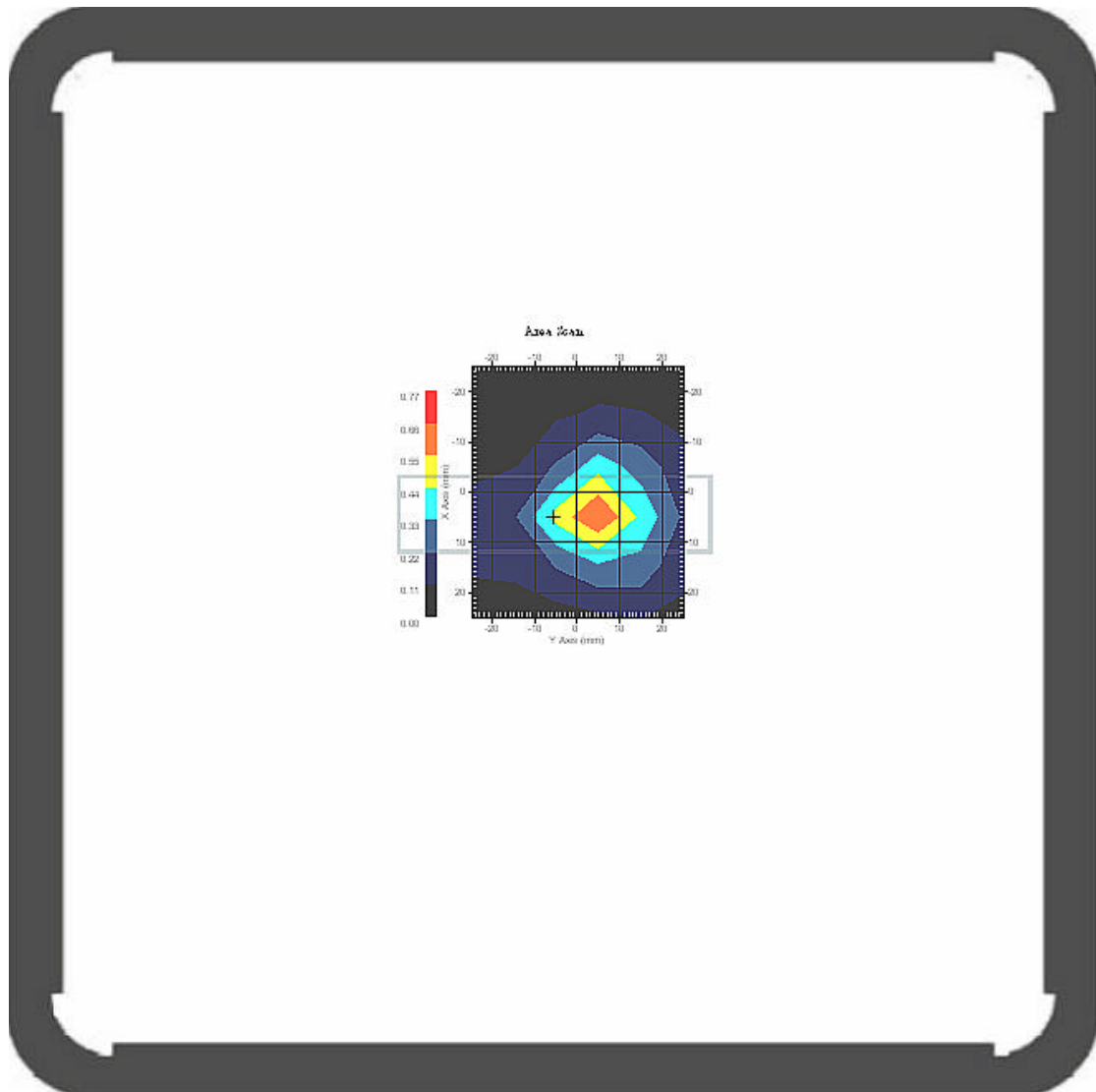
DUT Position : Touch

Channel : Mid

Power Drift-Start : 0.236 W/kg

Power Drift-Finish: 0.232 W/kg

Power Drift (%) : -1.644



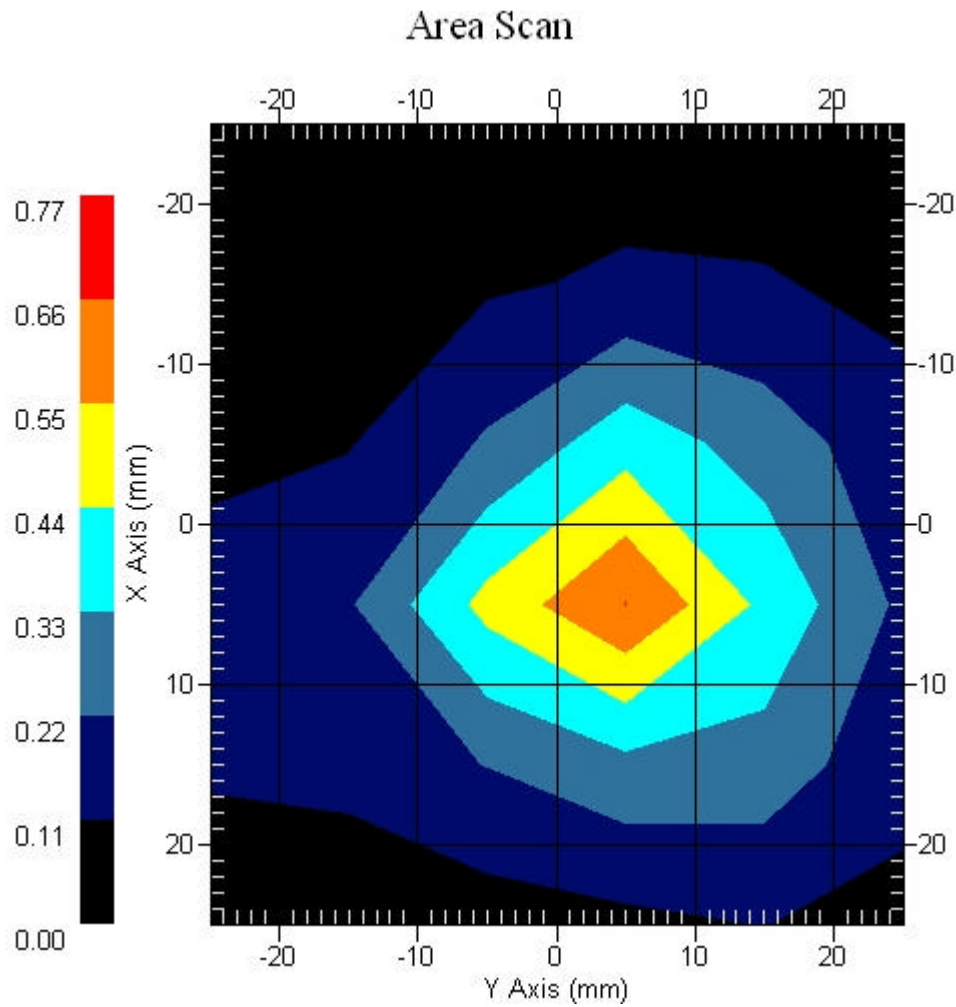
1 gram SAR value : 0.555 W/kg

10 gram SAR value : 0.257 W/kg

Area Scan Peak SAR : 0.661 W/kg

Zoom Scan Peak SAR : 1.141 W/kg

Area Scan Plot



1.2 2450 MHz, EUT Position: Front

Measurement Date : 21-Mar-2007

Crest Factor : 1

Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm

Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

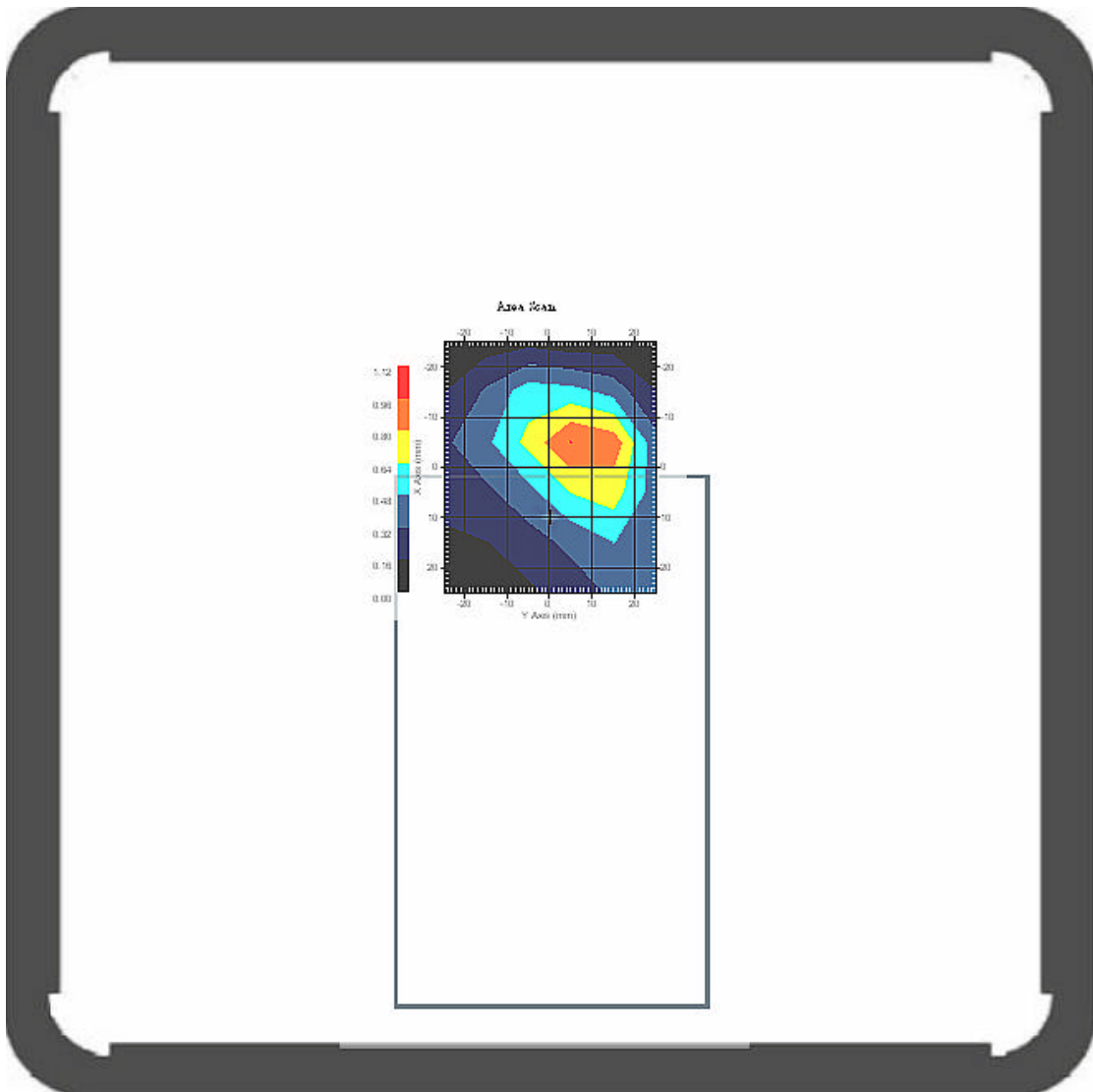
DUT Position : Touch

Channel : Mid

Power Drift-Start : 0.448 W/kg

Power Drift-Finish: 0.441 W/kg

Power Drift (%) : -1.657



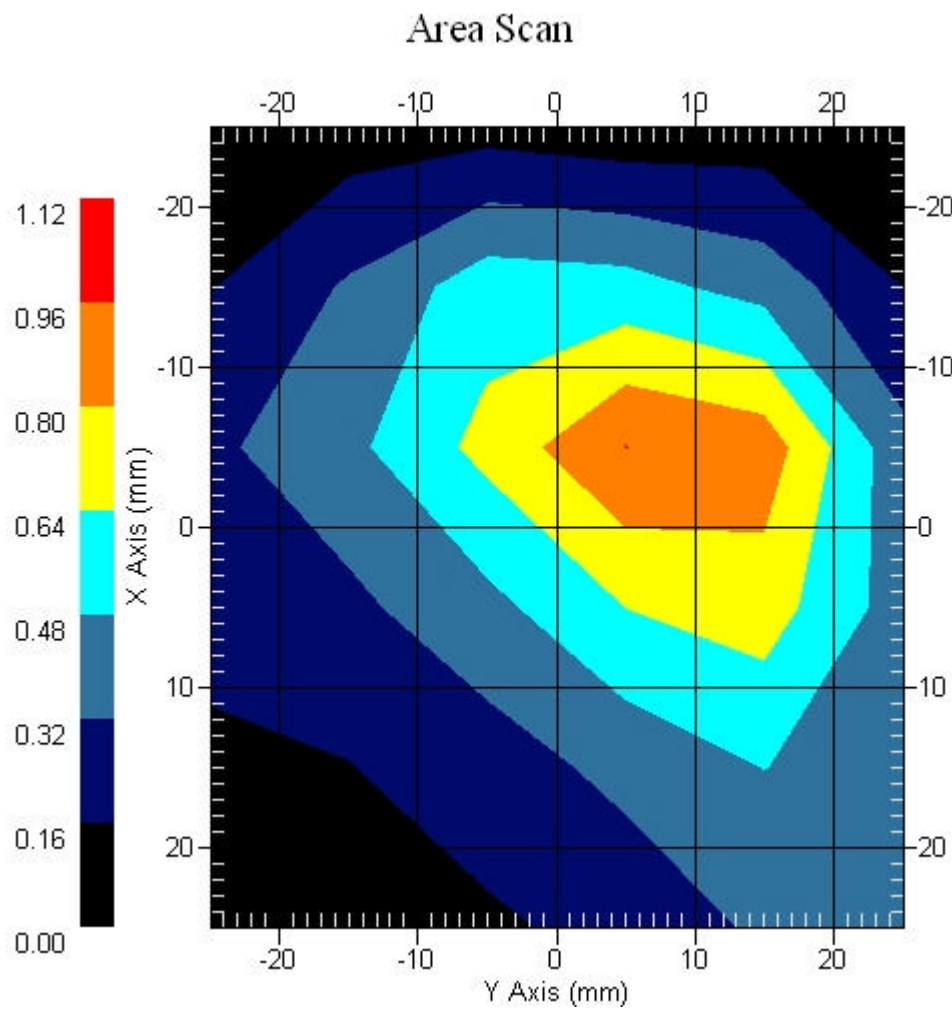
1 gram SAR value : 0.872 W/kg

10 gram SAR value : 0.438 W/kg

Area Scan Peak SAR : 0.961 W/kg

Zoom Scan Peak SAR : 1.621 W/kg

Area Scan Plot

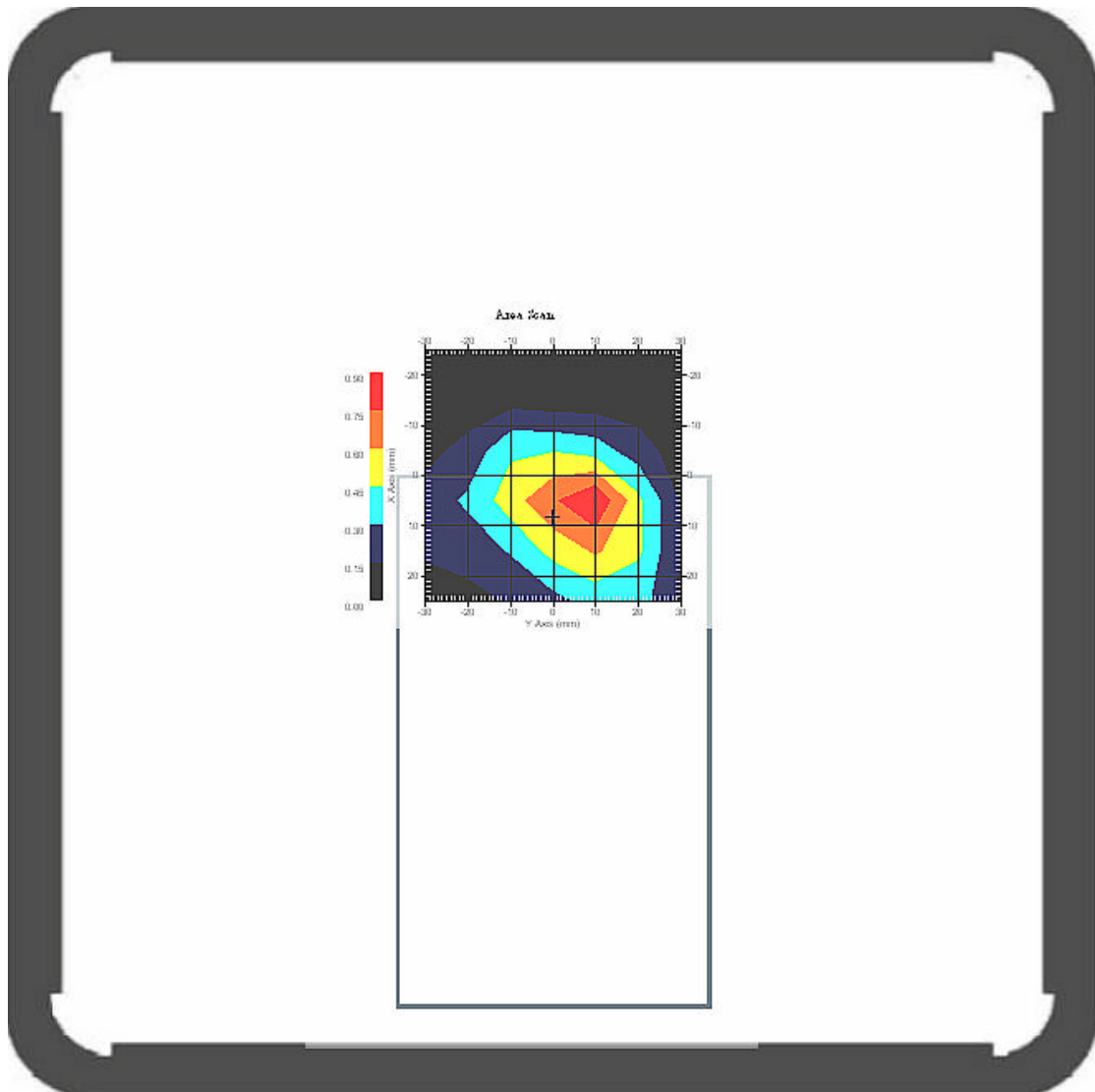


1.3 2450 MHz, EUT Position: Front

Measurement Date : 21-Mar-2007
Crest Factor : 1
Area Scan : 6x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

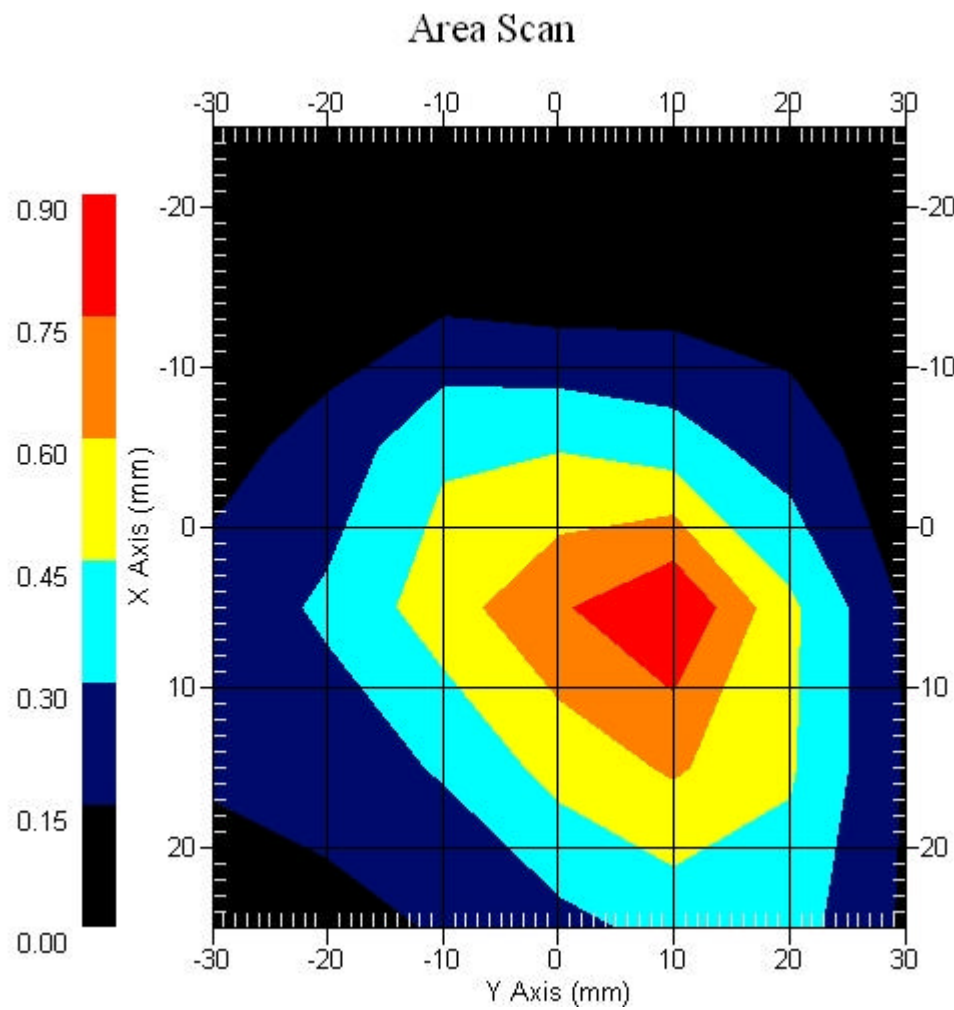
DUT Position : Touch
Channel : Low

Power Drift-Start : 0.633 W/kg
Power Drift-Finish: 0.612 W/kg
Power Drift (%) : -3.431



1 gram SAR value : 0.742 W/kg
10 gram SAR value : 0.357 W/kg
Area Scan Peak SAR : 0.897 W/kg
Zoom Scan Peak SAR : 1.491 W/kg

Area Scan Plot



1.4 2450 MHz, EUT Position: Front

Measurement Date : 21-Mar-2007

Crest Factor : 1

Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm

Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

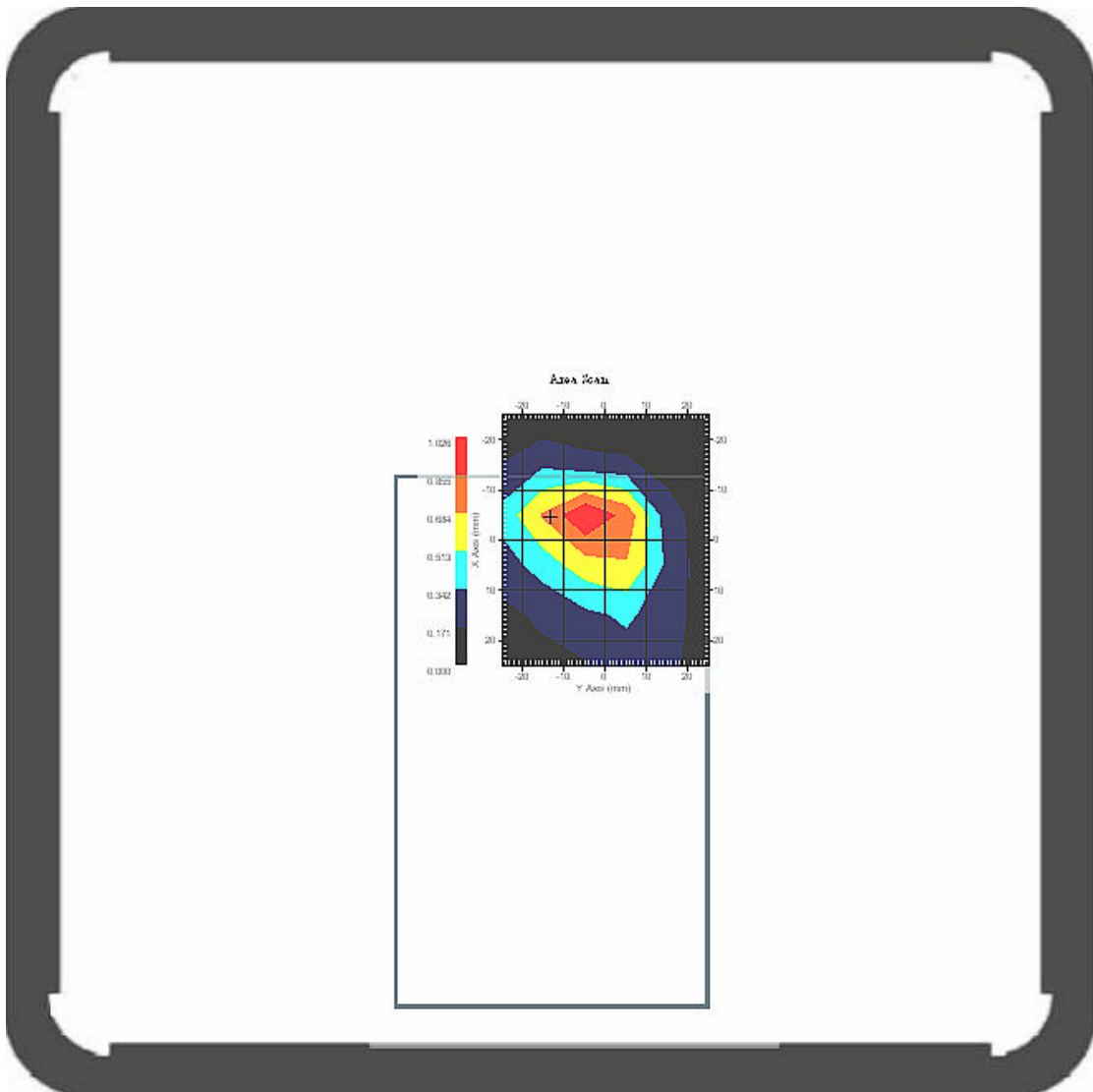
DUT Position : Touch

Channel : High

Power Drift-Start : 0.512 W/kg

Power Drift-Finish: 0.495 W/kg

Power Drift (%) : -3.438



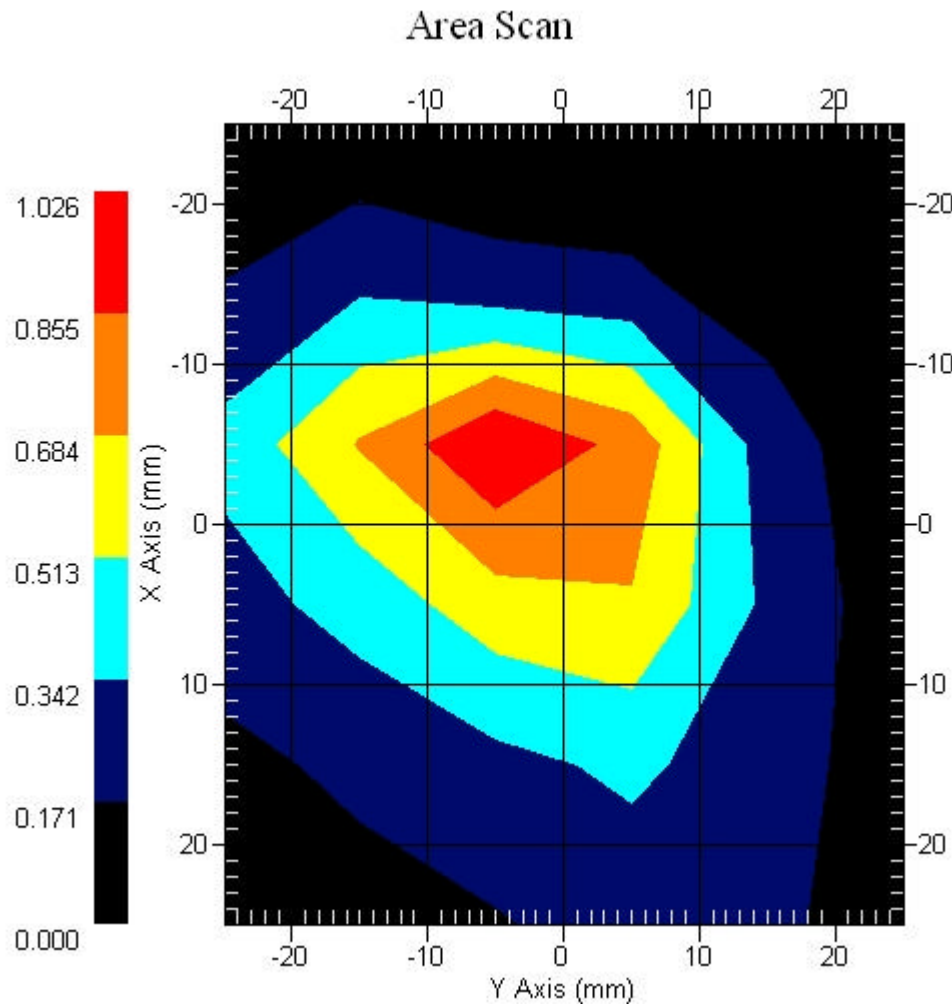
1 gram SAR value : 0.824 W/kg

10 gram SAR value : 0.371 W/kg

Area Scan Peak SAR : 1.025 W/kg

Zoom Scan Peak SAR : 1.831 W/kg

Area Scan Plot

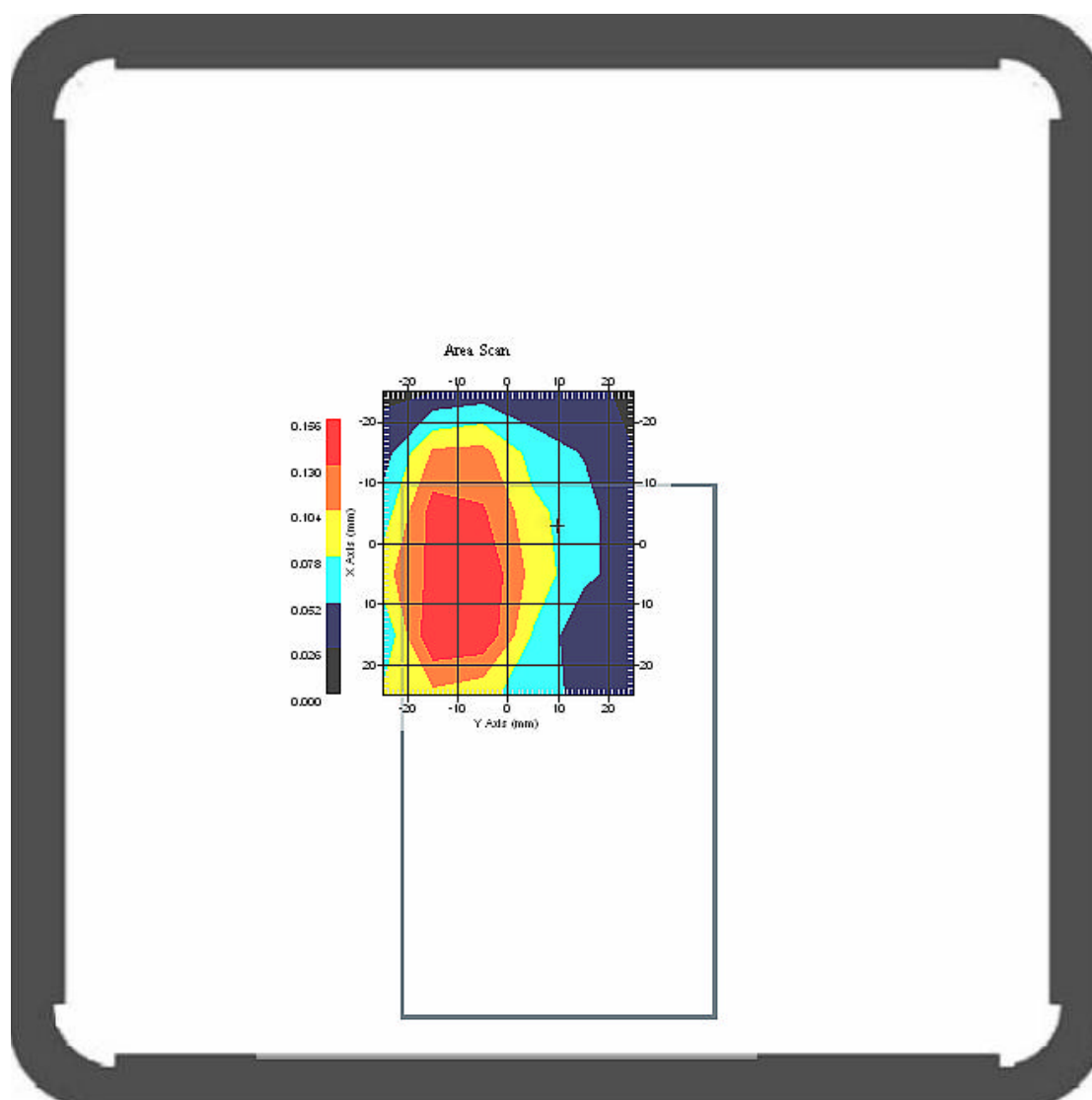


1.5 2450 MHz, EUT Position: Bottom

Measurement Date : 21-Mar-2007
Crest Factor : 1
Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

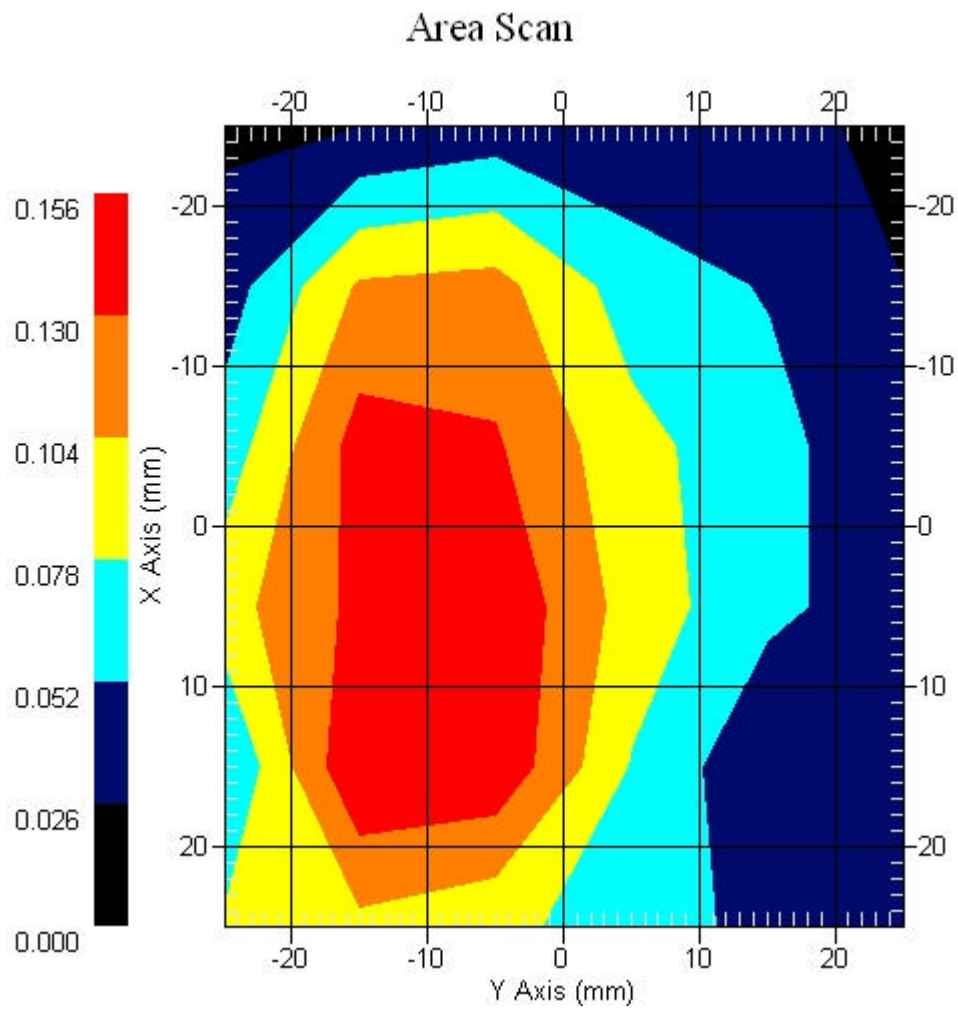
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.089 W/kg
Power Drift-Finish: 0.087 W/kg
Power Drift (%) : 3.705



1 gram SAR value : 0.148 W/kg
10 gram SAR value : 0.084 W/kg
Area Scan Peak SAR : 0.155 W/kg
Zoom Scan Peak SAR : 0.240 W/kg

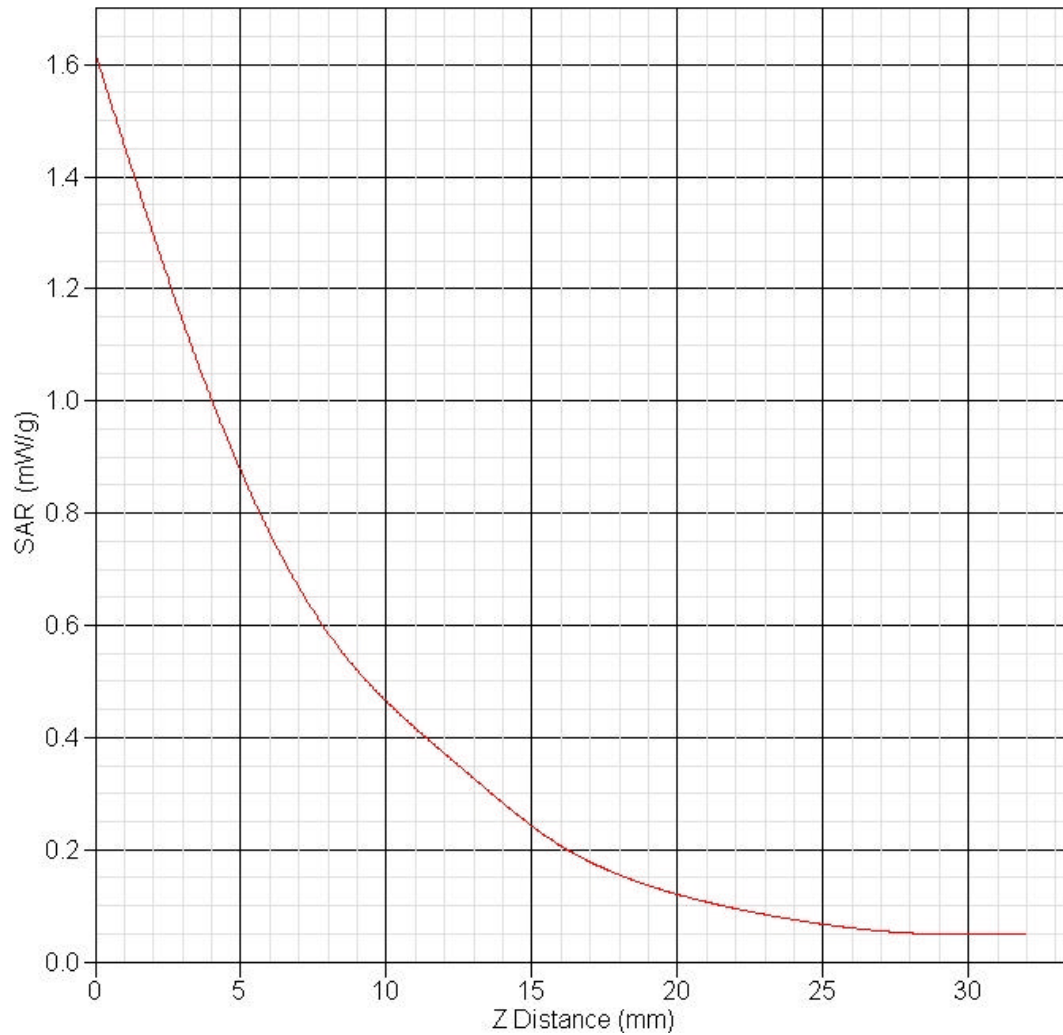
Area Scan Plot



1.6 2450 MHz Z-Axis plot

Frequency: 802.11b 2450 MHz, EUT Front

SAR-Z Axis
at Hotspot x:-4.87 y:12.88





2 802.11g+BT link 2450MHz SAR Measurement Data

SAR Test Report

Report Date : 21-Mar-2007
Measurement Date : 21-Mar-2007

Product Data

Device Name : Pa500
Serial No. : Top
Type : Other
Frequency : 2450.00 MHz
Max. Transmit Pwr : 15.39 dBm
Drift Time : 0 min(s)
Length : 20 mm
Width : 75 mm
Depth : 125 mm
Antenna Type : Internal

Phantom Data

Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Location : Center

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 21-Mar-2007
Temperature : 21.10 °C
Ambient Temp. : 21.30 °C
Humidity : 53.00 RH%
Epsilon : 52.287 F/m
Sigma : 1.92 S/m
Density : 1000.00 kg/cu. m

Probe Data

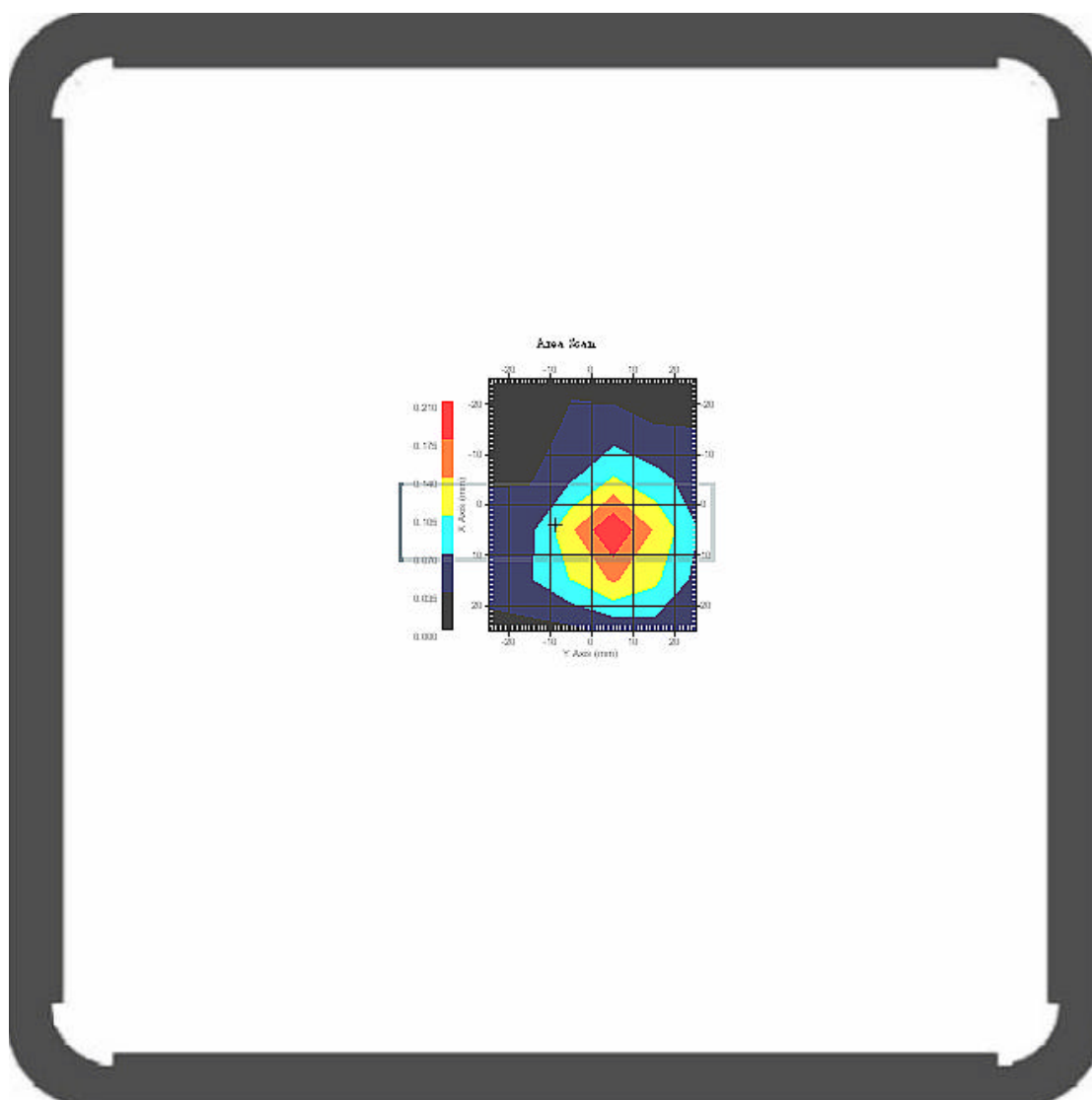
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5.02
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

2.1 2450 MHz, EUT Position: Top

Measurement Date : 21-Mar-2007
Crest Factor : 1
Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

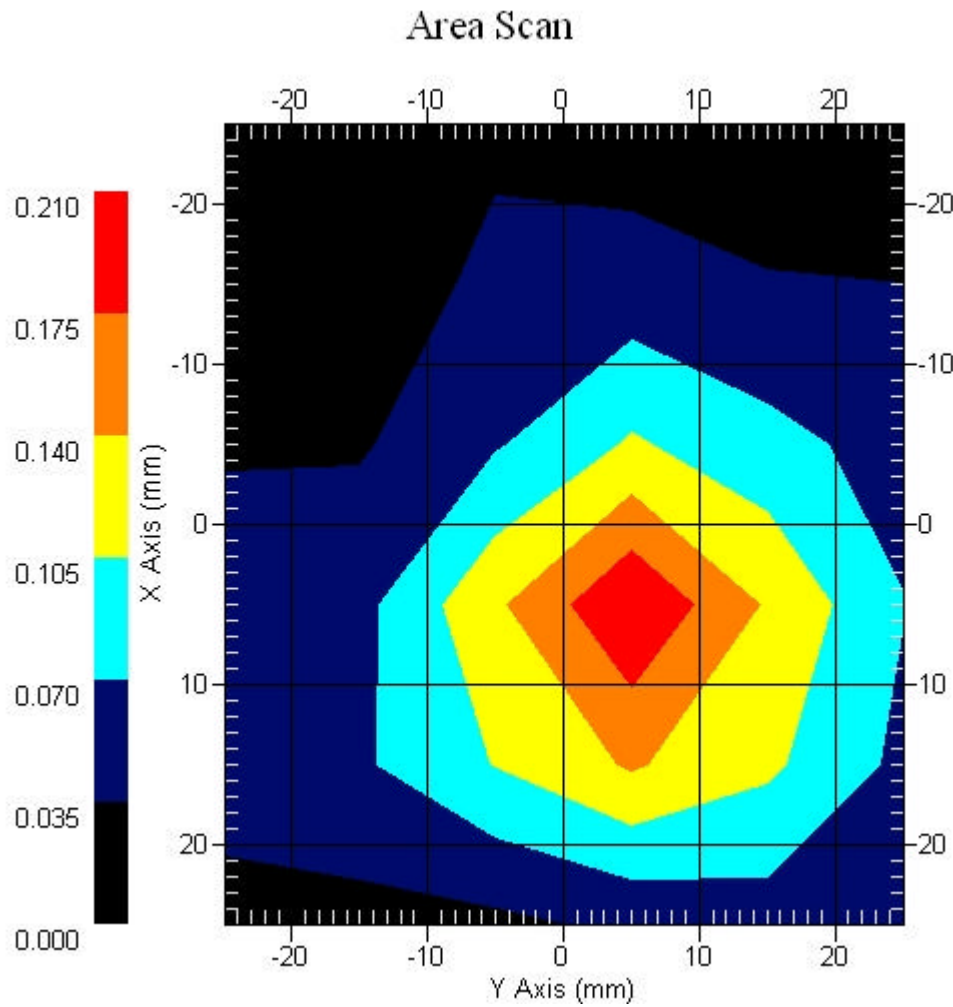
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.077 W/kg
Power Drift-Finish: 0.075 W/kg
Power Drift (%) : -2.654



1 gram SAR value : 0.177 W/kg
10 gram SAR value : 0.091 W/kg
Area Scan Peak SAR : 0.208 W/kg
Zoom Scan Peak SAR : 0.350 W/kg

Area Scan Plot

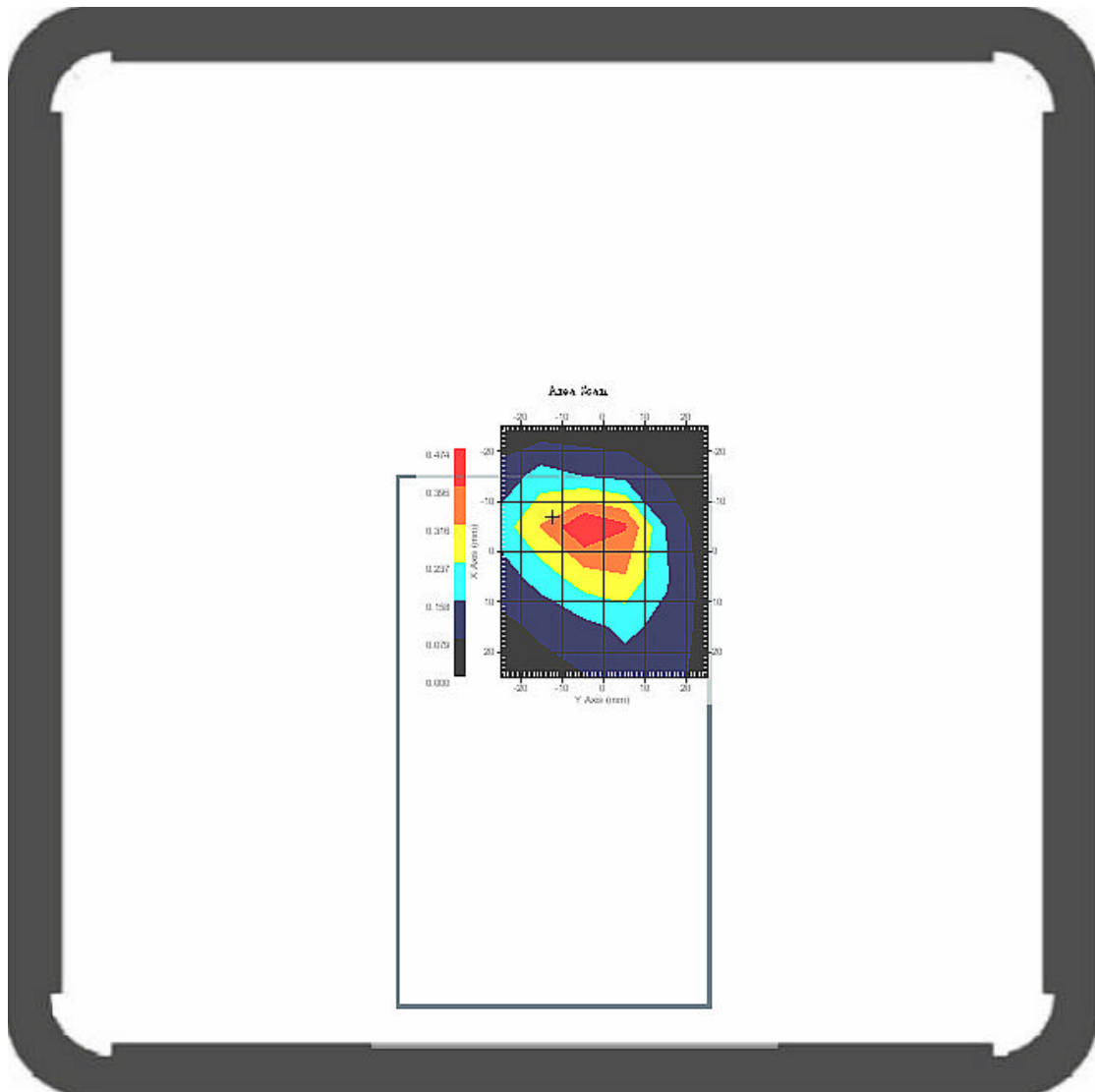


2.2 2450 MHz, EUT Position: Front

Measurement Date : 21-Mar-2007
Crest Factor : 1
Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

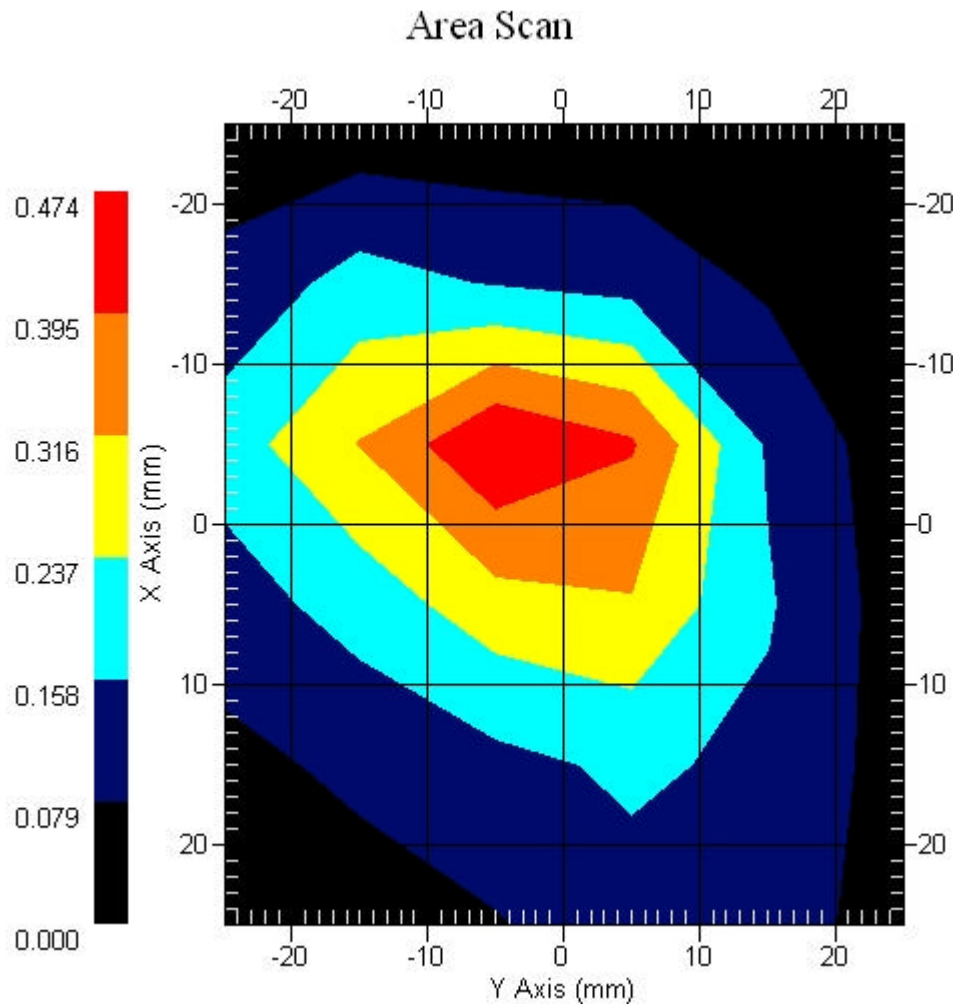
DUT Position : Touch
Channel : Low

Power Drift-Start : 0.252 W/kg
Power Drift-Finish: 0.248 W/kg
Power Drift (%) : -1.535



1 gram SAR value : 0.402 W/kg
10 gram SAR value : 0.194 W/kg
Area Scan Peak SAR : 0.473 W/kg
Zoom Scan Peak SAR : 0.830 W/kg

Area Scan Plot

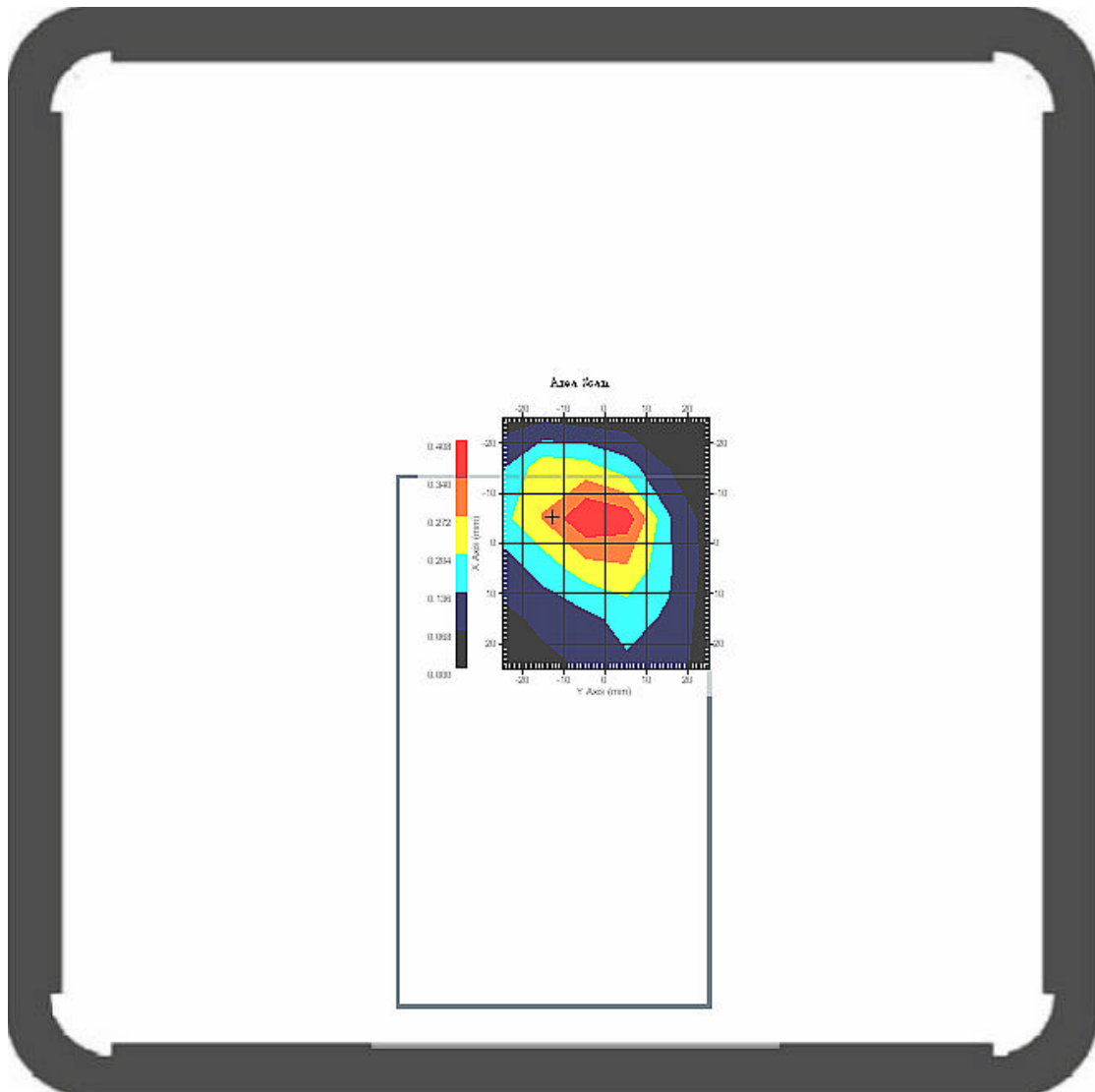


2.3 2450 MHz, EUT Position: Front

Measurement Date : 21-Mar-2007
Crest Factor : 1
Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

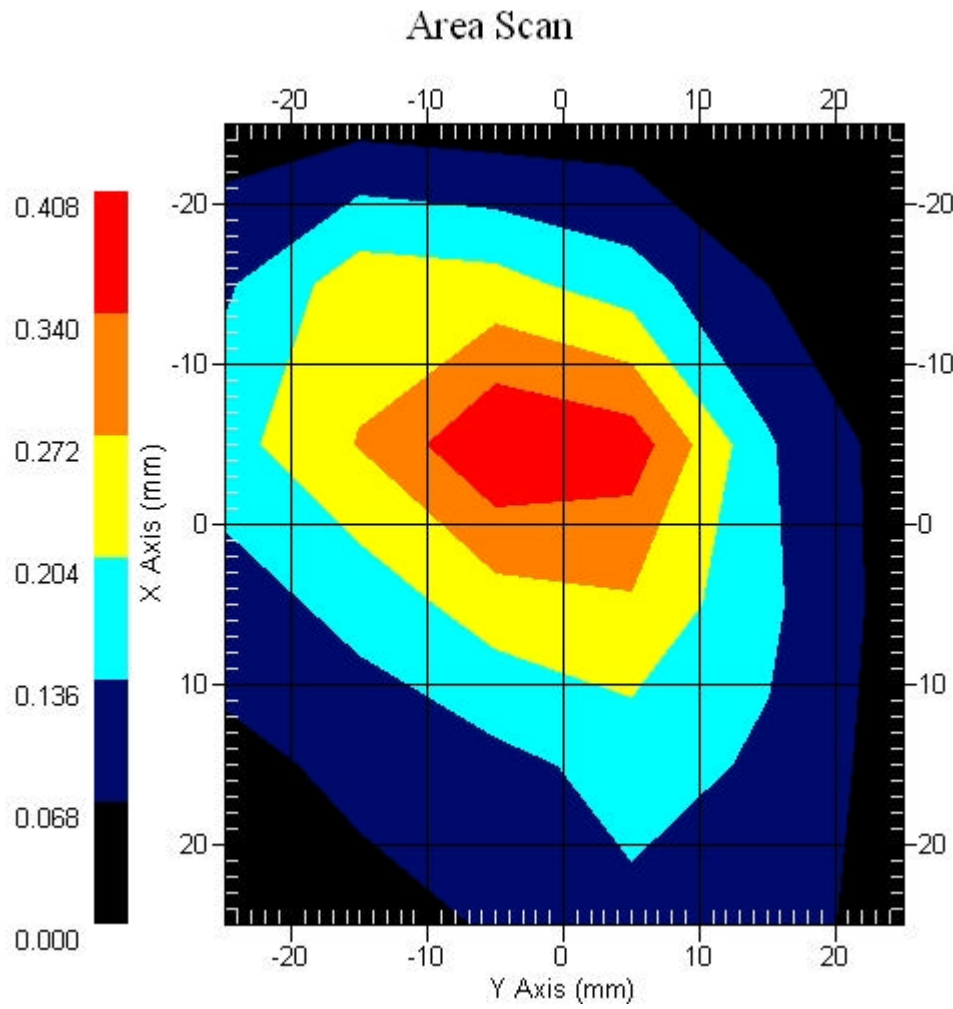
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.254 W/kg
Power Drift-Finish: 0.245 W/kg
Power Drift (%) : -3.677



1 gram SAR value : 0.361 W/kg
10 gram SAR value : 0.183 W/kg
Area Scan Peak SAR : 0.407 W/kg
Zoom Scan Peak SAR : 0.660 W/kg

Area Scan Plot



2.4 2450 MHz, EUT Position: Front

Measurement Date : 21-Mar-2007

Crest Factor : 1

Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm

Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

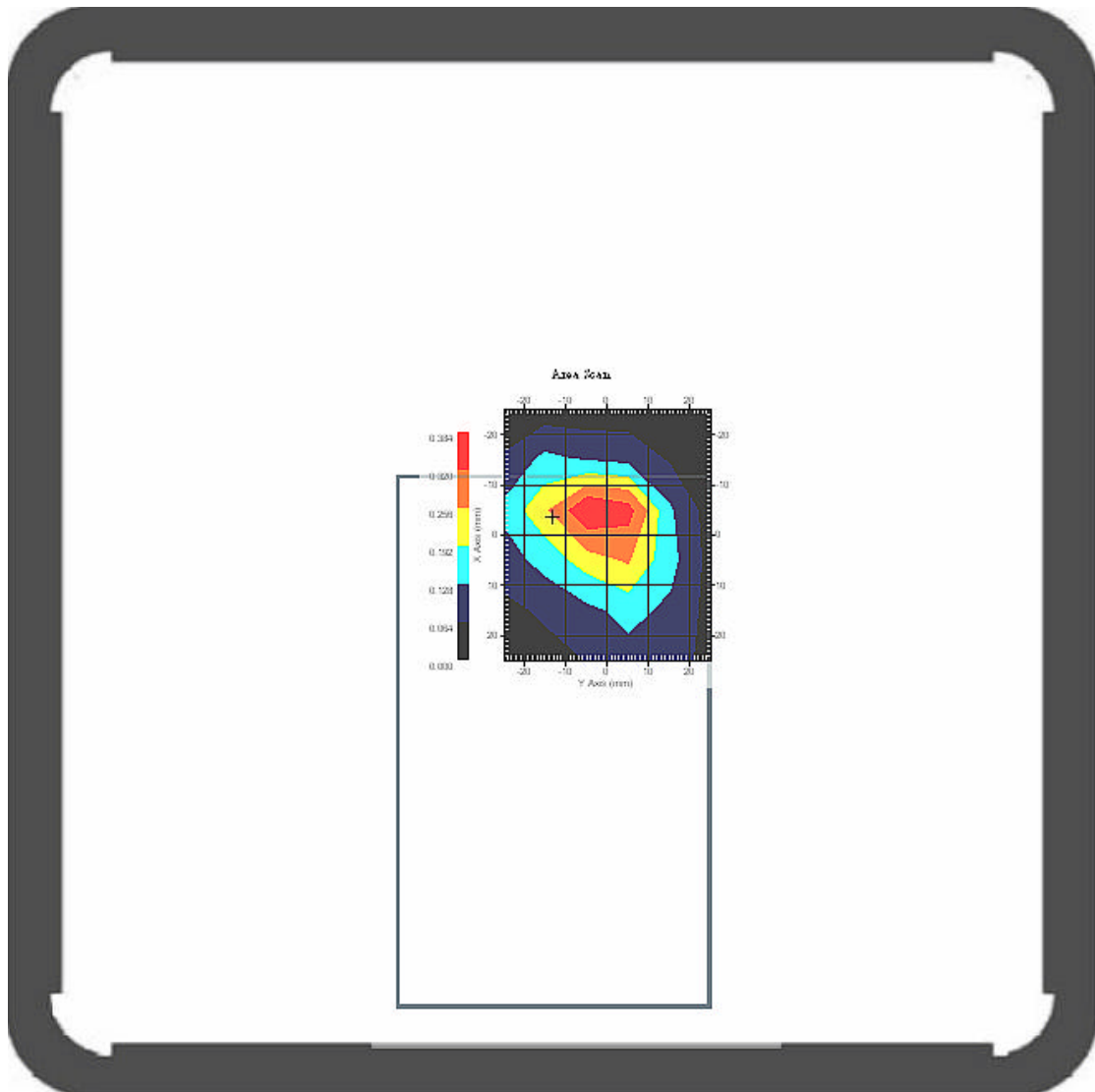
DUT Position : Touch

Channel : High

Power Drift-Start : 0.193 W/kg

Power Drift-Finish: 0.188 W/kg

Power Drift (%) : -2.659



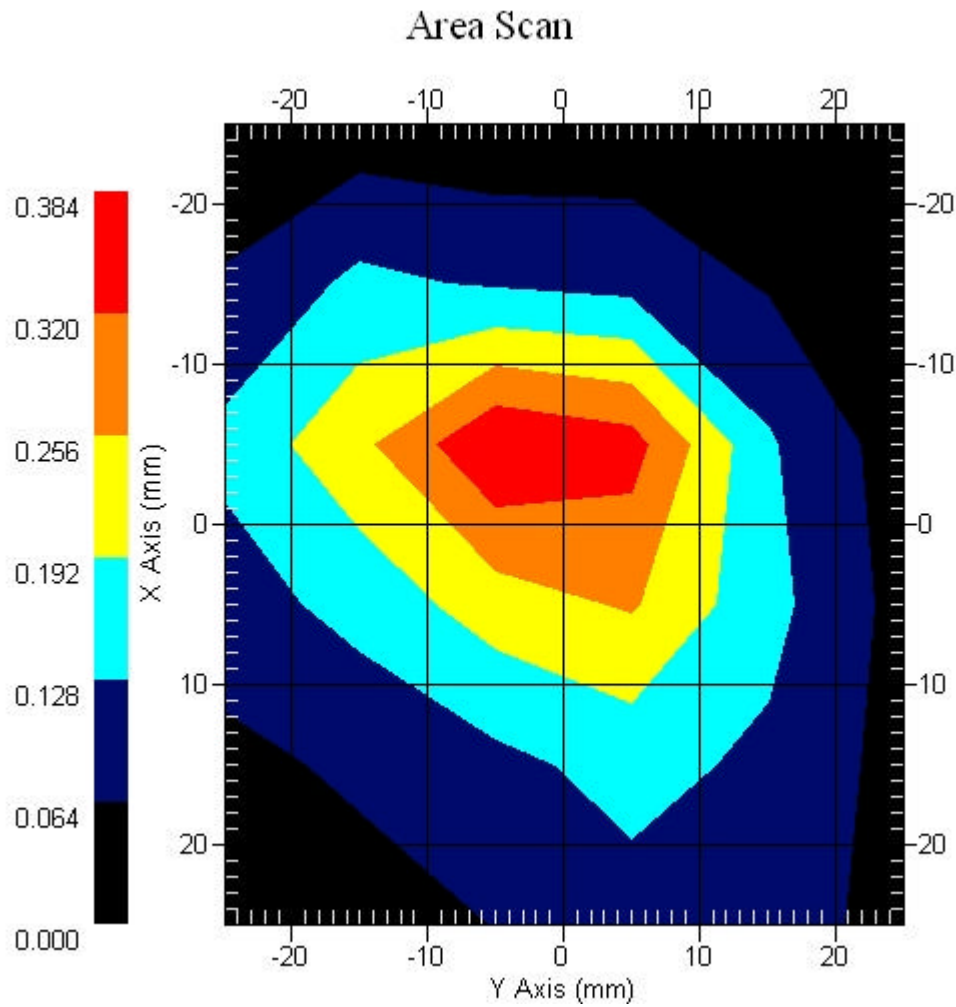
1 gram SAR value : 0.315 W/kg

10 gram SAR value : 0.155 W/kg

Area Scan Peak SAR : 0.382 W/kg

Zoom Scan Peak SAR : 0.620 W/kg

Area Scan Plot

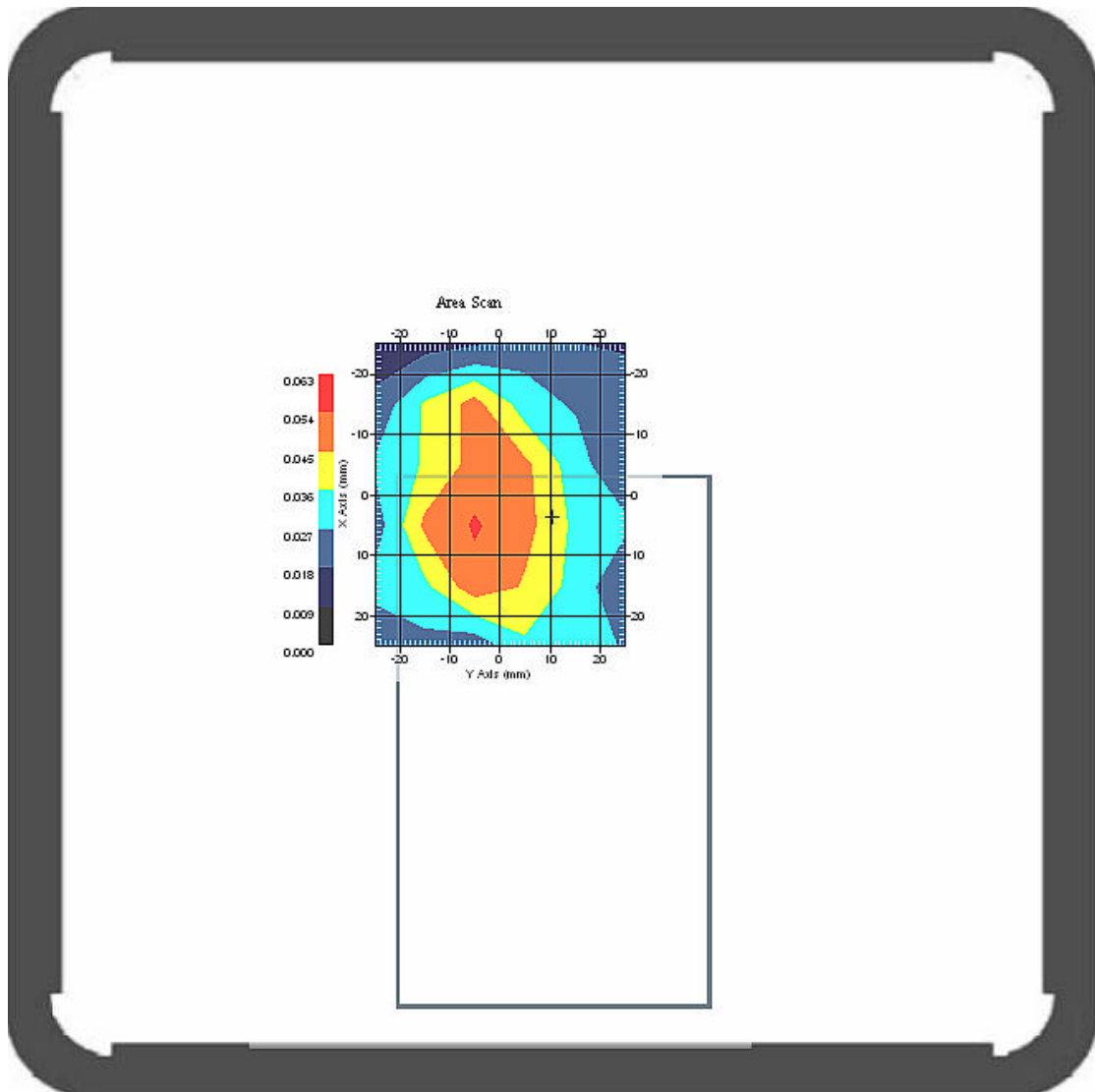


2.5 2450 MHz, EUT Position: Bottom

Measurement Date : 21-Mar-2007
Crest Factor : 1
Area Scan : 6x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

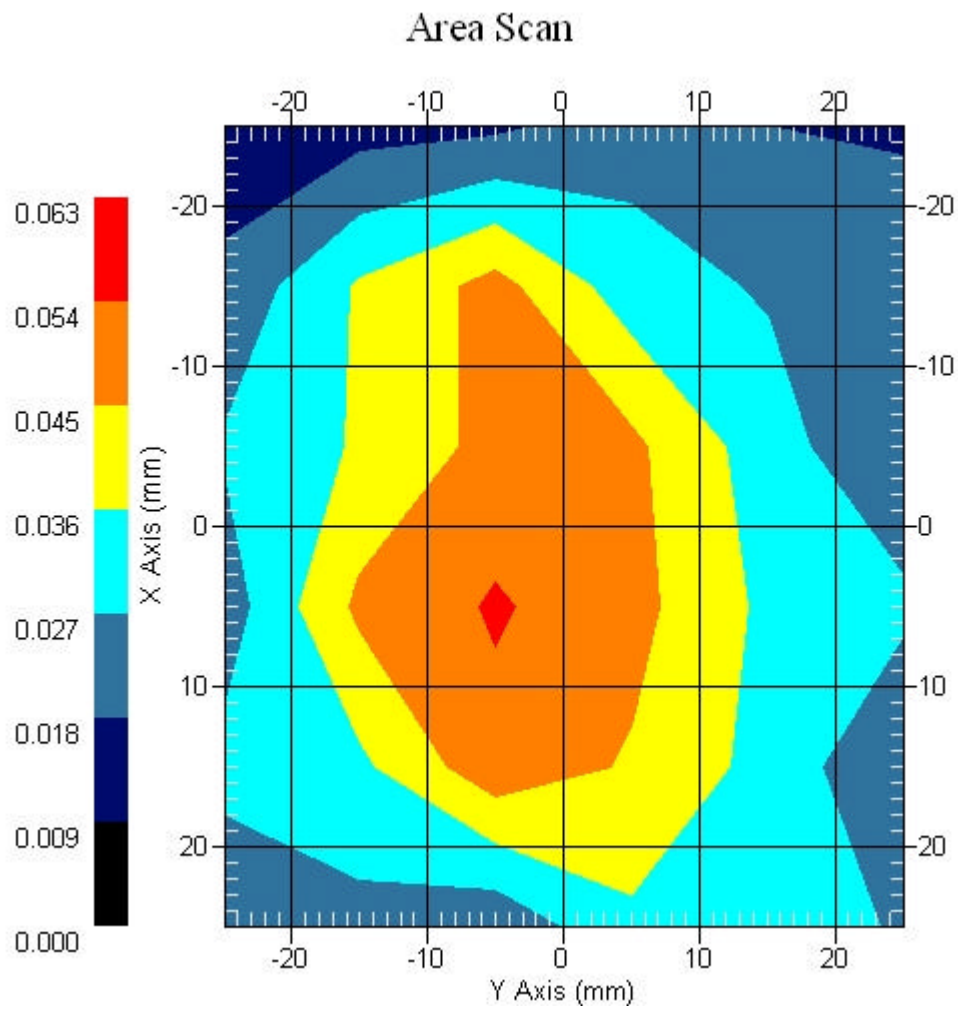
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.034 W/kg
Power Drift-Finish: 0.033 W/kg
Power Drift (%) : -3.032



1 gram SAR value : 0.059 W/kg
10 gram SAR value : 0.042 W/kg
Area Scan Peak SAR : 0.055 W/kg
Zoom Scan Peak SAR : 0.090 W/kg

Area Scan Plot



2.6 2450MHz Z-Axis plot

Frequency: 802.11g, 2450MHz, EUT Front

