

Appendix D

SAR Measurement Data

of

Product Name

AR5BXB63-L 802.11 b/g PCI Express Module

Model

AR5BXB63-L



1 802.11b SAR measurement Data

SAR Test Report

Report Date : 19-Apr-2007
Measurement Date : 19-Apr-2007

Product Data

Device Name : Dali 2
Type : Other
Frequency : 2450.00 MHz
Max. Transmit Pwr : 23.76dBm
Drift Time : 0 min(s)
Length : 235 mm
Width : 275 mm
Depth : 5 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 : 19-Apr-2007
Temperature : 21.10 °C
Ambient Temp. : 21.30 °C
Humidity : 49.00 RH%
Epsilon : 51.98 F/m
Sigma : 1.97 S/m
Density : 1000.00 kg/cu. m

Probe Data

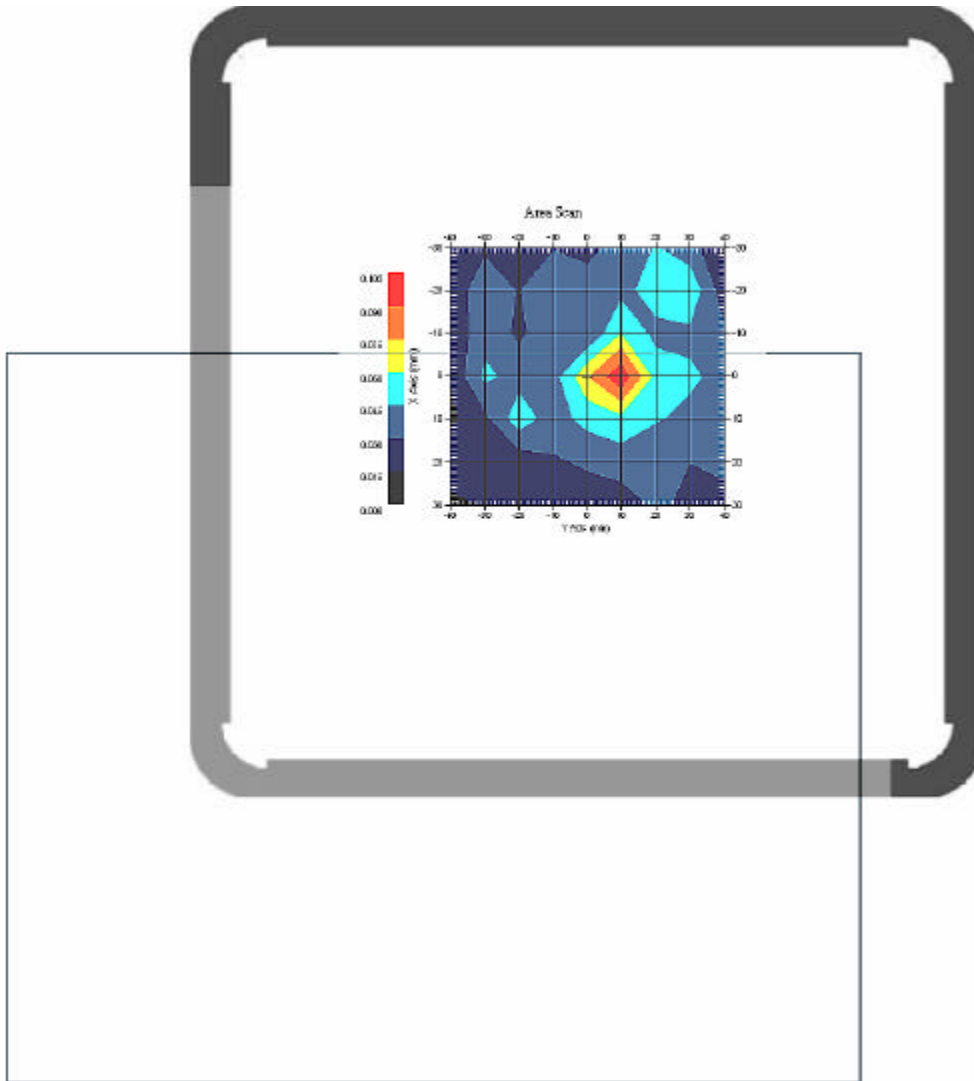
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5.02
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

1.1 2450 MHz, EUT Position: Laptop-2 mode

Measurement Data

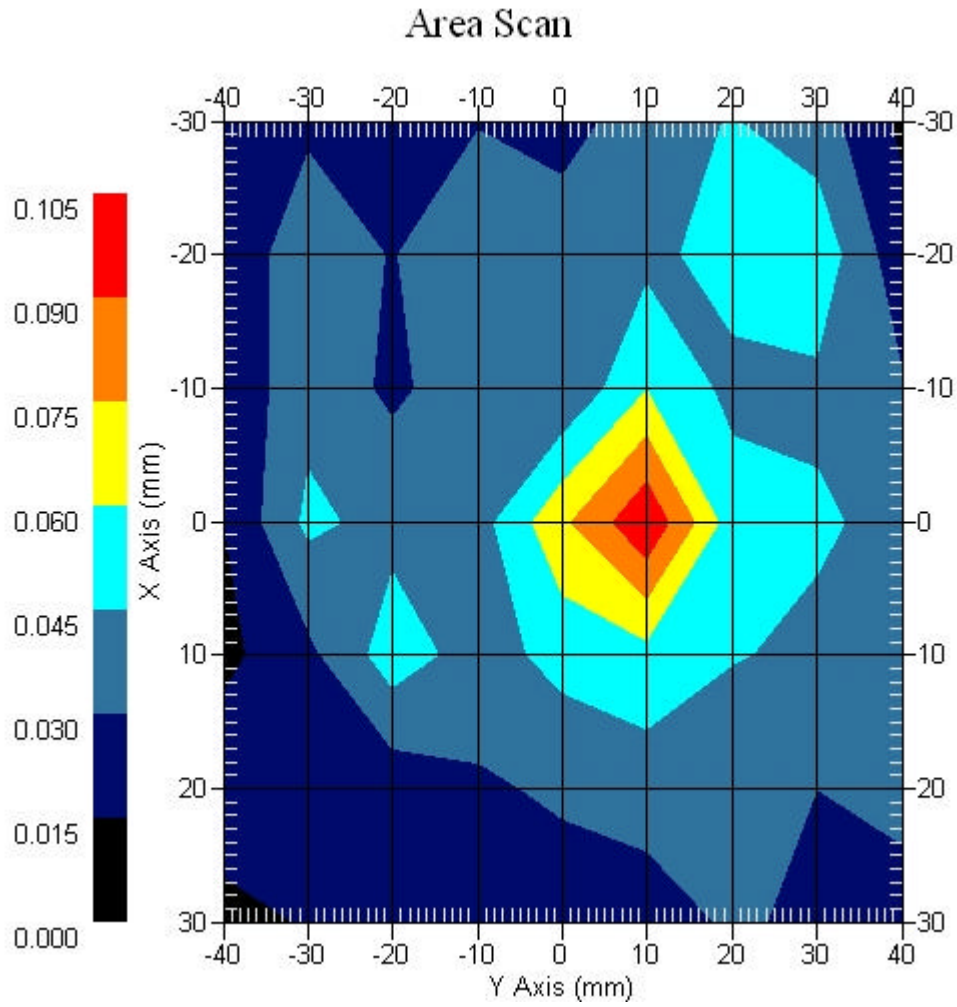
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.080 W/kg
Power Drift-Finish: 0.082 W/kg
Power Drift (%) : 2.489



1 gram SAR value : 0.075 W/kg
10 gram SAR value : 0.045 W/kg
Area Scan Peak SAR : 0.103 W/kg
Zoom Scan Peak SAR : 0.184 W/kg

Area Scan Plot

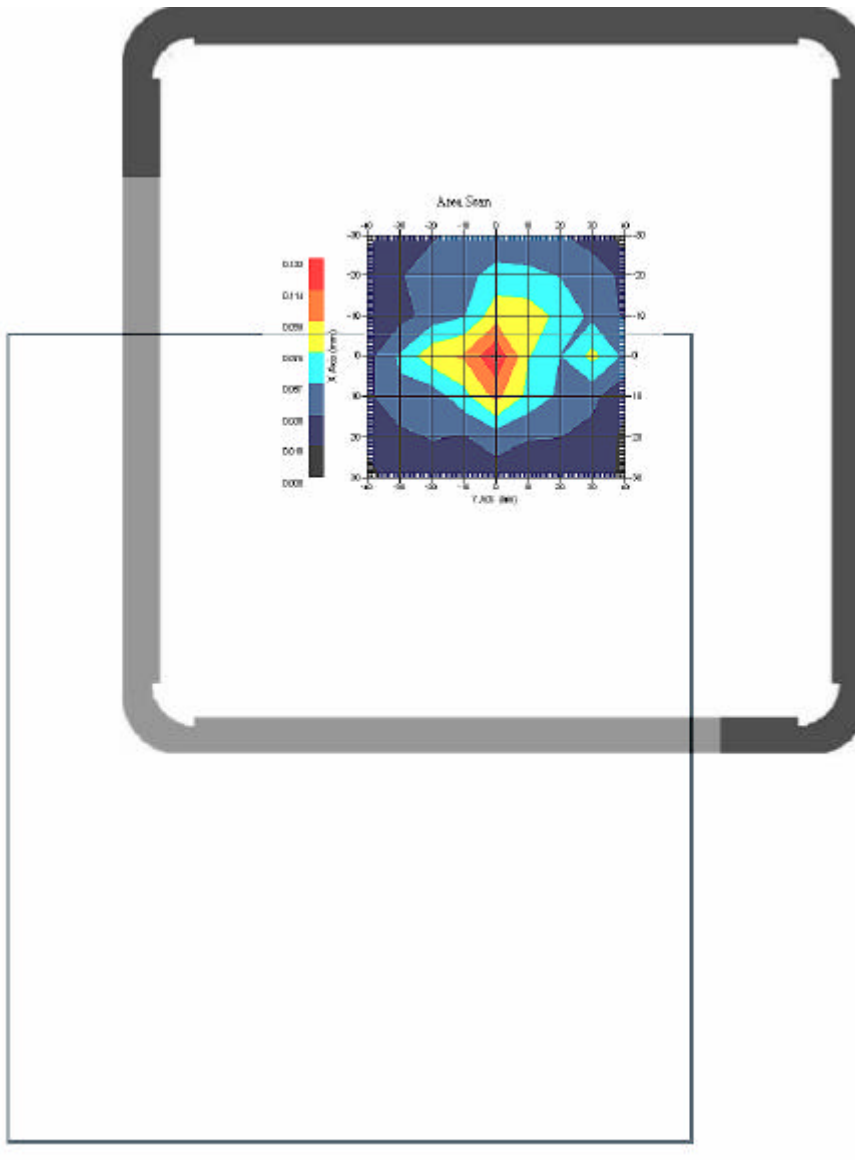


1.2 2450 MHz, EUT Position: Laptop-1 mode

Measurement Data

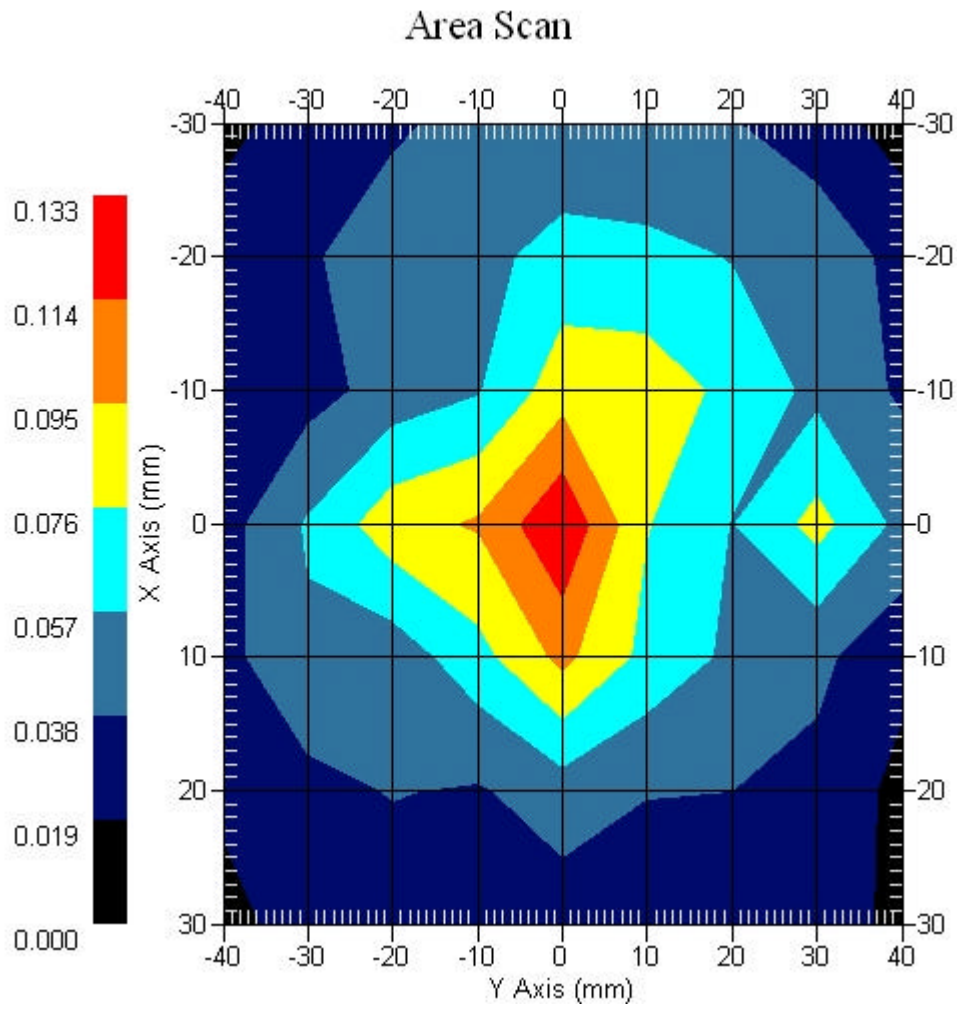
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.098 W/kg
Power Drift-Finish: 0.100 W/kg
Power Drift (%) : 2.043



1 gram SAR value : 0.116 W/kg
10 gram SAR value : 0.056 W/kg
Area Scan Peak SAR : 0.131 W/kg
Zoom Scan Peak SAR : 0.210 W/kg

Area Scan Plot

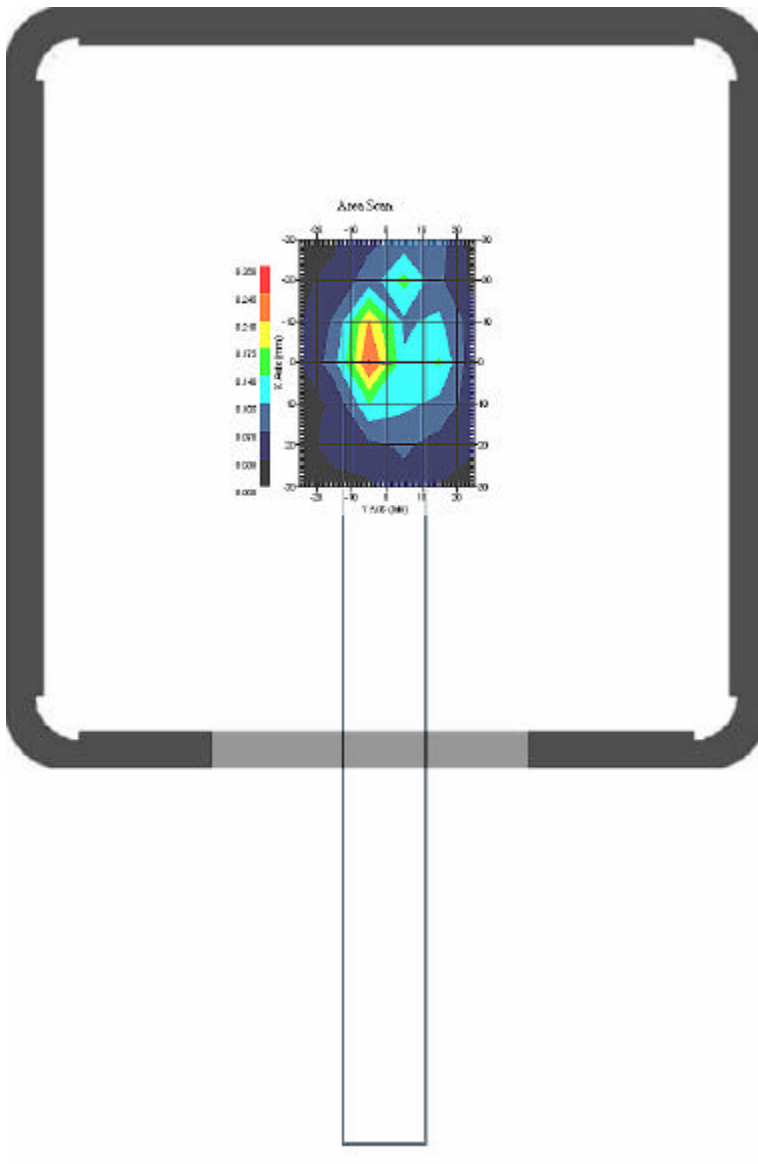


1.3 2450 MHz, EUT Position: PL mode

Measurement Data

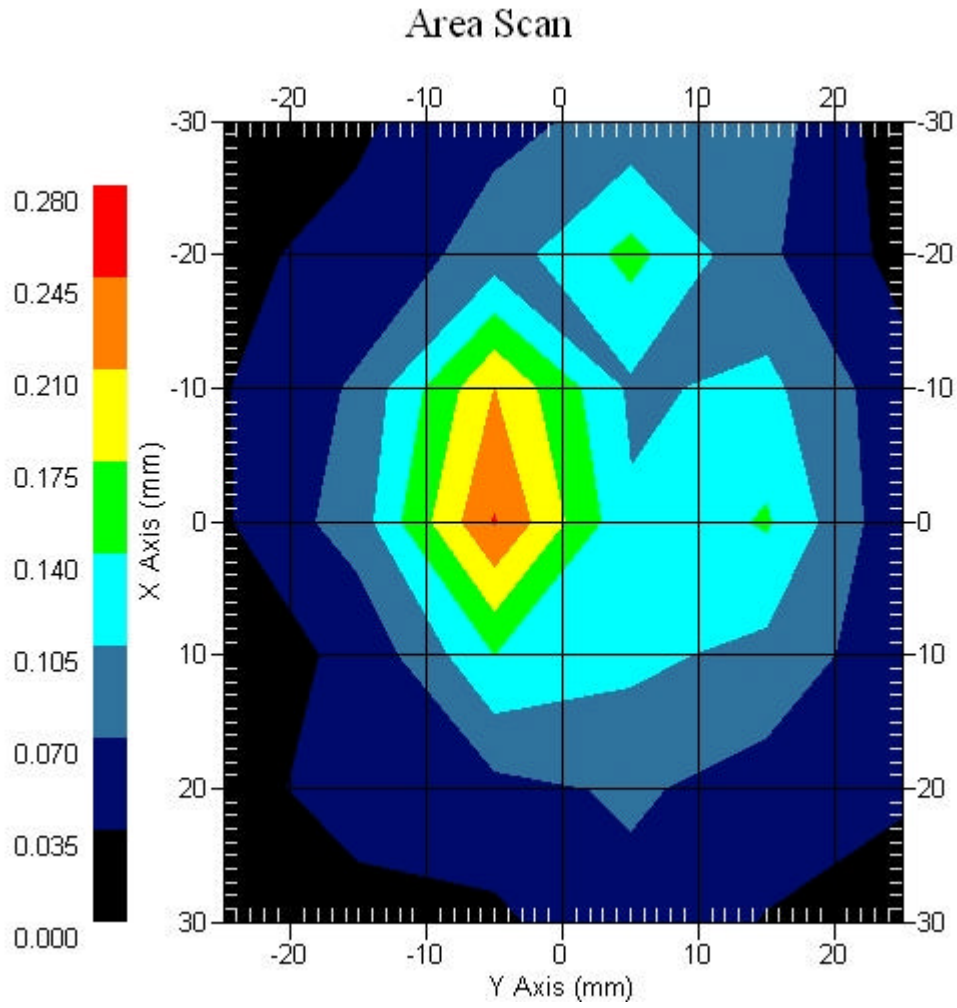
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.186 W/kg
Power Drift-Finish: 0.188 W/kg
Power Drift (%) : 1.079



1 gram SAR value : 0.211 W/kg
10 gram SAR value : 0.107 W/kg
Area Scan Peak SAR : 0.274 W/kg
Zoom Scan Peak SAR : 0.483 W/kg

Area Scan Plot

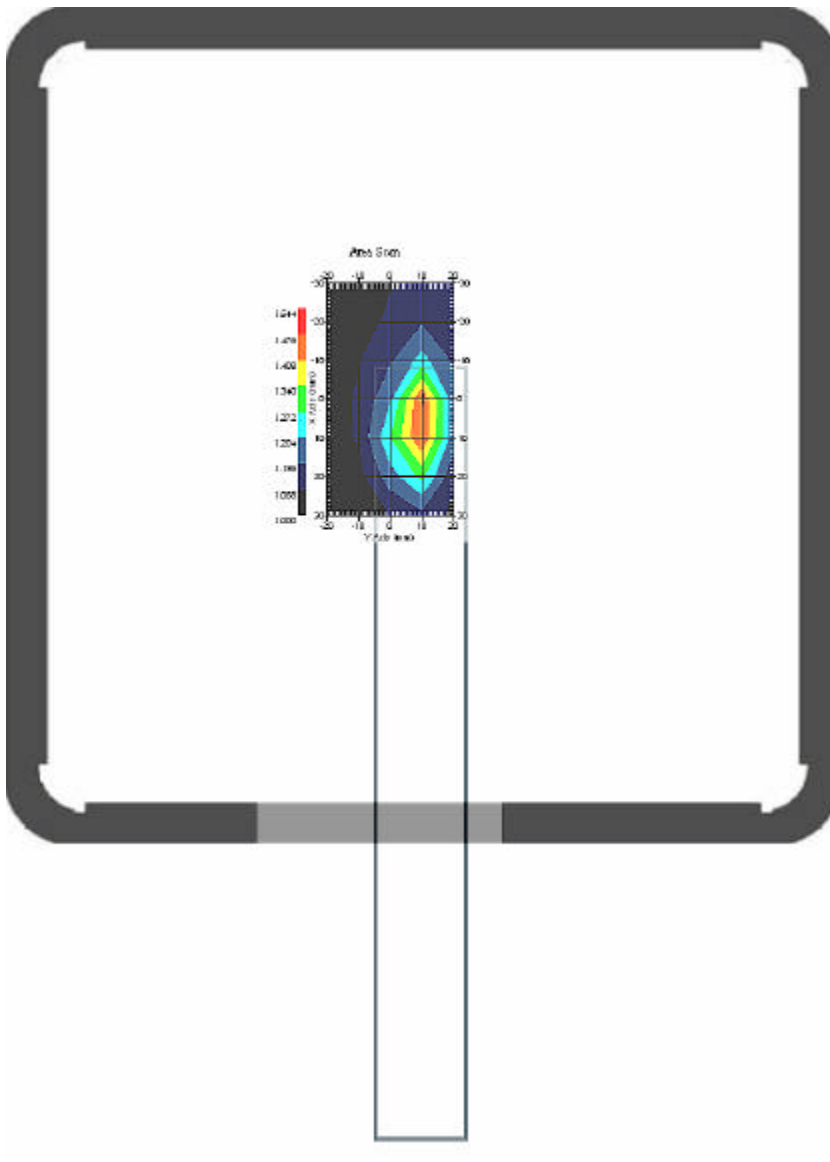


1.4 2450 MHz, EUT Position: PP mode

Measurement Data

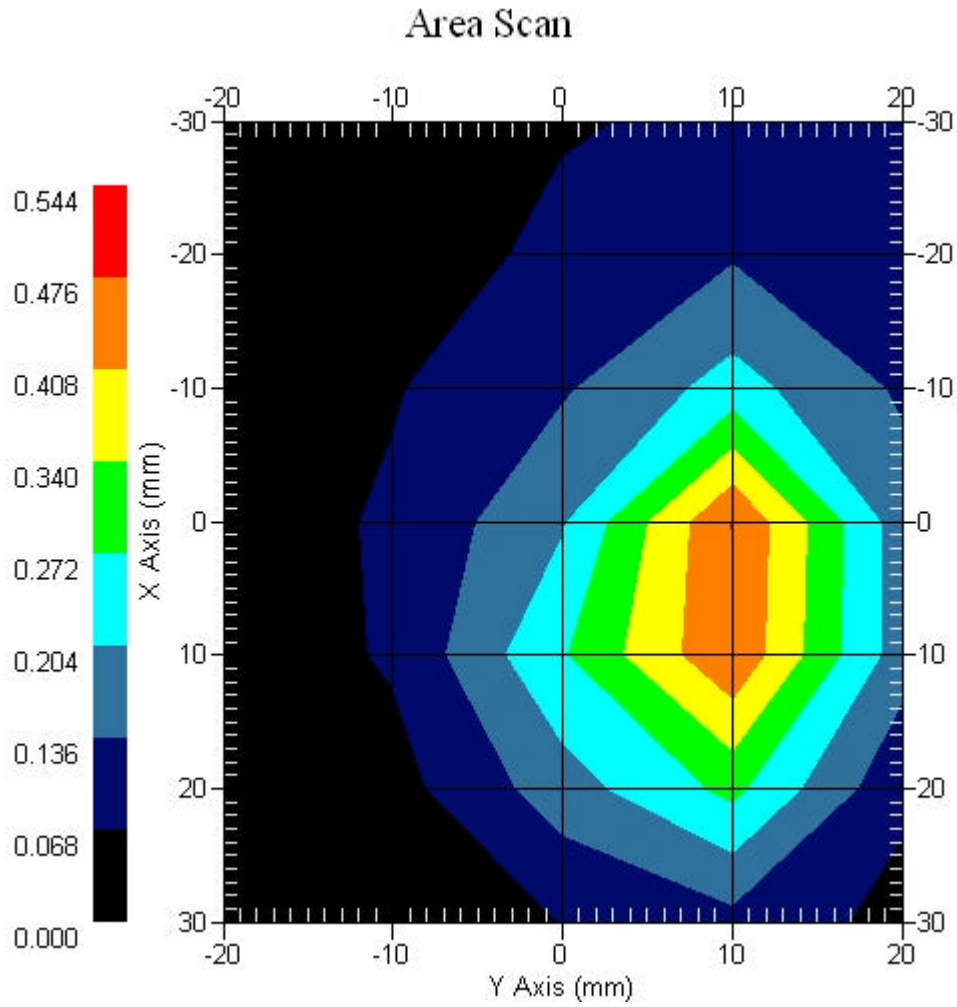
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : High

Power Drift-Start : 0.213 W/kg
Power Drift-Finish: 0.207 W/kg
Power Drift (%) : -2.831



1 gram SAR value : 0.455 W/kg
10 gram SAR value : 0.184 W/kg
Area Scan Peak SAR : 0.477 W/kg
Zoom Scan Peak SAR : 1.110 W/kg

Area Scan Plot

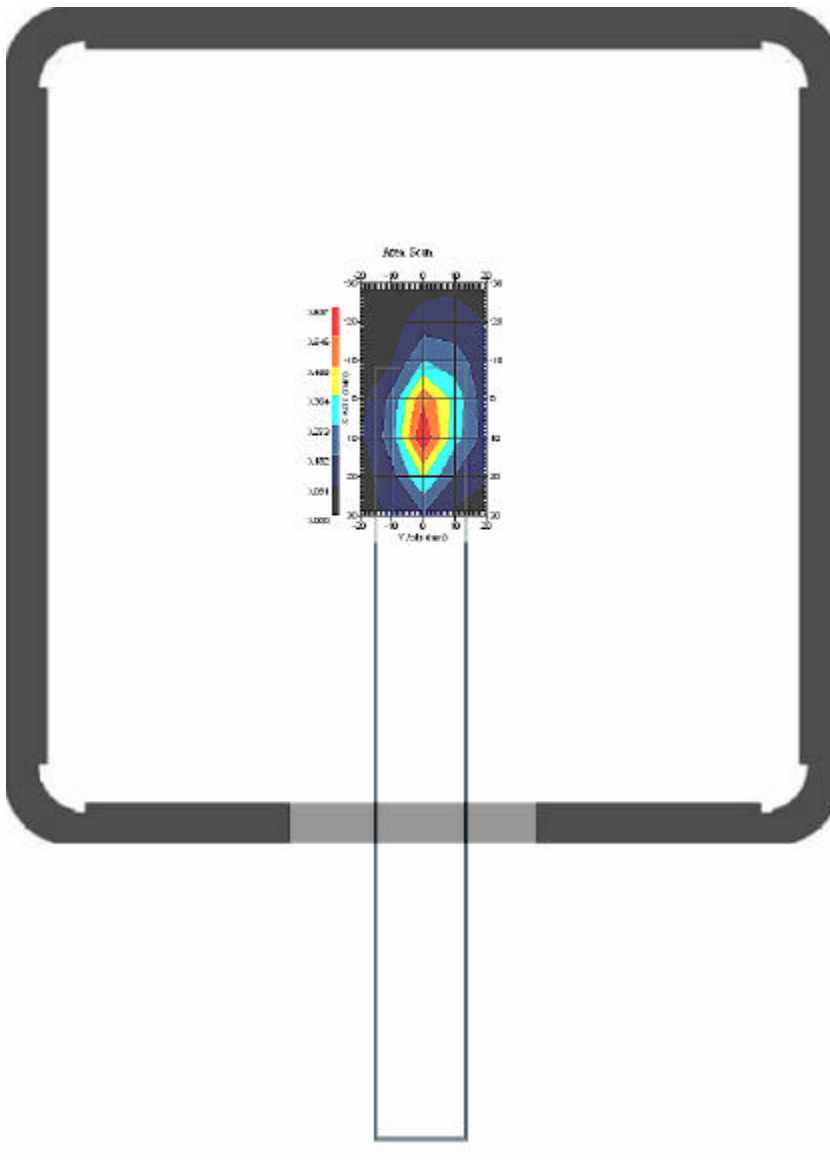


1.5 2450 MHz, EUT Position: PP mode

Measurement Data

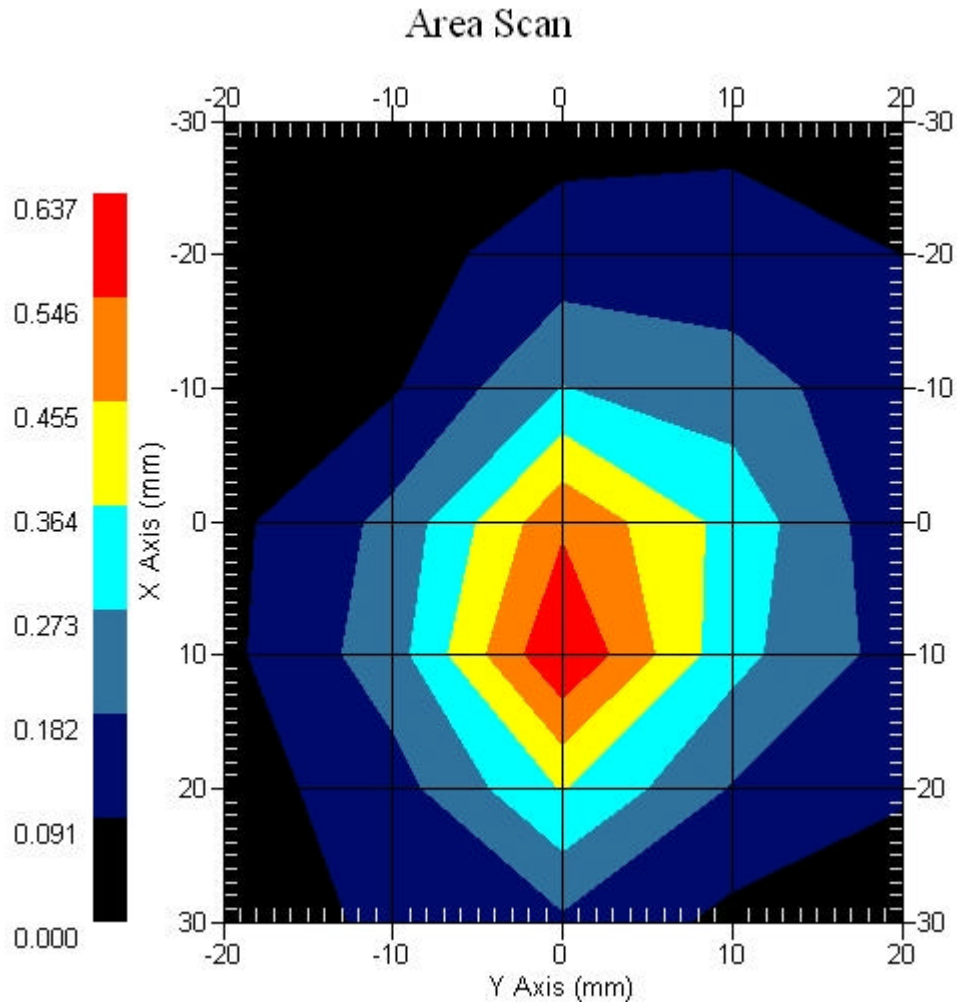
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Low

Power Drift-Start : 0.605 W/kg
Power Drift-Finish: 0.609 W/kg
Power Drift (%) : 0.667



1 gram SAR value : 0.559 W/kg
10 gram SAR value : 0.241 W/kg
Area Scan Peak SAR : 0.635 W/kg
Zoom Scan Peak SAR : 1.291 W/kg

Area Scan Plot

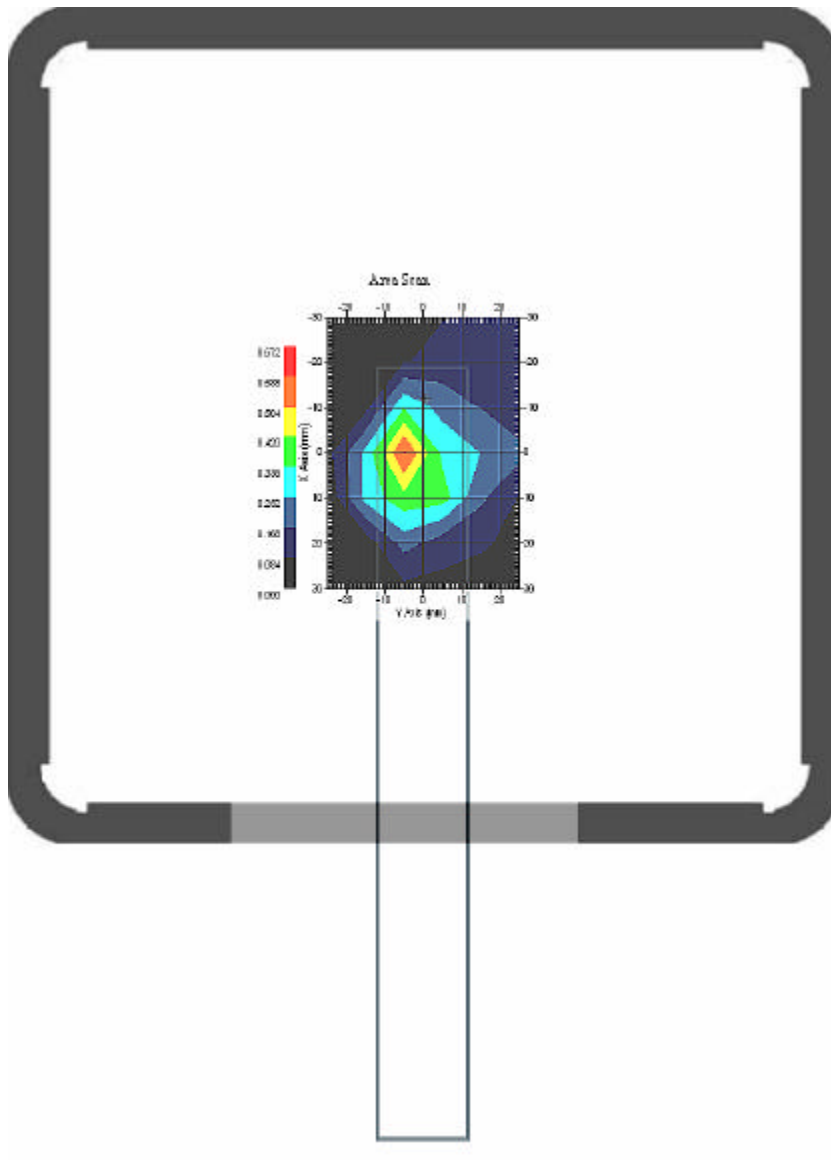


1.6 2450 MHz, EUT Position: PP mode

Measurement Data

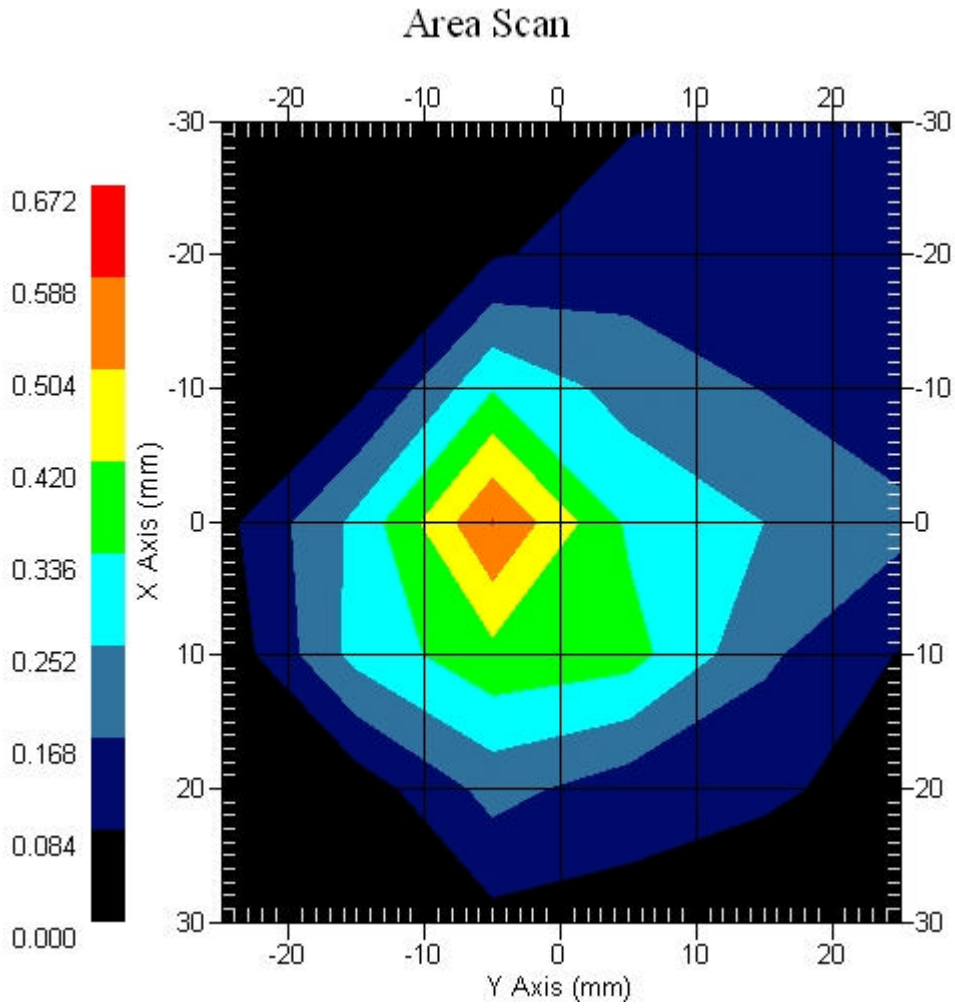
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.312 W/kg
Power Drift-Finish: 0.312 W/kg
Power Drift (%) : 0.063



1 gram SAR value : 0.512 W/kg
10 gram SAR value : 0.238 W/kg
Area Scan Peak SAR : 0.591 W/kg
Zoom Scan Peak SAR : 0.972 W/kg

Area Scan Plot

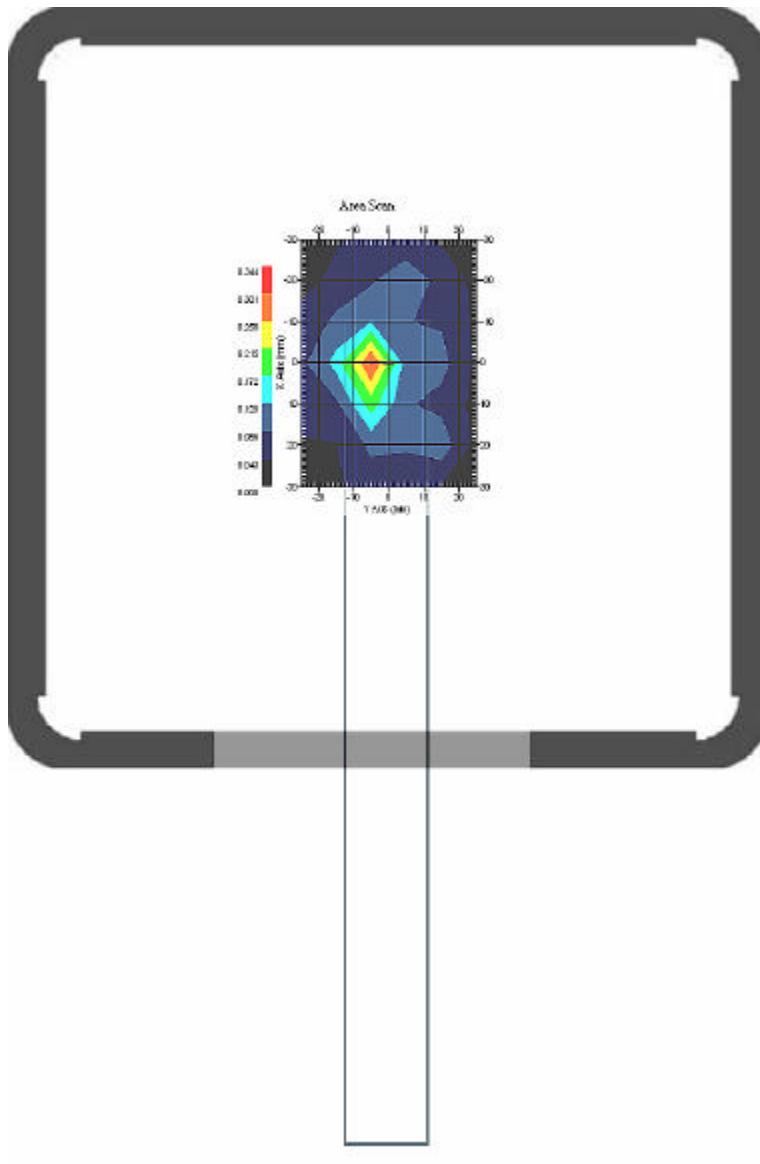


1.7 2450 MHz, EUT Position: SL mode

Measurement Data

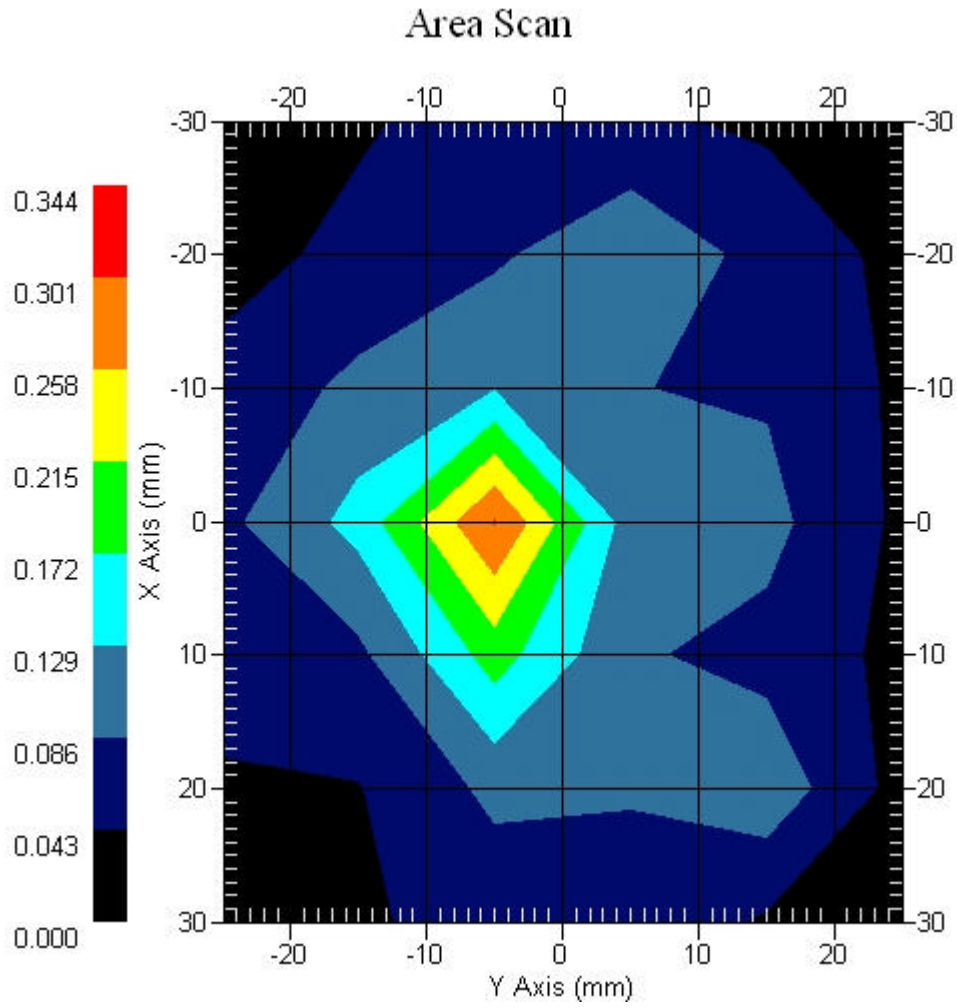
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.197 W/kg
Power Drift-Finish: 0.201 W/kg
Power Drift (%) : 2.031



1 gram SAR value : 0.296 W/kg
10 gram SAR value : 0.141 W/kg
Area Scan Peak SAR : 0.303 W/kg
Zoom Scan Peak SAR : 0.530 W/kg

Area Scan Plot

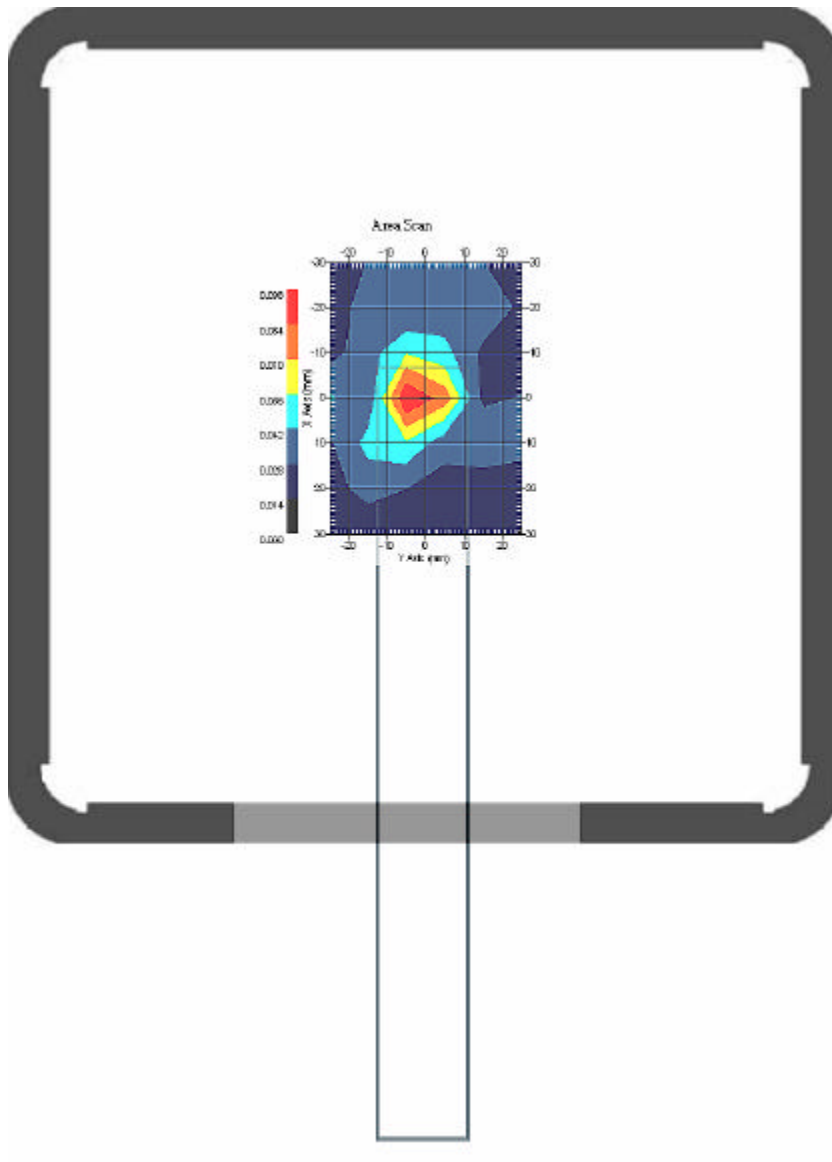


1.8 2450 MHz, EUT Position: SP mode

Measurement Data

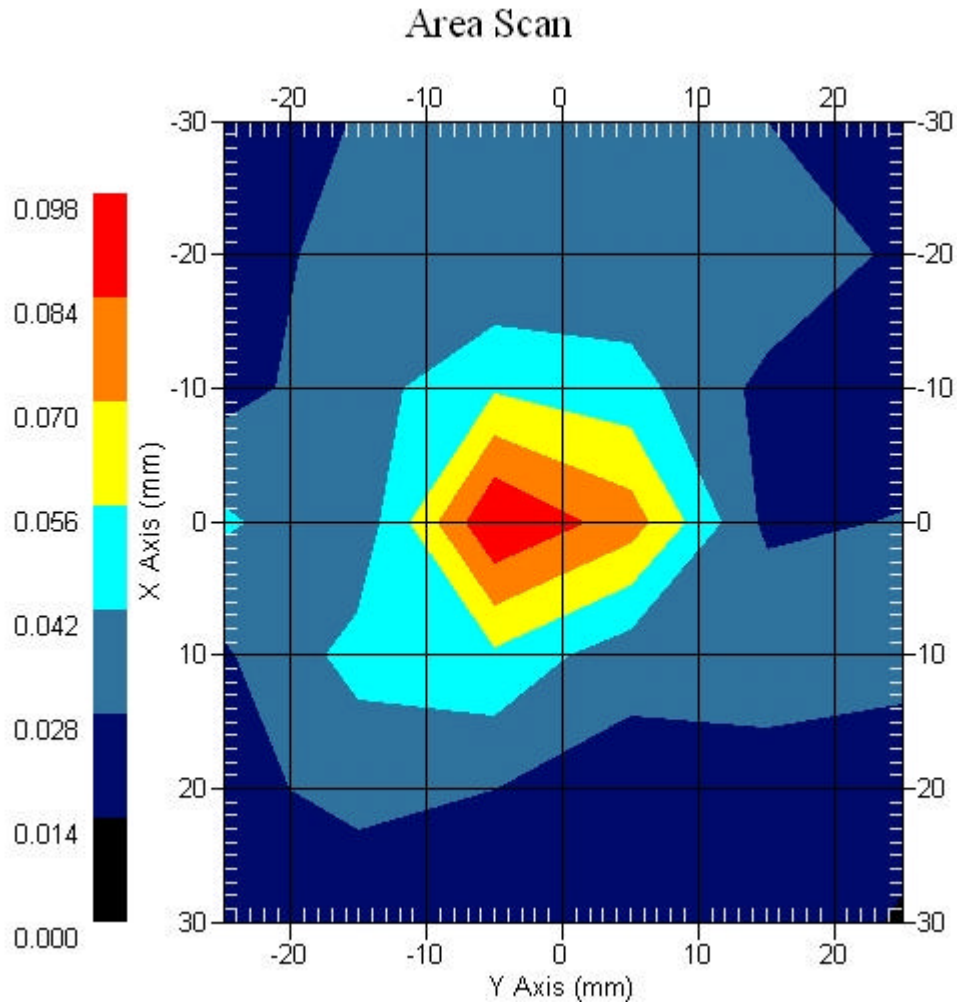
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.095 W/kg
Power Drift-Finish: 0.096 W/kg
Power Drift (%) : 1.057



1 gram SAR value : 0.091 W/kg
10 gram SAR value : 0.048 W/kg
Area Scan Peak SAR : 0.098 W/kg
Zoom Scan Peak SAR : 0.206 W/kg

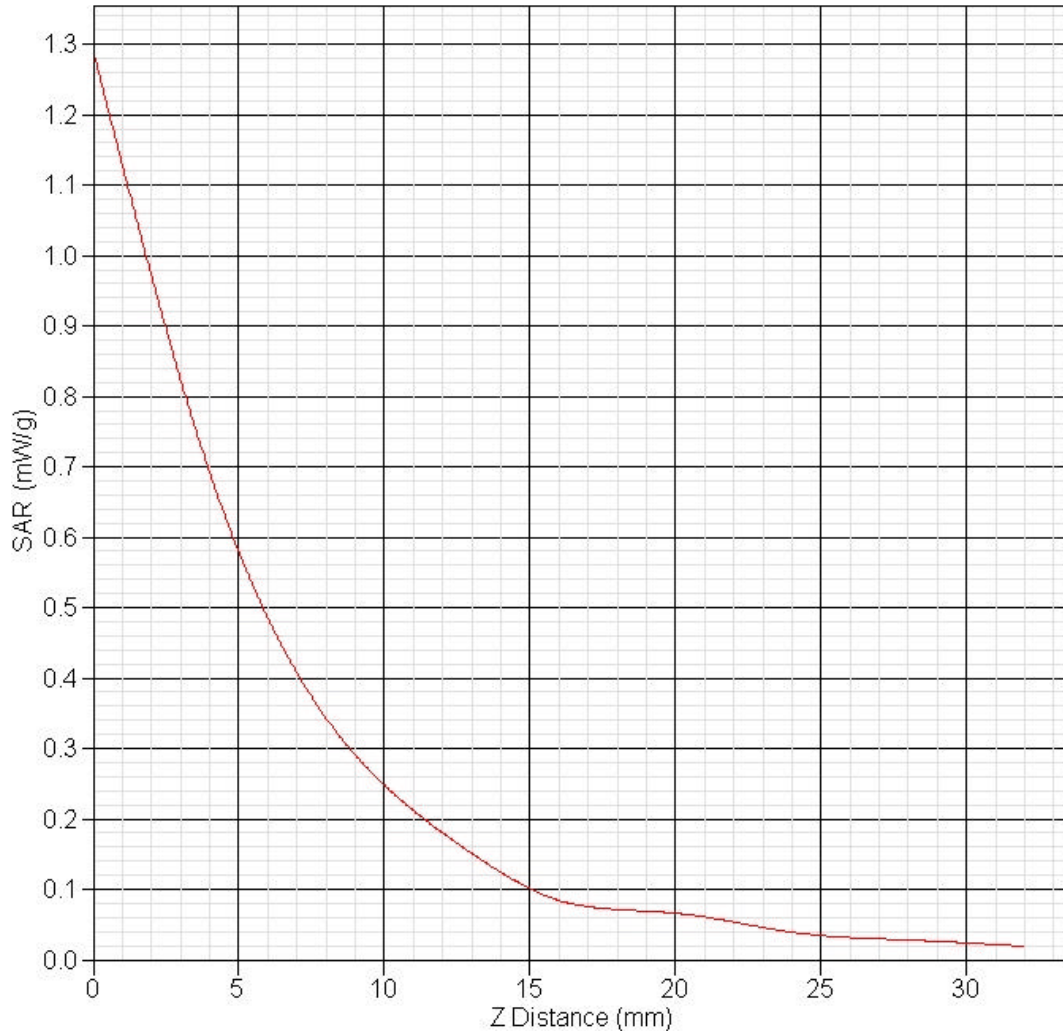
Area Scan Plot



1.11 2450MHz Z-Axis plot

Frequency: 802.11b 2450MHz, EUT PP mode

SAR-Z Axis
at Hotspot x:10.13 y:-0.12





2 802.11g SAR measurement Data

SAR Test Report

Report Date : 19-Apr-2007
Measurement Date : 19-Apr-2007

Product Data

Device Name : Dali 2
Type : Other
Frequency : 2450.00 MHz
Max. Transmit Pwr : 26.77dBm
Drift Time : 0 min(s)
Length : 235 mm
Width : 275 mm
Depth : 5 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 : 19-Apr-2007
Temperature : 21.10 °C
Ambient Temp. : 21.30 °C
Humidity : 49.00 RH%
Epsilon : 51.98 F/m
Sigma : 1.97 S/m
Density : 1000.00 kg/cu. m

Probe Data

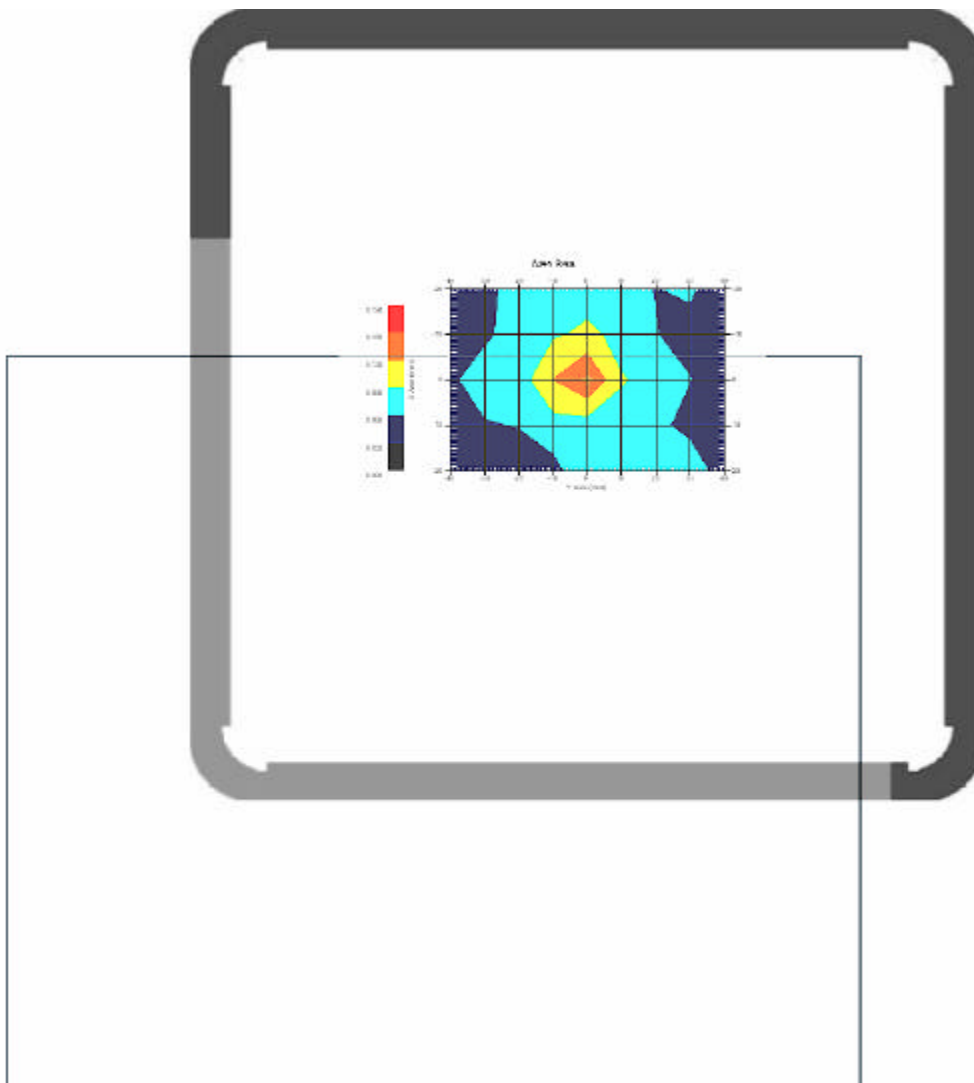
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5.02
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

2.1 2450 MHz, EUT Position: Laptop-2 mode

Measurement Data

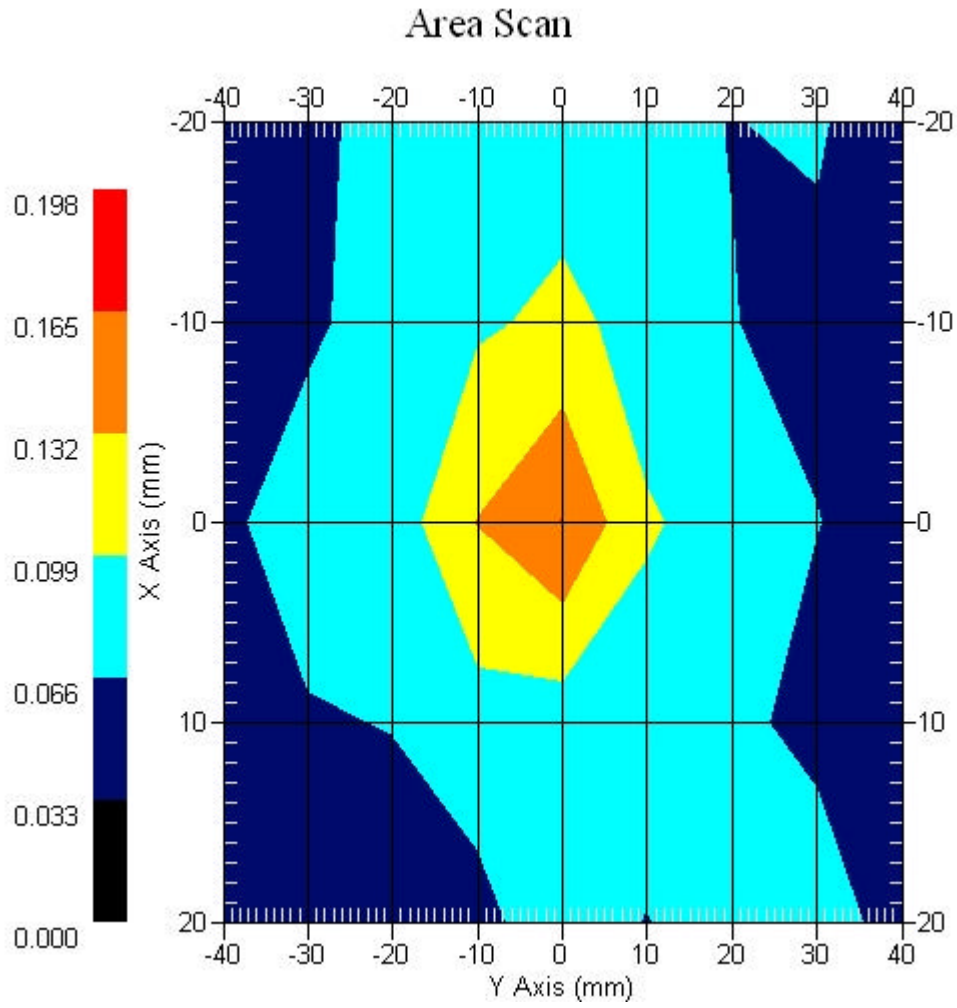
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.086 W/kg
Power Drift-Finish: 0.086 W/kg
Power Drift (%) : 0.012



1 gram SAR value : 0.112 W/kg
10 gram SAR value : 0.068 W/kg
Area Scan Peak SAR : 0.166 W/kg
Zoom Scan Peak SAR : 0.210 W/kg

Area Scan Plot

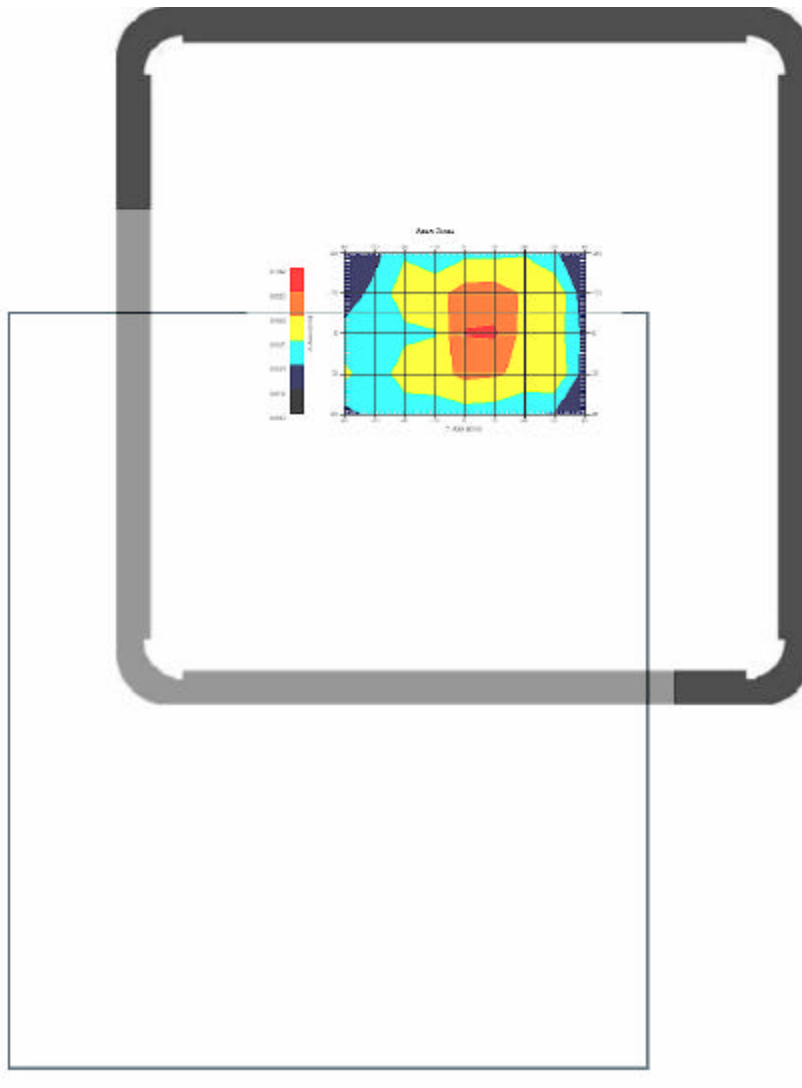


2.2 2450 MHz, EUT Position: Laptop-1 mode

Measurement Data

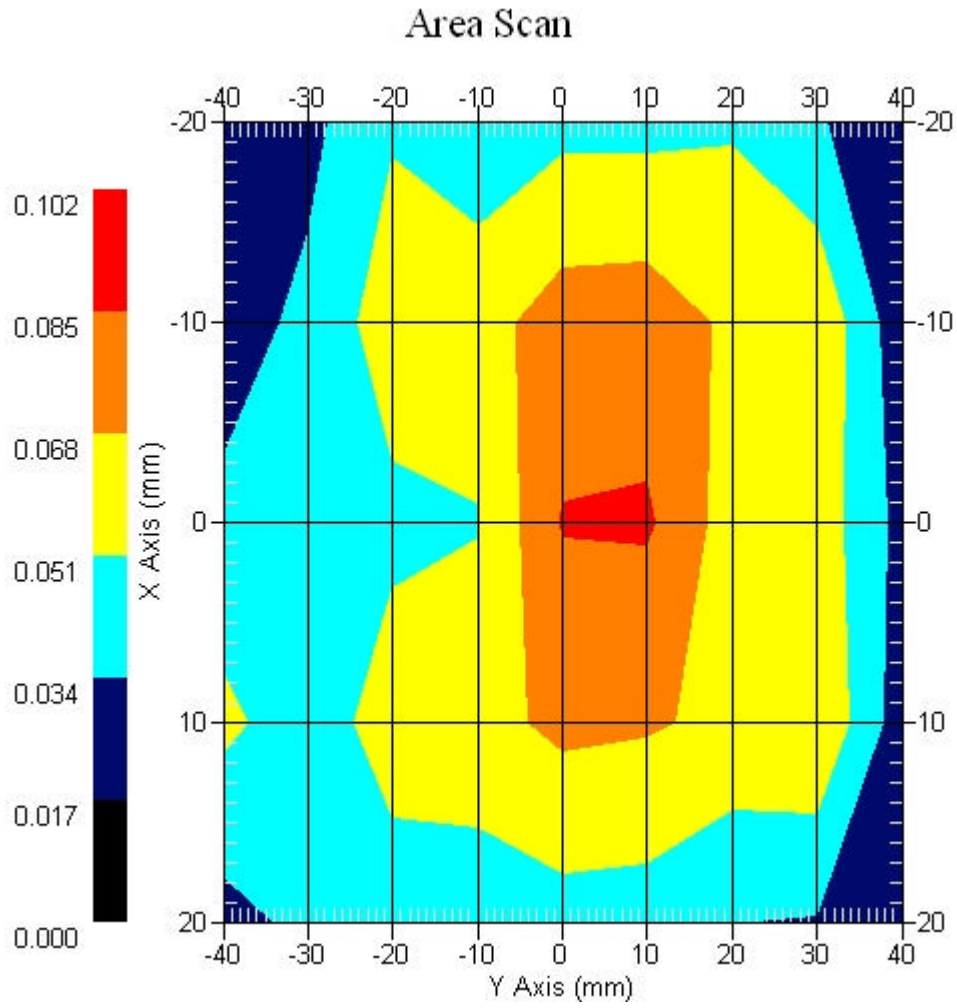
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.050 W/kg
Power Drift-Finish: 0.049 W/kg
Power Drift (%) : -1.247



1 gram SAR value : 0.104 W/kg
10 gram SAR value : 0.070 W/kg
Area Scan Peak SAR : 0.087 W/kg
Zoom Scan Peak SAR : 0.140 W/kg

Area Scan Plot

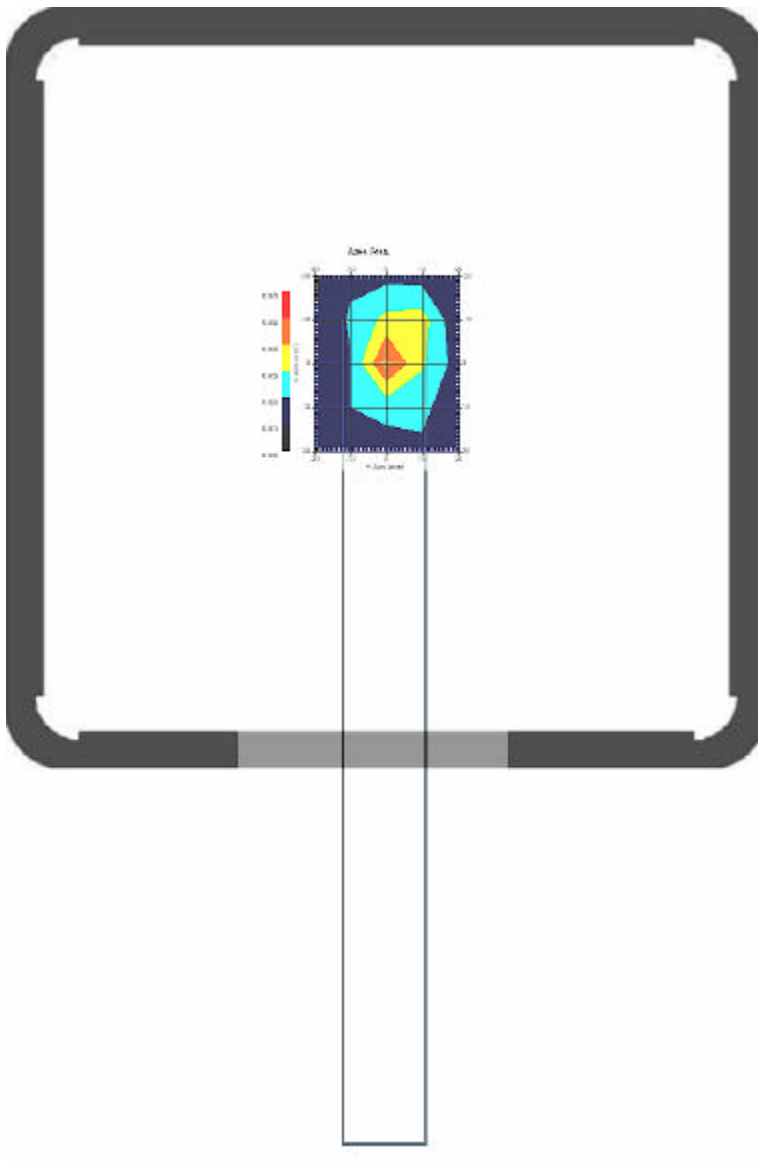


2.3 2450 MHz, EUT Position: PL mode

Measurement Data

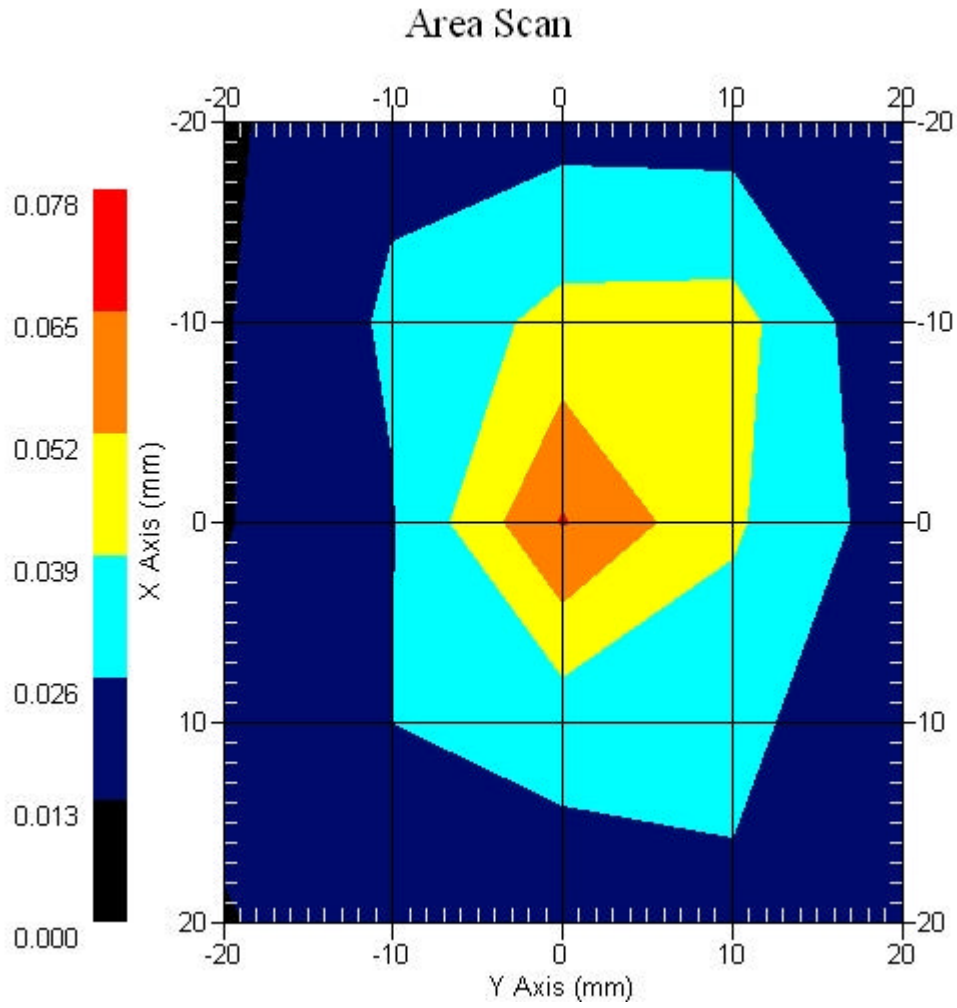
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.030 W/kg
Power Drift-Finish: 0.029 W/kg
Power Drift (%) : -3.339



1 gram SAR value : 0.061 W/kg
10 gram SAR value : 0.033 W/kg
Area Scan Peak SAR : 0.066 W/kg
Zoom Scan Peak SAR : 0.133 W/kg

Area Scan Plot

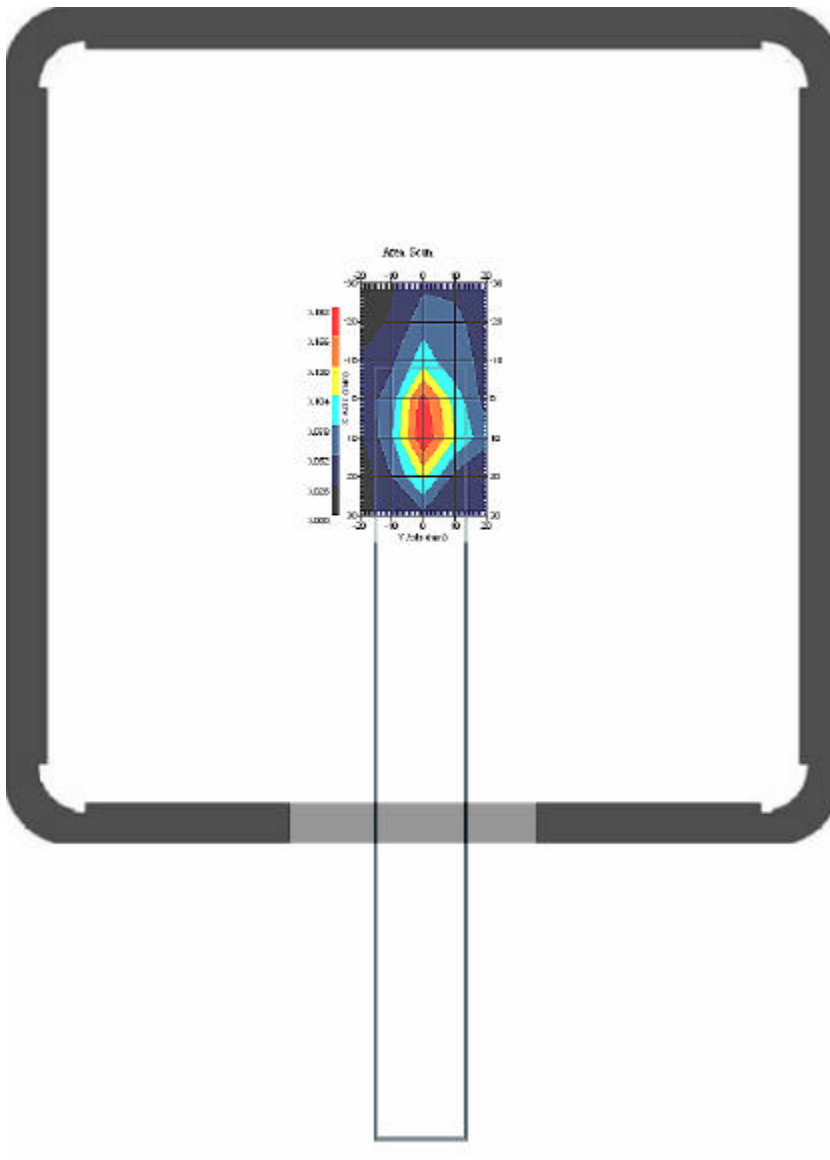


2.4 2450 MHz, EUT Position: PP mode

Measurement Data

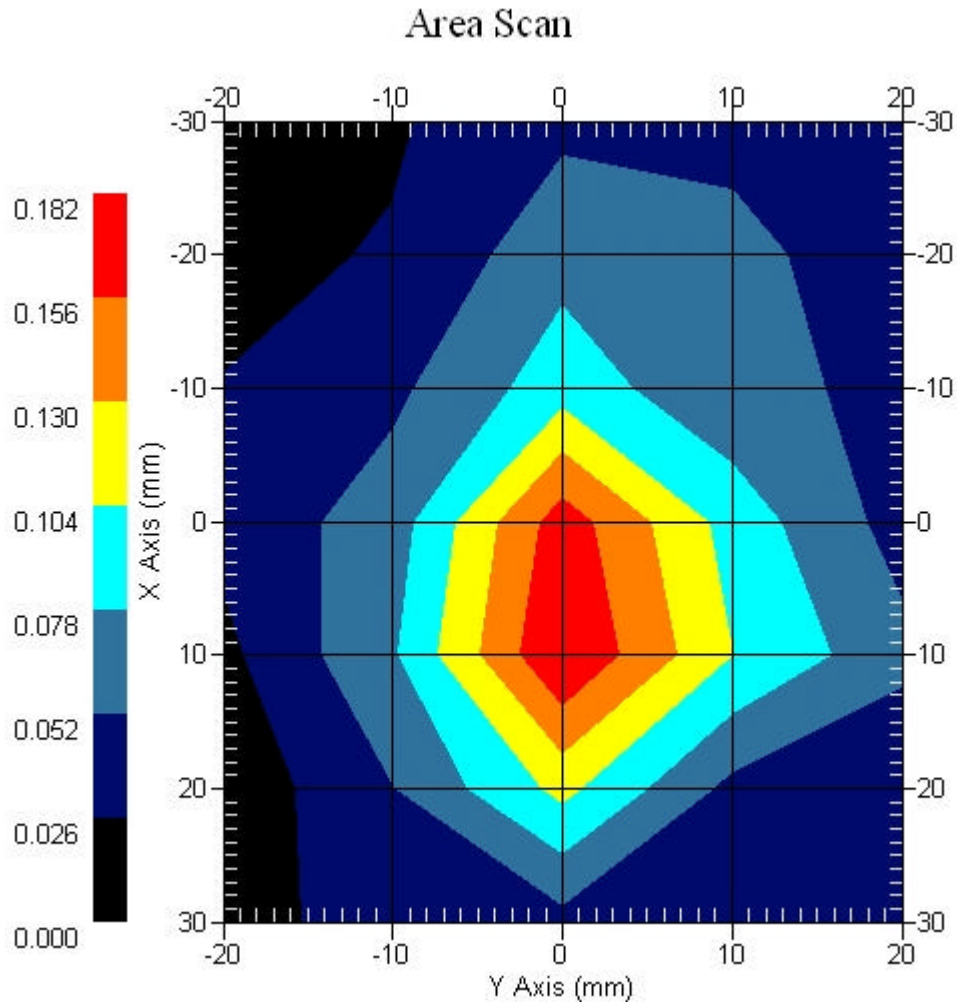
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : High

Power Drift-Start : 0.169 W/kg
Power Drift-Finish: 0.172 W/kg
Power Drift (%) : 1.748



1 gram SAR value : 0.174 W/kg
10 gram SAR value : 0.076 W/kg
Area Scan Peak SAR : 0.182 W/kg
Zoom Scan Peak SAR : 0.410 W/kg

Area Scan Plot

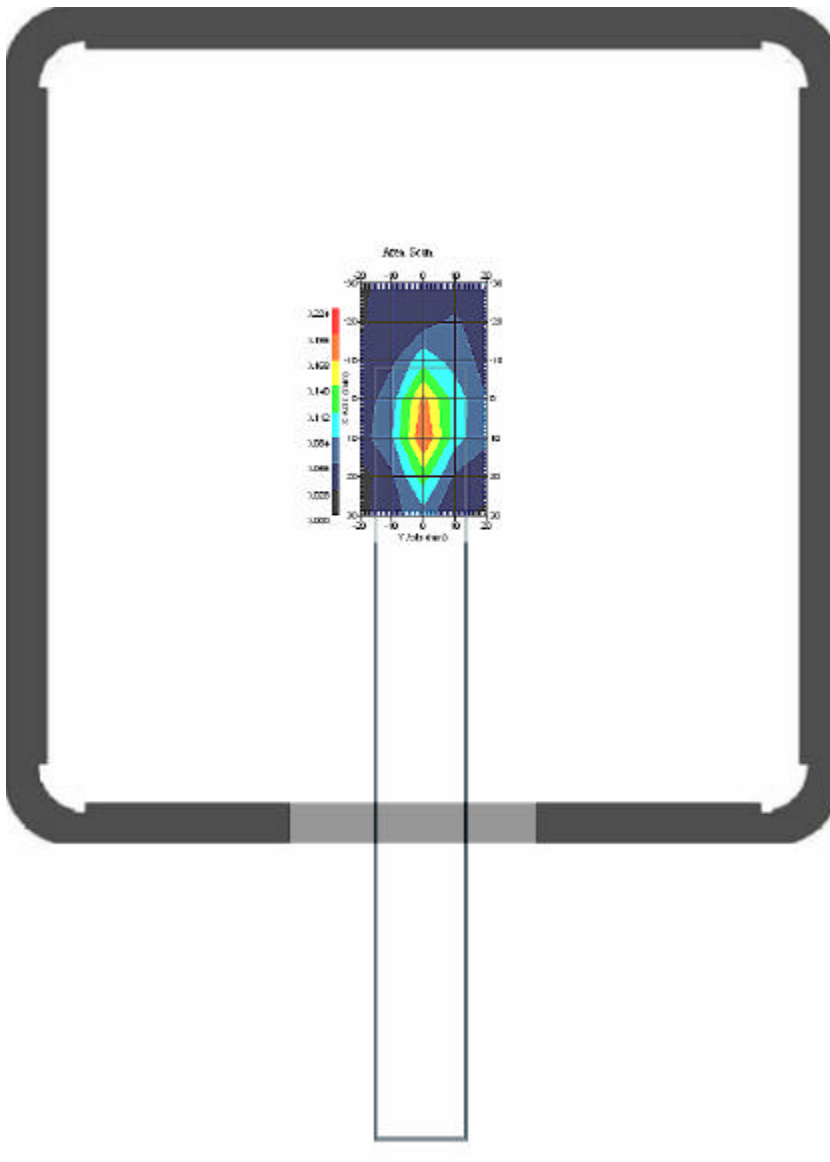


2.52450 MHz, EUT Position: PP mode

Measurement Data

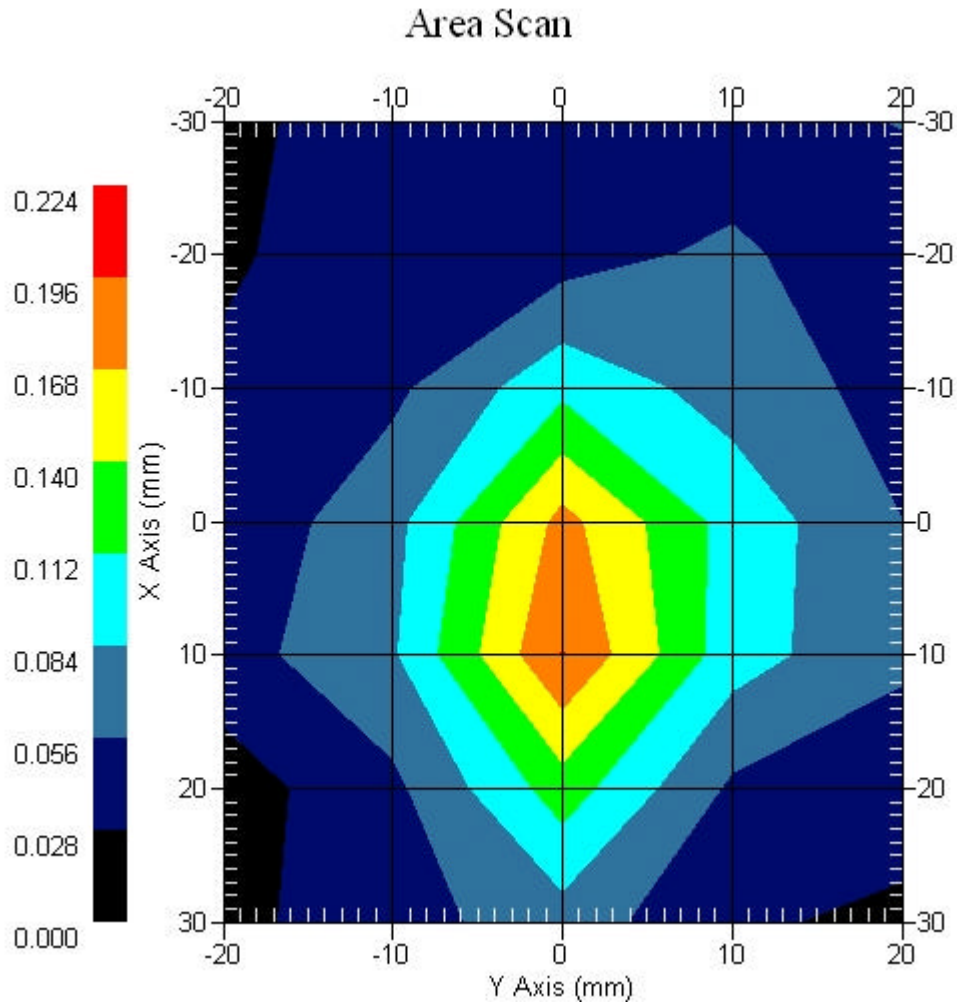
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Low

Power Drift-Start : 0.205 W/kg
Power Drift-Finish: 0.209 W/kg
Power Drift (%) : 1.957



1 gram SAR value : 0.170 W/kg
10 gram SAR value : 0.077 W/kg
Area Scan Peak SAR : 0.197 W/kg
Zoom Scan Peak SAR : 0.390 W/kg

Area Scan Plot

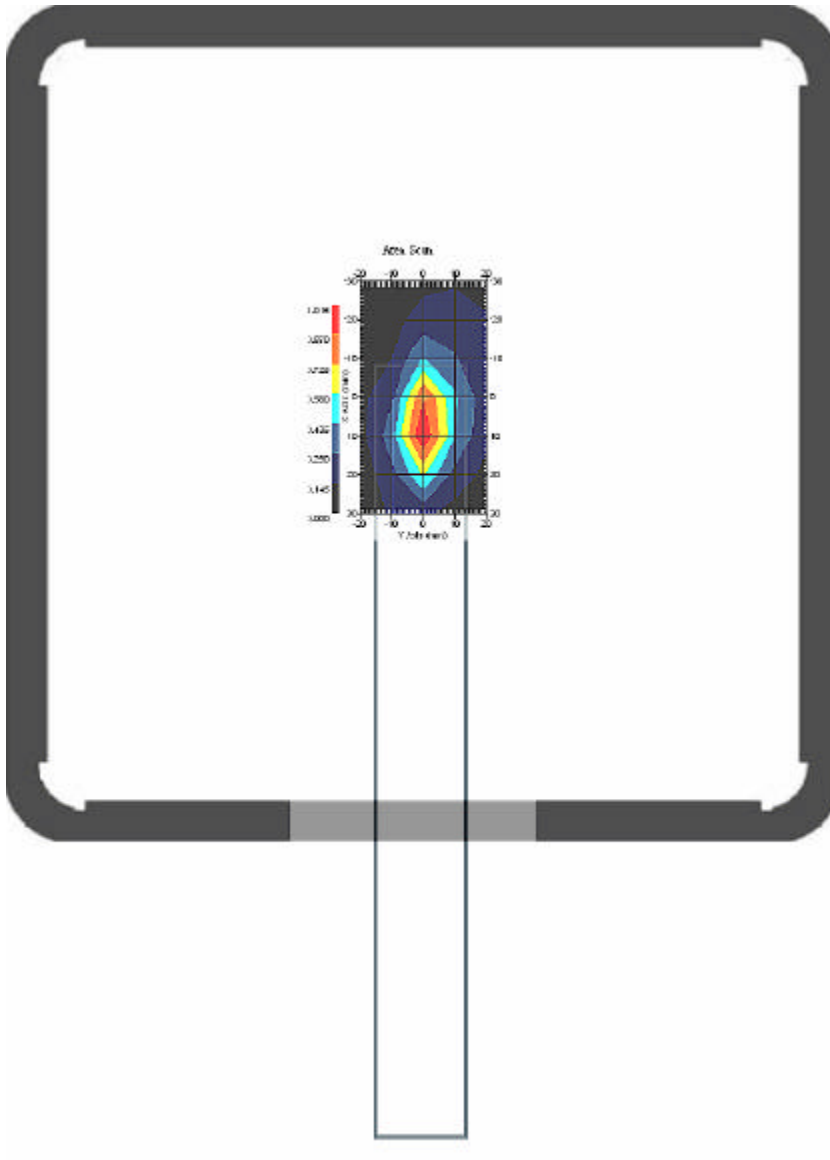


2.62450 MHz, EUT Position: PP mode

Measurement Data

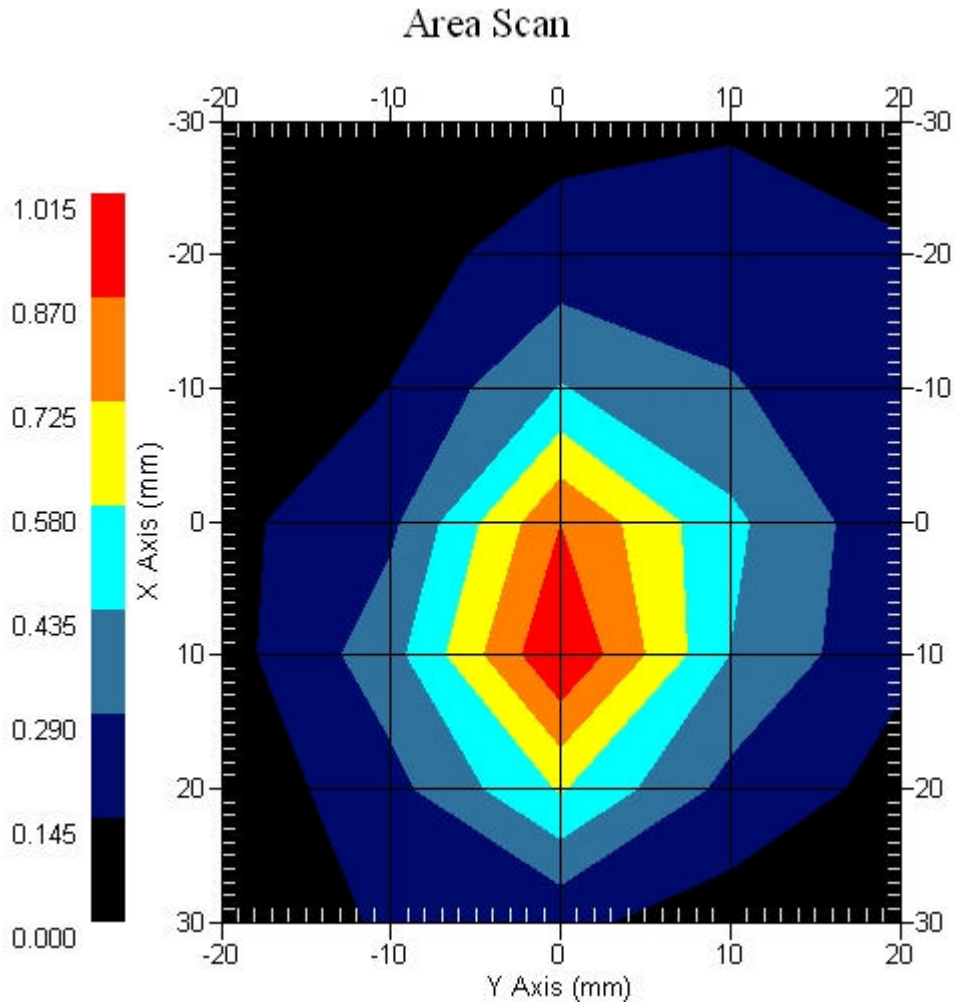
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.874 W/kg
Power Drift-Finish: 0.877 W/kg
Power Drift (%) : 0.343



1 gram SAR value : 0.792 W/kg
10 gram SAR value : 0.344 W/kg
Area Scan Peak SAR : 1.012 W/kg
Zoom Scan Peak SAR : 1.801 W/kg

Area Scan Plot

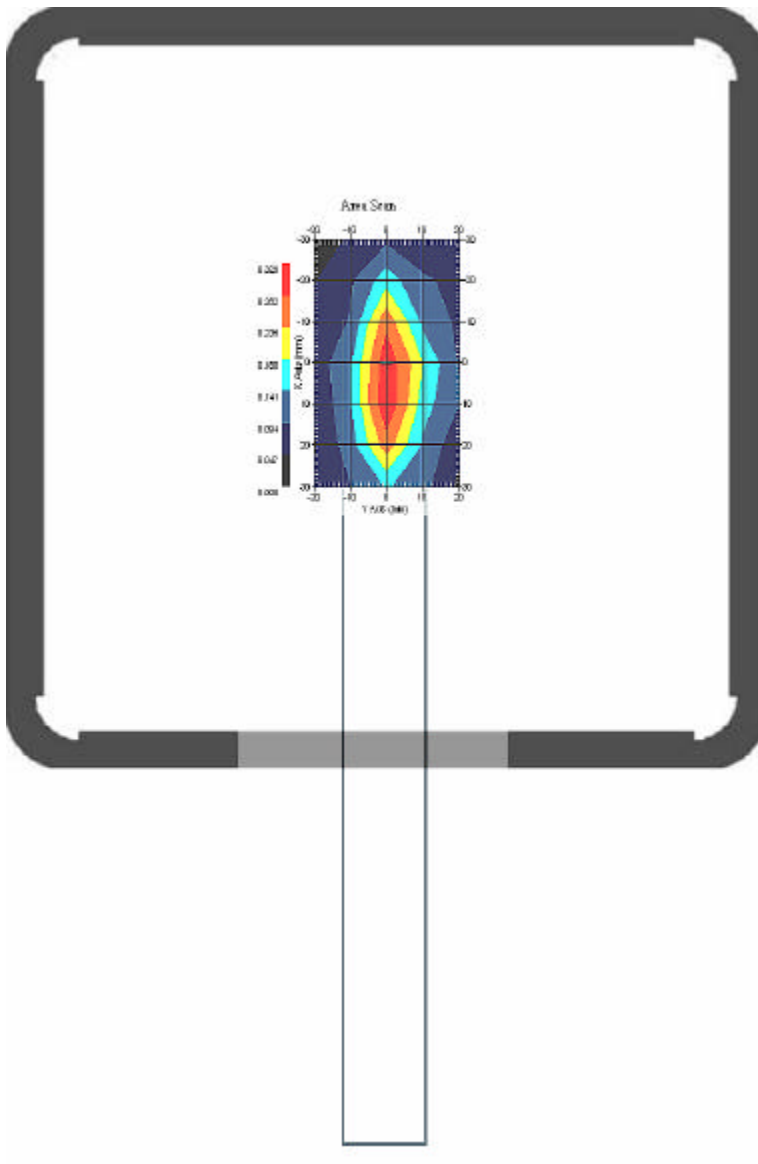


2.7 2450 MHz, EUT Position: SL mode

Measurement Data

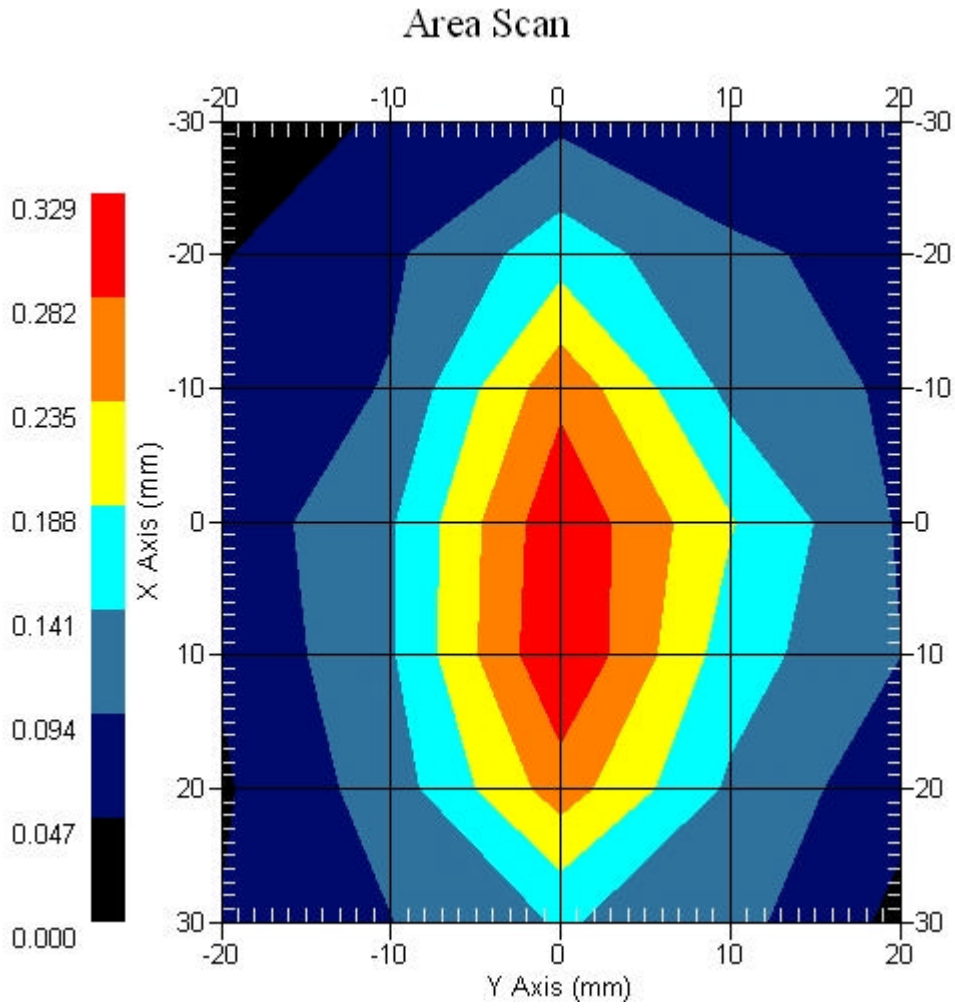
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.250 W/kg
Power Drift-Finish: 0.245 W/kg
Power Drift (%) : -2.011



1 gram SAR value : 0.248 W/kg
10 gram SAR value : 0.114 W/kg
Area Scan Peak SAR : 0.328 W/kg
Zoom Scan Peak SAR : 0.580 W/kg

Area Scan Plot

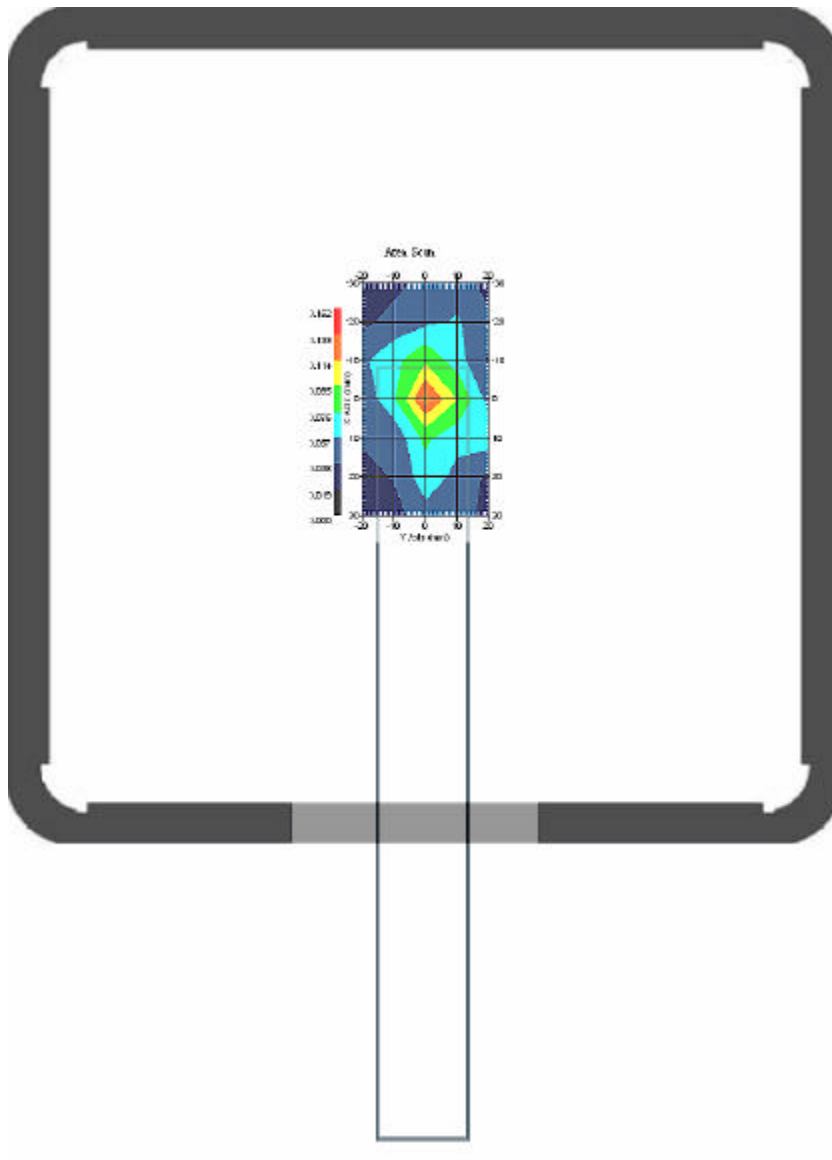


2.8 2450 MHz, EUT Position: SP mode

Measurement Data

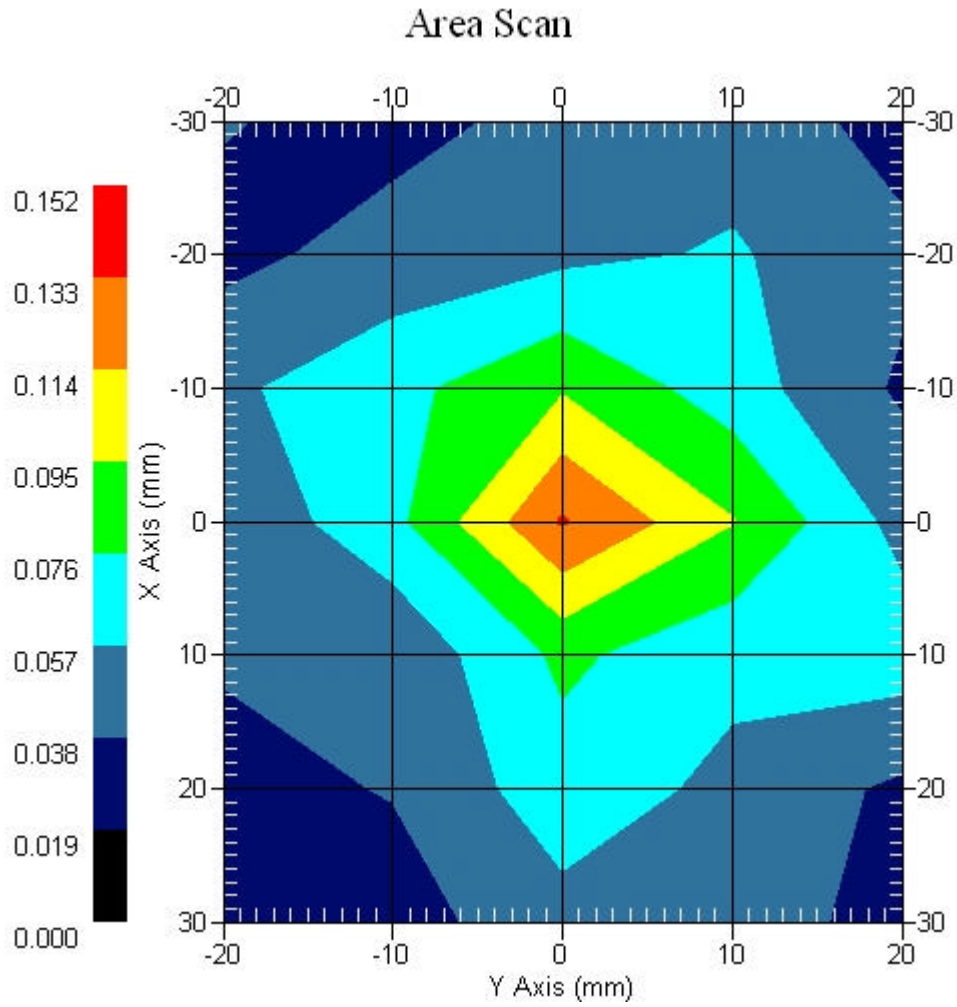
Crest Factor : 1
Set-up Date : 19-Apr-2007
Area Scan : 7x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid

Power Drift-Start : 0.118 W/kg
Power Drift-Finish: 0.115 W/kg
Power Drift (%) : -2.542



1 gram SAR value : 0.100 W/kg
10 gram SAR value : 0.057 W/kg
Area Scan Peak SAR : 0.135 W/kg
Zoom Scan Peak SAR : 0.210 W/kg

Area Scan Plot



2.11 2450MHz Z-Axis plot

Frequency: 802.11g, 2450MHz, EUT PP mode

SAR-Z Axis
at Hotspot x:10.15 y:-0.14

