

Appendix G

WLAN only & WLAN +BT Measurement Data

of

Product Name

Notebook Personal Computer

Model

V100

Test Result Summary

SAR Measurement						
Ambient Temperature (°C) : 21.8 ±1				Relative Humidity (%) : 44		
Liquid Temperature (°C) : 21.5±1				Depth of Liquid (cm) : >15		
Test Mode : 802.11b						
Test Position of EUT	Antenna Type	Frequency		Old SAR 1g (W/Kg)	New SAR 1g WLAN only	New SAR 1g WLAN +BT
		Channel	MHz			
Back	Internal	Low	2412	0.065	0.08	0.069
Back	Internal	Mid	2437	0.13	0.092	0.145
Back	Internal	High	2462	0.068	0.085	0.074
Test Mode : 802.11g						
Back	Internal	Low	2412	0.339	0.306	0.297
Back	Internal	Mid	2437	0.487	0.456	0.471
Back	Internal	High	2462	0.298	0.269	0.281
Ambient Temperature (°C) : 21.0 ±1				Relative Humidity (%) : 48		
Liquid Temperature (°C) : 21.3±1				Depth of Liquid (cm) : >15		
Test Mode : 802.11a(5150~5350MHz)						
Back	Internal	Low	5180	0.128	0.112	0.113
Back	Internal	High	5240	0.069	0.088	0.079
Back	Internal	Low	5260	0.101	0.121	0.112
Back	Internal	High	5320	0.142	0.126	0.136
Test Mode : 802.11a(5725~5825MHz)						
Back	Internal	Low	5745	0.207	0.198	0.204
Back	Internal	Mid	5785	0.139	0.116	0.156
Back	Internal	High	5805	0.217	0.189	0.221



1 2450MHz WLAN only SAR measurement Data

SAR Test Report

Report Date : 24-Apr-2007
Measurement Date : 24-Apr-2007

Product Data

Device Name : v100
Serial No. : 11b-Back
Type : Other
Frequency : 2450.00 MHz
Drift Time : 0 min(s)
Length : 225 mm
Width : 290 mm
Depth : 5 mm
Antenna Type : Internal

Phantom Data

Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : uni_1

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 24-Apr-2007
Temperature : 21.50 °C
Ambient Temp. : 21.80 °C
Humidity : 44.00 RH%
Epsilon : 52.37 F/m
Sigma : 1.98 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 802.11b Main Ant. , EUT Position: Back

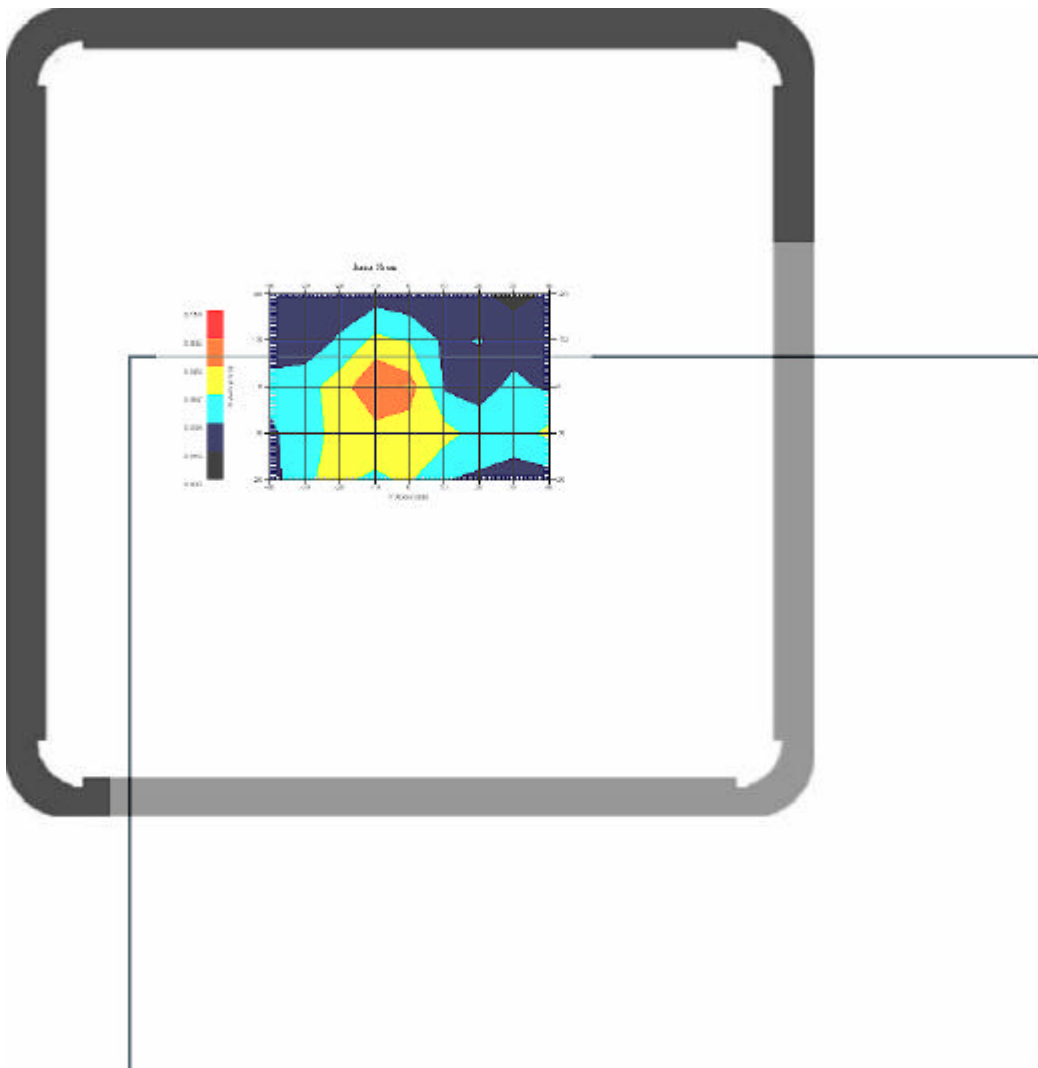
Measurement Data

Crest Factor : 1
Set-up Date : 24-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 : Low - 2412Mhz

Power Drift-Start : 0.049 W/kg

Power Drift-Finish: 0.050 W/kg

Power Drift (%) : 3.511



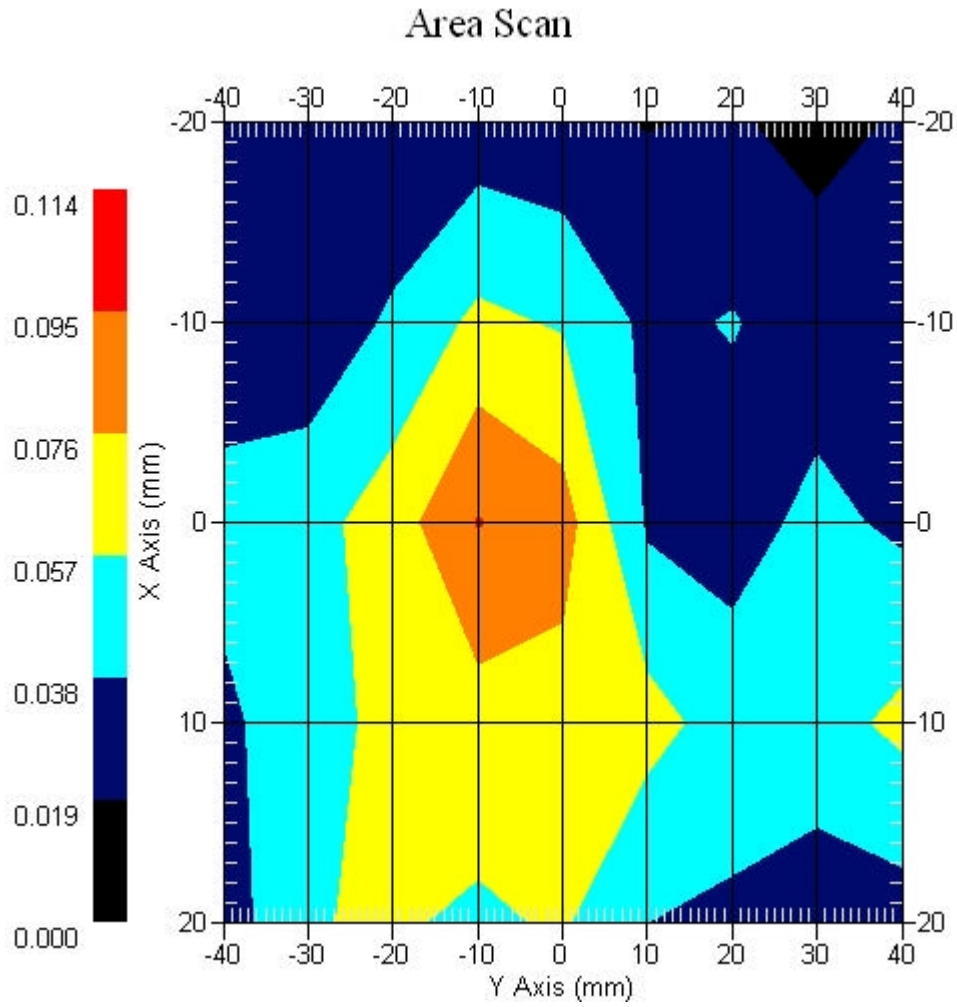
1 gram SAR value : 0.080 W/kg

10 gram SAR value : 0.037 W/kg

Area Scan Peak SAR : 0.096 W/kg

Zoom Scan Peak SAR : 0.202 W/kg

Area Scan Plot

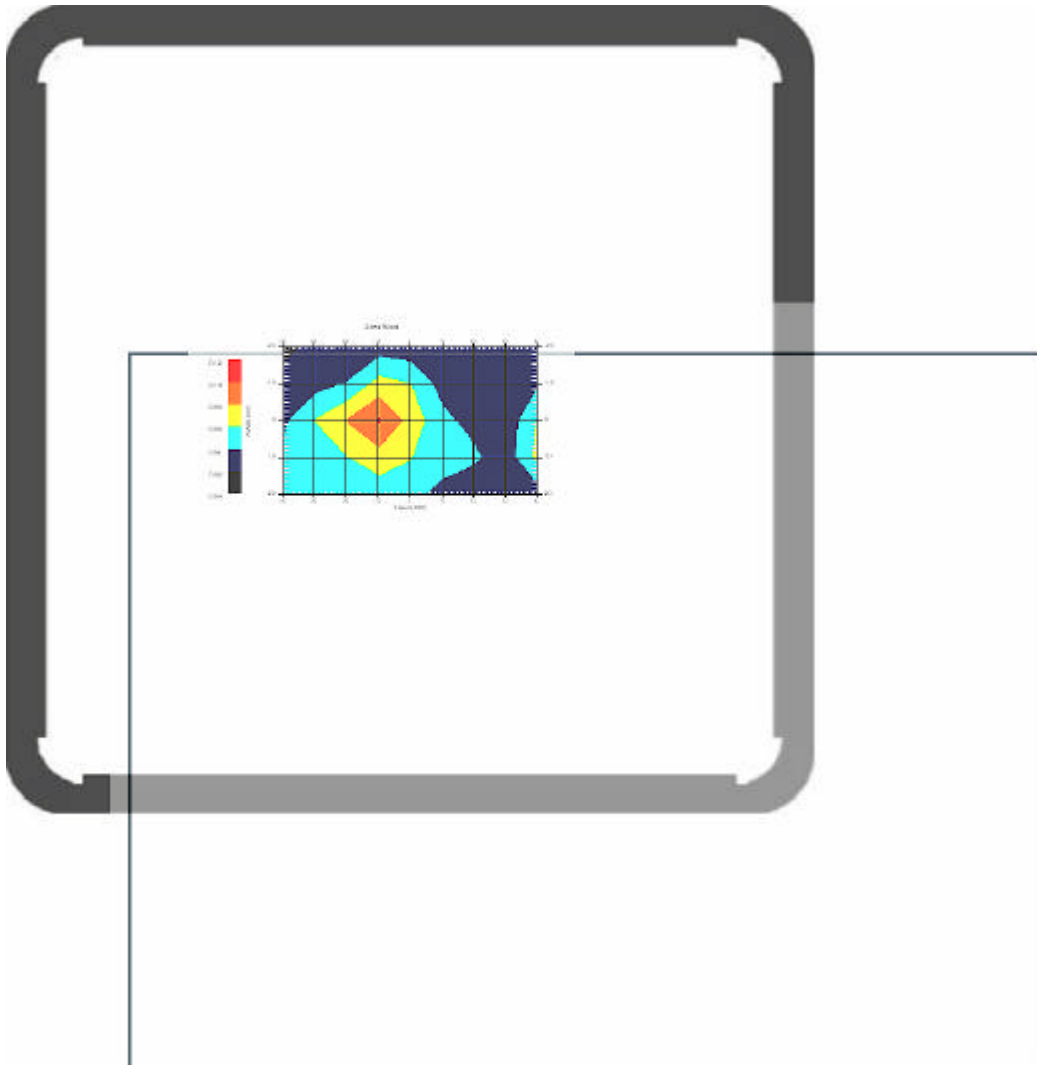


1.2 2450 MHz 802.11b Main Ant. , EUT Position: Back

Measurement Data

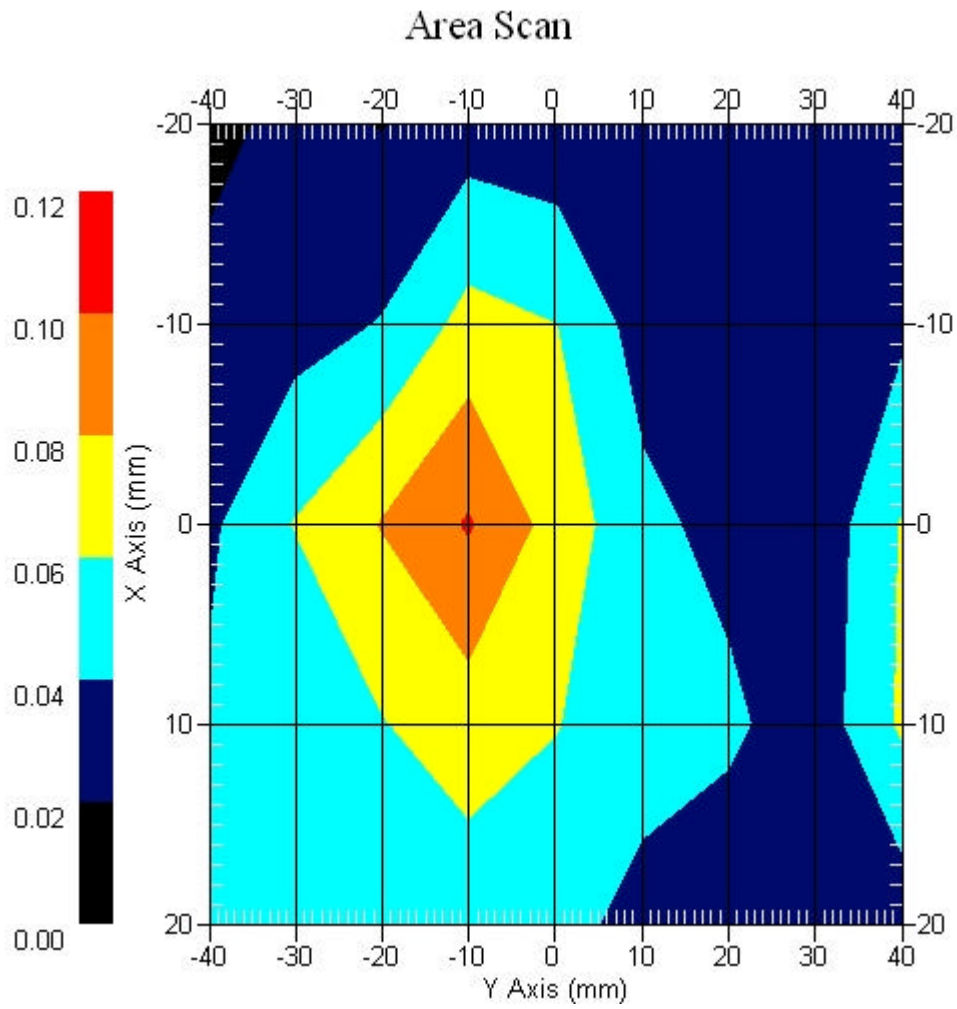
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid - 2437MHz

Power Drift-Start : 0.047 W/kg
Power Drift-Finish: 0.049 W/kg
Power Drift (%) : 4.244



1 gram SAR value : 0.092 W/kg
10 gram SAR value : 0.048 W/kg
Area Scan Peak SAR : 0.102 W/kg
Zoom Scan Peak SAR : 0.210 W/kg

Area Scan Plot

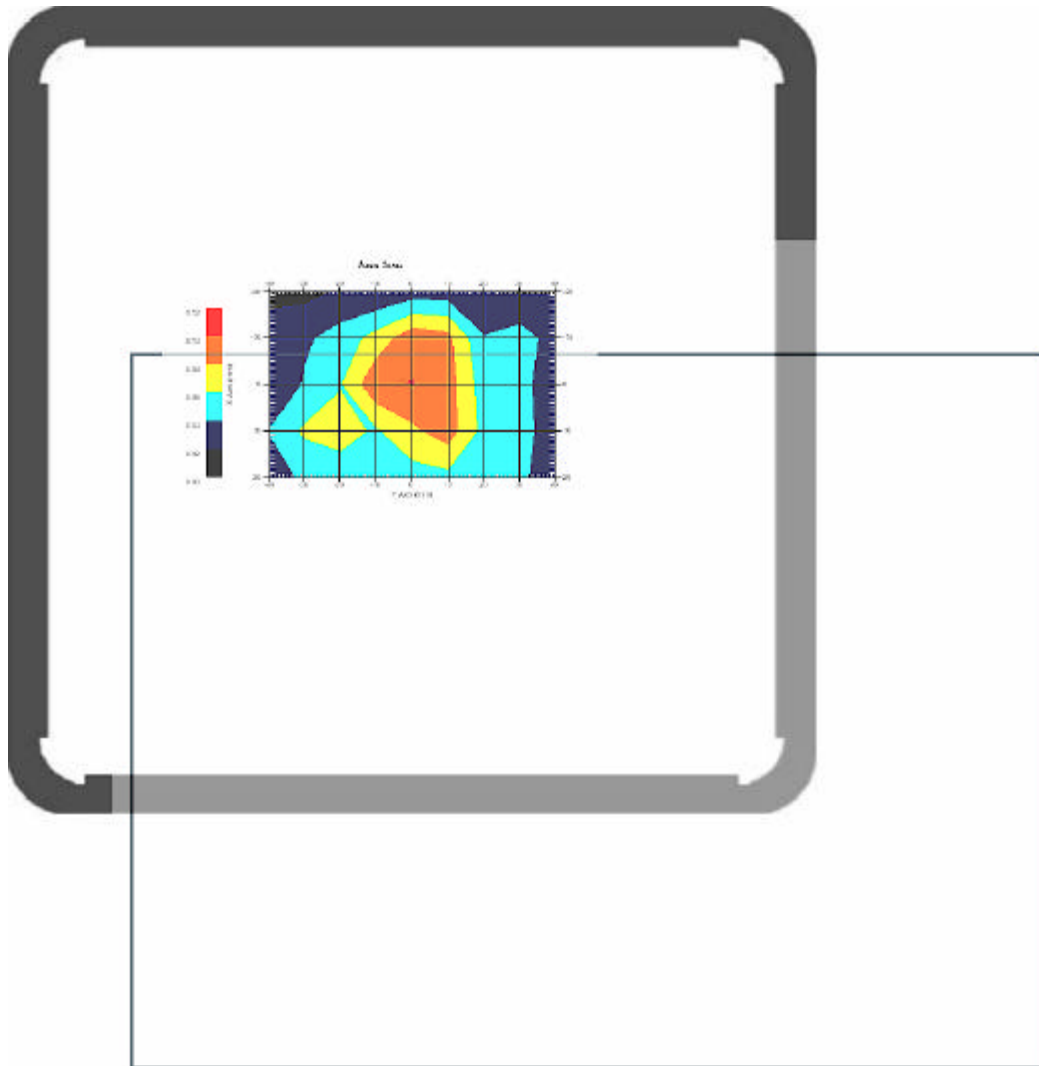


1.3 2450 MHz 802.11b Main Ant. , EUT Position: Back

Measurement Data

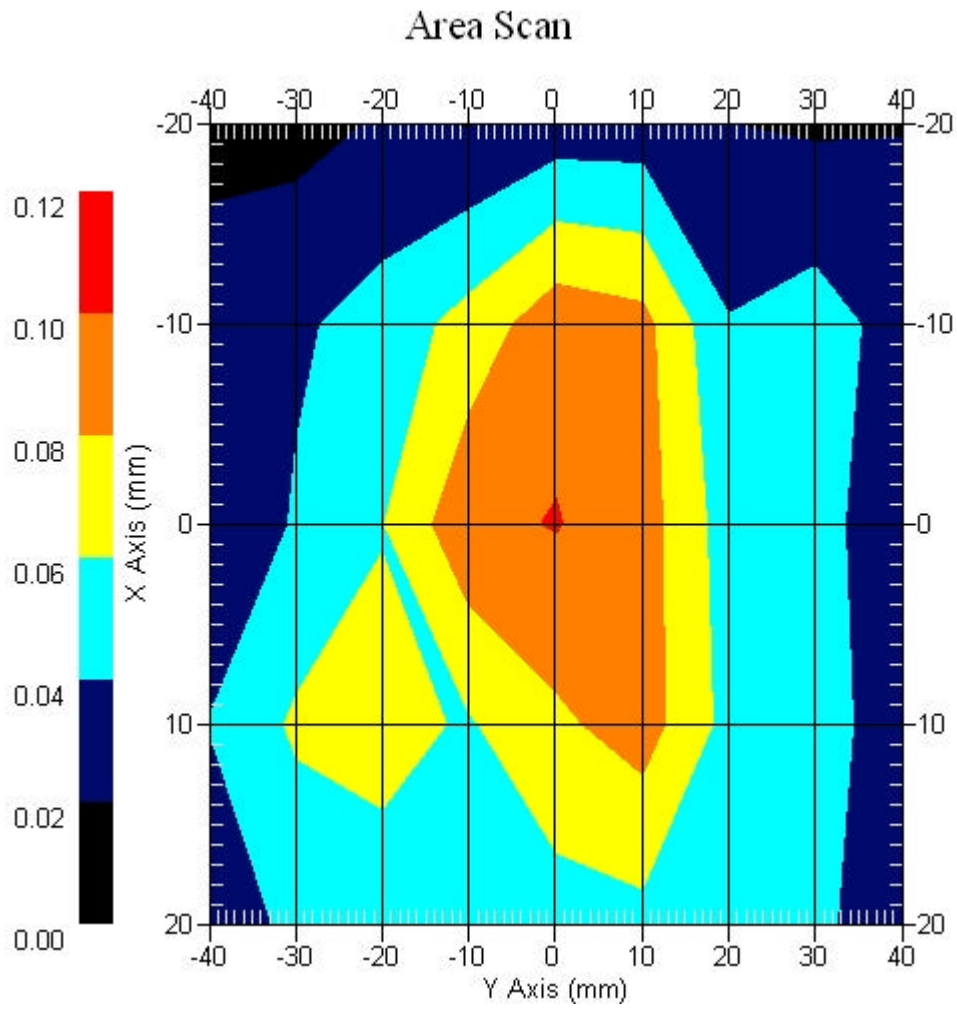
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : High - 2462MHz

Power Drift-Start : 0.041 W/kg
Power Drift-Finish: 0.042 W/kg
Power Drift (%) : 3.001



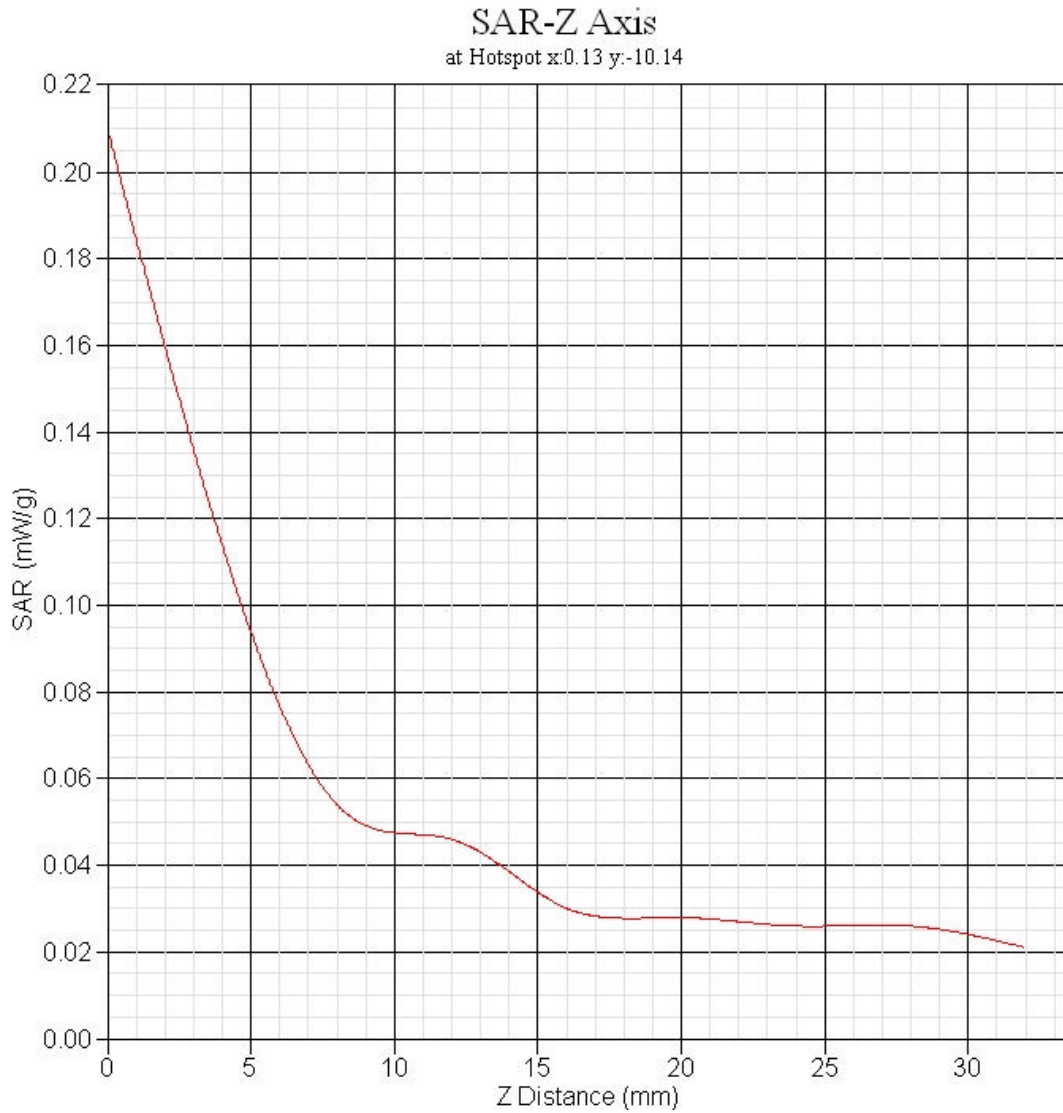
1 gram SAR value : 0.085 W/kg
10 gram SAR value : 0.039 W/kg
Area Scan Peak SAR : 0.101 W/kg
Zoom Scan Peak SAR : 0.220 W/kg

Area Scan Plot



1.4 Z-Axis plot

Frequency: 2450 MHz 802.11b Main Ant. , EUT Position: Back

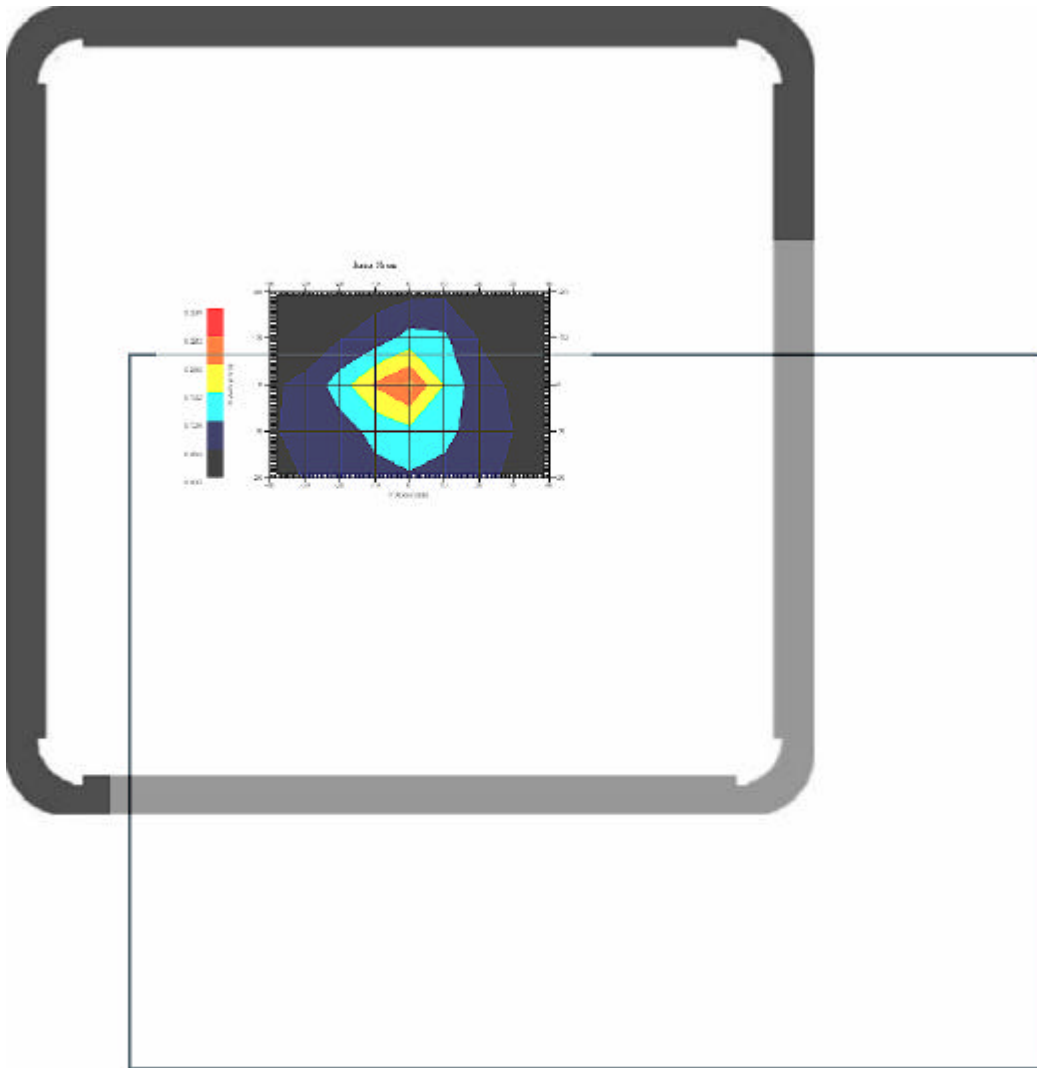


1.5 2450 MHz 802.11g Main Ant. , EUT Position: Back

Measurement Data

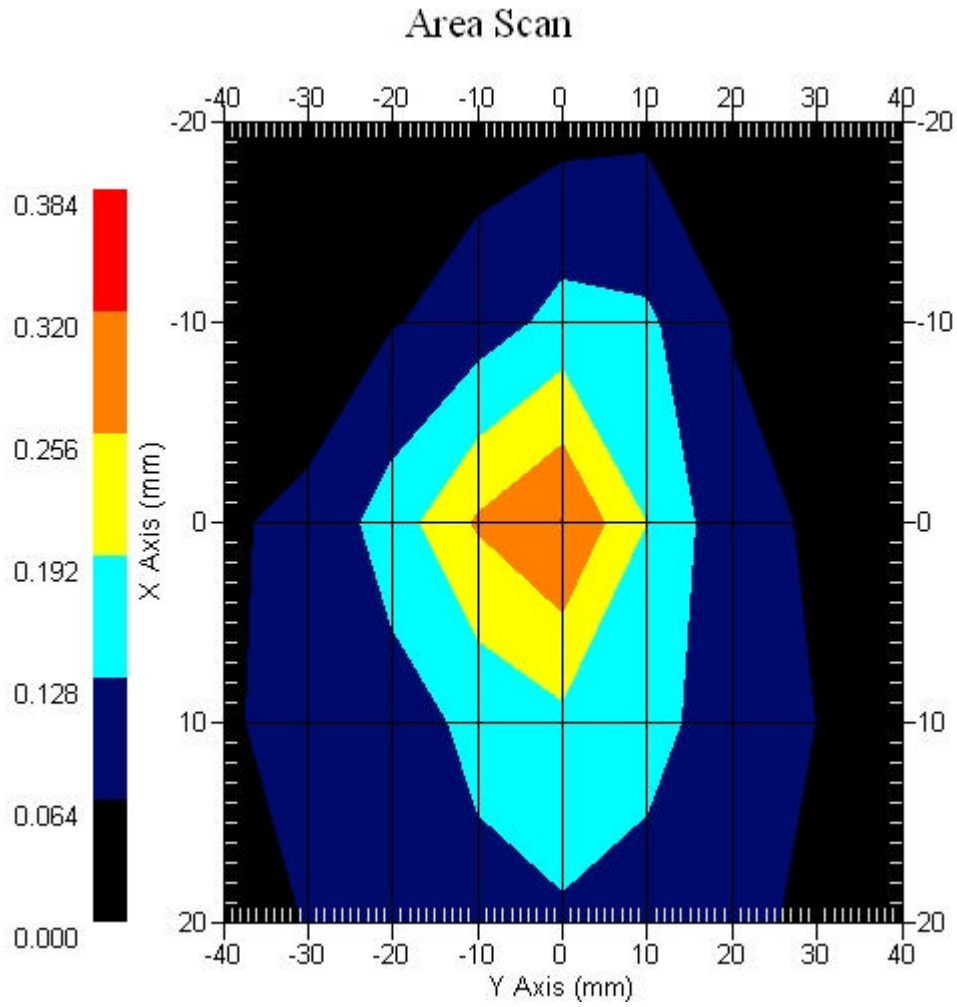
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Low - 2412MHz

Power Drift-Start : 0.155 W/kg
Power Drift-Finish: 0.153 W/kg
Power Drift (%) : -1.574



1 gram SAR value : 0.306 W/kg
10 gram SAR value : 0.141 W/kg
Area Scan Peak SAR : 0.322 W/kg
Zoom Scan Peak SAR : 0.650 W/kg

Area Scan Plot

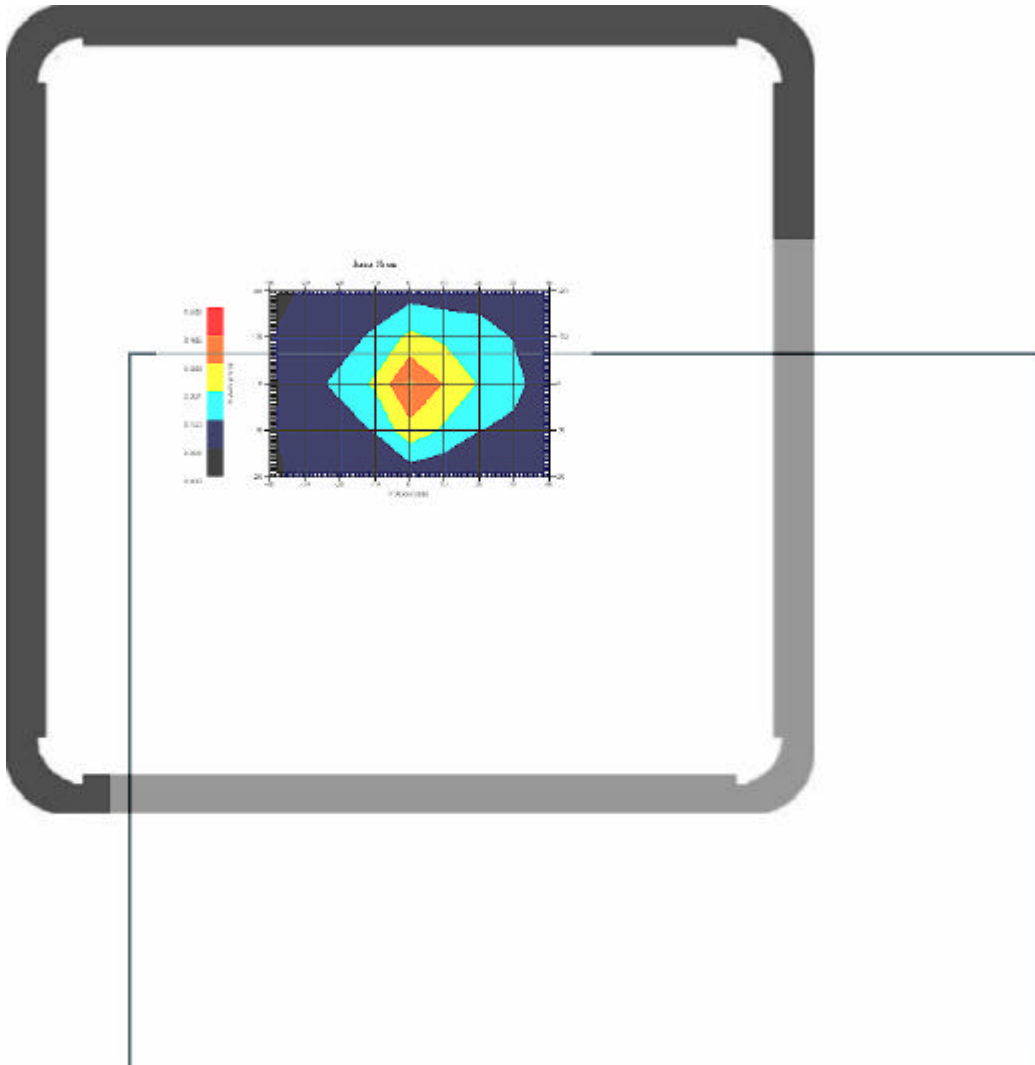


1.6 2450 MHz 802.11g Main Ant. , EUT Position: Back

Measurement Data

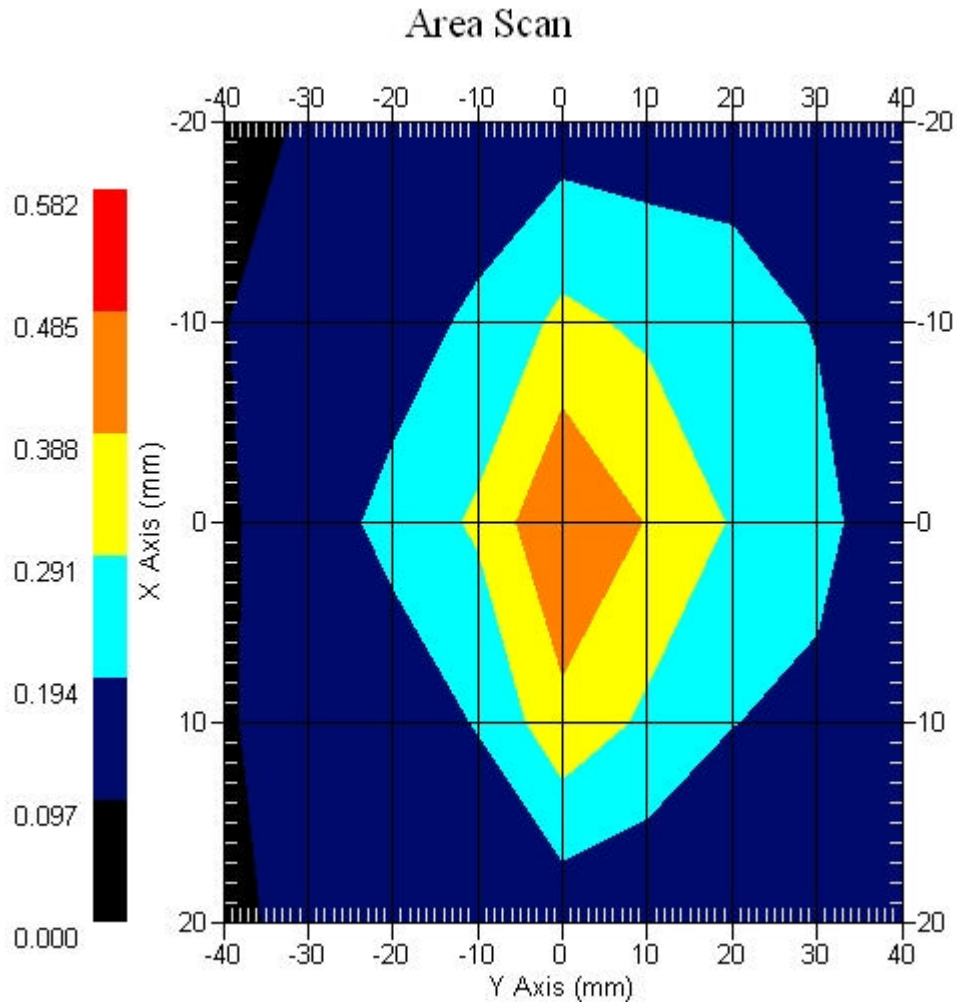
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid - 2437MHz

Power Drift-Start : 0.165 W/kg
Power Drift-Finish: 0.162 W/kg
Power Drift (%) : -1.679



1 gram SAR value : 0.456 W/kg
10 gram SAR value : 0.219 W/kg
Area Scan Peak SAR : 0.487 W/kg
Zoom Scan Peak SAR : 0.887 W/kg

Area Scan Plot

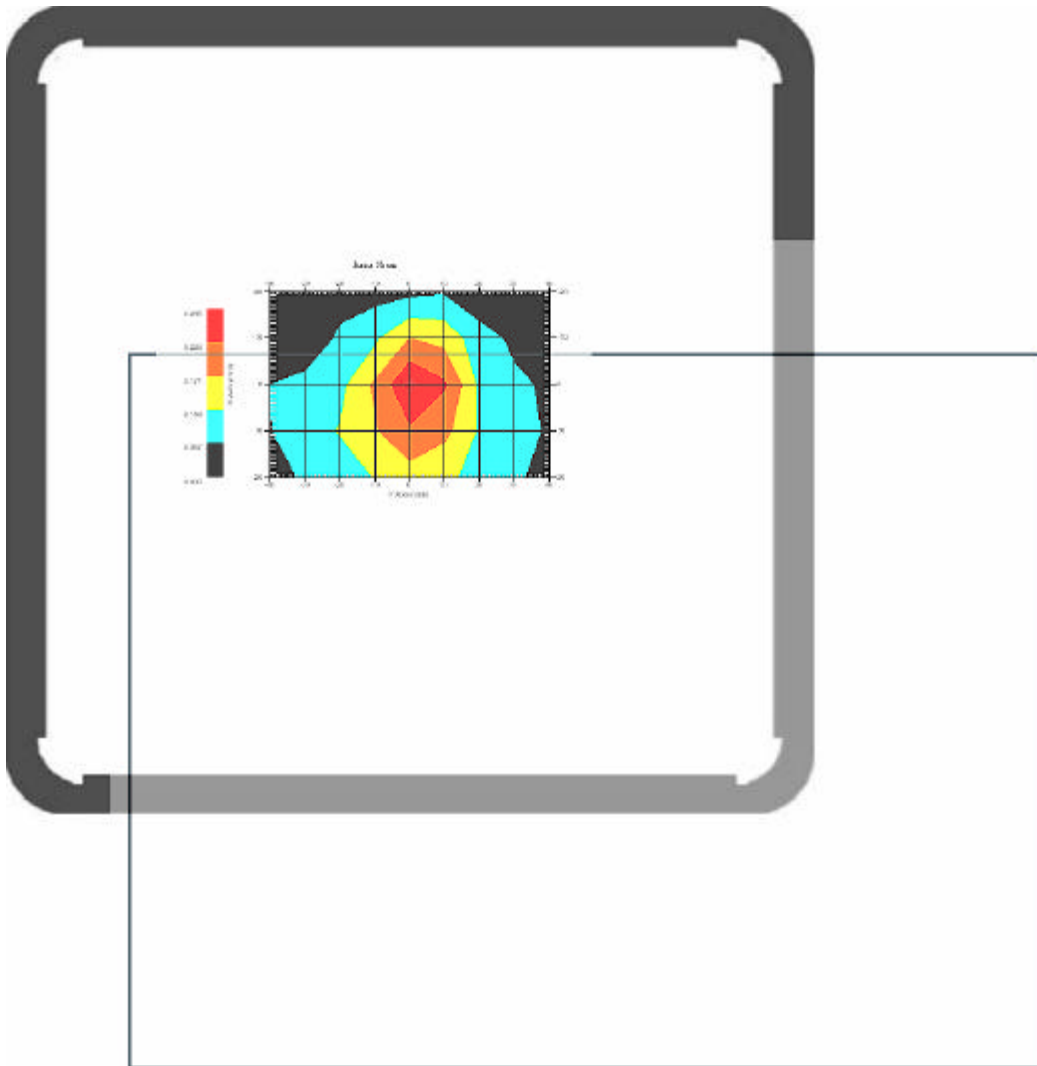


1.7 2450 MHz 802.11g Main Ant. , EUT Position: Back

Measurement Data

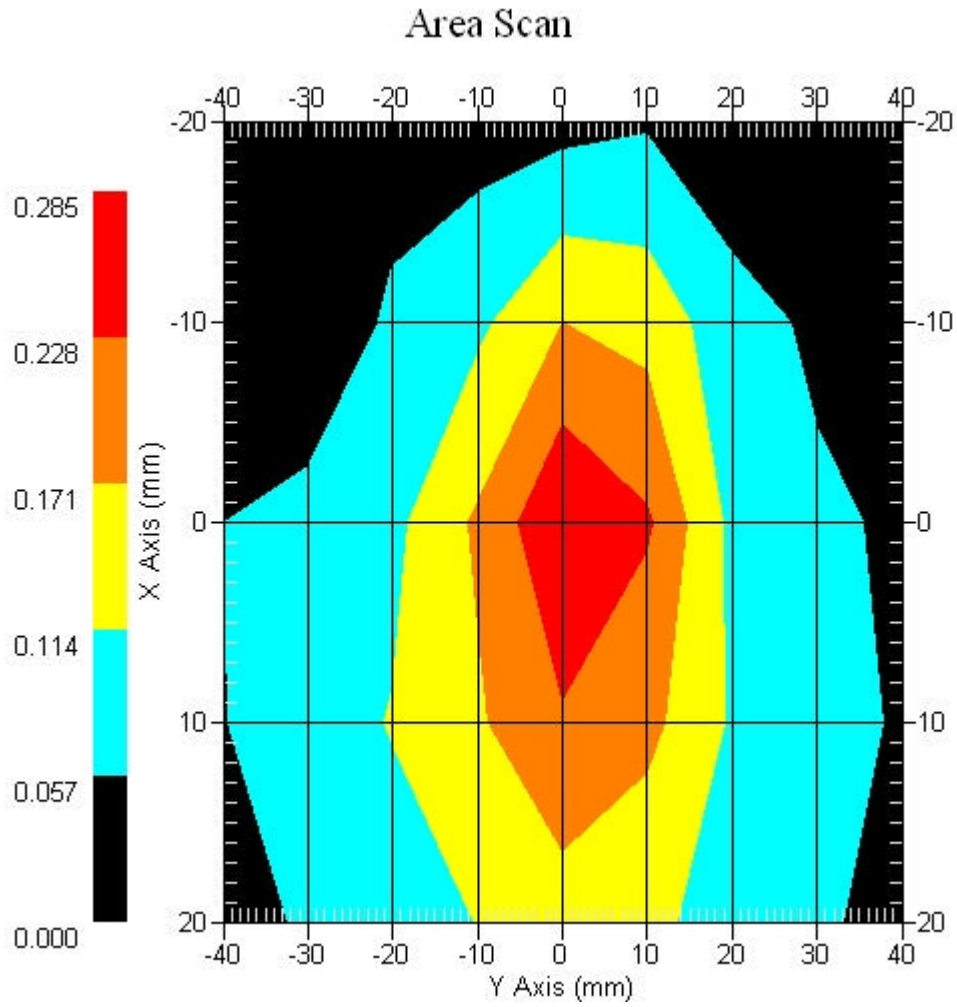
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : High - 2462MHz

Power Drift-Start : 0.165 W/kg
Power Drift-Finish: 0.164 W/kg
Power Drift (%) : -1.006



1 gram SAR value : 0.269 W/kg
10 gram SAR value : 0.124 W/kg
Area Scan Peak SAR : 0.283 W/kg
Zoom Scan Peak SAR : 0.460 W/kg

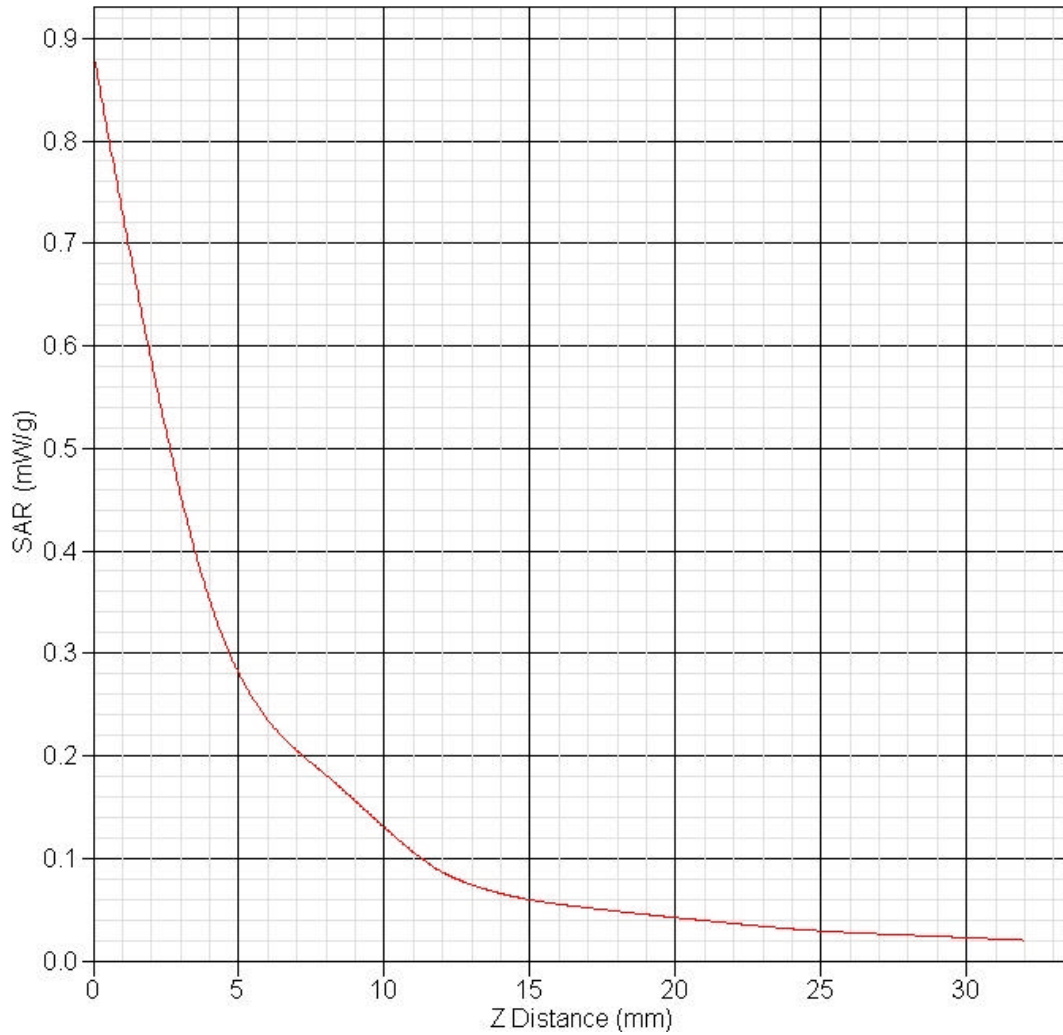
Area Scan Plot



1.8 Z-Axis plot

Frequency: 2450 MHz 802.11g Main Ant. , EUT Position: Back

SAR-Z Axis
at Hotspot x:0.12 y:7.88





2 2450MHz WLAN + BT SAR measurement Data

SAR Test Report

Report Date : 24-Apr-2007
Measurement Date : 24-Apr-2007

Product Data

Device Name : v100
Serial No. : 11b-Back
Type : Other
Frequency : 2450.00 MHz
Drift Time : 0 min(s)
Length : 225 mm
Width : 290 mm
Depth : 5 mm
Antenna Type : Internal

Phantom Data

Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : uni_1

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 24-Apr-2007
Temperature : 21.50 °C
Ambient Temp. : 21.80 °C
Humidity : 44.00 RH%
Epsilon : 52.37 F/m
Sigma : 1.98 S/m
Density : 1000.00 kg/cu. m

Probe Data

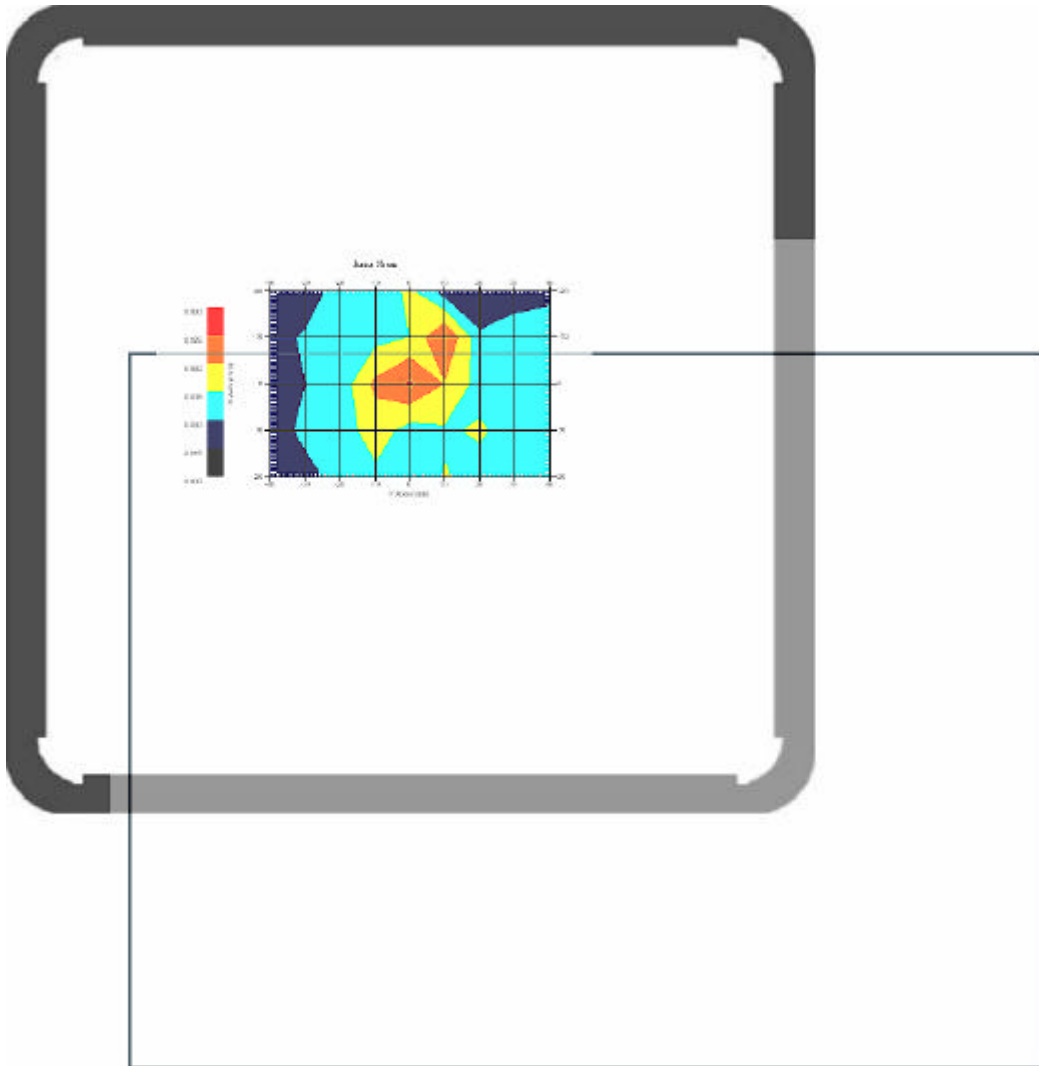
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 22-Jun-2006
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5.02
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

2.1 2450 MHz 802.11b Main Ant. , EUT Position: Back

Measurement Data

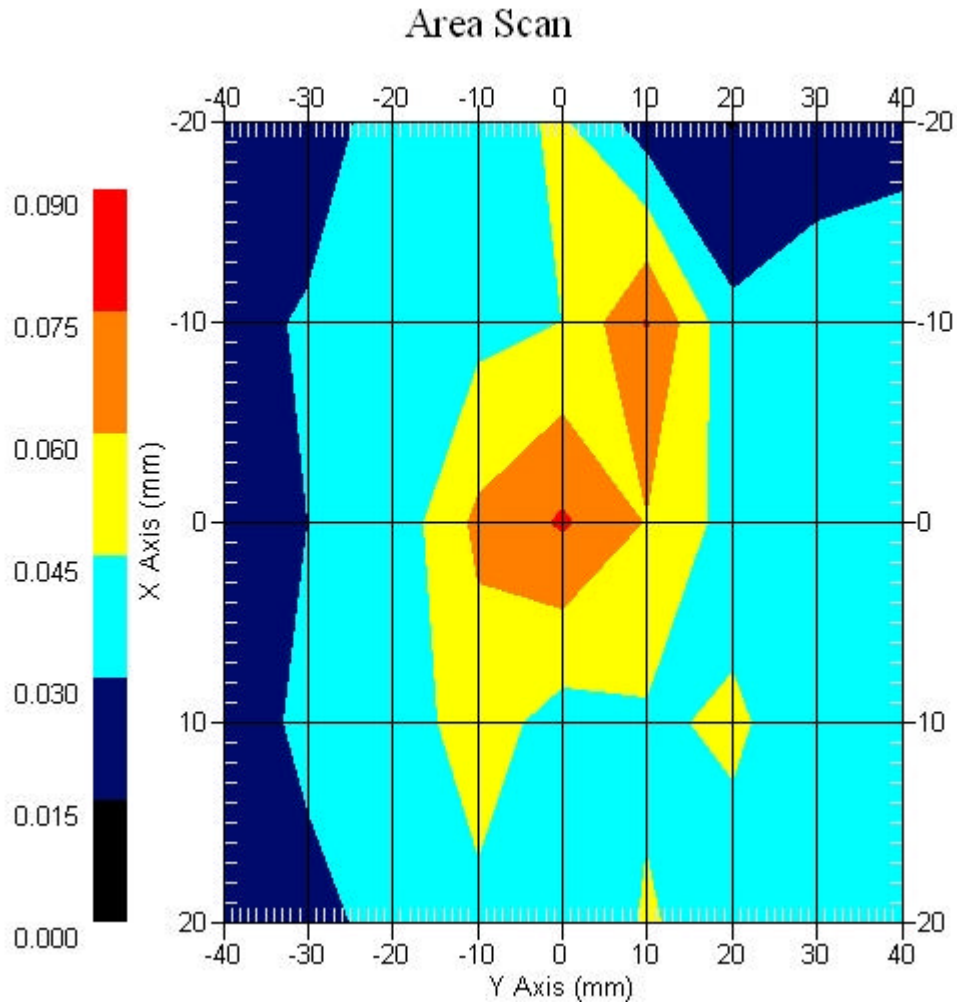
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Low - 2412MHz

Power Drift-Start : 0.069 W/kg
Power Drift-Finish: 0.067 W/kg
Power Drift (%) : -2.710



1 gram SAR value : 0.069 W/kg
10 gram SAR value : 0.031 W/kg
Area Scan Peak SAR : 0.077 W/kg
Zoom Scan Peak SAR : 0.141 W/kg

Area Scan Plot

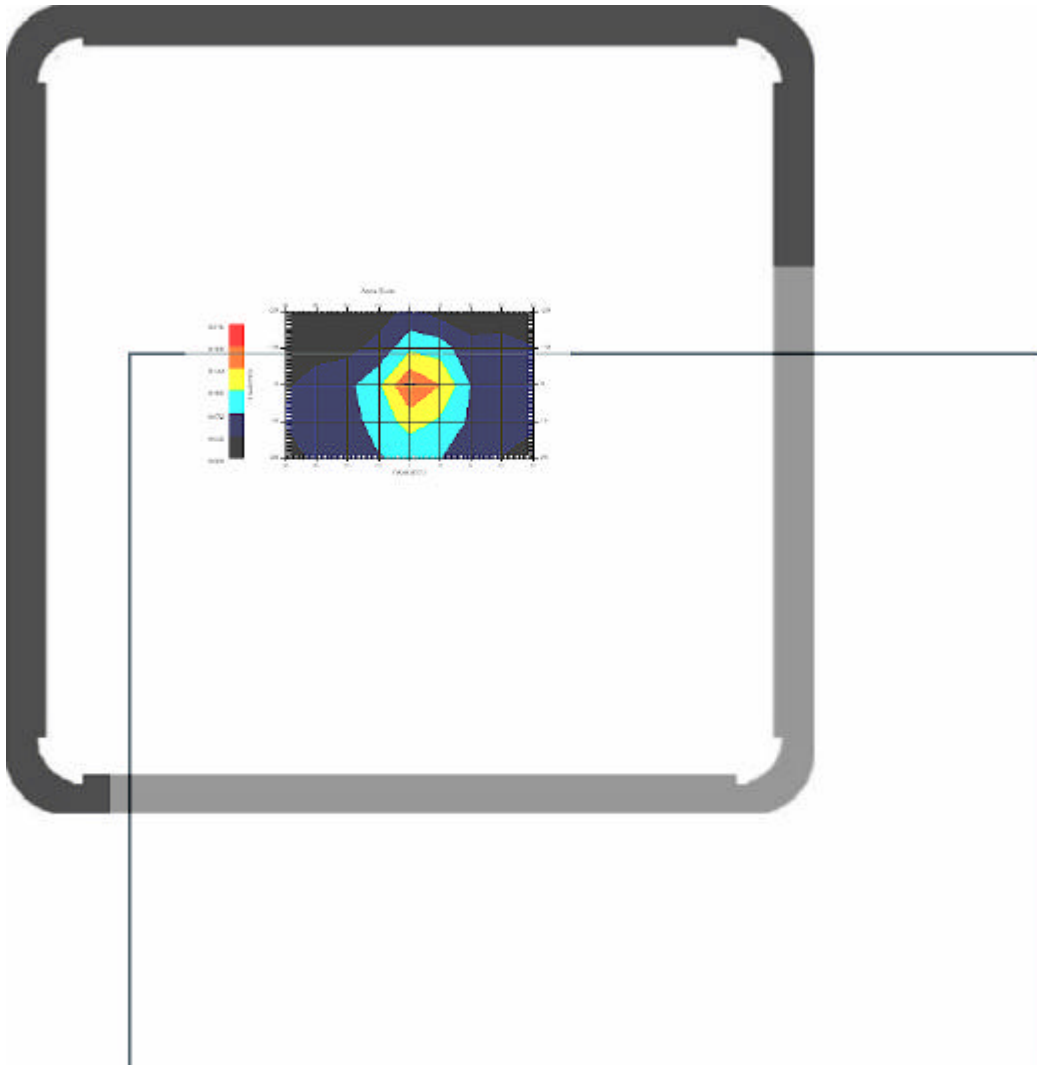


2.2 2450 MHz 802.11b Main Ant. , EUT Position: Back

Measurement Data

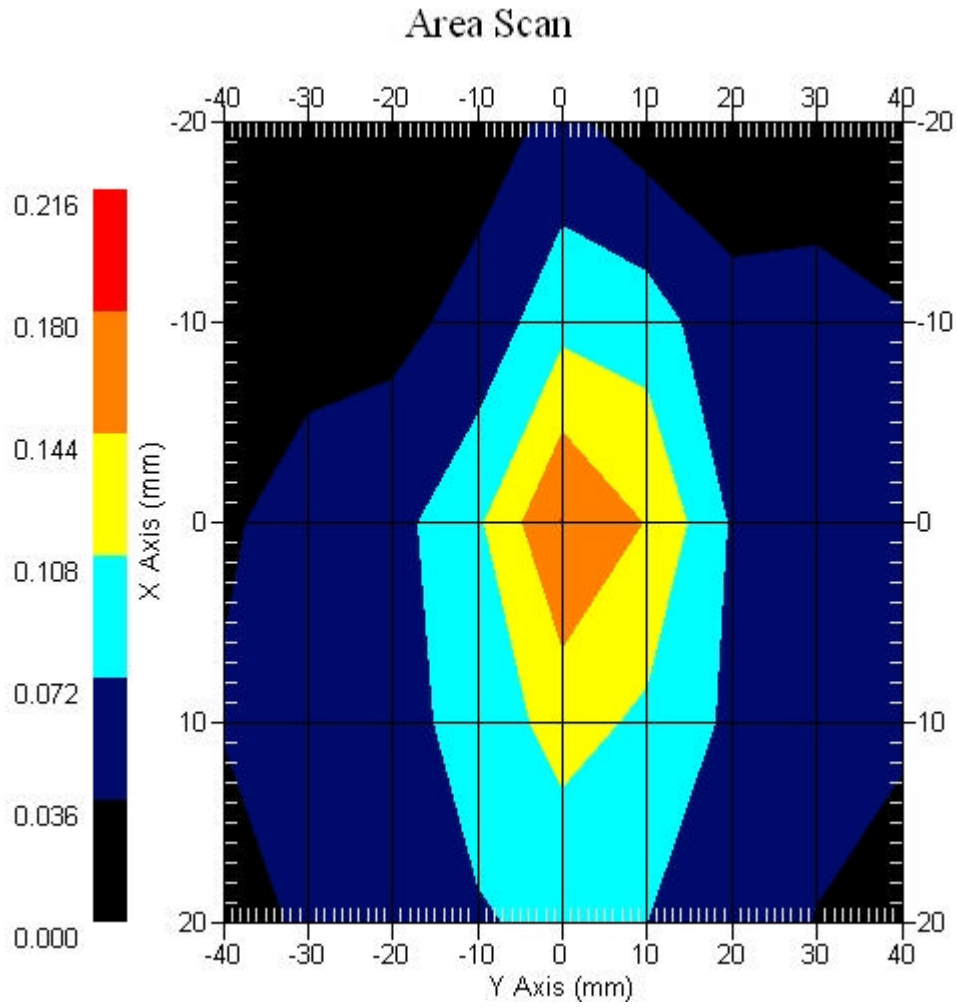
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid - 2437MHz

Power Drift-Start : 0.073 W/kg
Power Drift-Finish: 0.071 W/kg
Power Drift (%) : -2.743



1 gram SAR value : 0.145 W/kg
10 gram SAR value : 0.077 W/kg
Area Scan Peak SAR : 0.181 W/kg
Zoom Scan Peak SAR : 0.260 W/kg

Area Scan Plot

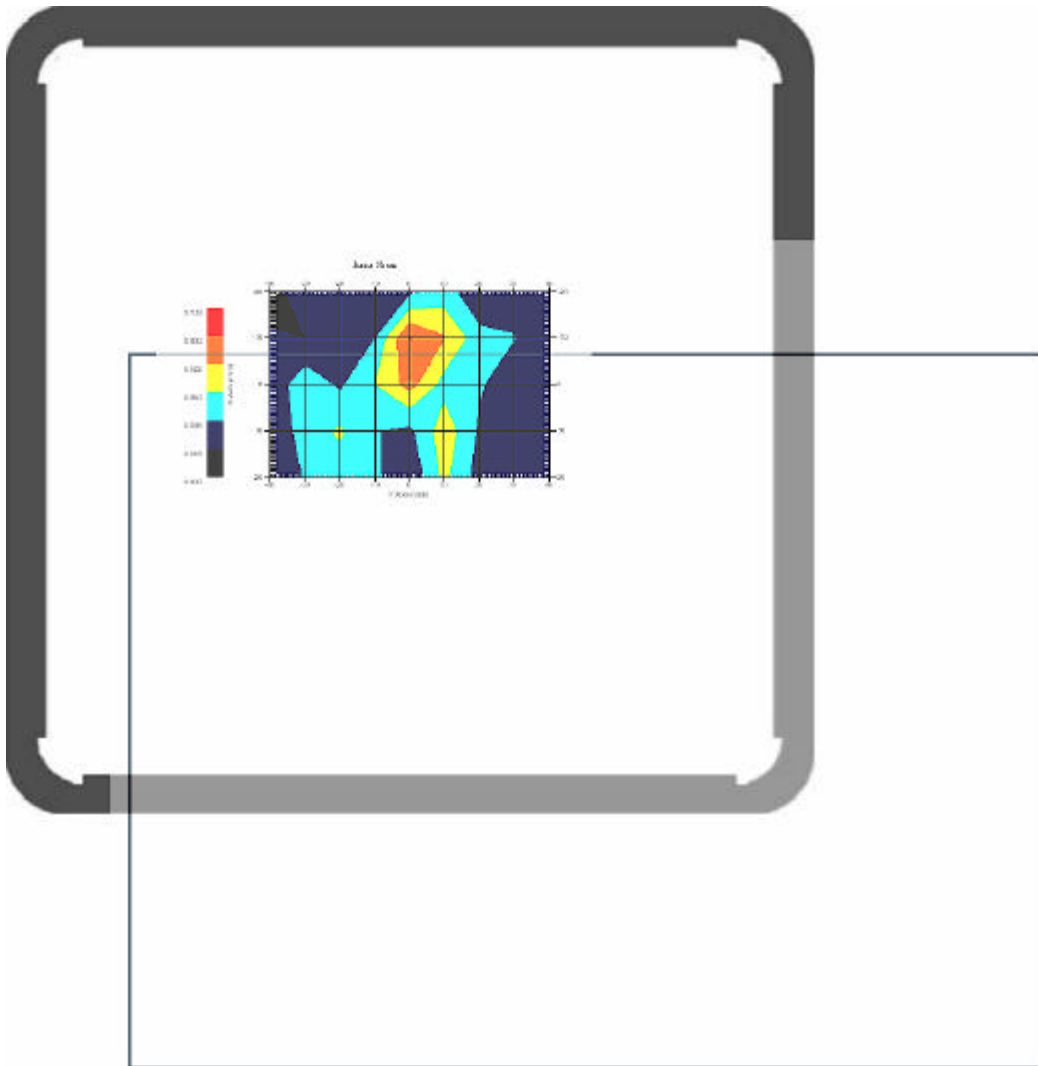


2.3 2450 MHz 802.11b Main Ant. , EUT Position: Back

Measurement Data

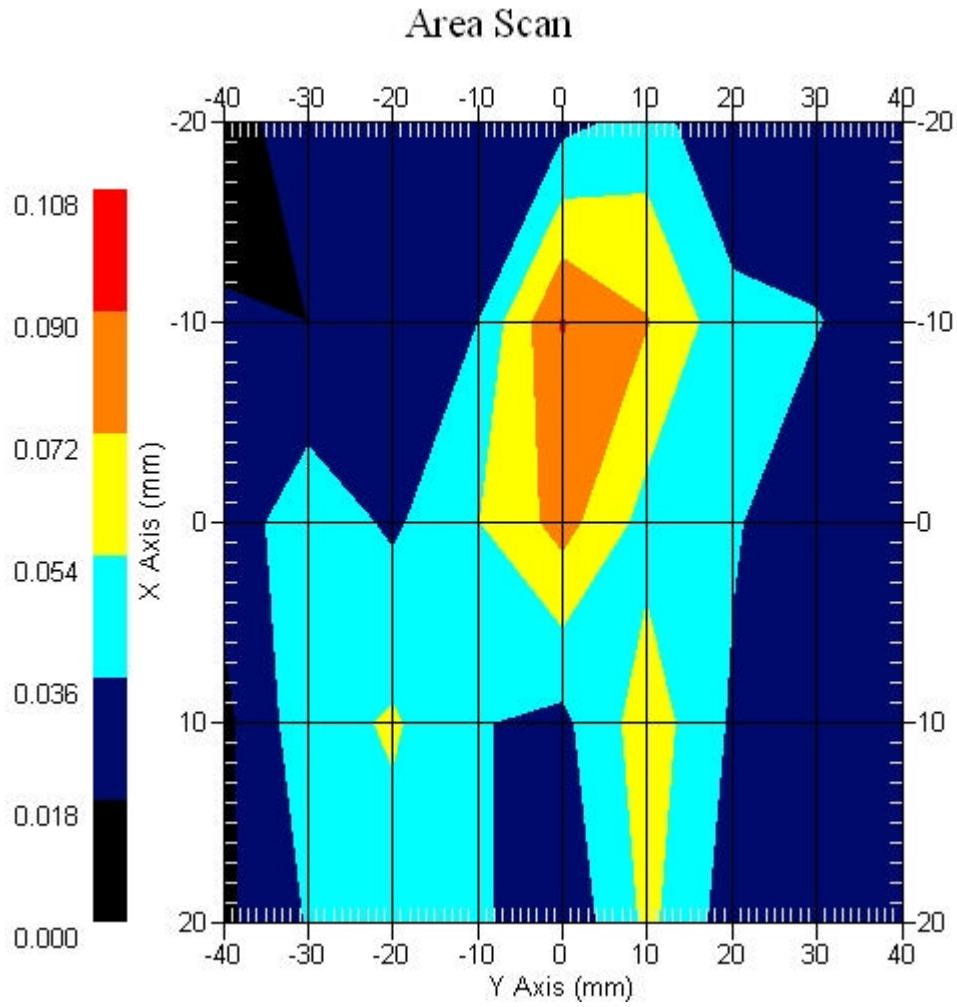
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : High - 2462MHz

Power Drift-Start : 0.074 W/kg
Power Drift-Finish: 0.074 W/kg
Power Drift (%) : -0.021



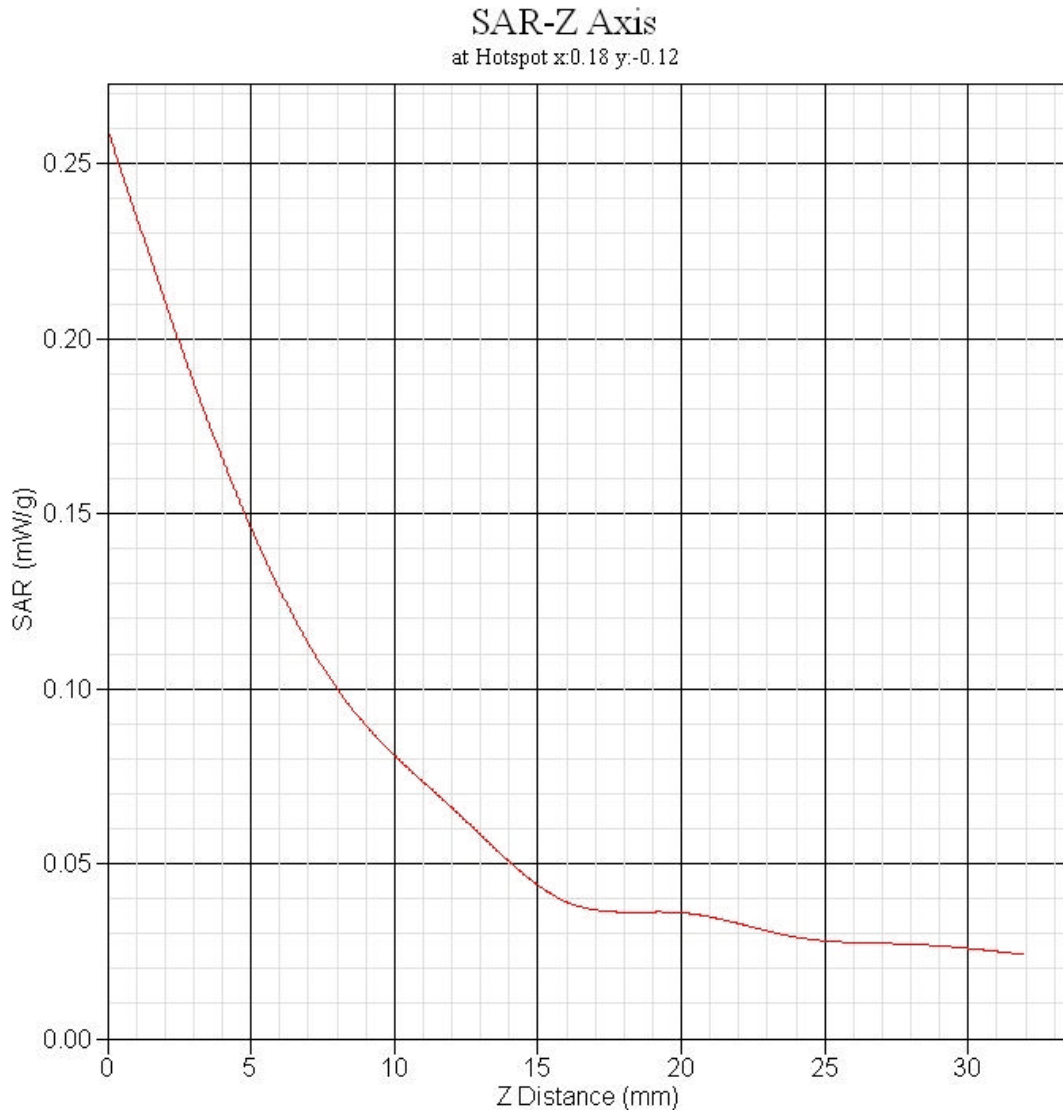
1 gram SAR value : 0.074 W/kg
10 gram SAR value : 0.034 W/kg
Area Scan Peak SAR : 0.079 W/kg
Zoom Scan Peak SAR : 0.141 W/kg

Area Scan Plot



2.4 Z-Axis plot

Frequency: 2450 MHz 802.11b Main Ant. , EUT Position: Back

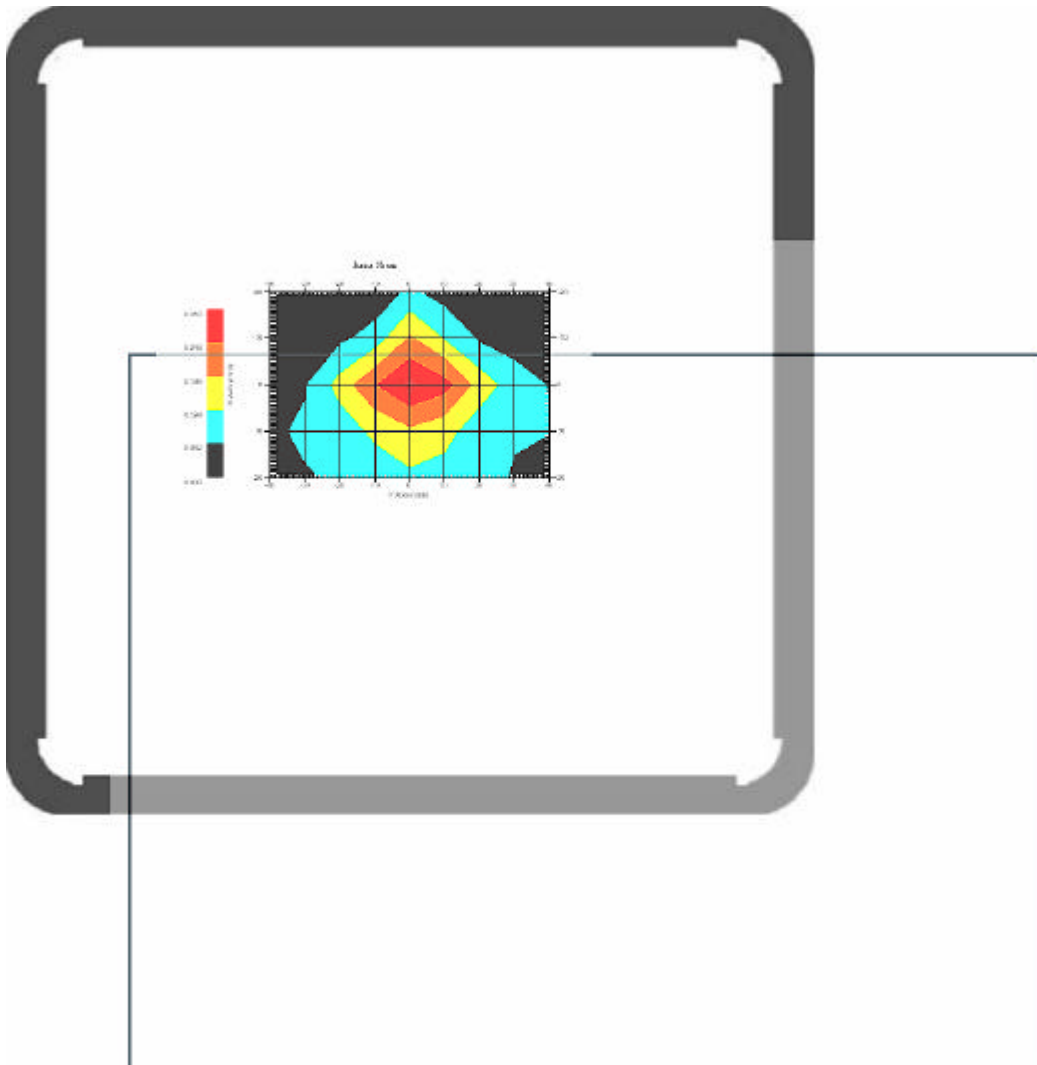


2.5 2450 MHz 802.11g Main Ant. , EUT Position: Back

Measurement Data

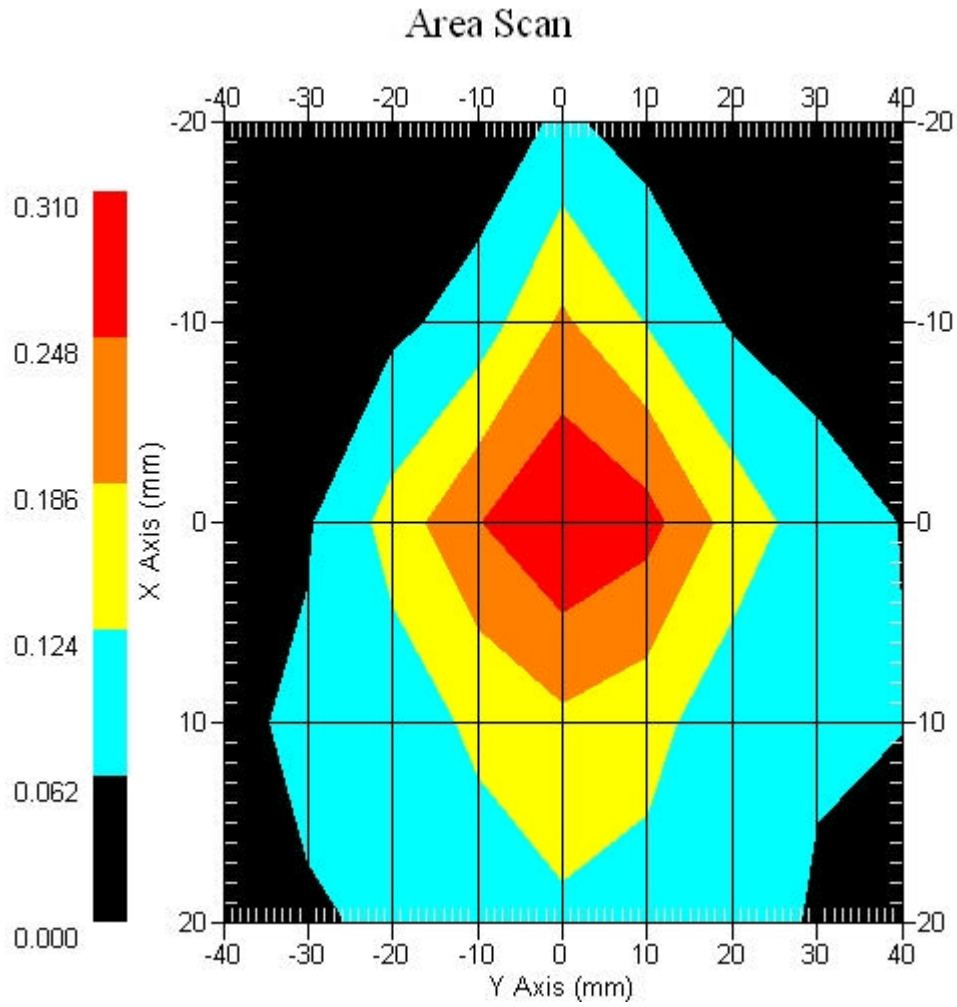
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Low - 2412MHz

Power Drift-Start : 0.127 W/kg
Power Drift-Finish: 0.129 W/kg
Power Drift (%) : 1.697



1 gram SAR value : 0.297 W/kg
10 gram SAR value : 0.133 W/kg
Area Scan Peak SAR : 0.310 W/kg
Zoom Scan Peak SAR : 0.540 W/kg

Area Scan Plot

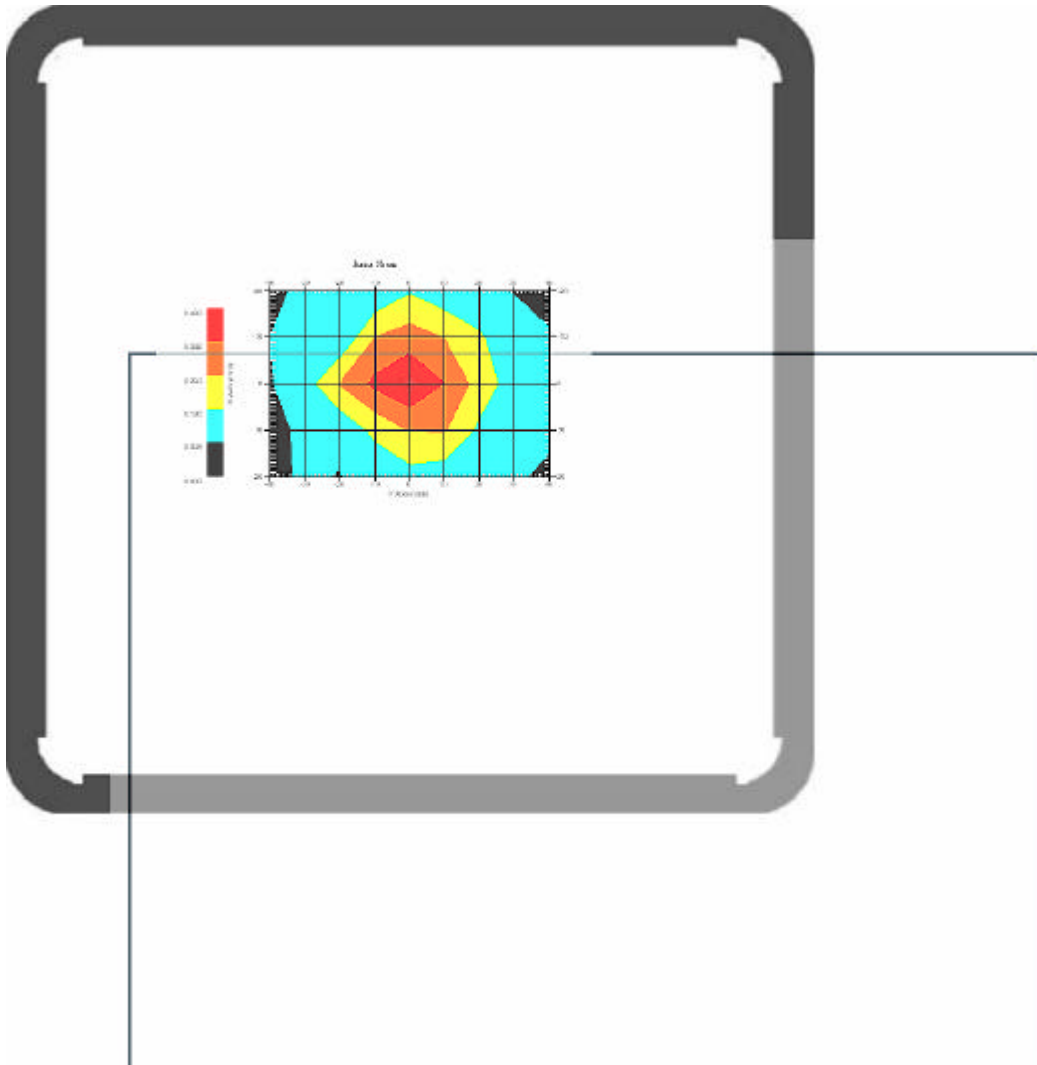


2.6 2450 MHz 802.11g Main Ant. , EUT Position: Back

Measurement Data

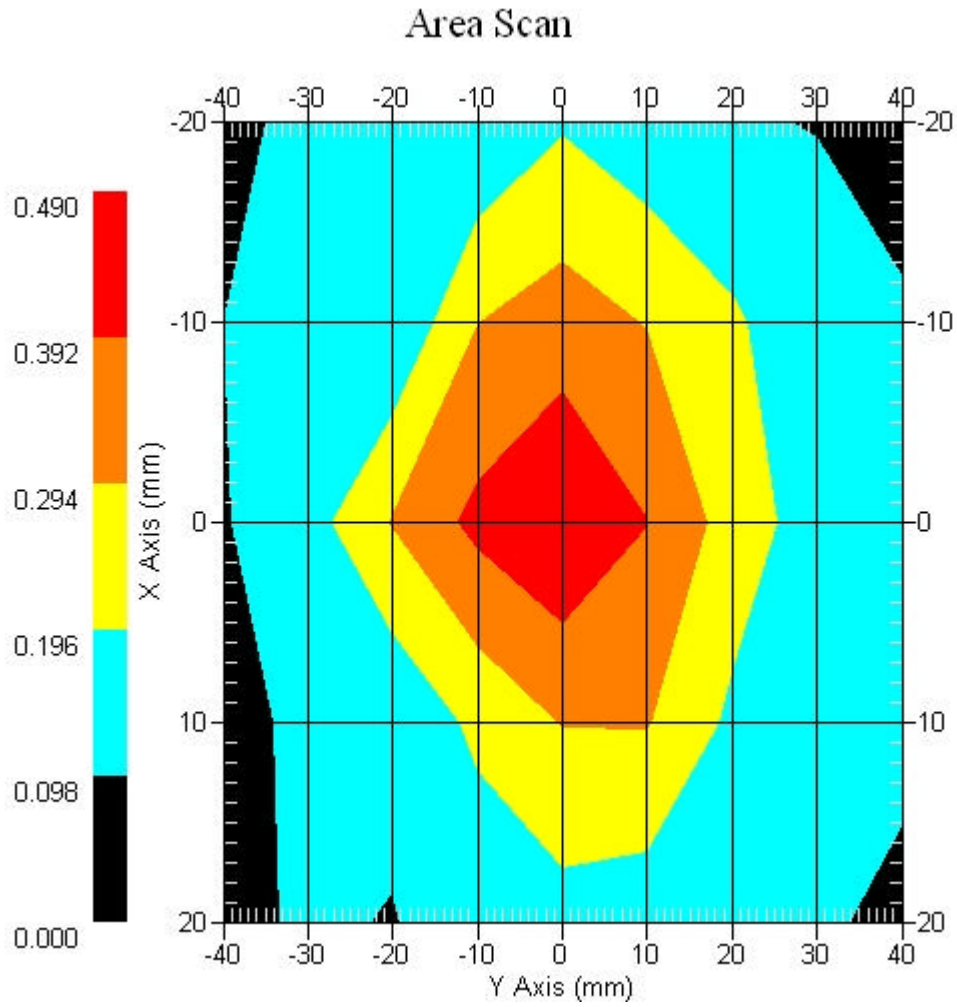
Crest Factor : 1
Set-up Date : 24-Apr-2007
Area Scan : 5x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
DUT Position : Touch
Channel : Mid - 2437MHz

Power Drift-Start : 0.344 W/kg
Power Drift-Finish: 0.347 W/kg
Power Drift (%) : -0.834



1 gram SAR value : 0.471 W/kg
10 gram SAR value : 0.228 W/kg
Area Scan Peak SAR : 0.489 W/kg
Zoom Scan Peak SAR : 0.896 W/kg

Area Scan Plot

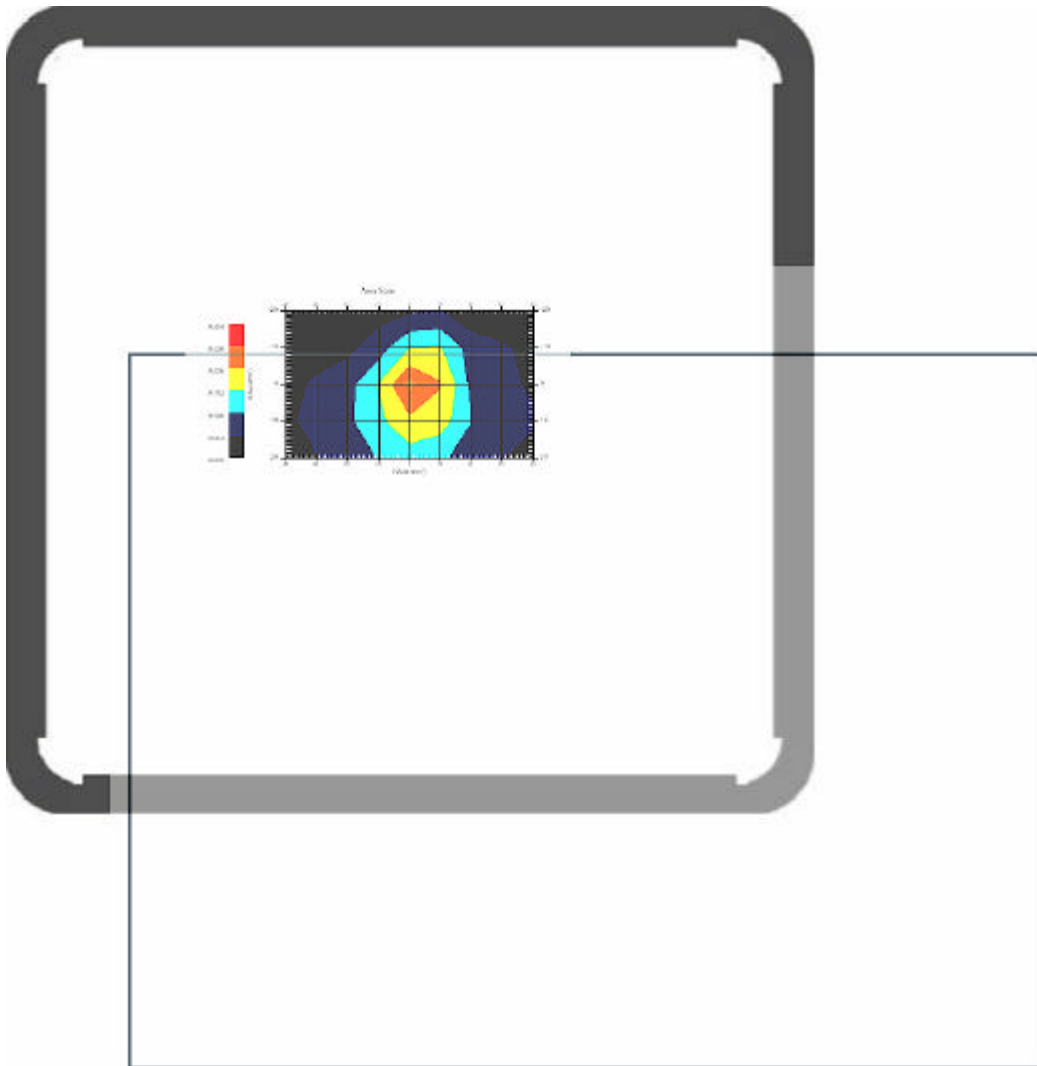


2.7 2450 MHz 802.11g Main Ant. , EUT Position: Back

Measurement Data

Crest Factor : 1
Set-up Date : 24-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 : High - 2462MHz

Power Drift-Start : 0.105 W/kg
Power Drift-Finish: 0.103 W/kg
Power Drift (%) : -1.911



1 gram SAR value : 0.281 W/kg
10 gram SAR value : 0.144 W/kg
Area Scan Peak SAR : 0.321 W/kg
Zoom Scan Peak SAR : 0.540 W/kg