Appendix D

SAR Measurement Data

of

Product Name

802.11n 1x1 PCIe Minicard transceiver

Model

AR5B95

1. 802.11b 2450MHz SAR measurement Data

SAR Test Report

Report Date : 03-May-2010
Measurement Date : 03-May-2010

Product Data
Device Name : AR5B95
Serial No. : Bottom
Type : Other
Model : 802.11b
Frequency : 2462.00 MHz
Max. Transmit Pwr : 21.13 dBm
Drift Time : 0 min(s)
Length : 259 mm
Width : 187 mm
Depth : 290 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.0135 W/kg
Power Drift-Finish: 0.0130 W/kg
Power Drift (%) : 3.846
Picture :

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

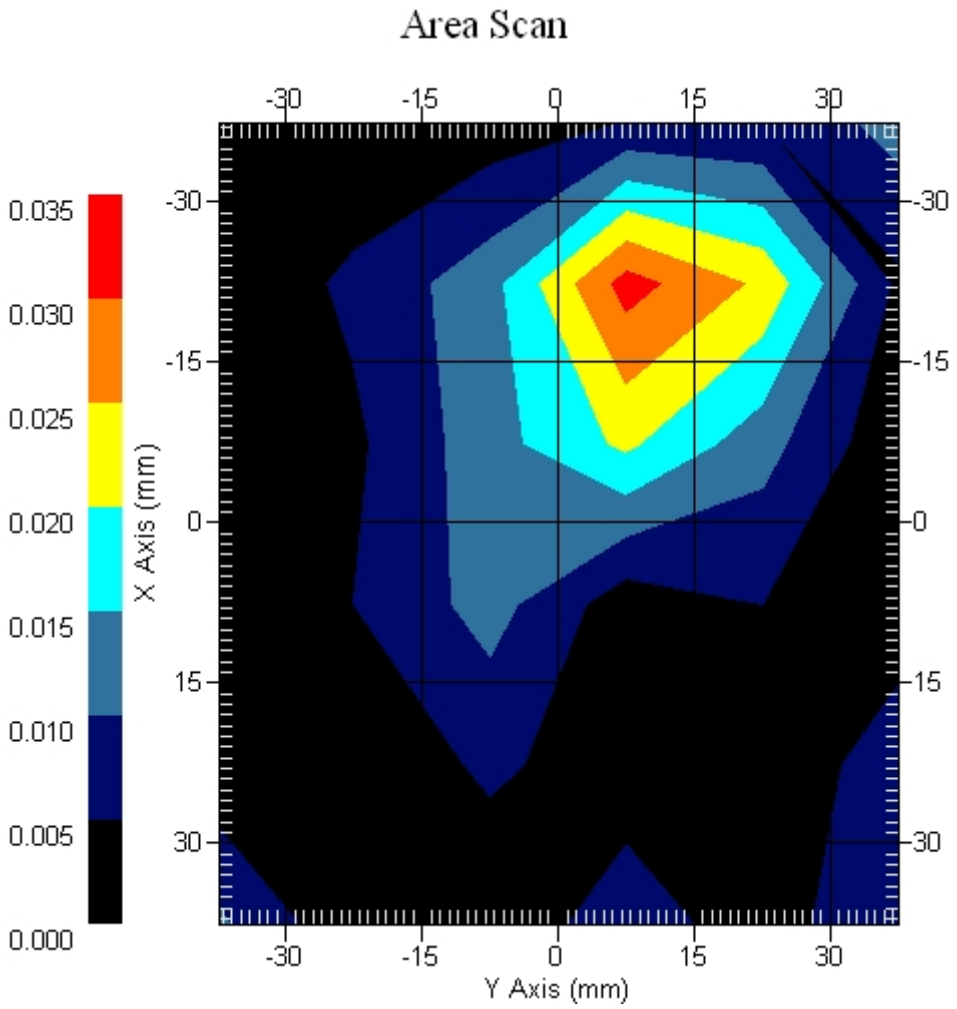
Tissue Data
Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 03-May-2010
Temperature : 22.50 °C
Ambient Temp. : 23.00 °C
Humidity : 60.00 RH%
Epsilon : 52.19 F/m
Sigma : 2.01 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 26-Apr-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

1.1 802.11b 2450MHz, EUT Position:

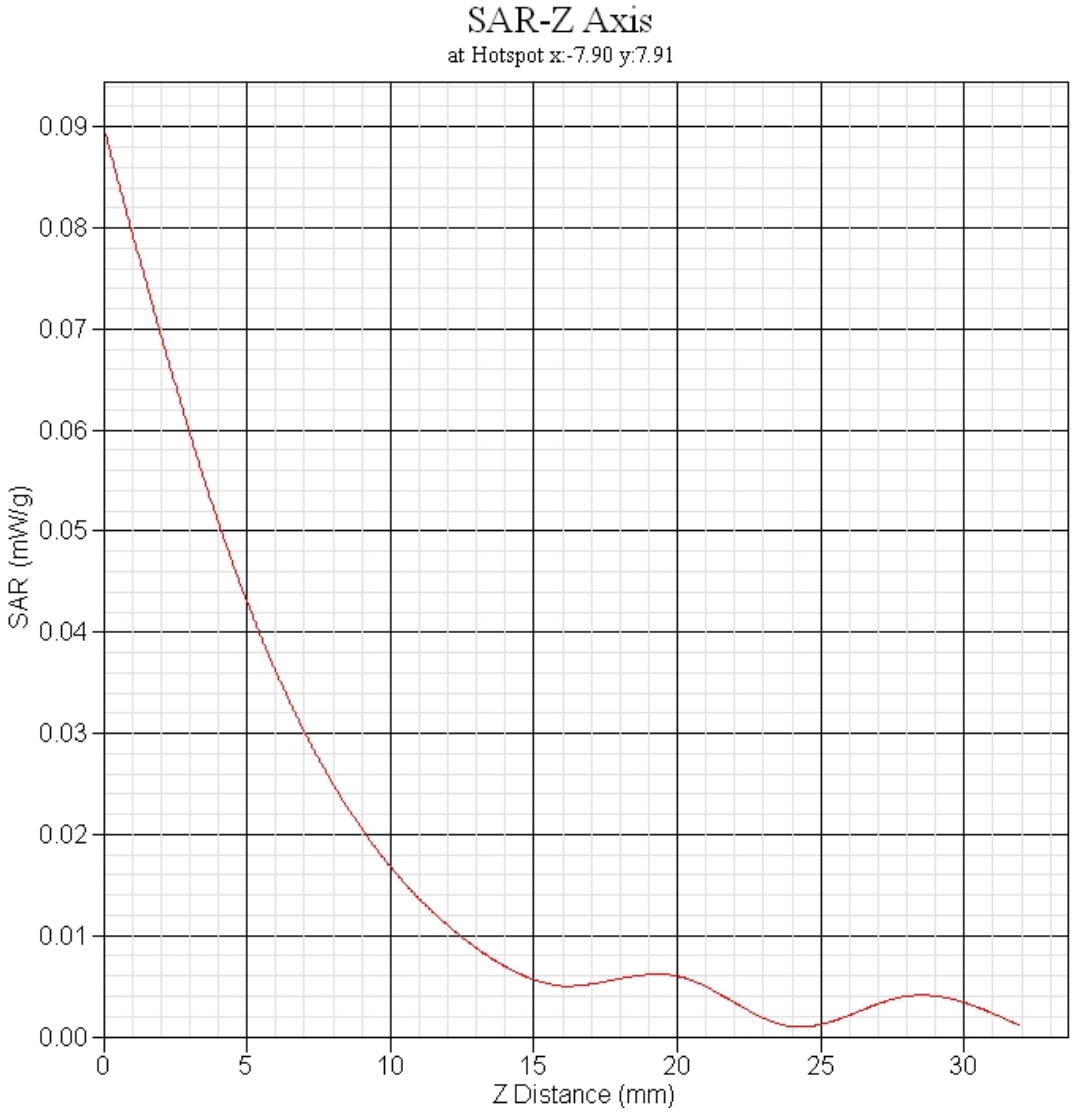
```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Set-up Date       : 03-May-2010
Area Scan         : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Separation        : 0
```

Area Scan Plot




```
1 gram SAR value    : 0.042 W/kg
10 gram SAR value   : 0.014 W/kg
Area Scan Peak SAR  : 0.032 W/kg
Zoom Scan Peak SAR  : 0.170 W/kg
```

1.2 802.11b 2450MHz Z-Axis plot



2. 802.11g 2450MHz SAR measurement Data

SAR Test Report

Report Date : 03-May-2010
Measurement Date : 03-May-2010

Product Data
Device Name : AR5B95
Serial No. : Bottom
Type : Other
Model : 802.11g
Frequency : 2437.00 MHz
Max. Transmit Pwr : 25.22 dBm
Drift Time : 0 min(s)
Length : 259 mm
Width : 187 mm
Depth : 290 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.0156 W/kg
Power Drift-Finish: 0.0150 W/kg
Power Drift (%) : 4.105
Picture :

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

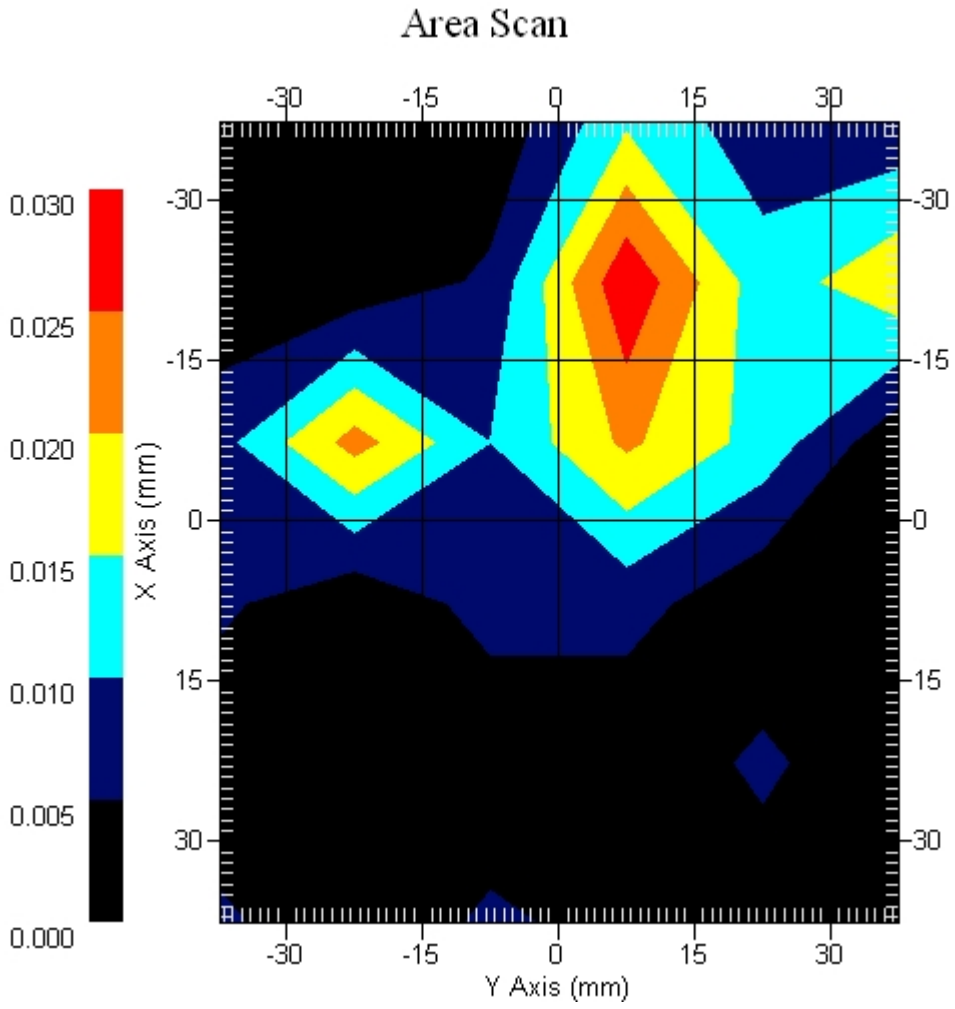
Tissue Data
Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 03-May-2010
Temperature : 22.50 °C
Ambient Temp. : 23.00 °C
Humidity : 60.00 RH%
Epsilon : 52.19 F/m
Sigma : 2.01 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 26-Apr-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

2.1 802.11g 2450MHz, EUT Position:

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 22.50 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-May-2010
Area Scan         : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Separation        : 0
```

Area Scan Plot




```
1 gram SAR value    : 0.022 W/kg
10 gram SAR value   : 0.014 W/kg
Area Scan Peak SAR  : 0.029 W/kg
Zoom Scan Peak SAR  : 0.080 W/kg
```

3. 802.11n HT20 2450MHz SAR measurement Data

SAR Test Report

Report Date : 03-May-2010
Measurement Date : 03-May-2010

Product Data
Device Name : AR5B95
Serial No. : Bottom
Type : Other
Model : 802.11n HT20
Frequency : 2437.00 MHz
Max. Transmit Pwr : 25.27 dBm
Drift Time : 0 min(s)
Length : 259 mm
Width : 187 mm
Depth : 290 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.0291 W/kg
Power Drift-Finish: 0.0280 W/kg
Power Drift (%) : 3.928
Picture :

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

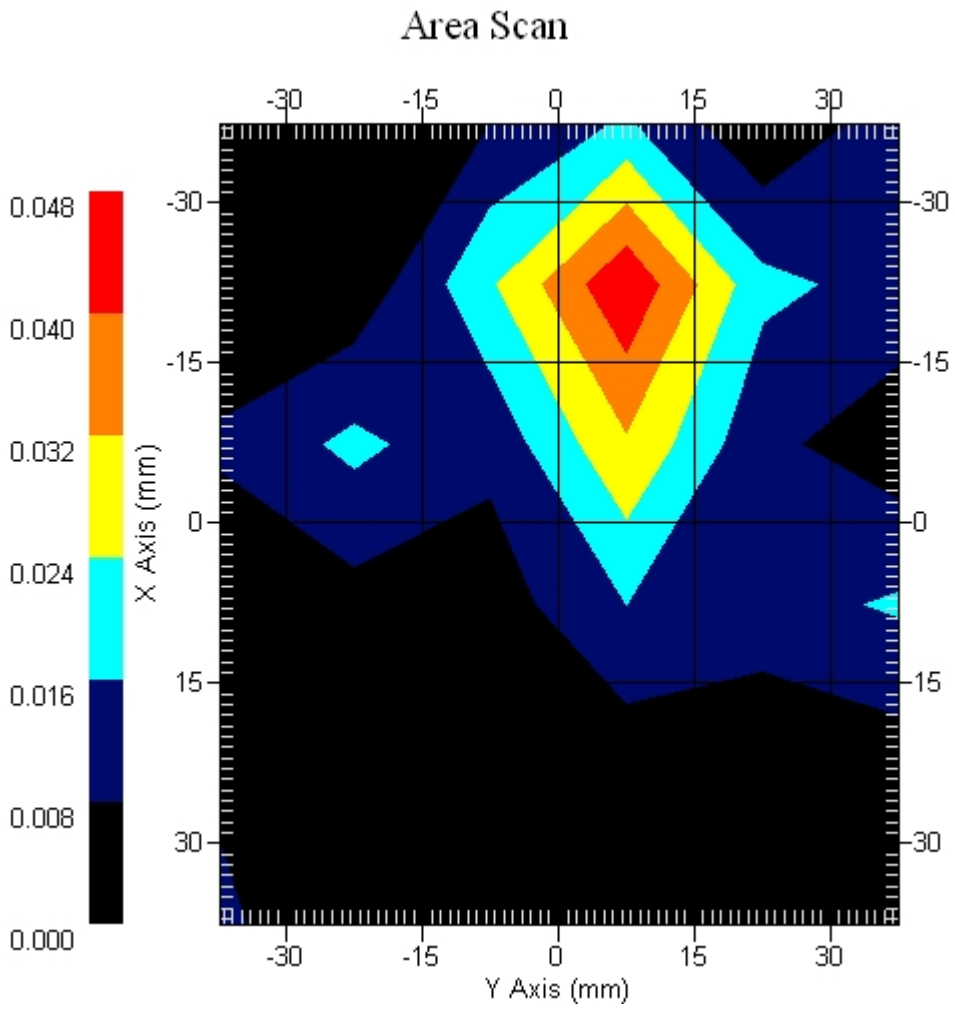
Tissue Data
Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 03-May-2010
Temperature : 22.50 °C
Ambient Temp. : 23.00 °C
Humidity : 60.00 RH%
Epsilon : 52.19 F/m
Sigma : 2.01 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 26-Apr-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

3.1 802.11n HT20 2450MHz, EUT Position:

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 22.50 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-May-2010
Area Scan         : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Separation        : 0
```

Area Scan Plot




```
1 gram SAR value    : 0.037 W/kg
10 gram SAR value   : 0.016 W/kg
Area Scan Peak SAR  : 0.047 W/kg
Zoom Scan Peak SAR  : 0.060 W/kg
```

4. 802.11n HT40 2450MHz SAR measurement Data

SAR Test Report

Report Date : 03-May-2010
Measurement Date : 03-May-2010

Product Data
Device Name : AR5B95
Serial No. : Bottom
Type : Other
Model : 802.11n HT40
Frequency : 2437.00 MHz
Max. Transmit Pwr : 21.94 dBm
Drift Time : 0 min(s)
Length : 259 mm
Width : 187 mm
Depth : 290 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.0136 W/kg
Power Drift-Finish: 0.0130 W/kg
Power Drift (%) : 4.615
Picture :

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

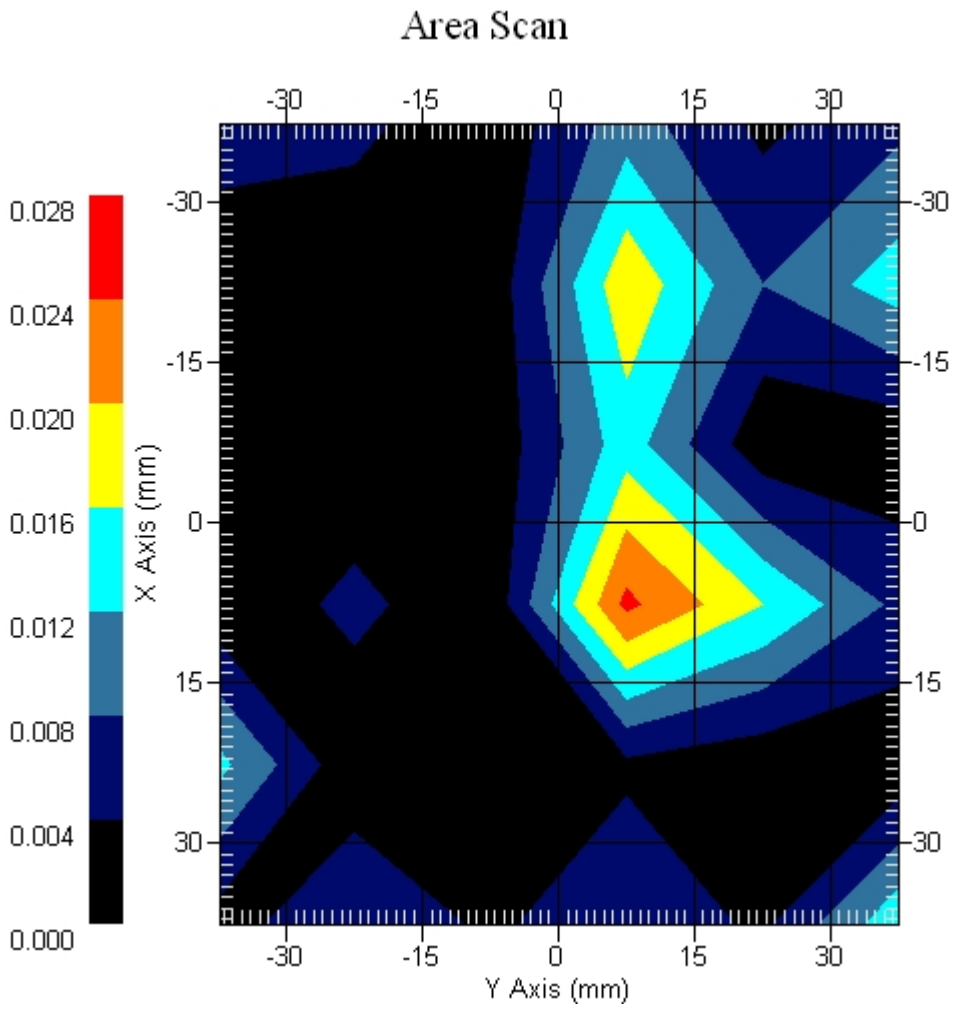
Tissue Data
Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 03-May-2010
Temperature : 22.50 °C
Ambient Temp. : 23.00 °C
Humidity : 60.00 RH%
Epsilon : 52.19 F/m
Sigma : 2.01 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 26-Apr-2010
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

4.1 802.11n HT40 2450MHz, EUT Position:

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 22.50 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 03-May-2010
Area Scan         : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Separation        : 0
```

Area Scan Plot




```
1 gram SAR value    : 0.026 W/kg
10 gram SAR value   : 0.011 W/kg
Area Scan Peak SAR  : 0.025 W/kg
Zoom Scan Peak SAR  : 0.070 W/kg
```