Appendix D: SAR Measurement Data

WLAN

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
1	2.4G	802.11b	Bottom	0	1	0.007
2	2.4G	802.11b	Bottom	0	6	**0.008**
3	2.4G	802.11b	Bottom	0	11	0.001
4	2.4G	802.11n20	Bottom	0	1	0.001
5	2.4G	802.11n20	Bottom	0	6	0.001
6	2.4G	802.11n20	Bottom	0	11	0.001
7	2.4G	BT LE	Bottom	0	39	0.001

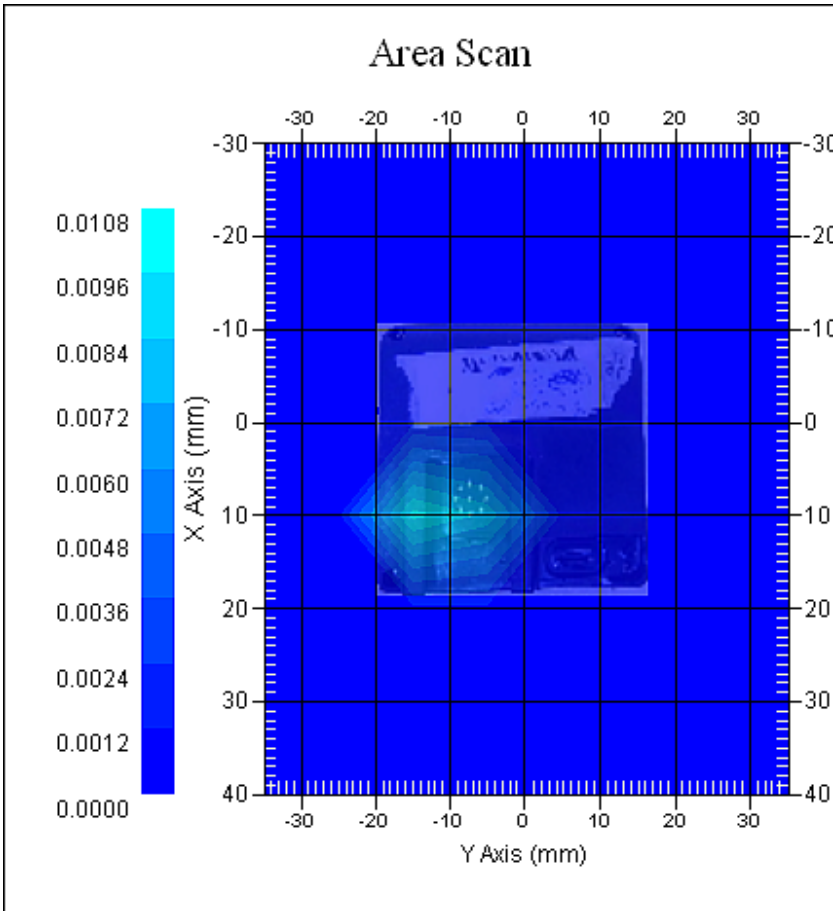
Data No. 1:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  08:24:53 AM
End Time           : 05-Dec-2013  08:45:04 AM
Scanning Time      : 1211 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                          : BODY
Serial No.                    : 2450B
Frequency                     : 2450.00 MHz
Last Calib. Date              : 05-Dec-2013
Temperature                   : 20.30 °C
Ambient Temp.                 : 20.30 °C
Humidity                      : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                         : 1.96 S/m
Density                       : 1000.00 kg/cu. m
```

Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : Low




```
The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 10.090, Y = -7.000
1 gram SAR value    : 0.007 W/kg
10 gram SAR value   : 0.002 W/kg
Area Scan Peak SAR : 0.010 W/kg
Zoom Scan Peak SAR : 0.020 W/kg


Maxima Summary:
Maxima #1
Maxima coordinates: X = 10.090, Y = -7.000
1 gram SAR value    : 0.007 W/kg
10 gram SAR value   : 0.002 W/kg
Area Scan Peak SAR : 0.010 W/kg
Zoom Scan Peak SAR : 0.020 W/kg
```

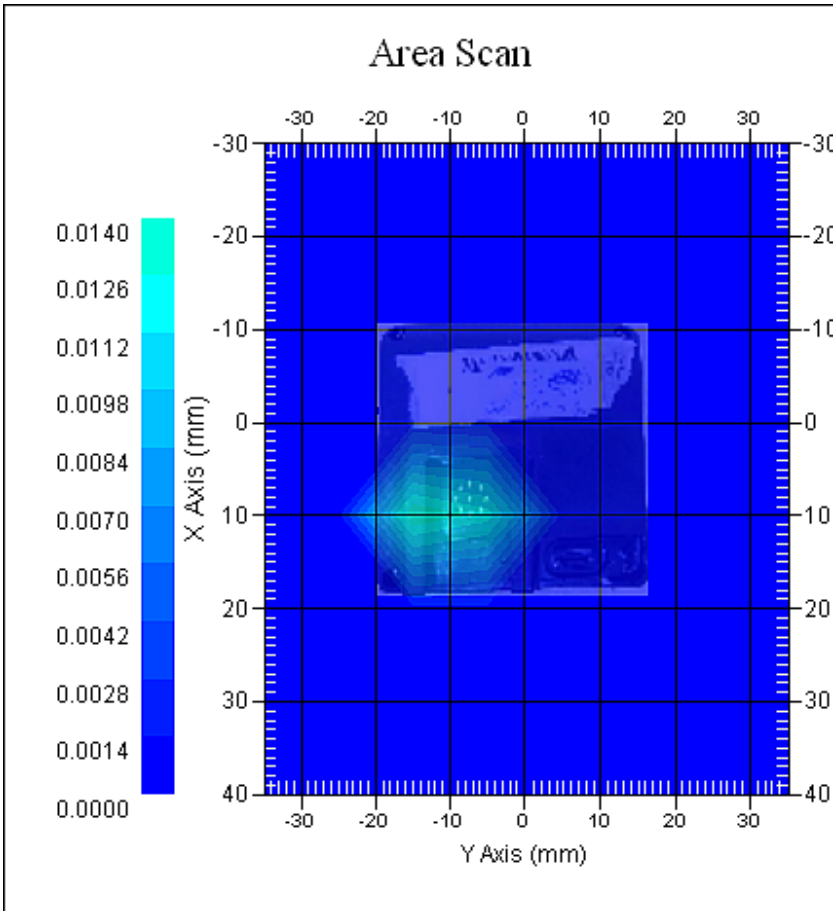
Data No. 2:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  10:12:18 AM
End Time           : 05-Dec-2013  10:32:33 AM
Scanning Time      : 1215 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                           : BODY
Serial No.                     : 2450B
Frequency                      : 2450.00 MHz
Last Calib. Date               : 05-Dec-2013
Temperature                    : 20.30 °C
Ambient Temp.                  : 20.30 °C
Humidity                       : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                          : 1.96 S/m
Density                        : 1000.00 kg/cu. m
```

Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : Mid




```
The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 10.120, Y = -7.000
1 gram SAR value    : 0.008 W/kg
10 gram SAR value   : 0.003 W/kg
Area Scan Peak SAR : 0.014 W/kg
Zoom Scan Peak SAR : 0.030 W/kg


Maxima Summary:
Maxima #1
Maxima coordinates: X = 10.120, Y = -7.000
1 gram SAR value    : 0.008 W/kg
10 gram SAR value   : 0.003 W/kg
Area Scan Peak SAR : 0.014 W/kg
Zoom Scan Peak SAR : 0.030 W/kg
```

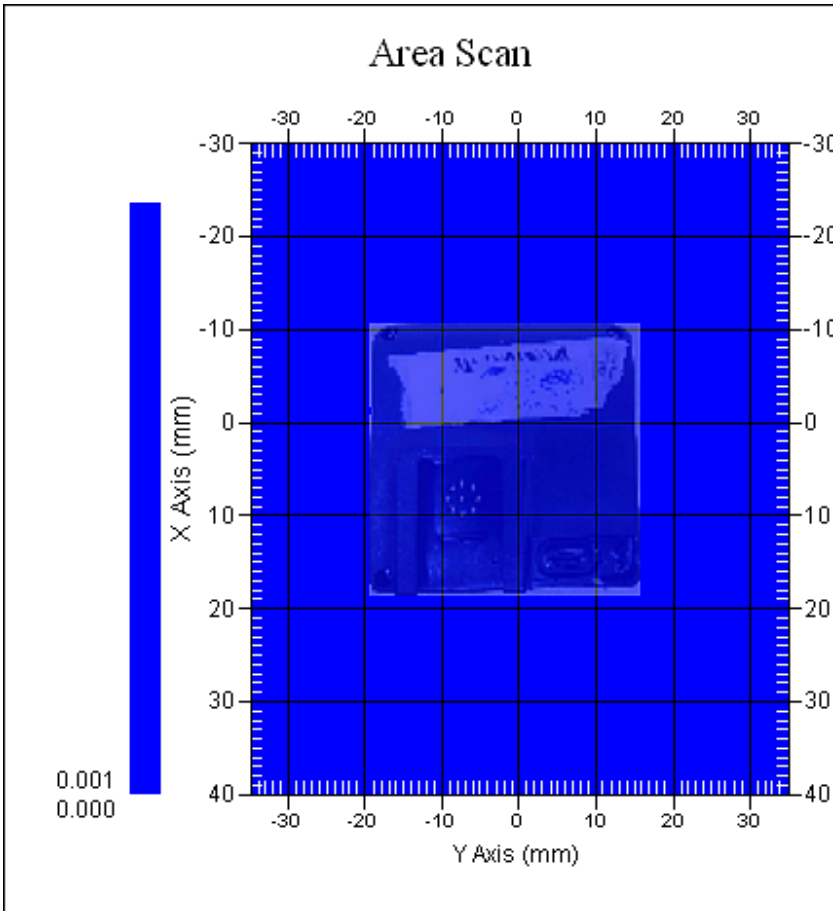
Data No. 3:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  09:49:15 AM
End Time           : 05-Dec-2013  10:09:42 AM
Scanning Time      : 1227 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                           : BODY
Serial No.                     : 2450B
Frequency                      : 2450.00 MHz
Last Calib. Date               : 05-Dec-2013
Temperature                    : 20.30 °C
Ambient Temp.                  : 20.30 °C
Humidity                       : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                          : 1.96 S/m
Density                        : 1000.00 kg/cu. m
```

Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : High




```
The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 23.120, Y = 17.900
1 gram SAR value    : 0.001 W/kg
10 gram SAR value   : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg


Maxima Summary:
Maxima #1
Maxima coordinates: X = 23.120, Y = 17.900
1 gram SAR value    : 0.001 W/kg
10 gram SAR value   : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg
```

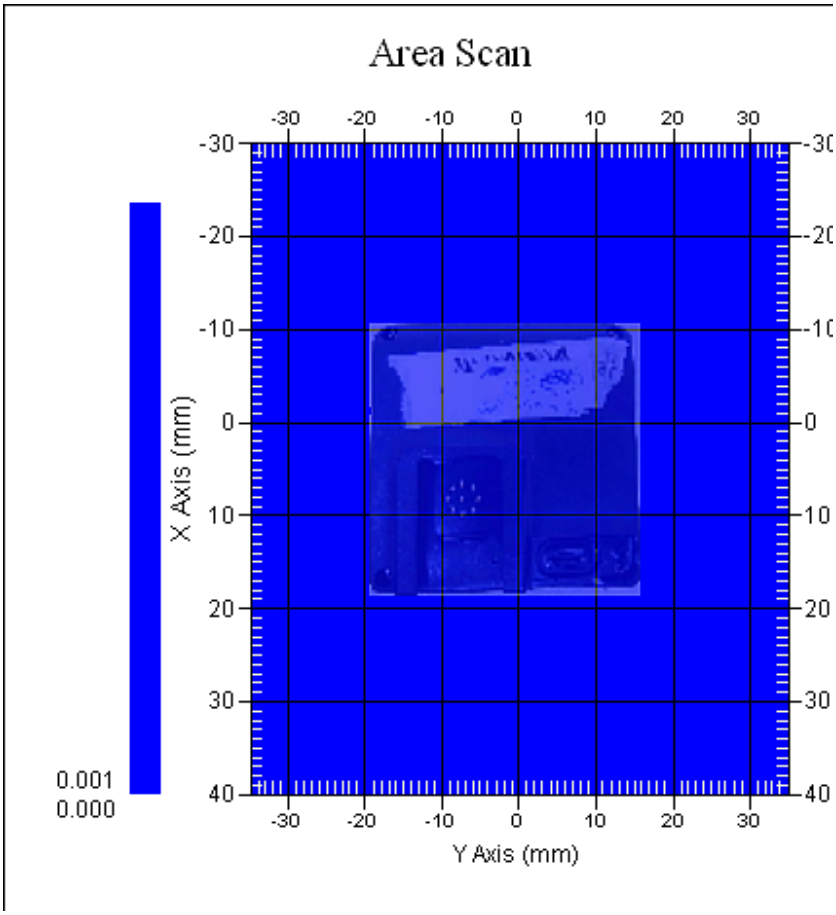
Data No. 4:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  11:11:07 AM
End Time           : 05-Dec-2013  11:31:31 AM
Scanning Time      : 1224 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                          : BODY
Serial No.                    : 2450B
Frequency                     : 2450.00 MHz
Last Calib. Date              : 05-Dec-2013
Temperature                   : 20.30 °C
Ambient Temp.                 : 20.30 °C
Humidity                      : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                         : 1.96 S/m
Density                       : 1000.00 kg/cu. m
```

Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : Low




```
The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 23.090, Y = 17.900
1 gram SAR value    : 0.001 W/kg
10 gram SAR value   : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg


Maxima Summary:
Maxima #1
Maxima coordinates: X = 23.090, Y = 17.900
1 gram SAR value    : 0.001 W/kg
10 gram SAR value   : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg
```

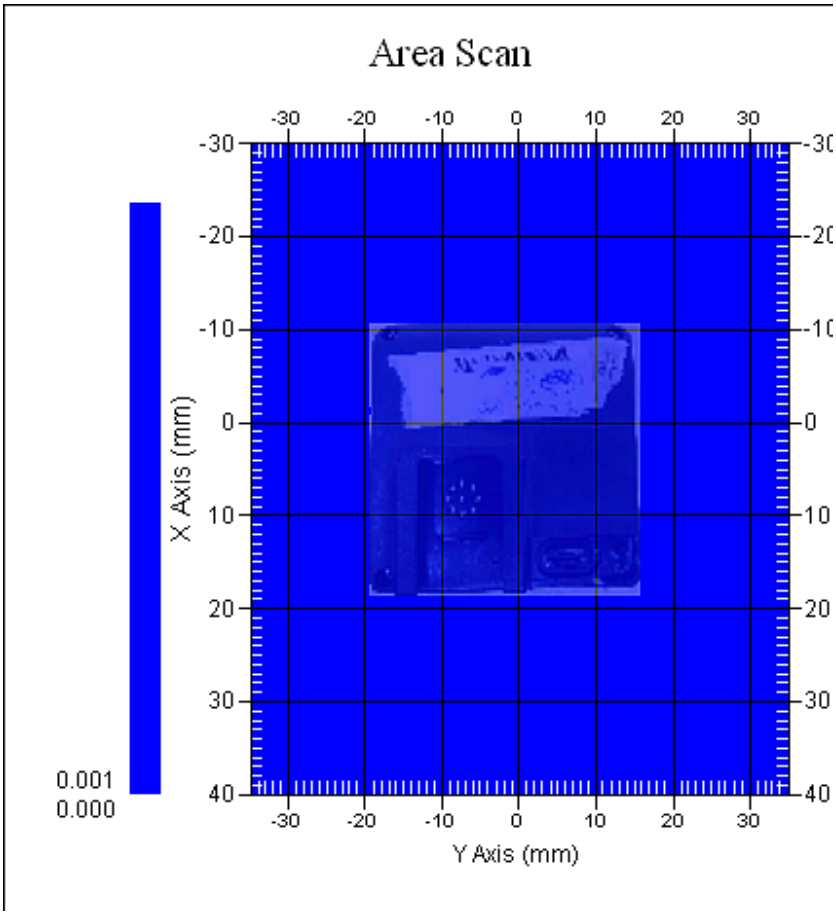
Data No. 5:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  12:02:09 PM
End Time           : 05-Dec-2013  12:22:28 PM
Scanning Time      : 1219 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                           : BODY
Serial No.                     : 2450B
Frequency                      : 2450.00 MHz
Last Calib. Date               : 05-Dec-2013
Temperature                    : 20.30 °C
Ambient Temp.                  : 20.30 °C
Humidity                       : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                          : 1.96 S/m
Density                        : 1000.00 kg/cu. m
```

Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 23.140, Y = 17.900
1 gram SAR value : 0.001 W/kg
10 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 23.140, Y = 17.900
1 gram SAR value : 0.001 W/kg
10 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

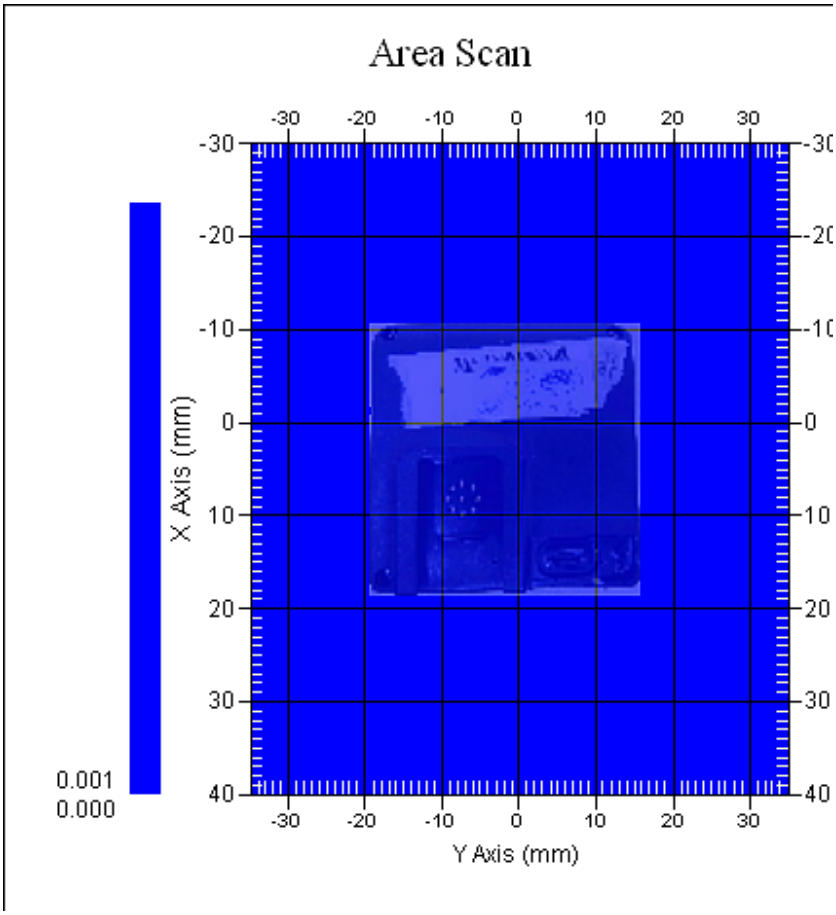
Data No. 6:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  12:25:56 PM
End Time           : 05-Dec-2013  12:46:22 PM
Scanning Time      : 1226 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                           : BODY
Serial No.                     : 2450B
Frequency                      : 2450.00 MHz
Last Calib. Date               : 05-Dec-2013
Temperature                    : 20.30 °C
Ambient Temp.                  : 20.30 °C
Humidity                       : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                          : 1.96 S/m
Density                        : 1000.00 kg/cu. m
```

Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 23.090, Y = 17.900
1 gram SAR value : 0.001 W/kg
10 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 23.090, Y = 17.900
1 gram SAR value : 0.001 W/kg
10 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

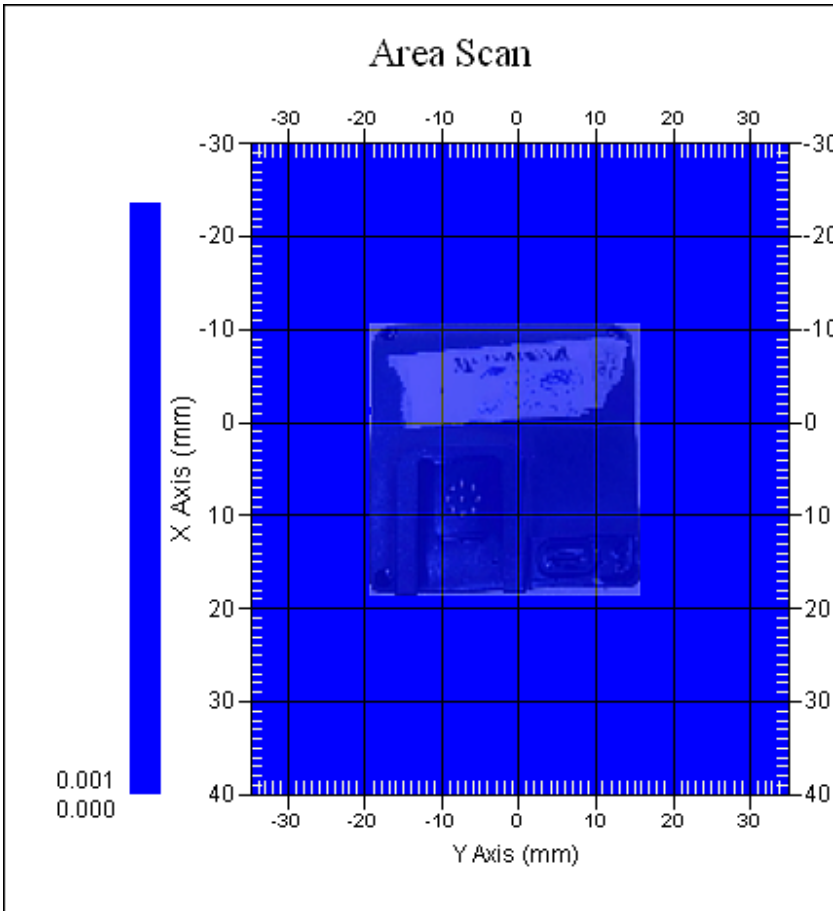
Data No. 7:

```
Report Date        : 05-Dec-2013
By Operator        : 123
Measurement Date   : 05-Dec-2013
Starting Time      : 05-Dec-2013  11:32:41 AM
End Time           : 05-Dec-2013  11:53:07 AM
Scanning Time      : 1226 secs
Product Data
Device Name        : 13LR243
Serial No.         : NA
Type               : Other
Model              : SGX-CA500
Frequency          : 2450.00 MHz
Max. Transmit Pwr  : 0.25 W
Drift Time         : 1 min(s)
Length             : 55 mm
Width              : 55 mm
Depth              : 2.5 mm
Antenna Type       : Internal
Orientation        : Touch
Power Drift-Start  : 0.001 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%)    : 0.000
Picture            : C:\alsas\bitmap\Device-3.bmp

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

Tissue Data
Type                          : BODY
Serial No.                    : 2450B
Frequency                     : 2450.00 MHz
Last Calib. Date              : 05-Dec-2013
Temperature                   : 20.30 °C
Ambient Temp.                 : 20.30 °C
Humidity                      : 61.00 RH%
Epsilon (Dielectric Constant): 53.57
Sigma                         : 1.96 S/m
Density                       : 1000.00 kg/cu. m
```

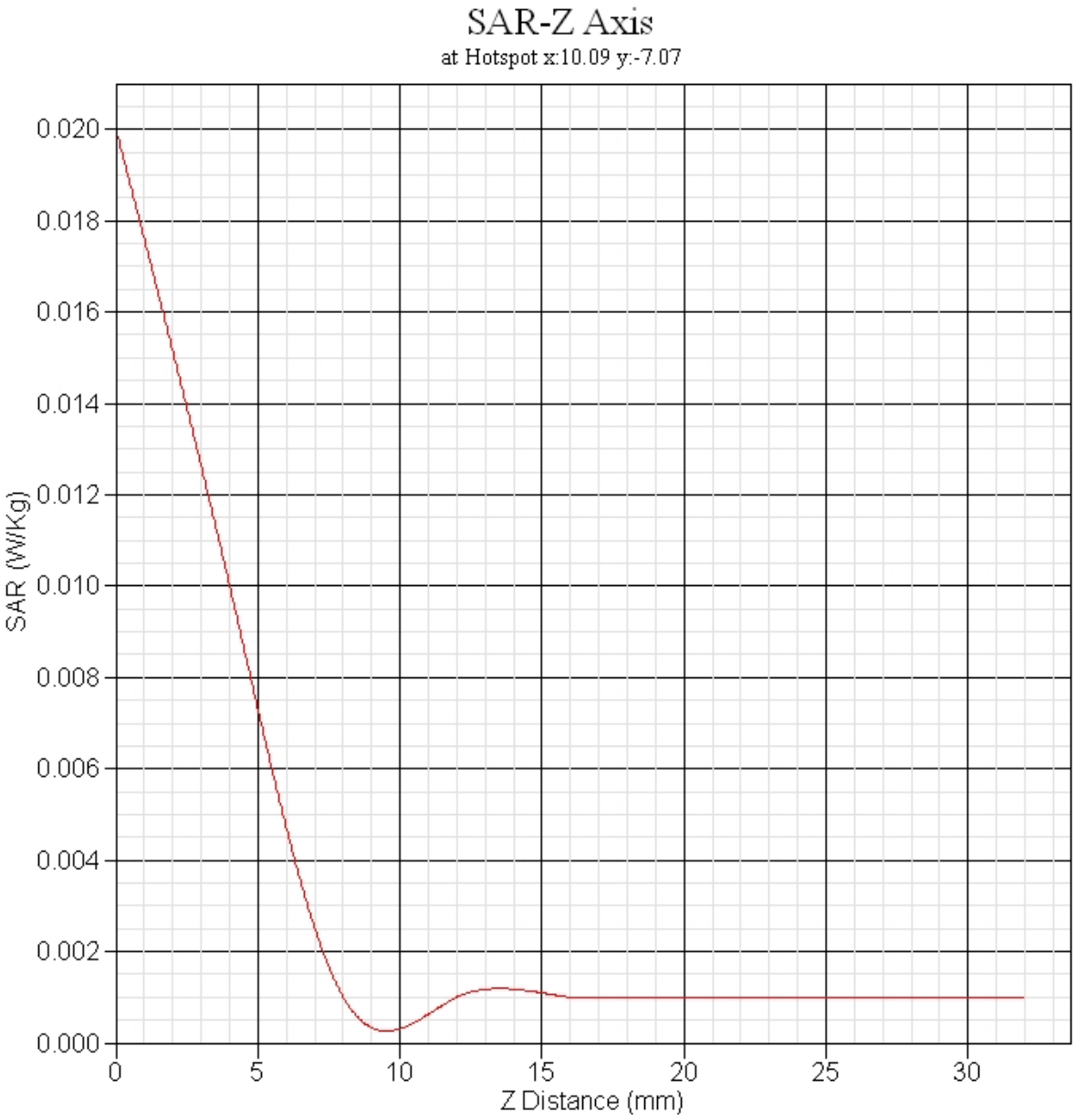
Probe Data
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 08-Oct-2013
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 9.50 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.30 °C
Ambient Temp. : 20.30 °C
Set-up Date : 05-Dec-2013
Set-up Time : 8:10:24 AM
Area Scan : 8x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position : Touch
Separation : 0
Channel : Mid




```
The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 23.090, Y = 17.900
1 gram SAR value    : 0.001 W/kg
10 gram SAR value   : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg


Maxima Summary:
Maxima #1
Maxima coordinates: X = 23.090, Y = 17.900
1 gram SAR value    : 0.001 W/kg
10 gram SAR value   : 0.001 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.000 W/kg
```


SAR-Z Axis
at Hotspot x:10.09 y:-7.07
SAR (W/Kg)
0.020
0.018
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
0
5
10
15
20
25
30
Z Distance (mm)