

Appendix D: SAR Measurement Data

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
1	Wifi	802.11b	EUT of Front	0.5	6	0.2
2	Wifi	802.11b	EUT of Top	0.5	6	1.363
3	Wifi	802.11b	EUT of Left	0.5	6	0.8
4	Wifi	802.11b	EUT of Right	0.5	6	0.609
5	Wifi	802.11b	Notebook Mode	0.5	6	0.583
6	Wifi	802.11b	EUT of Top	0.5	1	1.228
7	Wifi	802.11b	EUT of Top	0.5	11	0.998
8	Wifi	802.11n 20	EUT of Top	0.5	6	0.397
9	Wifi	802.11n 40	EUT of Top	0.5	6	0.349

Data No. 1:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 12:15:05 PM
End Time : 30-Oct-2012 12:27:14 PM
Scanning Time : 729 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 7 mm
Width : 15 mm
Depth : 19 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.259 W/kg
Power Drift-Finish: 0.257 W/kg
Power Drift (%) : -0.899
Picture : C:\alsas\bitmap\Device-top.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

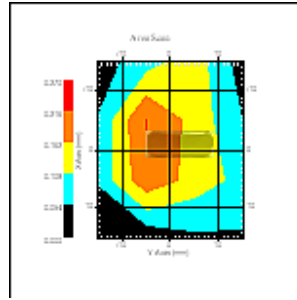
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 0.200 W/kg
10 gram SAR value : 0.064 W/kg
Area Scan Peak SAR : 0.218 W/kg
Zoom Scan Peak SAR : 0.550 W/kg



Data No. 2:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 01:53:44 PM
End Time : 30-Oct-2012 02:05:49 PM
Scanning Time : 725 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 19 mm
Depth : 7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 1.432 W/kg
Power Drift-Finish: 1.378 W/kg
Power Drift (%) : -3.787
Picture : C:\alsas\bitmap\Device-4.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

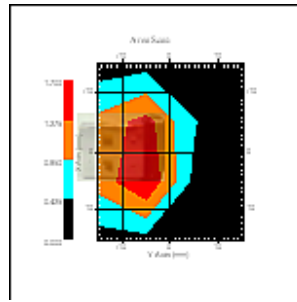
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 1.363 W/kg
10 gram SAR value : 0.499 W/kg
Area Scan Peak SAR : 1.700 W/kg
Zoom Scan Peak SAR : 3.192 W/kg



Data No. 3:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 09:46:30 AM
End Time : 30-Oct-2012 09:57:53 AM
Scanning Time : 683 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 7 mm
Width : 19 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.741 W/kg
Power Drift-Finish: 0.693 W/kg
Power Drift (%) : -6.482
Picture : C:\alsas\bitmap\Device-2.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

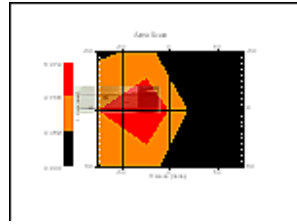
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 3x4x1 : 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



1 gram SAR value : 0.800 W/kg
10 gram SAR value : 0.278 W/kg
Area Scan Peak SAR : 1.074 W/kg
Zoom Scan Peak SAR : 2.071 W/kg

Data No. 4:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 01:17:47 PM
End Time : 30-Oct-2012 01:29:50 PM
Scanning Time : 723 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 7 mm
Width : 19 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.678 W/kg
Power Drift-Finish: 0.649 W/kg
Power Drift (%) : -4.274
Picture : C:\alsas\bitmap\Device-right.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

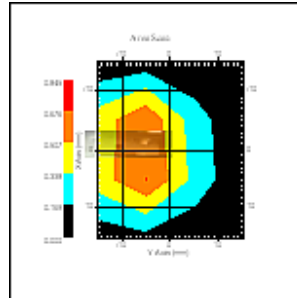
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 0.609 W/kg
10 gram SAR value : 0.214 W/kg
Area Scan Peak SAR : 0.677 W/kg
Zoom Scan Peak SAR : 1.561 W/kg

Data No. 5:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 05:15:29 PM
End Time : 30-Oct-2012 05:27:33 PM
Scanning Time : 724 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 120 mm
Width : 123 mm
Depth : 25 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.557 W/kg
Power Drift-Finish: 0.688 W/kg
Power Drift (%) : 23.654
Picture : C:\alsas\bitmap\Device-NB.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

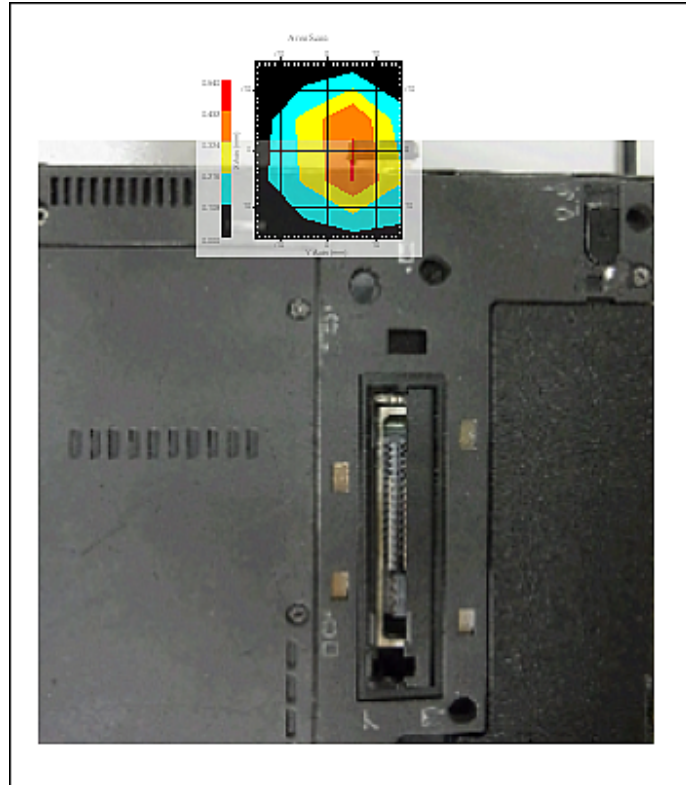
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 0.583 W/kg
10 gram SAR value : 0.197 W/kg
Area Scan Peak SAR : 0.434 W/kg
Zoom Scan Peak SAR : 1.511 W/kg

Data No. 6:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 01:37:41 PM
End Time : 30-Oct-2012 01:49:44 PM
Scanning Time : 723 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 19 mm
Depth : 7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 1.253 W/kg
Power Drift-Finish: 1.219 W/kg
Power Drift (%) : -2.703
Picture : C:\alsas\bitmap\Device-4.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

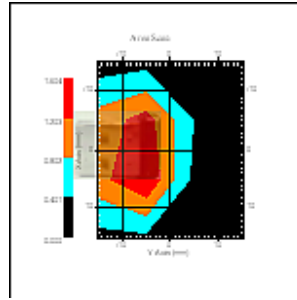
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 1.228 W/kg
10 gram SAR value : 0.460 W/kg
Area Scan Peak SAR : 1.603 W/kg
Zoom Scan Peak SAR : 2.952 W/kg

Data No. 7:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 02:07:27 PM
End Time : 30-Oct-2012 02:19:29 PM
Scanning Time : 722 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 19 mm
Depth : 7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 1.017 W/kg
Power Drift-Finish: 0.962 W/kg
Power Drift (%) : -5.347
Picture : C:\alsas\bitmap\Device-4.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

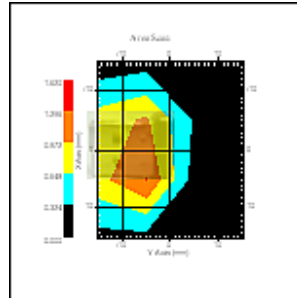
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 0.998 W/kg
10 gram SAR value : 0.368 W/kg
Area Scan Peak SAR : 1.298 W/kg
Zoom Scan Peak SAR : 2.452 W/kg

Data No. 8:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 02:53:30 PM
End Time : 30-Oct-2012 03:05:32 PM
Scanning Time : 722 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 19 mm
Depth : 7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.422 W/kg
Power Drift-Finish: 0.388 W/kg
Power Drift (%) : -8.068
Picture : C:\alsas\bitmap\Device-4.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

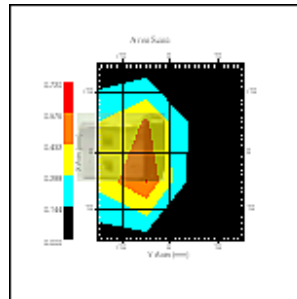
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 0.397 W/kg
10 gram SAR value : 0.137 W/kg
Area Scan Peak SAR : 0.577 W/kg
Zoom Scan Peak SAR : 1.010 W/kg

Data No. 9:

Report Date : 30-Oct-2012
By Operator : Dino
Measurement Date : 30-Oct-2012
Starting Time : 30-Oct-2012 04:36:04 PM
End Time : 30-Oct-2012 04:48:16 PM
Scanning Time : 732 secs

Product Data

Device Name : 12LR171
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 19 mm
Depth : 7 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.326 W/kg
Power Drift-Finish: 0.330 W/kg
Power Drift (%) : 1.244
Picture : C:\alsas\bitmap\Device-4.bmp

Phantom Data

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

Tissue Data

Type : BODY
Serial No. : 2450_Body
Frequency : 2450.00 MHz
Last Calib. Date : 30-Oct-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 54.41 F/m
Sigma : 1.88 S/m
Density : 1000.00 kg/cu. m

Probe Data

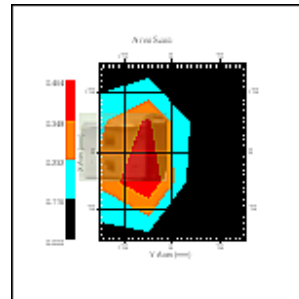
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 20-Aug-2012
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 30-Oct-2012
Set-up Time : 8:25:03 AM
Area Scan : 4x4x1 : 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



1 gram SAR value : 0.349 W/kg
10 gram SAR value : 0.114 W/kg
Area Scan Peak SAR : 0.463 W/kg
Zoom Scan Peak SAR : 0.880 W/kg

SAR-Z Axis
at Hotspot x:-2.94 y:-5.13

