

Appendix D: SAR Measurement Data

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
1	Wifi	802.11b	EUT Bottom	0.5	11	0.974
2	Wifi	802.11b	EUT Edge of Lift	0.5	11	0.001
3	Wifi	802.11b	EUT Edge of up	0.5	11	0.134
4	Wifi	802.11b	EUT Bottom	0.5	1	0.876
5	Wifi	802.11b	EUT Bottom	0.5	6	0.896
6	Wifi	802.11g	EUT Bottom	0.5	1	0.991
7	Wifi	802.11g	EUT Bottom	0.5	6	1.020
8	Wifi	802.11g	EUT Bottom	0.5	11	1.265
9	Wifi	802.11n 20	EUT Bottom	0.5	11	0.711

Data No. 1:

Report Date : 25-May-2012
By Operator : Dino
Measurement Date : 25-May-2012
Starting Time : 25-May-2012 05:16:46 PM
End Time : 25-May-2012 05:35:08 PM
Scanning Time : 1102 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.814 W/kg
Power Drift-Finish: 0.809 W/kg
Power Drift (%) : -0.663
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

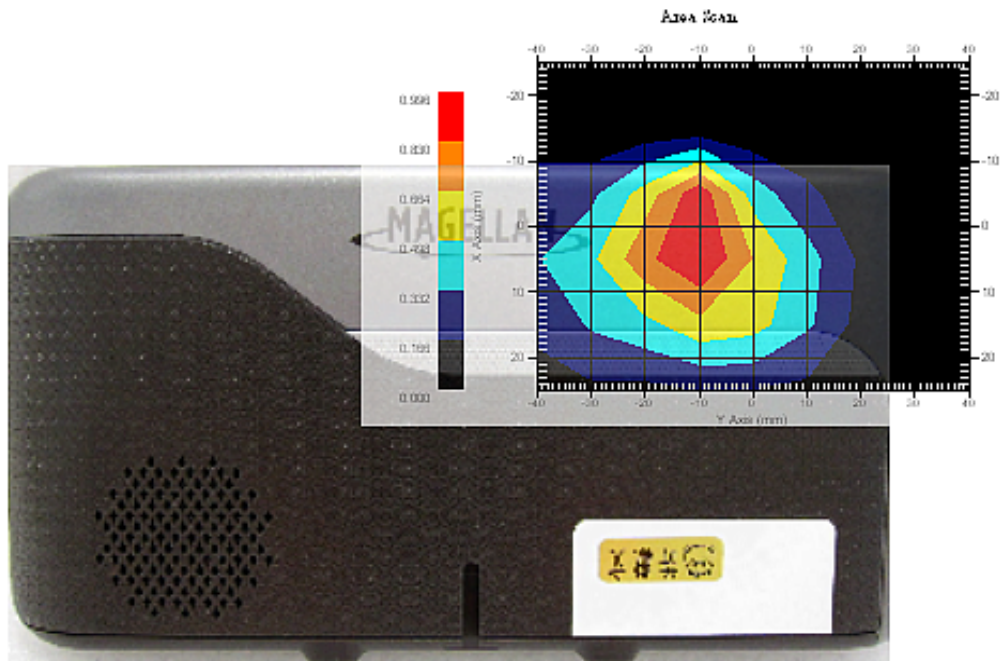
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : High



1 gram SAR value : 0.974 W/kg
10 gram SAR value : 0.344 W/kg
Area Scan Peak SAR : 0.994 W/kg
Zoom Scan Peak SAR : 2.652 W/kg

Data No. 2:

Report Date : 25-May-2012
By Operator : Dino
Measurement Date : 25-May-2012
Starting Time : 25-May-2012 10:49:01 AM
End Time : 25-May-2012 11:03:26 AM
Scanning Time : 865 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 90 mm
Depth : 160 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.007 W/kg
Power Drift-Finish: 0.000 W/kg
Power Drift (%) : -84.650
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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

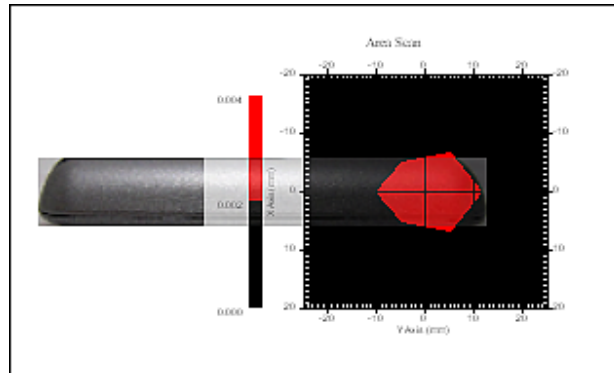
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 5x6x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : High



1 gram SAR value : 0.001 W/kg
10 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.004 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

Data No. 3:

Report Date : 25-May-2012
By Operator : Dino
Measurement Date : 25-May-2012
Starting Time : 25-May-2012 11:37:25 AM
End Time : 25-May-2012 11:53:17 AM
Scanning Time : 952 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 15 mm
Width : 160 mm
Depth : 90 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.034 W/kg
Power Drift-Finish: 0.031 W/kg
Power Drift (%) : -6.922
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

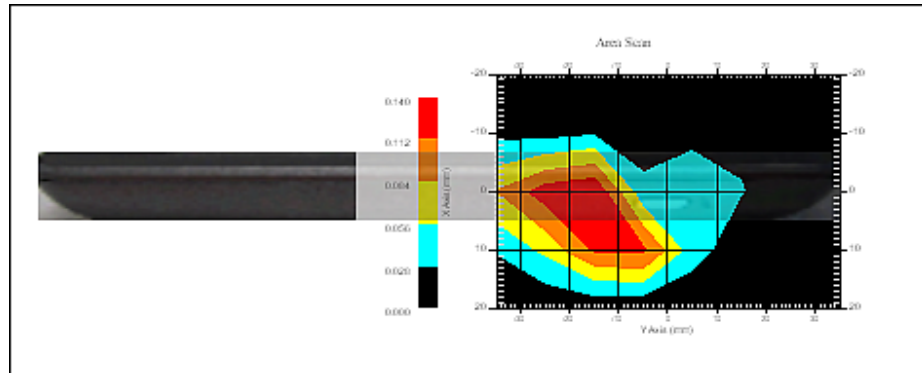
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 5x8x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : High



1 gram SAR value : 0.134 W/kg
 10 gram SAR value : 0.049 W/kg
 Area Scan Peak SAR : 0.138 W/kg
 Zoom Scan Peak SAR : 0.370 W/kg

Data No. 4:

Report Date : 28-May-2012
By Operator : Dino
Measurement Date : 28-May-2012
Starting Time : 28-May-2012 10:44:14 AM
End Time : 28-May-2012 11:02:09 AM
Scanning Time : 1075 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.809 W/kg
Power Drift-Finish: 0.772 W/kg
Power Drift (%) : -4.533
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 53.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

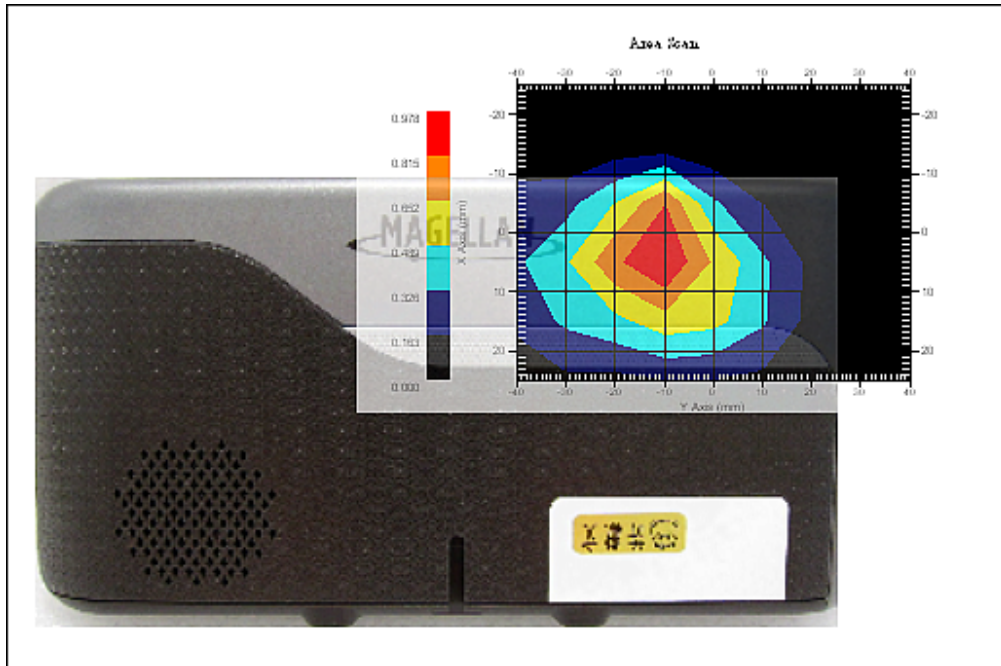
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : Low



1 gram SAR value : 0.876 W/kg
 10 gram SAR value : 0.318 W/kg
 Area Scan Peak SAR : 0.975 W/kg
 Zoom Scan Peak SAR : 2.311 W/kg

Data No. 5:

Report Date : 28-May-2012
By Operator : Dino
Measurement Date : 28-May-2012
Starting Time : 28-May-2012 09:09:21 AM
End Time : 28-May-2012 09:27:32 AM
Scanning Time : 1091 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.836 W/kg
Power Drift-Finish: 0.832 W/kg
Power Drift (%) : -0.552
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

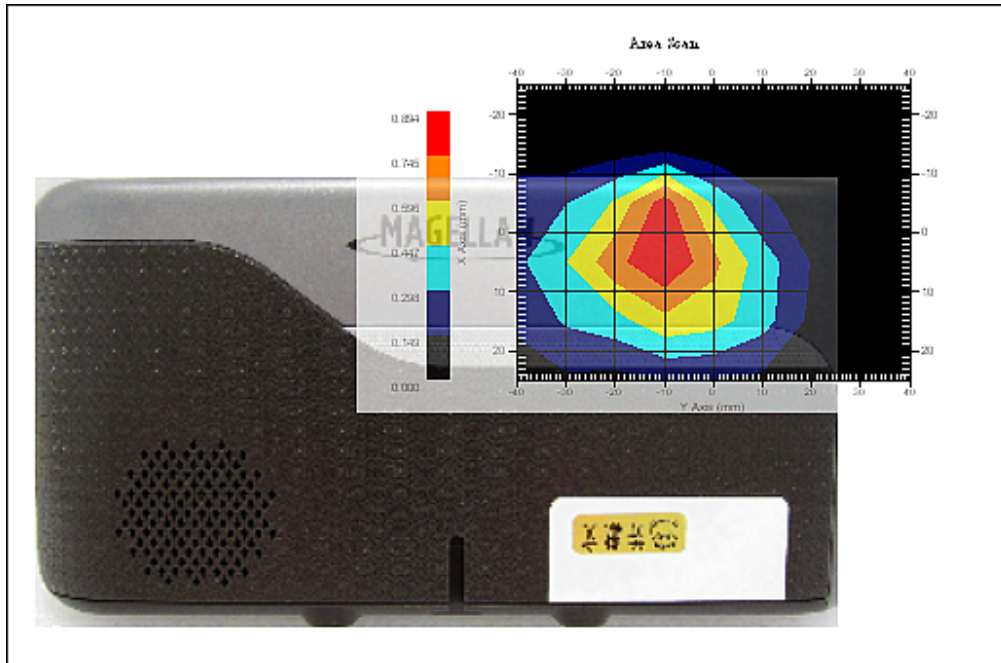
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : Mid



1 gram SAR value : 0.896 W/kg
10 gram SAR value : 0.319 W/kg
Area Scan Peak SAR : 0.892 W/kg
Zoom Scan Peak SAR : 2.422 W/kg

Data No. 6:

Report Date : 29-May-2012
By Operator : Dino
Measurement Date : 29-May-2012
Starting Time : 29-May-2012 07:44:46 PM
End Time : 29-May-2012 08:02:52 PM
Scanning Time : 1086 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 1.000 W/kg
Power Drift-Finish: 1.005 W/kg
Power Drift (%) : 0.426
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. M

Probe Data

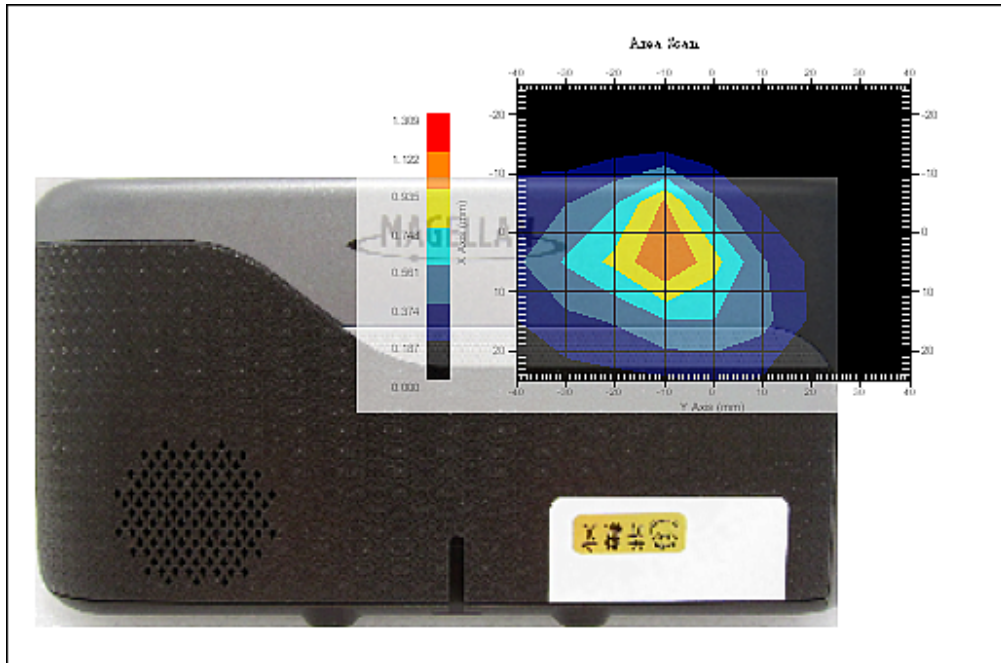
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : Low



1 gram SAR value : 0.991 W/kg
10 gram SAR value : 0.368 W/kg
Area Scan Peak SAR : 1.123 W/kg
Zoom Scan Peak SAR : 2.592 W/kg

Data No. 7:

Report Date : 29-May-2012
By Operator : Dino
Measurement Date : 29-May-2012
Starting Time : 29-May-2012 08:45:27 PM
End Time : 29-May-2012 09:03:31 PM
Scanning Time : 1084 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 1.433 W/kg
Power Drift-Finish: 1.525 W/kg
Power Drift (%) : 6.442
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

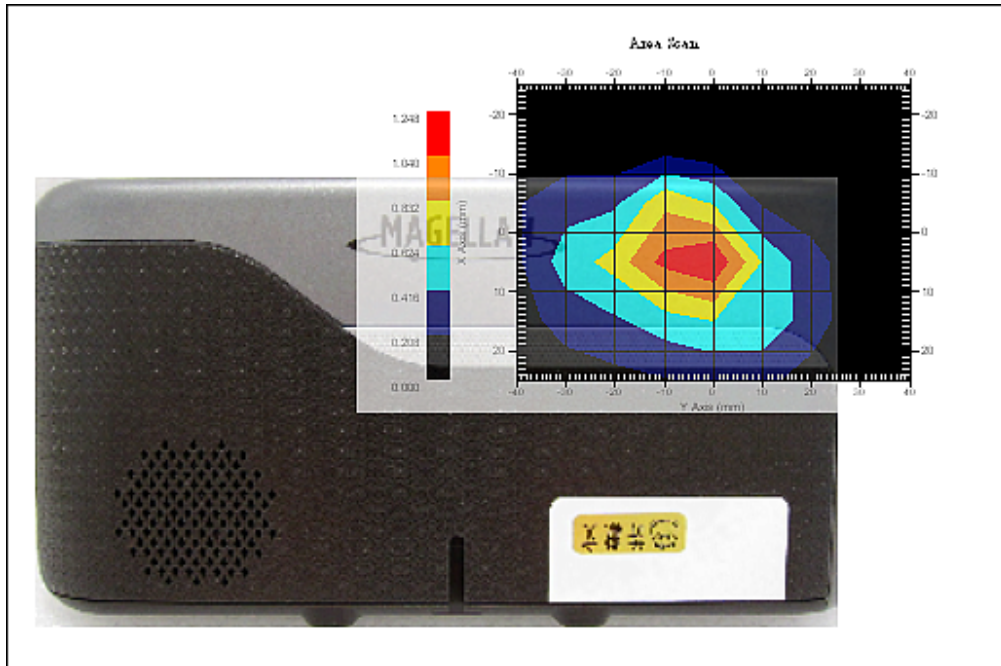
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : Low



1 gram SAR value : 1.020 W/kg
10 gram SAR value : 0.429 W/kg
Area Scan Peak SAR : 1.247 W/kg
Zoom Scan Peak SAR : 2.241 W/kg

Data No. 8:

Report Date : 25-May-2012
By Operator : Dino
Measurement Date : 25-May-2012
Starting Time : 25-May-2012 03:23:13 PM
End Time : 25-May-2012 03:41:34 PM
Scanning Time : 1101 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 1.052 W/kg
Power Drift-Finish: 1.082 W/kg
Power Drift (%) : 2.908
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

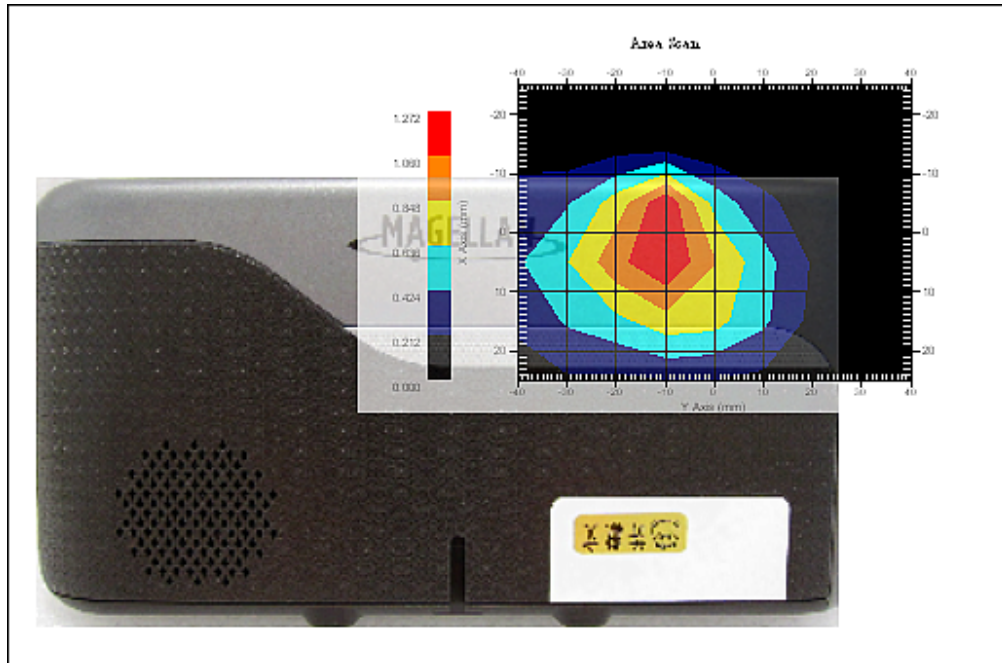
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : High



1 gram SAR value : 1.265 W/kg
10 gram SAR value : 0.454 W/kg
Area Scan Peak SAR : 1.270 W/kg
Zoom Scan Peak SAR : 3.402 W/kg

Data No. 9:

Report Date : 25-May-2012
By Operator : Dino
Measurement Date : 25-May-2012
Starting Time : 25-May-2012 02:20:39 PM
End Time : 25-May-2012 02:38:40 PM
Scanning Time : 1081 secs

Product Data

Device Name : 12LR056
Serial No. : NA
Type : Other
Model : N399M
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 0 min(s)
Length : 90 mm
Width : 160 mm
Depth : 15 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.516 W/kg
Power Drift-Finish: 0.492 W/kg
Power Drift (%) : -4.808
Picture : C:\alsas\bitmap\Device-5.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 : 23-May-2012
Temperature : 22.00 °C
Ambient Temp. : 21.70 °C
Humidity : 60.00 RH%
Epsilon : 52.16 F/m
Sigma : 2.04 S/m
Density : 1000.00 kg/cu. m

Probe Data

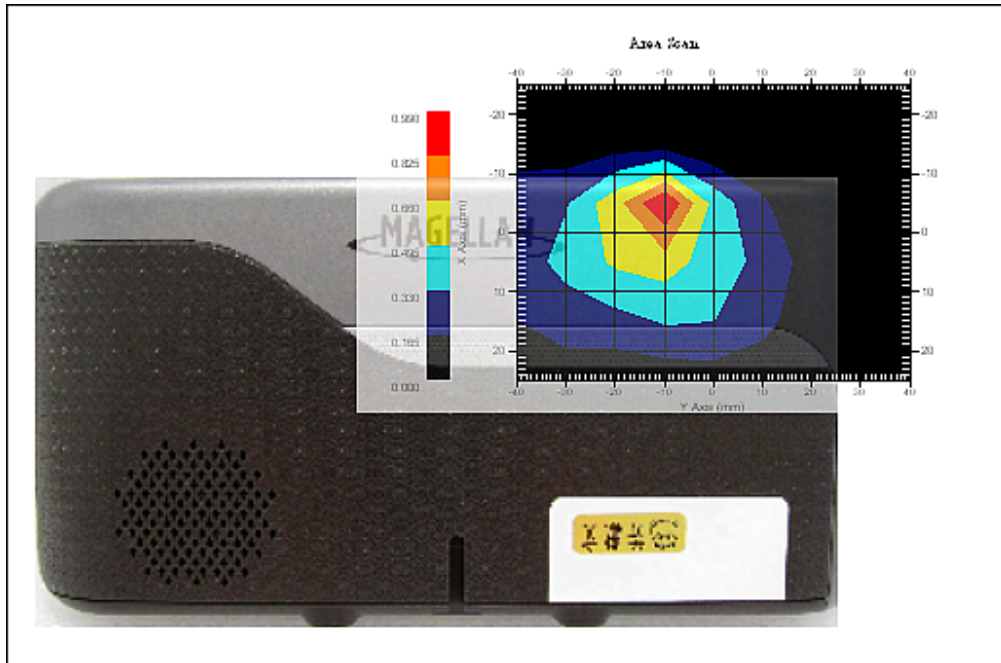
Name : E-field Probe
Model : ALS-E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 08-Aug-2011
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.55
Probe Sensitivity: 1.20 1.20 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Set-up Date : 25-May-2012
Set-up Time : 3:20:05 PM
Area Scan : 6x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data

DUT Position : Touch
Separation : 5 mm
Channel : High



1 gram SAR value : 0.711 W/kg
10 gram SAR value : 0.250 W/kg
Area Scan Peak SAR : 0.988 W/kg
Zoom Scan Peak SAR : 1.961 W/kg

Data no.8 802.11g Worst data

SAR-Z Axis

at Hotspot x:-2.89 y:-10.13

