

Appendix C: System Performance Check

Report Date : 22-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 2450.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 2450.00 MHz

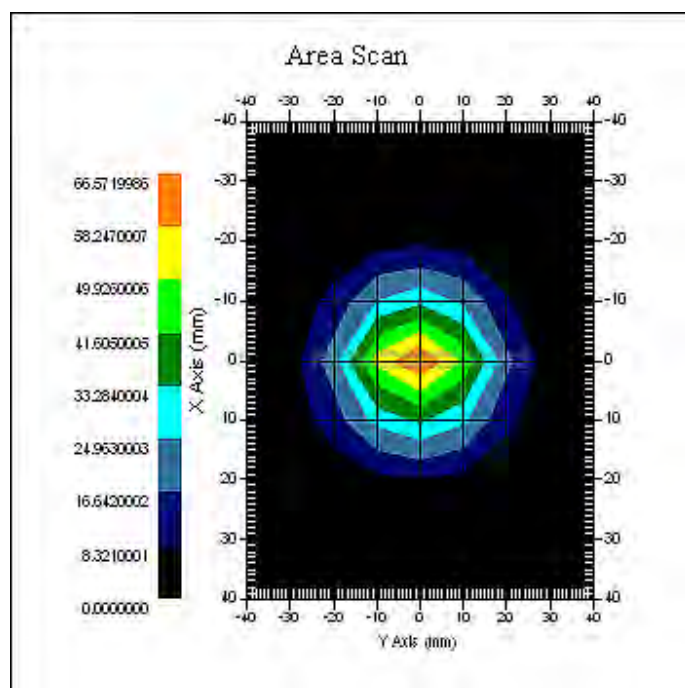
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.5 °C
Ambient Temp. : 21.5 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm





1 gram SAR value : 54.121 W/kg
 10 gram SAR value : 24.762 W/kg
 Area Scan Peak SAR : 65.414 W/kg
 Zoom Scan Peak SAR : 106.628 W/kg

Appendix C: System Performance Check

Report Date : 23-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 5250.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 5250.00 MHz

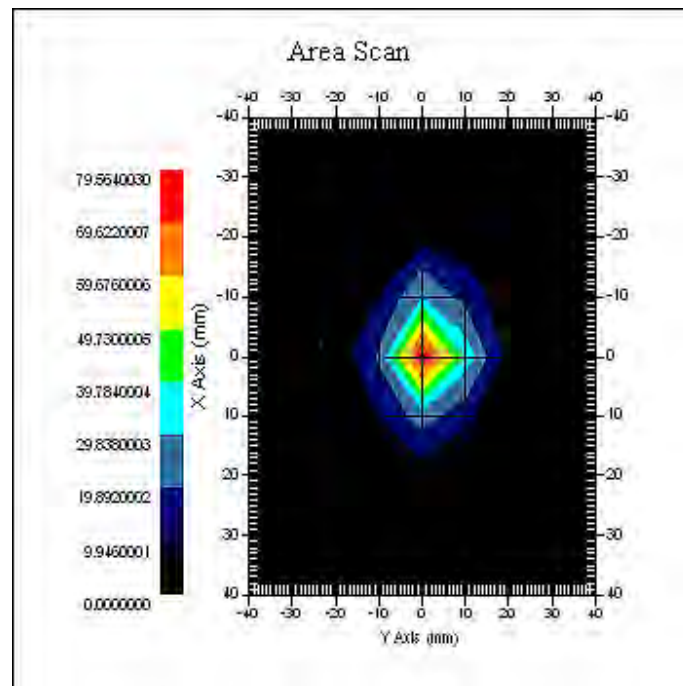
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm





1 gram SAR value : 61.024 W/kg
10 gram SAR value : 22.056 W/kg
Area Scan Peak SAR : 79.241 W/kg
Zoom Scan Peak SAR : 187.007 W/kg

Appendix C: System Performance Check

Report Date : 23-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 5600.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 5600.00 MHz

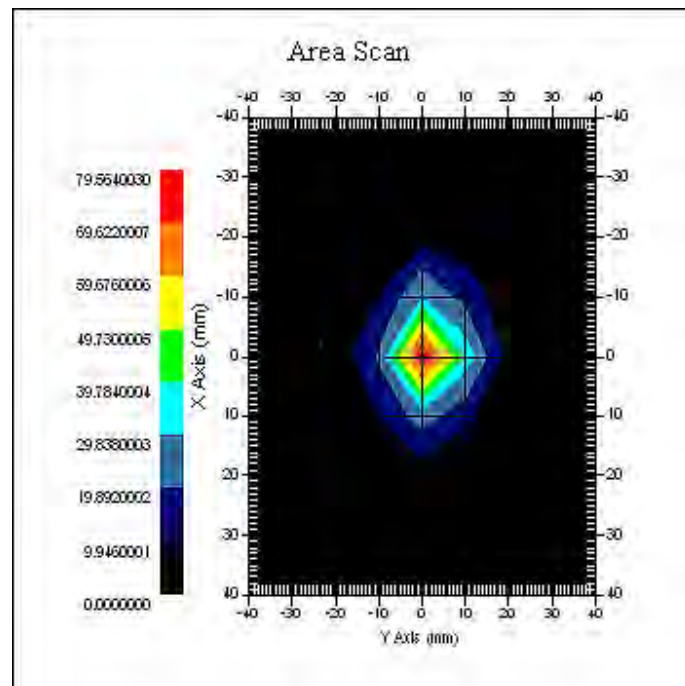
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm





1 gram SAR value : 65.564 W/kg
 10 gram SAR value : 22.013 W/kg
 Area Scan Peak SAR : 79.953 W/kg
 Zoom Scan Peak SAR : 188.439 W/kg

Appendix C: System Performance Check

Report Date : 24-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 5800.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 5800.00 MHz

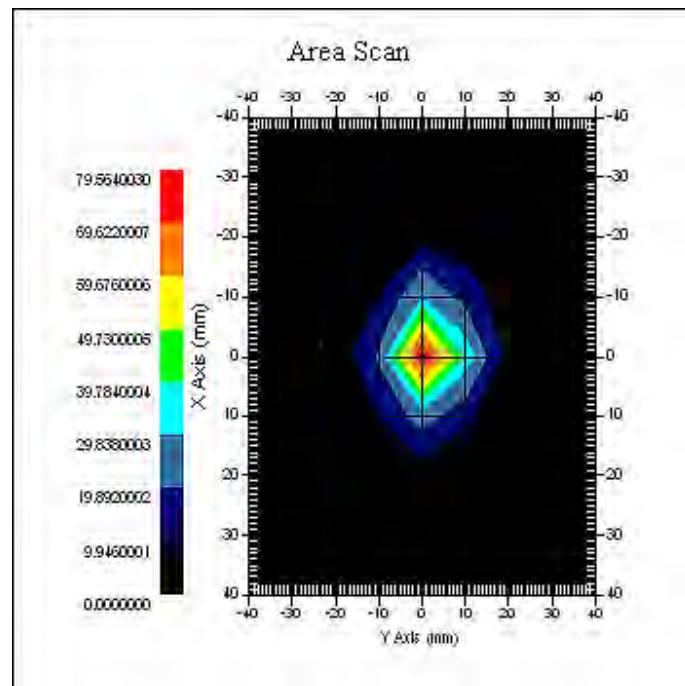
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm





1 gram SAR value : 61.003 W/kg
 10 gram SAR value : 19.018 W/kg
 Area Scan Peak SAR : 78.024 W/kg
 Zoom Scan Peak SAR : 180.439 W/kg

Appendix C: System Performance Check

Report Date : 27-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 1800MHz(1750MHz)
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 1800.00 MHz

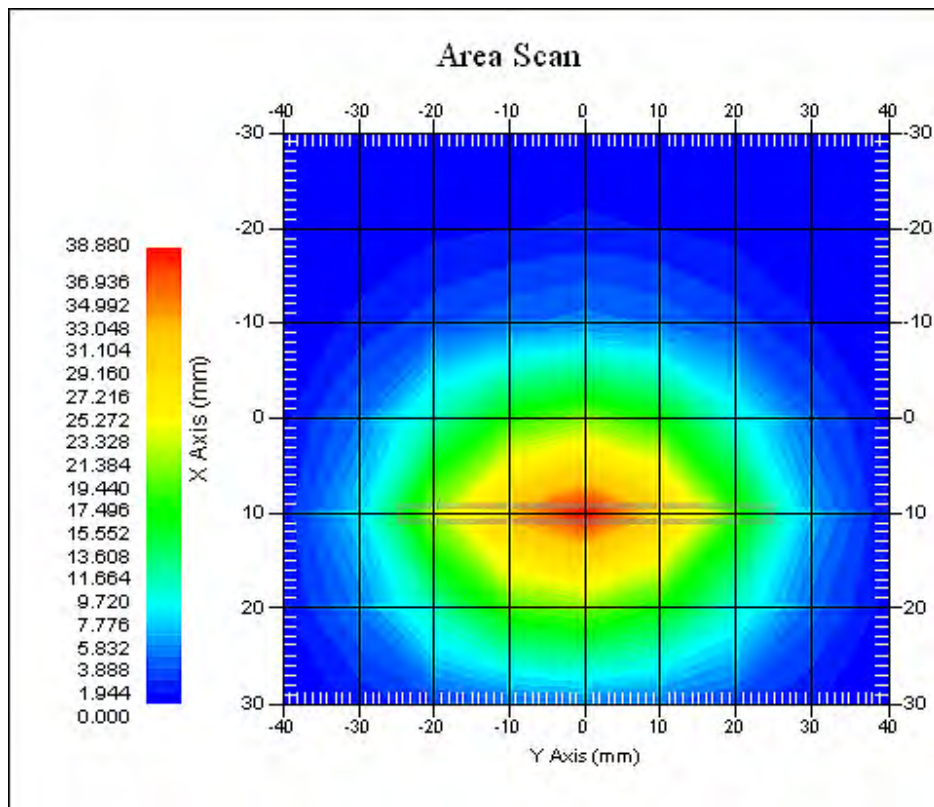
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm





1 gram SAR value : 35.316 W/kg
 10 gram SAR value : 19.942 W/kg
 Area Scan Peak SAR : 38.851 W/kg
 Zoom Scan Peak SAR : 62.953 W/kg

Appendix C: System Performance Check

Report Date : 26-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 1900.00 MHz

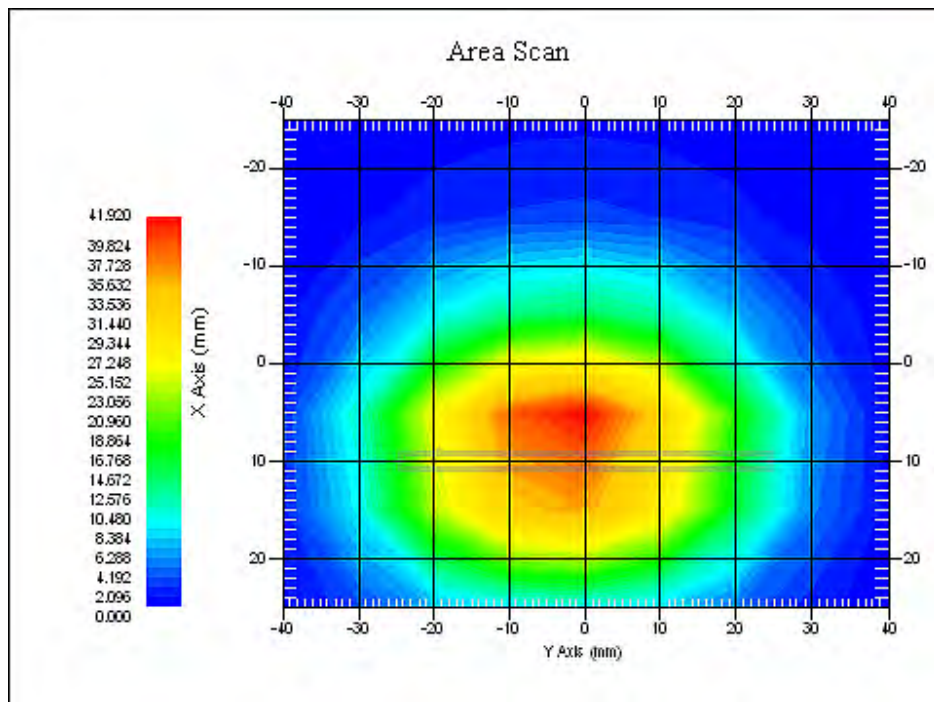
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm





1 gram SAR value : 40.091 W/kg
 10 gram SAR value : 20.726 W/kg
 Area Scan Peak SAR : 41.842 W/kg
 Zoom Scan Peak SAR : 74.451 W/kg

Appendix C: System Performance Check

Report Date : 28-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 700.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 700.00 MHz

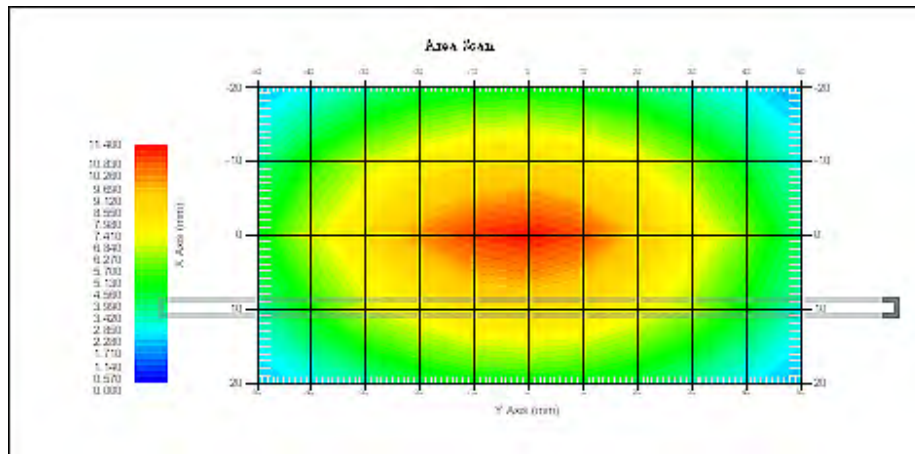
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 15cm





1 gram SAR value : 8.015 W/kg
 10 gram SAR value : 5.234 W/kg
 Area Scan Peak SAR : 11.403 W/kg
 Zoom Scan Peak SAR : 16.096 W/kg

Appendix C: System Performance Check

Report Date : 26-Dec-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 835.00 MHz
Max. Transmit Pwr : 1 W

APREL ALSAS-10U System Description

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 835.00 MHz

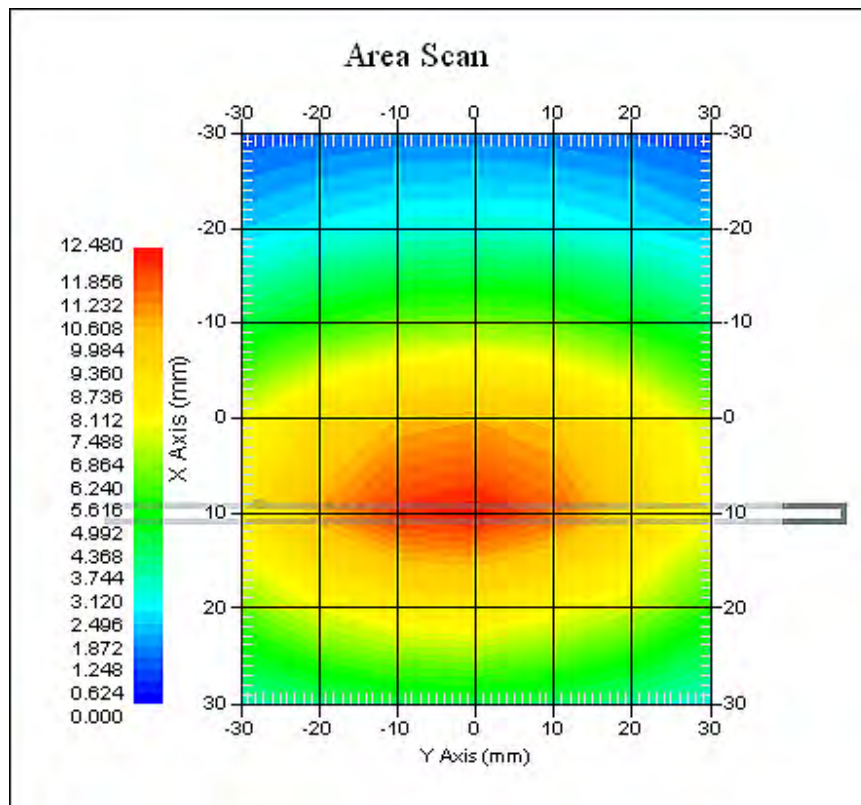
Probe Data

Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 12-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 15mm





1 gram SAR value : 9.432 W/kg
 10 gram SAR value : 6.352 W/kg
 Area Scan Peak SAR : 12.477 W/kg
 Zoom Scan Peak SAR : 17.524 W/kg

Appendix D: SAR Measurement Data

Stand- Alone SAR

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
1	Wifi	802.11b	Bottom	0	6	0.052
2	Wifi	802.11b	Edge of Top	0	6	0.001
3	Wifi	802.11b	Edge of Bottom	0	6	0.004
4	Wifi	802.11b	Edge of Left	0	6	0.597
5	Wifi	802.11b	Edge of Right	0	6	0.017
6	Wifi	802.11b	Edge of Left	0	1	0.530
7	Wifi	802.11b	Edge of Left	0	11	0.578
8	Wifi	802.11g	Edge of Left	0	6	0.320
9	Wifi	802.11n 20	Edge of Left	0	11	0.274
10	Wifi	802.11n 40	Edge of Left	0	3	0.369
11	BT	BDR	Edge of Left	0	78	0.001
12	Wifi	802.11a B1 and B2	Bottom	0	36	0.001
13	Wifi	802.11a B1 and B2	Edge of Top	0	36	0.010
14	Wifi	802.11a B1 and B2	Edge of Bottom	0	36	0.020
15	Wifi	802.11a B1 and B2	Edge of Left	0	36	0.763
16	Wifi	802.11a B1 and B2	Edge of Right	0	36	0.001
17	Wifi	802.11a B1 and B2	Edge of Left	0	52	0.531
18	Wifi	802.11a B1 and B2	Edge of Left	0	64	0.566
19	Wifi	802.11n 20 B1 and B2	Edge of Left	0	64	0.557
20	Wifi	802.11n 40 B1 and B2	Edge of Left	0	38	0.681
21	Wifi	802.11ac 80 B1 and B2	Edge of Left	0	42	0.211
22	Wifi	802.11a B3	Edge of Left	0	100	0.721
23	Wifi	802.11n 20 B3	Edge of Left	0	100	0.626
24	Wifi	802.11n 40 B3	Edge of Left	0	110	0.532
25	Wifi	802.11n 80 B3	Edge of Left	0	106	0.264
26	Wifi	802.11a B4	Edge of Left	0	149	0.220
27	Wifi	802.11n 20 B4	Edge of Left	0	149	0.197
28	Wifi	802.11n 40 B4	Edge of Left	0	159	0.305
29	Wifi	802.11ac 80 B4	Edge of Left	0	155	0.271

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
30	GSM	GPRS 835	Bottom	0	128	0.231
31	GSM	GPRS 835	Edge of Top	0	128	0.316
32	GSM	GPRS 835	Edge of Bottom	0	128	0.001
33	GSM	GPRS 835	Edge of Left	0	128	0.009
34	GSM	GPRS 835	Edge of Right	0	128	0.001
35	GSM	GPRS 835	Edge of Top	0	190	0.236
36	GSM	GPRS 835	Edge of Top	0	251	0.239
37	GSM	GPRS 1900	Edge of Top	0	512	0.074
38	GSM	GPRS 1900	Edge of Top	0	661	0.057
39	GSM	GPRS 1900	Edge of Top	0	810	0.037
40	WCDMA	WCDMA B2	Edge of Top	0	9262	0.236
41	WCDMA	WCDMA B2	Edge of Top	0	9400	0.200
42	WCDMA	WCDMA B2	Edge of Top	0	9538	0.117
43	WCDMA	WCDMA B4	Edge of Top	0	1312	0.591
44	WCDMA	WCDMA B4	Edge of Top	0	1413	0.467
45	WCDMA	WCDMA B4	Edge of Top	0	1513	0.500
46	WCDMA	WCDMA B5	Edge of Top	0	4132	0.462
47	WCDMA	WCDMA B5	Edge of Top	0	4183	0.526
48	WCDMA	WCDMA B5	Edge of Top	0	4233	0.473

LTE 1RB:

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
49	LTE	LTE Band 2	Edge of Top	0	1835	0.059
50	LTE	LTE Band 2	Edge of Top	0	1880	0.124
51	LTE	LTE Band 2	Edge of Top	0	1910	0.111
52	LTE	LTE Band 4	Edge of Top	0	1710	0.284
53	LTE	LTE Band 4	Edge of Top	0	1732	0.392
54	LTE	LTE Band 4	Edge of Top	0	1755	0.311
55	LTE	LTE Band 5	Edge of Top	0	824	0.486
56	LTE	LTE Band 5	Edge of Top	0	836	0.622
57	LTE	LTE Band 5	Edge of Top	0	849	0.573
58	LTE	LTE Band 13	Edge of Top	0	777	0.496
59	LTE	LTE Band 13	Edge of Top	0	782	0.622
60	LTE	LTE Band 13	Edge of Top	0	787	0.562
61	LTE	LTE Band 17	Edge of Top	0	704	0.522
62	LTE	LTE Band 17	Edge of Top	0	710	0.618
63	LTE	LTE Band 17	Edge of Top	0	716	0.556
64	BT	BDR	Bottom	0	78	0.001
65	BT	BDR	Edge of Bottom	0	78	0.001
66	LTE	LTE Band 13	Bottom	0	777	0.407
67	LTE	LTE Band 13	Edge of Right	0	777	0.030
68	Wifi	802.11a B3	Bottom	0	100	0.001
69	Wifi	802.11a B4	Bottom	0	149	0.001
70	GSM	GPRS 1900	Bottom	0	512	0.001
71	GSM	GPRS 1900	Edge of Right	0	512	0.001
72	WCDMA	WCDMA B2	Bottom	0	9262	0.167
73	WCDMA	WCDMA B2	Edge of Right	0	9262	0.001
74	WCDMA	WCDMA B4	Bottom	0	1312	0.438
75	WCDMA	WCDMA B4	Edge of Right	0	1312	0.106
76	WCDMA	WCDMA B5	Bottom	0	4183	0.392
77	WCDMA	WCDMA B5	Edge of Right	0	4183	0.067
78	LTE	LTE Band 2	Bottom	0	1880	0.017
79	LTE	LTE Band 2	Edge of Right	0	1880	0.001
80	LTE	LTE Band 4	Bottom	0	1755	0.281
81	LTE	LTE Band 4	Edge of Right	0	1755	0.002
82	LTE	LTE Band 5	Bottom	0	824	0.448
83	LTE	LTE Band 5	Edge of Right	0	824	0.135
84	LTE	LTE Band 17	Bottom	0	704	0.399
85	LTE	LTE Band 17	Edge of Right	0	704	0.026

LTE 50%RB SAR:

Data No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	SAR 1g(W/kg)
86	LTE	LTE Band 2	Bottom	0	1880	0.014
87	LTE	LTE Band 2	Edge of Top	0	1880	0.119
88	LTE	LTE Band 2	Edge of Right	0	1880	0.001
89	LTE	LTE Band 2	Edge of Top	0	1835	0.116
90	LTE	LTE Band 2	Edge of Top	0	1910	0.104
91	LTE	LTE Band 4	Bottom	0	1732	0.275
92	LTE	LTE Band 4	Edge of Top	0	1732	0.388
93	LTE	LTE Band 4	Edge of Right	0	1732	0.001
94	LTE	LTE Band 4	Edge of Top	0	1710	0.376
95	LTE	LTE Band 4	Edge of Top	0	1755	0.365
96	LTE	LTE Band 5	Bottom	0	836	0.432
97	LTE	LTE Band 5	Edge of Top	0	836	0.609
98	LTE	LTE Band 5	Edge of Right	0	836	0.128
99	LTE	LTE Band 5	Edge of Top	0	824	0.596
100	LTE	LTE Band 5	Edge of Top	0	849	0.571
101	LTE	LTE Band 13	Bottom	0	777	0.391
102	LTE	LTE Band 13	Edge of Top	0	777	0.604
103	LTE	LTE Band 13	Edge of Right	0	777	0.022
104	LTE	LTE Band 13	Edge of Top	0	782	0.591
105	LTE	LTE Band 13	Edge of Top	0	787	0.566
106	LTE	LTE Band 17	Bottom	0	704	0.377
107	LTE	LTE Band 17	Edge of Top	0	704	0.601
108	LTE	LTE Band 17	Edge of Right	0	704	0.022
109	LTE	LTE Band 17	Edge of Top	0	710	0.588
110	LTE	LTE Band 17	Edge of Top	0	716	0.541

Data No. 1:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 09:15:36 AM
End Time : 22-Dec-2016 09:39:40 AM
Scanning Time : 1444 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 110 mm
Width : 135 mm
Depth : 42 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-11.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

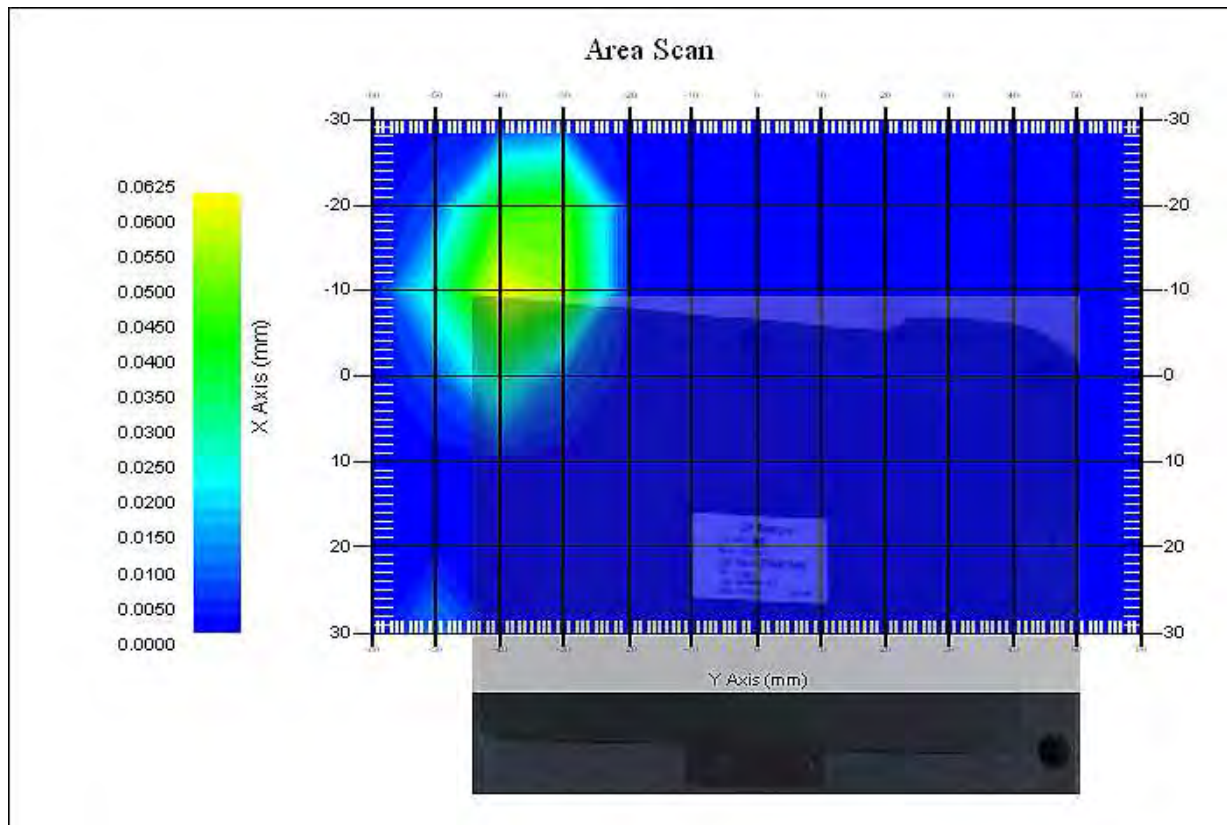
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = -9.920, Y = -40.000
 1 gram SAR value : 0.052 W/kg
 Area Scan Peak SAR : 0.061 W/kg
 Zoom Scan Peak SAR : 0.120 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -9.920, Y = -40.000
 1 gram SAR value : 0.052 W/kg
 Area Scan Peak SAR : 0.061 W/kg
 Zoom Scan Peak SAR : 0.120 W/kg

Data No. 2:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 01:55:33 PM
End Time : 22-Dec-2016 02:12:55 PM
Scanning Time : 1042 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 170 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-8.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

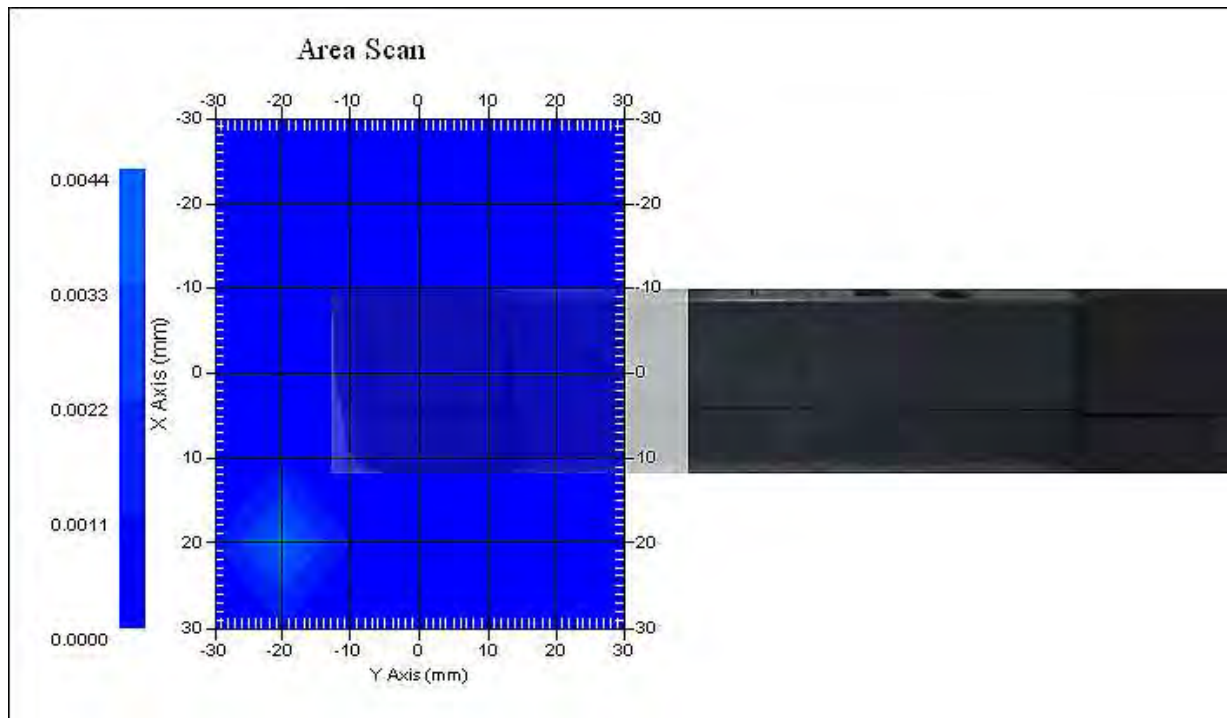
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x7x1 : 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 = 4.060, Y = -36.000
1 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.004 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 4.060, Y = -36.000
1 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 : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 02:14:44 PM
End Time : 22-Dec-2016 02:32:06 PM
Scanning Time : 1042 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 170 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-8.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

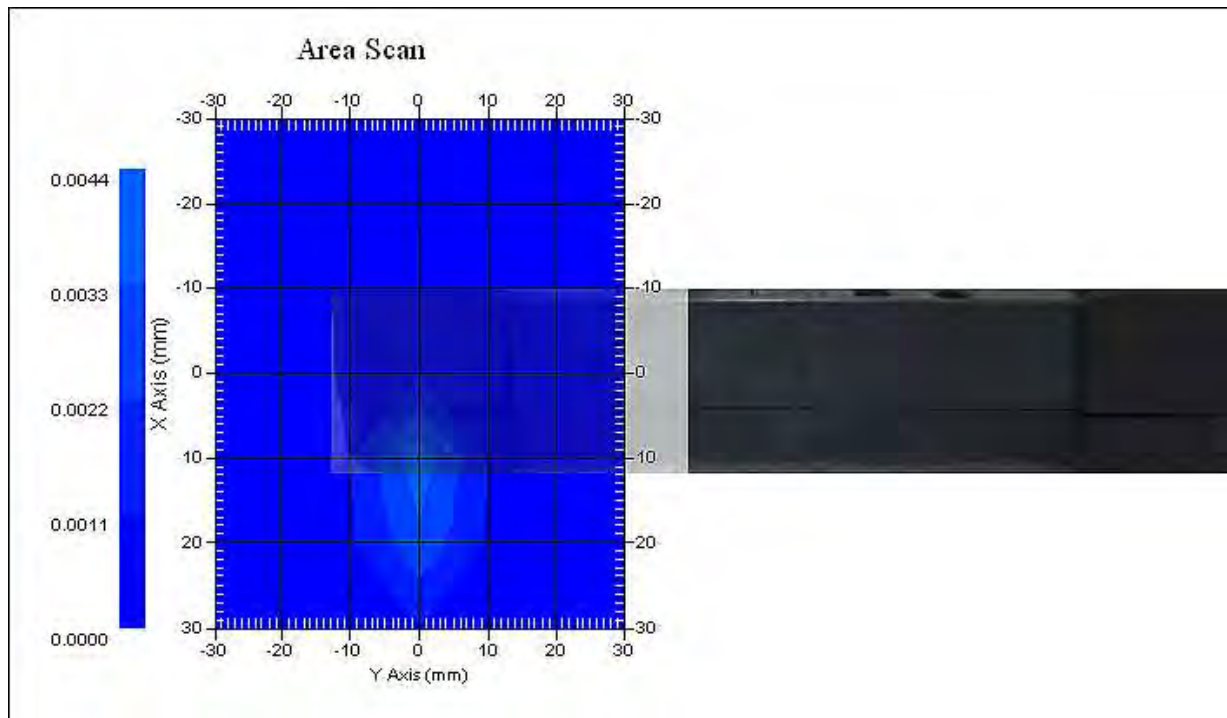
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x7x1 : 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 = 10.110, Y = 0.000
1 gram SAR value : 0.004 W/kg
Area Scan Peak SAR : 0.004 W/kg
Zoom Scan Peak SAR : 0.010 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 10.110, Y = 0.000
1 gram SAR value : 0.004 W/kg
Area Scan Peak SAR : 0.004 W/kg
Zoom Scan Peak SAR : 0.010 W/kg

Data No. 4:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 07:56:00 AM
End Time : 22-Dec-2016 08:20:00 AM
Scanning Time : 1440 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 135 mm
Depth : 110 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.016 W/kg
Power Drift-Finish: 0.016 W/kg
Power Drift (%) : -4.142
Picture : C:\alsas\bitmap\Device-10.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

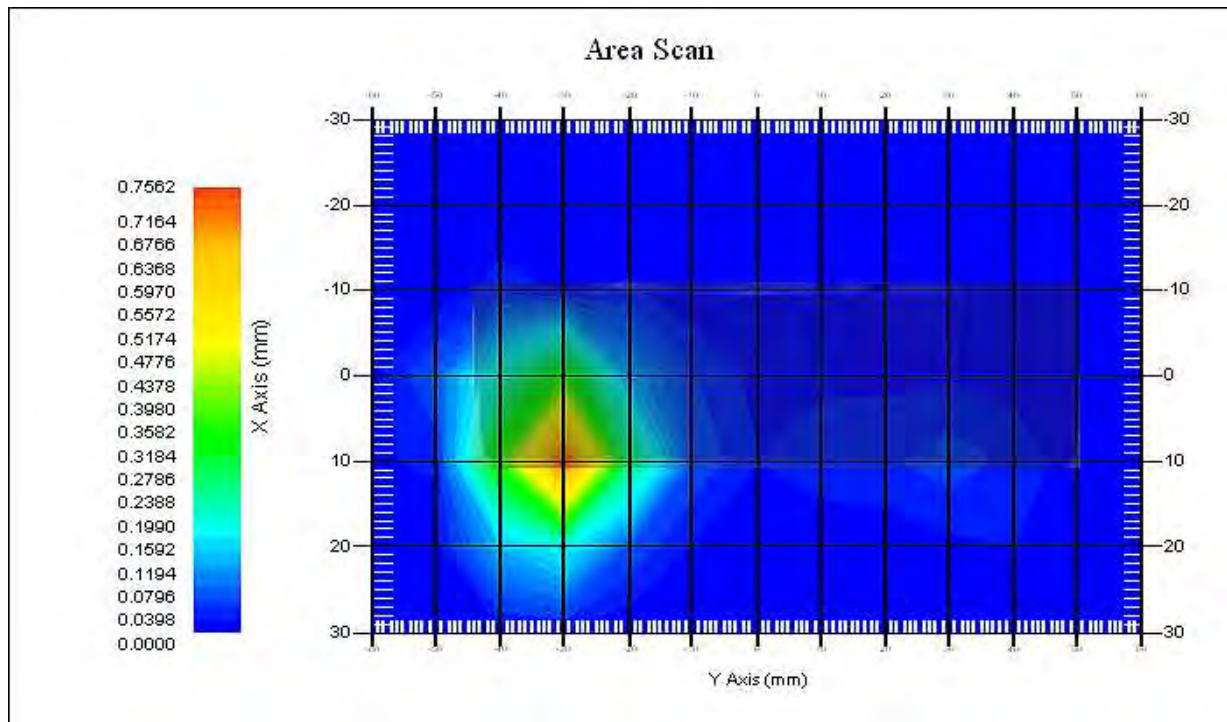
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 2450.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 5.2
 Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 22-Dec-2016
 Set-up Time : 12:53:56 AM
 Area Scan : 7x13x1 : 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 = 10.080, Y = -30.000
1 gram SAR value : 0.597 W/kg
Area Scan Peak SAR : 0.755 W/kg
Zoom Scan Peak SAR : 1.591 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 10.080, Y = -30.000
1 gram SAR value : 0.597 W/kg
Area Scan Peak SAR : 0.755 W/kg
Zoom Scan Peak SAR : 1.591 W/kg

Data No. 5:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 01:26:38 PM
End Time : 22-Dec-2016 01:50:45 PM
Scanning Time : 1447 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-8.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

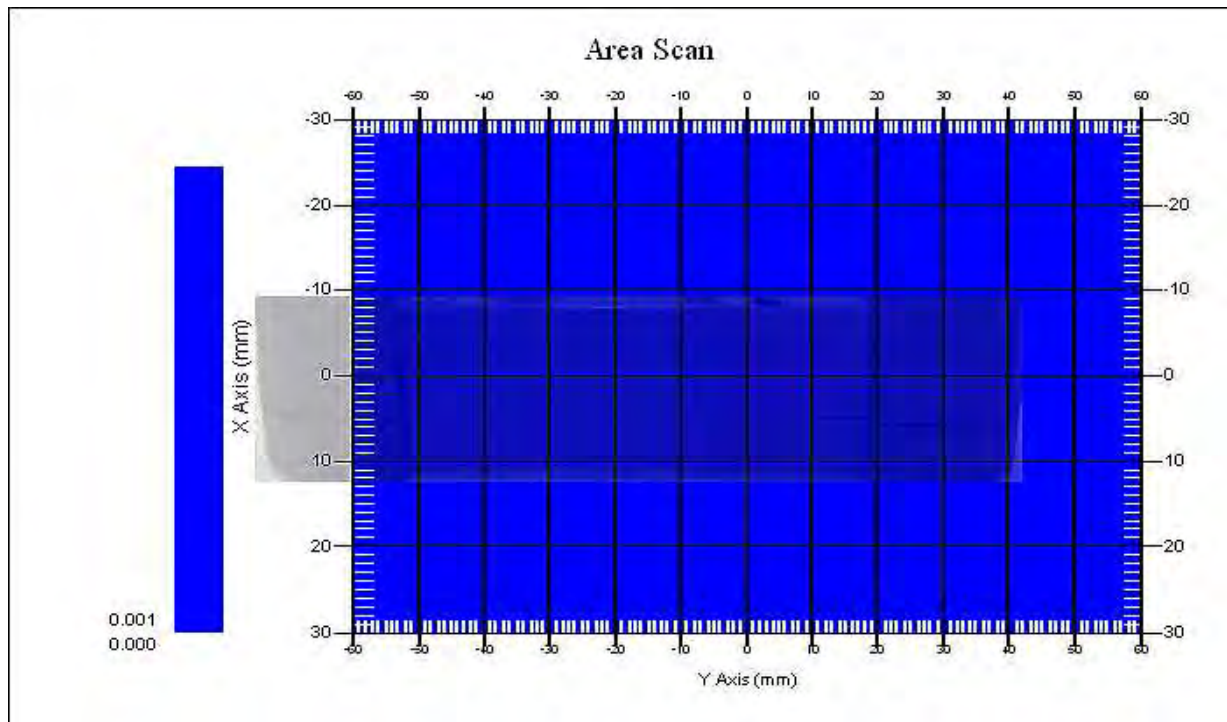
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = 21.110, Y = 50.900
1 gram SAR value : 0.017 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.090 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 21.110, Y = 50.900
1 gram SAR value : 0.017 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.090 W/kg

Data No. 6:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 08:24:53 AM
End Time : 22-Dec-2016 08:49:14 AM
Scanning Time : 1461 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 135 mm
Depth : 110 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.012 W/kg
Power Drift-Finish: 0.012 W/kg
Power Drift (%) : -1.012
Picture : C:\alsas\bitmap\Device-10.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

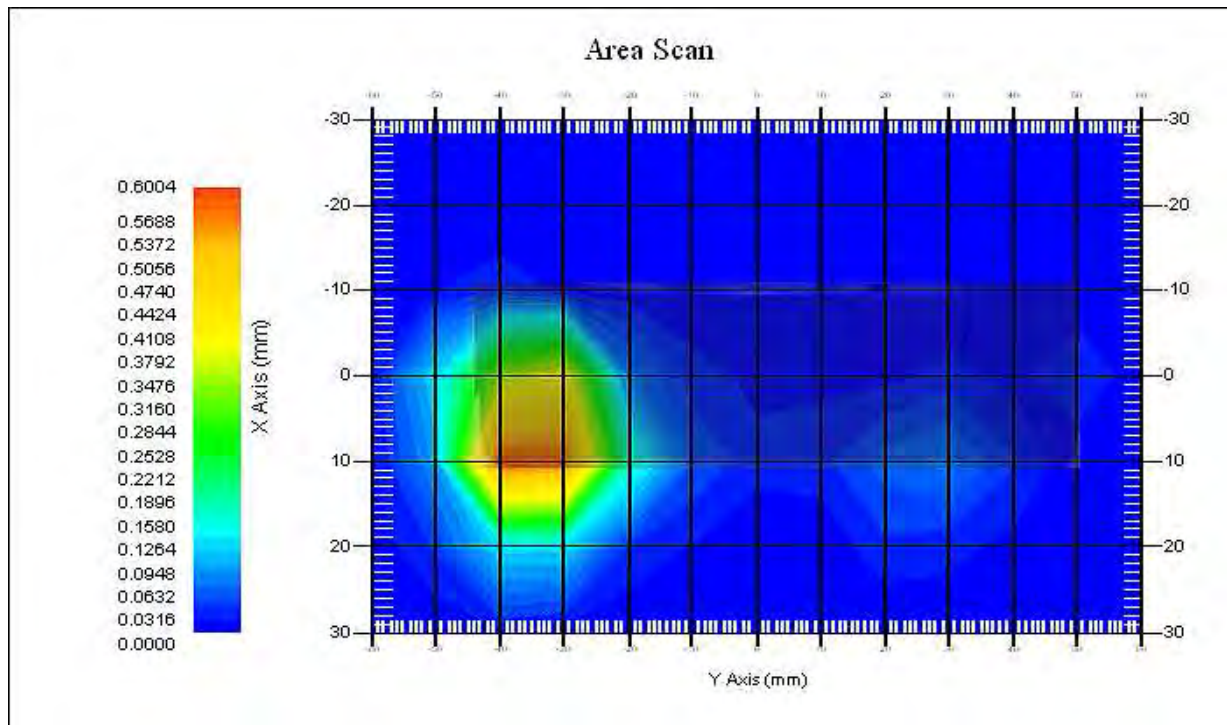
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = 10.100, Y = -32.000
 1 gram SAR value : 0.530 W/kg
 Area Scan Peak SAR : 0.591 W/kg
 Zoom Scan Peak SAR : 1.321 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 10.100, Y = -32.000
 1 gram SAR value : 0.530 W/kg
 Area Scan Peak SAR : 0.591 W/kg
 Zoom Scan Peak SAR : 1.321 W/kg

Data No. 7:

Report Date : 22-Dec-2016
 By Operator : 123
 Measurement Date : 22-Dec-2016
 Starting Time : 22-Dec-2016 08:50:28 AM
 End Time : 22-Dec-2016 09:14:23 AM
 Scanning Time : 1435 secs
 Product Data
 Device Name : 16LR283
 Serial No. : NA
 Type : Other
 Model : NA
 Frequency : 2450.00 MHz
 Max. Transmit Pwr : 0.25 W
 Drift Time : 1 min(s)
 Length : 42 mm
 Width : 135 mm
 Depth : 110 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-10.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 : 22-Dec-2016
 Temperature : 21.50 °C
 Ambient Temp. : 21.50 °C
 Humidity : 62.00 RH%
 Epsilon (Dielectric Constant): 54.27
 Sigma : 1.93 S/m
 Density : 1000.00 kg/cu. m

Probe Data

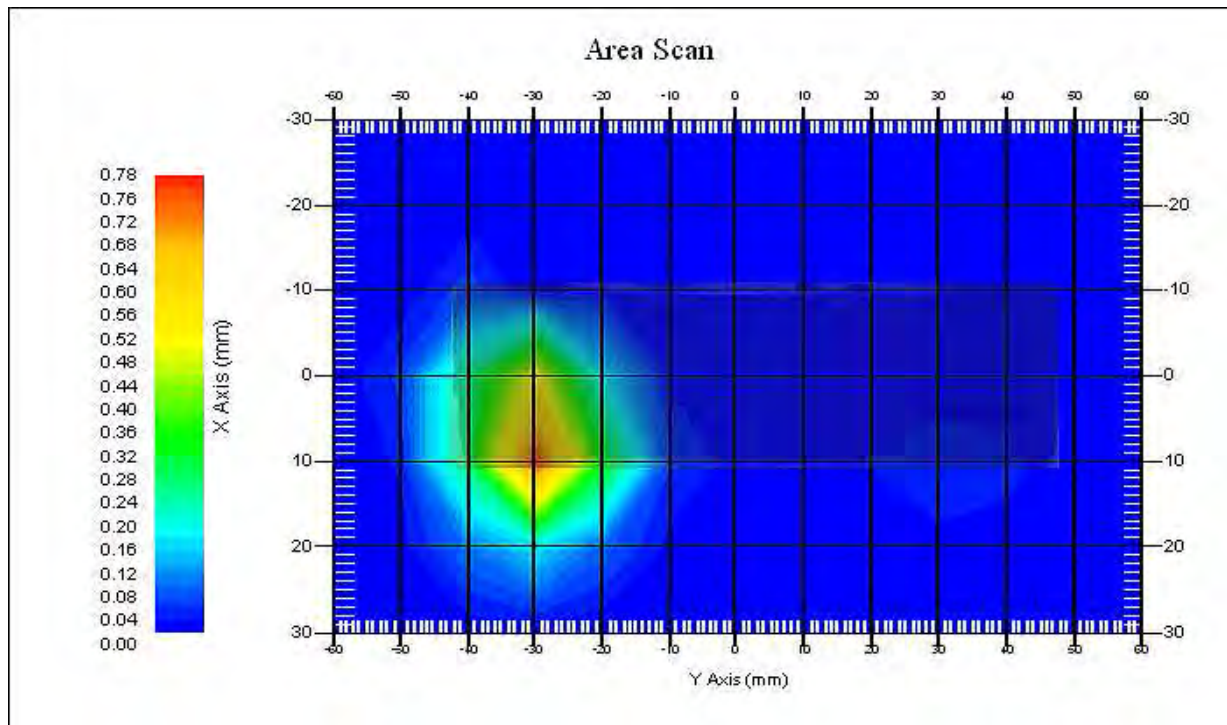
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = 10.080, Y = -30.000
1 gram SAR value : 0.578 W/kg
Area Scan Peak SAR : 0.761 W/kg
Zoom Scan Peak SAR : 1.481 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 10.080, Y = -30.000
1 gram SAR value : 0.578 W/kg
Area Scan Peak SAR : 0.761 W/kg
Zoom Scan Peak SAR : 1.481 W/kg

Data No. 8:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 12:06:21 PM
End Time : 22-Dec-2016 12:30:21 PM
Scanning Time : 1440 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 135 mm
Depth : 110 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.009 W/kg
Power Drift-Finish: 0.009 W/kg
Power Drift (%) : 3.620
Picture : C:\alsas\bitmap\Device-10.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

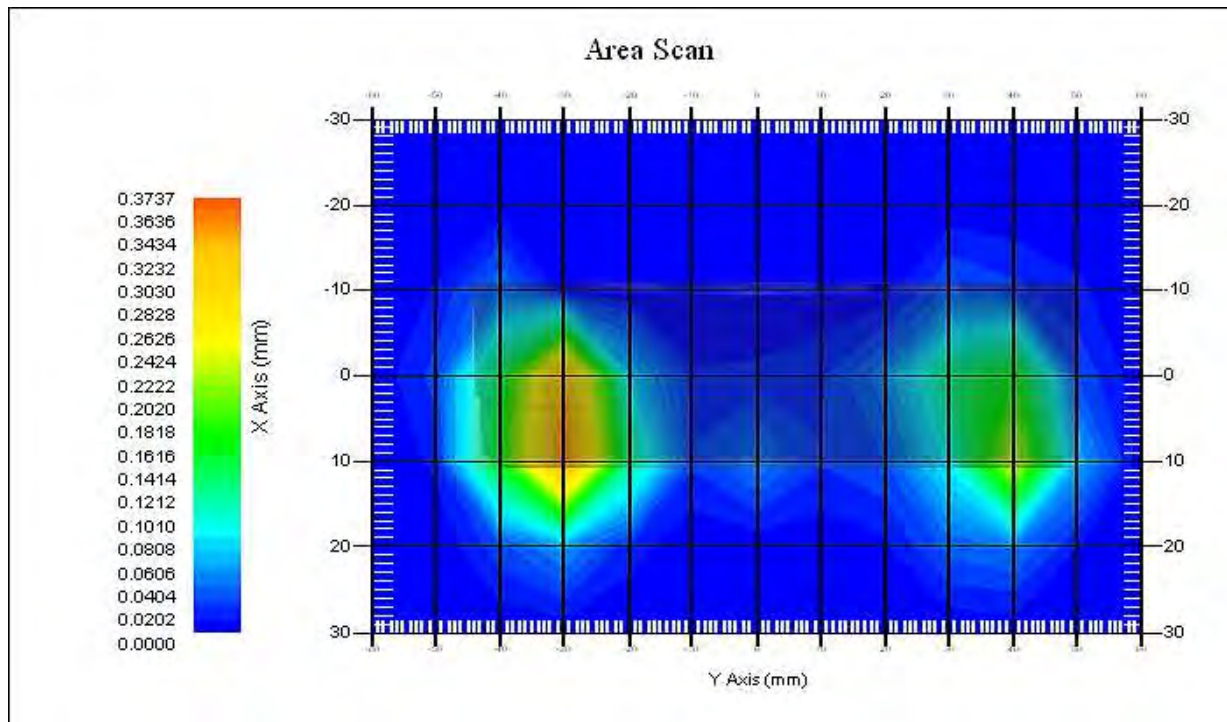
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = 2.080, Y = -30.000
1 gram SAR value : 0.320 W/kg
Area Scan Peak SAR : 0.364 W/kg
Zoom Scan Peak SAR : 0.970 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 2.080, Y = -30.000
1 gram SAR value : 0.320 W/kg
Area Scan Peak SAR : 0.364 W/kg
Zoom Scan Peak SAR : 0.970 W/kg

Data No. 9:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 12:35:38 PM
End Time : 22-Dec-2016 12:59:40 PM
Scanning Time : 1442 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 135 mm
Depth : 110 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-10.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

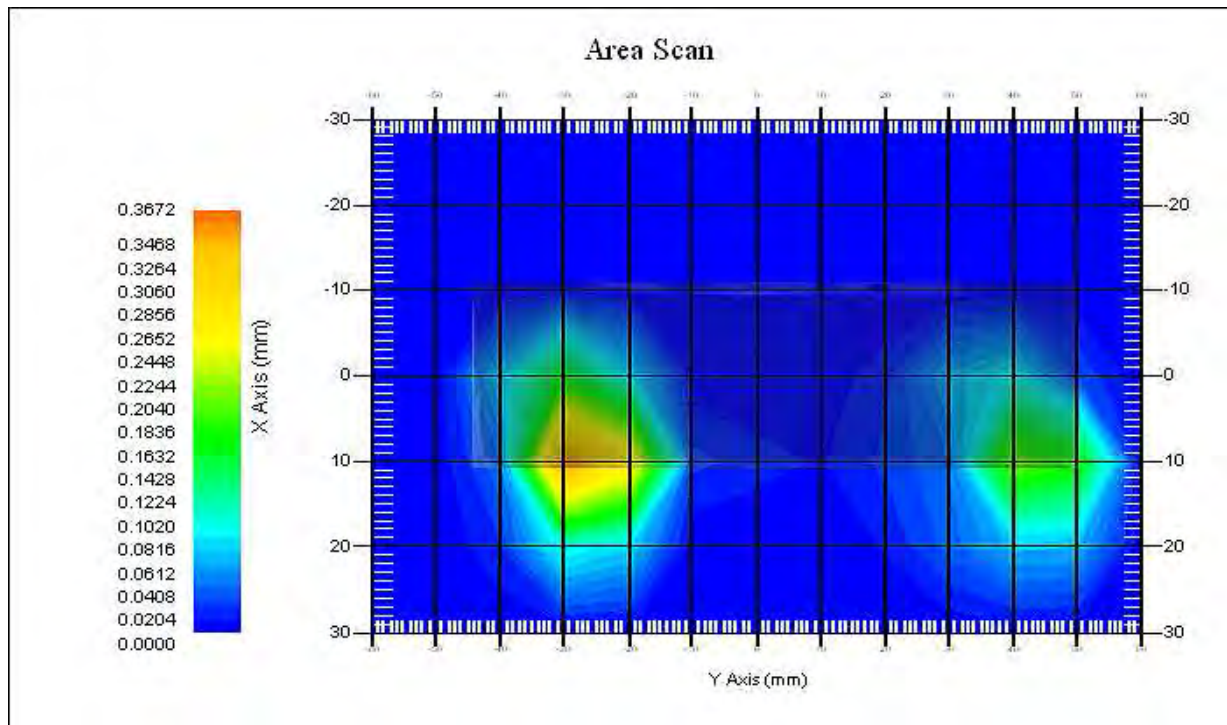
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = 10.080, Y = -30.000
 1 gram SAR value : 0.274 W/kg
 Area Scan Peak SAR : 0.367 W/kg
 Zoom Scan Peak SAR : 0.770 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 10.080, Y = -30.000
 1 gram SAR value : 0.274 W/kg
 Area Scan Peak SAR : 0.367 W/kg
 Zoom Scan Peak SAR : 0.770 W/kg

Data No. 10:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 09:44:22 AM
End Time : 22-Dec-2016 10:08:16 AM
Scanning Time : 1434 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 135 mm
Depth : 110 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.011 W/kg
Power Drift-Finish: 0.010 W/kg
Power Drift (%) : -4.848
Picture : C:\alsas\bitmap\Device-12.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

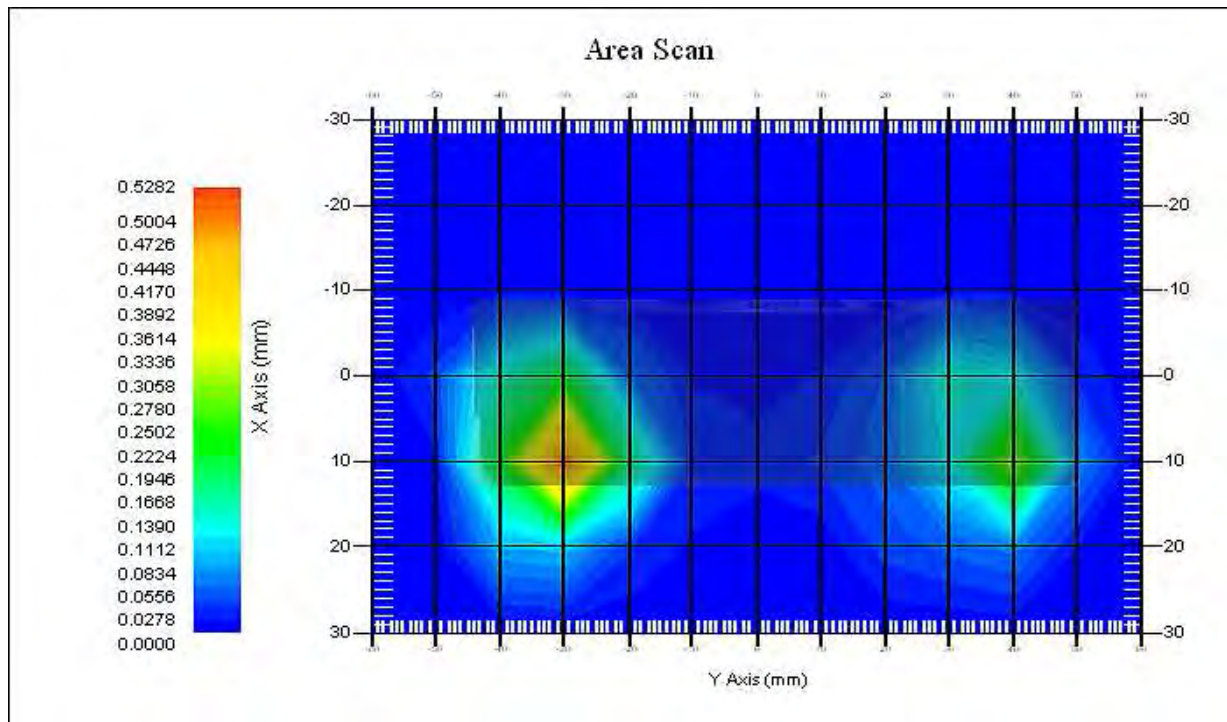
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 7x13x1 : 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 = 10.080, Y = -30.000
1 gram SAR value : 0.369 W/kg
Area Scan Peak SAR : 0.515 W/kg
Zoom Scan Peak SAR : 1.030 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 10.080, Y = -30.000
1 gram SAR value : 0.369 W/kg
Area Scan Peak SAR : 0.515 W/kg
Zoom Scan Peak SAR : 1.030 W/kg

Data No. 11:

Report Date : 22-Dec-2016
By Operator : 123
Measurement Date : 22-Dec-2016
Starting Time : 22-Dec-2016 09:07:34 PM
End Time : 22-Dec-2016 09:29:35 PM
Scanning Time : 1321 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 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-13.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 : 22-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.27
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

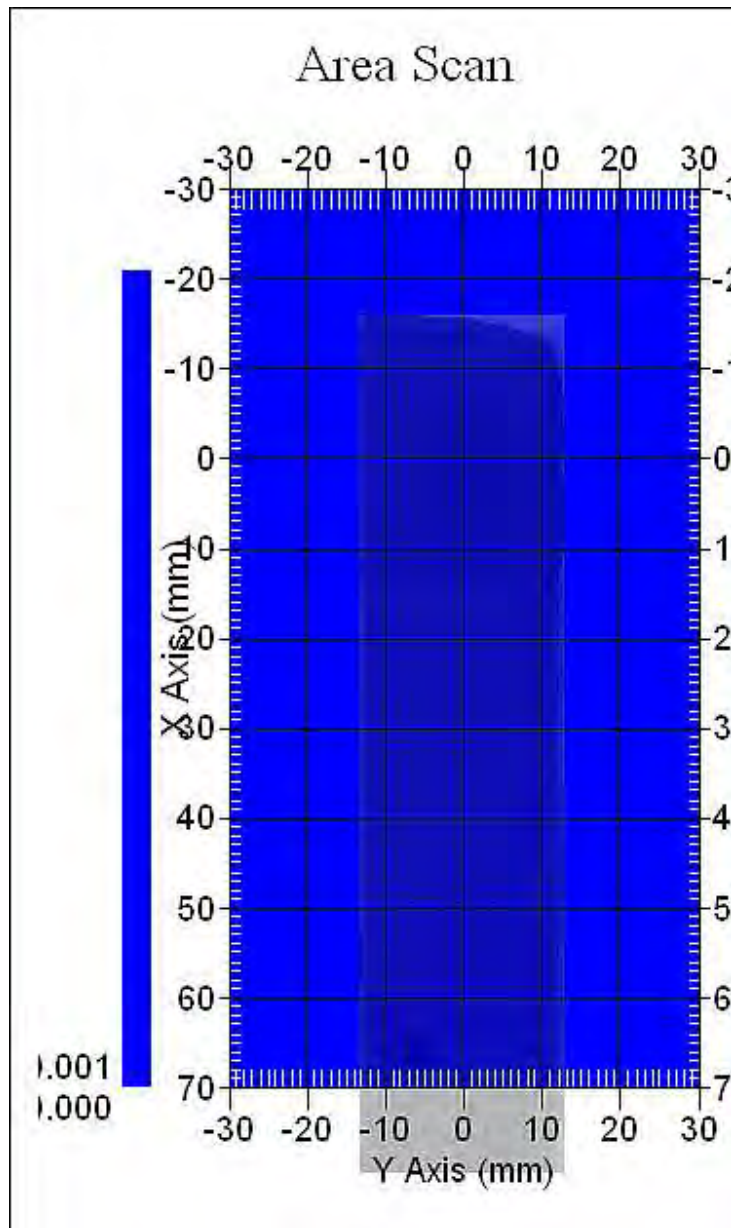
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.2
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 22-Dec-2016
Set-up Time : 12:53:56 AM
Area Scan : 11x7x1 : 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 = 53.130, Y = 12.900
 1 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 = 53.130, Y = 12.900
 1 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. 12:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 08:38:13 AM
End Time : 23-Dec-2016 09:18:39 AM
Scanning Time : 2426 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 110 mm
Width : 135 mm
Depth : 42 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-15.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 54.00 RH%
Epsilon (Dielectric Constant): 47.23
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

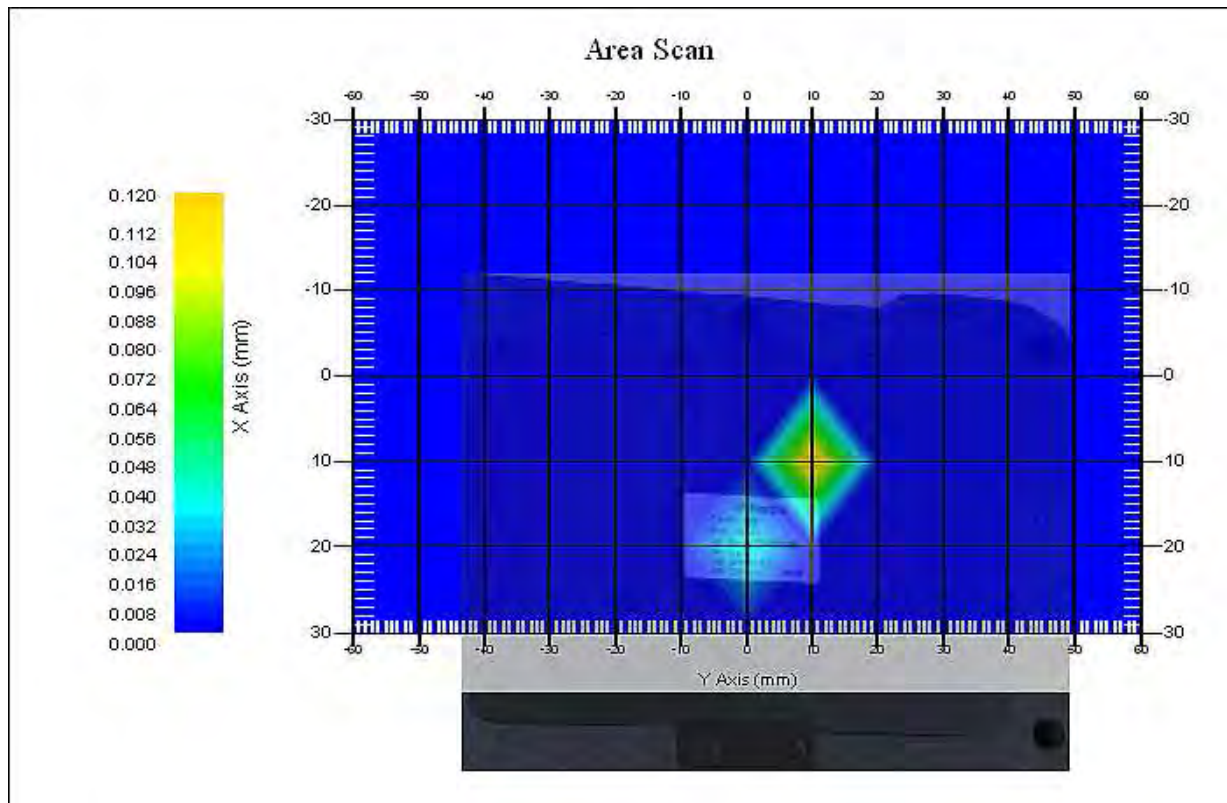
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 3
Probe Sensitivity : 1.19 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = -5.890, Y = -6.000
1 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.119 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = -5.890, Y = -6.000
1 gram SAR value : 0.001 W/kg
Area Scan Peak SAR : 0.119 W/kg
Zoom Scan Peak SAR : 0.000 W/kg

Data No. 13:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 12:59:11 PM
End Time : 23-Dec-2016 01:33:07 PM
Scanning Time : 2036 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 170 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-16.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

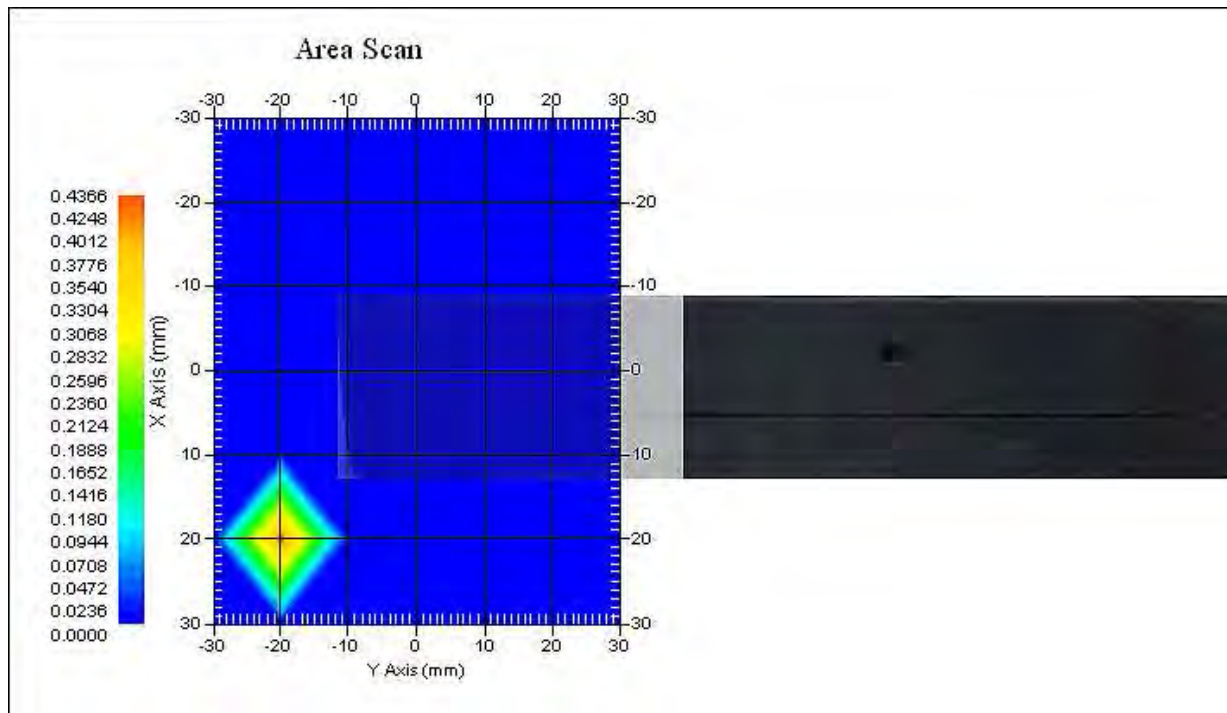
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 20.050, Y = -36.000
1 gram SAR value : 0.010 W/kg
Area Scan Peak SAR : 0.433 W/kg
Zoom Scan Peak SAR : 0.050 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 20.050, Y = -36.000
1 gram SAR value : 0.010 W/kg
Area Scan Peak SAR : 0.433 W/kg
Zoom Scan Peak SAR : 0.050 W/kg

Data No. 14:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 01:59:22 PM
End Time : 23-Dec-2016 02:33:26 PM
Scanning Time : 2044 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 170 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-16.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

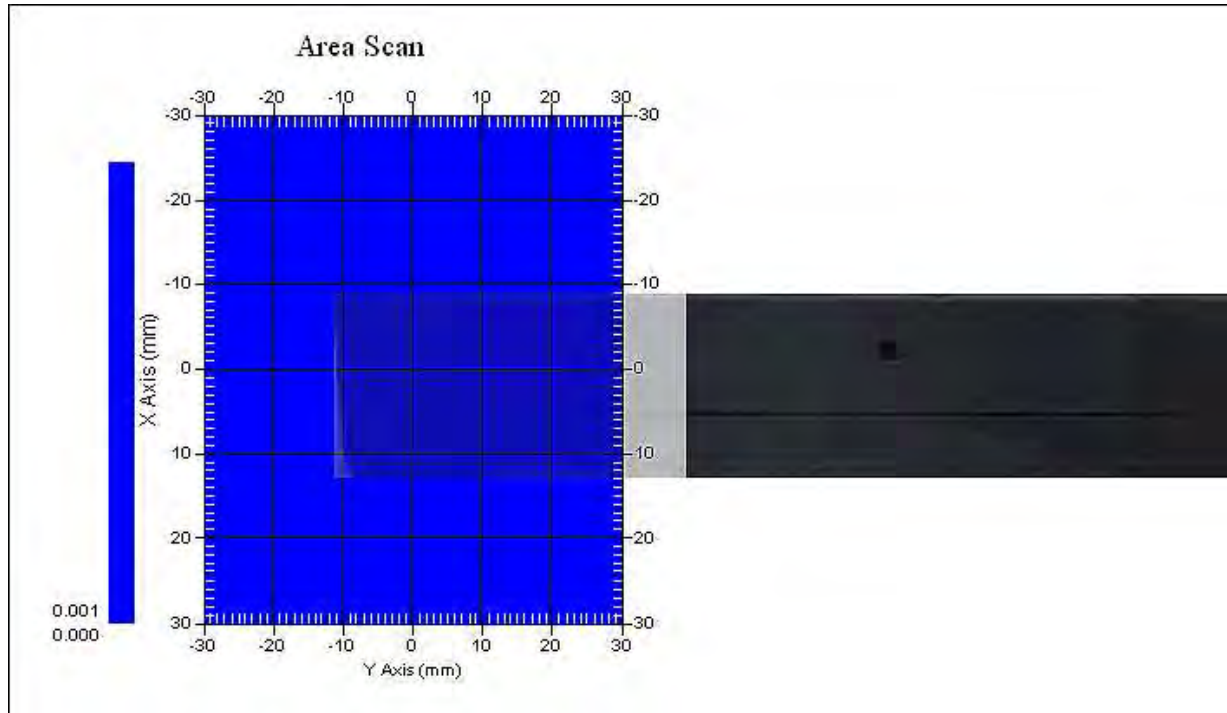
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 25.080, Y = 20.900
1 gram SAR value : 0.020 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.190 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 25.080, Y = 20.900
1 gram SAR value : 0.020 W/kg
Area Scan Peak SAR : 0.001 W/kg
Zoom Scan Peak SAR : 0.190 W/kg

Data No. 15:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 09:19:41 AM
End Time : 23-Dec-2016 10:00:04 AM
Scanning Time : 2423 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 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-17.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

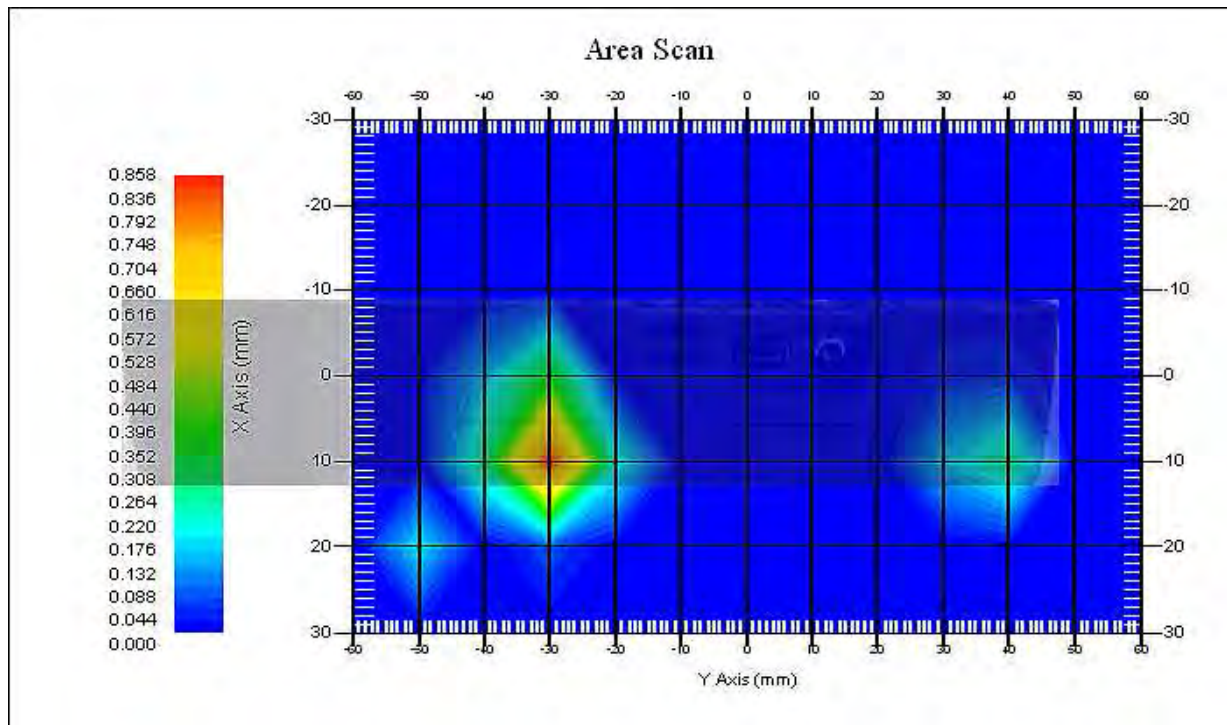
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 6.100, Y = -30.000
 1 gram SAR value : 0.763 W/kg
 Area Scan Peak SAR : 0.851 W/kg
 Zoom Scan Peak SAR : 2.451 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 6.100, Y = -30.000
 1 gram SAR value : 0.763 W/kg
 Area Scan Peak SAR : 0.851 W/kg
 Zoom Scan Peak SAR : 2.451 W/kg

Data No. 16:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 07:47:24 AM
End Time : 23-Dec-2016 08:28:08 AM
Scanning Time : 2444 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 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-17.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

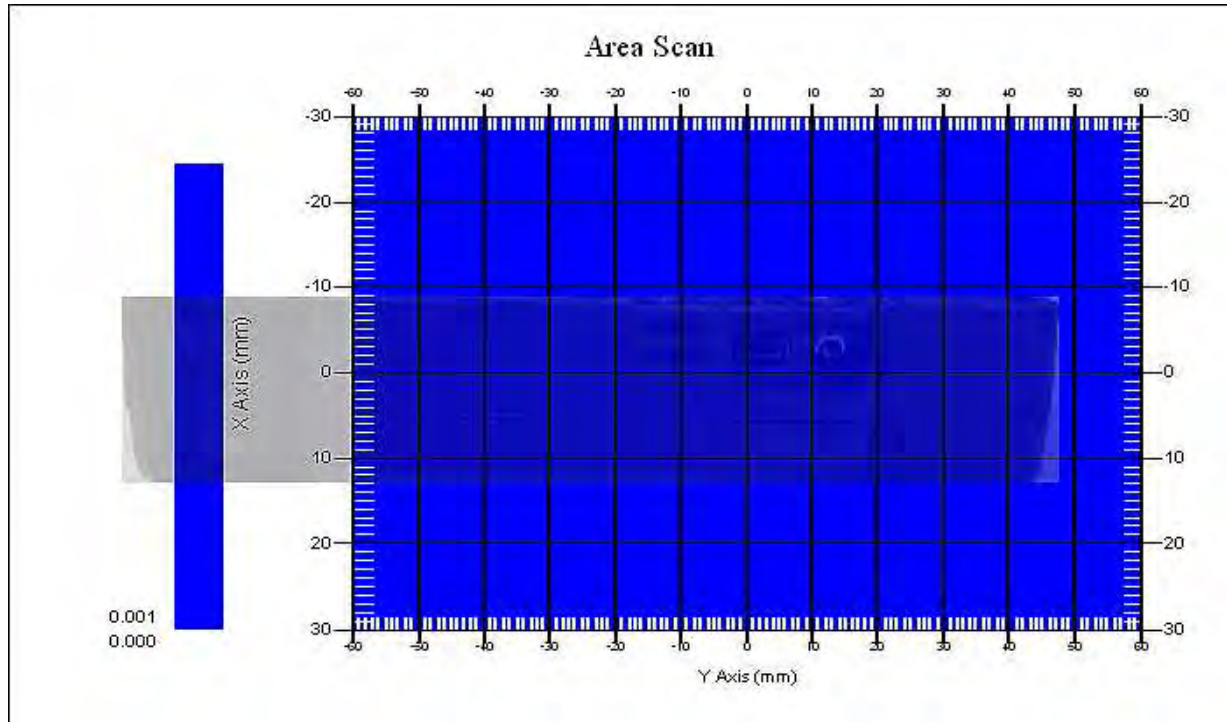
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 13.080, Y = 42.900
1 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 = 13.080, Y = 42.900
1 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. 17:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 06:36:31 AM
End Time : 23-Dec-2016 07:17:11 AM
Scanning Time : 2440 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 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-17.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

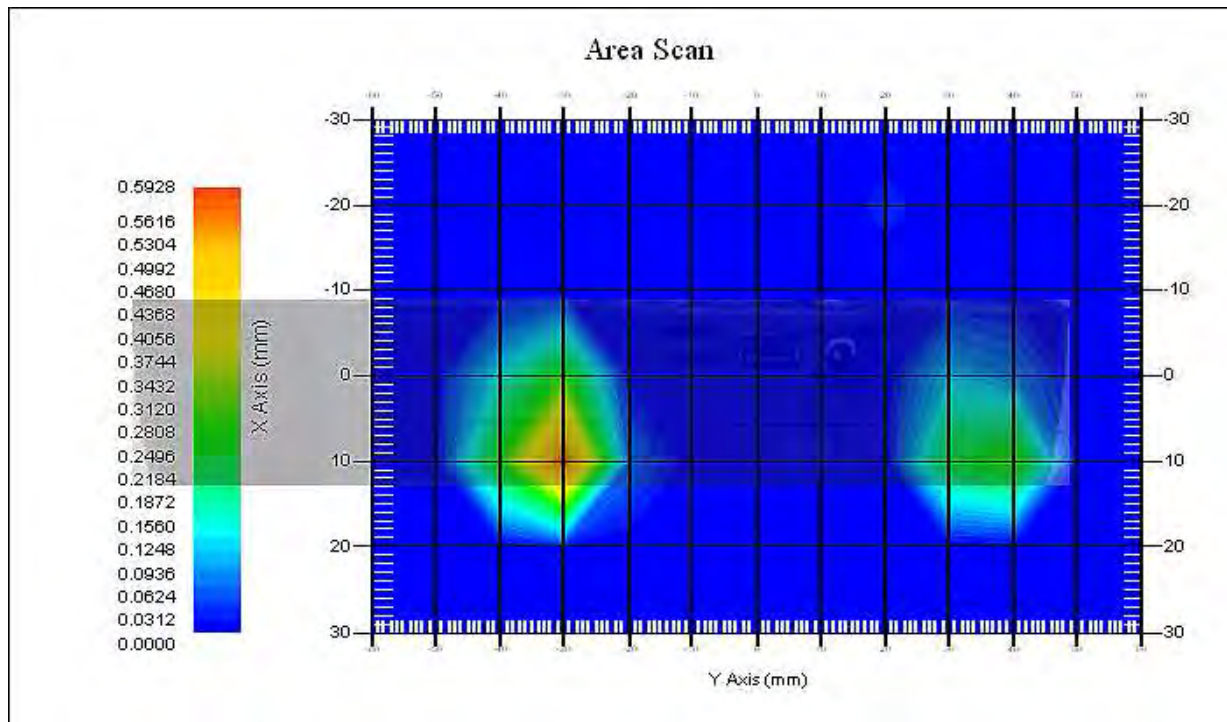
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 6.040, Y = -30.000
1 gram SAR value : 0.531 W/kg
Area Scan Peak SAR : 0.585 W/kg
Zoom Scan Peak SAR : 1.721 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 6.040, Y = -30.000
1 gram SAR value : 0.531 W/kg
Area Scan Peak SAR : 0.585 W/kg
Zoom Scan Peak SAR : 1.721 W/kg

Data No. 18:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 10:07:06 AM
End Time : 23-Dec-2016 10:47:56 AM
Scanning Time : 2450 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 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-17.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

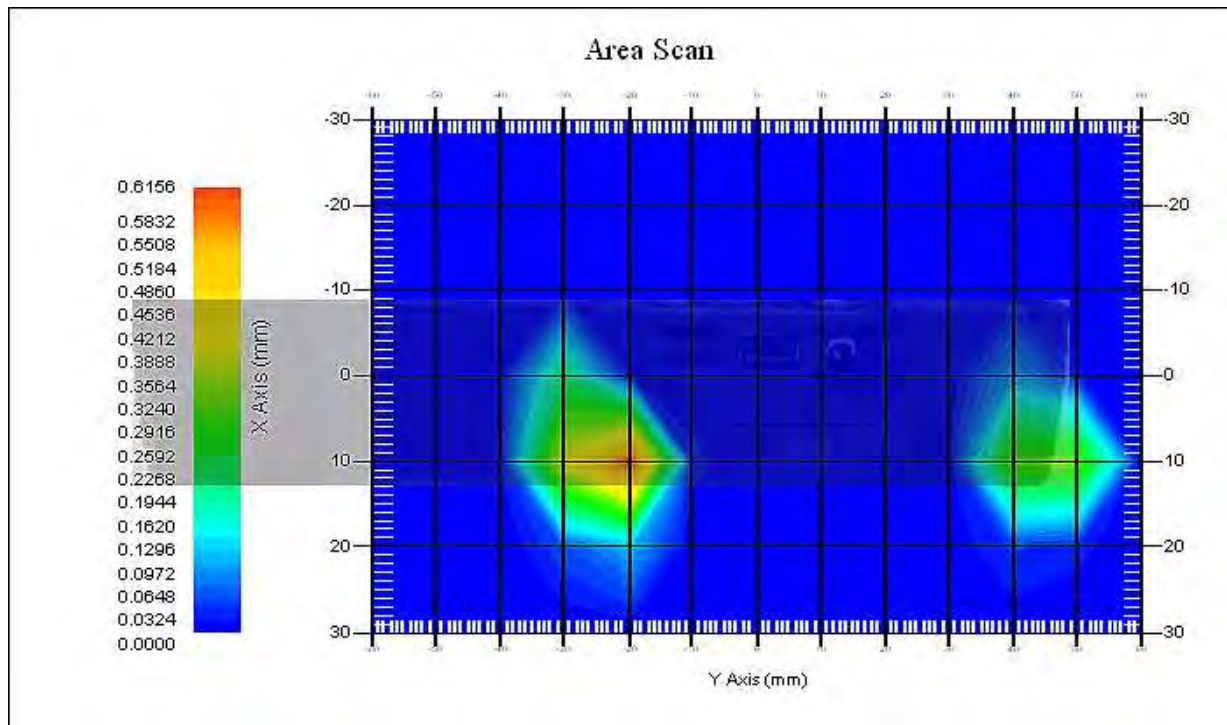
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 6.060, Y = -24.000
 1 gram SAR value : 0.556 W/kg
 Area Scan Peak SAR : 0.608 W/kg
 Zoom Scan Peak SAR : 1.831 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 6.060, Y = -24.000
 1 gram SAR value : 0.556 W/kg
 Area Scan Peak SAR : 0.608 W/kg
 Zoom Scan Peak SAR : 1.831 W/kg

Data No. 19:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 12:09:14 PM
End Time : 23-Dec-2016 12:49:57 PM
Scanning Time : 2443 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 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-17.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

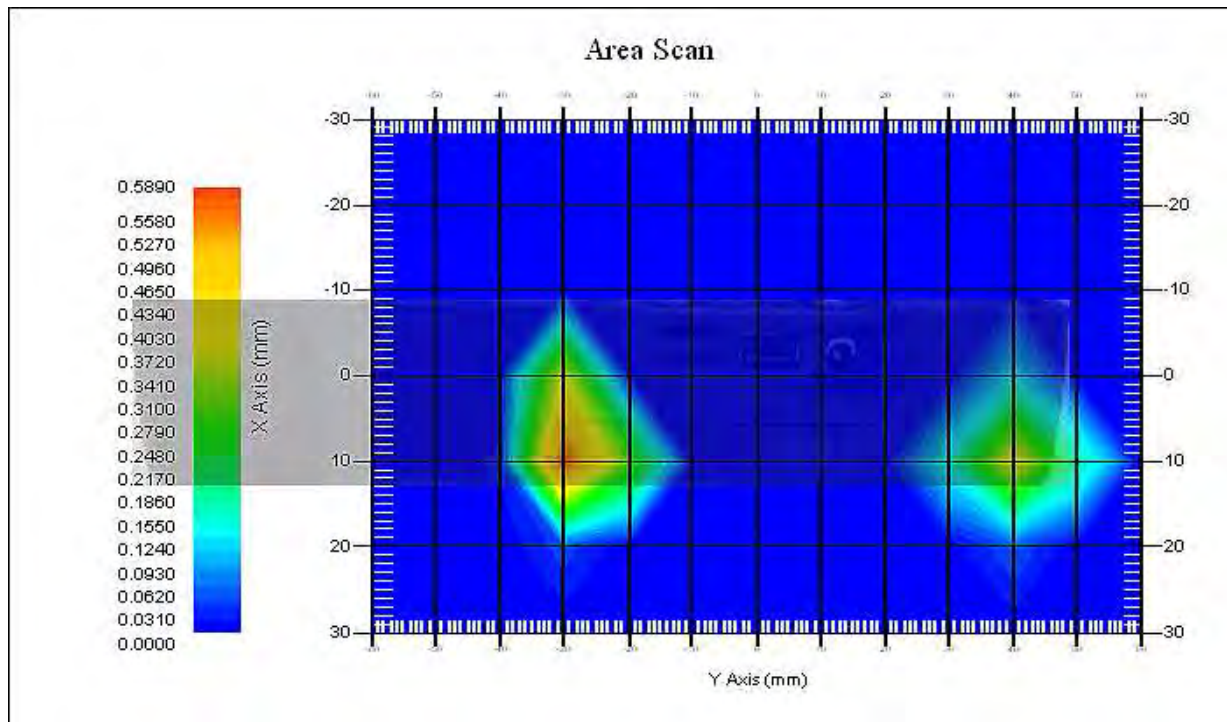
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 6.100, Y = -30.000
1 gram SAR value : 0.557 W/kg
Area Scan Peak SAR : 0.581 W/kg
Zoom Scan Peak SAR : 1.921 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 6.100, Y = -30.000
1 gram SAR value : 0.557 W/kg
Area Scan Peak SAR : 0.581 W/kg
Zoom Scan Peak SAR : 1.921 W/kg

Data No. 20:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 03:02:51 PM
End Time : 23-Dec-2016 03:43:26 PM
Scanning Time : 2435 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.027 W/kg
Power Drift-Finish: 0.025 W/kg
Power Drift (%) : -4.259
Picture : C:\alsas\bitmap\Device-17.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

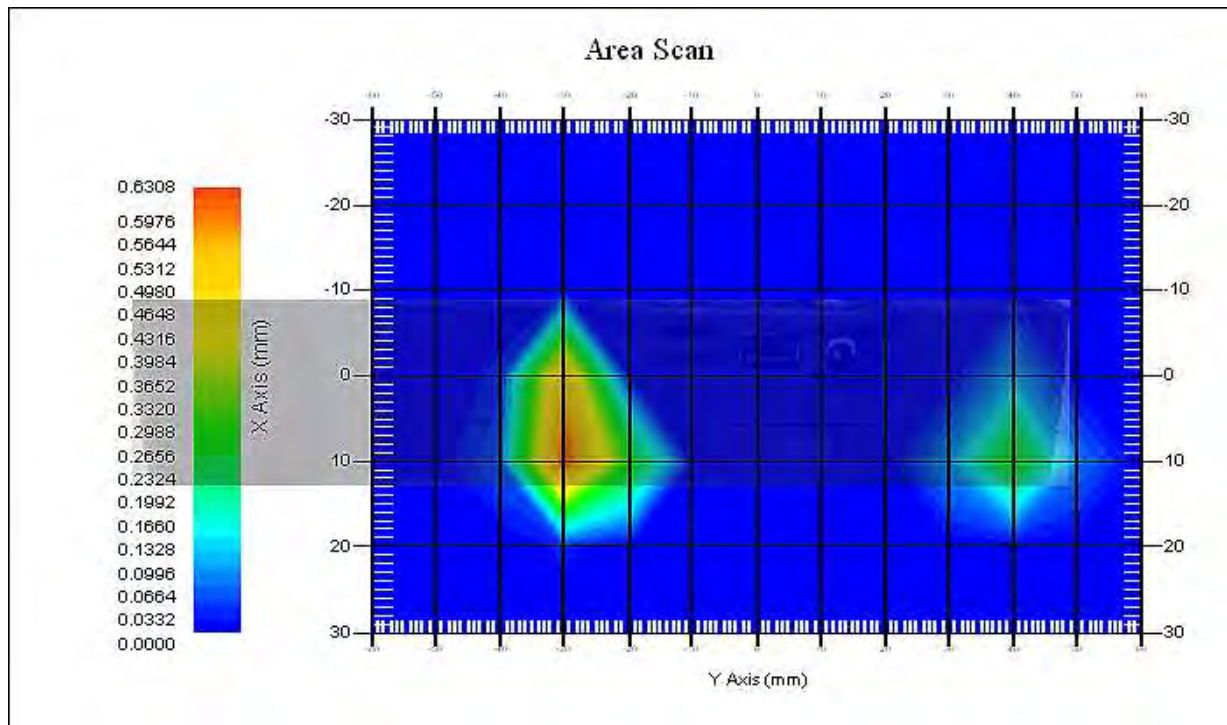
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5250.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 3
Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 6.080, Y = -30.000
 1 gram SAR value : 0.681 W/kg
 Area Scan Peak SAR : 0.624 W/kg
 Zoom Scan Peak SAR : 2.251 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 6.080, Y = -30.000
 1 gram SAR value : 0.681 W/kg
 Area Scan Peak SAR : 0.624 W/kg
 Zoom Scan Peak SAR : 2.251 W/kg

Data No. 21:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 03:54:22 PM
End Time : 23-Dec-2016 04:34:51 PM
Scanning Time : 2429 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5250.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 207 mm
Depth : 107 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-18.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. : 5250B
Frequency : 5250.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 47.22
Sigma : 5.48 S/m
Density : 1000.00 kg/cu. m

Probe Data

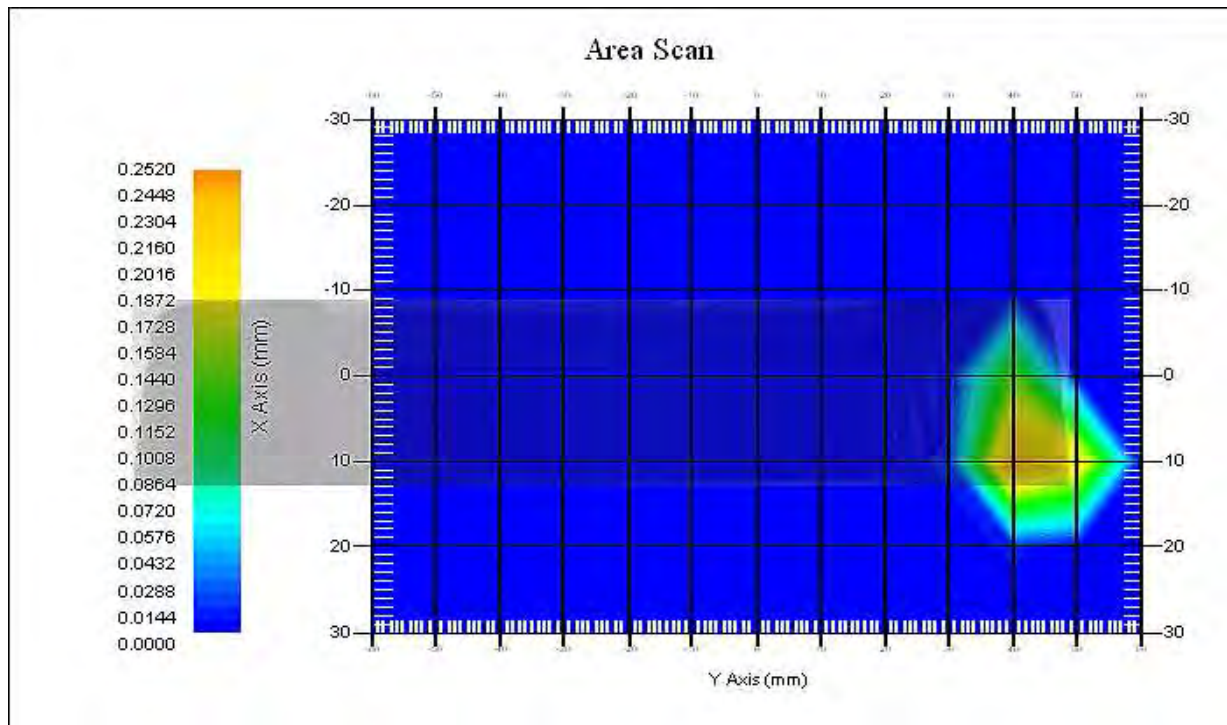
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 5250.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 3
 Probe Sensitivity : 1.91 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 23-Dec-2016
 Set-up Time : 12:26:34 AM
 Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 6.100, Y = 39.900
 1 gram SAR value : 0.211 W/kg
 Area Scan Peak SAR : 0.248 W/kg
 Zoom Scan Peak SAR : 0.790 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 6.100, Y = 39.900
 1 gram SAR value : 0.211 W/kg
 Area Scan Peak SAR : 0.248 W/kg
 Zoom Scan Peak SAR : 0.790 W/kg

Data No. 22:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 04:40:16 PM
End Time : 23-Dec-2016 05:20:57 PM
Scanning Time : 2441 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5600B
Frequency : 5600.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 46.27
Sigma : 5.64 S/m
Density : 1000.00 kg/cu. m

Probe Data

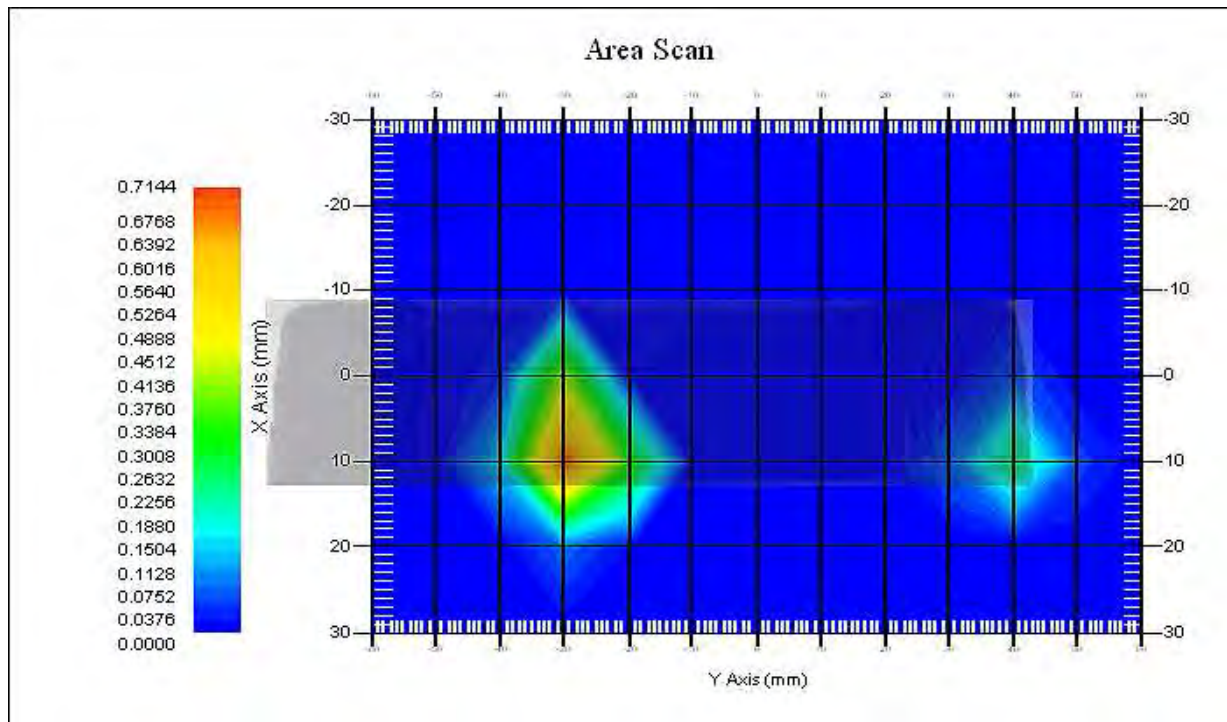
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 18-Feb-2016
Frequency : 5600.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 2.9
Probe Sensitivity : 1.19 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 6.060, Y = -30.000
1 gram SAR value : 0.721 W/kg
Area Scan Peak SAR : 0.711 W/kg
Zoom Scan Peak SAR : 2.371 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 6.060, Y = -30.000
1 gram SAR value : 0.721 W/kg
Area Scan Peak SAR : 0.711 W/kg
Zoom Scan Peak SAR : 2.371 W/kg

Data No. 23:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 05:23:18 PM
End Time : 23-Dec-2016 06:03:51 PM
Scanning Time : 2433 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5600B
Frequency : 5600.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 46.27
Sigma : 5.64 S/m
Density : 1000.00 kg/cu. m

Probe Data

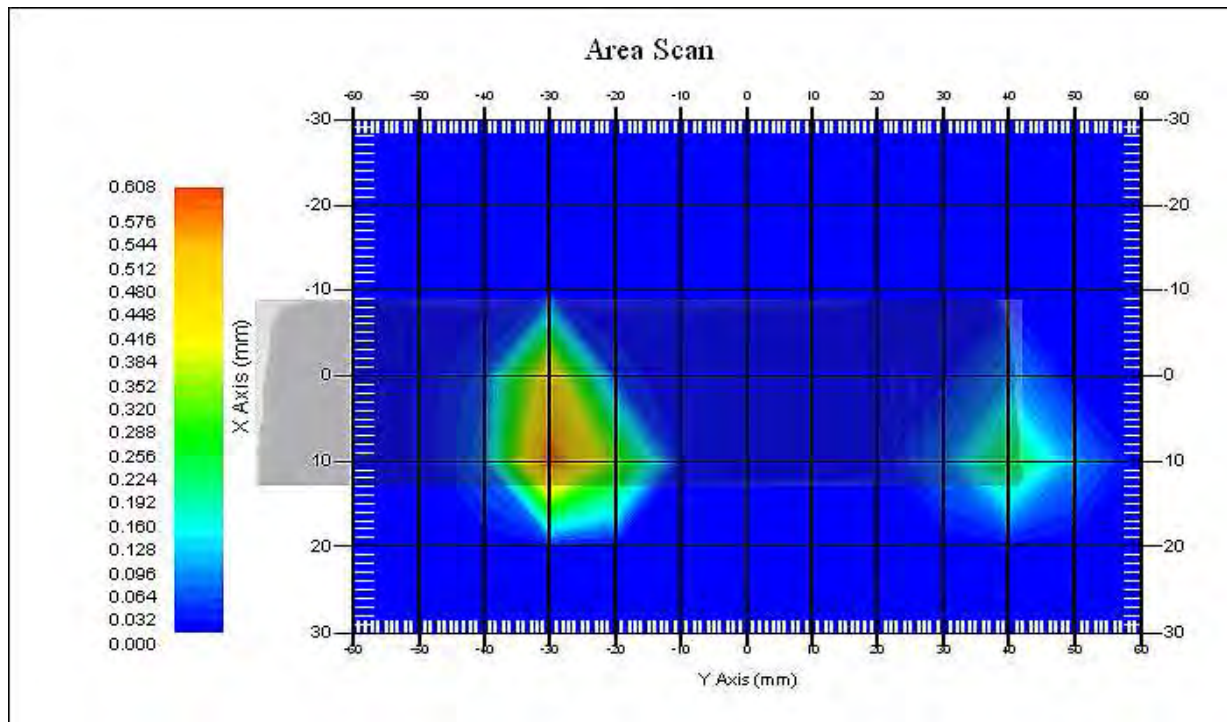
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5600.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 2.9
Probe Sensitivity : 1.19 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 6.070, Y = -30.000
1 gram SAR value : 0.626 W/kg
Area Scan Peak SAR : 0.601 W/kg
Zoom Scan Peak SAR : 1.971 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 6.070, Y = -30.000
1 gram SAR value : 0.626 W/kg
Area Scan Peak SAR : 0.601 W/kg
Zoom Scan Peak SAR : 1.971 W/kg

Data No. 24:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 07:05:49 PM
End Time : 23-Dec-2016 07:46:22 PM
Scanning Time : 2433 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5600B
Frequency : 5600.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 46.27
Sigma : 5.64 S/m
Density : 1000.00 kg/cu. m

Probe Data

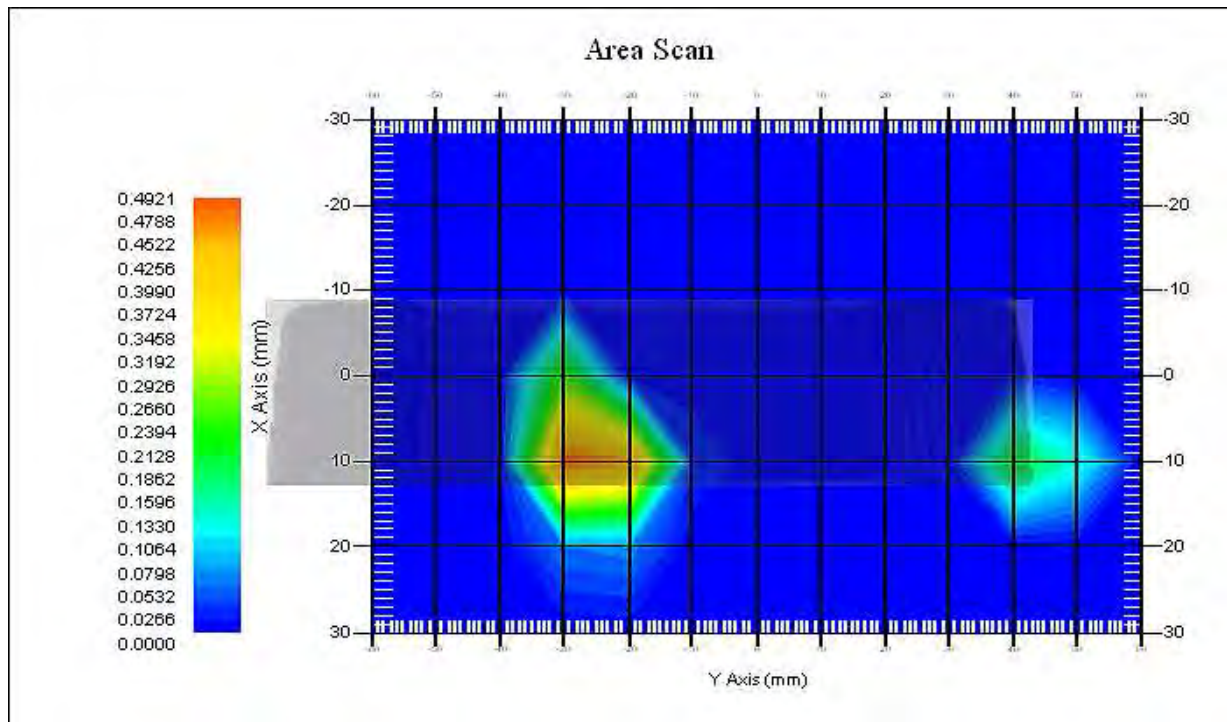
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5600.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 2.9
Probe Sensitivity : 1.19 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 6.080, Y = -26.000
1 gram SAR value : 0.532 W/kg
Area Scan Peak SAR : 0.490 W/kg
Zoom Scan Peak SAR : 1.751 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 6.080, Y = -26.000
1 gram SAR value : 0.532 W/kg
Area Scan Peak SAR : 0.490 W/kg
Zoom Scan Peak SAR : 1.751 W/kg

Data No. 25:

Report Date : 23-Dec-2016
By Operator : 123
Measurement Date : 23-Dec-2016
Starting Time : 23-Dec-2016 07:47:44 PM
End Time : 23-Dec-2016 08:28:13 PM
Scanning Time : 2429 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5600.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5600B
Frequency : 5600.00 MHz
Last Calib. Date : 23-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 46.27
Sigma : 5.64 S/m
Density : 1000.00 kg/cu. m

Probe Data

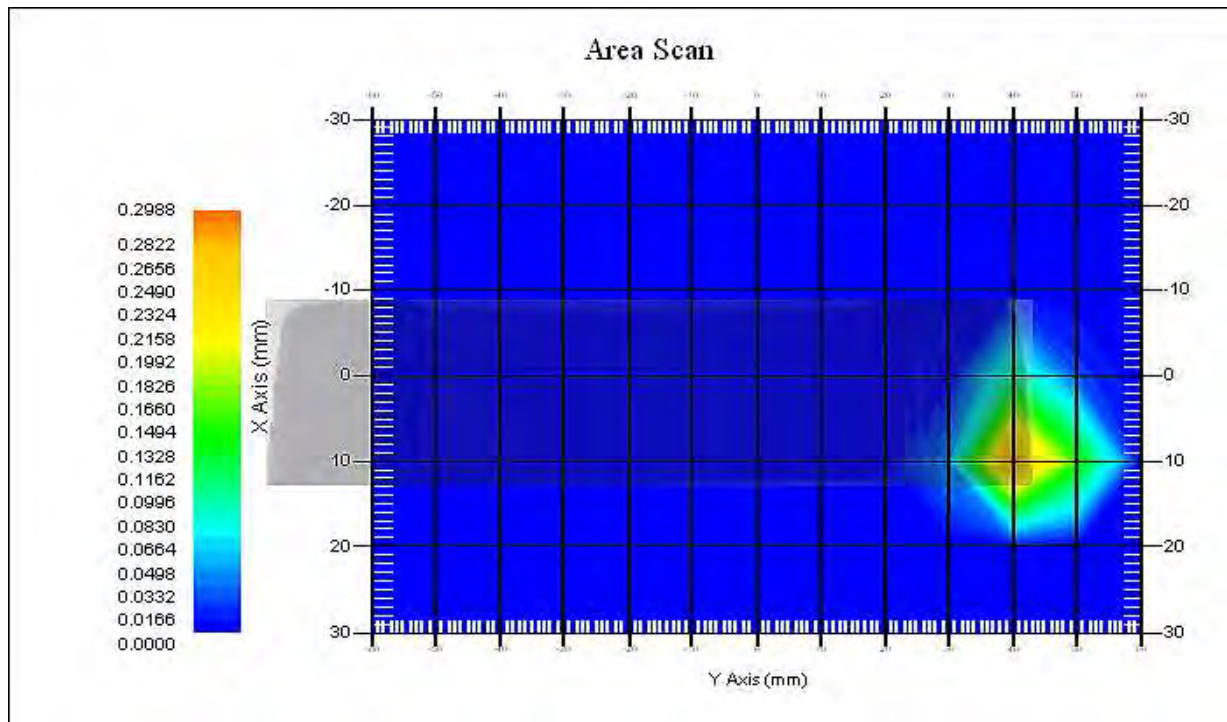
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5600.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 2.9
Probe Sensitivity : 1.19 1.19 1.19 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 23-Dec-2016
Set-up Time : 12:26:34 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 6.090, Y = 39.900
 1 gram SAR value : 0.264 W/kg
 Area Scan Peak SAR : 0.293 W/kg
 Zoom Scan Peak SAR : 1.020 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 6.090, Y = 39.900
 1 gram SAR value : 0.264 W/kg
 Area Scan Peak SAR : 0.293 W/kg
 Zoom Scan Peak SAR : 1.020 W/kg

Data No. 26:

Report Date : 24-Dec-2016
By Operator : 123
Measurement Date : 24-Dec-2016
Starting Time : 24-Dec-2016 07:56:02 AM
End Time : 24-Dec-2016 08:36:36 AM
Scanning Time : 2434 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5800B
Frequency : 5800.00 MHz
Last Calib. Date : 24-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 58.00 RH%
Epsilon (Dielectric Constant): 46.12
Sigma : 5.68 S/m
Density : 1000.00 kg/cu. m

Probe Data

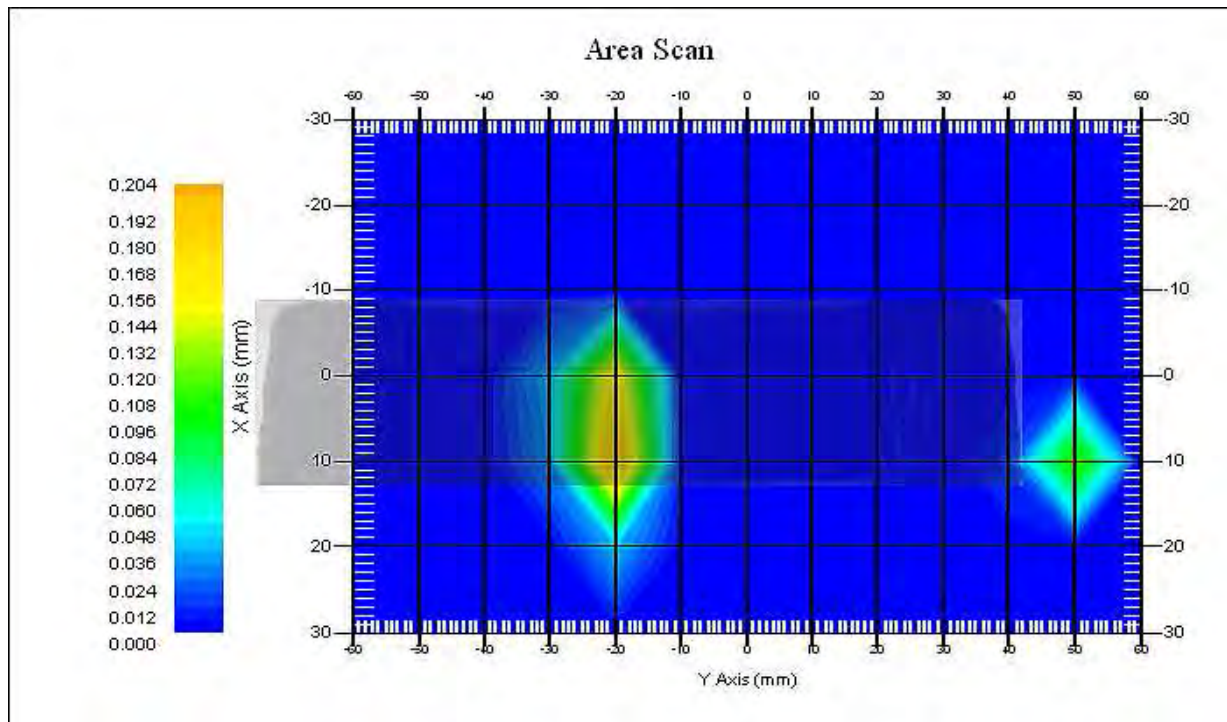
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5800.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 2.9
Probe Sensitivity : 1.90 1.90 1.90 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 24-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 6.100, Y = -20.000
1 gram SAR value : 0.220 W/kg
Area Scan Peak SAR : 0.200 W/kg
Zoom Scan Peak SAR : 0.810 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 6.100, Y = -20.000
1 gram SAR value : 0.220 W/kg
Area Scan Peak SAR : 0.200 W/kg
Zoom Scan Peak SAR : 0.810 W/kg

Data No. 27:

Report Date : 24-Dec-2016
By Operator : 123
Measurement Date : 24-Dec-2016
Starting Time : 24-Dec-2016 08:42:10 AM
End Time : 24-Dec-2016 09:48:12 AM
Scanning Time : 3962 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5800B
Frequency : 5800.00 MHz
Last Calib. Date : 24-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 58.00 RH%
Epsilon (Dielectric Constant): 46.12
Sigma : 5.68 S/m
Density : 1000.00 kg/cu. m

Probe Data

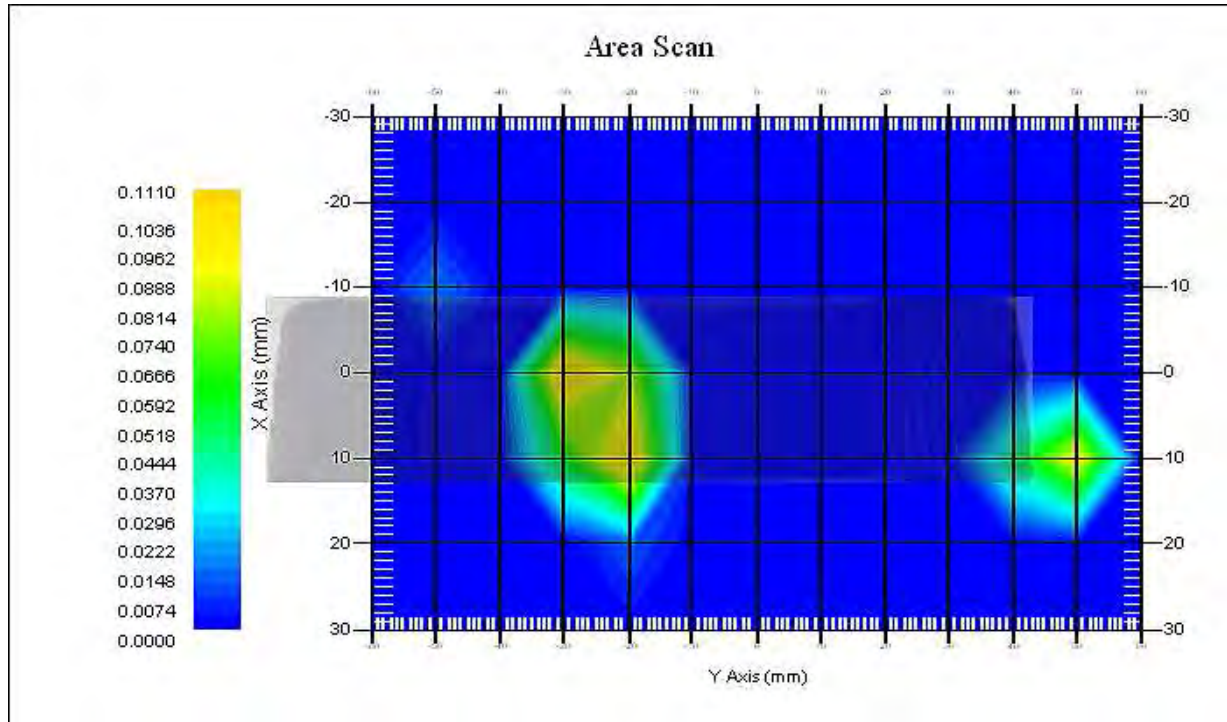
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 5800.00 MHz
 Duty Cycle Factor (CreF): 1
 Conversion Factor : 2.9
 Probe Sensitivity : 1.90 1.90 1.90 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 24-Dec-2016
 Set-up Time : 7:48:05 AM
 Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : Low



The system detected 2 maxima.
 Selected highest maxima # = 2.
 Maxima #2 coordinates: X = 6.150, Y = -24.000
 1 gram SAR value : 0.197 W/kg
 Area Scan Peak SAR : 0.110 W/kg
 Zoom Scan Peak SAR : 0.720 W/kg

Maxima Summary:

Maxima #1

Maxima coordinates: X = 4.030, Y = -26.000
 1 gram SAR value : 0.195 W/kg
 Area Scan Peak SAR : 0.110 W/kg
 Zoom Scan Peak SAR : 0.780 W/kg

Maxima #2

Maxima coordinates: X = 6.150, Y = -24.000
 1 gram SAR value : 0.197 W/kg
 Area Scan Peak SAR : 0.110 W/kg
 Zoom Scan Peak SAR : 0.720 W/kg

Data No. 28:

Report Date : 24-Dec-2016
By Operator : 123
Measurement Date : 24-Dec-2016
Starting Time : 24-Dec-2016 09:55:55 AM
End Time : 24-Dec-2016 10:36:29 AM
Scanning Time : 2434 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5800B
Frequency : 5800.00 MHz
Last Calib. Date : 24-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 58.00 RH%
Epsilon (Dielectric Constant): 46.12
Sigma : 5.68 S/m
Density : 1000.00 kg/cu. m

Probe Data

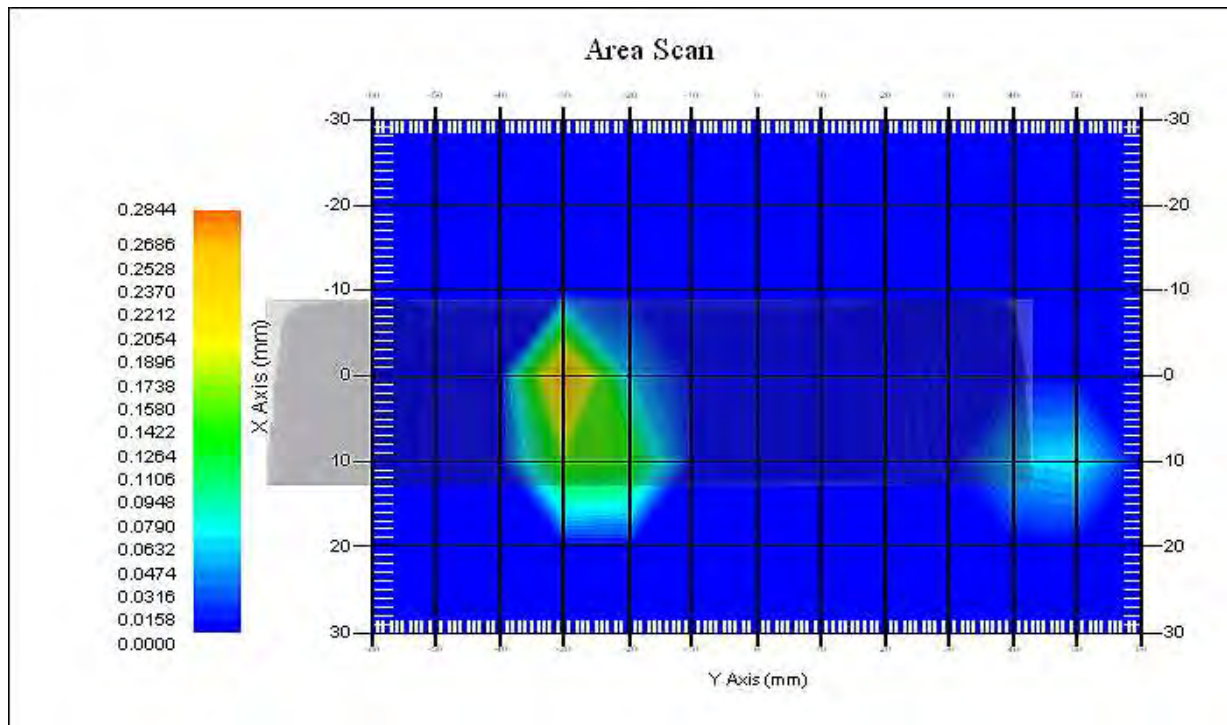
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5800.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 2.9
Probe Sensitivity : 1.90 1.90 1.90 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 24-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 4.090, Y = -26.000
 1 gram SAR value : 0.305 W/kg
 10 gram SAR value : 0.067 W/kg
 Area Scan Peak SAR : 0.278 W/kg
 Zoom Scan Peak SAR : 1.100 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 4.090, Y = -26.000
 1 gram SAR value : 0.305 W/kg
 10 gram SAR value : 0.067 W/kg
 Area Scan Peak SAR : 0.278 W/kg
 Zoom Scan Peak SAR : 1.100 W/kg

Data No. 29:

Report Date : 24-Dec-2016
By Operator : 123
Measurement Date : 24-Dec-2016
Starting Time : 24-Dec-2016 12:03:17 PM
End Time : 24-Dec-2016 12:43:54 PM
Scanning Time : 2437 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 5800.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 42 mm
Width : 170 mm
Depth : 207 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-14.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. : 5800B
Frequency : 5800.00 MHz
Last Calib. Date : 24-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 58.00 RH%
Epsilon (Dielectric Constant): 46.12
Sigma : 5.68 S/m
Density : 1000.00 kg/cu. m

Probe Data

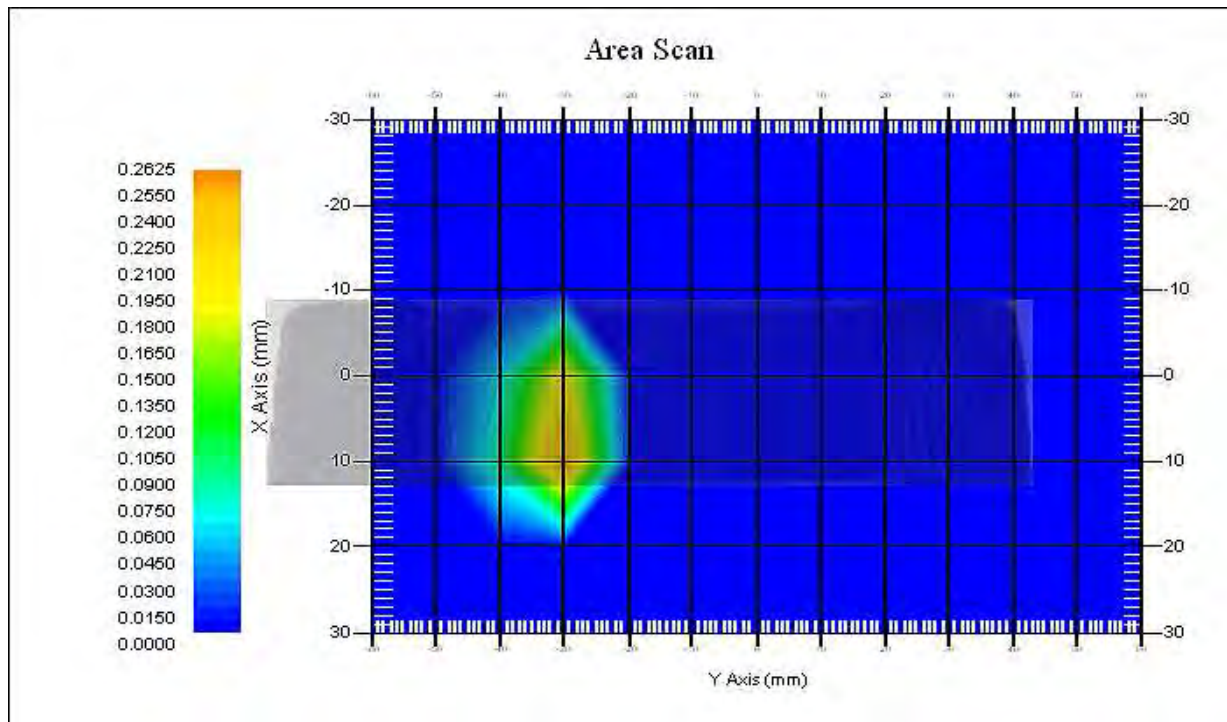
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 5800.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 2.9
Probe Sensitivity : 1.90 1.90 1.90 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 24-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 7x13x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 9x9x7 : Measurement x=4mm, y=4mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 6.110, Y = -30.000
 1 gram SAR value : 0.271 W/kg
 10 gram SAR value : 0.063 W/kg
 Area Scan Peak SAR : 0.259 W/kg
 Zoom Scan Peak SAR : 0.980 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 6.110, Y = -30.000
 1 gram SAR value : 0.271 W/kg
 10 gram SAR value : 0.063 W/kg
 Area Scan Peak SAR : 0.259 W/kg
 Zoom Scan Peak SAR : 0.980 W/kg

Data No. 30:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 04:53:28 PM
End Time : 26-Dec-2016 05:37:38 PM
Scanning Time : 2650 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 207 mm
Depth : 42 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.180 W/kg
Power Drift-Finish: 0.178 W/kg
Power Drift (%) : -1.306
Picture : C:\alsas\bitmap\Device-21.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

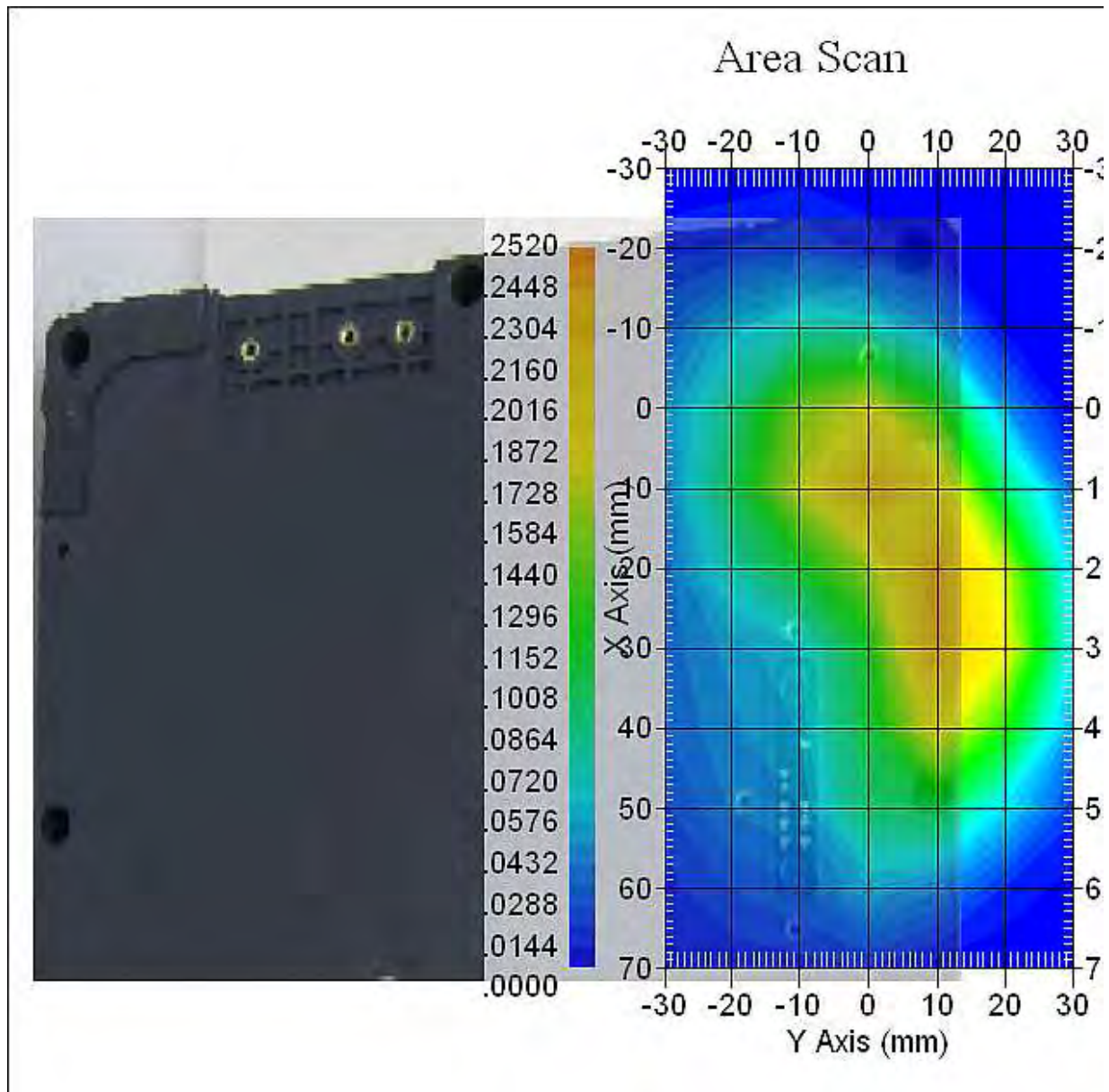
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=1.4mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 2 maxima.
 Selected highest maxima # = 2.
 Maxima #2 coordinates: X = 25.140, Y = 9.900
 1 gram SAR value : 0.231 W/kg
 Area Scan Peak SAR : 0.246 W/kg
 Zoom Scan Peak SAR : 0.410 W/kg

Maxima Summary:

Maxima #1

Maxima coordinates: X = 20.070, Y = 9.900

1 gram SAR value : 0.155 W/kg

Area Scan Peak SAR : 0.246 W/kg

Zoom Scan Peak SAR : 0.380 W/kg

Maxima #2

Maxima coordinates: X = 25.140, Y = 9.900

1 gram SAR value : 0.231 W/kg

Area Scan Peak SAR : 0.246 W/kg

Zoom Scan Peak SAR : 0.410 W/kg

Data No. 31:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 08:49:20 AM
End Time : 26-Dec-2016 09:17:53 AM
Scanning Time : 1713 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.180 W/kg
Power Drift-Finish: 0.172 W/kg
Power Drift (%) : -4.276
Picture : C:\alsas\bitmap\Device-22.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

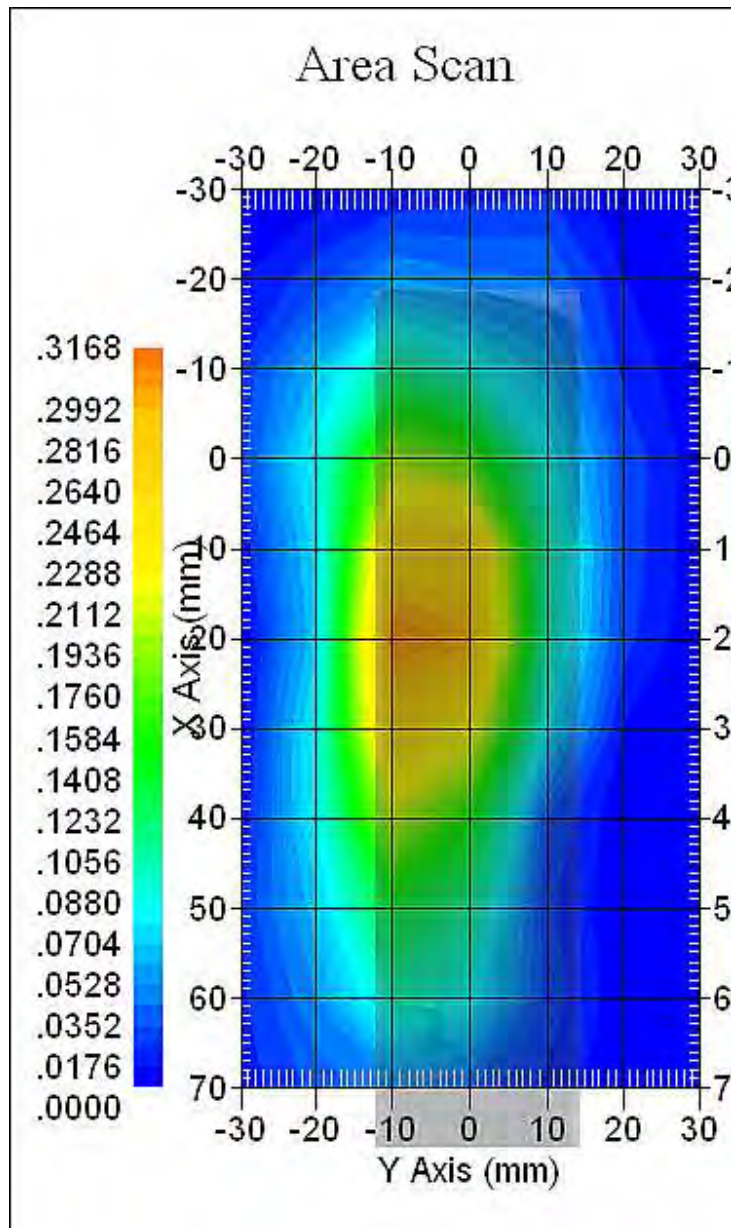
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.316 W/kg
 Area Scan Peak SAR : 0.311 W/kg
 Zoom Scan Peak SAR : 0.550 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.316 W/kg
 Area Scan Peak SAR : 0.311 W/kg
 Zoom Scan Peak SAR : 0.550 W/kg

Data No. 32:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 01:34:13 PM
End Time : 26-Dec-2016 02:00:18 PM
Scanning Time : 1565 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 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-5.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

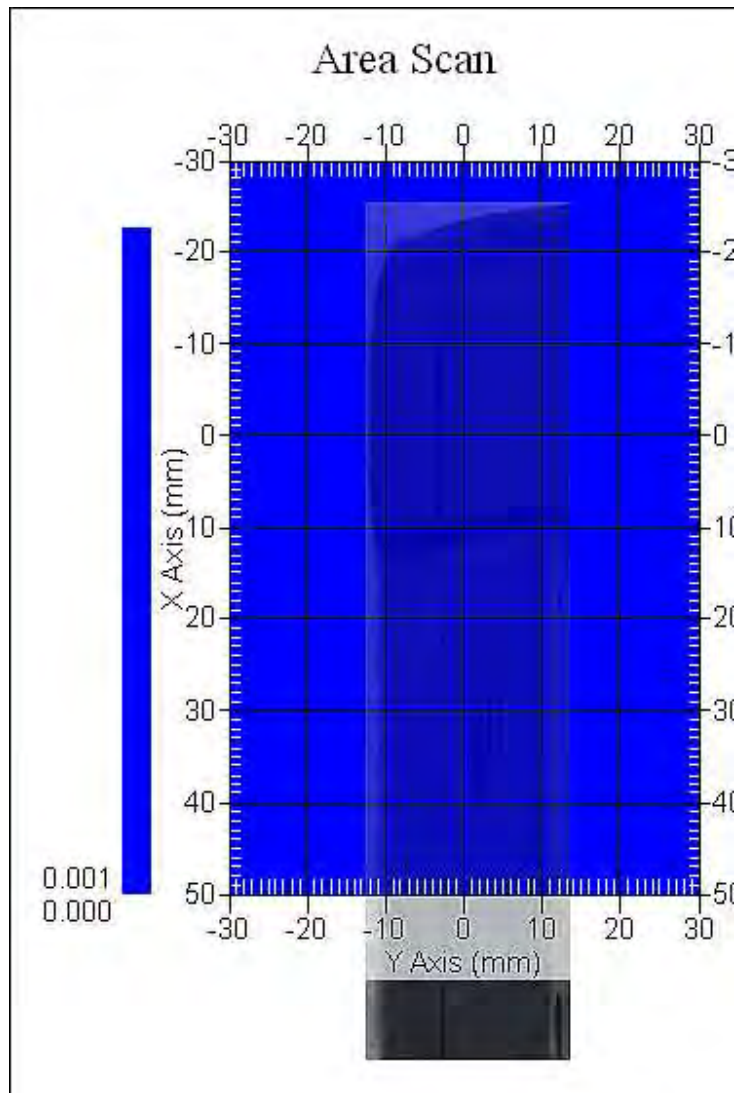
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 34.050, Y = 13.900
1 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 = 34.050, Y = 13.900
1 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. 33:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 02:41:42 PM
End Time : 26-Dec-2016 03:05:34 PM
Scanning Time : 1432 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 207 mm
Width : 42 mm
Depth : 107 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.004 W/kg
Power Drift-Finish: 0.004 W/kg
Power Drift (%) : 11.038
Picture : C:\alsas\bitmap\Device-19.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

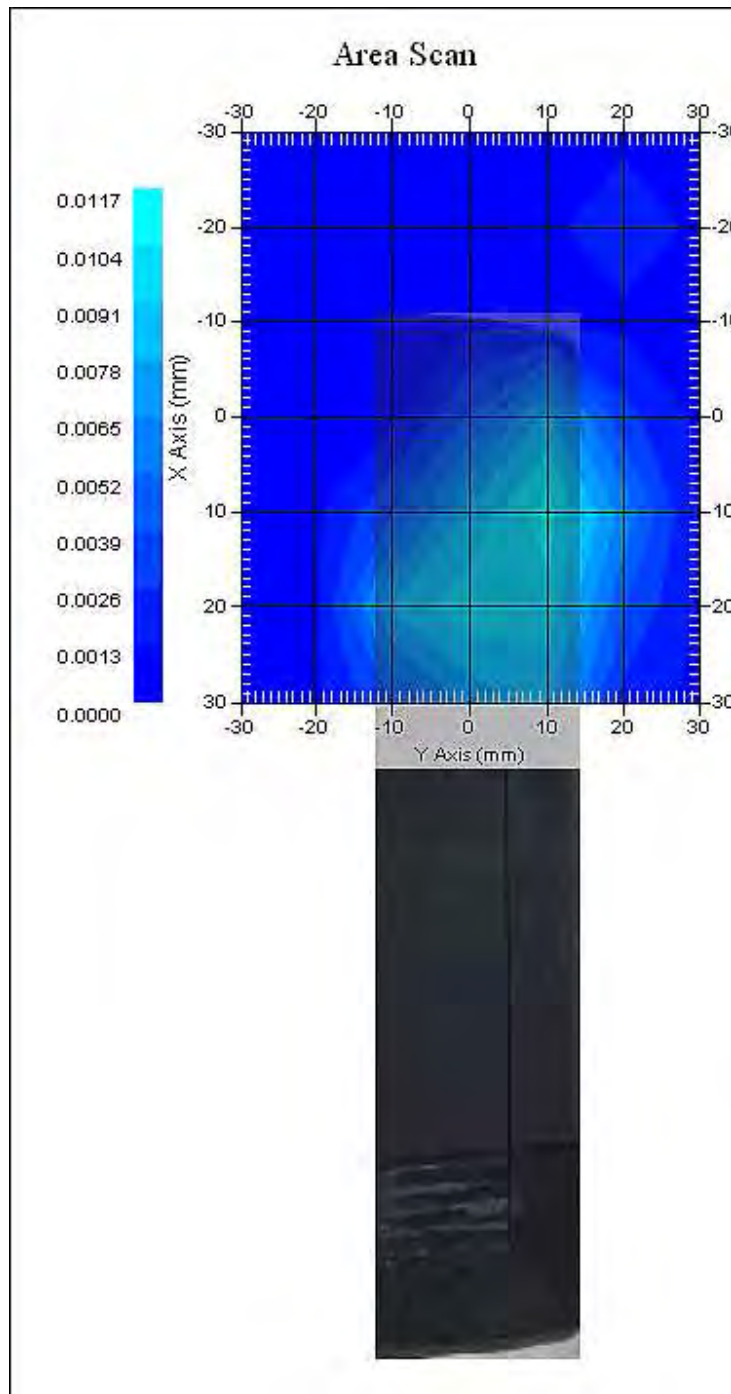
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 10.100, Y = 9.900
 1 gram SAR value : 0.009 W/kg
 Area Scan Peak SAR : 0.011 W/kg
 Zoom Scan Peak SAR : 0.020 W/kg

Maxima Summary:

Maxima #1

Maxima coordinates: X = 10.100, Y = 9.900

1 gram SAR value : 0.009 W/kg

Area Scan Peak SAR : 0.011 W/kg

Zoom Scan Peak SAR : 0.020 W/kg

Data No. 34:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 02:16:02 PM
End Time : 26-Dec-2016 02:40:16 PM
Scanning Time : 1454 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 207 mm
Width : 42 mm
Depth : 107 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-19.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

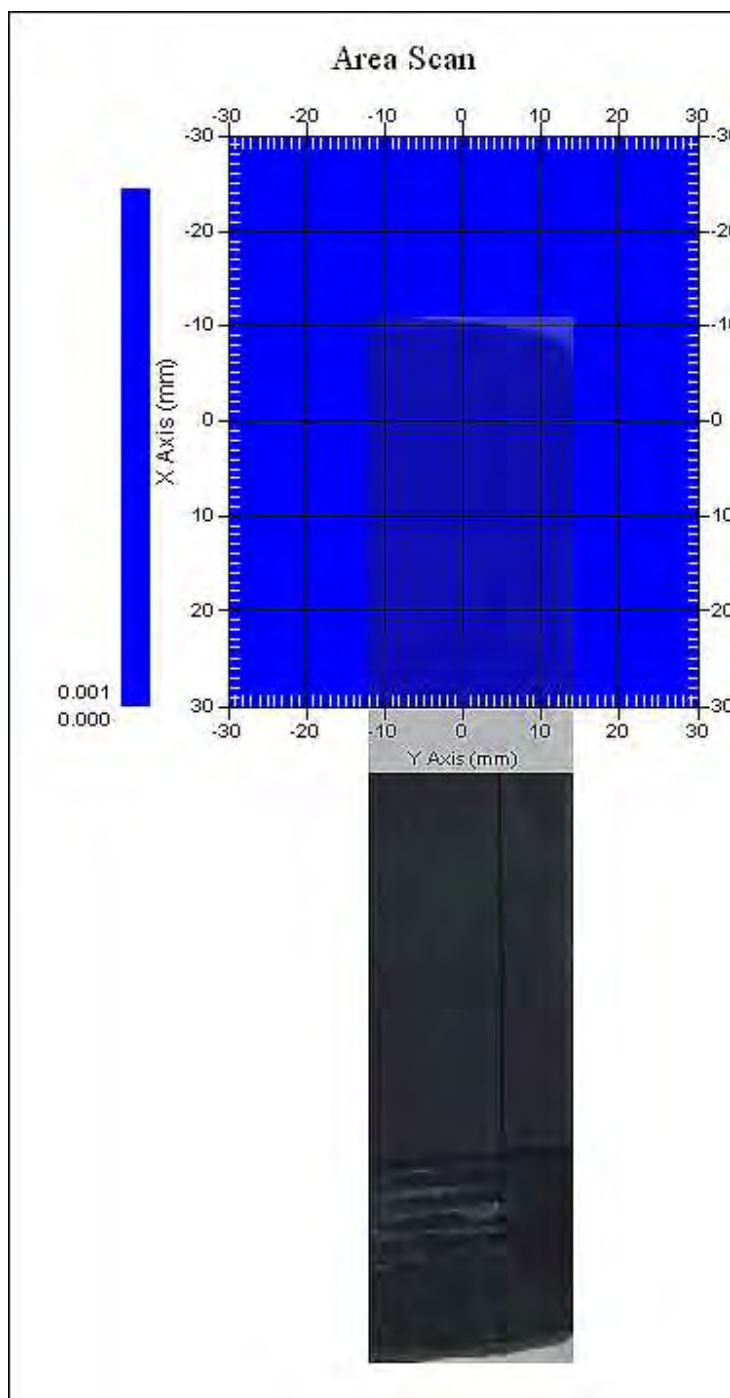
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 14.060, Y = 13.900
 1 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 = 14.060, Y = 13.900

1 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. 35:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 07:50:35 AM
End Time : 26-Dec-2016 08:19:05 AM
Scanning Time : 1710 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.107 W/kg
Power Drift-Finish: 0.104 W/kg
Power Drift (%) : -3.095
Picture : C:\alsas\bitmap\Device-22.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

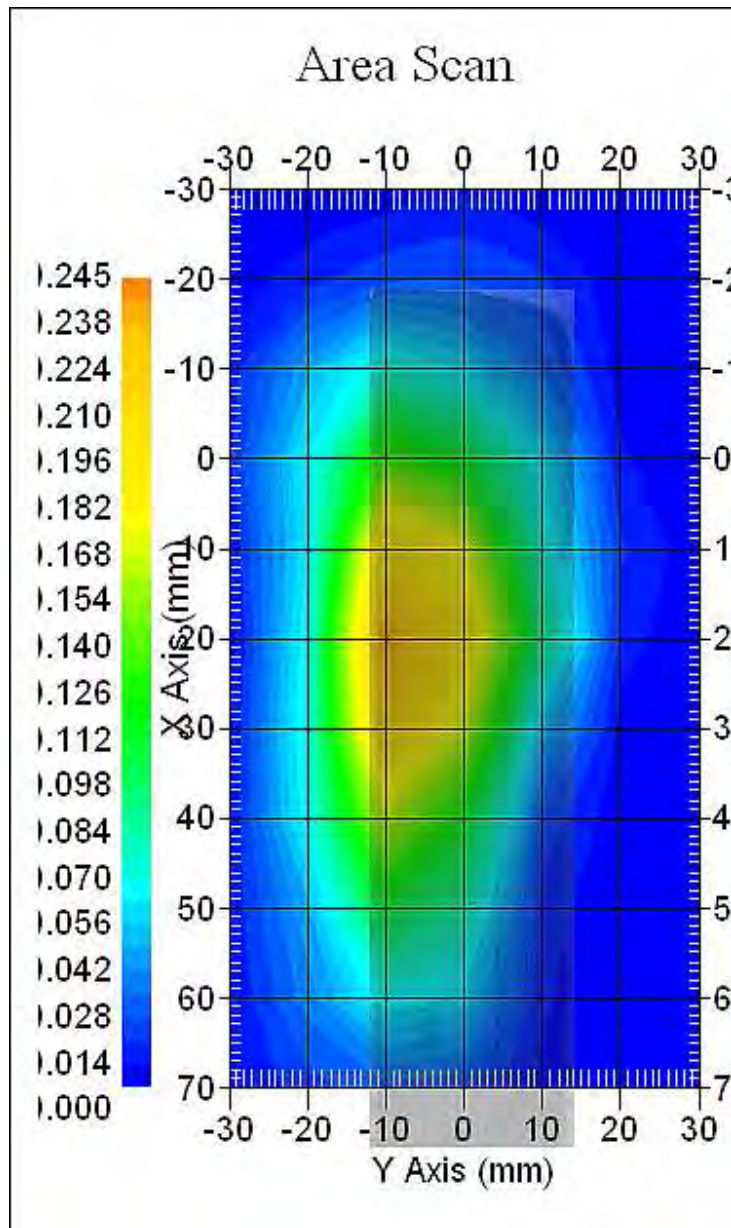
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.120, Y = -5.000
 1 gram SAR value : 0.236 W/kg
 Area Scan Peak SAR : 0.240 W/kg
 Zoom Scan Peak SAR : 0.420 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.120, Y = -5.000
 1 gram SAR value : 0.236 W/kg
 Area Scan Peak SAR : 0.240 W/kg
 Zoom Scan Peak SAR : 0.420 W/kg

Data No. 36:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 08:17:29 PM
End Time : 26-Dec-2016 08:43:31 PM
Scanning Time : 1562 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.108 W/kg
Power Drift-Finish: 0.113 W/kg
Power Drift (%) : 4.718
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.34
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

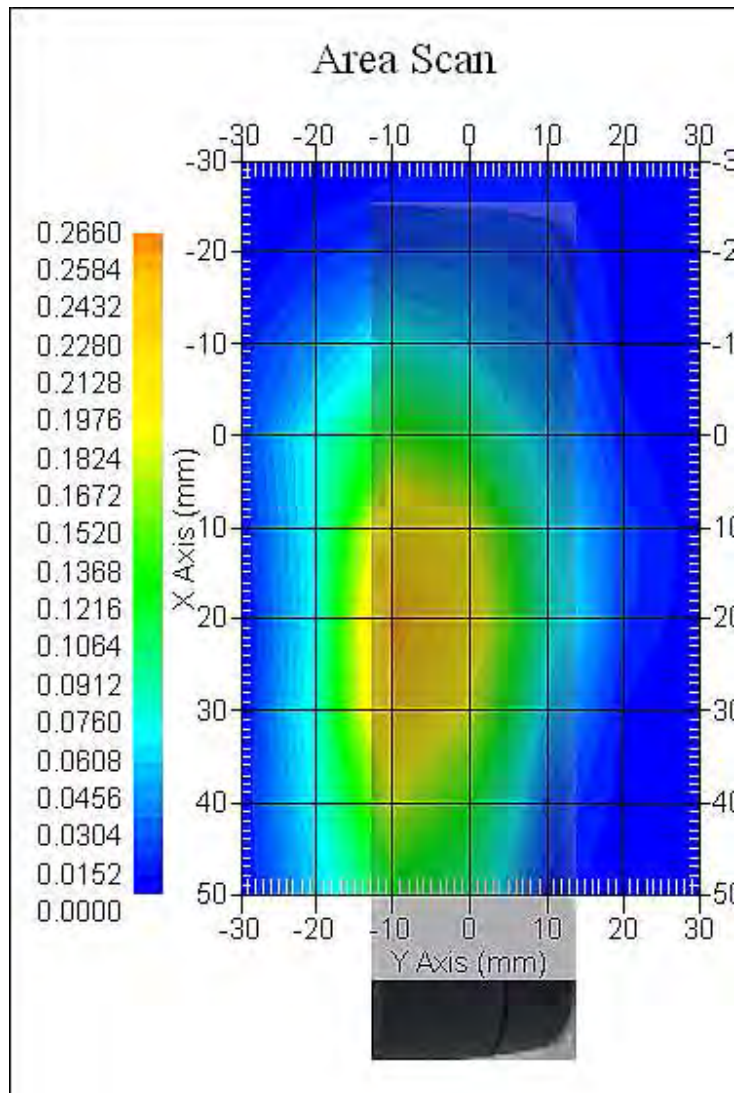
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.060, Y = -5.000
 1 gram SAR value : 0.239 W/kg
 Area Scan Peak SAR : 0.263 W/kg
 Zoom Scan Peak SAR : 0.430 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.060, Y = -5.000
 1 gram SAR value : 0.239 W/kg
 Area Scan Peak SAR : 0.263 W/kg
 Zoom Scan Peak SAR : 0.430 W/kg

Data No. 37:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 03:23:18 PM
End Time : 26-Dec-2016 03:51:32 PM
Scanning Time : 1694 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.066 W/kg
Power Drift-Finish: 0.065 W/kg
Power Drift (%) : -1.465
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 51.86
Sigma : 1.52 S/m
Density : 1000.00 kg/cu. m

Probe Data

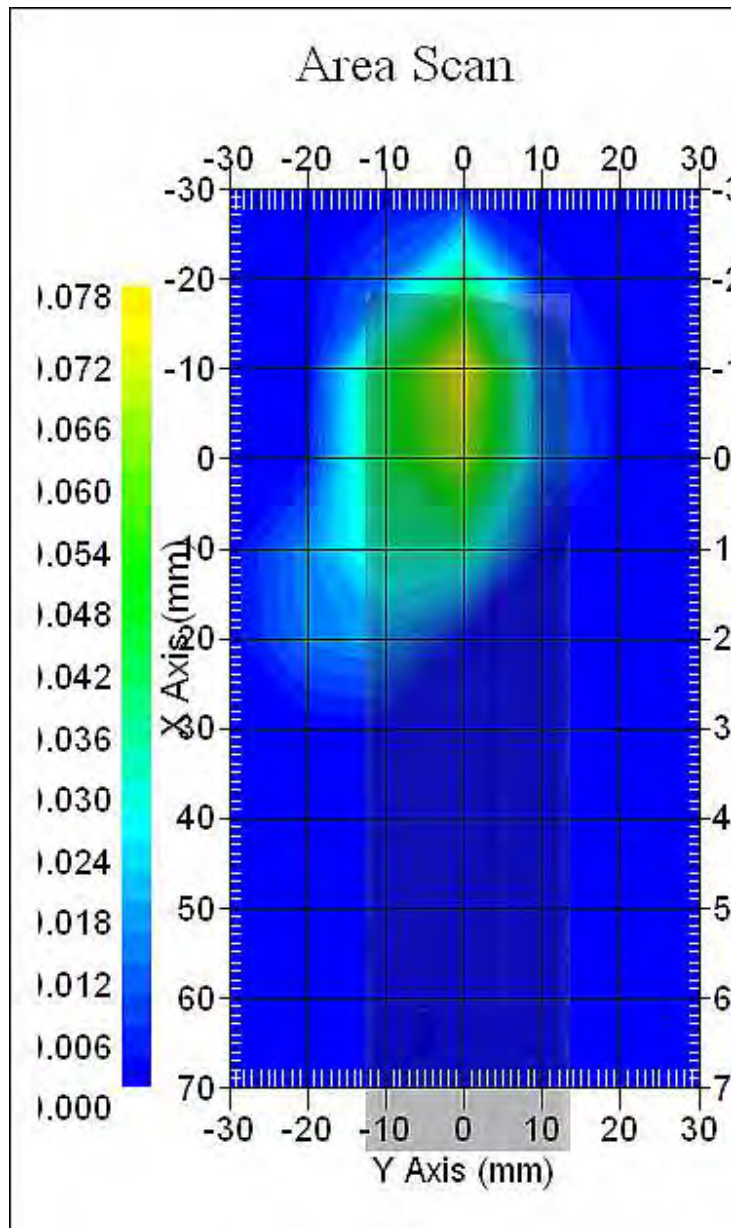
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 26-Dec-2016
Set-up Time : 7:48:05 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = -4.920, Y = 0.000
1 gram SAR value : 0.074 W/kg
Area Scan Peak SAR : 0.078 W/kg
Zoom Scan Peak SAR : 0.150 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = -4.920, Y = 0.000
1 gram SAR value : 0.074 W/kg
Area Scan Peak SAR : 0.078 W/kg
Zoom Scan Peak SAR : 0.150 W/kg

Data No. 38:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 05:53:25 PM
End Time : 26-Dec-2016 06:21:43 PM
Scanning Time : 1698 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.053 W/kg
Power Drift-Finish: 0.052 W/kg
Power Drift (%) : -0.981
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 51.86
Sigma : 1.52 S/m
Density : 1000.00 kg/cu. m

Probe Data

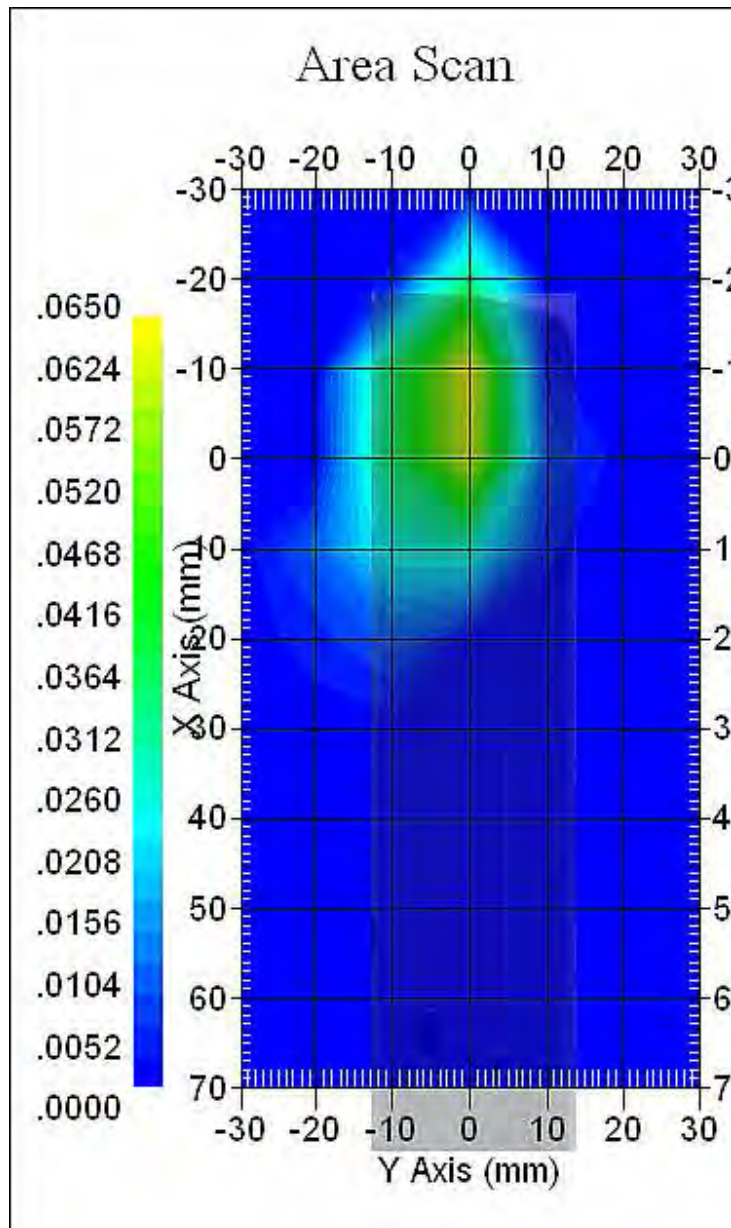
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 1900.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 5.5
 Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 26-Dec-2016
 Set-up Time : 7:48:05 AM
 Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -9.920, Y = -5.000
 1 gram SAR value : 0.057 W/kg
 Area Scan Peak SAR : 0.064 W/kg
 Zoom Scan Peak SAR : 0.140 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -9.920, Y = -5.000
 1 gram SAR value : 0.057 W/kg
 Area Scan Peak SAR : 0.064 W/kg
 Zoom Scan Peak SAR : 0.140 W/kg

Data No. 39:

Report Date : 26-Dec-2016
By Operator : 123
Measurement Date : 26-Dec-2016
Starting Time : 26-Dec-2016 04:02:44 PM
End Time : 26-Dec-2016 04:31:20 PM
Scanning Time : 1716 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.034 W/kg
Power Drift-Finish: 0.035 W/kg
Power Drift (%) : 13.011
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 26-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 51.86
Sigma : 1.52 S/m
Density : 1000.00 kg/cu. m

Probe Data

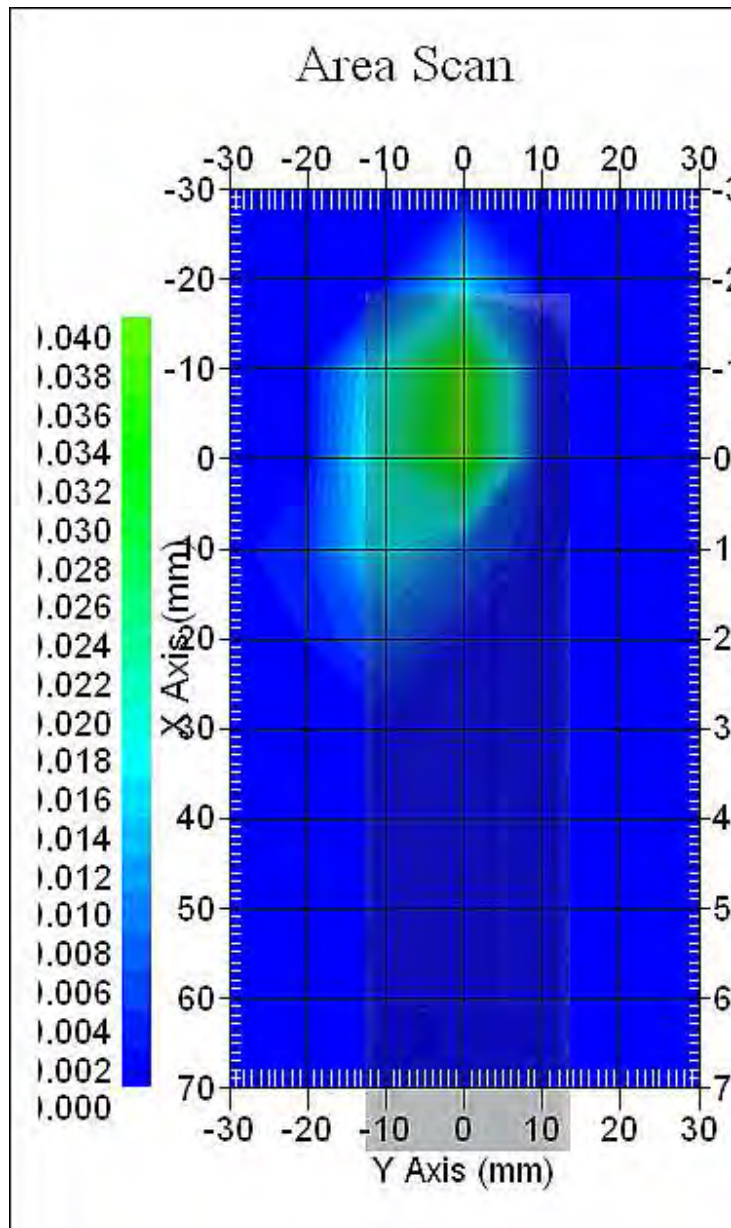
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 1900.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 5.5
 Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 26-Dec-2016
 Set-up Time : 7:48:05 AM
 Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : High



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = -9.920, Y = -5.000
1 gram SAR value : 0.037 W/kg
Area Scan Peak SAR : 0.039 W/kg
Zoom Scan Peak SAR : 0.100 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = -9.920, Y = -5.000
1 gram SAR value : 0.037 W/kg
Area Scan Peak SAR : 0.039 W/kg
Zoom Scan Peak SAR : 0.100 W/kg

Data No. 40:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 09:06:33 AM
End Time : 27-Dec-2016 09:35:06 AM
Scanning Time : 1713 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.247 W/kg
Power Drift-Finish: 0.239 W/kg
Power Drift (%) : -3.285
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 51.81
Sigma : 1.52 S/m
Density : 1000.00 kg/cu. m

Probe Data

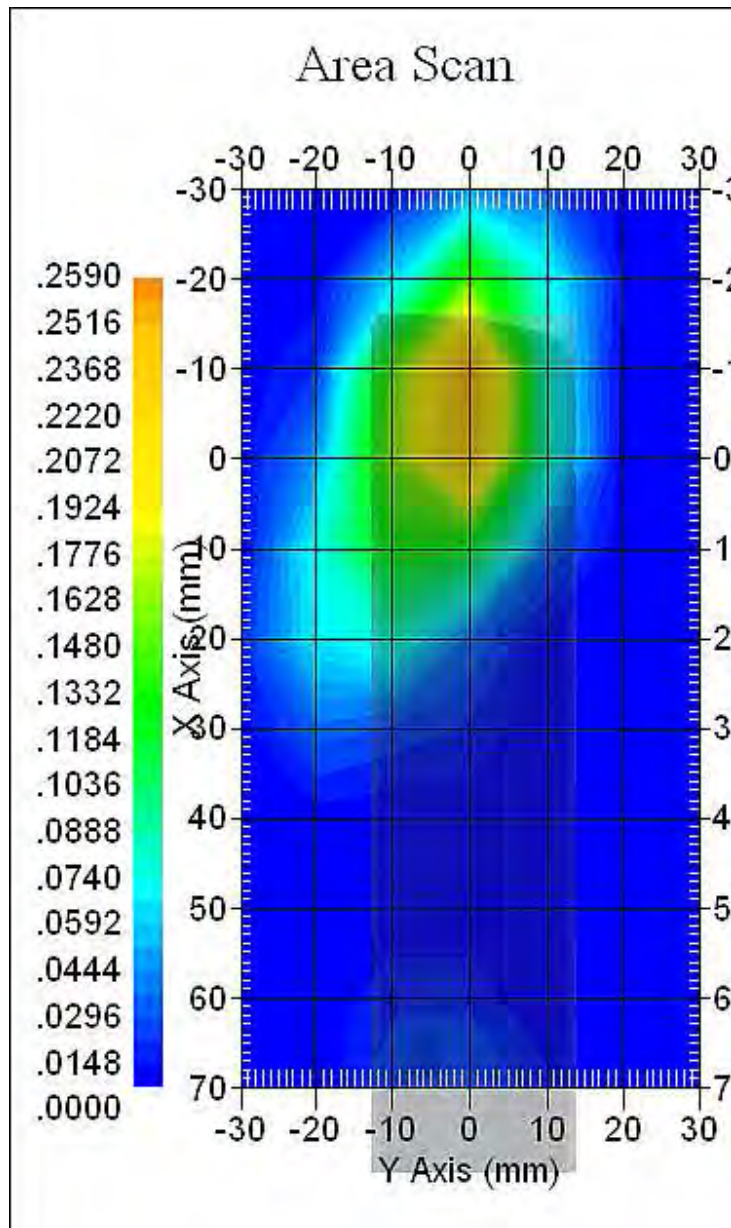
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.890, Y = 0.000
 1 gram SAR value : 0.236 W/kg
 Area Scan Peak SAR : 0.254 W/kg
 Zoom Scan Peak SAR : 0.490 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.890, Y = 0.000
 1 gram SAR value : 0.236 W/kg
 Area Scan Peak SAR : 0.254 W/kg
 Zoom Scan Peak SAR : 0.490 W/kg

Data No. 41:

Report Date : 27-Dec-2016
 By Operator : 123
 Measurement Date : 27-Dec-2016
 Starting Time : 27-Dec-2016 09:50:09 AM
 End Time : 27-Dec-2016 10:18:36 AM
 Scanning Time : 1707 secs
 Product Data
 Device Name : 16LR283
 Serial No. : NA
 Type : Other
 Model : NA
 Frequency : 1900.00 MHz
 Max. Transmit Pwr : 1 W
 Drift Time : 1 min(s)
 Length : 170 mm
 Width : 42 mm
 Depth : 207 mm
 Antenna Type : Internal
 Orientation : Touch
 Power Drift-Start : 0.195 W/kg
 Power Drift-Finish: 0.194 W/kg
 Power Drift (%) : -0.926
 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 : Uni-Phantom

Tissue Data
 Type : BODY
 Serial No. : 1900B
 Frequency : 1900.00 MHz
 Last Calib. Date : 27-Dec-2016
 Temperature : 21.50 °C
 Ambient Temp. : 21.50 °C
 Humidity : 52.00 RH%
 Epsilon (Dielectric Constant): 51.81
 Sigma : 1.52 S/m
 Density : 1000.00 kg/cu. m

Probe Data

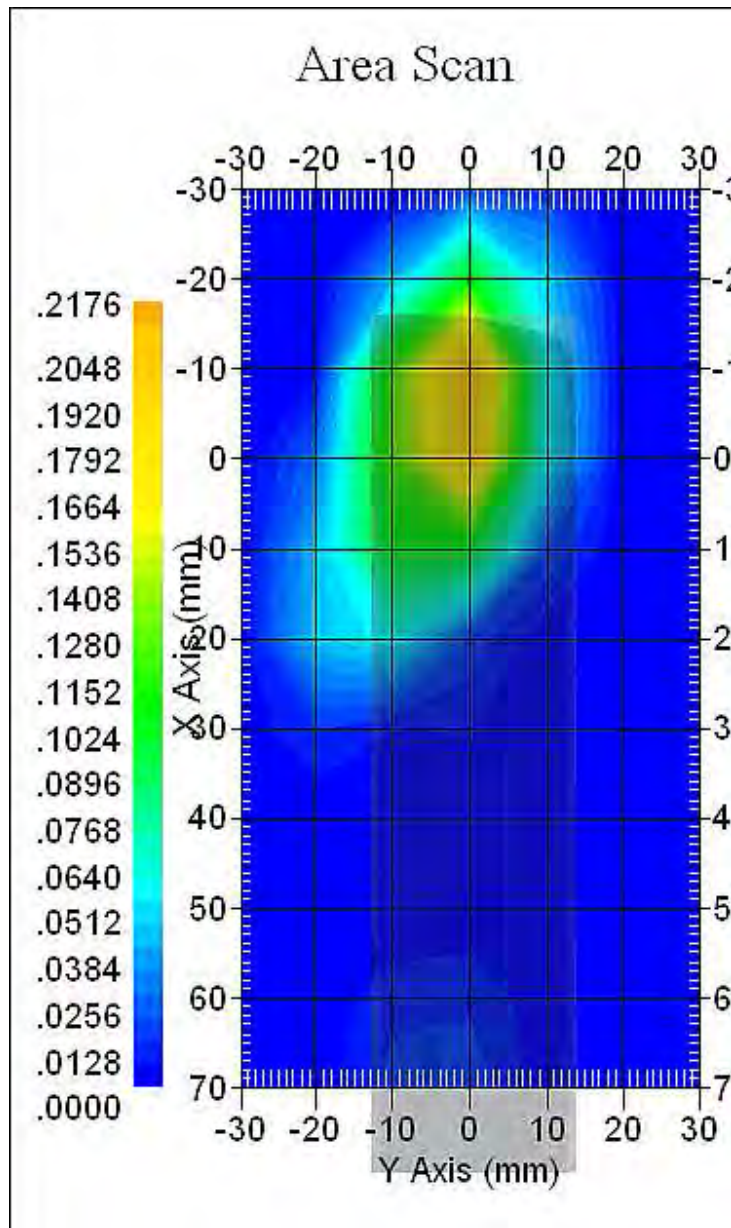
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.940, Y = 0.000
 1 gram SAR value : 0.200 W/kg
 Area Scan Peak SAR : 0.214 W/kg
 Zoom Scan Peak SAR : 0.410 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.940, Y = 0.000
 1 gram SAR value : 0.200 W/kg
 Area Scan Peak SAR : 0.214 W/kg
 Zoom Scan Peak SAR : 0.410 W/kg

Data No. 42:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 10:19:56 AM
End Time : 27-Dec-2016 10:48:15 AM
Scanning Time : 1699 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.103 W/kg
Power Drift-Finish: 0.107 W/kg
Power Drift (%) : 4.598
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 51.81
Sigma : 1.52 S/m
Density : 1000.00 kg/cu. m

Probe Data

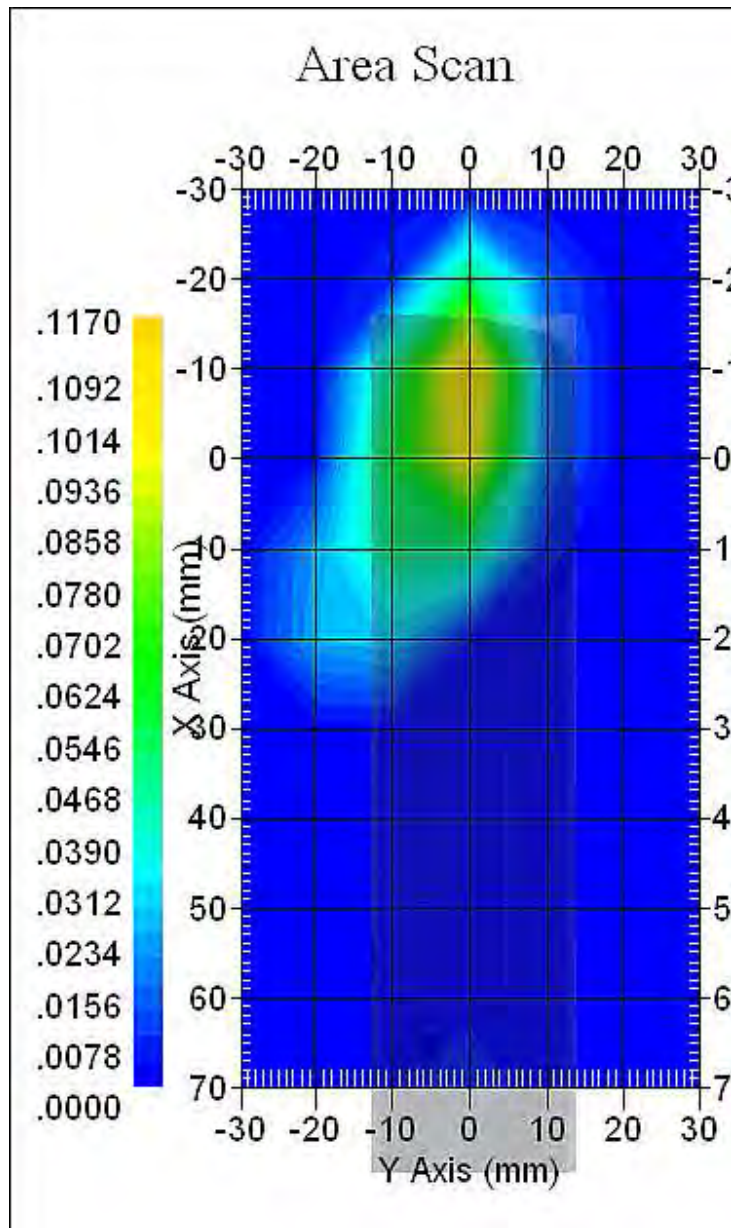
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.870, Y = 0.000
 1 gram SAR value : 0.117 W/kg
 Area Scan Peak SAR : 0.115 W/kg
 Zoom Scan Peak SAR : 0.260 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.870, Y = 0.000
 1 gram SAR value : 0.117 W/kg
 Area Scan Peak SAR : 0.115 W/kg
 Zoom Scan Peak SAR : 0.260 W/kg

Data No. 43:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 12:23:29 PM
End Time : 27-Dec-2016 12:51:53 PM
Scanning Time : 1704 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1800.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.607 W/kg
Power Drift-Finish: 0.624 W/kg
Power Drift (%) : 2.680
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1800B
Frequency : 1800.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 54.25
Sigma : 1.54 S/m
Density : 1000.00 kg/cu. m

Probe Data

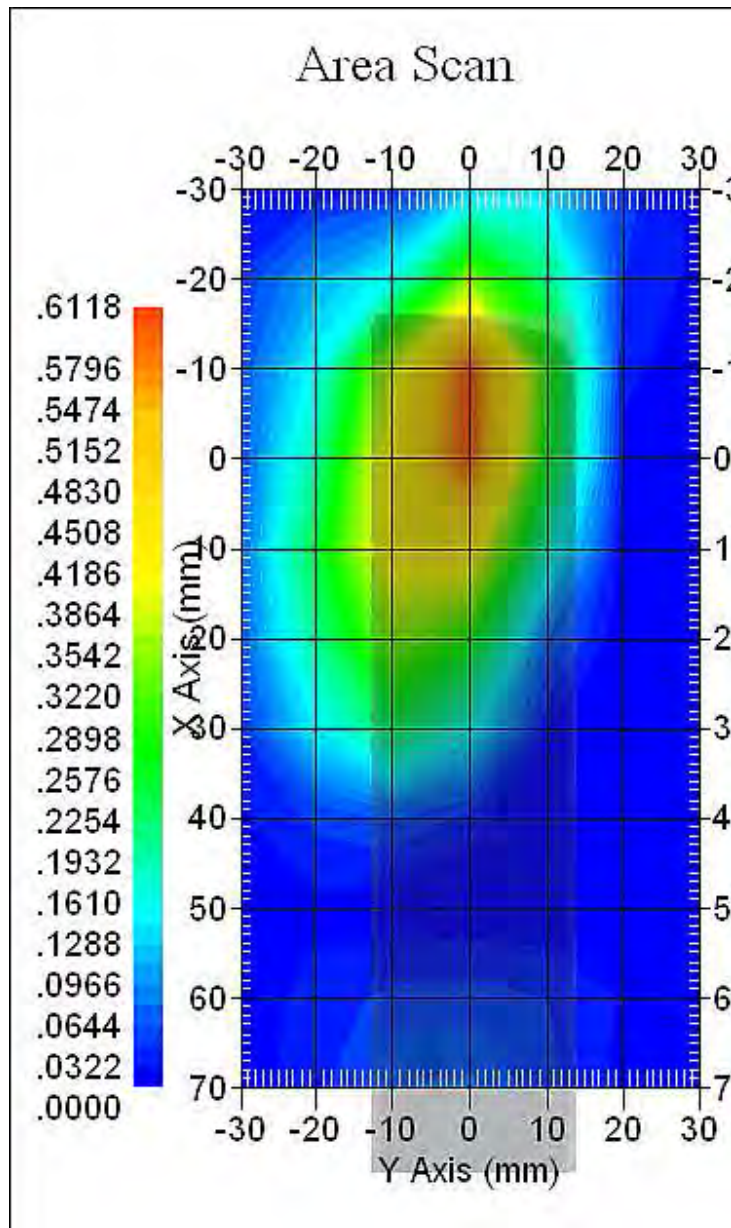
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 1750.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 5.5
 Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 27-Dec-2016
 Set-up Time : 7:04:33 AM
 Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.960, Y = 0.000
 1 gram SAR value : 0.591 W/kg
 Area Scan Peak SAR : 0.603 W/kg
 Zoom Scan Peak SAR : 1.100 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.960, Y = 0.000
 1 gram SAR value : 0.591 W/kg
 Area Scan Peak SAR : 0.603 W/kg
 Zoom Scan Peak SAR : 1.100 W/kg

Data No. 44:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 12:54:00 PM
End Time : 27-Dec-2016 01:22:23 PM
Scanning Time : 1703 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1800.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.465 W/kg
Power Drift-Finish: 0.483 W/kg
Power Drift (%) : 4.068
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1800B
Frequency : 1800.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 54.25
Sigma : 1.54 S/m
Density : 1000.00 kg/cu. m

Probe Data

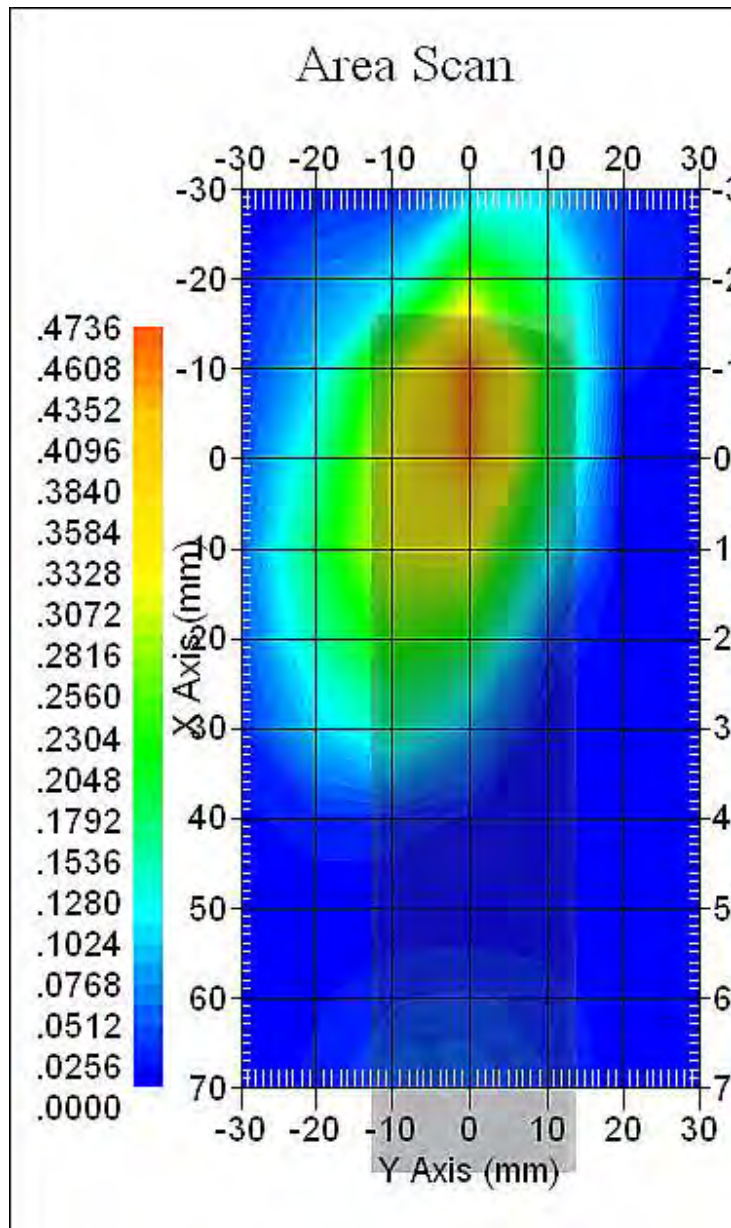
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 1750.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 5.5
 Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 27-Dec-2016
 Set-up Time : 7:04:33 AM
 Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.930, Y = 0.000
 1 gram SAR value : 0.467 W/kg
 Area Scan Peak SAR : 0.473 W/kg
 Zoom Scan Peak SAR : 0.870 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.930, Y = 0.000
 1 gram SAR value : 0.467 W/kg
 Area Scan Peak SAR : 0.473 W/kg
 Zoom Scan Peak SAR : 0.870 W/kg

Data No. 45:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 01:25:59 PM
End Time : 27-Dec-2016 01:54:15 PM
Scanning Time : 1696 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1800.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.502 W/kg
Power Drift-Finish: 0.515 W/kg
Power Drift (%) : 2.624
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1800B
Frequency : 1800.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 52.00 RH%
Epsilon (Dielectric Constant): 54.25
Sigma : 1.54 S/m
Density : 1000.00 kg/cu. m

Probe Data

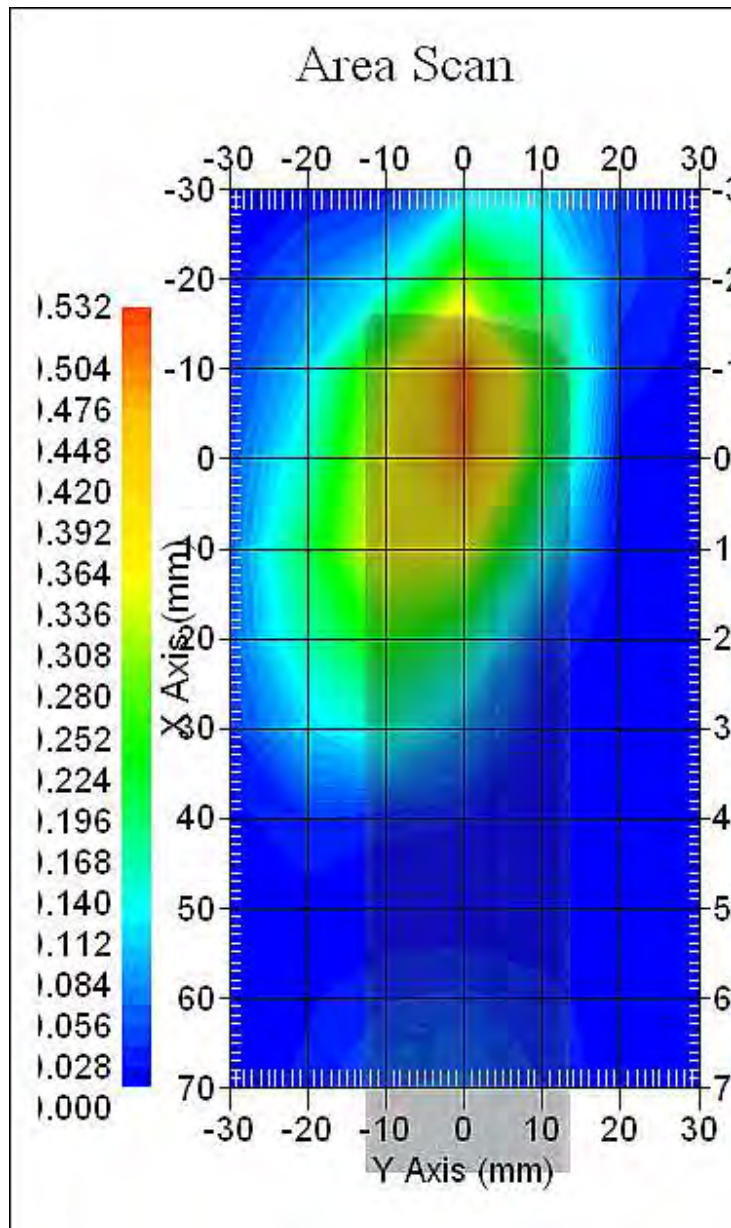
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1750.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.930, Y = 0.000
 1 gram SAR value : 0.500 W/kg
 Area Scan Peak SAR : 0.521 W/kg
 Zoom Scan Peak SAR : 0.940 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.930, Y = 0.000
 1 gram SAR value : 0.500 W/kg
 Area Scan Peak SAR : 0.521 W/kg
 Zoom Scan Peak SAR : 0.940 W/kg

Data No. 46:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 08:35:53 PM
End Time : 27-Dec-2016 09:04:21 PM
Scanning Time : 1708 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.207 W/kg
Power Drift-Finish: 0.209 W/kg
Power Drift (%) : 1.103
Picture : C:\alsas\bitmap\Device-22.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.52
Sigma : 0.92 S/m
Density : 1000.00 kg/cu. m

Probe Data

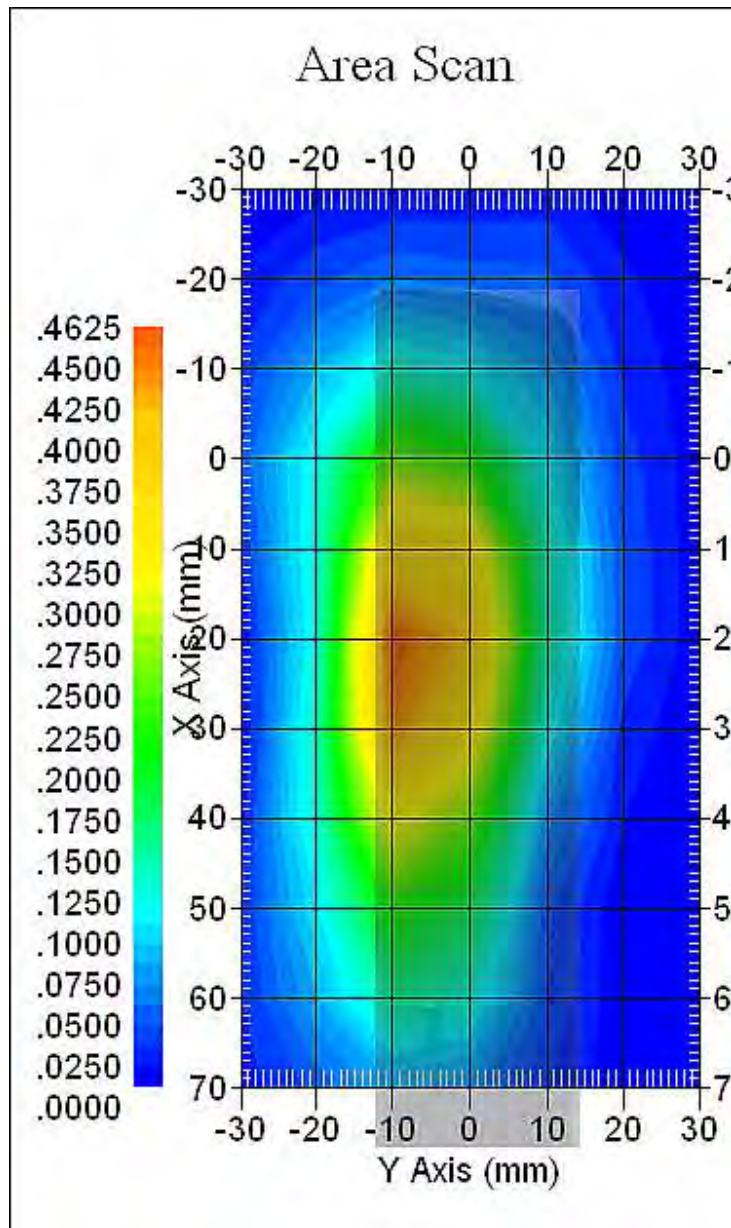
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 25.070, Y = -5.000
 1 gram SAR value : 0.462 W/kg
 Area Scan Peak SAR : 0.462 W/kg
 Zoom Scan Peak SAR : 0.810 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 25.070, Y = -5.000
 1 gram SAR value : 0.462 W/kg
 Area Scan Peak SAR : 0.462 W/kg
 Zoom Scan Peak SAR : 0.810 W/kg

Data No. 47:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 09:20:25 PM
End Time : 27-Dec-2016 09:49:00 PM
Scanning Time : 1715 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.257 W/kg
Power Drift-Finish: 0.260 W/kg
Power Drift (%) : 0.897
Picture : C:\alsas\bitmap\Device-22.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.52
Sigma : 0.92 S/m
Density : 1000.00 kg/cu. m

Probe Data

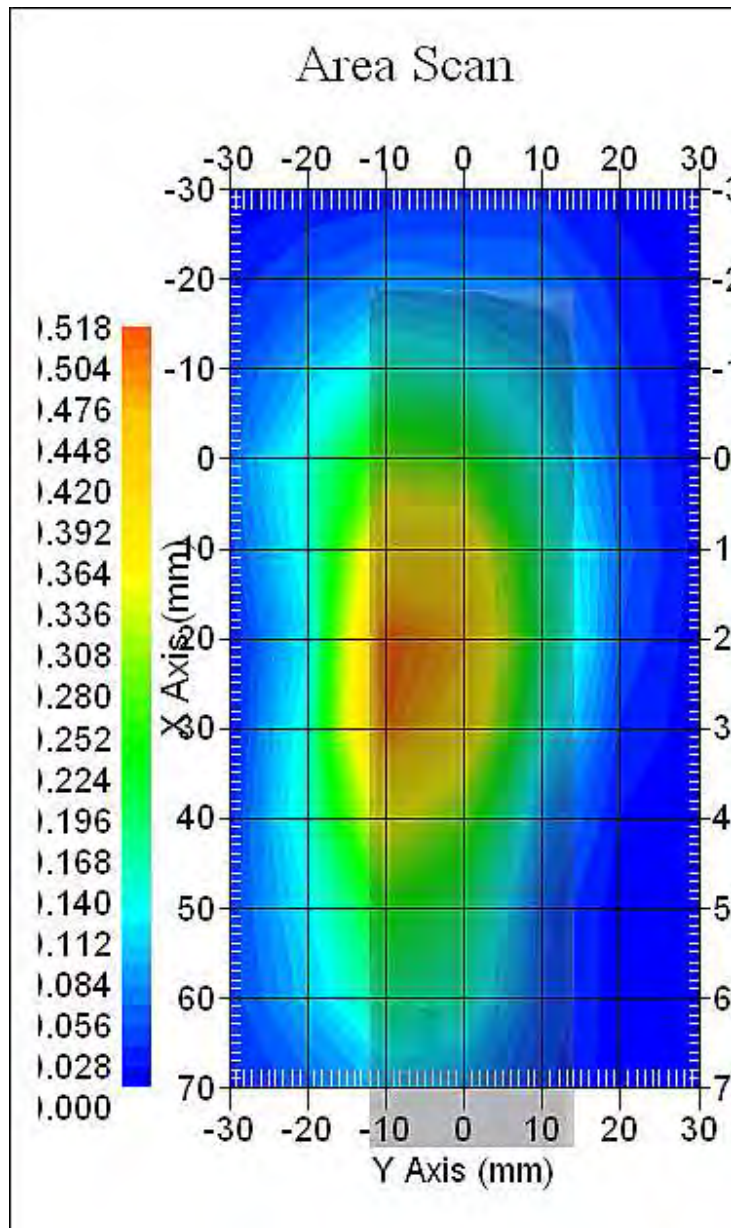
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.526 W/kg
 Area Scan Peak SAR : 0.518 W/kg
 Zoom Scan Peak SAR : 0.950 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.526 W/kg
 Area Scan Peak SAR : 0.518 W/kg
 Zoom Scan Peak SAR : 0.950 W/kg

Data No. 48:

Report Date : 27-Dec-2016
By Operator : 123
Measurement Date : 27-Dec-2016
Starting Time : 27-Dec-2016 09:49:55 PM
End Time : 27-Dec-2016 10:18:27 PM
Scanning Time : 1712 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.229 W/kg
Power Drift-Finish: 0.233 W/kg
Power Drift (%) : 1.414
Picture : C:\alsas\bitmap\Device-22.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. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 27-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.52
Sigma : 0.92 S/m
Density : 1000.00 kg/cu. m

Probe Data

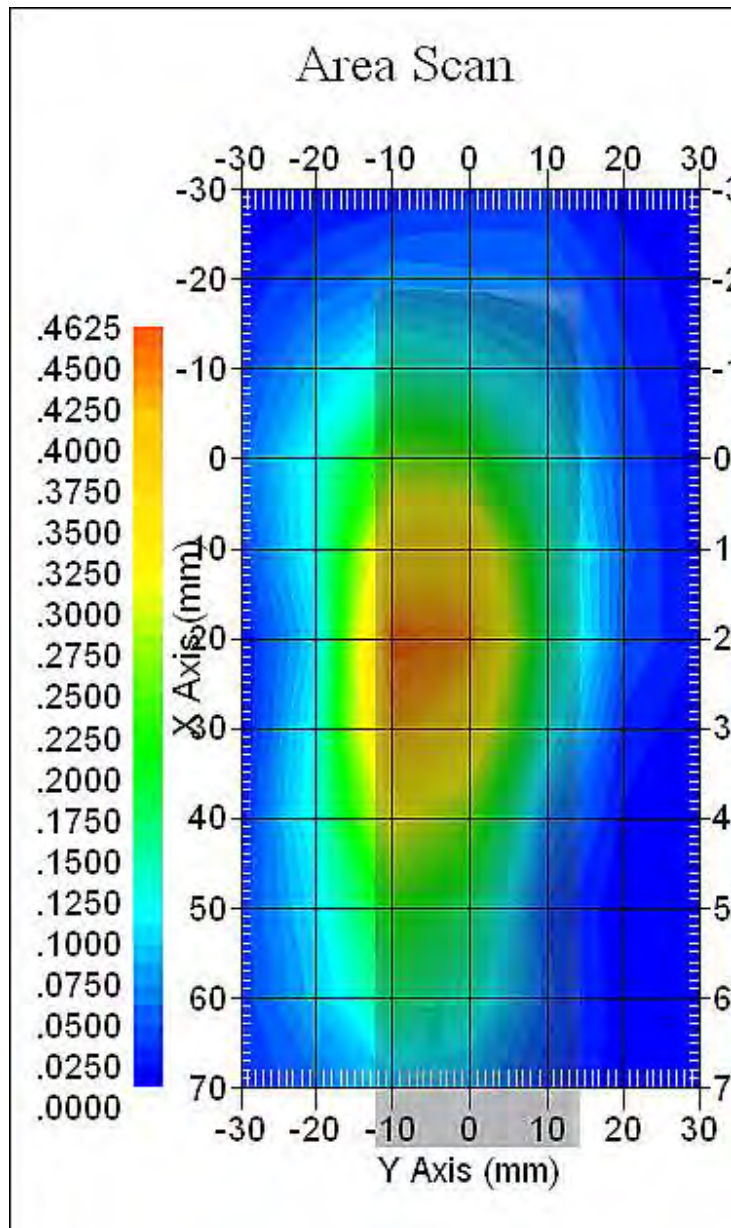
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 27-Dec-2016
Set-up Time : 7:04:33 AM
Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.050, Y = -5.000
 1 gram SAR value : 0.473 W/kg
 Area Scan Peak SAR : 0.461 W/kg
 Zoom Scan Peak SAR : 0.820 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.050, Y = -5.000
 1 gram SAR value : 0.473 W/kg
 Area Scan Peak SAR : 0.461 W/kg
 Zoom Scan Peak SAR : 0.820 W/kg

Data No. 49:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 12:53:00 PM
End Time : 28-Dec-2016 01:19:00 PM
Scanning Time : 1560 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.056 W/kg
Power Drift-Finish: 0.054 W/kg
Power Drift (%) : -2.557
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 51.88
Sigma : 1.51 S/m
Density : 1000.00 kg/cu. m

Probe Data

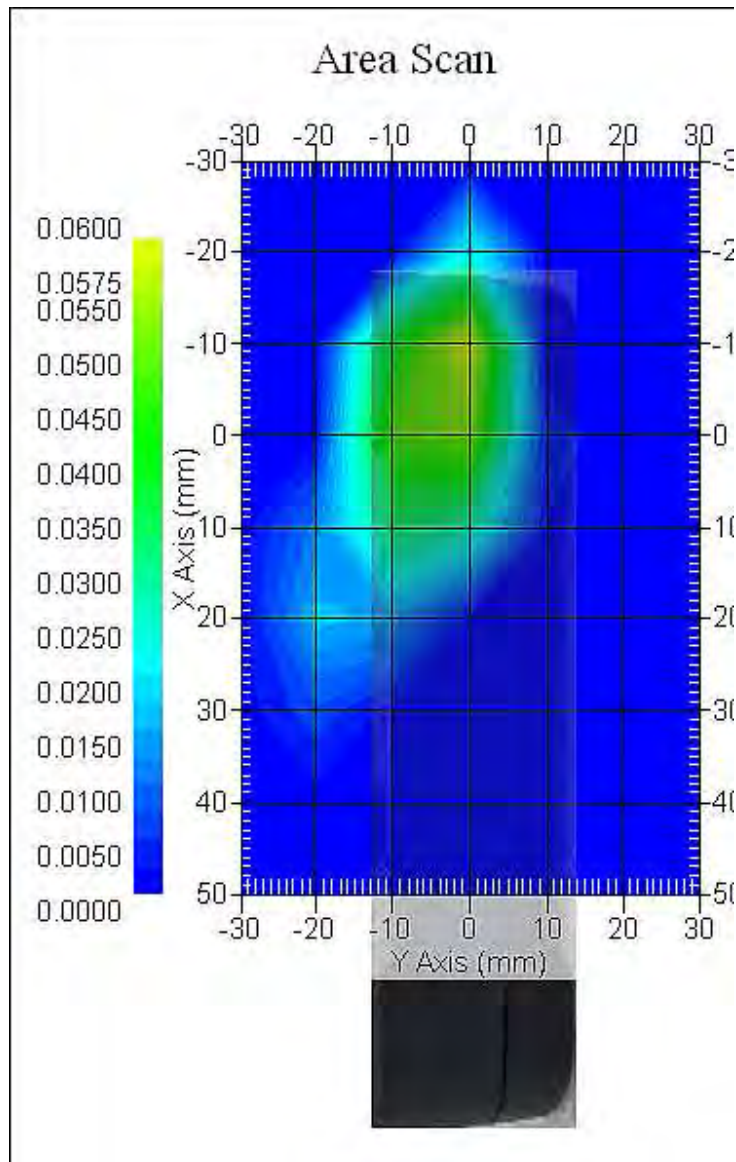
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:01:08 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = -4.900, Y = 0.000
1 gram SAR value : 0.059 W/kg
Area Scan Peak SAR : 0.060 W/kg
Zoom Scan Peak SAR : 0.150 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = -4.900, Y = 0.000
1 gram SAR value : 0.059 W/kg
Area Scan Peak SAR : 0.060 W/kg
Zoom Scan Peak SAR : 0.150 W/kg

Data No. 50:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 03:19:24 PM
End Time : 28-Dec-2016 03:45:40 PM
Scanning Time : 1576 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.125 W/kg
Power Drift-Finish: 0.129 W/kg
Power Drift (%) : 3.507
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900B
Frequency : 1900.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 51.88
Sigma : 1.51 S/m
Density : 1000.00 kg/cu. m

Probe Data

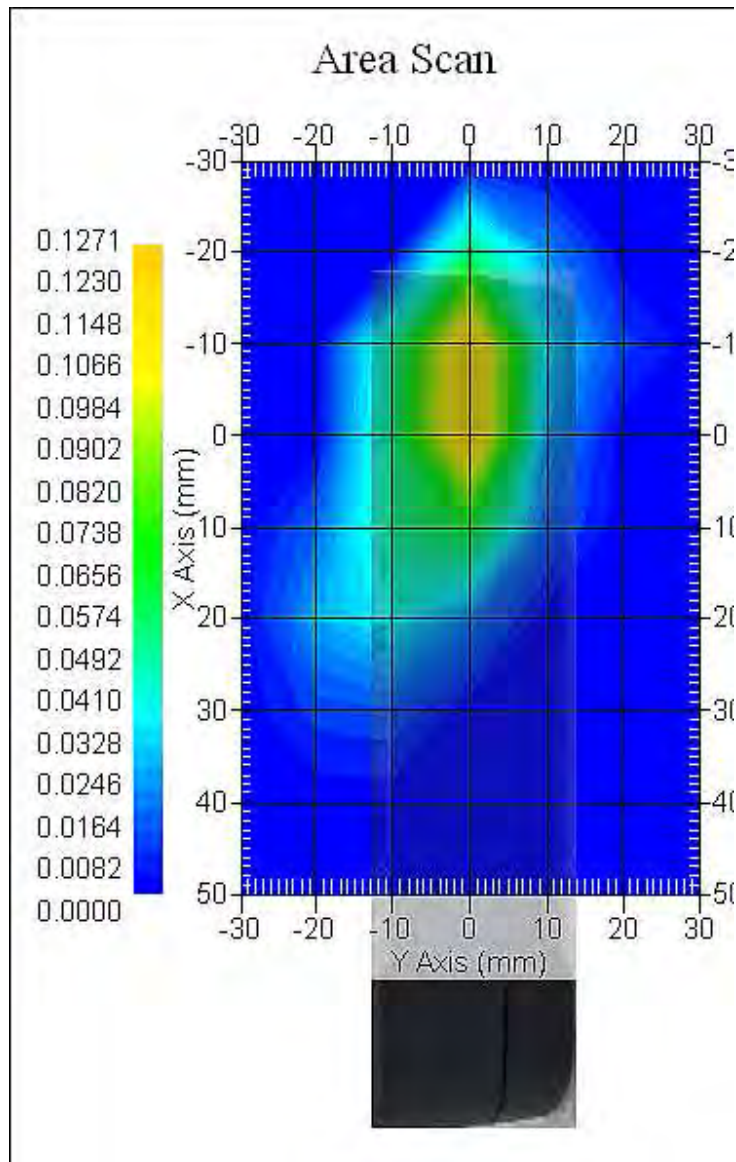
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:01:08 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.930, Y = 0.000
 1 gram SAR value : 0.124 W/kg
 Area Scan Peak SAR : 0.125 W/kg
 Zoom Scan Peak SAR : 0.300 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.930, Y = 0.000
 1 gram SAR value : 0.124 W/kg
 Area Scan Peak SAR : 0.125 W/kg
 Zoom Scan Peak SAR : 0.300 W/kg

Data No. 51:

Report Date : 28-Dec-2016
 By Operator : 123
 Measurement Date : 28-Dec-2016
 Starting Time : 28-Dec-2016 02:50:54 PM
 End Time : 28-Dec-2016 03:16:53 PM
 Scanning Time : 1559 secs
 Product Data
 Device Name : 16LR283
 Serial No. : NA
 Type : Other
 Model : NA
 Frequency : 1900.00 MHz
 Max. Transmit Pwr : 0.5 W
 Drift Time : 1 min(s)
 Length : 170 mm
 Width : 42 mm
 Depth : 207 mm
 Antenna Type : Internal
 Orientation : Touch
 Power Drift-Start : 0.121 W/kg
 Power Drift-Finish: 0.127 W/kg
 Power Drift (%) : 4.756
 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 : Uni-Phantom

Tissue Data
 Type : BODY
 Serial No. : 1900B
 Frequency : 1900.00 MHz
 Last Calib. Date : 28-Dec-2016
 Temperature : 21.50 °C
 Ambient Temp. : 21.50 °C
 Humidity : 53.00 RH%
 Epsilon (Dielectric Constant): 51.88
 Sigma : 1.51 S/m
 Density : 1000.00 kg/cu. m

Probe Data

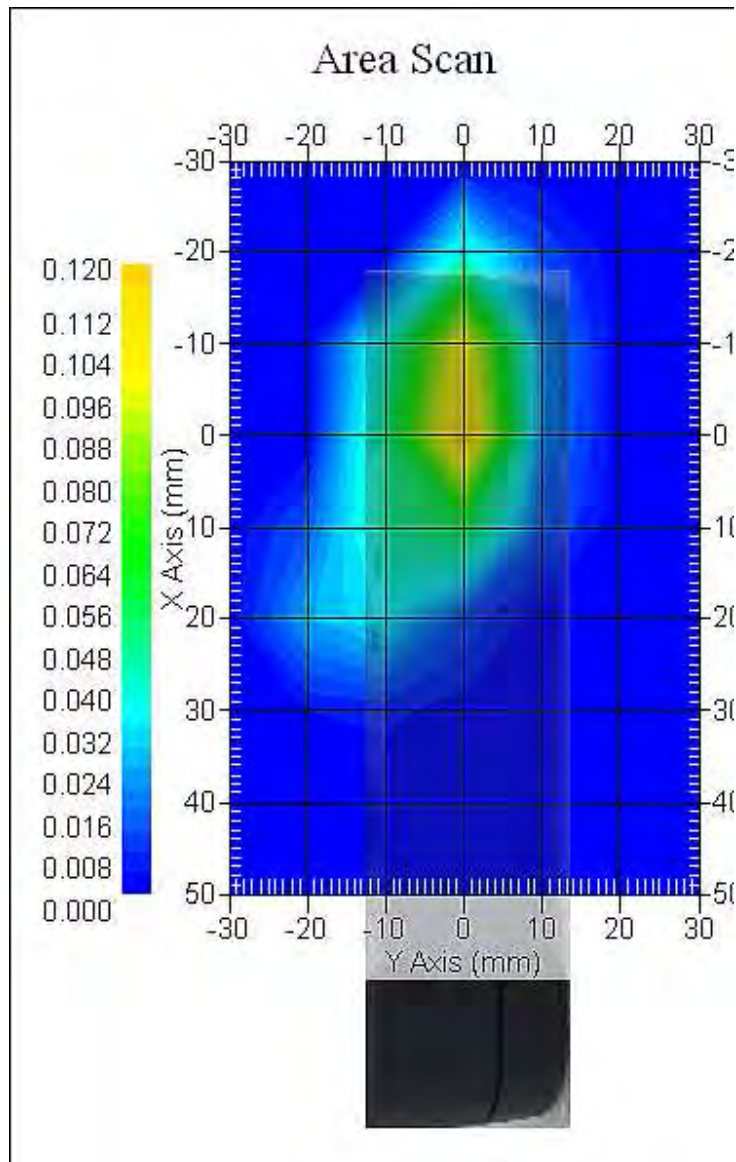
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1900.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:01:08 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.900, Y = 0.000
 1 gram SAR value : 0.111 W/kg
 Area Scan Peak SAR : 0.118 W/kg
 Zoom Scan Peak SAR : 0.290 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.900, Y = 0.000
 1 gram SAR value : 0.111 W/kg
 Area Scan Peak SAR : 0.118 W/kg
 Zoom Scan Peak SAR : 0.290 W/kg

Data No. 52:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 01:27:27 PM
End Time : 28-Dec-2016 01:53:40 PM
Scanning Time : 1573 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1750.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.299 W/kg
Power Drift-Finish: 0.290 W/kg
Power Drift (%) : -2.950
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1750B
Frequency : 1750.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 54.09
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data

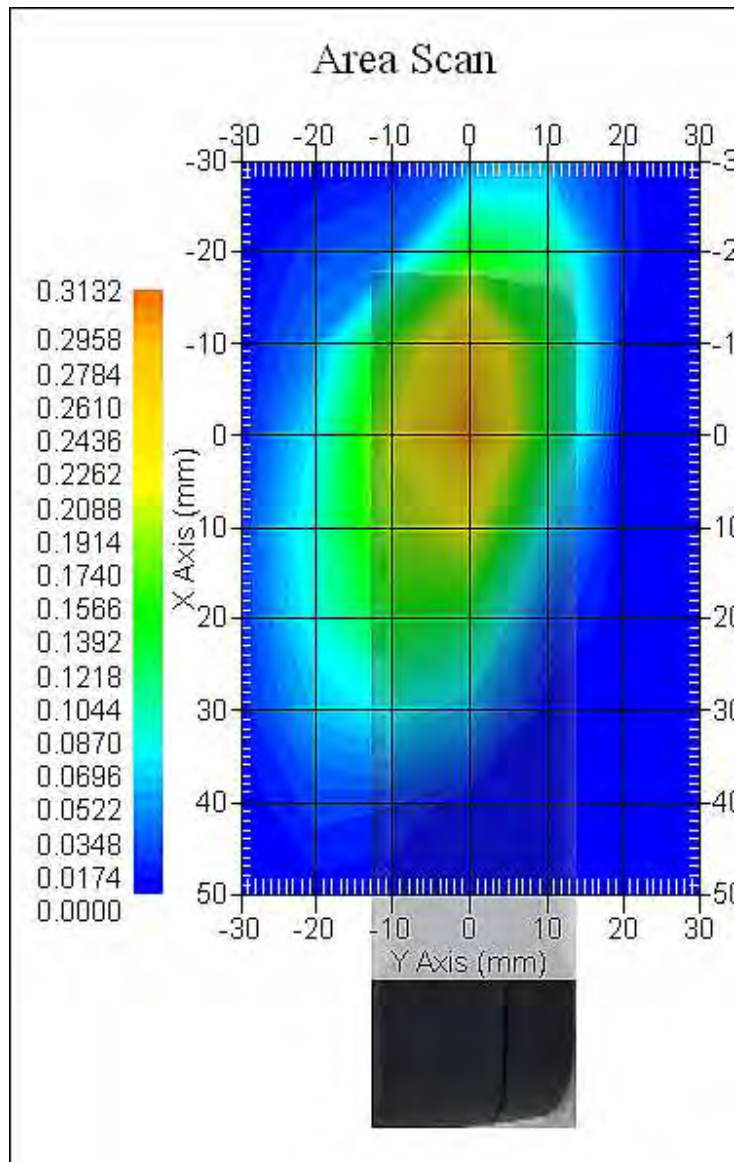
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1750.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:01:08 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.910, Y = 0.000
 1 gram SAR value : 0.284 W/kg
 Area Scan Peak SAR : 0.308 W/kg
 Zoom Scan Peak SAR : 0.540 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.910, Y = 0.000
 1 gram SAR value : 0.284 W/kg
 Area Scan Peak SAR : 0.308 W/kg
 Zoom Scan Peak SAR : 0.540 W/kg

Data No. 53:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 02:22:44 PM
End Time : 28-Dec-2016 02:48:51 PM
Scanning Time : 1567 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1750.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.410 W/kg
Power Drift-Finish: 0.427 W/kg
Power Drift (%) : 4.149
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1750B
Frequency : 1750.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 54.09
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data

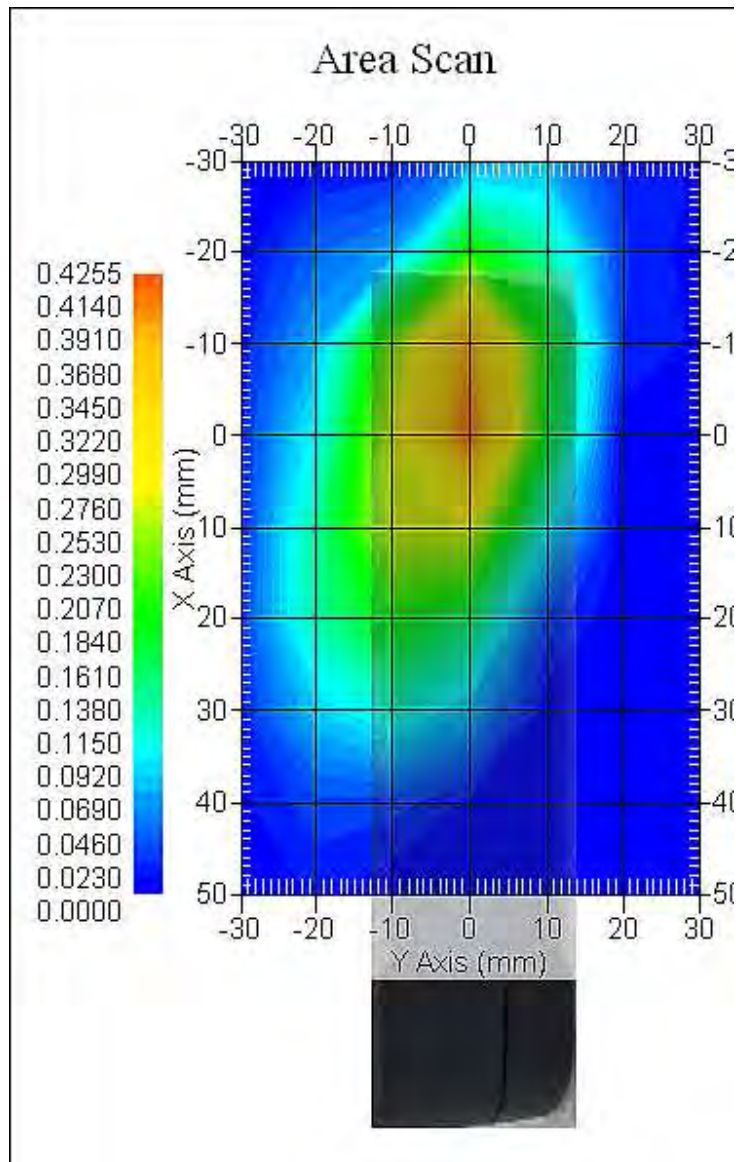
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 1750.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5.5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:01:08 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.910, Y = 0.000
 1 gram SAR value : 0.392 W/kg
 Area Scan Peak SAR : 0.419 W/kg
 Zoom Scan Peak SAR : 0.760 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.910, Y = 0.000
 1 gram SAR value : 0.392 W/kg
 Area Scan Peak SAR : 0.419 W/kg
 Zoom Scan Peak SAR : 0.760 W/kg

Data No. 54:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 01:55:05 PM
End Time : 28-Dec-2016 02:21:11 PM
Scanning Time : 1566 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 1750.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.323 W/kg
Power Drift-Finish: 0.336 W/kg
Power Drift (%) : 4.087
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1750B
Frequency : 1750.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 53.00 RH%
Epsilon (Dielectric Constant): 54.09
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data

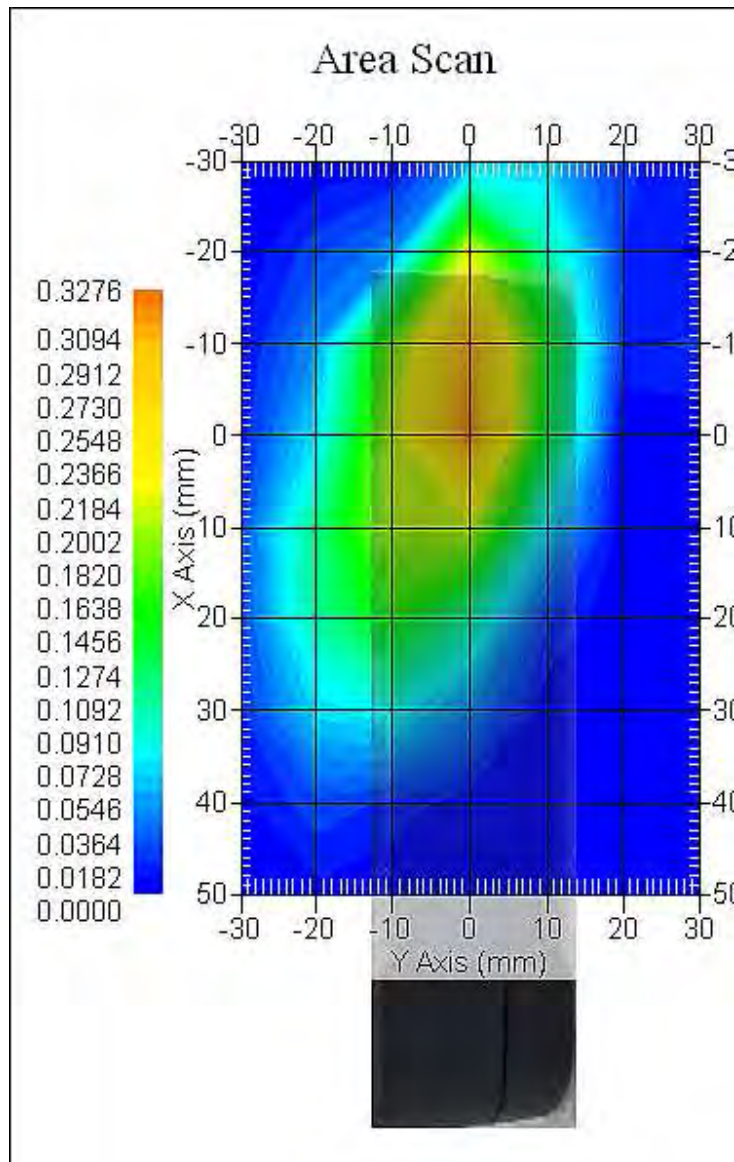
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 1750.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 5.5
 Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 28-Dec-2016
 Set-up Time : 8:01:08 AM
 Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = -4.940, Y = 0.000
 1 gram SAR value : 0.311 W/kg
 Area Scan Peak SAR : 0.324 W/kg
 Zoom Scan Peak SAR : 0.630 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = -4.940, Y = 0.000
 1 gram SAR value : 0.311 W/kg
 Area Scan Peak SAR : 0.324 W/kg
 Zoom Scan Peak SAR : 0.630 W/kg

Data No. 55:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 05:02:52 PM
End Time : 28-Dec-2016 05:29:02 PM
Scanning Time : 1570 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.222 W/kg
Power Drift-Finish: 0.221 W/kg
Power Drift (%) : -0.557
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.36
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

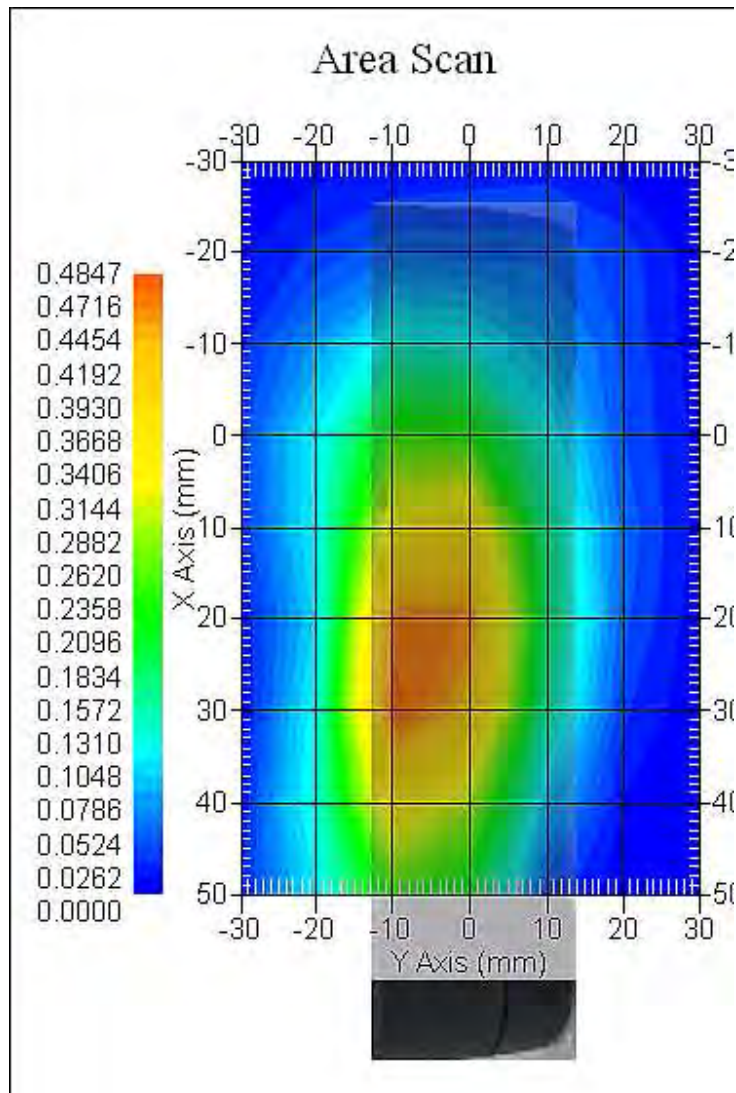
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 25.060, Y = -5.000
 1 gram SAR value : 0.486 W/kg
 Area Scan Peak SAR : 0.483 W/kg
 Zoom Scan Peak SAR : 0.835 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 25.060, Y = -5.000
 1 gram SAR value : 0.486 W/kg
 Area Scan Peak SAR : 0.483 W/kg
 Zoom Scan Peak SAR : 0.835 W/kg

Data No. 56:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 08:20:43 PM
End Time : 28-Dec-2016 08:46:54 PM
Scanning Time : 1571 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.367 W/kg
Power Drift-Finish: 0.373 W/kg
Power Drift (%) : 1.672
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.36
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

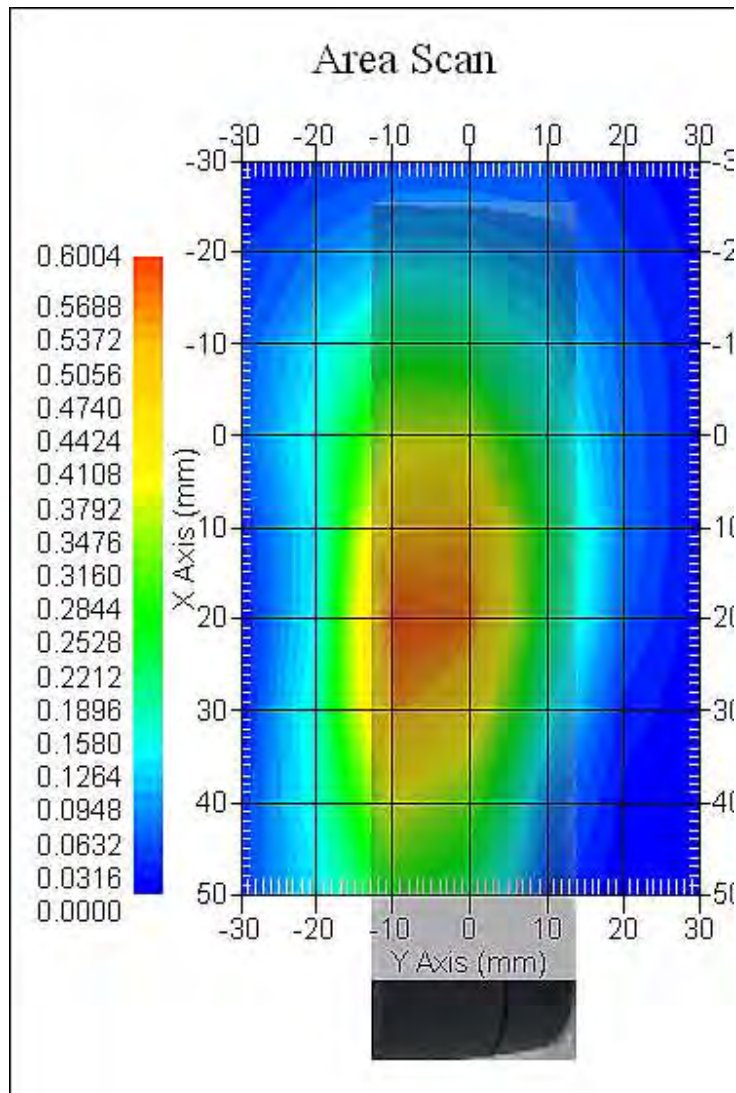
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.100, Y = -5.000
 1 gram SAR value : 0.622 W/kg
 Area Scan Peak SAR : 0.594 W/kg
 Zoom Scan Peak SAR : 1.070 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.100, Y = -5.000
 1 gram SAR value : 0.622 W/kg
 Area Scan Peak SAR : 0.594 W/kg
 Zoom Scan Peak SAR : 1.070 W/kg

Data No. 57:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 10:11:49 PM
End Time : 28-Dec-2016 10:38:08 PM
Scanning Time : 1579 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.340 W/kg
Power Drift-Finish: 0.330 W/kg
Power Drift (%) : -2.769
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.36
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

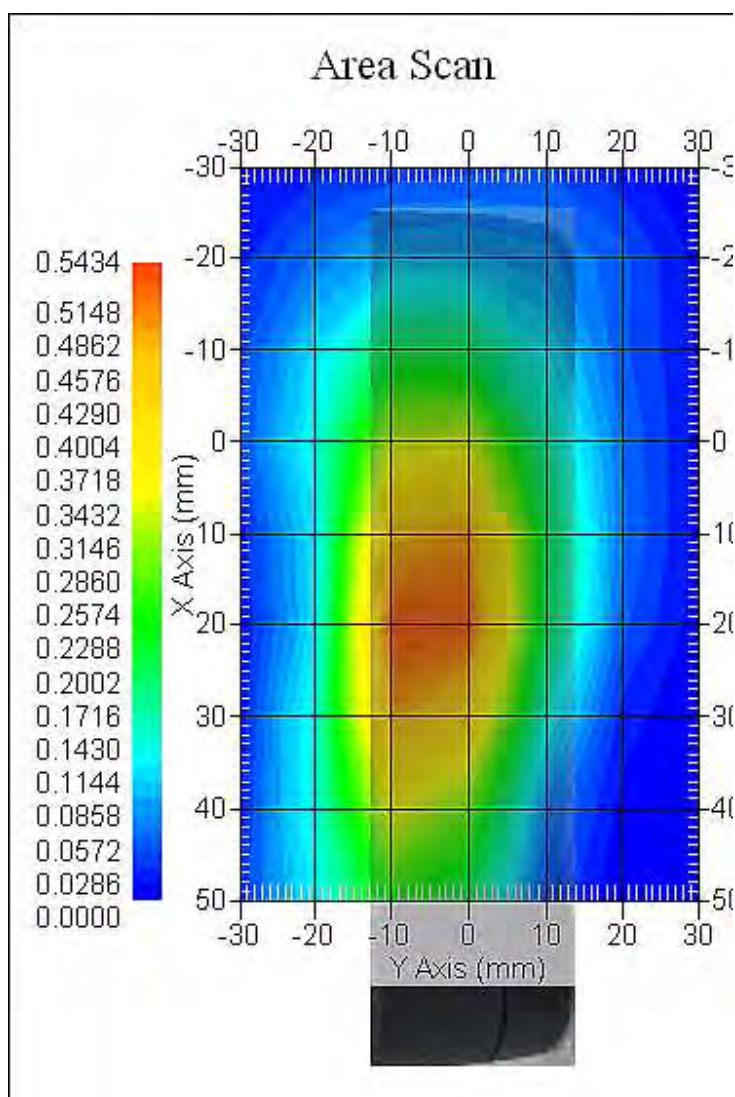
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 500-00266
 Last Calib. Date : 18-Feb-2016
 Frequency : 835.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 6.7
 Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 28-Dec-2016
 Set-up Time : 8:04:33 AM
 Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.100, Y = -5.000
 1 gram SAR value : 0.573 W/kg
 Area Scan Peak SAR : 0.532 W/kg
 Zoom Scan Peak SAR : 0.990 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.100, Y = -5.000
 1 gram SAR value : 0.573 W/kg
 Area Scan Peak SAR : 0.532 W/kg
 Zoom Scan Peak SAR : 0.990 W/kg

Data No. 58:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 05:31:03 PM
End Time : 28-Dec-2016 05:57:07 PM
Scanning Time : 1564 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.227 W/kg
Power Drift-Finish: 0.226 W/kg
Power Drift (%) : -0.245
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.36
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

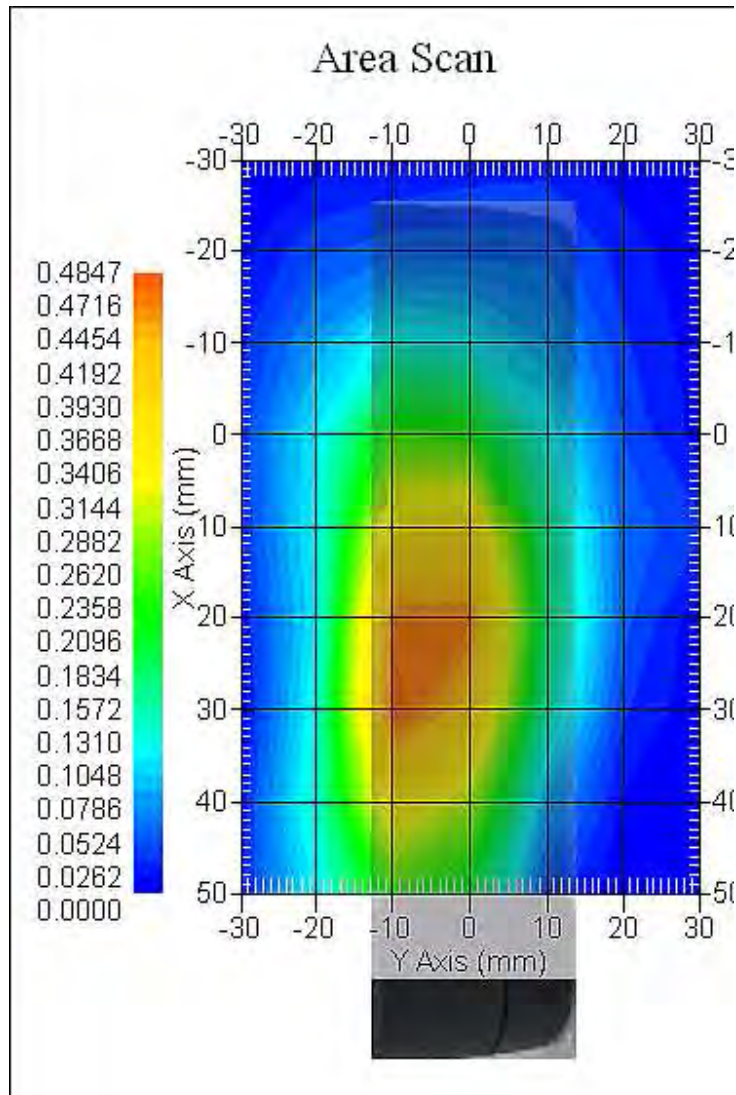
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.496 W/kg
 Area Scan Peak SAR : 0.484 W/kg
 Zoom Scan Peak SAR : 0.870 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.496 W/kg
 Area Scan Peak SAR : 0.484 W/kg
 Zoom Scan Peak SAR : 0.870 W/kg

Data No. 59:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 07:53:03 PM
End Time : 28-Dec-2016 08:19:17 PM
Scanning Time : 1574 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.372 W/kg
Power Drift-Finish: 0.367 W/kg
Power Drift (%) : -1.252
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.36
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

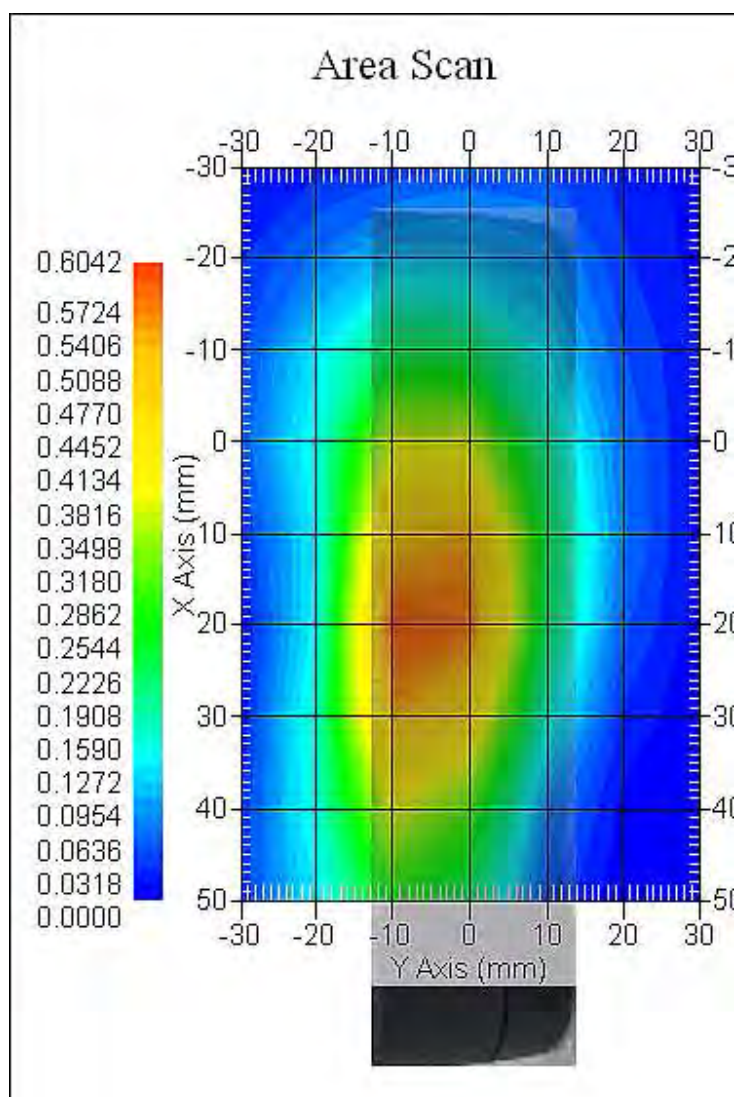
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 20.060, Y = -5.000
1 gram SAR value : 0.622 W/kg
Area Scan Peak SAR : 0.596 W/kg
Zoom Scan Peak SAR : 1.080 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 20.060, Y = -5.000
1 gram SAR value : 0.622 W/kg
Area Scan Peak SAR : 0.596 W/kg
Zoom Scan Peak SAR : 1.080 W/kg

Data No. 60:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 10:38:43 PM
End Time : 28-Dec-2016 11:04:54 PM
Scanning Time : 1571 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.340 W/kg
Power Drift-Finish: 0.336 W/kg
Power Drift (%) : -1.244
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835B
Frequency : 835.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.36
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

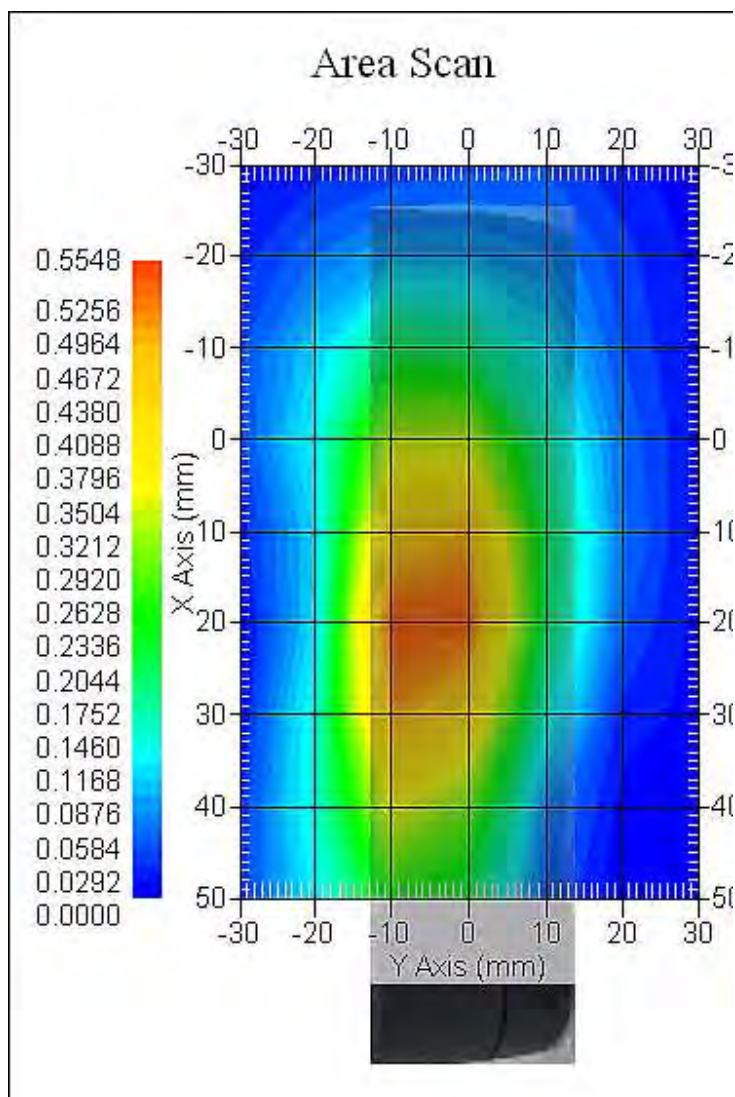
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.7
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
Selected highest maxima # = 1.
Maxima #1 coordinates: X = 20.070, Y = -5.000
1 gram SAR value : 0.562 W/kg
Area Scan Peak SAR : 0.545 W/kg
Zoom Scan Peak SAR : 0.990 W/kg

Maxima Summary:
Maxima #1
Maxima coordinates: X = 20.070, Y = -5.000
1 gram SAR value : 0.562 W/kg
Area Scan Peak SAR : 0.545 W/kg
Zoom Scan Peak SAR : 0.990 W/kg

Data No. 61:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 09:17:50 PM
End Time : 28-Dec-2016 09:43:58 PM
Scanning Time : 1568 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 700.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.297 W/kg
Power Drift-Finish: 0.294 W/kg
Power Drift (%) : -0.748
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 700B
Frequency : 700.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.01
Sigma : 0.97 S/m
Density : 1000.00 kg/cu. m

Probe Data

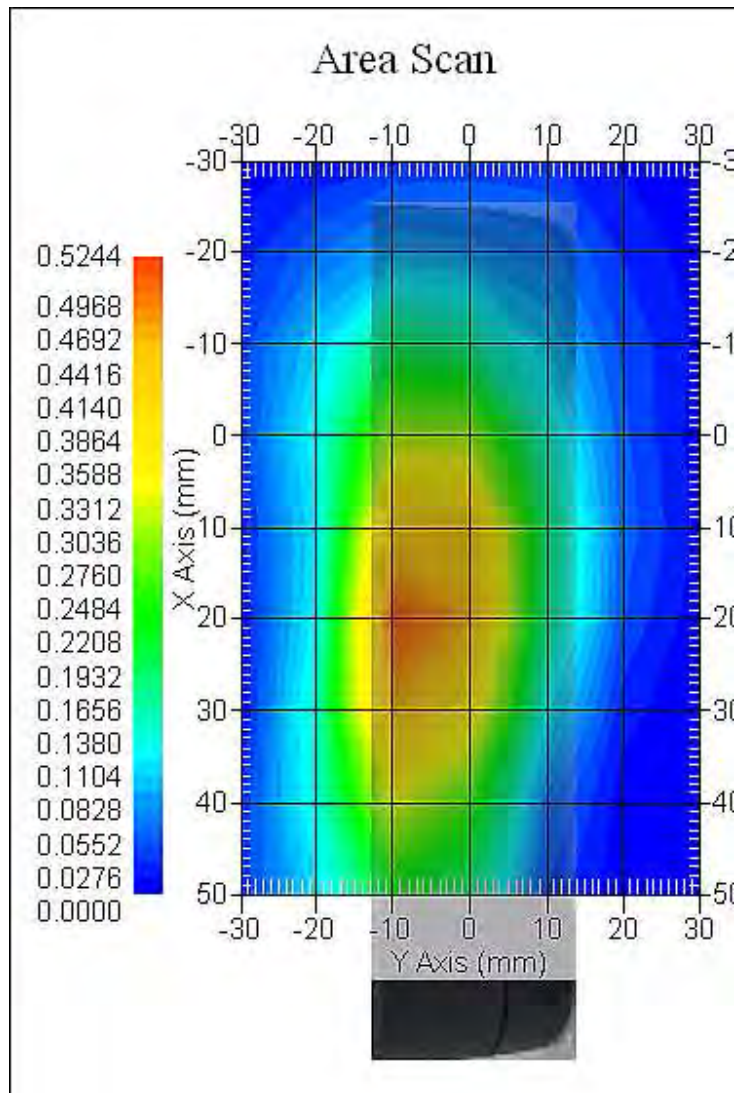
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 700.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.6
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.100, Y = -5.000
 1 gram SAR value : 0.522 W/kg
 Area Scan Peak SAR : 0.513 W/kg
 Zoom Scan Peak SAR : 0.910 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.100, Y = -5.000
 1 gram SAR value : 0.522 W/kg
 Area Scan Peak SAR : 0.513 W/kg
 Zoom Scan Peak SAR : 0.910 W/kg

Data No. 62:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 08:50:20 PM
End Time : 28-Dec-2016 09:16:33 PM
Scanning Time : 1573 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 700.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.384 W/kg
Power Drift-Finish: 0.368 W/kg
Power Drift (%) : -4.110
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 700B
Frequency : 700.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.01
Sigma : 0.97 S/m
Density : 1000.00 kg/cu. m

Probe Data

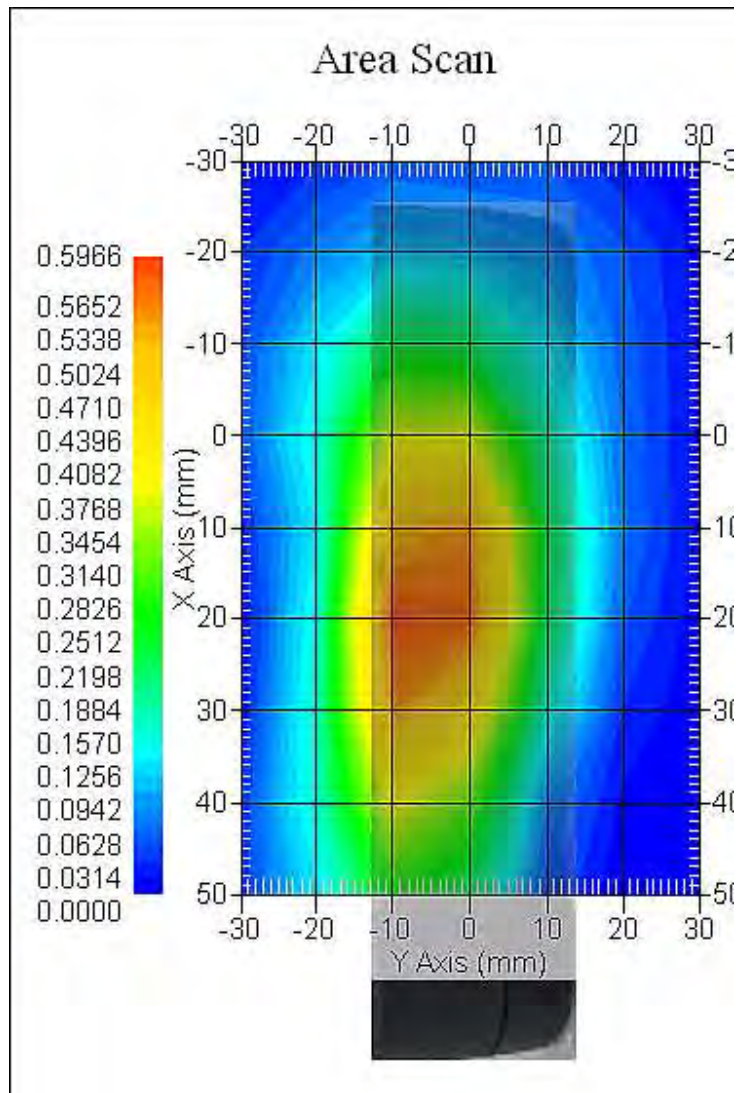
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016
Frequency : 700.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.6
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Mid



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.618 W/kg
 Area Scan Peak SAR : 0.588 W/kg
 Zoom Scan Peak SAR : 1.110 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.070, Y = -5.000
 1 gram SAR value : 0.618 W/kg
 Area Scan Peak SAR : 0.588 W/kg
 Zoom Scan Peak SAR : 1.110 W/kg

Data No. 63:

Report Date : 28-Dec-2016
By Operator : 123
Measurement Date : 28-Dec-2016
Starting Time : 28-Dec-2016 09:45:00 PM
End Time : 28-Dec-2016 10:11:10 PM
Scanning Time : 1570 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 700.00 MHz
Max. Transmit Pwr : 0.5 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 42 mm
Depth : 207 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.329 W/kg
Power Drift-Finish: 0.335 W/kg
Power Drift (%) : 1.988
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 : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 700B
Frequency : 700.00 MHz
Last Calib. Date : 28-Dec-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.01
Sigma : 0.97 S/m
Density : 1000.00 kg/cu. m

Probe Data

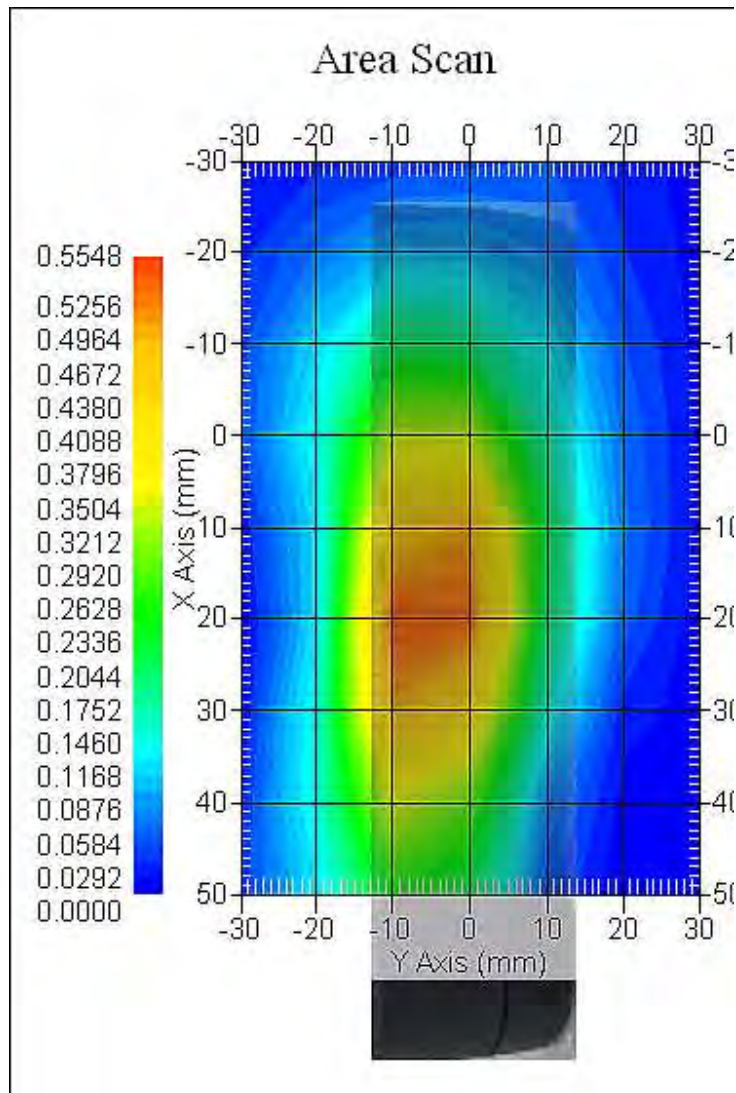
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 50-00266
Last Calib. Date : 18-Feb-2016
Frequency : 700.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.6
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 28-Dec-2016
Set-up Time : 8:04:33 AM
Area Scan : 9x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : High



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.060, Y = -5.000
 1 gram SAR value : 0.556 W/kg
 Area Scan Peak SAR : 0.542 W/kg
 Zoom Scan Peak SAR : 0.960 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 20.060, Y = -5.000
 1 gram SAR value : 0.556 W/kg
 Area Scan Peak SAR : 0.542 W/kg
 Zoom Scan Peak SAR : 0.960 W/kg

Data No. 64:

Report Date : 30-Mar-2017
By Operator : 123
Measurement Date : 30-Mar-2017
Starting Time : 30-Mar-2017 09:02:39 AM
End Time : 30-Mar-2017 09:27:15 AM
Scanning Time : 1476 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.25 W
Drift Time : 1 min(s)
Length : 110 mm
Width : 135 mm
Depth : 42 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-32.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 : 30-Mar-2017
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 62.00 RH%
Epsilon (Dielectric Constant): 54.39
Sigma : 1.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

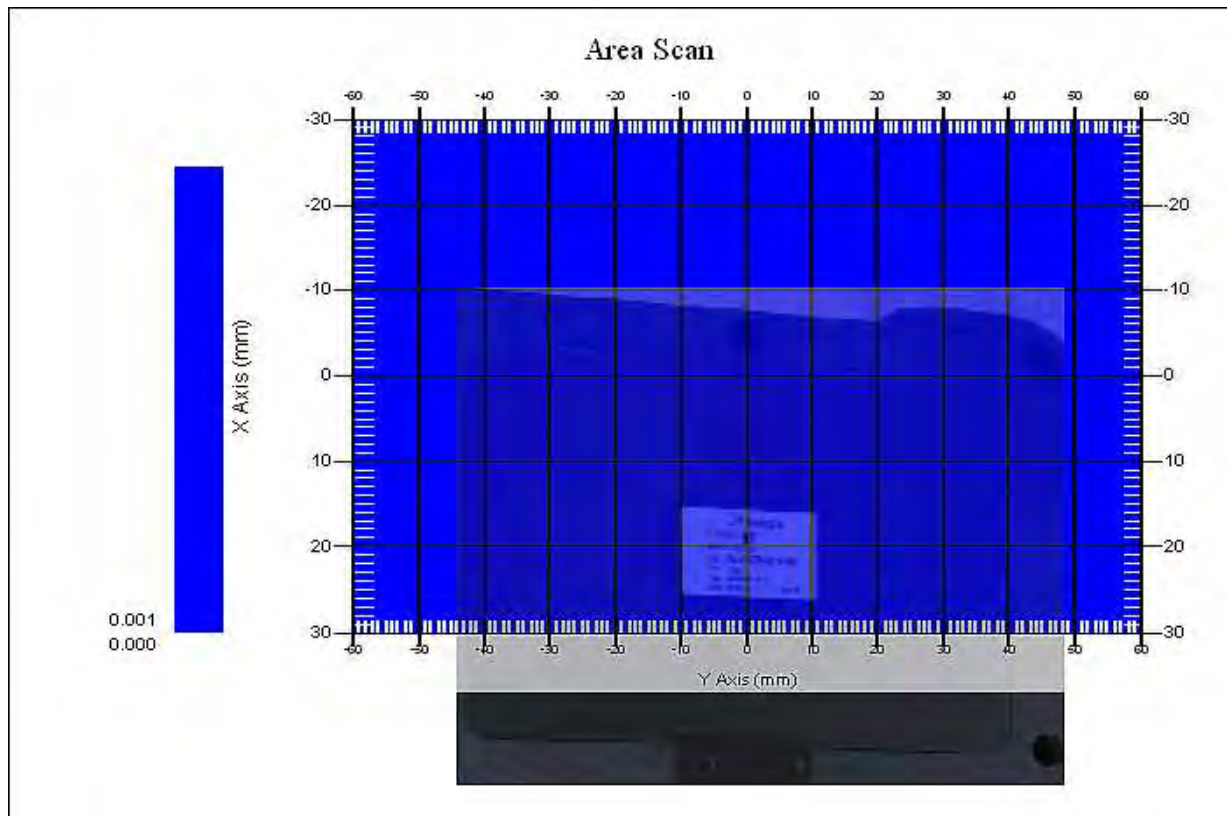
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 16-Feb-2017
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF): 1
Conversion Factor : 5.0
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 30-Mar-2017
Set-up Time : 12:53:56 PM
Area Scan : 7x13x1 : 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 = 13.050, Y = 42.900
 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 = 13.050, Y = 42.900
 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. 65:

Report Date : 30-Mar-2017
 By Operator : 123
 Measurement Date : 30-Mar-2017
 Starting Time : 30-Mar-2017 10:09:06 AM
 End Time : 30-Mar-2017 10:26:37 AM
 Scanning Time : 1051 secs
 Product Data
 Device Name : 16LR283
 Serial No. : NA
 Type : Other
 Model : NA
 Frequency : 2450.00 MHz
 Max. Transmit Pwr : 0.25 W
 Drift Time : 1 min(s)
 Length : 42 mm
 Width : 207 mm
 Depth : 170 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-33.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 : 30-Mar-2017
 Temperature : 21.50 °C
 Ambient Temp. : 21.50 °C
 Humidity : 62.00 RH%
 Epsilon (Dielectric Constant): 54.39
 Sigma : 1.93 S/m
 Density : 1000.00 kg/cu. m

Probe Data

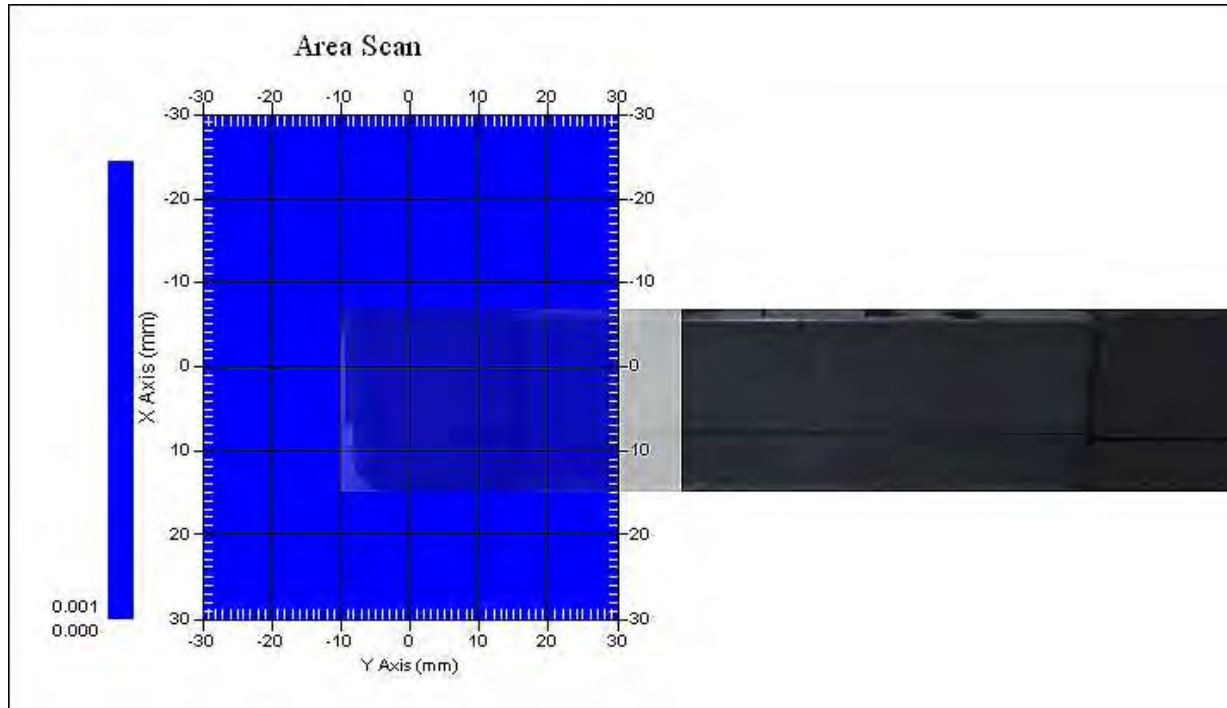
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 16-Feb-2017
Frequency : 2450.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 5
Probe Sensitivity : 1.21 1.21 1.20 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 30-Mar-2017
Set-up Time : 12:53:56 PM
Area Scan : 7x7x1 : 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 = 13.060, Y = 12.900
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 = 13.060, Y = 12.900
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. 66:

Report Date : 30-Mar-2017
By Operator : 123
Measurement Date : 30-Mar-2017
Starting Time : 30-Mar-2017 11:23:40 AM
End Time : 30-Mar-2017 12:08:24 PM
Scanning Time : 2684 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 850.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 170 mm
Width : 207 mm
Depth : 42 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.210 W/kg
Power Drift-Finish: 0.219 W/kg
Power Drift (%) : 4.366
Picture : C:\alsas\bitmap\Device-34.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. : 850B
Frequency : 850.00 MHz
Last Calib. Date : 30-Mar-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.38
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

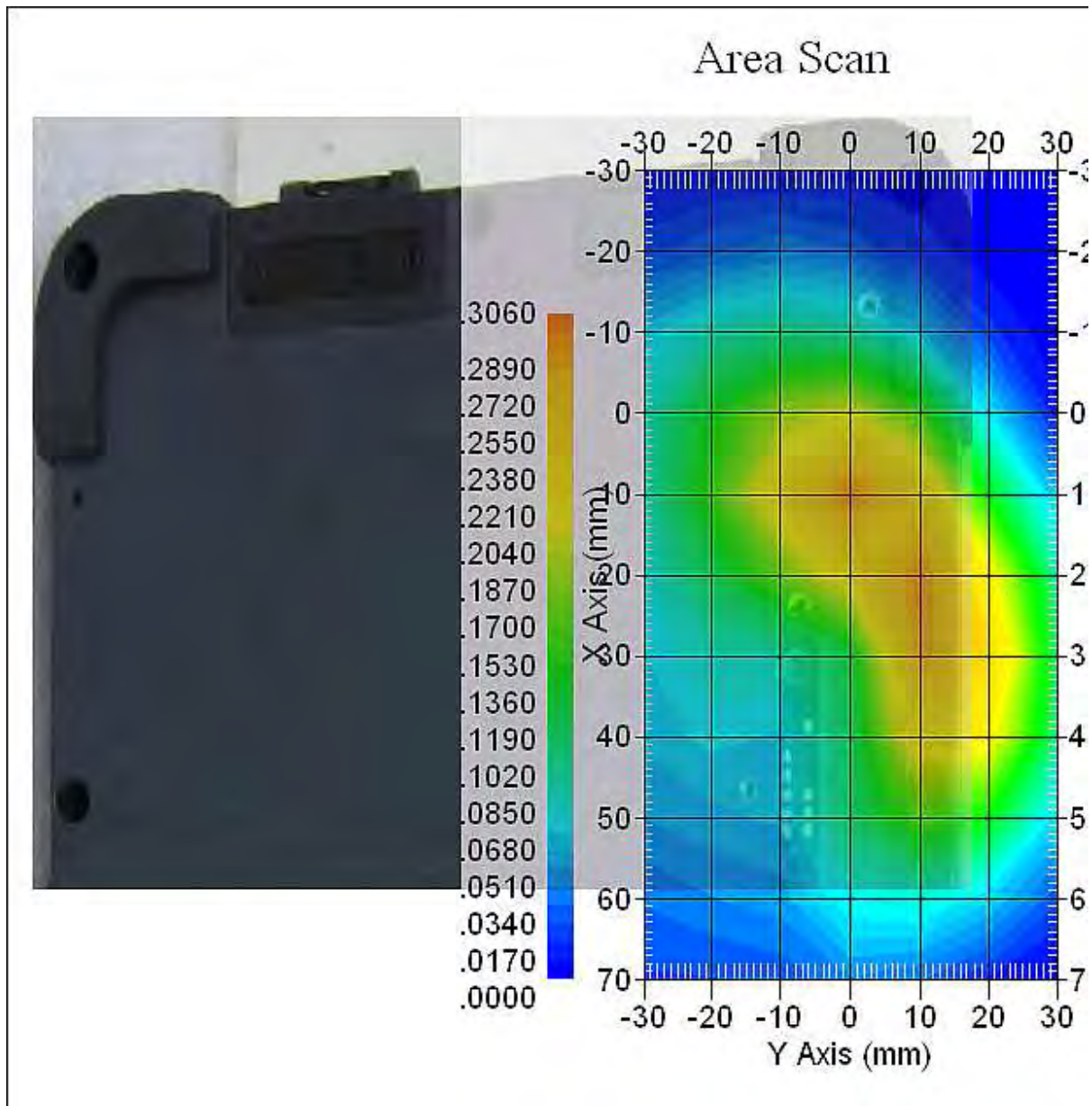
Name : E-field
 Model : E-020
 Type : E-Field Triangle
 Serial No. : 266
 Last Calib. Date : 16-Feb-2017
 Frequency : 835.00 MHz
 Duty Cycle Factor (CreF) : 1
 Conversion Factor : 6.8
 Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
 Compression Point : 95.00 mV
 Offset : 1.56 mm

Measurement Data

Crest Factor : 1
 Scan Type : Complete
 Tissue Temp. : 21.50 °C
 Ambient Temp. : 21.50 °C
 Set-up Date : 30-Mar-2017
 Set-up Time : 8:04:33 AM
 Area Scan : 11x7x1 : Measurement x=10mm, y=10mm, z=4mm
 Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
 Separation : 0
 Channel : Low



The system detected 2 maxima.
 Selected highest maxima # = 2.
 Maxima #2 coordinates: X = 30.150, Y = 14.800
 1 gram SAR value : 0.407 W/kg
 Area Scan Peak SAR : 0.299 W/kg
 Zoom Scan Peak SAR : 0.610 W/kg

Maxima Summary:
 Maxima #1
 Maxima coordinates: X = 10.130, Y = 0.000
 1 gram SAR value : 0.210 W/kg
 Area Scan Peak SAR : 0.299 W/kg
 Zoom Scan Peak SAR : 0.400 W/kg

Maxima #2

Maxima coordinates: X = 30.150, Y = 14.800

1 gram SAR value : 0.407 W/kg

Area Scan Peak SAR : 0.299 W/kg

Zoom Scan Peak SAR : 0.610 W/kg

Data No. 67:

Report Date : 30-Mar-2017
By Operator : 123
Measurement Date : 30-Mar-2017
Starting Time : 30-Mar-2017 03:15:50 PM
End Time : 30-Mar-2017 03:40:01 PM
Scanning Time : 1451 secs
Product Data
Device Name : 16LR283
Serial No. : NA
Type : Other
Model : NA
Frequency : 850.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 1 min(s)
Length : 207 mm
Width : 42 mm
Depth : 107 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.011 W/kg
Power Drift-Finish: 0.011 W/kg
Power Drift (%) : 4.578
Picture : C:\alsas\bitmap\Device-35.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. : 850B
Frequency : 850.00 MHz
Last Calib. Date : 30-Mar-2016
Temperature : 21.50 °C
Ambient Temp. : 21.50 °C
Humidity : 63.00 RH%
Epsilon (Dielectric Constant): 54.38
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data

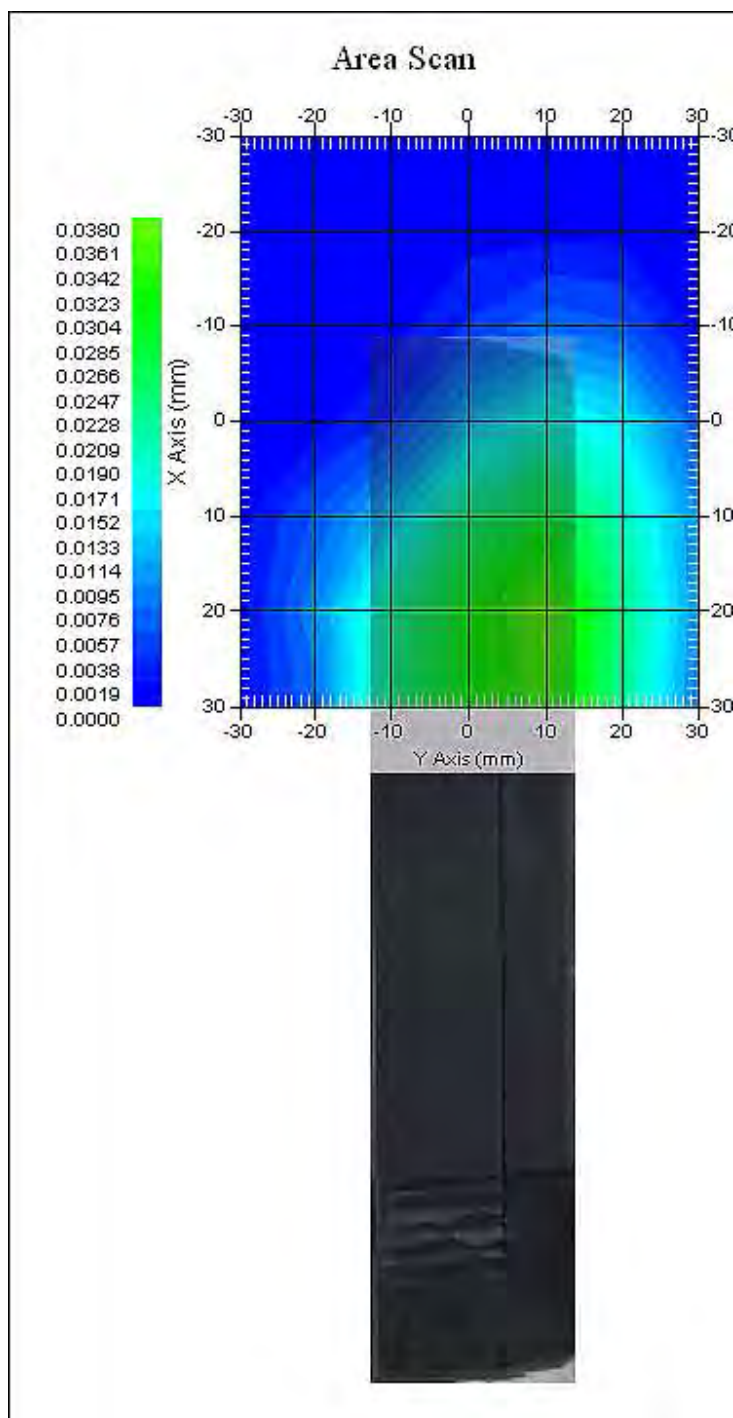
Name : E-field
Model : E-020
Type : E-Field Triangle
Serial No. : 266
Last Calib. Date : 16-Feb-2017
Frequency : 835.00 MHz
Duty Cycle Factor (CreF) : 1
Conversion Factor : 6.8
Probe Sensitivity : 1.21 1.21 1.21 $\mu\text{V}/(\text{V}/\text{m})^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Set-up Date : 30-Mar-2017
Set-up Time : 8:04:33 AM
Area Scan : 7x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data

DUT Position : Touch
Separation : 0
Channel : Low



The system detected 1 maxima.
 Selected highest maxima # = 1.
 Maxima #1 coordinates: X = 20.060, Y = 9.900
 1 gram SAR value : 0.030 W/kg
 Area Scan Peak SAR : 0.037 W/kg
 Zoom Scan Peak SAR : 0.040 W/kg

Maxima Summary:

Maxima #1

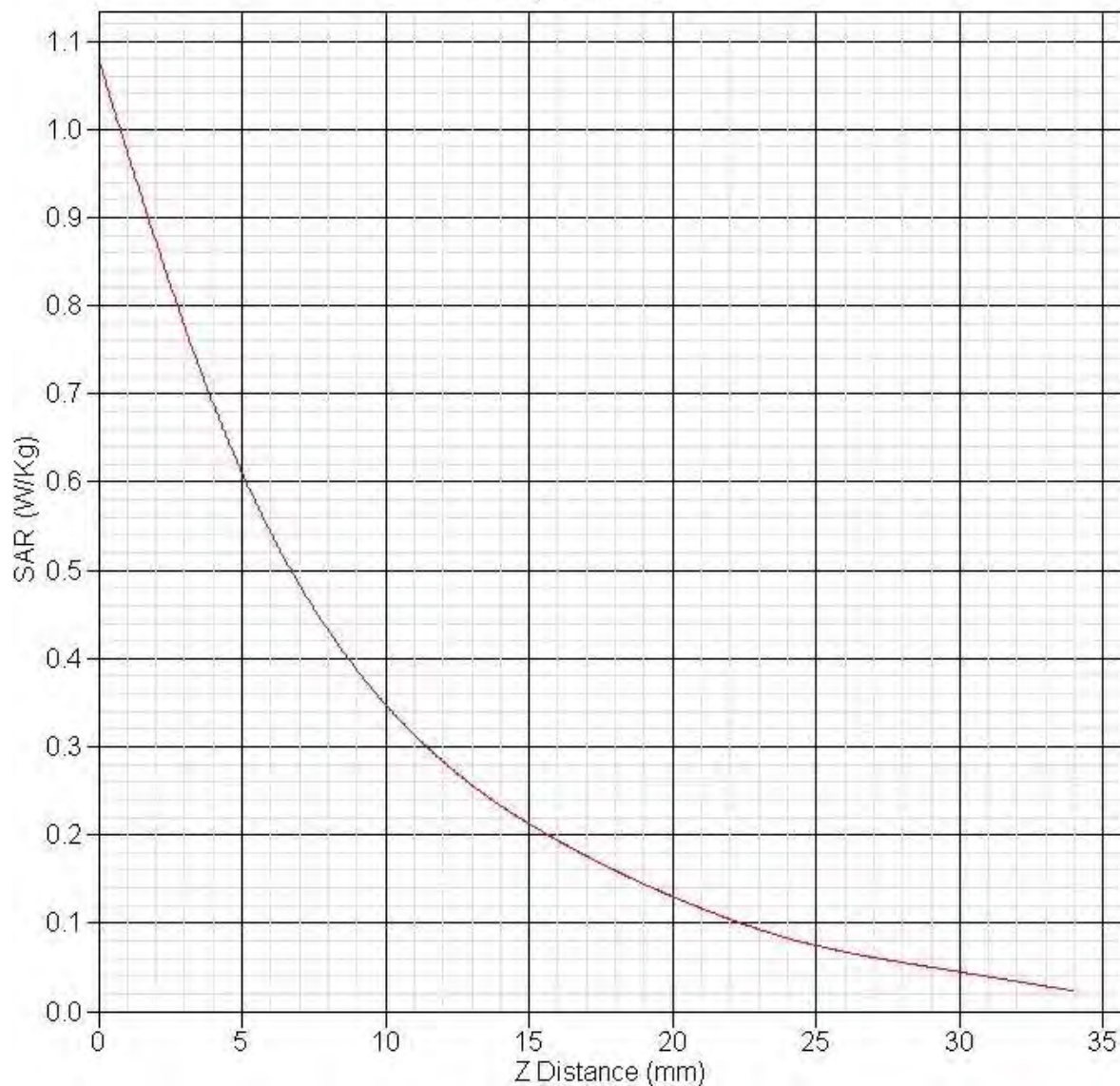
Maxima coordinates: X = 20.060, Y = 9.900

1 gram SAR value : 0.030 W/kg

Area Scan Peak SAR : 0.037 W/kg

Zoom Scan Peak SAR : 0.040 W/kg

SAR-Z Axis
at Hotspot x:20.06 y:-5.06



NCL CALIBRATION LABORATORIES

Calibration File No.: PC-1672

Task No: 5812

Client.: International Standards Laboratory

Address: No. 120, Lane 180, Hsin Ho Rd.,
Lung-Tan Dist., Tao Yuan City 325, Taiwan

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Equipment: Miniature Isotropic RF Probe

Record of Calibration

Head and Body

Manufacturer: APREL Inc.

Model No.: ALS-E020

Serial No.: 500-00266

Calibration Procedure: D01-032-E020-V2, D22-012-Tissue, D28-002-Dipole

Calibrated: 18th February 2016

Released on: 19th February 2016

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By: _____



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr,
OTTAWA, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

Introduction

This Calibration Report reproduces the results of the calibration performed in line with the references listed below. Calibration is performed using accepted methodologies as per the references listed below. Probes are calibrated for air and tissue, and the values reported are the results from the physical quantification.

Calibration Method

Probes are calibrated using the following methods.

<800 MHz

TEM Cell for sensitivity in air

Standard phantom using temperature transfer method for sensitivity in tissue

>800 MHz

Waveguide method to determine sensitivity in air and tissue

Waveguide is numerically (simulation) assessed to determine the field distribution and power

The boundary effect for the probe is assessed using a standard flat phantom where the probe output is compared against numerically simulated series of data points

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o IEC 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o TP-D01-032-E020-V2 E-Field probe calibration procedure
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

NCL Calibration Laboratories

Division of APREL Inc.

PC-1672

Conditions

Probe S/N 266 was a re-calibration.

Ambient Temperature of the Laboratory: 20 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 1.0°C
Relative Humidity: < 60%

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Power Meter Tektronix USB	11C940	Apr 2, 2017
Signal Generator Agilent E4438C	MY45094463	Dec 11, 2017

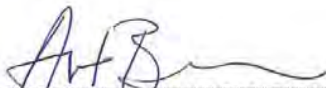
Secondary Measurement Standards

Network Analyzer Anritsu 37347C	002106	Feb. 4, 2017
---------------------------------	--------	--------------

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Dan Brooks, Test Engineer

Probe Summary

Probe Type: E-Field Probe E020
Serial Number: 266
Frequency: As presented on page 5
Sensor Offset: 1.56
Sensor Length: 2.5
Tip Enclosure: Composite*
Tip Diameter: < 2.9 mm
Tip Length: 55 mm
Total Length: 289 mm
Diode Compression Point: 95 mV

Sensitivity in Air

Frequency Range	Channel X, $\mu\text{V}/(\text{V}/\text{m})^2$	Channel Y, $\mu\text{V}/(\text{V}/\text{m})^2$	Channel Z, $\mu\text{V}/(\text{V}/\text{m})^2$	Tolerance, $\mu\text{V}/(\text{V}/\text{m})^2$
600 MHz – 1000 MHz	1.21	1.212	1.208	± 0.005
1000 MHz – 4000 MHz	1.207	1.21	1.202	± 0.004
5000 MHz – 6000 MHz	1.191	1.189	1.192	± 0.004

*Resistive to recommended tissue recipes per IEEE-1528

NCL Calibration Laboratories

Division of APREL Inc.

PC-1672

Calibration for Tissue (Head H, Body B)

Frequency	Tissue Type	Measured Epsilon	Measured Sigma	Standard Uncertainty (%)	Calibration Frequency Range (MHz)	Conversion Factor
300 H	Head	X	X	X	X	X
300 B	Body	X	X	X	X	X
450 H	Head	X	X	X	X	X
450 B	Body	X	X	X	X	X
700 H	Head	42.78	0.85	3.5	±50	6.1
700 B	Body	57.18	0.85	3.5	±50	6.6
835 H	Head	43.44	0.94	3.5	±50	6.0
835 B	Body	55.32	1.00	3.5	±50	6.7
850 H	Head	X	X	X	X	X
850 B	Body	X	X	X	X	X
900 H	Head	41.5	1.00	3.5	±50	6.7
900 B	Body	54.81	1.05	3.5	±50	6.6
1450 H	Head	39.26	1.21	3.5	±50	6.0
1450 B	Body	X	X	X	X	X
1500 H	Head	X	X	X	X	X
1500 B	Body	X	X	X	X	X
1640 H	Head	X	X	X	X	X
1640 B	Body	X	X	X	X	X
1750 H	Head	39.18	1.34	3.5	±50	5.8
1750 B	Body	51.53	1.52	3.5	±75	5.5
1800 H	Head	X	X	X	X	X
1800 B	Body	X	X	X	X	X
1900 H	Head	40.72	1.37	3.5	±75	4.9
1900 B	Body	53.31	1.43	3.5	±75	5.5
2000 H	Head	38.18	1.46	3.5	±75	5.5
2000 B	Body	52.15	1.47	3.5	±75	5.4
2100 H	Head	X	X	X	X	X
2100 B	Body	X	X	X	X	X
2300 H	Head	X	X	X	X	X
2300 B	Body	X	X	X	X	X
2450 H	Head	37.6	1.88	3.5	±75	5.4
2450B	Body	53.99	1.97	3.5	±75	5.2
2590H	Head	37.85	2.03	3.5	±75	5.5
2590B	Body	53.31	2.21	3.5	±75	5.3
3500H	Head	X	X	X	X	X
3500 B	Body	X	X	X	X	X
5200 H	Head	X	X	X	X	X
5250 H	Head	35.43	4.61	3.5	±100	3.2
5250 B	Body	70	5.17	5	±100	3.0
5600 H	Head	36.24	5.09	3.5	±100	2.9
5600 B	Body	46.75	5.75	5	±100	2.6
5800 H	Head	34.57	5.27	3.5	±100	3.0
5800 B	Body	46.27	6.03	5	±100	2.9

Boundary Effect:

Uncertainty resulting from the boundary effect is less than 2.1% for the distance between the tip of the probe and the tissue boundary, when less than 0.58 mm.

Spatial Resolution:

The spatial resolution uncertainty is less than 1.5% for 4.9 mm diameter probe.

The spatial resolution uncertainty is less than 1.0% for 2.5 mm diameter probe.

DAQ-PAQ Contribution

To minimize the uncertainty calculation all tissue sensitivity values were calculated using a load impedance of 5 M Ω .

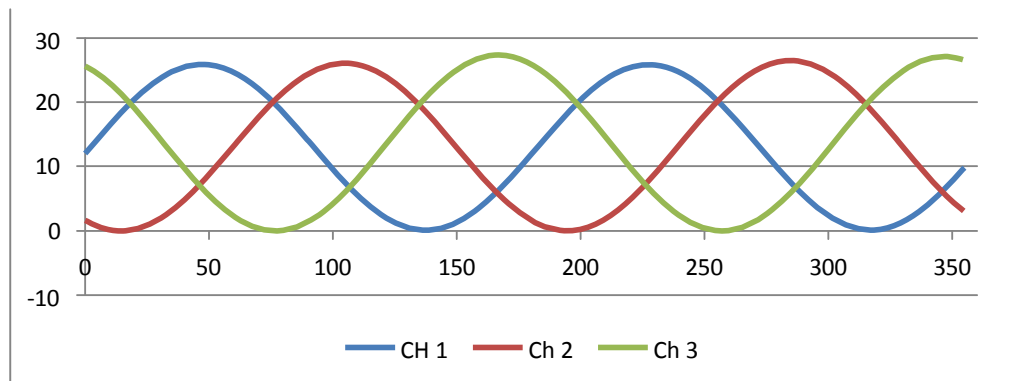
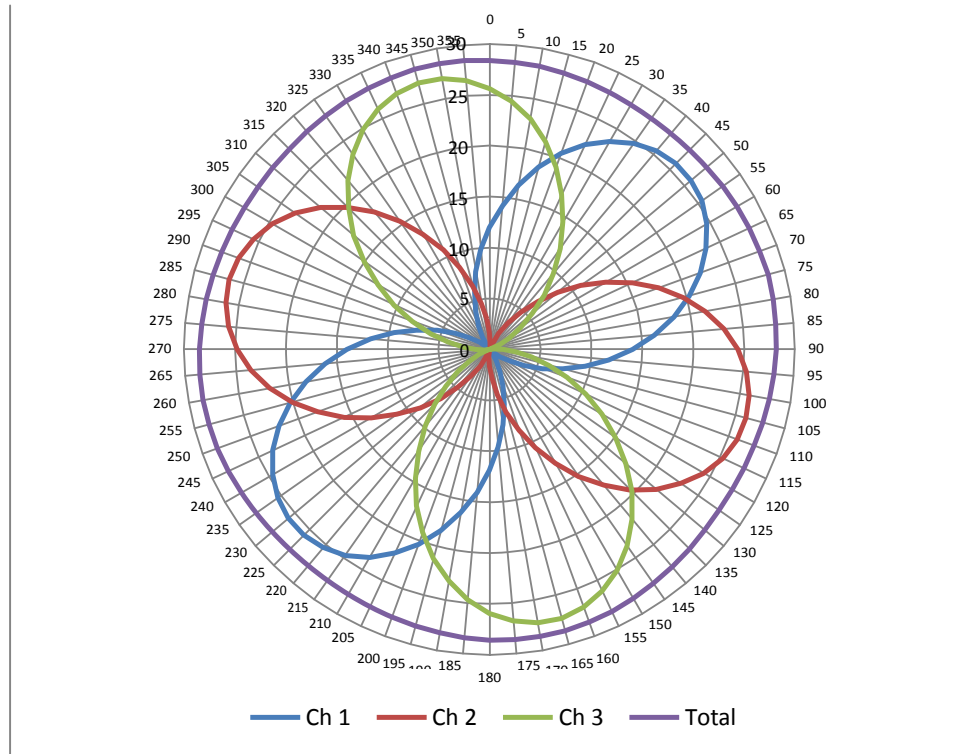
Probe Calibration Uncertainty for 300 MHz – 3500 MHz frequency range

Uncertainty component	Tolerance ($\pm$ %)	Probability distribution	Divisor	Standard uncertainty ($\pm$ %)
Incident or forward power	2.5	R	$\sqrt{3}$	1.44
Reflected power	2	R	$\sqrt{3}$	1.15
Liquid conductivity measurement	1	R	$\sqrt{3}$	0.58
Liquid permittivity measurement	1	R	$\sqrt{3}$	0.58
Liquid conductivity deviation	1.5	R	$\sqrt{3}$	0.87
Liquid permittivity deviation	1.5	R	$\sqrt{3}$	0.87
Frequency deviation	2.25	R	$\sqrt{3}$	1.30
Field homogeneity	2.5	R	$\sqrt{3}$	1.44
Field-probe positioning	2.5	R	$\sqrt{3}$	1.44
Field-probe linearity	1.55	R	$\sqrt{3}$	0.89
Combined standard uncertainty		RSS		3.50

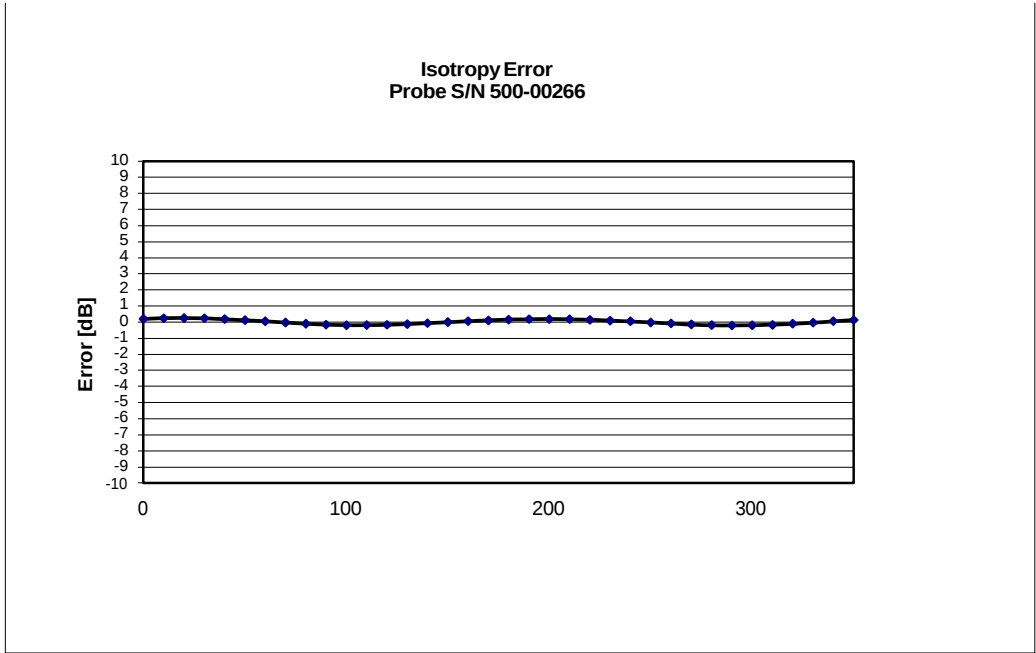
Probe Calibration Uncertainty for 5-6 GHz frequency range

Uncertainty component	Tolerance ($\pm$ %)	Probability distribution	Divisor	Standard uncertainty ($\pm$ %)
Incident or forward power	2.5	R	$\sqrt{3}$	1.44
Reflected power	2	R	$\sqrt{3}$	1.15
Liquid conductivity measurement	1.5	R	$\sqrt{3}$	0.87
Liquid permittivity measurement	1.5	R	$\sqrt{3}$	0.87
Liquid conductivity deviation	2.5	R	$\sqrt{3}$	1.44
Liquid permittivity deviation	3	R	$\sqrt{3}$	1.73
Frequency deviation	2.25	R	$\sqrt{3}$	1.30
Field homogeneity	3.2	R	$\sqrt{3}$	1.85
Field-probe positioning	3.8	R	$\sqrt{3}$	2.19
Field-probe linearity	1.55	R	$\sqrt{3}$	0.89
Combined standard uncertainty		RSS		4.55

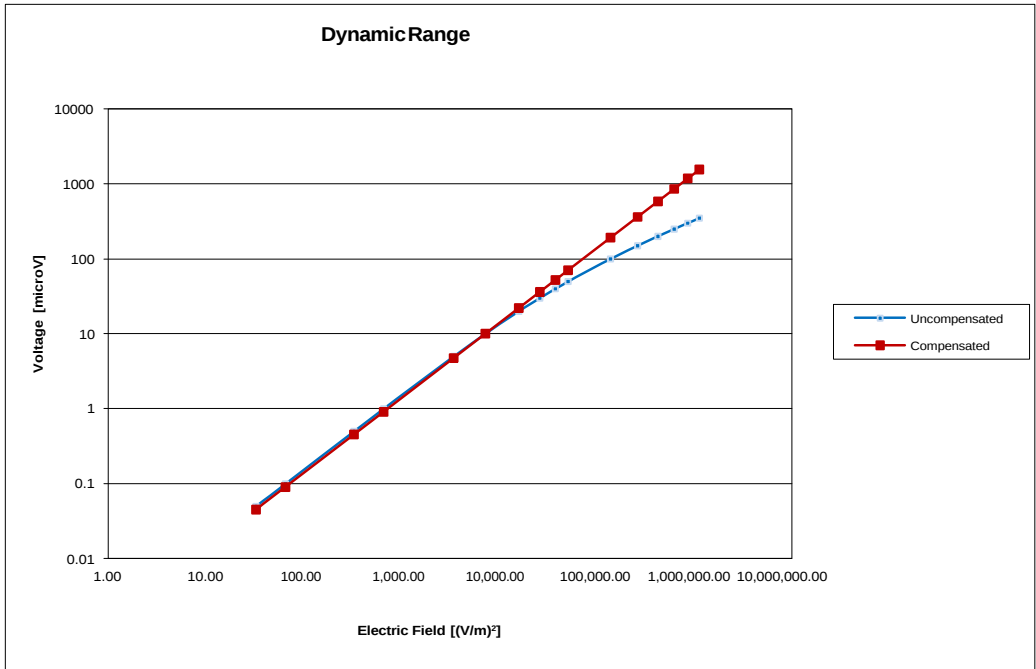
Receiving Pattern Air



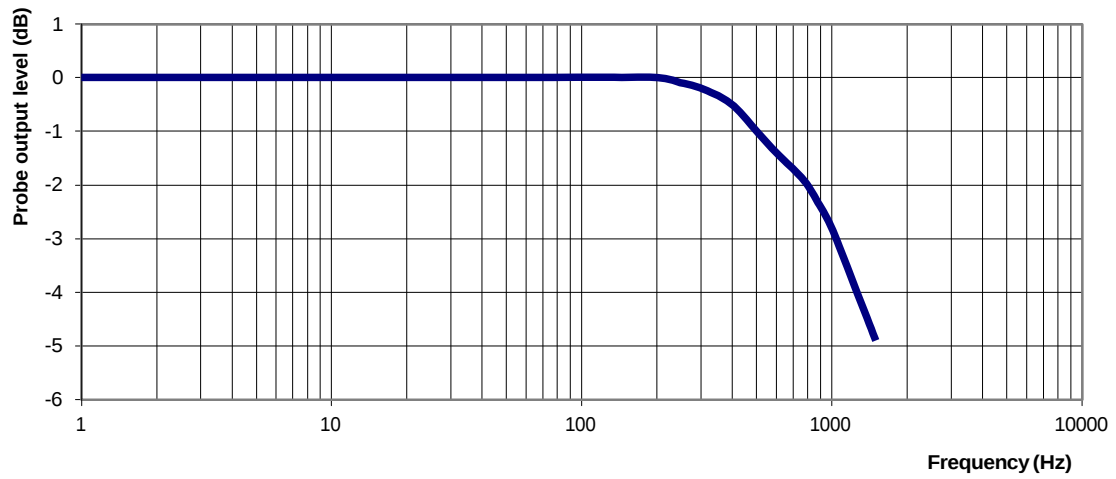
Isotropy Error



Dynamic Range



Probe Frequency Characteristics



Video Bandwidth at 500 Hz	1 dB
Video Bandwidth at 1.02 KHz:	3 dB

NCL CALIBRATION LABORATORIES

Calibration File No: DC-1673

Project Number: 5812

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Head & Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-700-S-2

Frequency: 700 MHz

Serial No: 176-00502

Calibrated: 17th February 2016
Released on: 19th February 2016

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories

Conditions

Dipole 190-00615 was an original calibration.

Ambient Temperature of the Laboratory: $21\text{ }^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$

Temperature of the Tissue: $21\text{ }^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	April 2, 2017
Network Analyzer Anritsu 37347C	002106	Feb. 4, 2017
Agilent Signal Generator	MY45094463	Dec. 11, 2017

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height	Diameter
196 mm	112 mm	3.6 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Head	700 MHz	42.78	0.85
Body	700 MHz	57.21	0.91

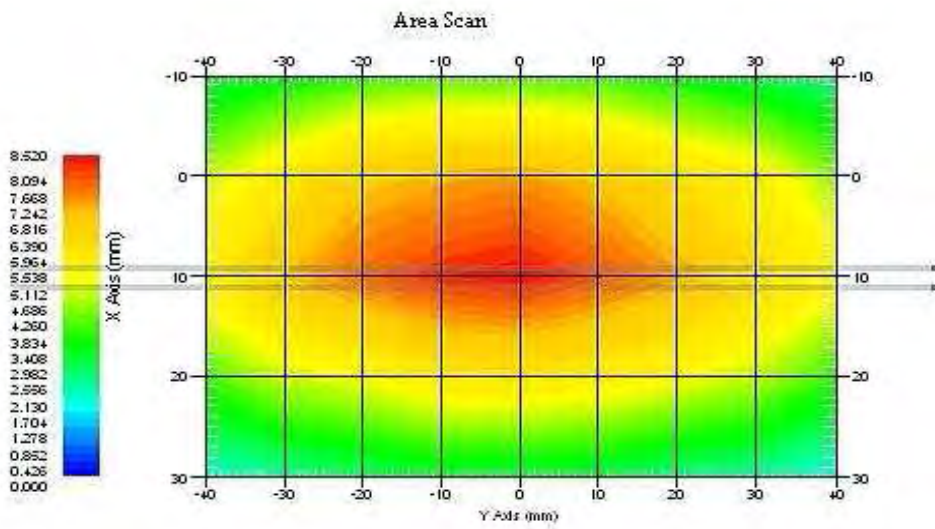
Electrical Specification

Tissue	Frequency	Return Loss	SWR:	Impedance
Head	700 MHz	-31.541 dB	1.055 U	47.704 Ω
Body	700 MHz	-33.916 dB	1.04 U	48.90 Ω

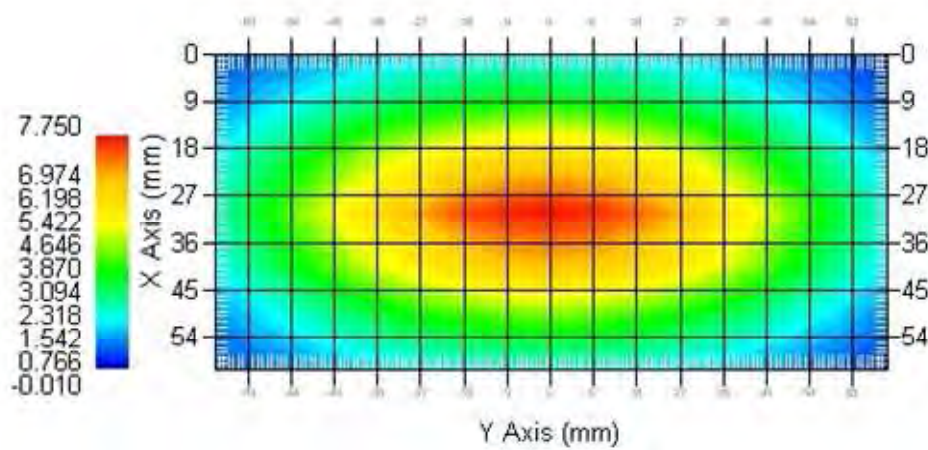
System Validation Results

Tissue	Frequency	1 Gram, W/kg	10 Gram, W/kg
Head	700 MHz	7.288	4.734
Body	700 MHz	7.944	5.207

Body



Head



Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 176-00502. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS- 10U, along with APREL E020 30 MHz to 6 GHz E-Field Probe Serial Number 225.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Dipole 190-00615 was an original calibration.

Ambient Temperature of the Laboratory: $21^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$

Temperature of the Tissue: $21^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$

Dipole Calibration uncertainty

The calibration uncertainty for the dipole is made up of various parameters presented below.

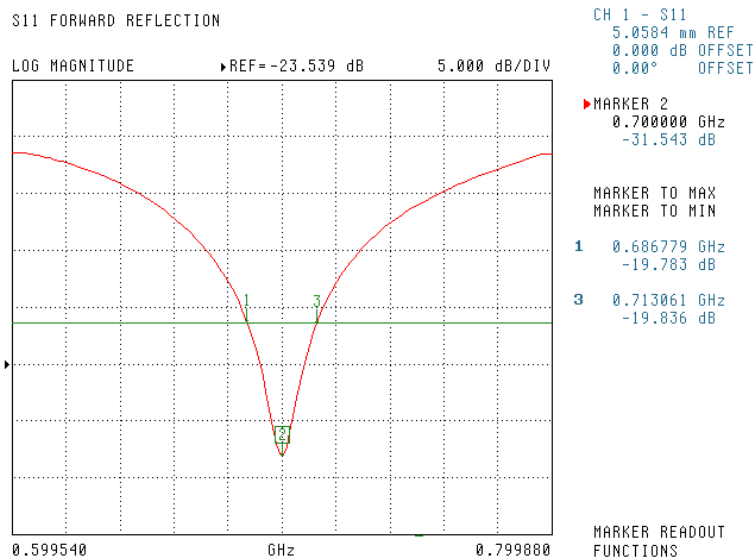
Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
Combined Standard Uncertainty	3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

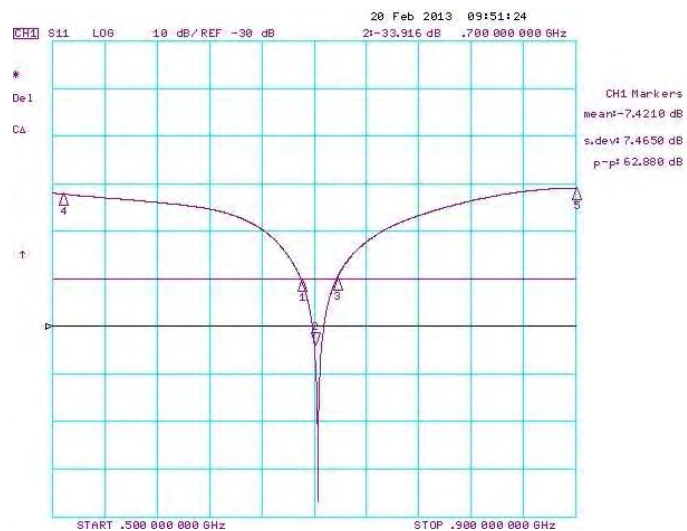
S11 Parameter Return Loss

Head

Frequency Range 686.78 MHz to 713.06 MHz

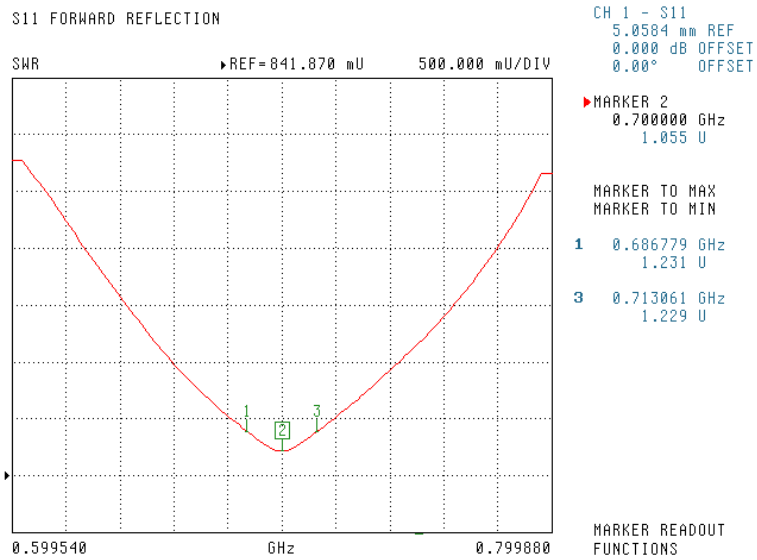


Body



SWR

Head

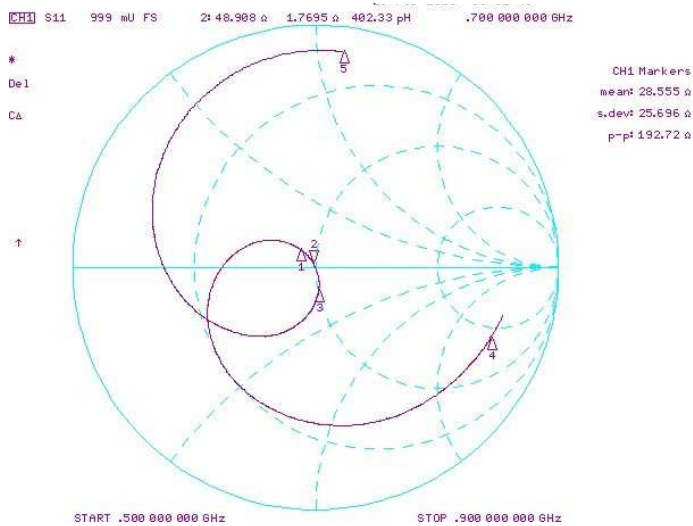


Body

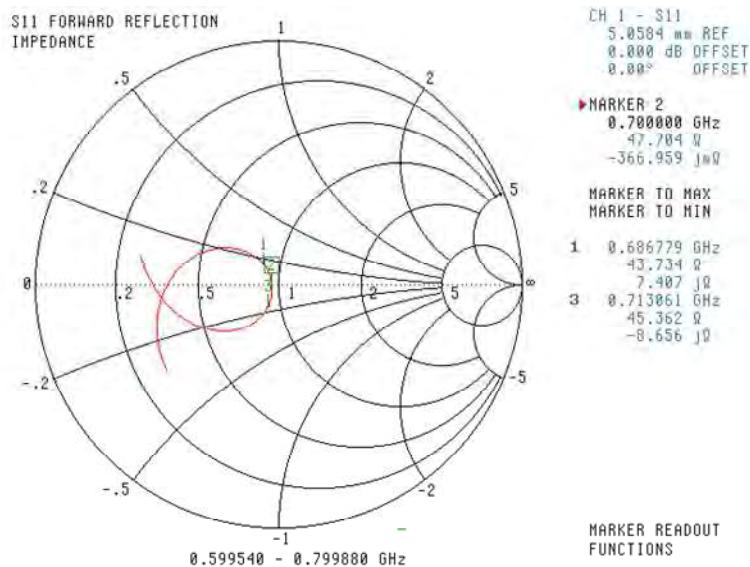


Smith Chart Dipole Impedance

Body



Head



NCL CALIBRATION LABORATORIES

Calibration File No: DC-1609
Project Number: ISL-D-cal-5785

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole(Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-835-S-2

Frequency: 835 MHz

Serial No: 180-00553

Customer: ISL

Calibrated: 12th January 2015
Released on: 15th January 2015

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories.

Conditions

Dipole 180-00553 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	May 14, 2015
Network Analyzer Anritsu 37347C	002106	Feb. 20, 2015
Agilent Signal Generator	MY45094463	Dec. 2015

This page has been reviewed for content and attested to by signature within this document.

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height
161.0 mm	89.8 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Body	835 MHz	55.35	1.00

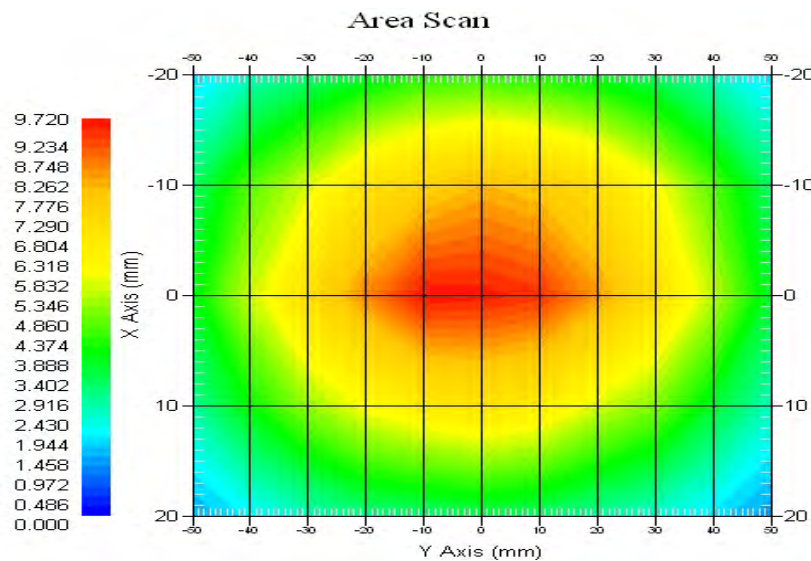
Electrical Specification

Tissue	Frequency	SWR:	Return Loss	Impedance
Body	835 MHz	1.167 U	-22.301 dB	55.443 Ω

System Validation Results

Tissue	Frequency	1 Gram	10 Gram
Body	835 MHz	9.11	6.23

Body



Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 180-00553. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 30 MHz to 6 GHz E-Field Probe Serial Number 266.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Dipole 180-00553 was a re-calibration.

Ambient Temperature of the Laboratory: 21 °C +/- 0.5°C

Temperature of the Tissue: 21 °C +/- 0.5°C

Dipole Calibration uncertainty

The calibration uncertainty for the dipole is made up of various parameters presented below.

Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
 Combined Standard Uncertainty	 3.88% (7.76% K=2)

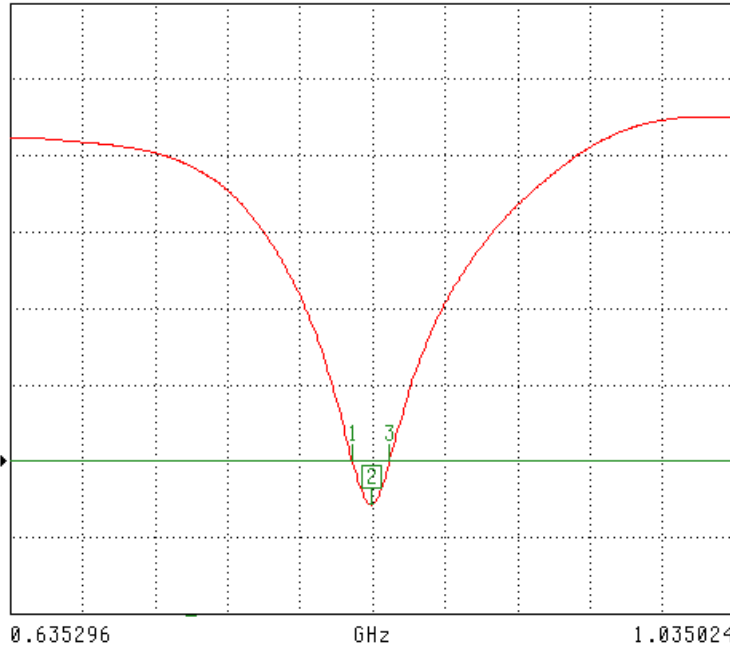
The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

Body Tissue: Frequency Range 824 MHz to 845 MHz

S11 FORWARD REFLECTION

LOG MAGNITUDE REF=-20.000 dB 4.000 dB/DIV



CH 1 - S11
5.0584 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 2
0.835000 GHz
-22.301 dB

MARKER TO MAX
MARKER TO MIN

1 0.824348 GHz
-20.010 dB

3 0.844926 GHz
-20.007 dB

MARKER READOUT
FUNCTIONS

SWR

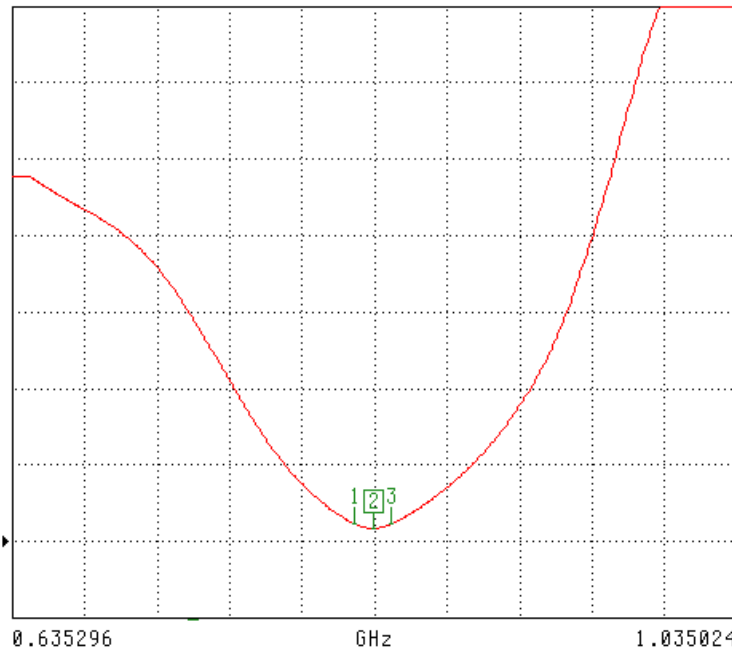
Body

S11 FORWARD REFLECTION

SWR

REF=1.000 U

1.000 U/DIV



CH 1 - S11
5.0584 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 2
0.835000 GHz
1.167 U

MARKER TO MAX
MARKER TO MIN

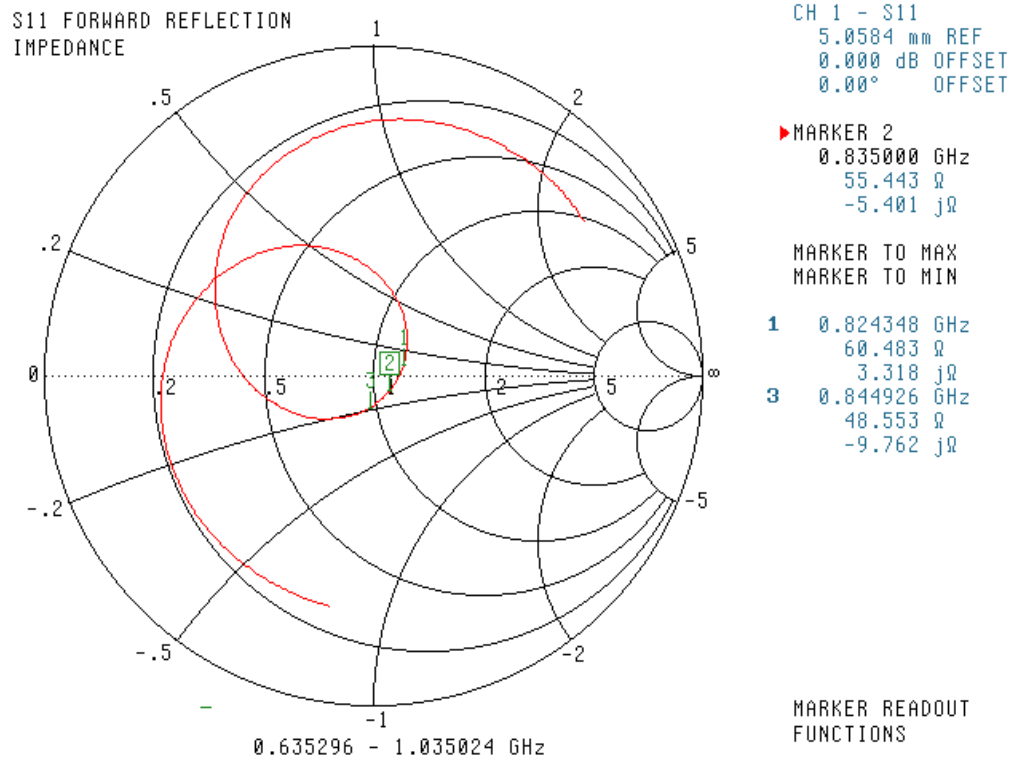
1 0.824348 GHz
1.226 U

3 0.844926 GHz
1.226 U

MARKER READOUT
FUNCTIONS

Smith Chart Dipole Impedance

Body



NCL CALIBRATION LABORATORIES

Calibration File No: DC-1674

Project Number: 5812

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Head & Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-1750-S-2

Frequency: 1750 MHz

Serial No: 198-00303

Calibrated: 17th February 2016
Released on: 19th February 2016

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories

Conditions

Dipole 190-00615 was an original calibration.

Ambient Temperature of the Laboratory: $21\text{ }^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$

Temperature of the Tissue: $21\text{ }^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	April 2, 2017
Network Analyzer Anritsu 37347C	002106	Feb. 4, 2017
Agilent Signal Generator	MY45094463	Dec. 11, 2017

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height	Diameter
73.4 mm	45.2 mm	3.6 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Head	1750 MHz	39.18	1.34
Body	1750 MHz	52.86	1.54

Electrical Specification

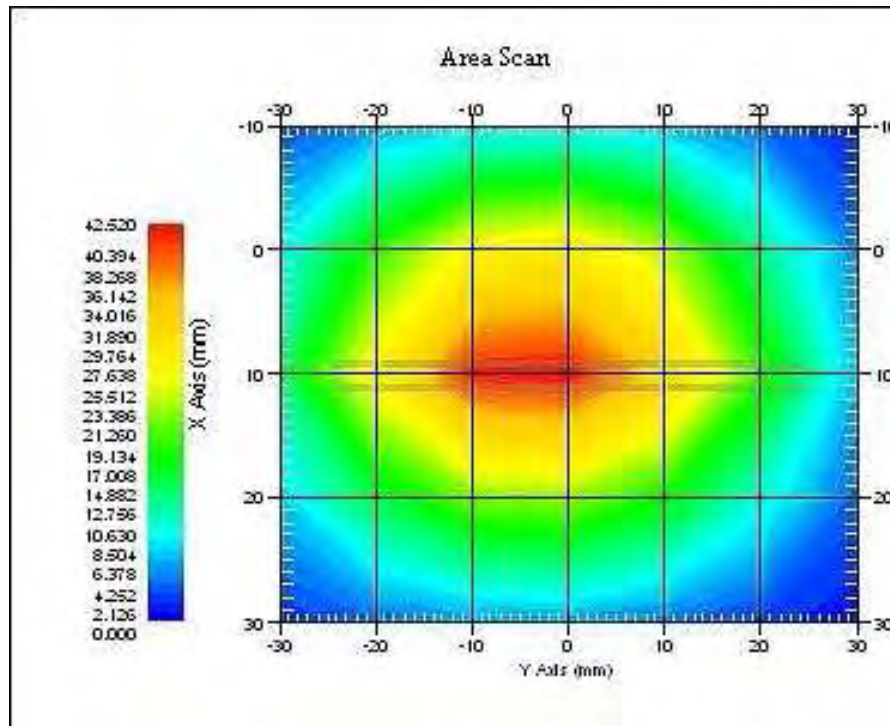
Tissue	Frequency	Return Loss	SWR:	Impedance
Head	1750 MHz	-35.170 dB	1.036 U	50.783 Ω
Body	1750 MHz	-25.24 dB	1.11 U	54.18 Ω

System Validation Results

Tissue	Frequency	1 Gram, W/kg	10 Gram, W/kg
Head	1750 MHz	36.704	19.19
Body	1750 MHz	36.666	19.293

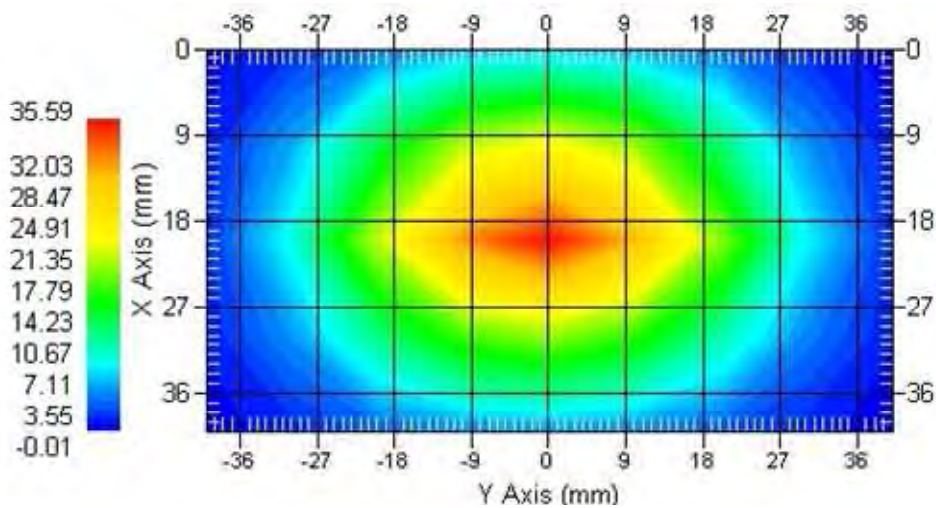
NCL Calibration Laboratories

Body



Dipole 198-00303

Head



Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 198-00303. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS- 10U, along with APREL E020 30 MHz to 6 GHz E-Field Probe Serial Number 225.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Dipole 190-00615 was an original calibration.

Ambient Temperature of the Laboratory: 21 °C ± 0.5°C

Temperature of the Tissue: 21 °C ± 0.5°C

Dipole Calibration uncertainty

The calibration uncertainty for the dipole is made up of various parameters presented below.

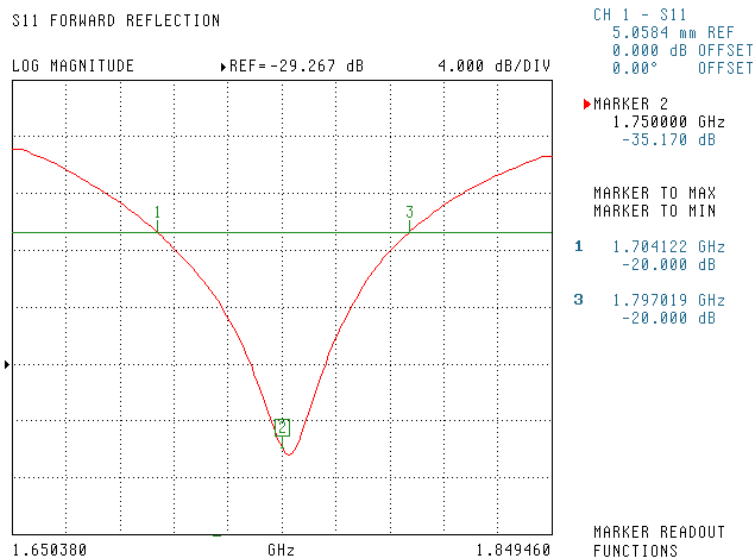
Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
Combined Standard Uncertainty	3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

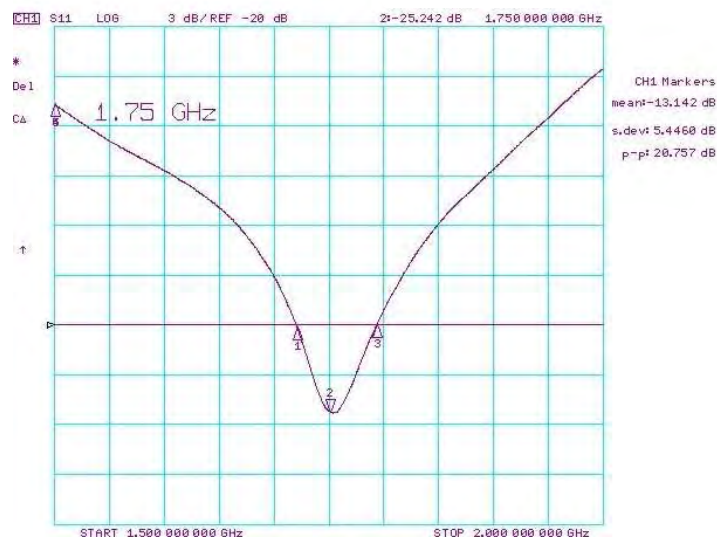
S11 Parameter Return Loss

Head

Frequency Range 1704.12 MHz to 1797.02 MHz

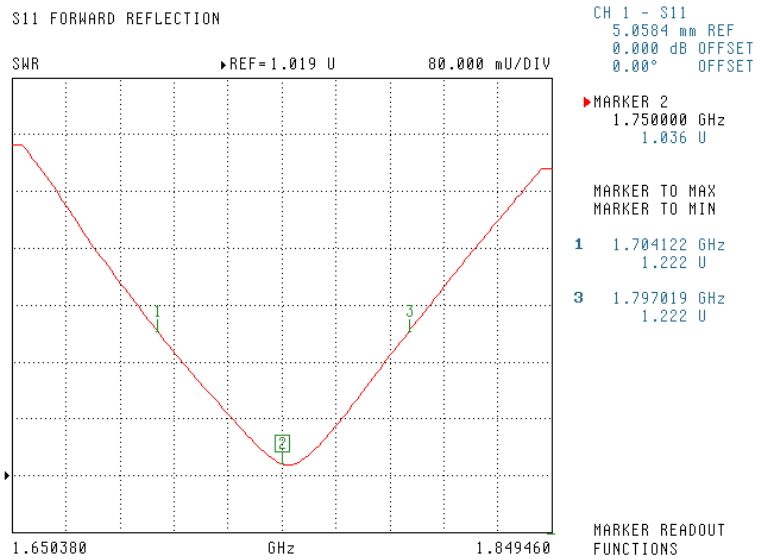


Body

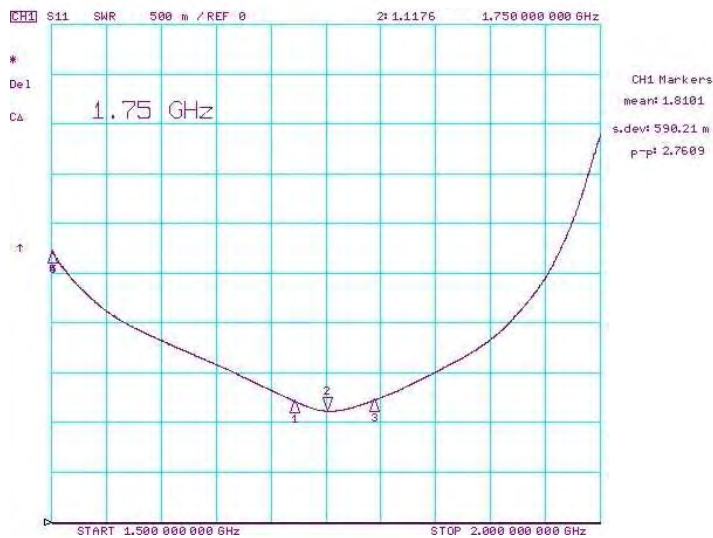


SWR

Head

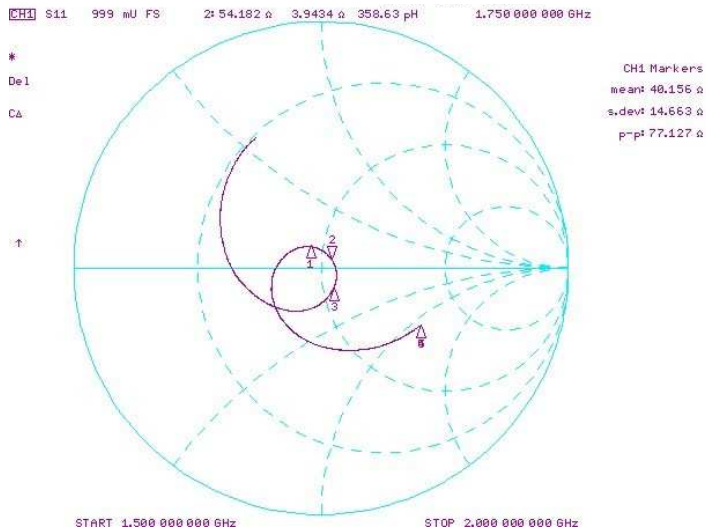


Body

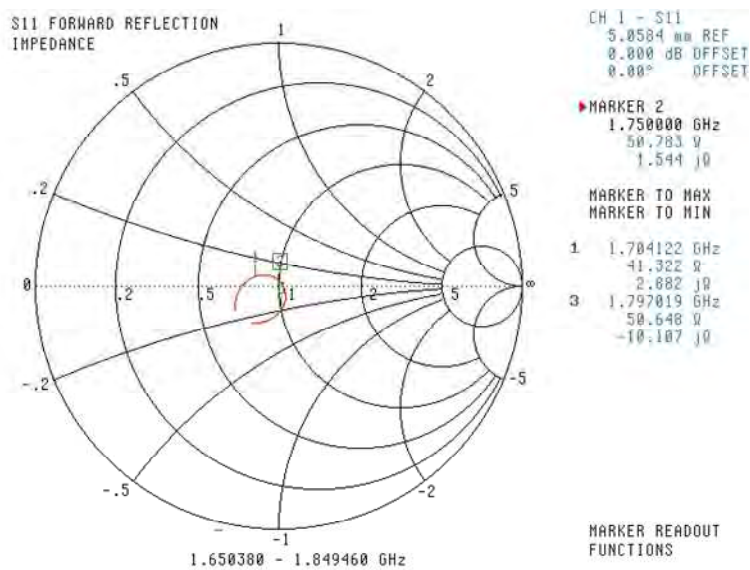


Smith Chart Dipole Impedance

Body



Head



NCL CALIBRATION LABORATORIES

Calibration File No: DC-1611
Project Number: ISL-D-cal-5785

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-1900-S-2

Frequency: 1900 MHz

Serial No: 210-00703

Customer: ISL

Calibrated: 12th January 2015
Released on: 15th January 2015

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL **CALIBRATION LABORATORIES**

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories.

Conditions

Dipole 210-00703 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	May 14, 2015
Network Analyzer Anritsu 37347C	002106	Feb. 20, 2015
Agilent Signal Generator	MY45094463	Dec. 2015

This page has been reviewed for content and attested to by signature within this document.

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height
68.0 mm	39.5 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Body	1900 MHz	53.35	1.45

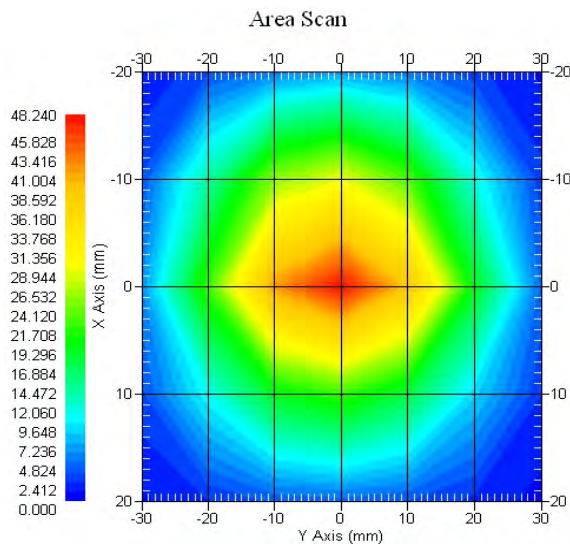
Electrical Specification

Tissue	Frequency	SWR:	Return Loss	Impedance
Body	1900 MHz	1.103 U	-26.210 dB	52.196 Ω

System Validation Results

Tissue	Frequency	1 Gram	10 Gram
Body	1900 MHz	38.474	20.466

Body



Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 210-00703. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 30 MHz to 6 GHz E-Field Probe Serial Number 266.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Ambient Temperature of the Laboratory: 21 °C +/- 0.5°C

Temperature of the Tissue: 21 °C +/- 0.5°C

Dipole Calibration uncertainty

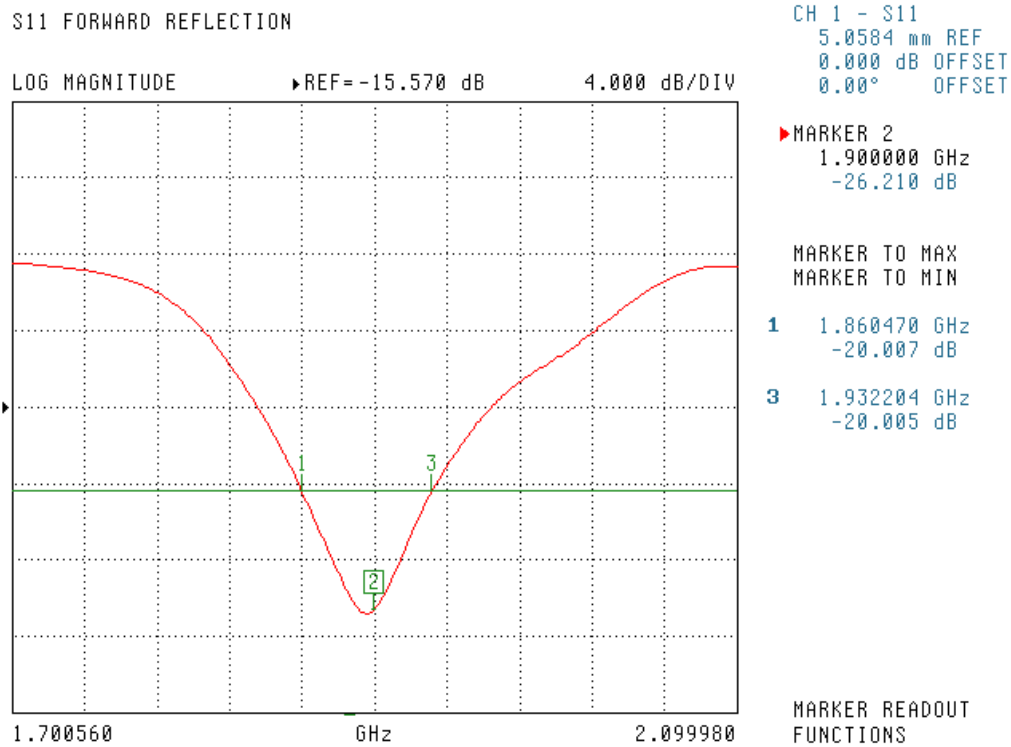
The calibration uncertainty for the dipole is made up of various parameters presented below.

Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
Combined Standard Uncertainty	3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

Body Tissue: Frequency Range 1860.5 MHz to 1932.2 MHz



SWR

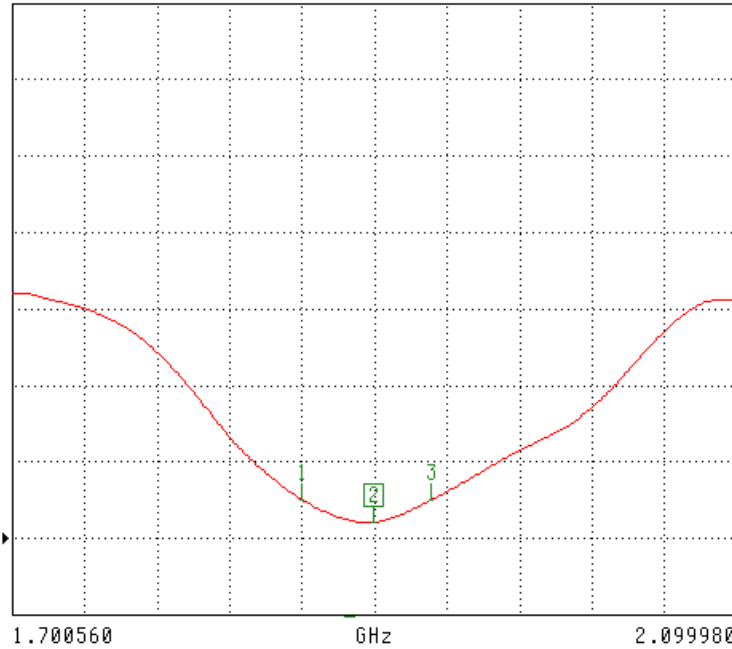
Body

S11 FORWARD REFLECTION

SWR

REF=1.020 U

400.000 mU/DIV



CH 1 - S11
5.0584 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 2
1.900000 GHz
1.103 U

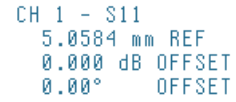
MARKER TO MAX
MARKER TO MIN

1 1.860470 GHz
1.223 U

3 1.932204 GHz
1.223 U

MARKER READOUT
FUNCTIONS

Body



▶ MARKER 2
1.900000 GHz
52.196 Ω
-4.405 $j\Omega$

MARKER TO MAX
MARKER TO MIN

1	1.860470 GHz
	58.140 Ω
	7.135 j Ω
3	1.932204 GHz
	42.555 Ω
	-5.598 j Ω

MARKER READOUT FUNCTIONS

NCL CALIBRATION LABORATORIES

Calibration File No: DC-1613
Project Number: ISL-D-cal-5785

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-2450-S-2

Frequency: 2450 MHz

Serial No: 220-00753

Customer: ISL

Calibrated: 12th January 2015
Released on: 15th January 2015

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories.

Conditions

Dipole 220-00753 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	May 14, 2015
Network Analyzer Anritsu 37347C	002106	Feb. 20, 2015
Agilent Signal Generator	MY45094463	Dec. 2015

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height
51.5 mm	30.4 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Body	2450 MHz	53.26	1.96

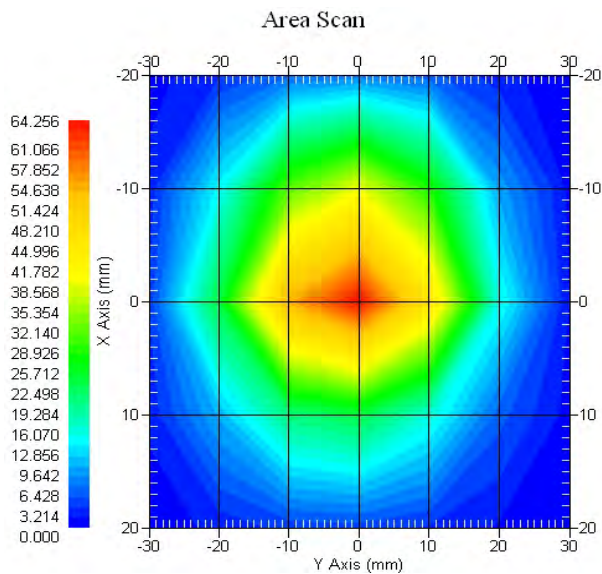
Electrical Specification

Tissue	Frequency	SWR:	Return Loss	Impedance
Body	2450 MHz	1.03 U	-36.635 dB	49.353 Ω

System Validation Results

Tissue	Frequency	1 Gram	10 Gram
Body	2450 MHz	53.46	24.89

Body



Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 220-00753. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 30 MHz to 6 GHz E-Field Probe Serial Number 266.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Ambient Temperature of the Laboratory: 21 °C +/- 0.5°C

Temperature of the Tissue: 21 °C +/- 0.5°C

Dipole Calibration uncertainty

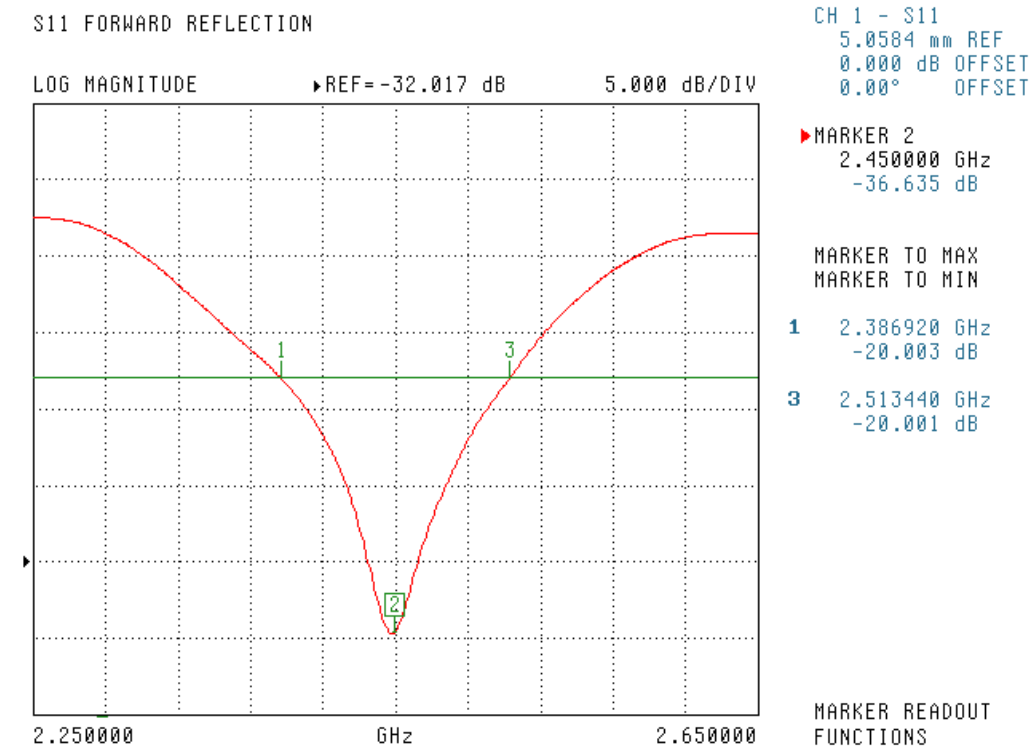
The calibration uncertainty for the dipole is made up of various parameters presented below.

Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
Combined Standard Uncertainty	3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

Body Tissue: Frequency Range 2386.9 MHz to 2513.4 MHz

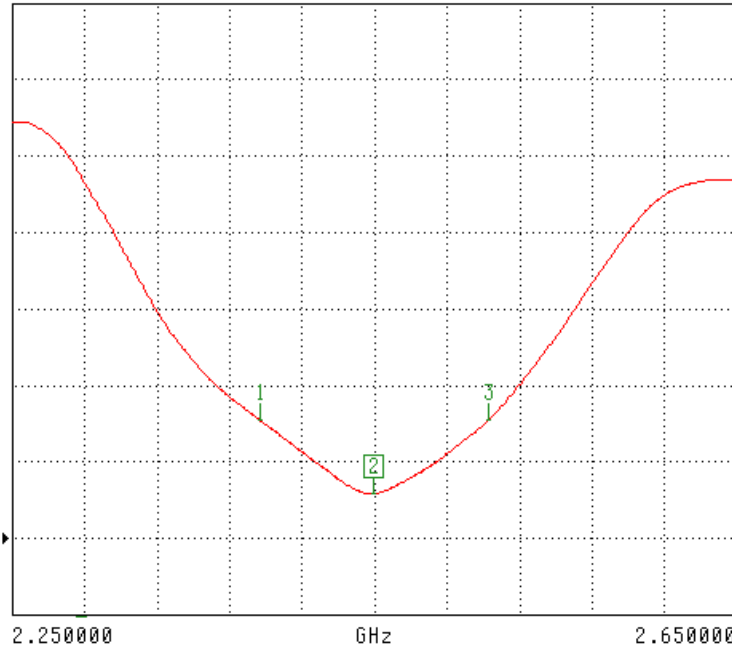


SWR

Body

S11 FORWARD REFLECTION

SWR REF=913.800 mU 200.000 mU/DIV



CH 1 - S11
5.0584 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 2
2.450000 GHz
1.030 U

MARKER TO MAX
MARKER TO MIN

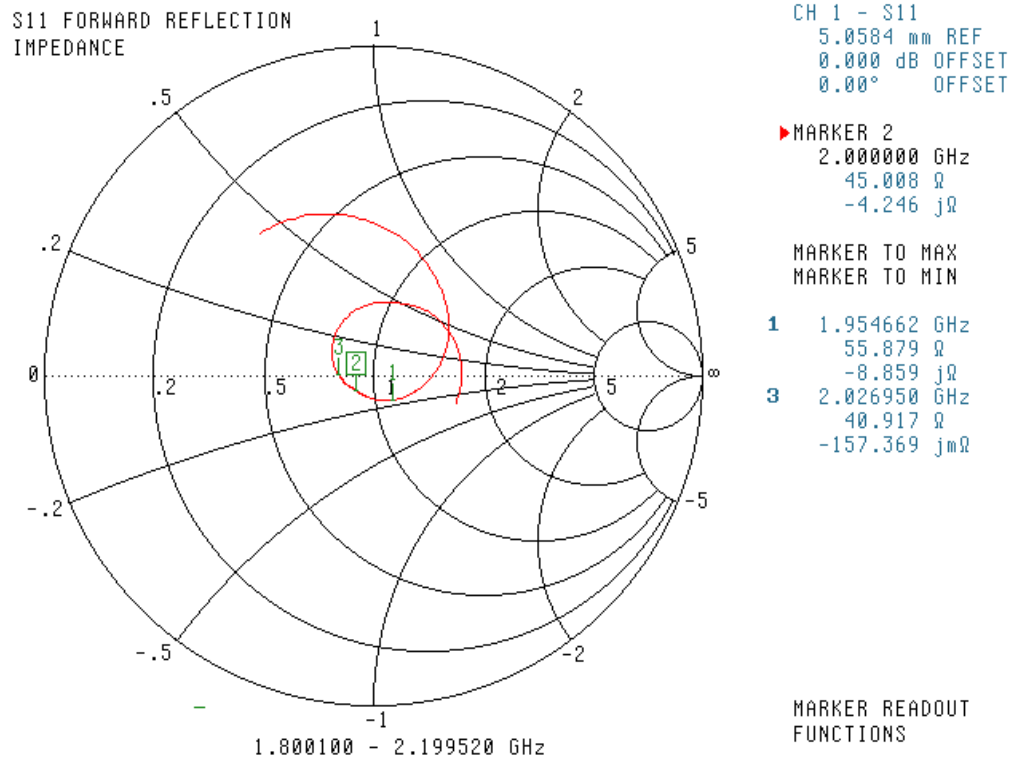
1 2.386920 GHz
1.223 U

3 2.513440 GHz
1.223 U

MARKER READOUT
FUNCTIONS

Smith Chart Dipole Impedance

Body



NCL CALIBRATION LABORATORIES

Calibration File No: DC-1614
Project Number: ISL-D-cal-5785

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-5200-S-2

Frequency: 5250 MHz

Serial No: 230-00802

Customer: ISL

Calibrated: 12th January 2015
Released on: 15th January 2015

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories.

Conditions

Dipole 230-00802 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	May 14, 2015
Network Analyzer Anritsu 37347C	002106	Feb. 20, 2015
Agilent Signal Generator	MY45094463	Dec. 2015

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height
23.6 mm	14.0 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Body	5250 MHz	47.54	5.23

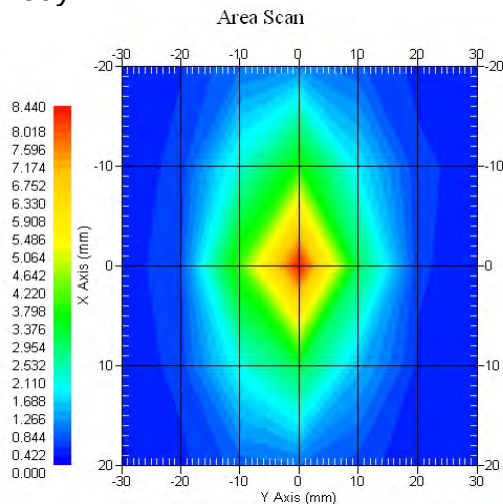
Electrical Specification

Tissue	Frequency	SWR:	Return Loss	Impedance
Body	5250MHz	1.17 U	-22.4dB	57.834 Ω

System Validation Results

Tissue	Frequency	1 Gram	10 Gram
Body	5250 MHz	63.18	21.24

Body



Note: APREL dipoles for SAR measurements above 5 GHz are calibrated referring numerical simulation results (XFDTD method [Remcom Inc.]) for 1 g and 10 g SAR for the configuration of APREL dipoles with Flat and Uni-Phantoms. For the system check procedures a user should use 1 g and 10 g SAR values ($\pm 10\%$) presented in this certificate as a reference.

Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 230-00802. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 30 MHz to 6 GHz E-Field Probe Serial Number 266.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Ambient Temperature of the Laboratory: 21 °C +/- 0.5°C

Temperature of the Tissue: 21 °C +/- 0.5°C

Dipole Calibration uncertainty

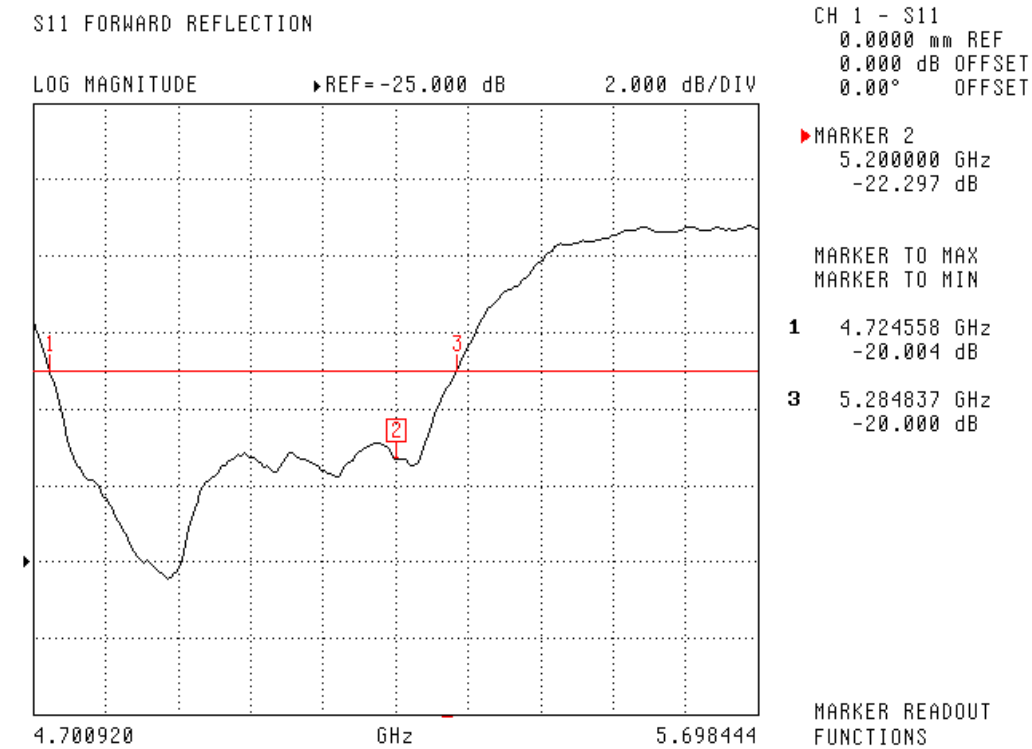
The calibration uncertainty for the dipole is made up of various parameters presented below.

Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
Combined Standard Uncertainty	3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

Body Tissue: Frequency Range 4724.5 MHz to 5284.8 MHz



SWR

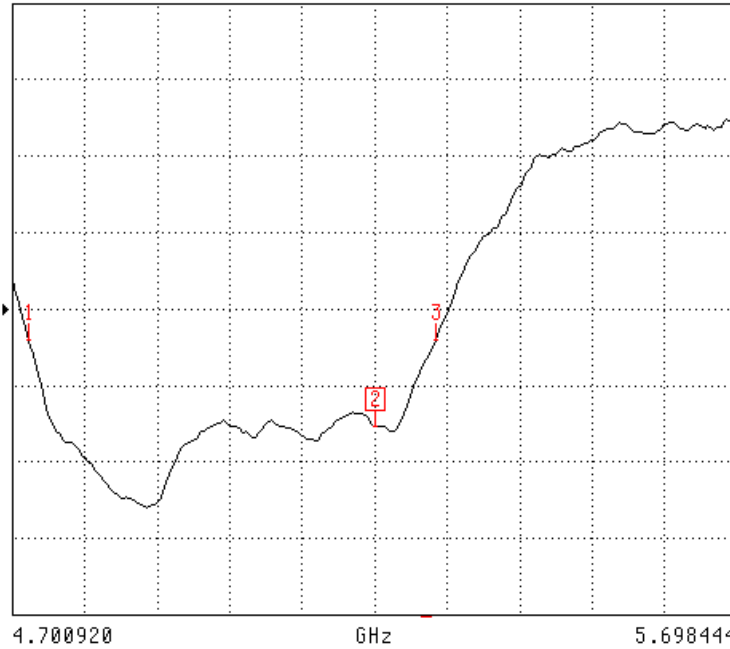
Body

S11 FORWARD REFLECTION

SWR

REF=1.243 U

50.000 mU/DIV



CH 1 - S11
0.0000 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 2
5.200000 GHz
1.166 U

MARKER TO MAX
MARKER TO MIN

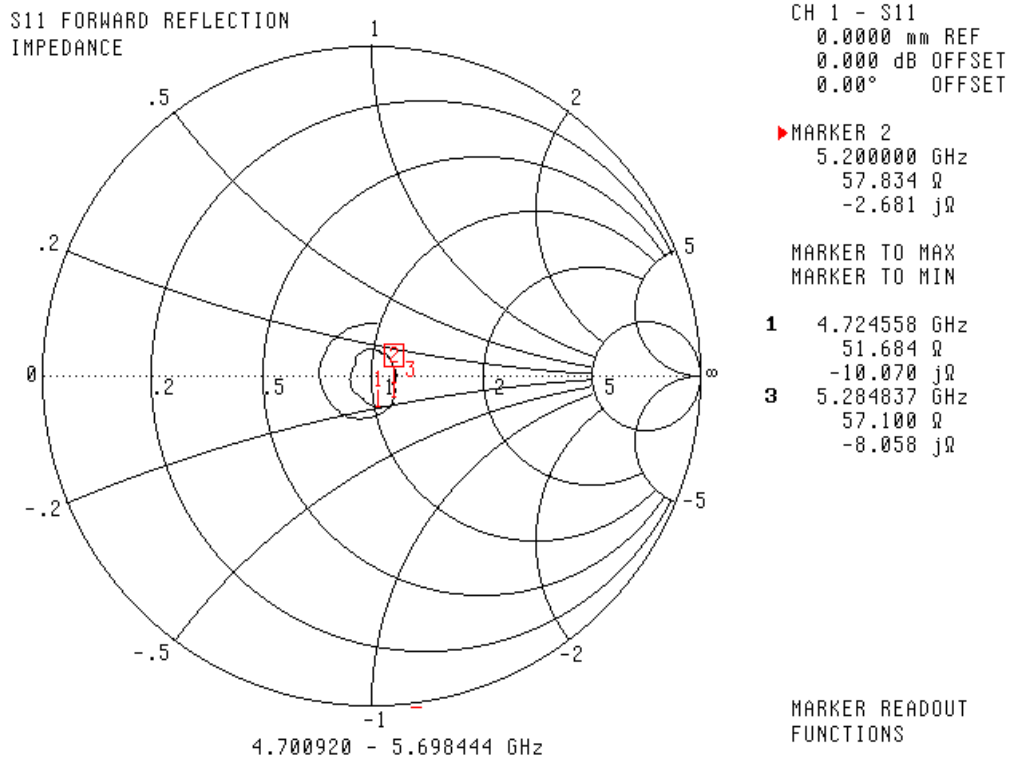
1 4.724558 GHz
1.222 U

3 5.284837 GHz
1.222 U

MARKER READOUT
FUNCTIONS

Smith Chart Dipole Impedance

Body



NCL CALIBRATION LABORATORIES

Calibration File No: DC-1615
Project Number: ISL-D-cal-5785

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-5600-S-2

Frequency: 5600 MHz

Serial No: 234-00702

Customer: ISL

Calibrated: 12th January 2015
Released on: 15th January 2015

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL **CALIBRATION LABORATORIES**

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories.

Conditions

Dipole 234-00702 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	May 14, 2015
Network Analyzer Anritsu 37347C	002106	Feb. 20, 2015
Agilent Signal Generator	MY45094463	Dec. 2015

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height
22.2 mm	14.4 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Body	5600 MHz	46.49	5.73

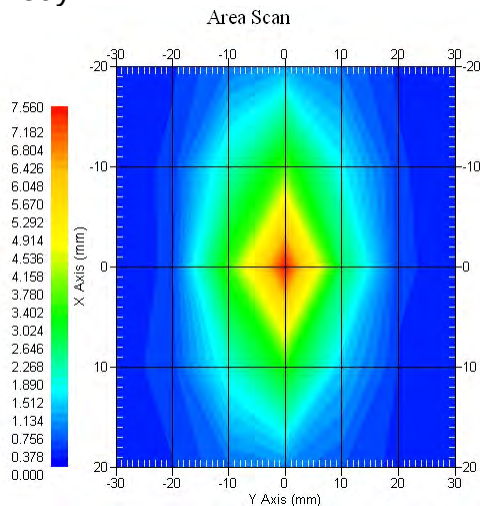
Electrical Specification

Tissue	Frequency	SWR:	Return Loss	Impedance
Body	5600 MHz	1.106 U	-25.931 dB	53.265 Ω

System Validation Results

Tissue	Frequency	1 Gram	10 Gram
Body	5600 MHz	68.71	22.06

Body



Note: APREL dipoles for SAR measurements above 5 GHz are calibrated referring numerical simulation results (XFDTD method [Remcom Inc.]) for 1 g and 10 g SAR for the configuration of APREL dipoles with Flat and Uni-Phantoms. For the system check procedures a user should use 1 g and 10 g SAR values ($\pm 10\%$) presented in this certificate as a reference.

Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 234-00702. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 30 MHz to 6 GHz E-Field Probe Serial Number 266.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Ambient Temperature of the Laboratory: 21 °C +/- 0.5°C

Temperature of the Tissue: 21 °C +/- 0.5°C

Dipole Calibration uncertainty

The calibration uncertainty for the dipole is made up of various parameters presented below.

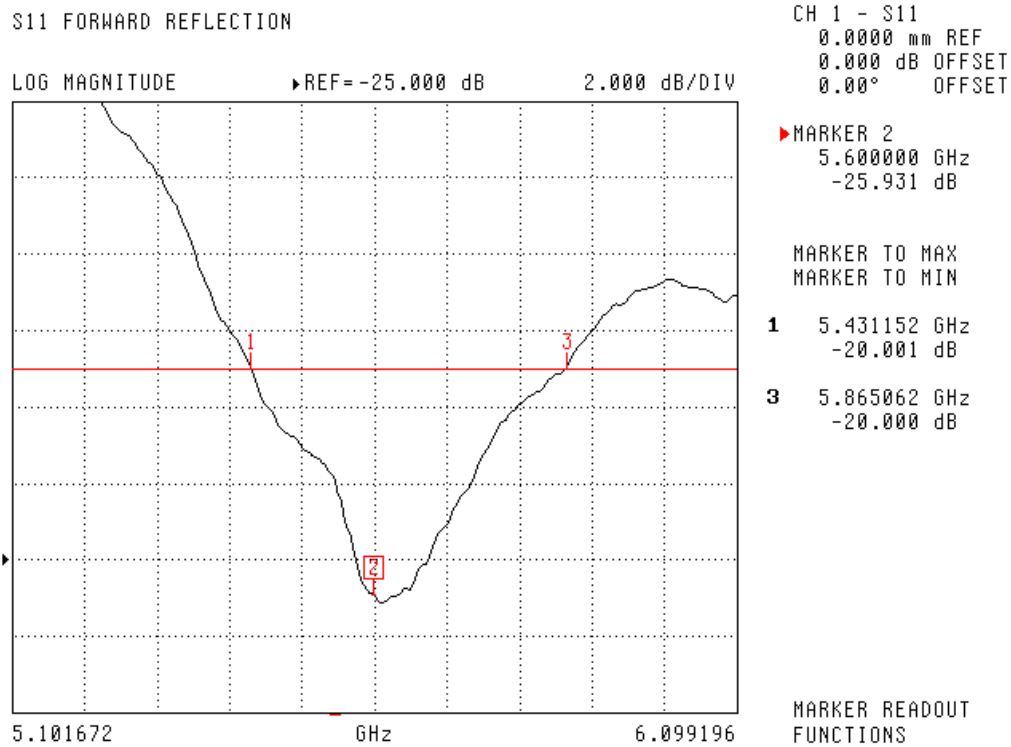
Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%

Combined Standard Uncertainty 3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

Body Tissue: Frequency Range 5431.2 MHz to 5865.1 MHz



SWR

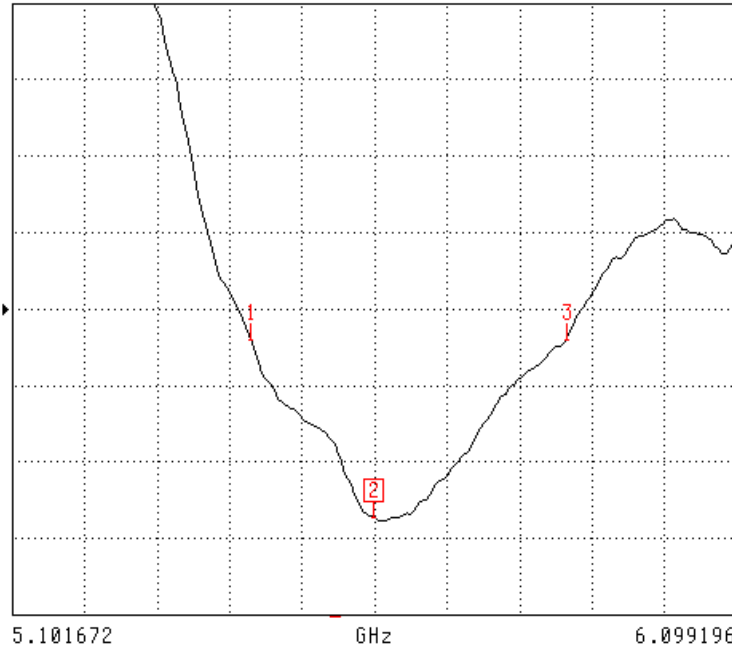
Body

S11 FORWARD REFLECTION

SWR

REF=1.243 U

50.000 mU/DIV



CH 1 - S11
0.0000 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 2
5.600000 GHz
1.106 U

MARKER TO MAX
MARKER TO MIN

1 5.431152 GHz
1.222 U

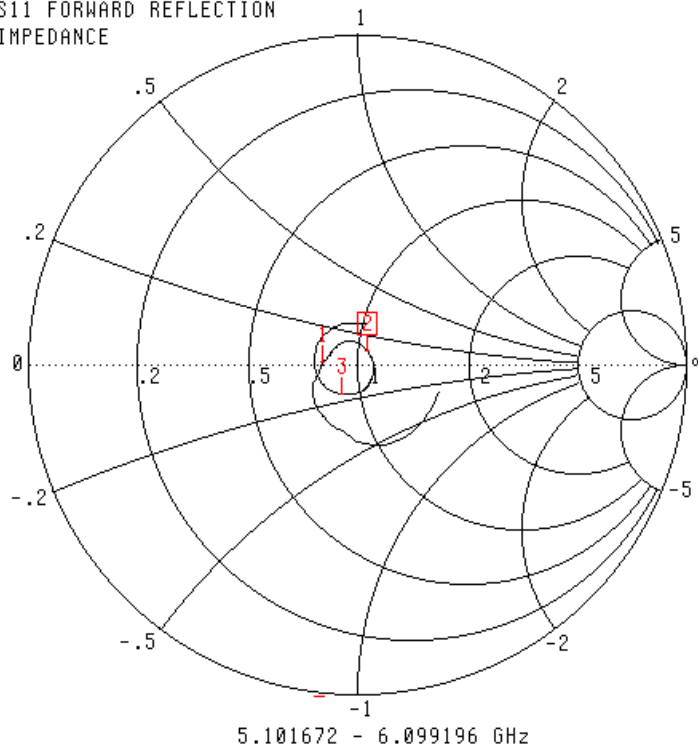
3 5.865062 GHz
1.222 U

MARKER READOUT
FUNCTIONS

Smith Chart Dipole Impedance

Body

S11 FORWARD REFLECTION
IMPEDANCE



CH 1 - S11
0.0000 mm REF
0.000 dB OFFSET
0.00° OFFSET

▶ MARKER 2
5.600000 GHz
53.265 Ω
4.076 $j\Omega$

MARKER TO MAX
MARKER TO MIN

1 5.431152 GHz
40.893 Ω
213.779 $j\Omega$
3 5.865062 GHz
45.102 Ω
-8.175 $j\Omega$

MARKER READOUT
FUNCTIONS

NCL CALIBRATION LABORATORIES

Calibration File No: DC-1616
Project Number: ISL-D-cal-5785

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the
NCL CALIBRATION LABORATORIES by qualified personnel following recognized
procedures and using transfer standards traceable to NRC/NIST.

Validation Dipole (Body)

Manufacturer: APREL Laboratories

Part number: ALS-D-5800-S-2

Frequency: 5800 MHz

Serial No: 240-00852

Customer: ISL

Calibrated: 12th January 2015
Released on: 15th January 2015

This Calibration Certificate is Incomplete Unless Accompanied with the Calibration Results Summary

Released By:



Art Brennan, Quality Manager

NCL CALIBRATION LABORATORIES

Suite 102, 303 Terry Fox Dr.
Kanata, ONTARIO
CANADA K2K 3J1

Division of APREL Lab.
TEL: (613) 435-8300
FAX: (613) 435-8306

NCL Calibration Laboratories

Division of APREL Laboratories.

Conditions

Dipole 240-00852 was a re-calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

Attestation

The below named signatories have conducted the calibration and review of the data which is presented in this calibration report.

We the undersigned attest that to the best of our knowledge the calibration of this subject has been accurately conducted and that all information contained within the results pages have been reviewed for accuracy.



Art Brennan, Quality Manager



Maryna Nesterova Calibration Engineer

Primary Measurement Standards

Instrument	Serial Number	Cal due date
Tektronix USB Power Meter	11C940	May 14, 2015
Network Analyzer Anritsu 37347C	002106	Feb. 20, 2015
Agilent Signal Generator	MY45094463	Dec. 2015

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

Length	Height
21.6 mm	14.7 mm

Tissue Validation

Tissue	Frequency	Dielectric constant, ϵ_r	Conductivity, σ [S/m]
Body	5800 MHz	45.99	6.10

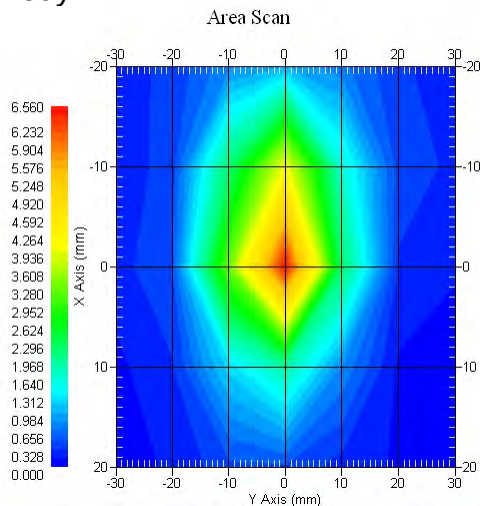
Electrical Specification

Tissue	Frequency	SWR:	Return Loss	Impedance
Body	5800 MHz	1.407 U	-15.438 dB	62.919 Ω

System Validation Results

Tissue	Frequency	1 Gram	10 Gram
Body	5800 MHz	59.95	18.61

Body



Note: APREL dipoles for SAR measurements above 5 GHz are calibrated referring numerical simulation results (XFDTD method [Remcom Inc.]) for 1 g and 10 g SAR for the configuration of APREL dipoles with Flat and Uni-Phantoms. For the system check procedures a user should use 1 g and 10 g SAR values ($\pm 10\%$) presented in this certificate as a reference.

Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole 240-00852. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 30 MHz to 6 GHz E-Field Probe Serial Number 266.

References

- o IEEE Standard 1528:2013
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
- o EN 62209-1:2006
Human Exposure to RF Fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices
- o IEC 62209-2:2010
Human exposure to RF fields from hand-held and body-mounted wireless devices - Human models, instrumentation, and procedures - Part 2: specific absorption rate (SAR) for wireless communication devices (30 MHz - 6 GHz)
- o D22-012-Tissue dielectric tissue calibration procedure
- o D28-002-Dipole procedure for validation of SAR system using a dipole
- o IEEE 1309 Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9kHz to 40GHz

Conditions

Ambient Temperature of the Laboratory: 21 °C +/- 0.5°C

Temperature of the Tissue: 21 °C +/- 0.5°C

Dipole Calibration uncertainty

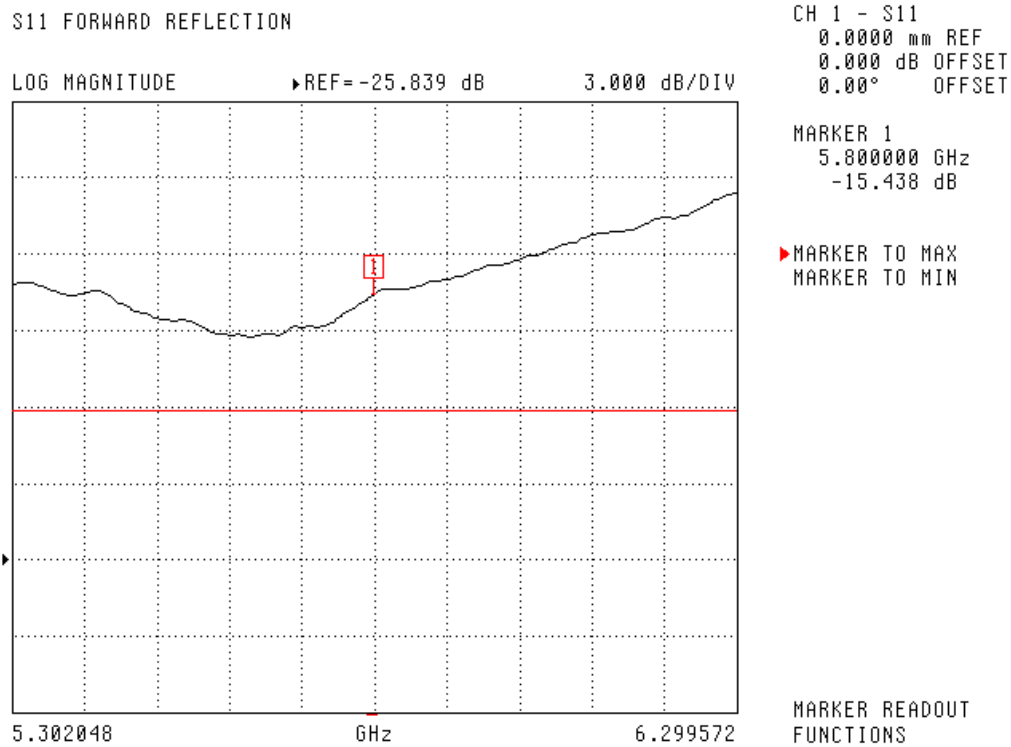
The calibration uncertainty for the dipole is made up of various parameters presented below.

Mechanical	1%
Positioning Error	1.22%
Electrical	1.7%
Tissue	2.2%
Dipole Validation	2.2%
Combined Standard Uncertainty	3.88% (7.76% K=2)

The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

Body Tissue:



SWR

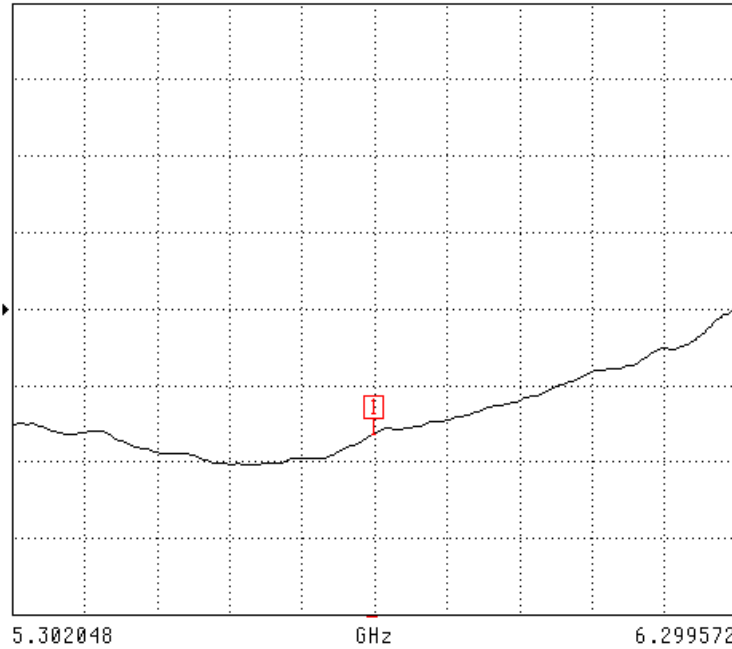
Body

S11 FORWARD REFLECTION

SWR

REF=1.735 U

200.000 mU/DIV



CH 1 - S11
0.0000 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 1
5.800000 GHz
1.407 U

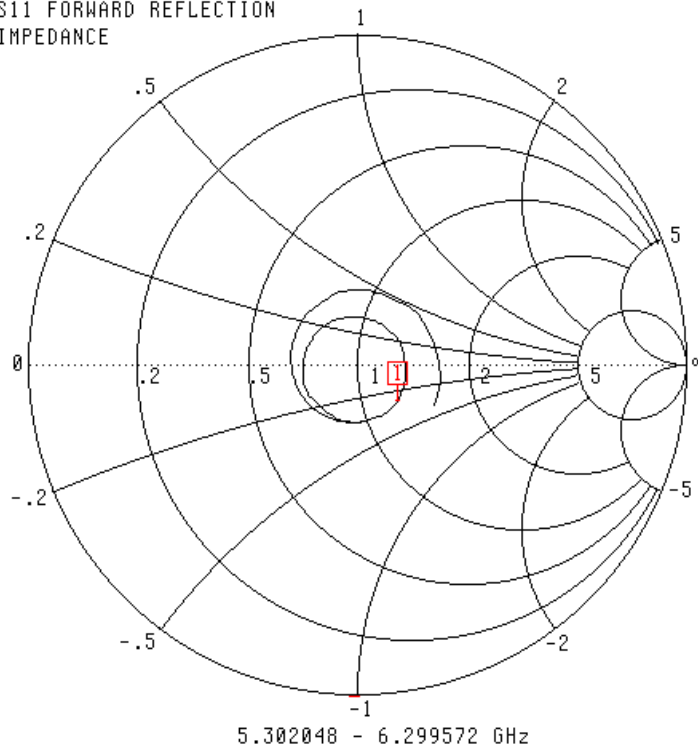
MARKER TO MAX
MARKER TO MIN

MARKER READOUT
FUNCTIONS

Smith Chart Dipole Impedance

Body

S11 FORWARD REFLECTION
IMPEDANCE



CH 1 - S11
0.0000 mm REF
0.000 dB OFFSET
0.00° OFFSET

MARKER 1
5.800000 GHz
62.919 Ω
-14.234 $j\Omega$

▶ MARKER TO MAX
MARKER TO MIN

MARKER READOUT
FUNCTIONS

Appendix G: System Check (Annual)

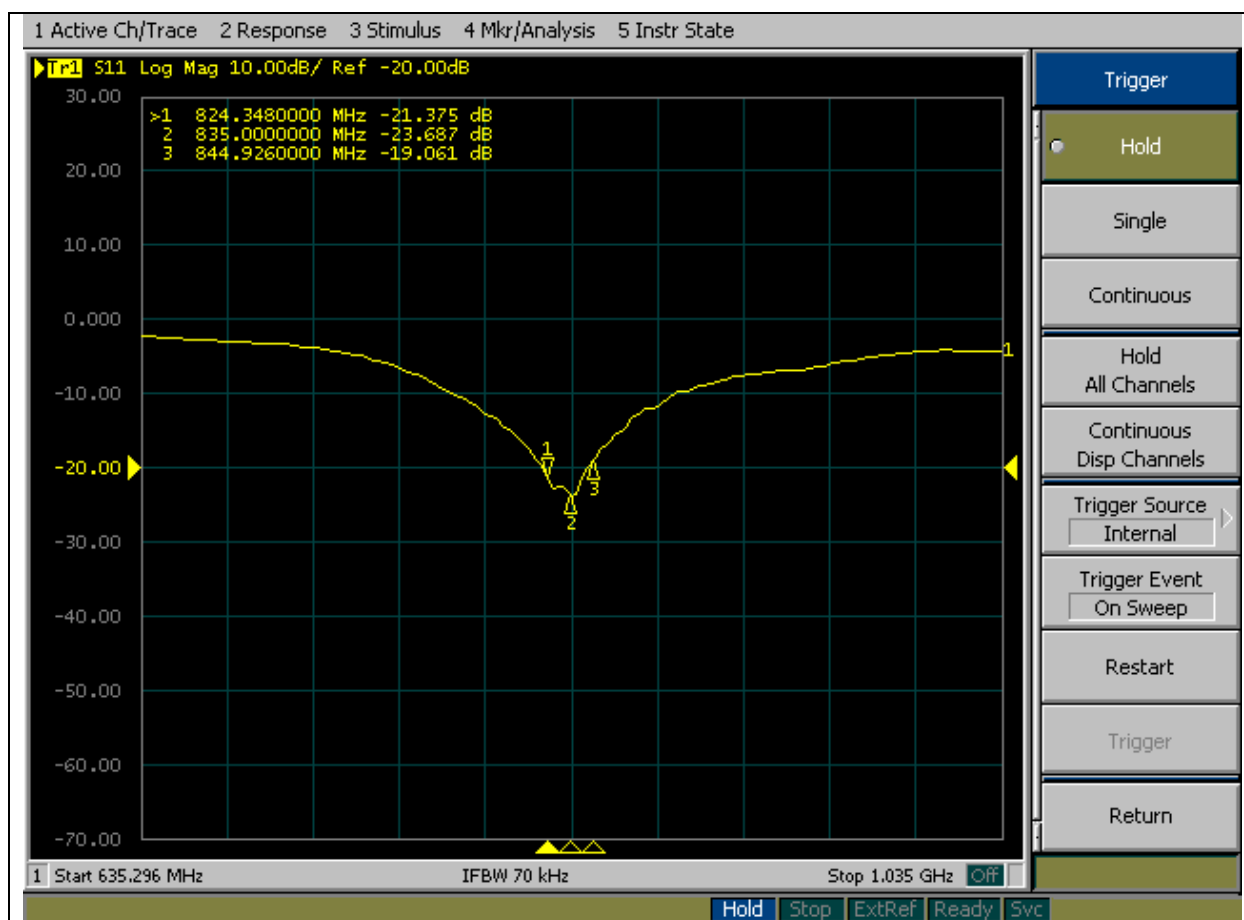
Report Date : 12-Jan-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 835.00 MHz
Part number : ALS-D-835-S-2
Ambient Temperature of the Laboratory : 21.5 °C

Test Equipment List

Equipment Type	MFR	Model No.	Serial No.	Last Cal.	Cal. Due Date
Vector Network Analyzer	Agilent	E5071B	MY42402726	12/21/2015	12/20/2016

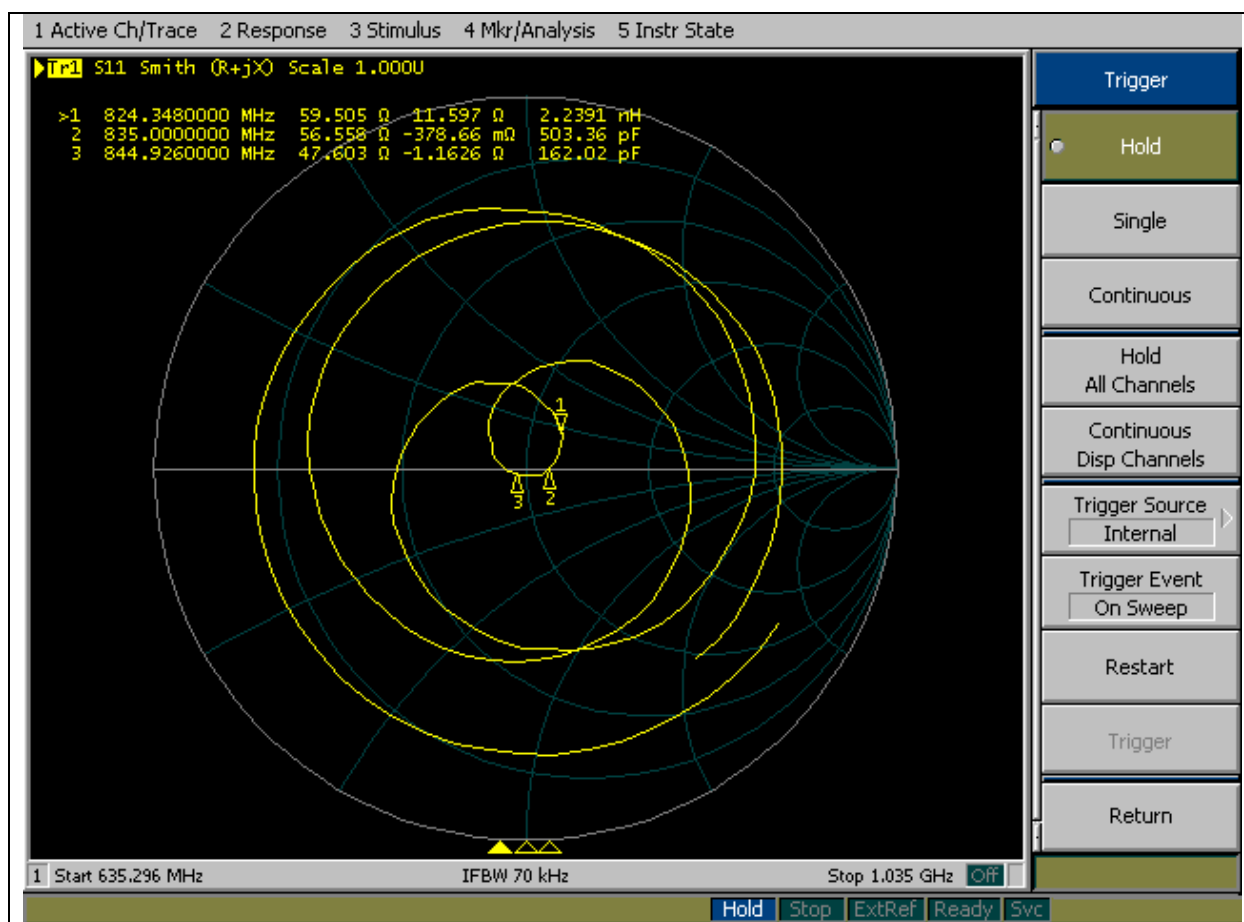
S11 Parameter Return Loss

Validation Result (dB)	Calibration Result (dB)	Difference	Limit
-23.687	-22.301	-14.75%	+/- 20 %



Smith Chart Impedance

Validation Result (Ω)	Calibration Result (Ω)	Difference (Ω)	Limit
56.558	55.443	1.115	+/- 5 Ω



APREL ALSAS-10U System Description

Max. Transmit Pwr : 1 W

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 835.00 MHz

Probe Data

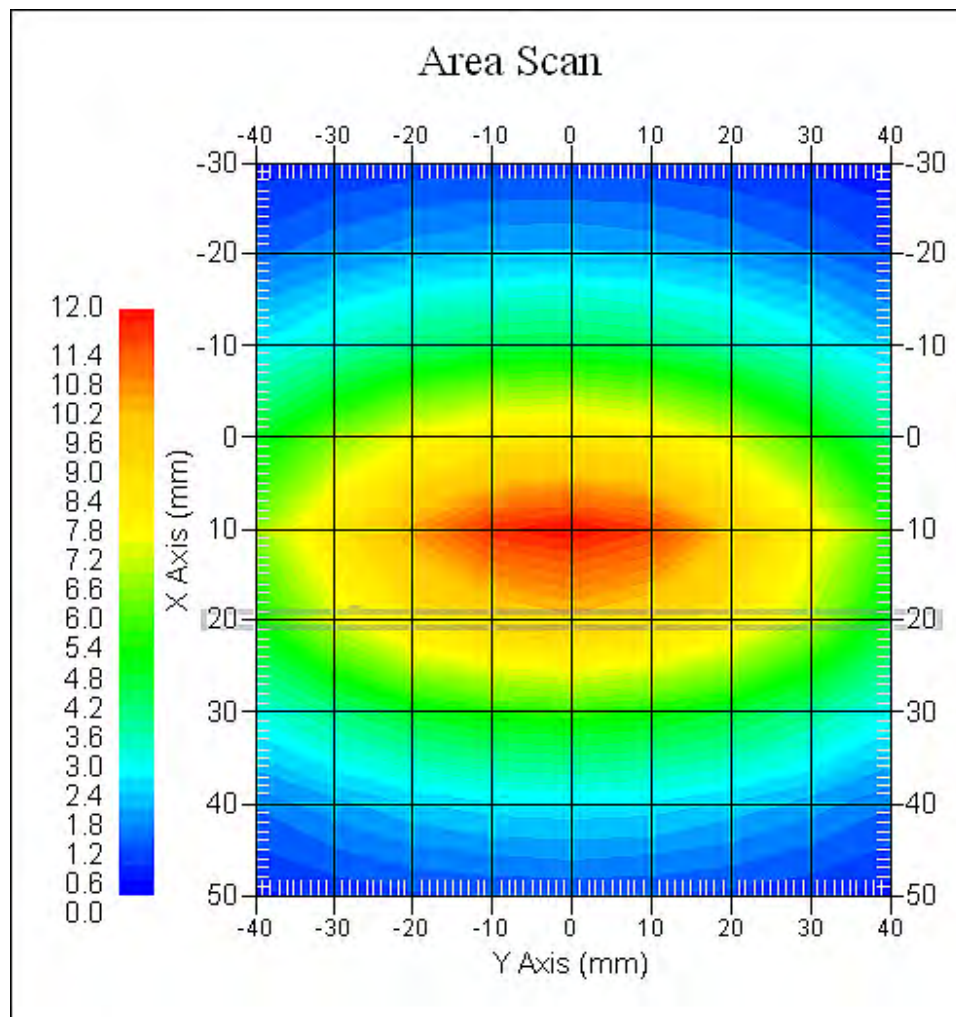
Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.00 °C
Ambient Temp. : 21.00 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 15mm



	Validation Result (W/kg)	Calibration Result (W/kg)	Difference	Limit
1 Gram	9.685	9.11	6.31%	+/- 10%
10 Gram	6.042	6.23	-3.02%	+/- 10%



1 gram SAR value : 9.685 W/kg
10 gram SAR value : 6.042 W/kg
Area Scan Peak SAR : 11.961 W/kg
Zoom Scan Peak SAR : 17.144 W/kg

Appendix G: System Check (Annual)

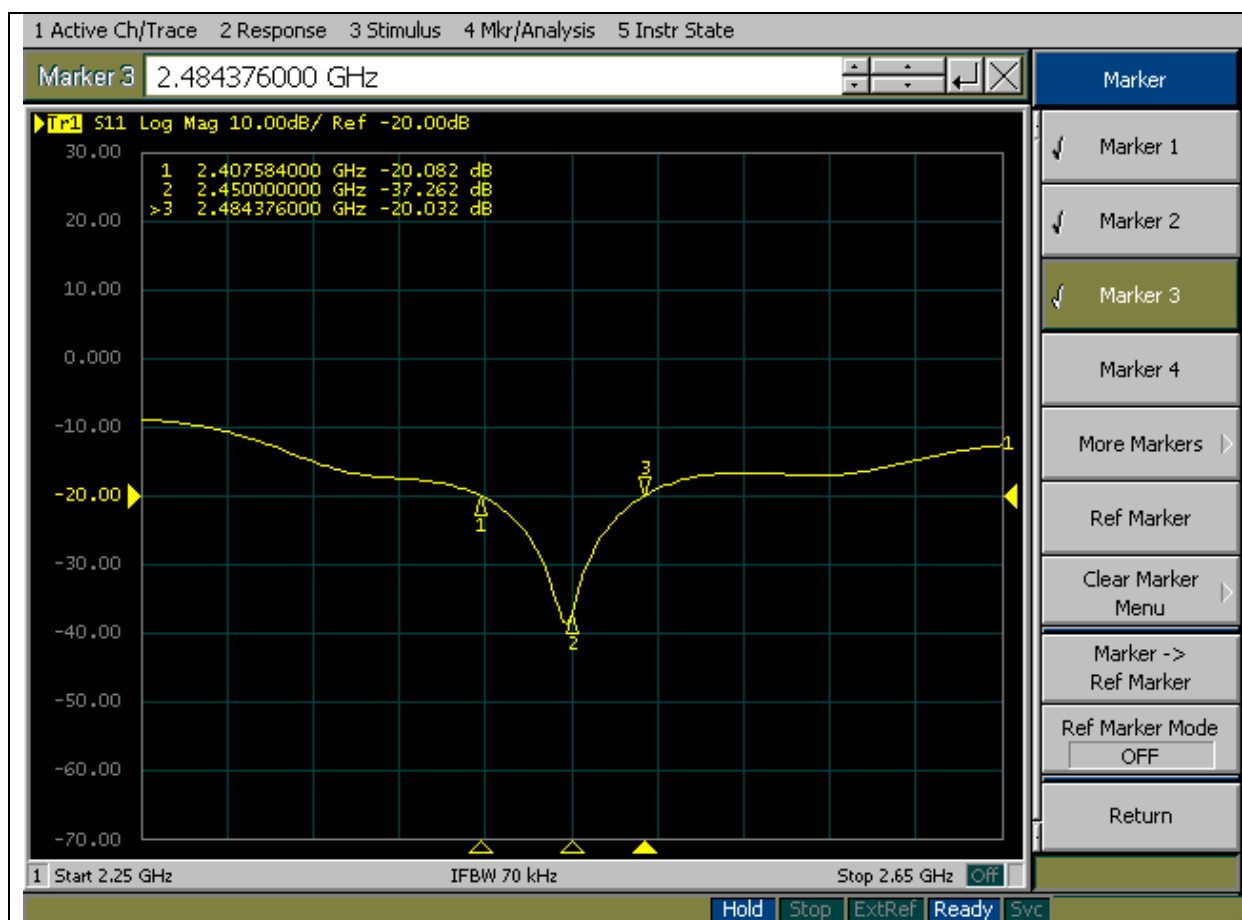
Report Date : 12-Jan-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 2450.00 MHz
Part number : ALS-D-2450-S-2
Ambient Temperature of the Laboratory : 21.5 °C

Test Equipment List

Equipment Type	MFR	Model No.	Serial No.	Last Cal.	Cal. Due Date
Vector Network Analyzer	Agilent	E5071B	MY42402726	12/21/2015	12/20/2016

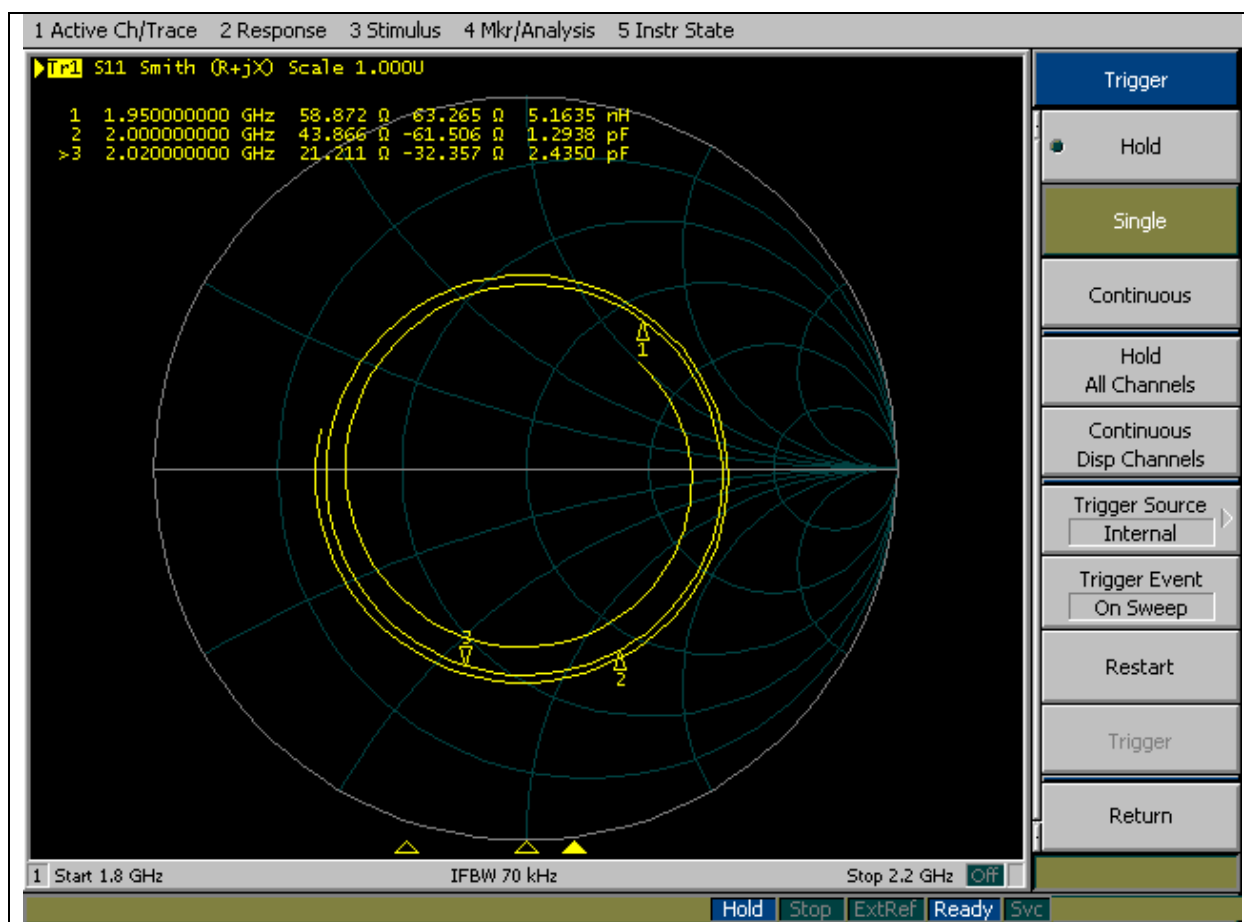
S11 Parameter Return Loss

Validation Result (dB)	Calibration Result (dB)	Difference	Limit
-37.262	-36.635	-6.96%	+/- 20 %



Smith Chart Impedance

Validation Result (Ω)	Calibration Result (Ω)	Difference (Ω)	Limit
43.866	45.008	-1.142	$\pm 5 \Omega$



APREL ALSAS-10U System Description

Max. Transmit Pwr : 1 W

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 2450.00 MHz

Probe Data

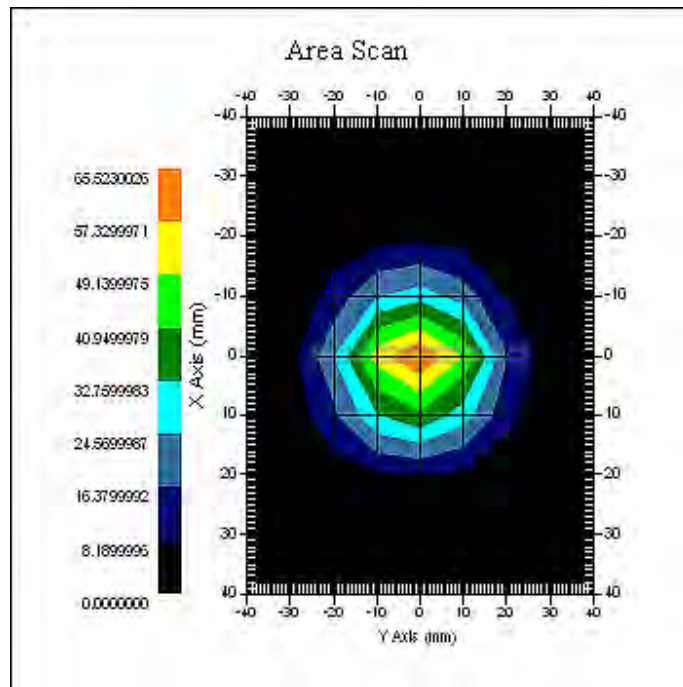
Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm



	Validation Result (W/kg)	Calibration Result (W/kg)	Difference	Limit
1 Gram	54.855	53.46	2.61%	+/- 10%
10 Gram	25.964	24.89	4.31%	+/- 10%



1 gram SAR value : 54.855 W/kg
 10 gram SAR value : 25.964 W/kg
 Area Scan Peak SAR : 65.437 W/kg
 Zoom Scan Peak SAR : 105.312 W/kg

Appendix G: System Check (Annual)

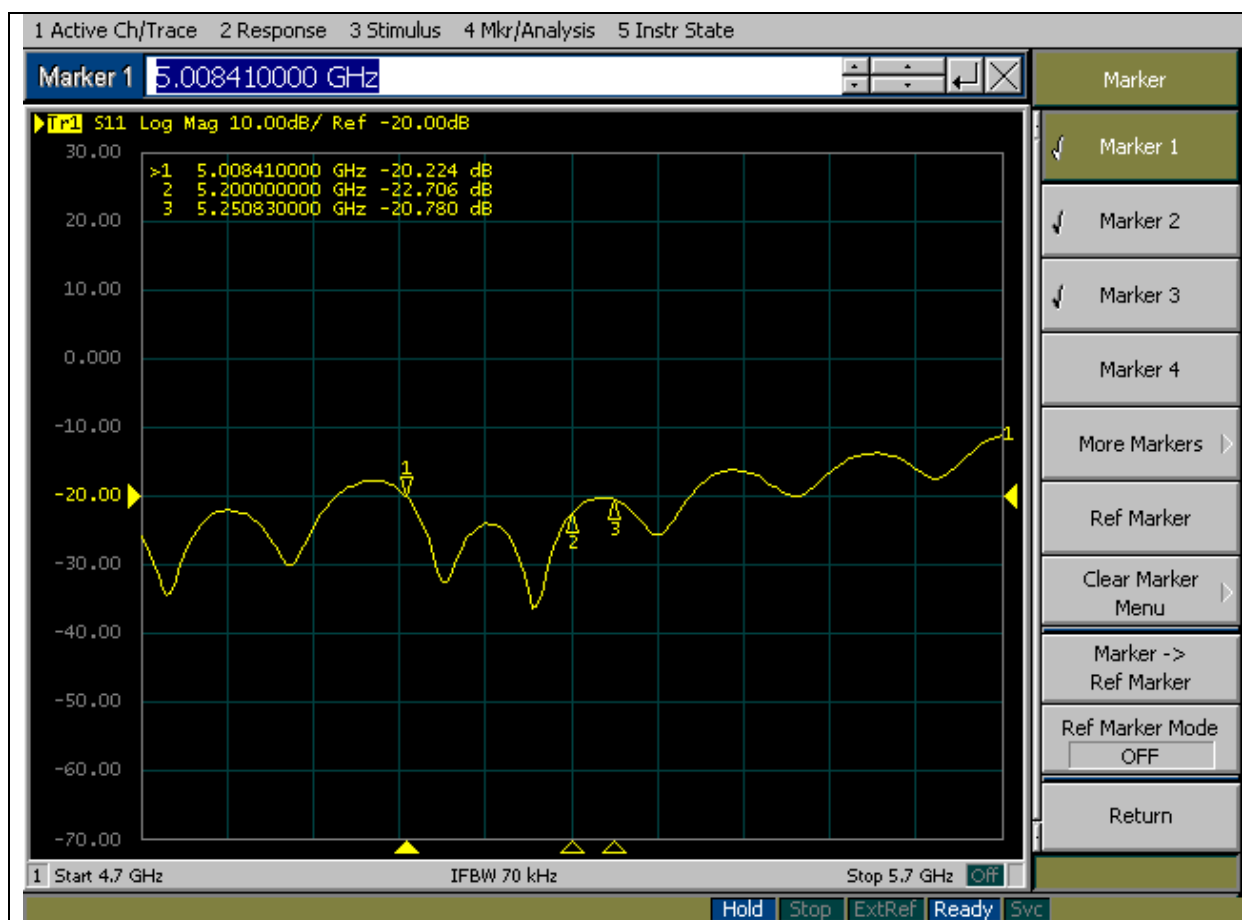
Report Date : 12-Jan-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 5250.00 MHz
Part number : ALS-D-5250-S-2
Ambient Temperature of the Laboratory : 21.5 °C

Test Equipment List

Equipment Type	MFR	Model No.	Serial No.	Last Cal.	Cal. Due Date
Vector Network Analyzer	Agilent	E5071B	MY42402726	12/21/2015	12/20/2016

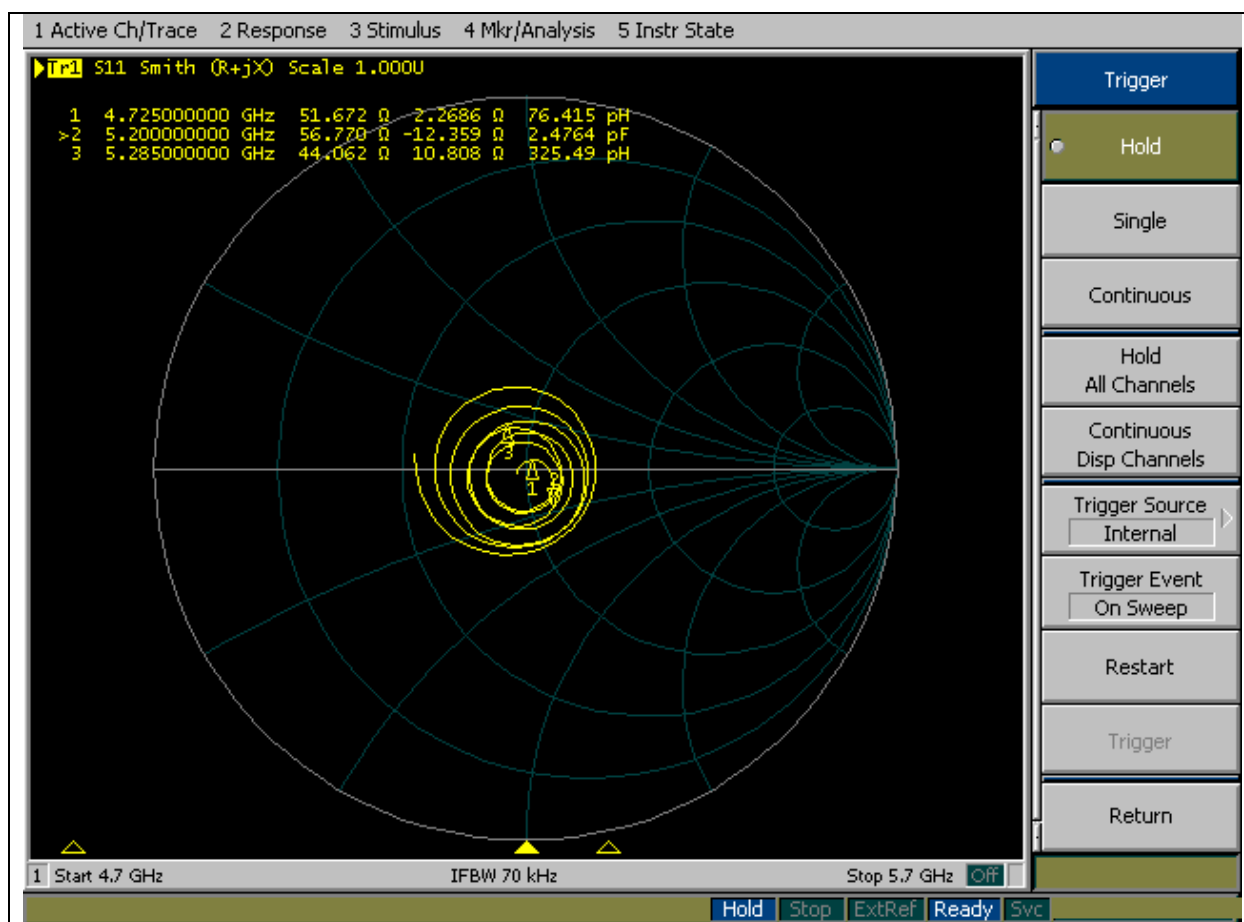
S11 Parameter Return Loss

Validation Result (dB)	Calibration Result (dB)	Difference	Limit
-22.706	-22.297	-4.60%	+/- 20 %



Smith Chart Impedance

Validation Result (Ω)	Calibration Result (Ω)	Difference (Ω)	Limit
56.77	57.834	-1.064	+/- 5 Ω



APREL ALSAS-10U System Description

Max. Transmit Pwr : 1 W

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 5250.00 MHz

Probe Data

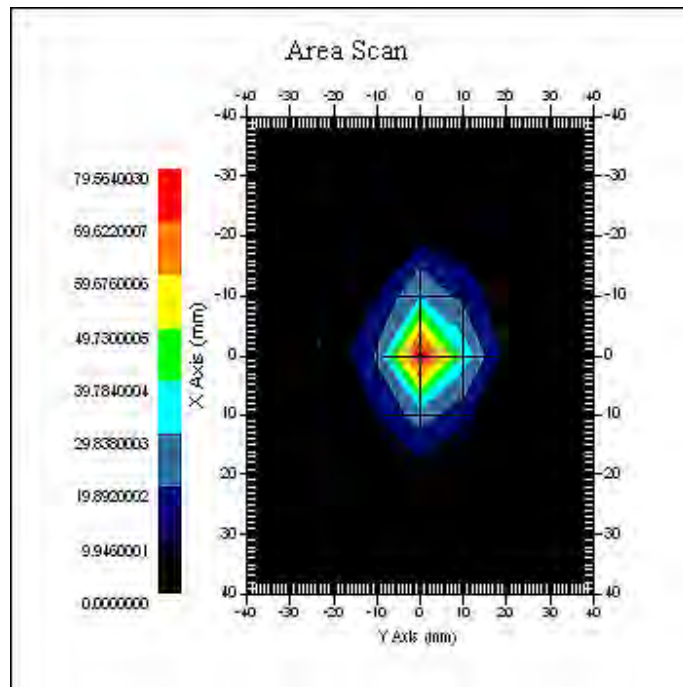
Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm



	Validation Result (W/kg)	Calibration Result (W/kg)	Difference	Limit
1 Gram	62.267	64.18	-2.98%	+/- 10%
10 Gram	20.358	21.24	-4.15%	+/- 10%



1 gram SAR value : 62.267 W/kg
 10 gram SAR value : 20.358 W/kg
 Area Scan Peak SAR : 79.481 W/kg
 Zoom Scan Peak SAR : 189.522 W/kg

Appendix G: System Check (Annual)

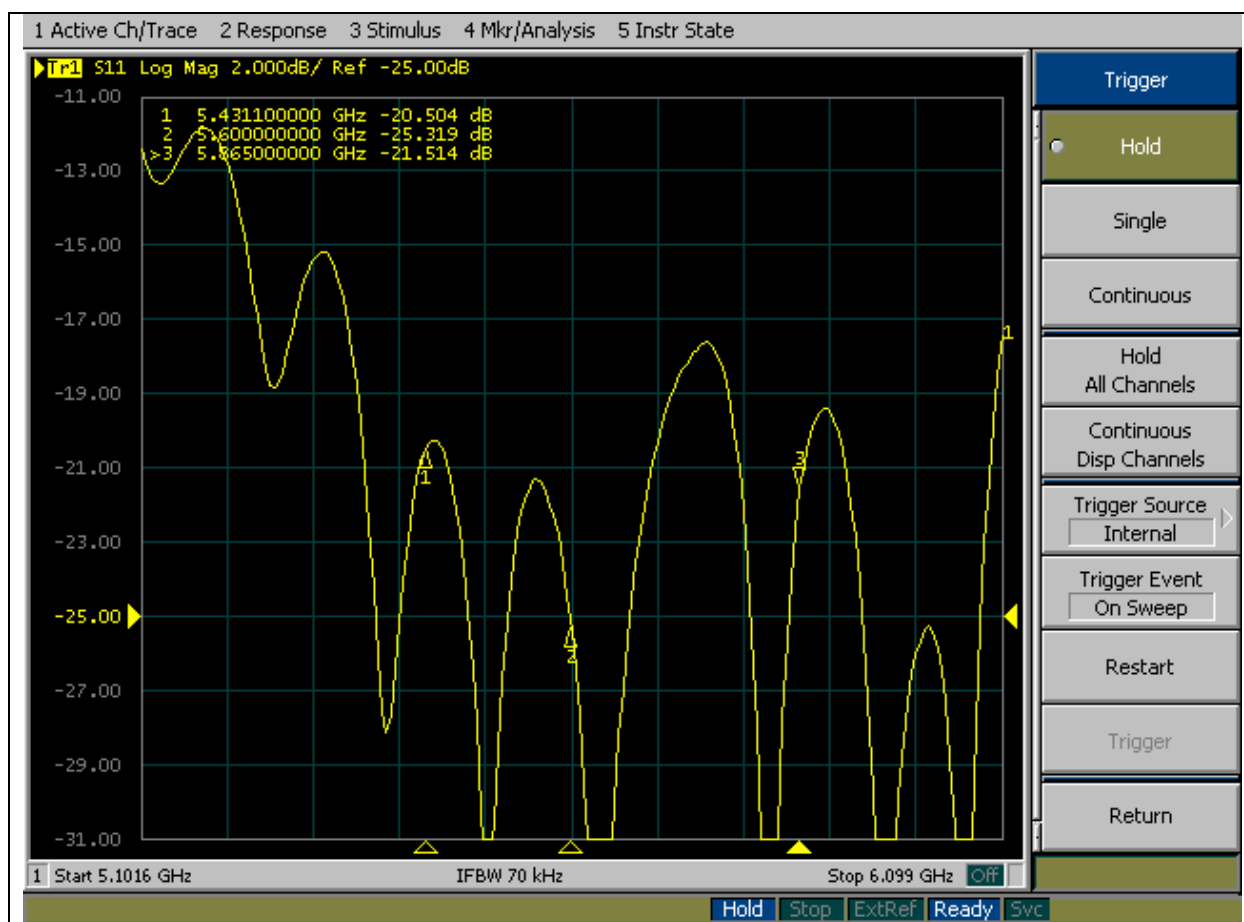
Report Date : 12-Jan-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 5600.00 MHz
Part number : ALS-D-5600-S-2
Ambient Temperature of the Laboratory : 21.5 °C

Test Equipment List

Equipment Type	MFR	Model No.	Serial No.	Last Cal.	Cal. Due Date
Vector Network Analyzer	Agilent	E5071B	MY42402726	12/21/2015	12/20/2016

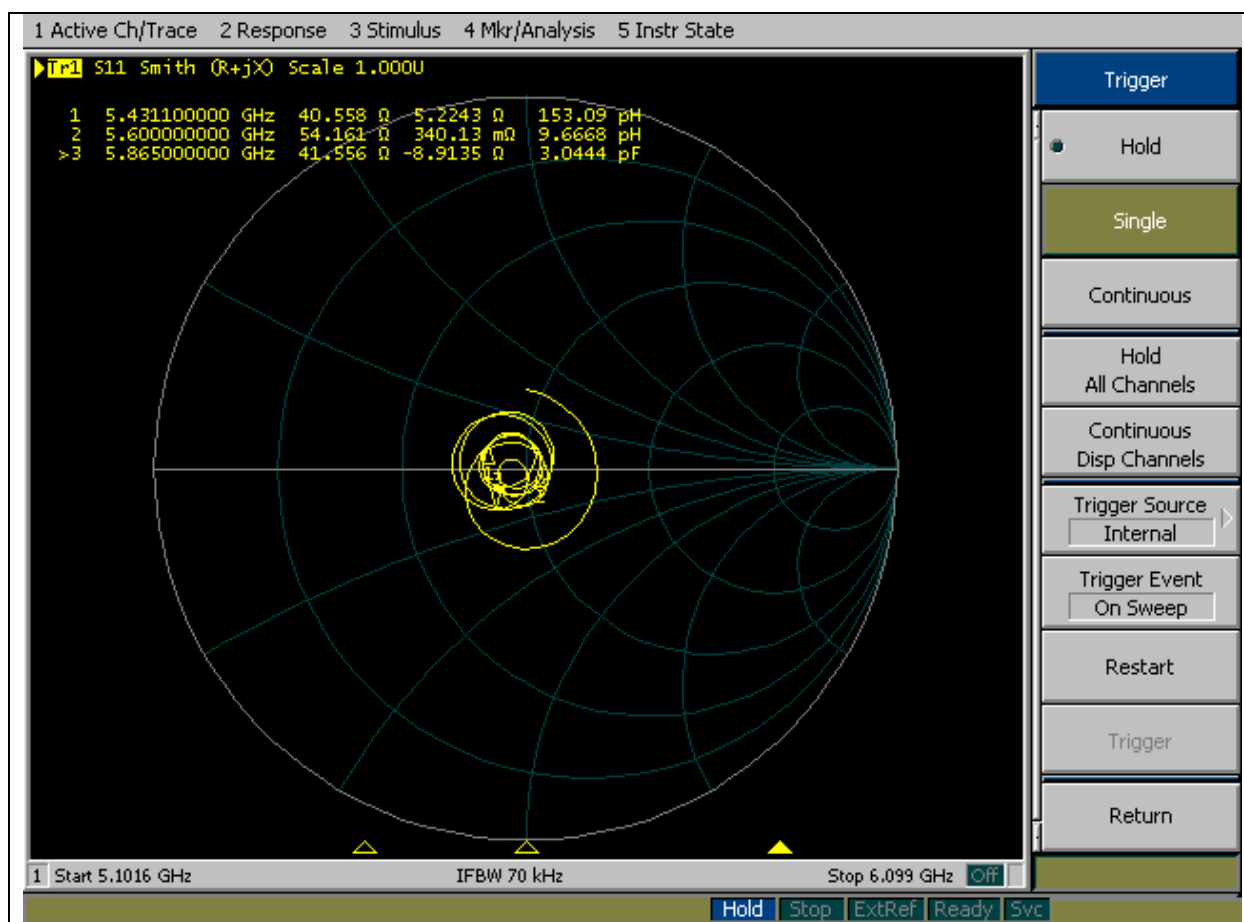
S11 Parameter Return Loss

Validation Result (dB)	Calibration Result (dB)	Difference	Limit
-25.319	-25.931	7.30%	+/- 20 %



Smith Chart Impedance

Validation Result (Ω)	Calibration Result (Ω)	Difference (Ω)	Limit
54.161	53.265	0.896	+/- 5 Ω



APREL ALSAS-10U System Description

Max. Transmit Pwr : 1 W

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 5600.00 MHz

Probe Data

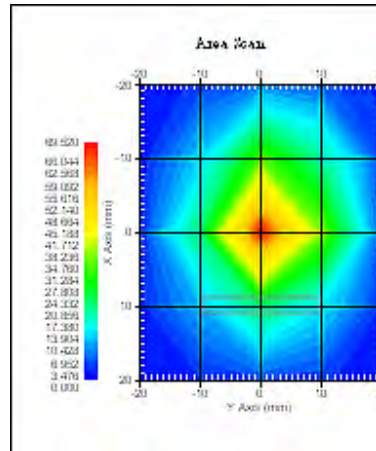
Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm



	Validation Result (W/kg)	Calibration Result (W/kg)	Difference	Limit
1 Gram	67.988	68.71	-1.05%	+/- 10%
10 Gram	21.347	22.06	-3.23%	+/- 10%



1 gram SAR value : 67.988 W/kg
 10 gram SAR value : 21.347 W/kg
 Area Scan Peak SAR : 79.658 W/kg
 Zoom Scan Peak SAR : 184.093 W/kg

Appendix G: System Check (Annual)

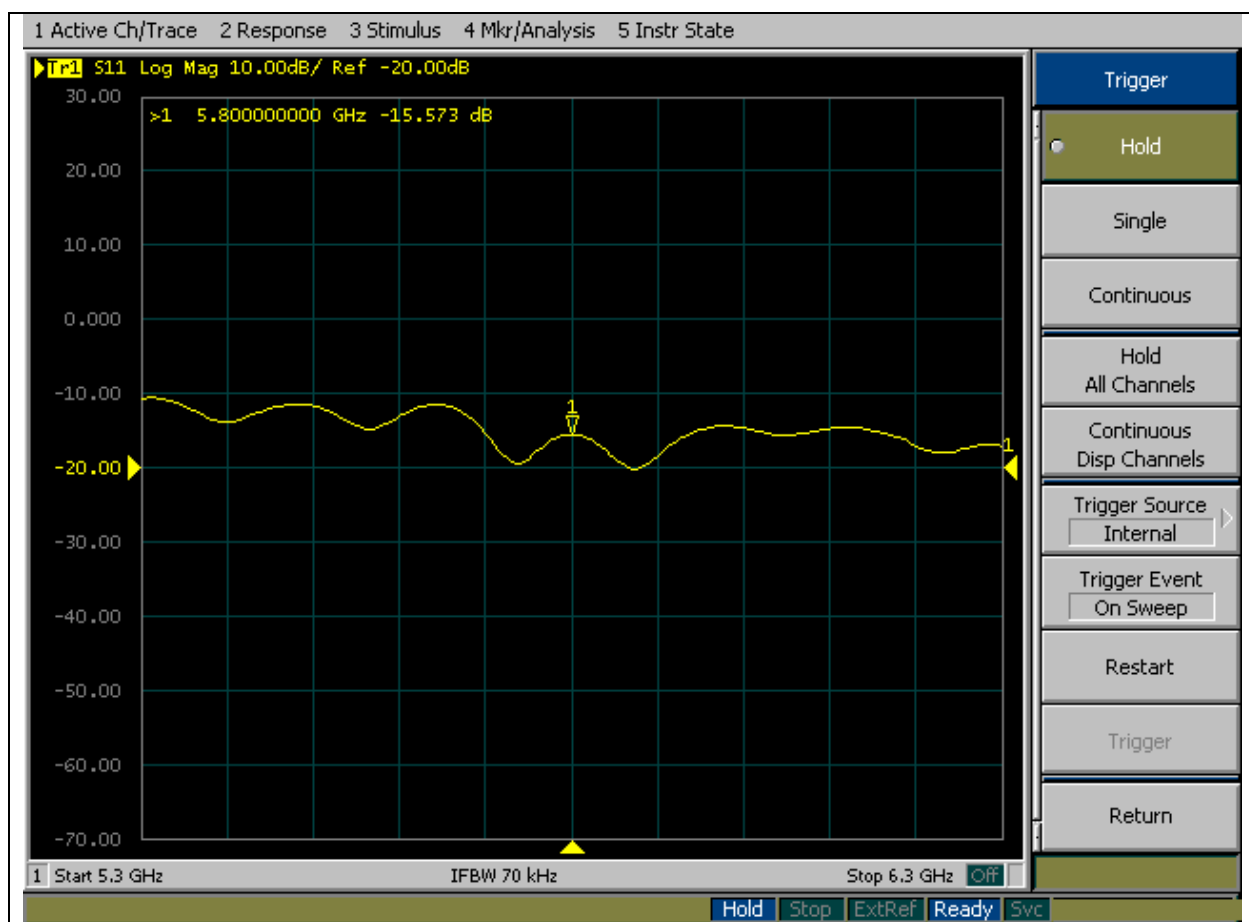
Report Date : 12-Jan-2016
By Operator : Dino Chen
DUT : Dipole
Frequency : 5800.00 MHz
Part number : ALS-D-5800-S-2
Ambient Temperature of the Laboratory : 21.5 °C

Test Equipment List

Equipment Type	MFR	Model No.	Serial No.	Last Cal.	Cal. Due Date
Vector Network Analyzer	Agilent	E5071B	MY42402726	12/21/2015	12/20/2016

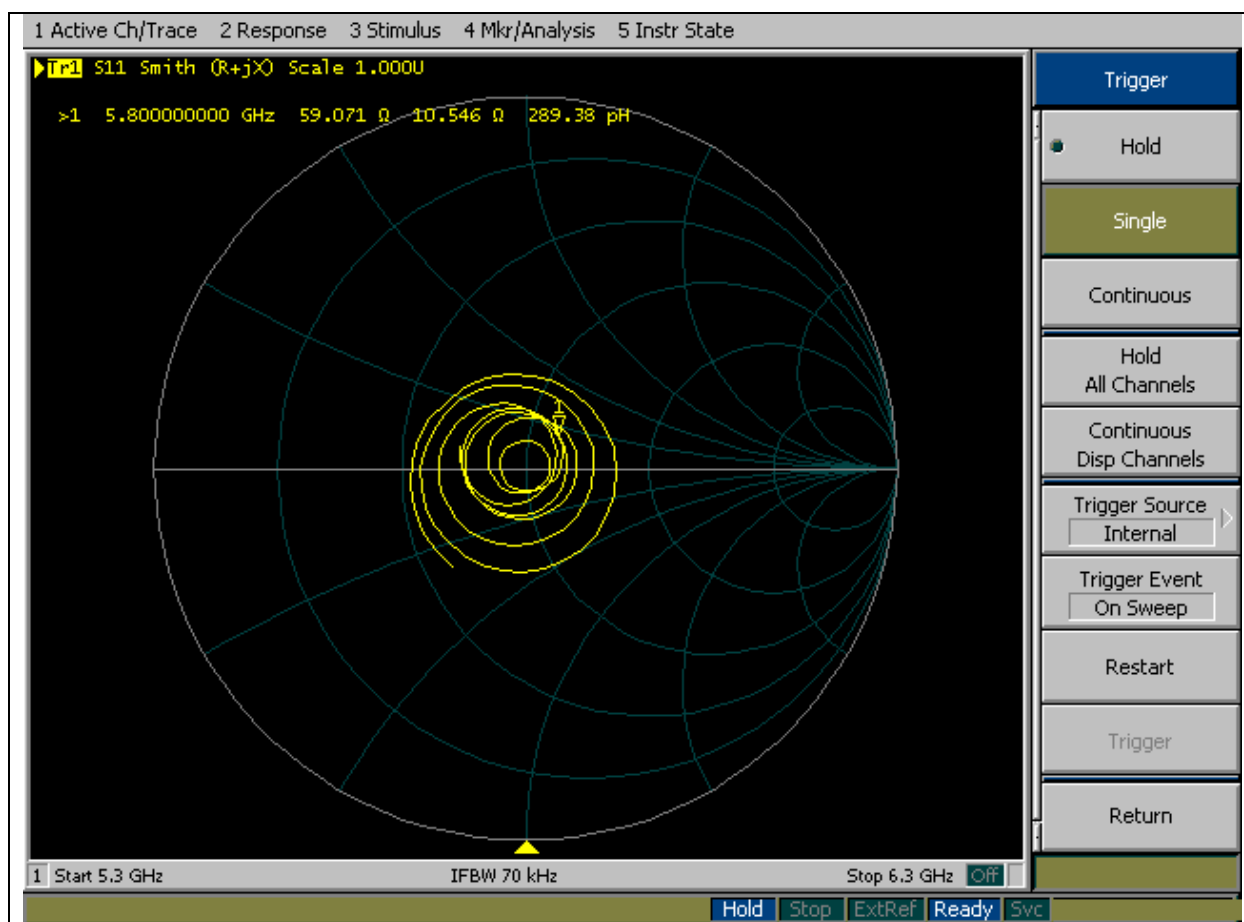
S11 Parameter Return Loss

Validation Result (dB)	Calibration Result (dB)	Difference	Limit
-15.573	-15.438	-1.54%	+/- 20 %



Smith Chart Impedance

Validation Result (Ω)	Calibration Result (Ω)	Difference (Ω)	Limit
59.071	62.919	-3.848	$\pm 5 \Omega$



APREL ALSAS-10U System Description

Max. Transmit Pwr : 1 W

Phantom Data

Name : Universal Phantom
Type : ALS-P-UP-1

Tissue Data

Type : Body
Frequency : 5800.00 MHz

Probe Data

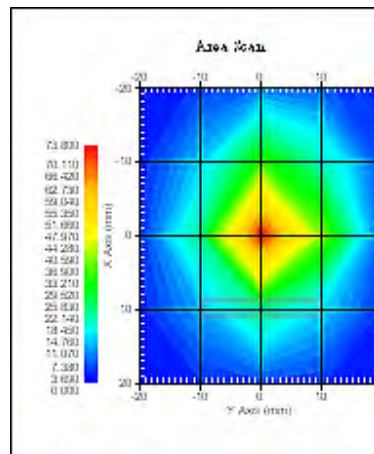
Name : E-field Probe
Model : ALS-E-020
Serial No. : 500-00266
Last Calib. Date : 18-Feb-2016

Measurement Data

Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.50 °C
Ambient Temp. : 21.50 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=8mm, y=8mm, z=4mm
DUT Position : Touch
Separation : 10mm



	Validation Result (W/kg)	Calibration Result (W/kg)	Difference	Limit
1 Gram	62.529	59.95	4.30%	+/- 10%
10 Gram	19.386	18.61	4.17%	+/- 10%



1 gram SAR value : 62.529 W/kg
 10 gram SAR value : 19.386 W/kg
 Area Scan Peak SAR : 73.750 W/kg
 Zoom Scan Peak SAR : 158.130 W/kg