Appendix C: System Performance Check

Report Date : 07-Jun-2013
By Operator : Dino Chen
DUT : Dipole
Frequency : 2450.00 MHz
Max. Transmit Pwr : 1 W

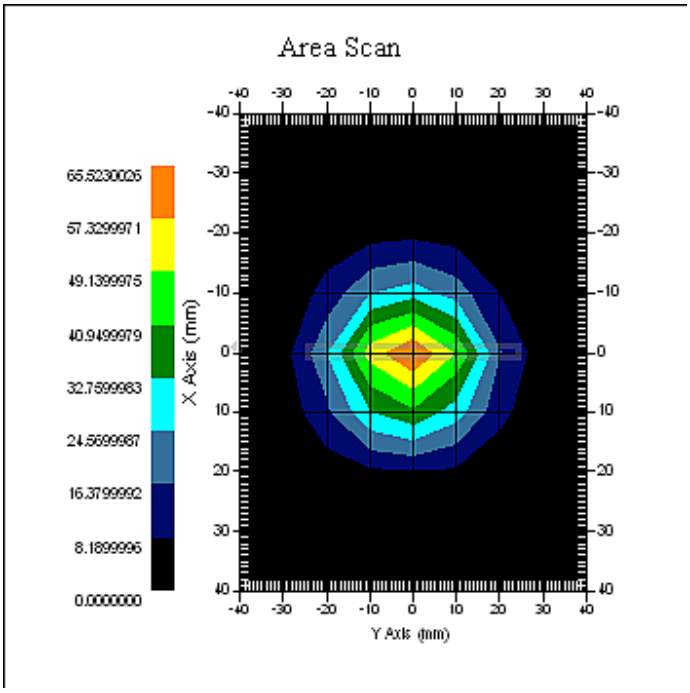
APREL ALSAS-10U System Description

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. : 266
Last Calib. Date : 20-Aug-2012

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm

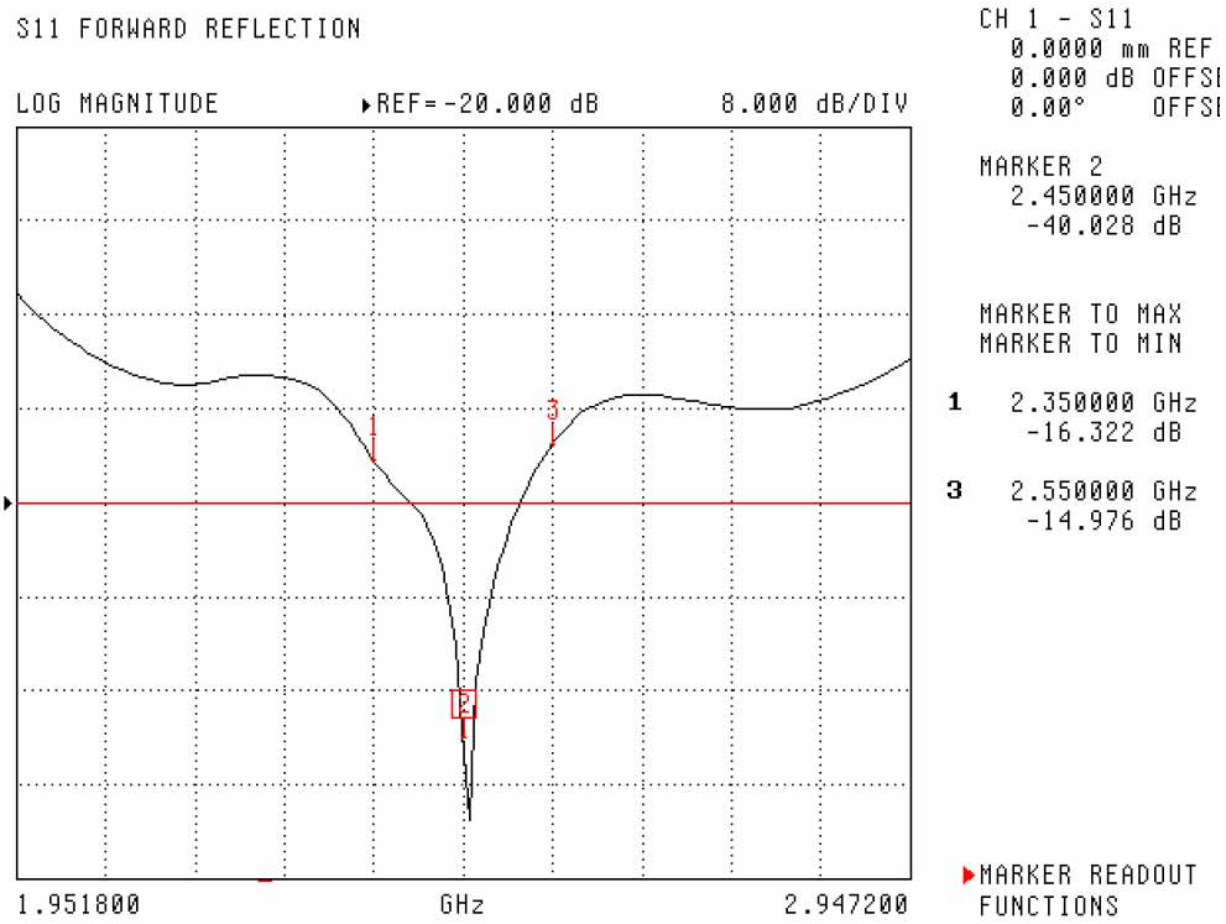


1 gram SAR value : 53.112 W/kg
10 gram SAR value : 25.083 W/kg
Area Scan Peak SAR : 65.339 W/kg
Zoom Scan Peak SAR : 104.09 W/kg

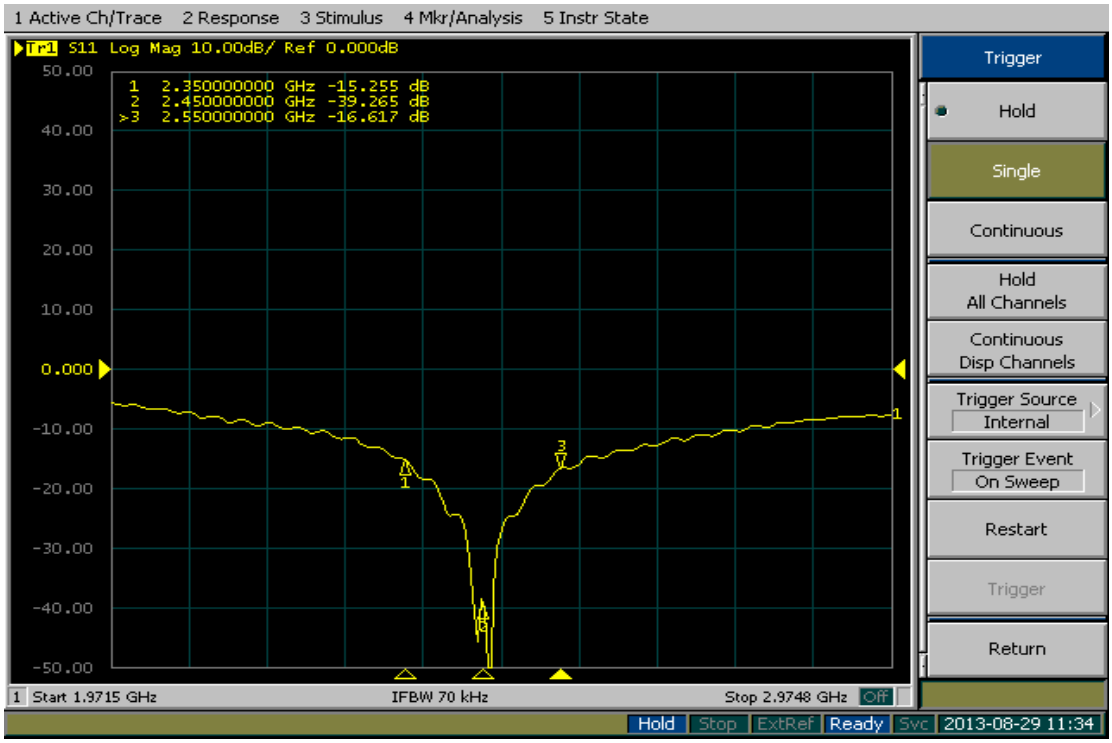
Electrical Calibration

Electrical Calibration			
Test	Result	Validation	Difference
S11	-16.32dB	-16.62dB	1.8%
Impedance	10.33Ω	13.97Ω	3.64Ω

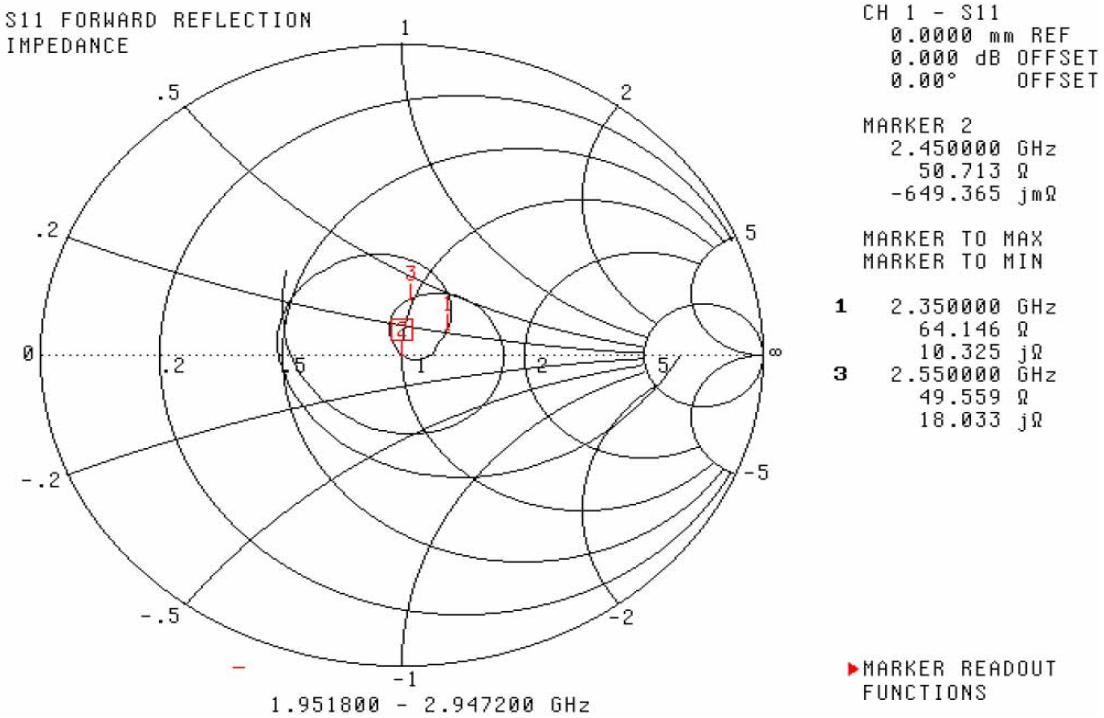
S11 Parameter Return Loss –Cal. report



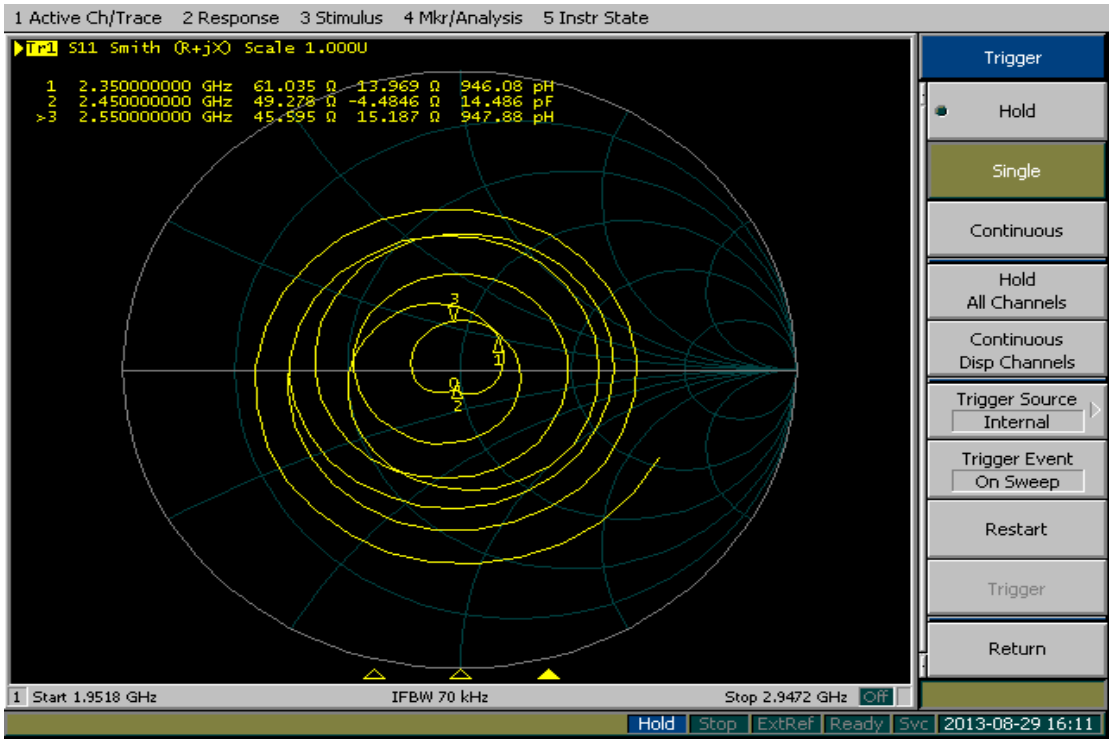
S11 Parameter Return Loss –Self Check, Date 08/29/2013



Smith Chart Dipole Impedance –Cal. Report



Smith Chart Dipole Impedance –self check, Date 08/29/2013



Appendix C: System Performance Check

Report Date : 11-Jun-2013
By Operator : Dino Chen
DUT : Dipole
Frequency : 5200.00 MHz
Max. Transmit Pwr : 1 W

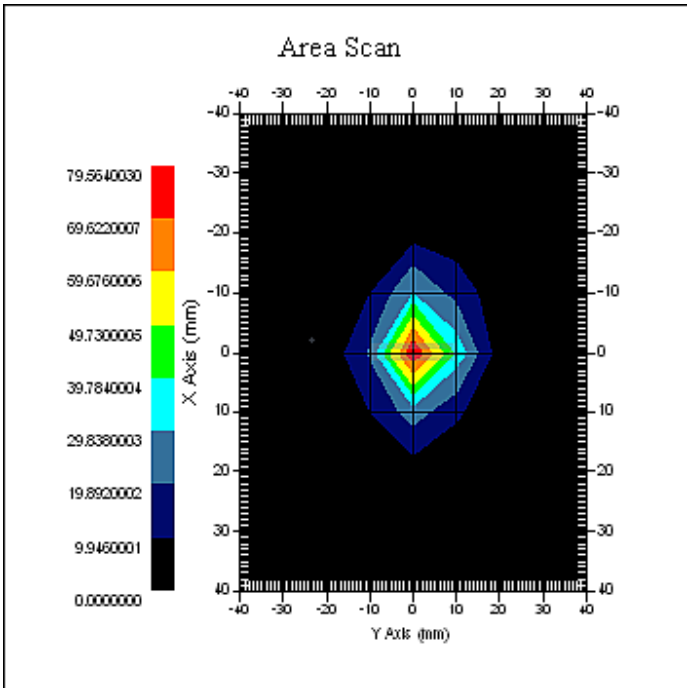
APREL ALSAS-10U System Description

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

Tissue Data
Type : Body
Frequency : 5200.00 MHz

Probe Data
Name : E-field Probe
Model : ALS-E-020
Serial No. : 266
Last Calib. Date : 20-Aug-2012

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm

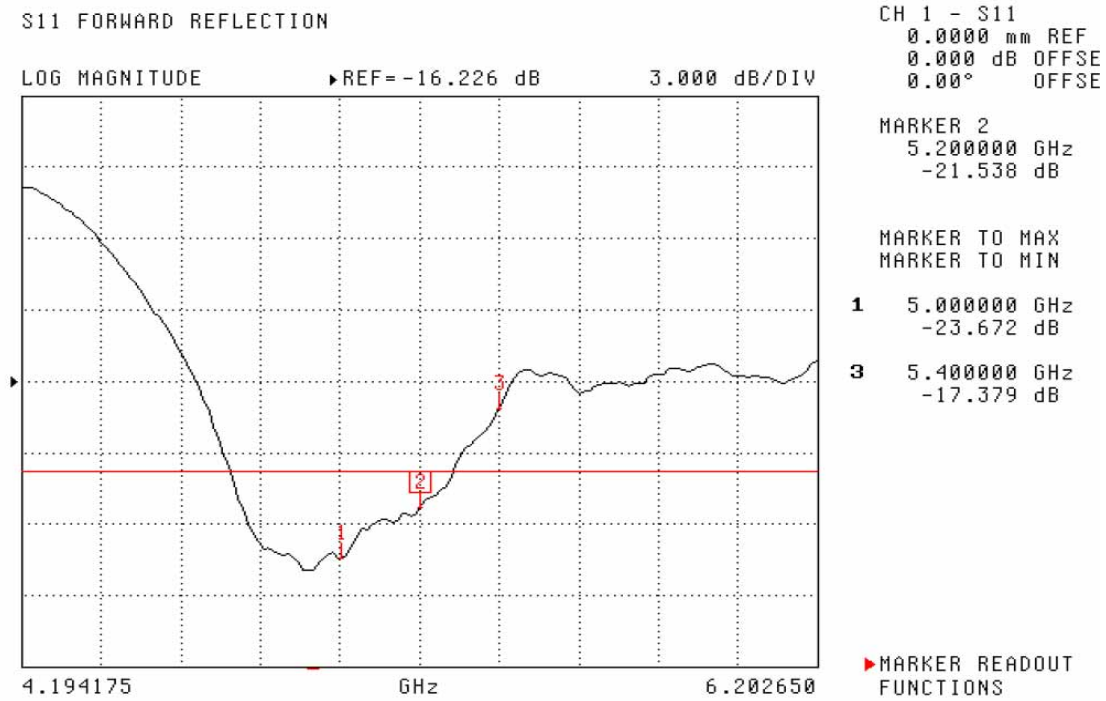


1 gram SAR value : 69.311 W/kg
10 gram SAR value : 22.089 W/kg
Area Scan Peak SAR : 79.482 W/kg
Zoom Scan Peak SAR : 188.662 W/kg

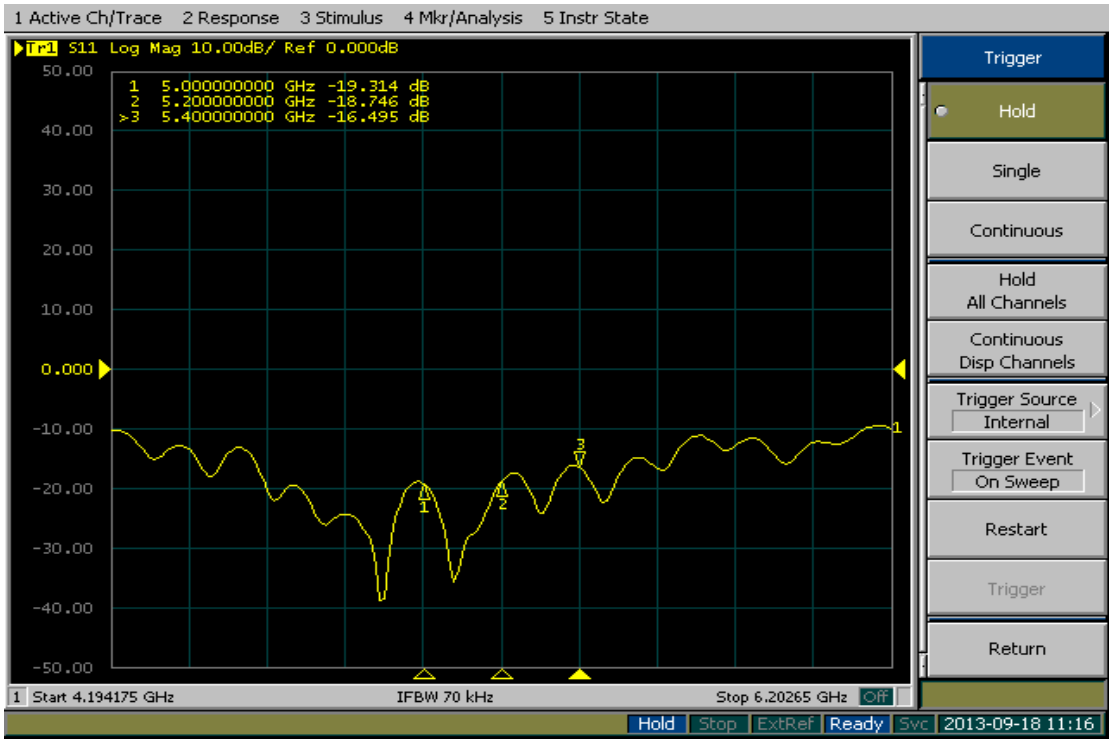
Electrical Calibration

Electrical Calibration			
Test	Result	Validation	Diference
S11	-23.67	-19.31dB	18.41%
Impedance	51.17Ω	53.93Ω	2.76Ω

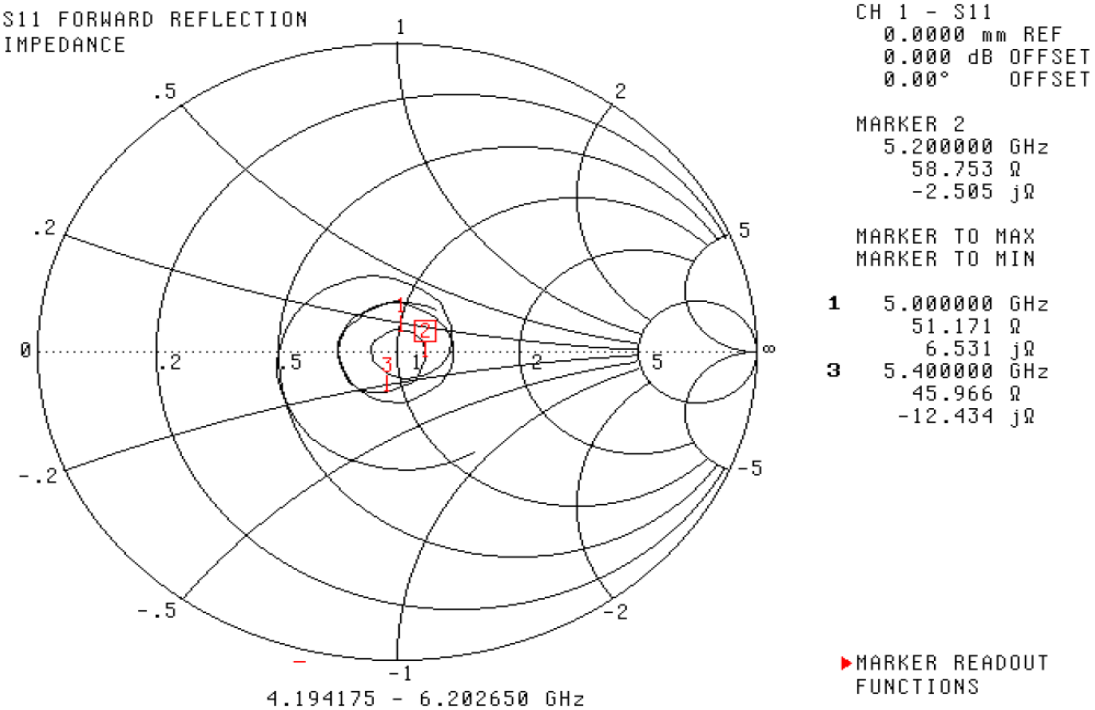
S11 Parameter Return Loss –Cal. report



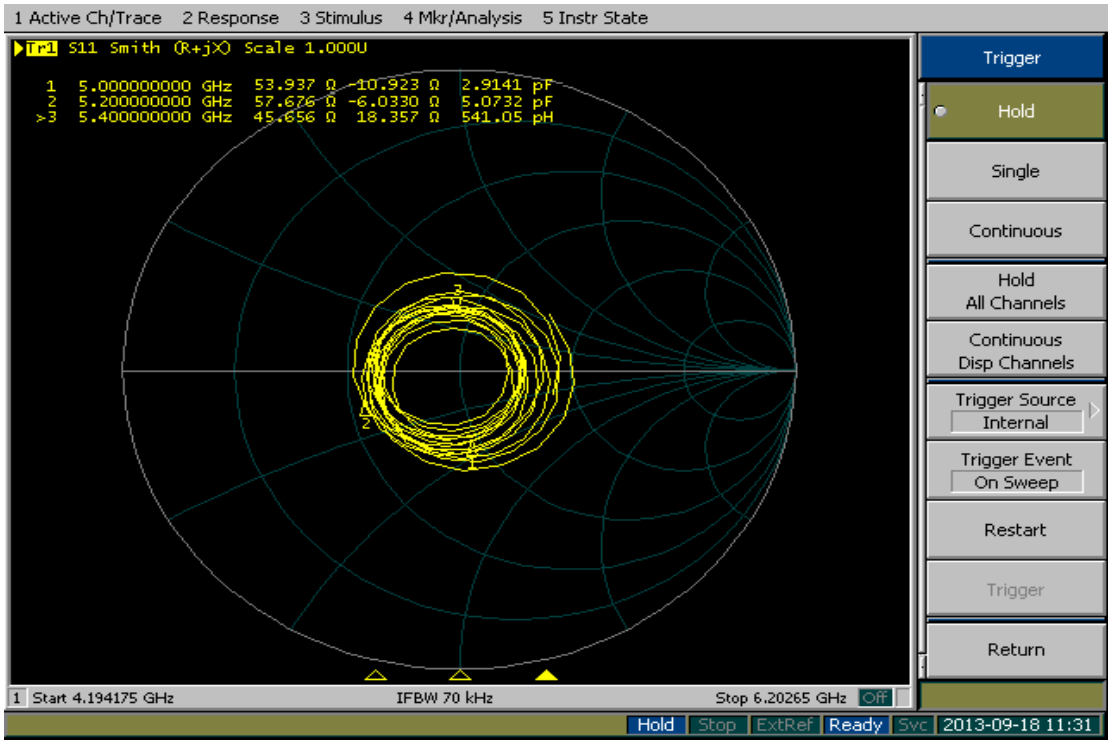
S11 Parameter Return Loss –Self Check, Date 09/18/2013



Smith Chart Dipole Impedance –Cal. Report



Smith Chart Dipole Impedance –self check, Date 09/18/2013



Appendix C: System Performance Check

Report Date :11-Jun-2013
By Operator : Dino Chen
DUT : Dipole
Frequency : 5600.00 MHz
Max. Transmit Pwr : 1 W

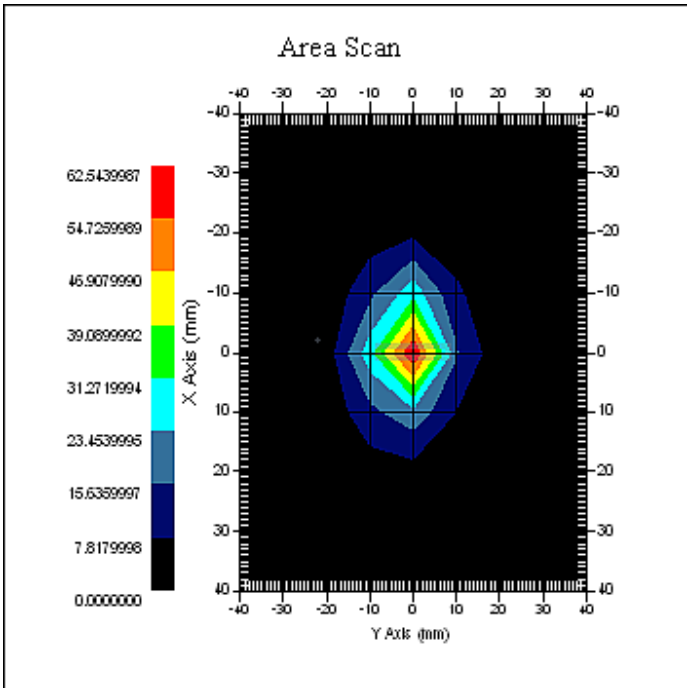
APREL ALSAS-10U System Description

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. : 266
Last Calib. Date : 20-Aug-2012

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm

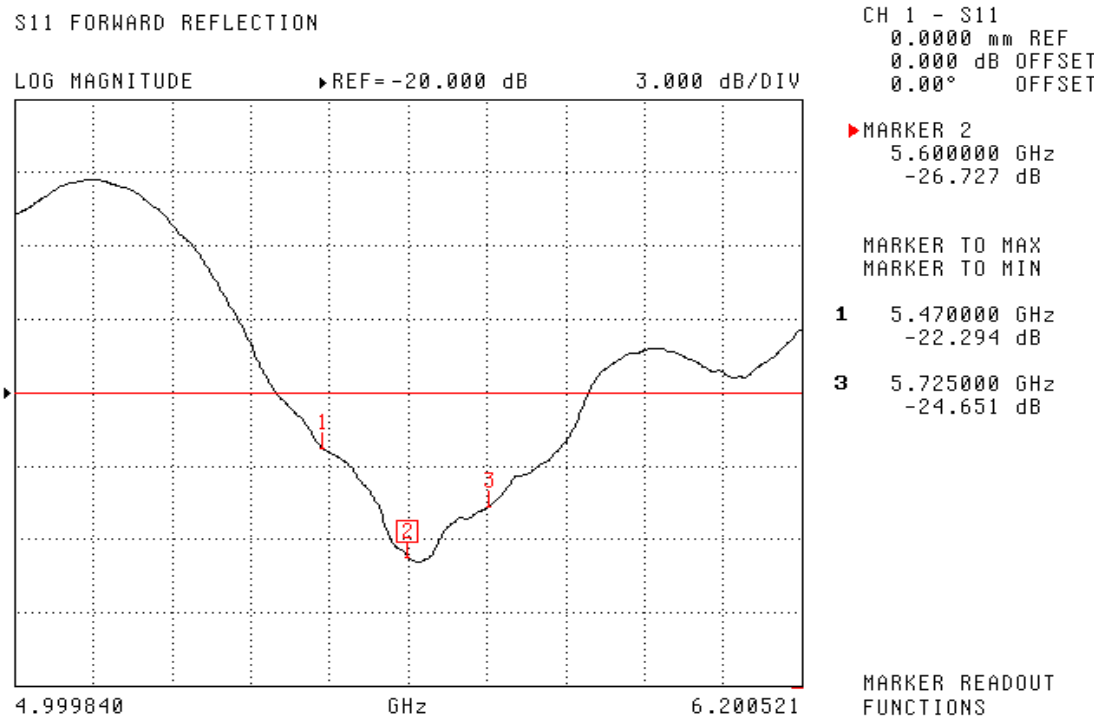


1 gram SAR value : 65.273 W/kg
10 gram SAR value : 21.348 W/kg
Area Scan Peak SAR : 62.544 W/kg
Zoom Scan Peak SAR : 181.334 W/kg

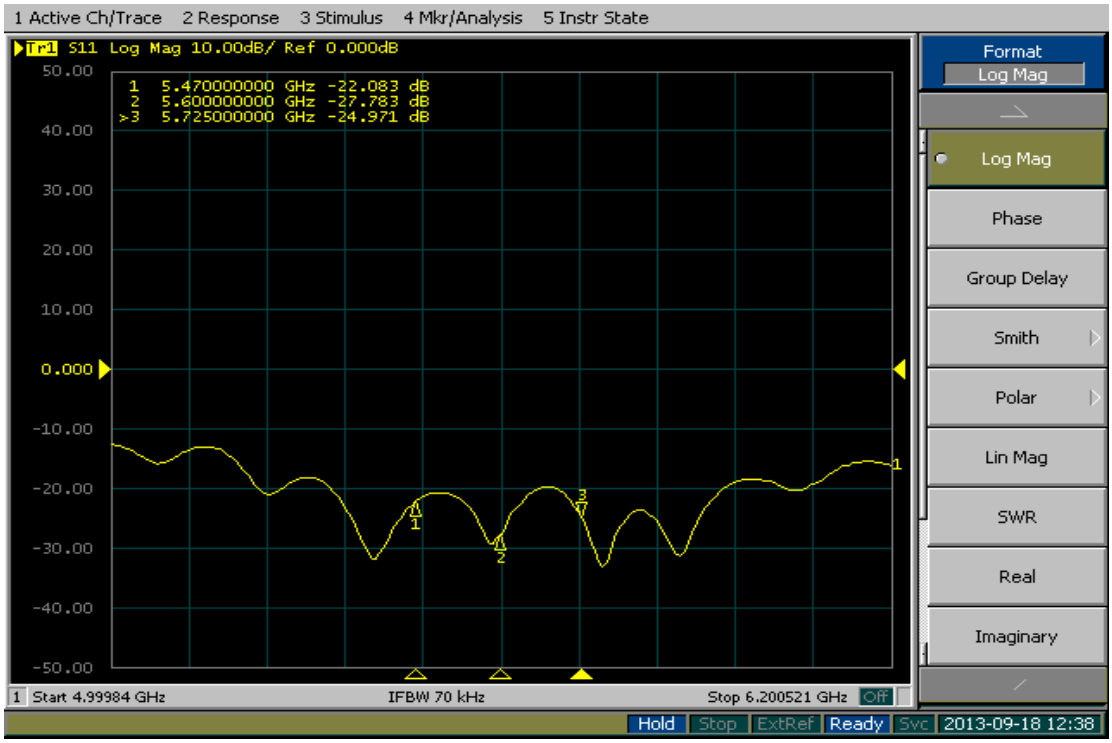
Electrical Calibration

Electrical Calibration			
Test	Result	Validation	Diference
S11	-26.727dB	-27.783dB	3.95%
Impedance	53.674Ω	51.579Ω	-2.09Ω

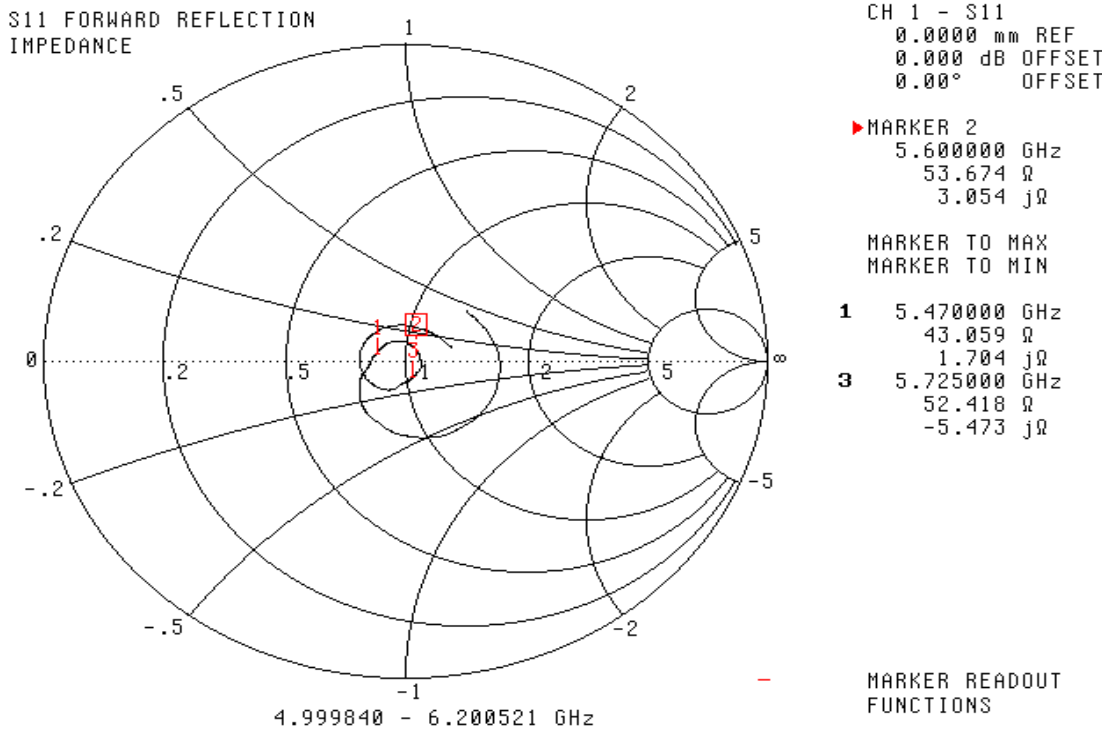
S11 Parameter Return Loss –Cal. report



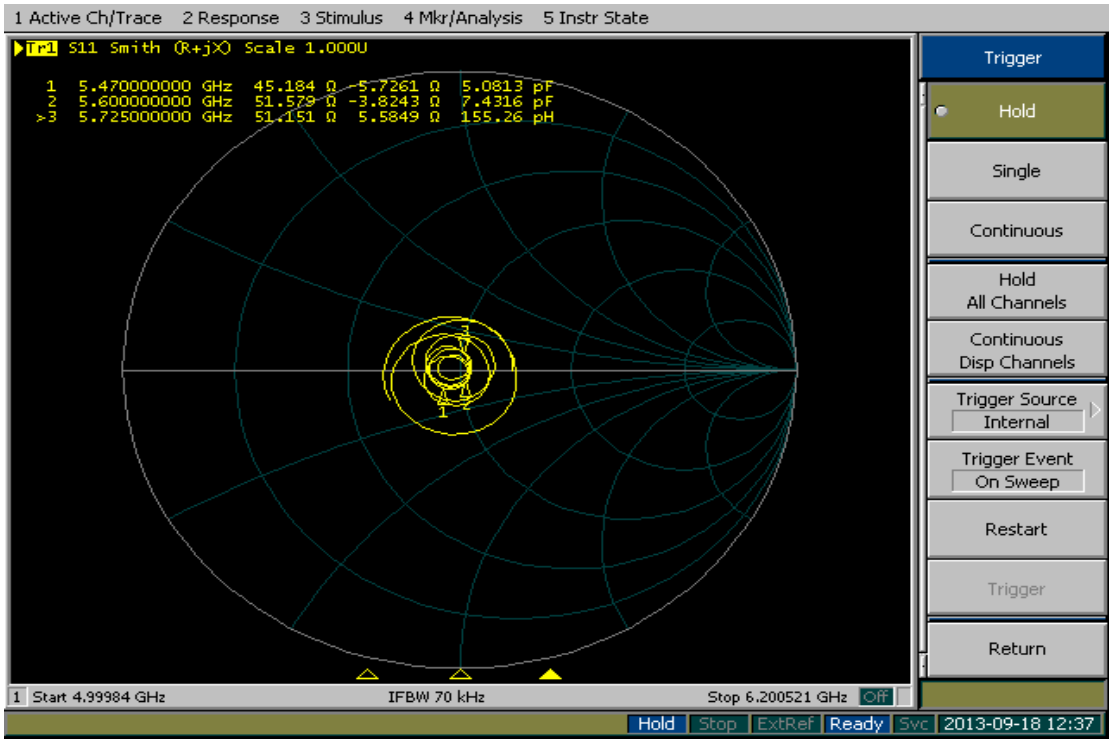
S11 Parameter Return Loss –Self Check, Date 09/18/2013



Smith Chart Dipole Impedance –Cal. Report



Smith Chart Dipole Impedance –self check, Date 09/18/2013



Appendix C: System Performance Check

Report Date :11-Jun-2013
By Operator : Dino Chen
DUT : Dipole
Frequency : 5800.00 MHz
Max. Transmit Pwr : 1 W

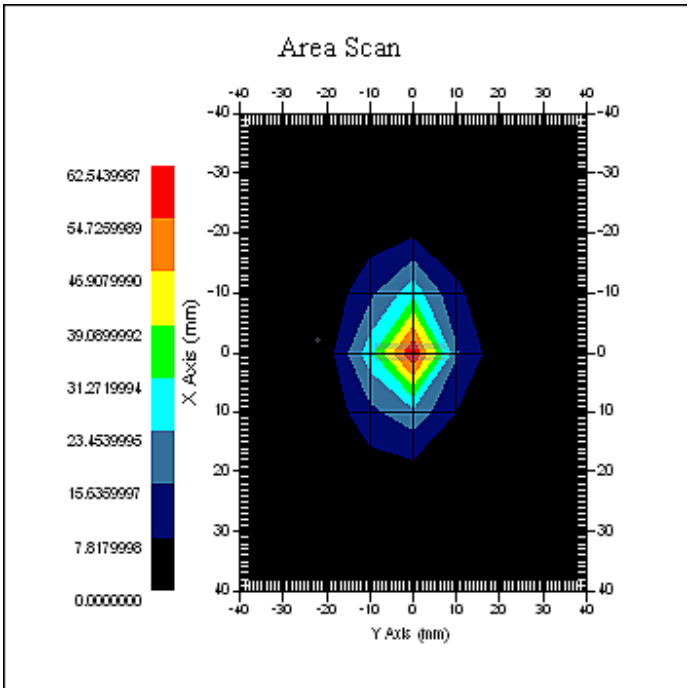
APREL ALSAS-10U System Description

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. : 266
Last Calib. Date : 20-Aug-2012

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 22.00 °C
Ambient Temp. : 21.70 °C
Area Scan : 9x9x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm
Separation : 1cm

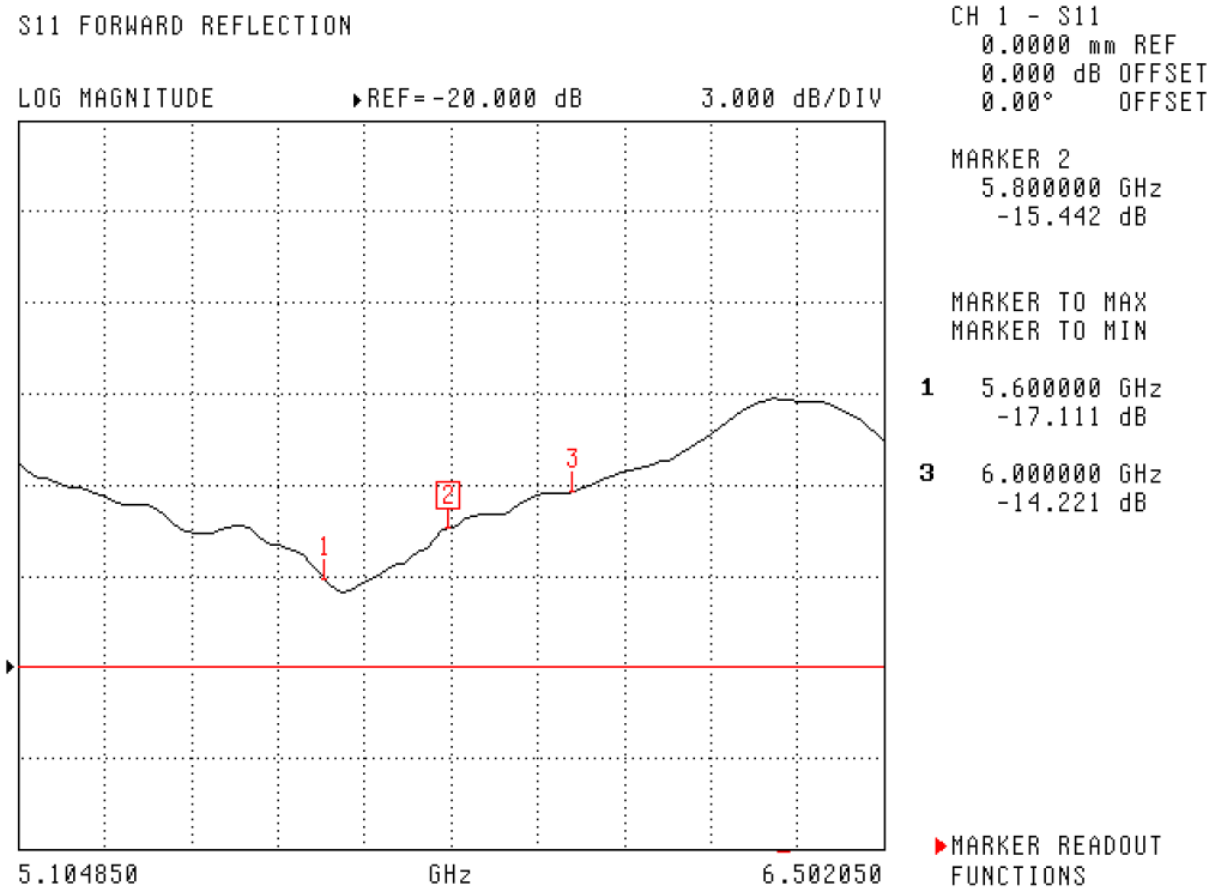


1 gram SAR value : 58.478 W/kg
10 gram SAR value : 20.117 W/kg
Area Scan Peak SAR : 62.641 W/kg
Zoom Scan Peak SAR : 162.059 W/kg

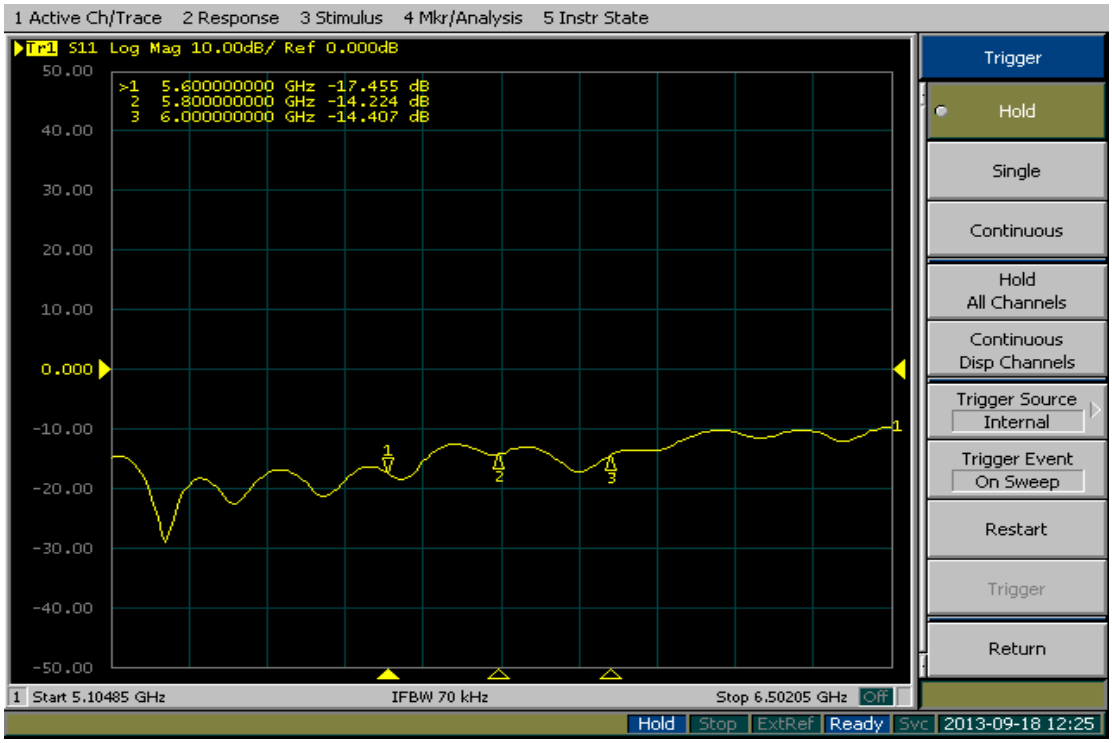
Electrical Calibration

Electrical Calibration			
Test	Result	Validation	Diference
S11	-17.11dB	-17.45dB	1.98%
Impedance	49.33Ω	47.85Ω	-1.48Ω

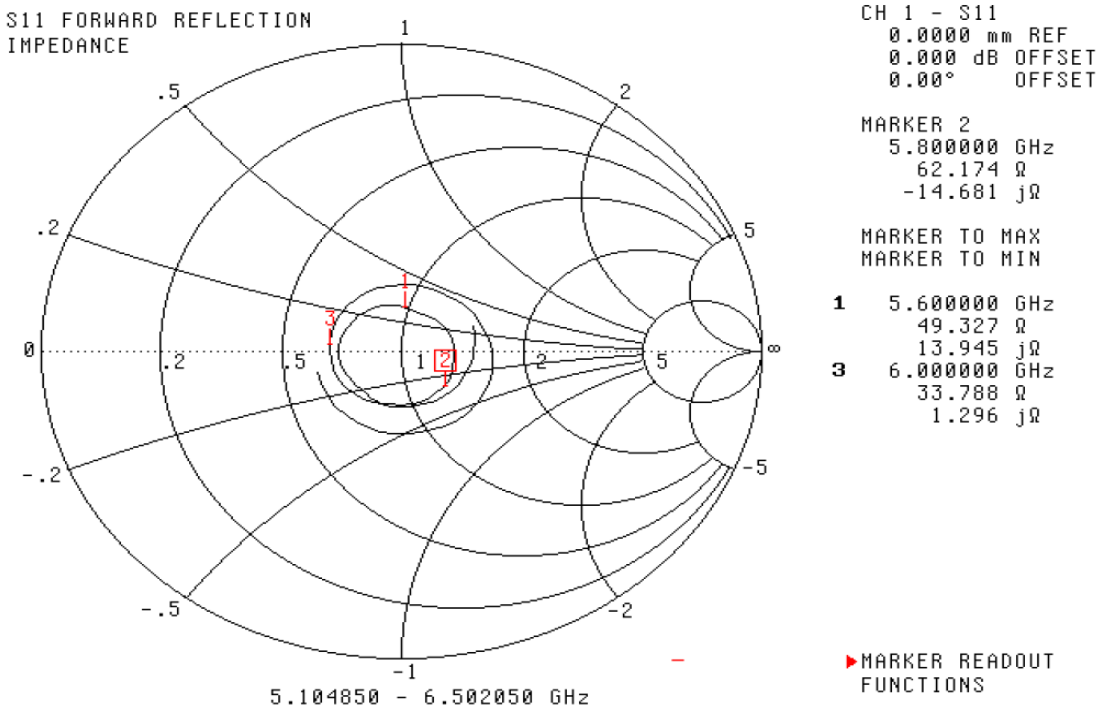
S11 Parameter Return Loss –Cal. report



S11 Parameter Return Loss –Self Check, Date 09/18/2013



Smith Chart Dipole Impedance –Cal. Report



Smith Chart Dipole Impedance –self check, Date 09/18/2013