

## Appendix C: System Performance Check

Report Date : 24-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

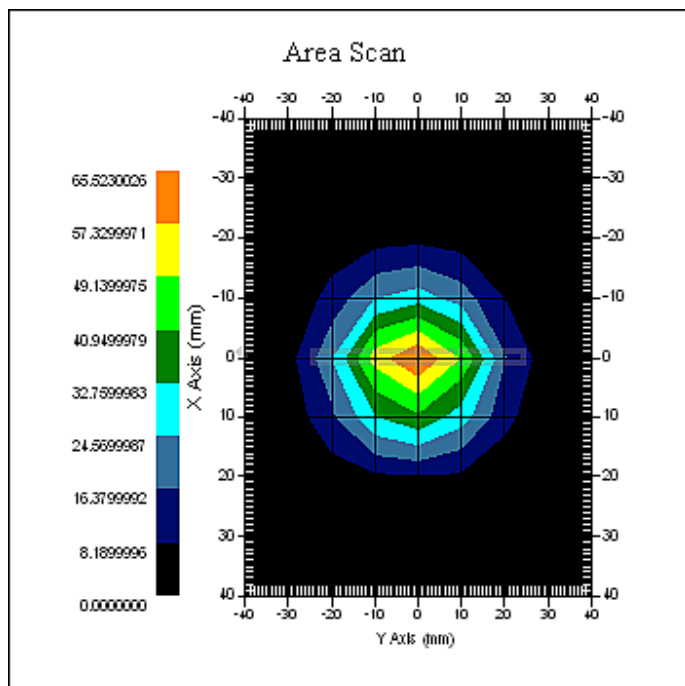
#### Probe Data

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. : 21.60 °C  
Ambient Temp. : 21.60 °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 : 53.688 W/kg  
10 gram SAR value : 25.214 W/kg  
Area Scan Peak SAR : 65.523 W/kg  
Zoom Scan Peak SAR : 104.171 W/kg

## Electrical Calibration

Electrical Calibration				
Test	Cal. report Result	Self Check Result	Date	Deviations
S11	-16.32dB	-16.62dB	Aug. 29/2013	1.8%
Impedance	10.33 $\Omega$	13.97 $\Omega$		3.64 $\Omega$

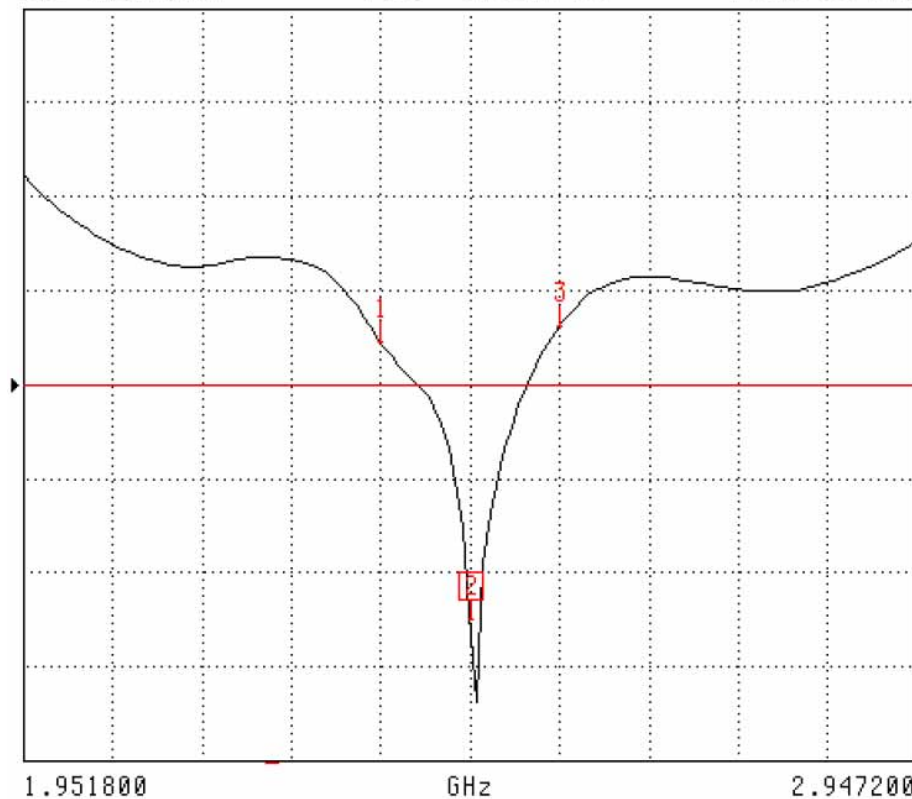
## S11 Parameter Return Loss –Cal. report

S11 FORWARD REFLECTION

LOG MAGNITUDE

REF = -20.000 dB

8.000 dB/DIV



CH 1 - S11

0.0000 mm REF

0.000 dB OFFSI

0.00° OFFSI

MARKER 2

2.450000 GHz

-40.028 dB

MARKER TO MAX

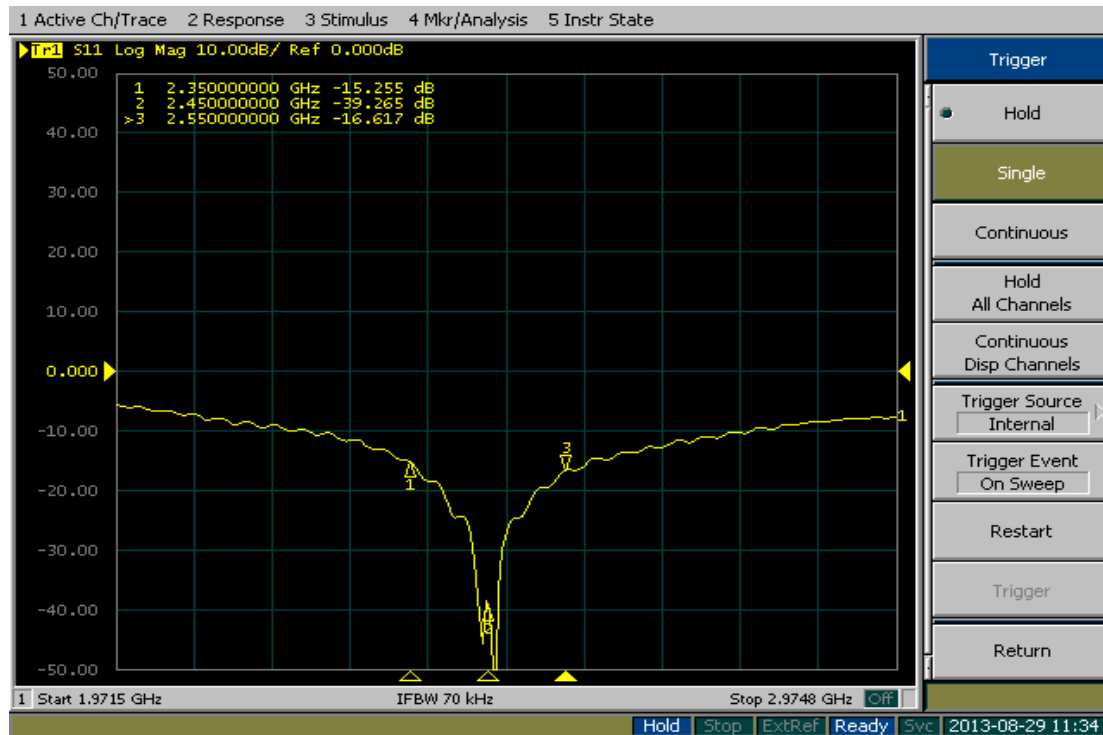
MARKER TO MIN

**1** 2.350000 GHz  
-16.322 dB

**3** 2.550000 GHz  
-14.976 dB

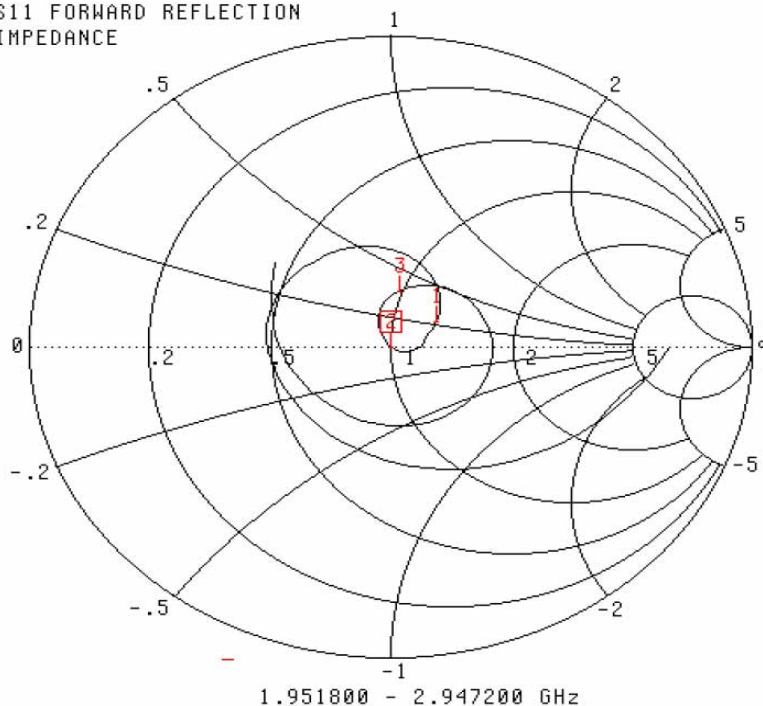
MARKER READOUT  
FUNCTIONS

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



## Smith Chart Dipole Impedance –Cal. Report

S11 FORWARD REFLECTION  
IMPEDANCE



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

MARKER 2  
2.450000 GHz  
50.713  $\Omega$   
-649.365  $j\Omega$

MARKER TO MAX  
MARKER TO MIN

1 2.350000 GHz  
64.146  $\Omega$   
10.325  $j\Omega$   
3 2.550000 GHz  
49.559  $\Omega$   
18.033  $j\Omega$

▶ MARKER READOUT  
FUNCTIONS

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

