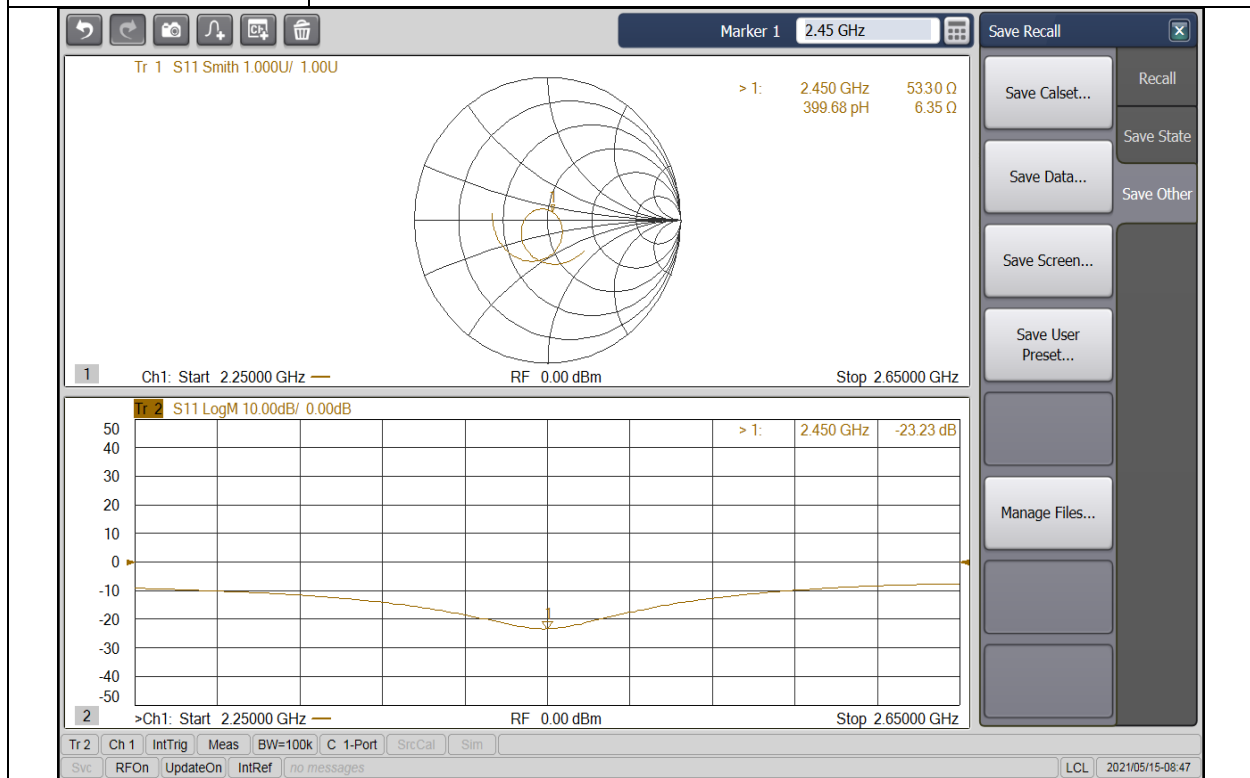


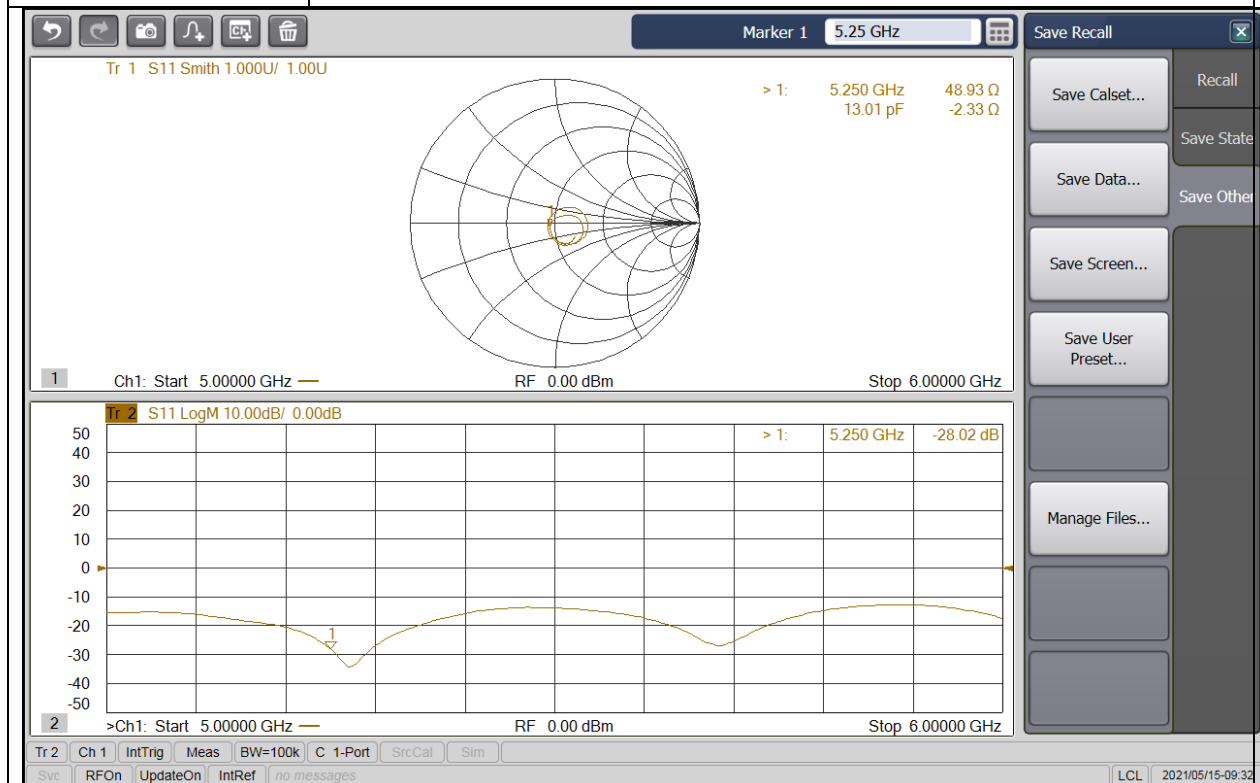
# App E

Dipole calibration record

Dipole 2450 Head TSL	Target Value		Measure Value		Difference	
	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )
Impedance	52.8	3.77	53.3	6.35	0.5	2.58
Return loss(dB)	-26.8		-23.23		-13.32%	
Measure Date	2021-5-15					



Dipole 5250 Head TSL	Target Value		Measure Value		Difference	
	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )
Impedance	51.3	-3.03	48.93	-2.33	-2.37	0.7
Return loss(dB)	-29.7		-28.02		-5.66%	
Measure Date	2021-5-15					



Dipole 5600 Head TSL	Target Value		Measure Value		Difference	
	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )
Impedance	53	1.64	50.78	-1.55	-2.22	-3.19
Return loss(dB)	-29.5		-35.19		19.29%	
Measure Date	2021-5-15					

Tr 1 S11 Smith 1.000U/ 1.00U
Marker 1 5.6 GHz
Save Recall

> 1: 5.600 GHz 50.78  $\Omega$   
 22.72 pF -1.55  $\Omega$

Save Calset... Recall  
 Save State  
 Save Data... Save Other  
 Save Screen...  
 Save User Preset...  
 Manage Files...

1 Ch1: Start 5.00000 GHz — RF 0.00 dBm Stop 6.00000 GHz

> 1: 5.600 GHz -35.19 dB

Save Calset... Recall  
 Save State  
 Save Data... Save Other  
 Save Screen...  
 Save User Preset...  
 Manage Files...

2 >Ch1: Start 5.00000 GHz — RF 0.00 dBm Stop 6.00000 GHz

Tr 2 Ch 1 IntTrig Meas BW=100k C 1-Port SrcCal Sim
LCL 2021/05/15-09:25

Dipole 5800 Head TSL	Target Value		Measure Value		Difference	
	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )	R( $\Omega$ )	X(j $\Omega$ )
Impedance	51.2	4.08	53.32	1.73	2.12	-2.35
Return loss(dB)	-27.6		-23.57		-14.6%	
Measure Date	2021-5-15					

