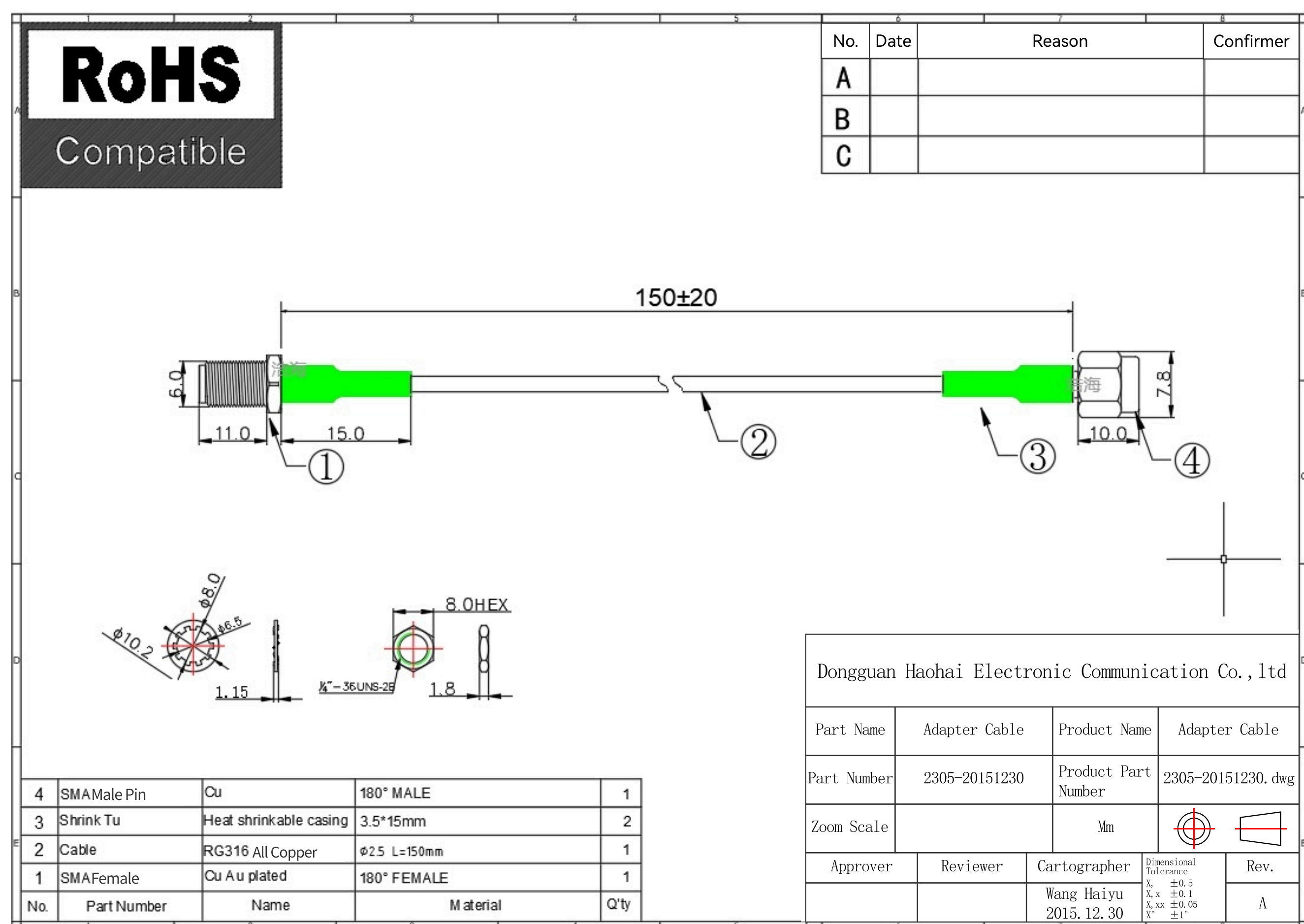


1. Overview Of Acknowledgement

This Acknowledgment Describes The Wifi Antenna Status Of The Keluxun Car Audio System, With A Frequency Band Of 2.4/5ghz, And The Manufacturer Is Dongguan Haohai Electronic Communication Co., Ltd

2. Appearance

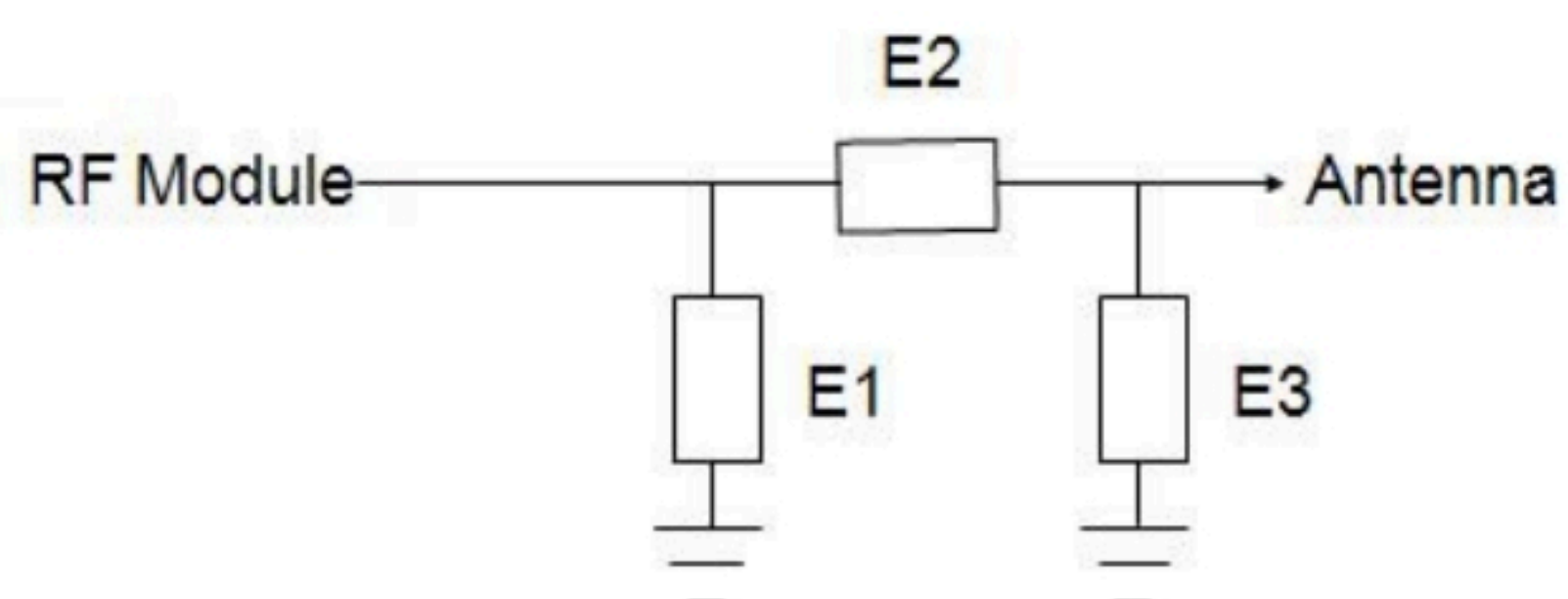


3. Electrical Performance

3.1 Antenna Frequency Band

Transmitting/receiving Frequency Band (GHz)	WIFI
	2.4~2.5GHz、 5.15~5.85GHz

3.2 Matching Circuit



Element	Value
E1(0402)	Original Match
E2(0402)	Original Match
E3(0402)	Original Match

3.3 Impedance Requirement

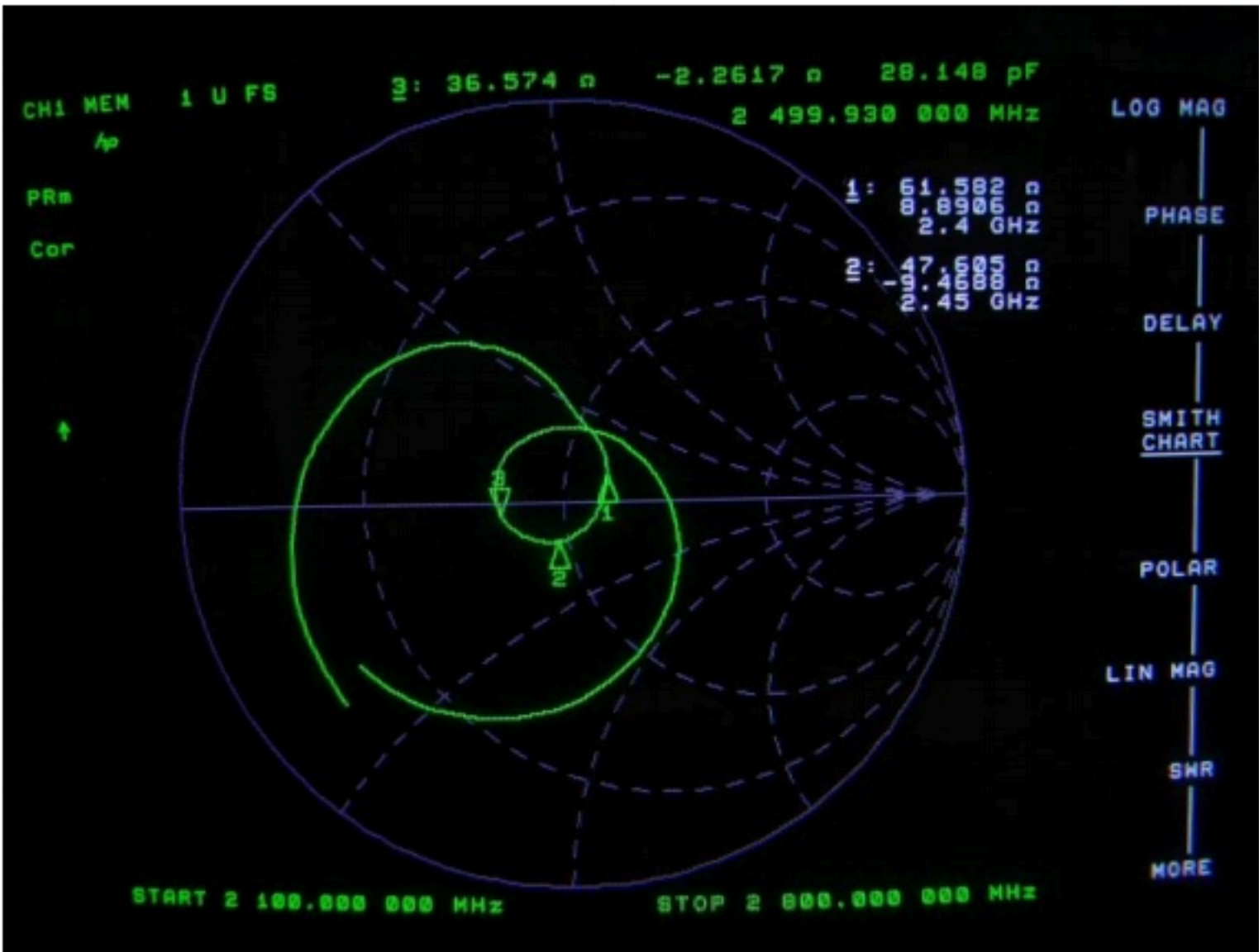
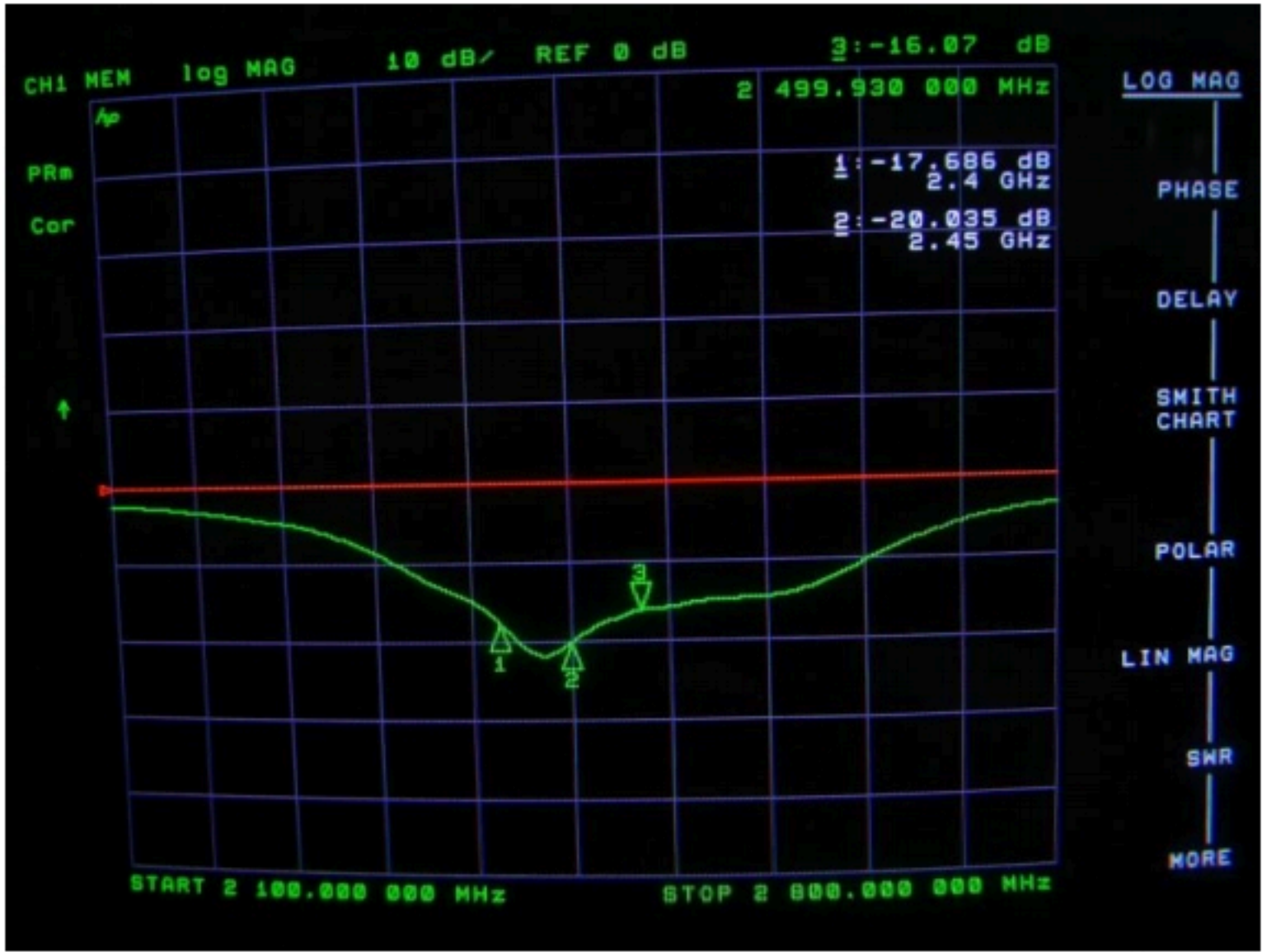
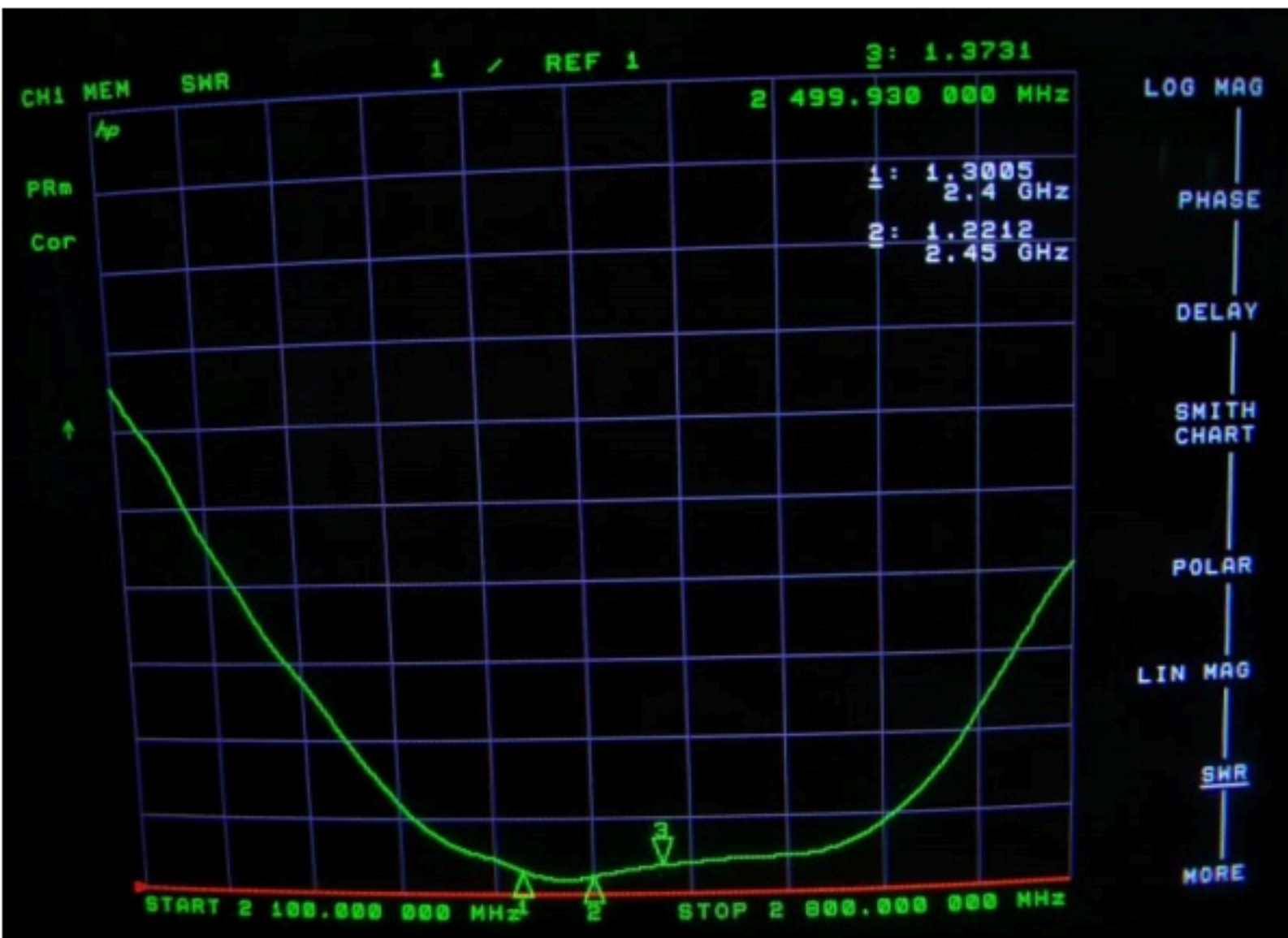
50 ohm

3.4 Antenna Passive Test Data:

2.4g Data:

Electrical Properties	
Frequency	2. 4GHz-2. 5GHz
Impedance	50 ohm Nominal
V. S. W. R	1: 1.22 Max
Return Loss	-20.03dB Max
Radiation	Omni-directional
Polarization	Linear, Vertical

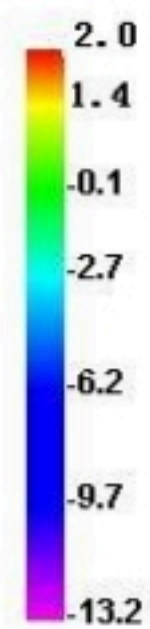
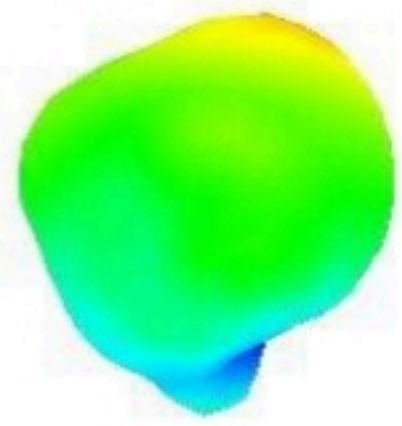
VSWR & Return Loss & Smith Chart :



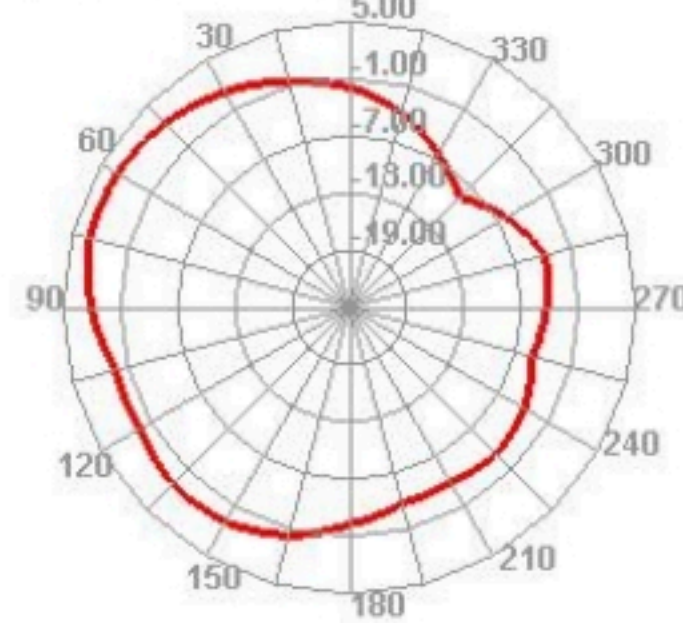
Efficiency, Gain, Directionality:

Passive Test For 2.4G_wifi						
Freq	Effi	Effi	Gain	Gain	Max	Min
(MHz)	(%%)	(dB)	(dBi)	(dBd)	(dB)	(dB)
2400	61.13	-0.88	2.04	-0.11	2.04	-15.27
2440	62.41	-1.37	2.11	-0.04	2.11	-16.24
2500	60.36	-1.29	1.80	-0.35	1.80	-15.37

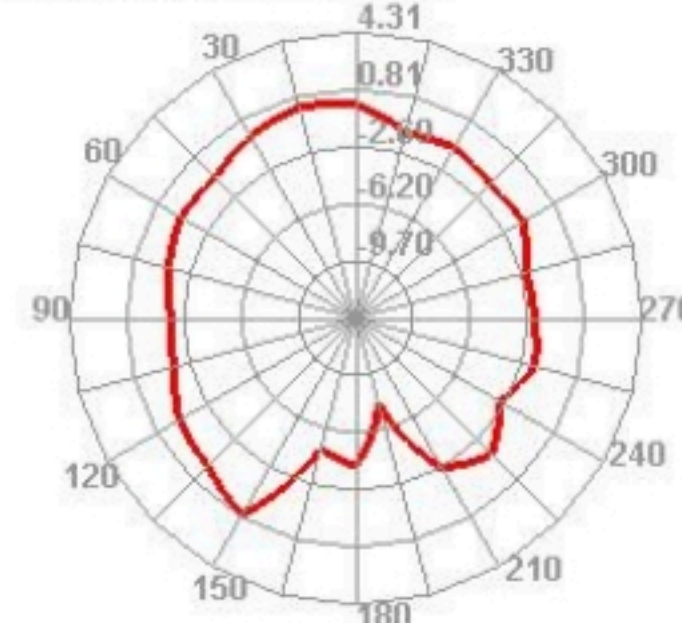
2400.000MHz



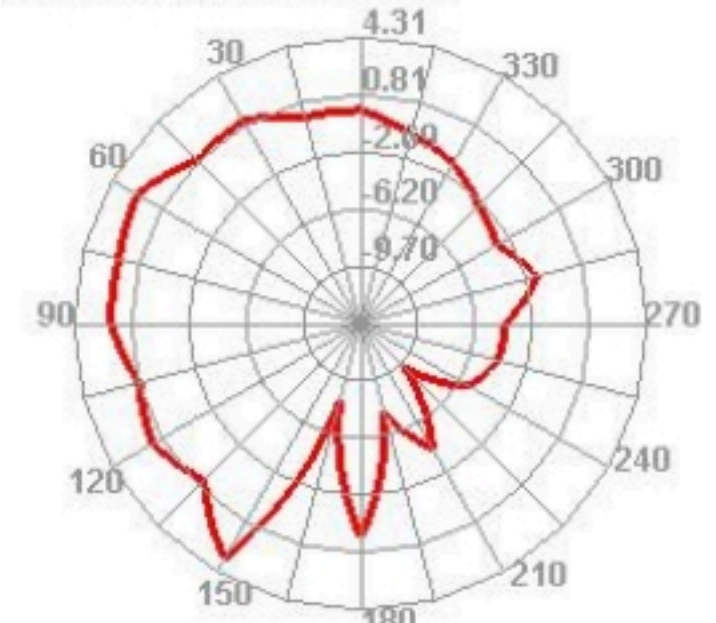
2400.000MHz H



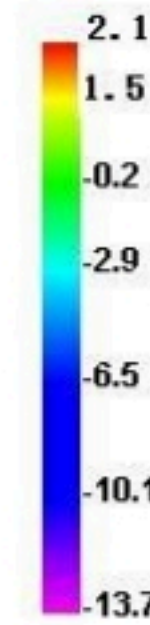
2400.000MHz E1



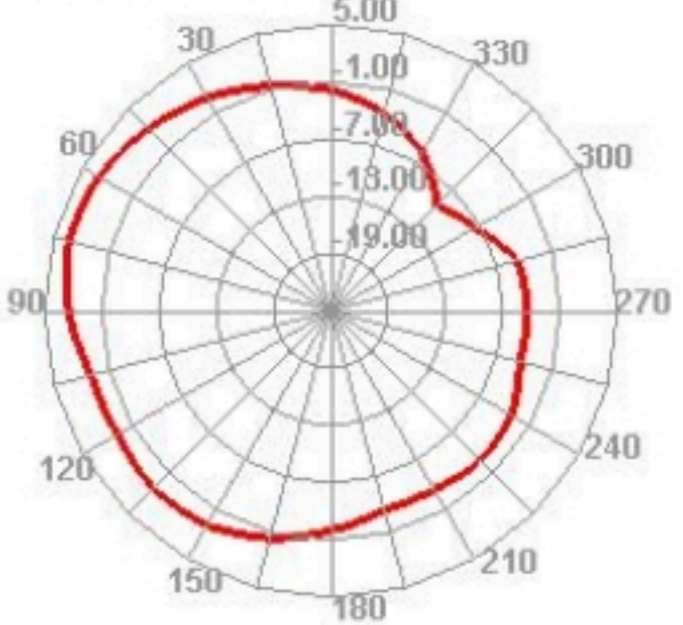
2400.000MHz E2



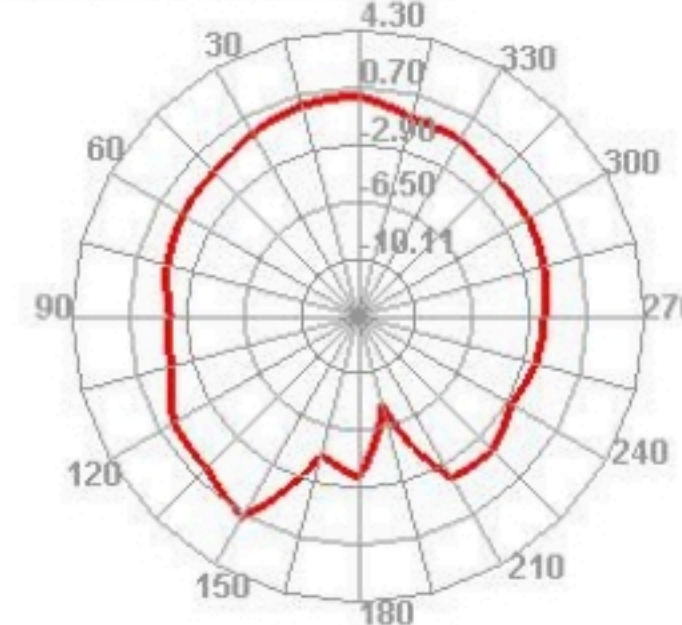
2440.000MHz



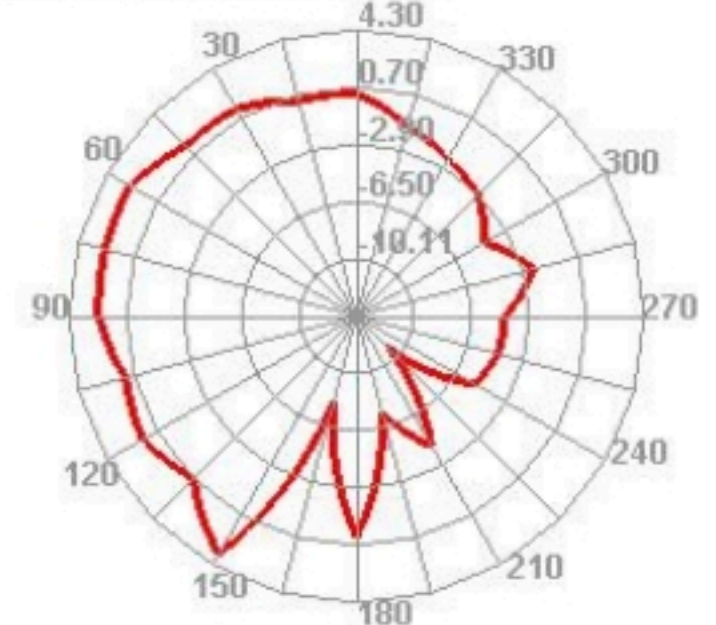
2440.000MHz H



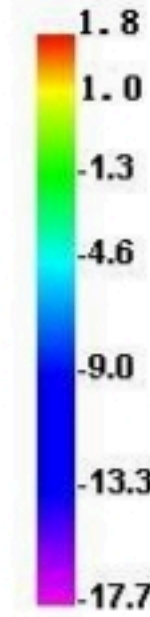
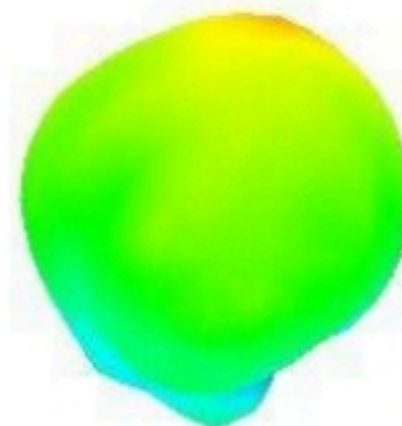
2440.000MHz E1



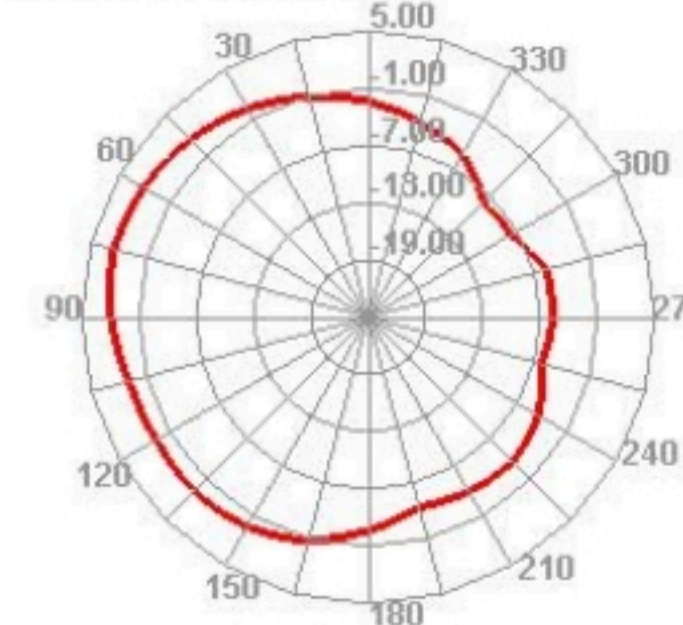
2440.000MHz E2



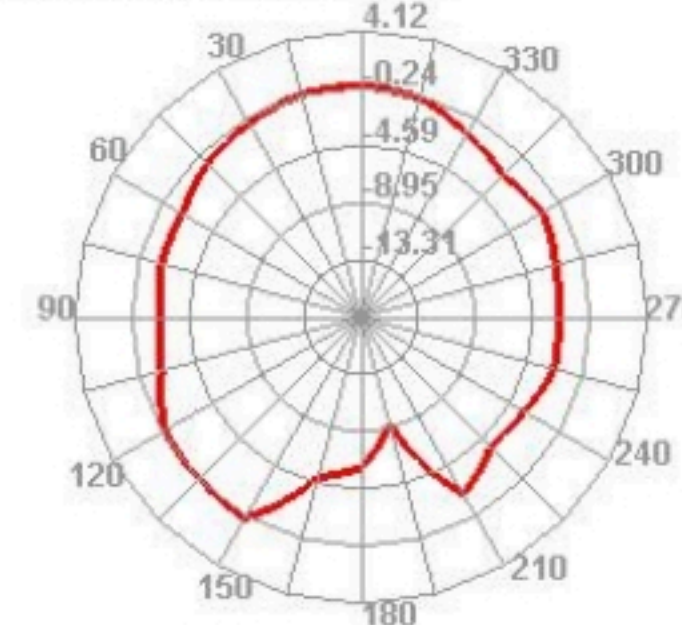
2500.000MHz



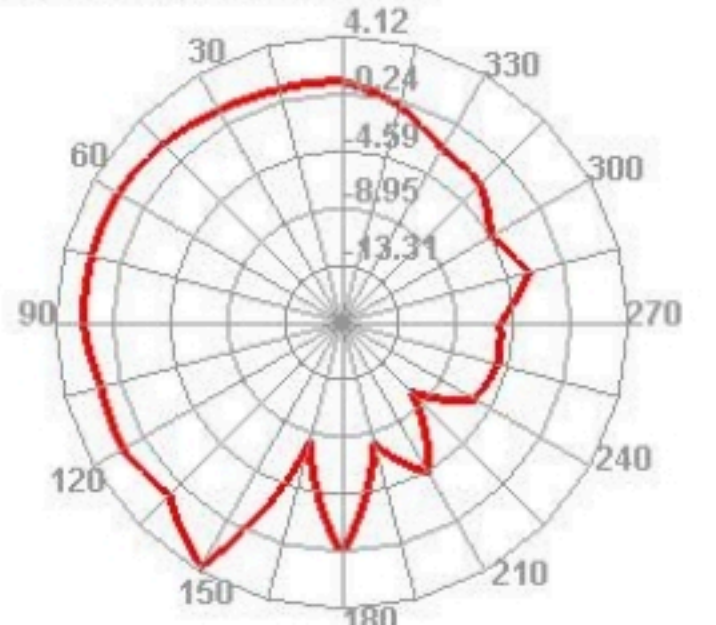
2500.000MHz H



2500.000MHz E1



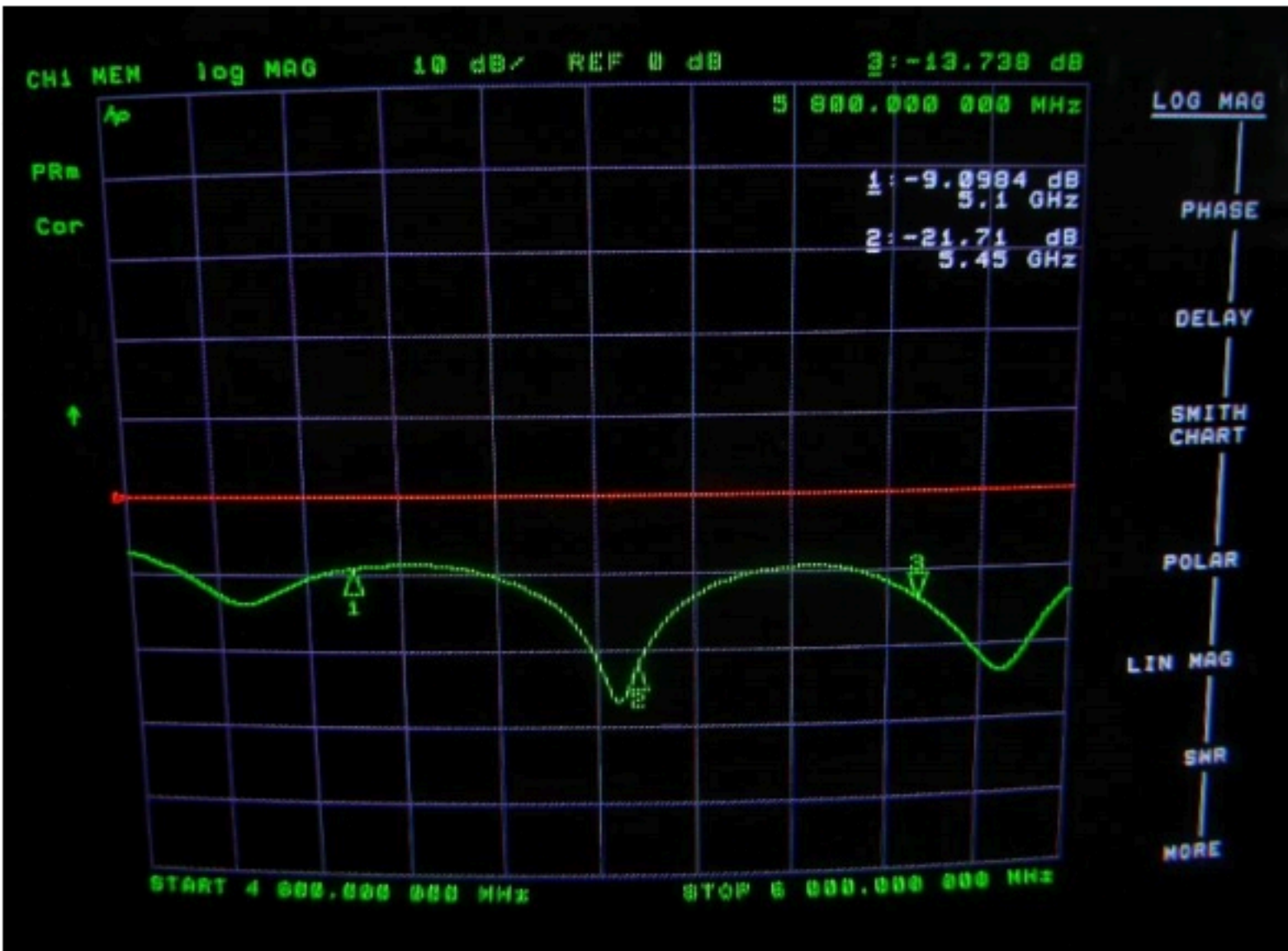
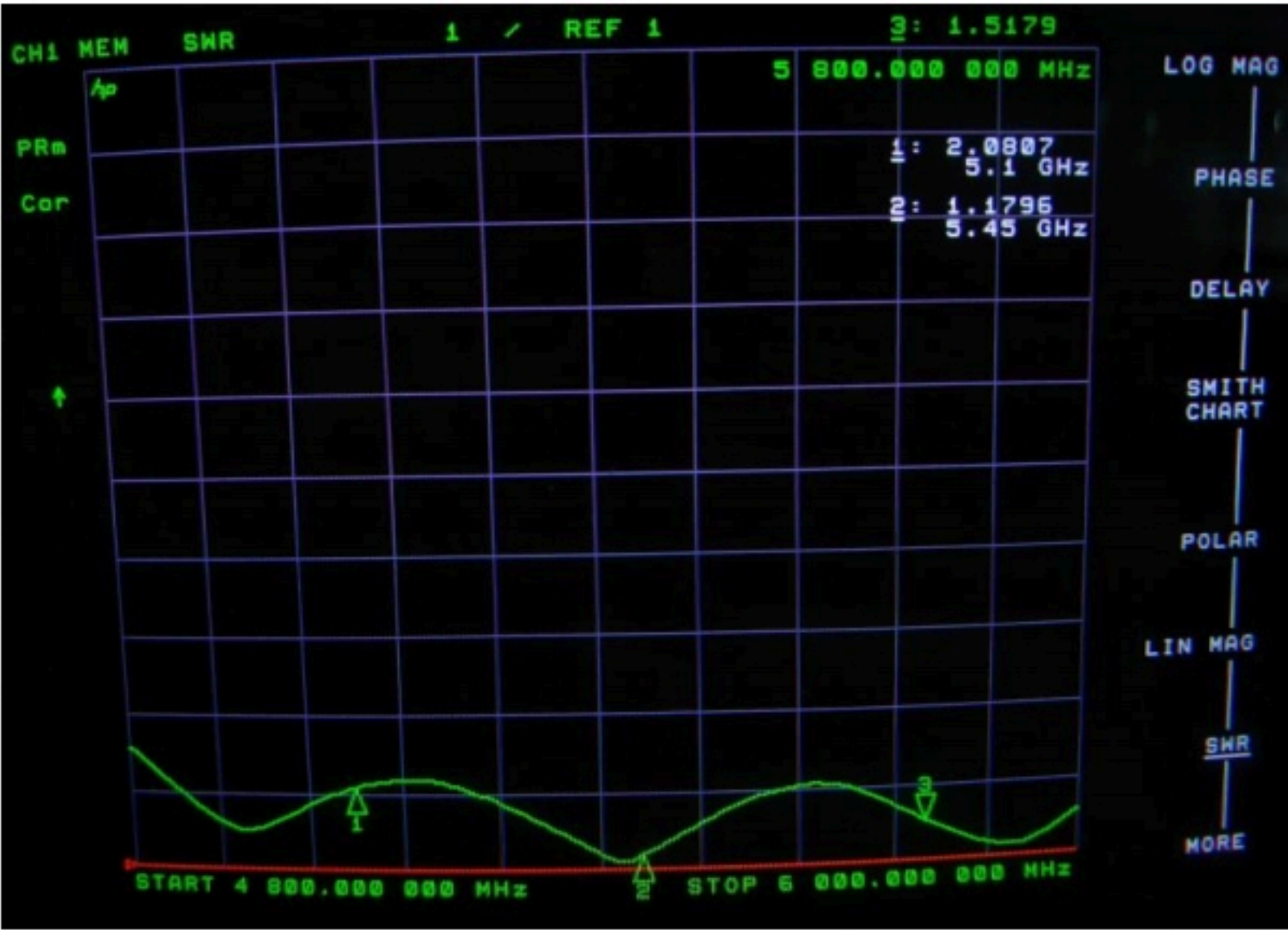
2500.000MHz E2



5g Data

Electrical Properties	
Frequency	5.1GHz-5.9GHz
Impedance	50 ohm Nominal
V. S. W. R	1: 1.17 Max
Return Loss	-21.71dB Max
Radiation	Omni-directional
Polarization	Linear, Vertical

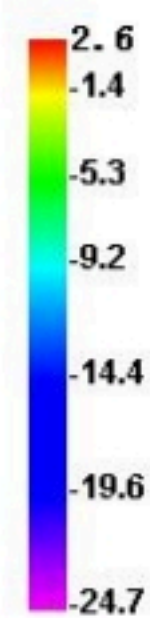
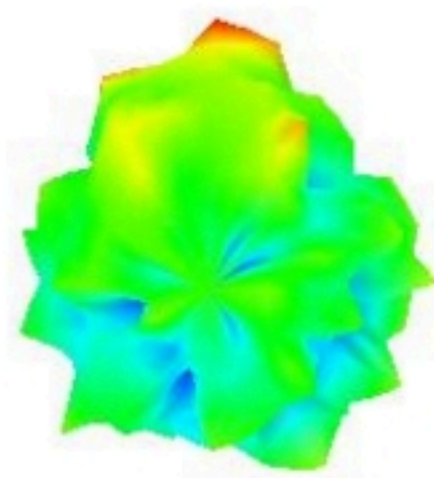
VSWR & Return Loss & Smith Chart :



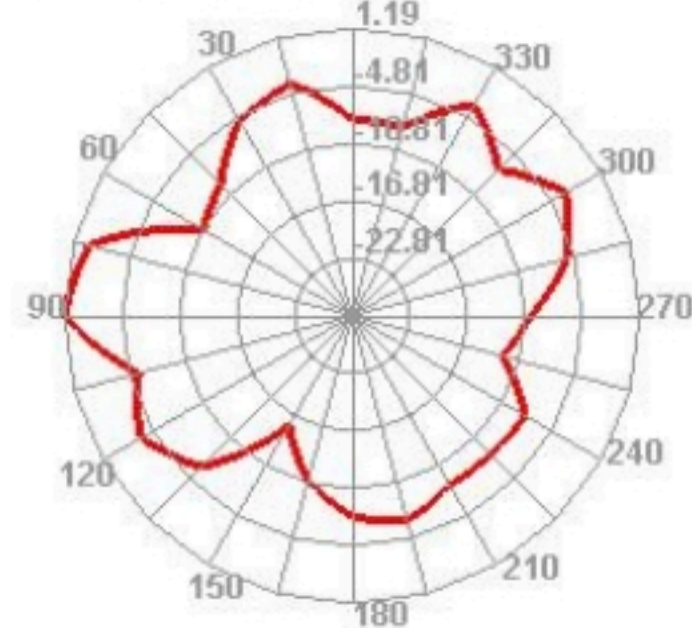
Efficiency, Gain, Directionality:

Passive Test For 5G_wifi						
Freq	Effi	Effi	Gain	Gain	Max	Min
(MHz)	(%%)	(dB)	(dBi)	(dBd)	(dB)	(dB)
5100	58.94	-3.21	2.60	0.45	2.60	-14.28
5500	60.32	-4.36	2.68	0.53	2.68	-15.34
5900	61.52	-4.23	2.51	0.36	2.51	-15.12

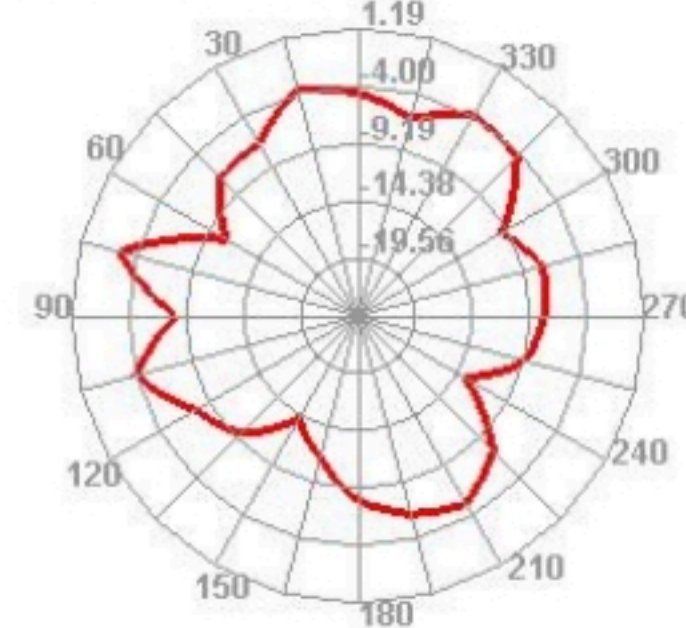
5100.000MHz



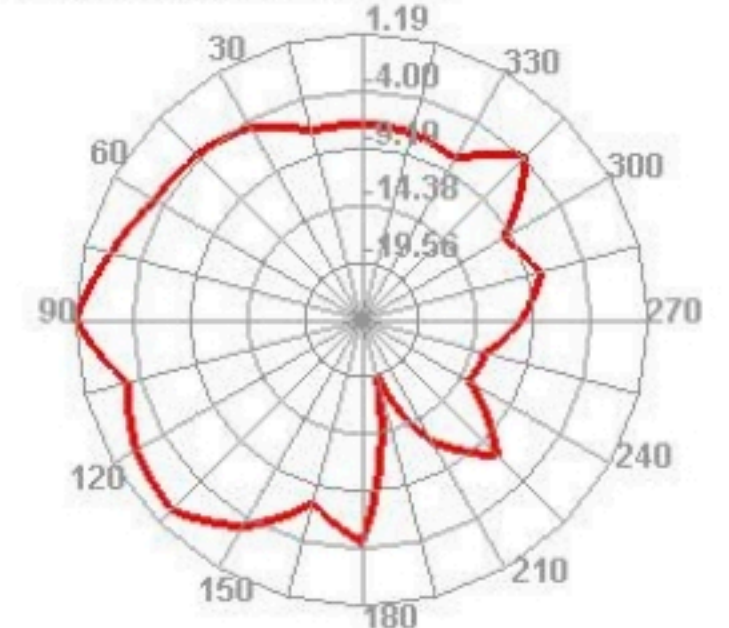
5100.000MHz H



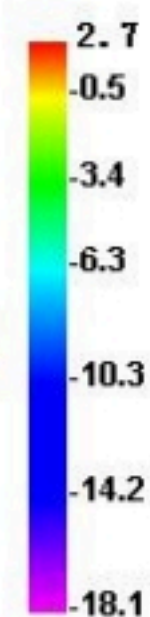
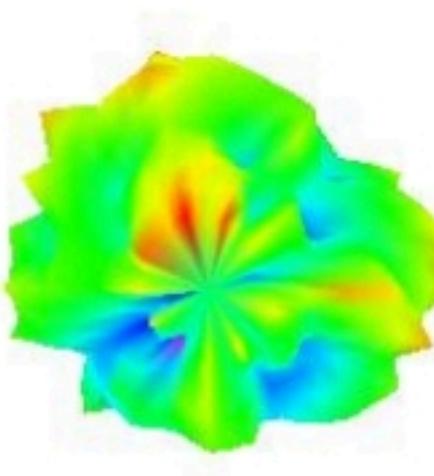
5100.000MHz E1



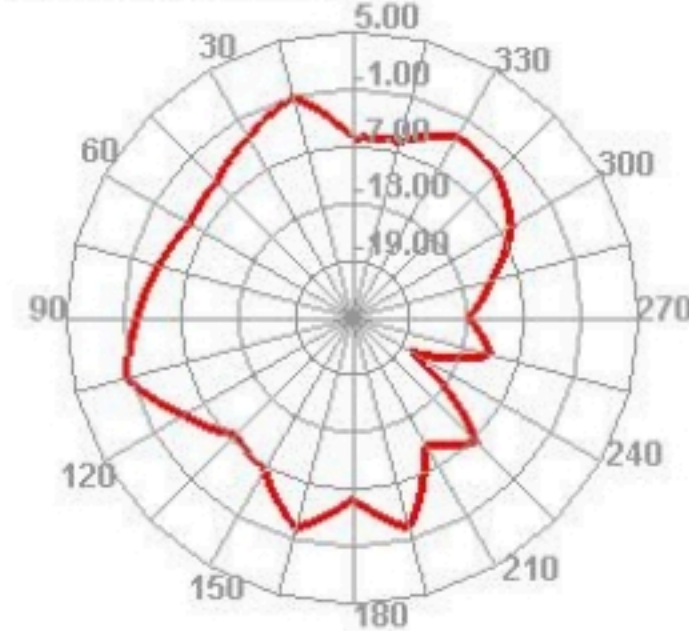
5100.000MHz E2



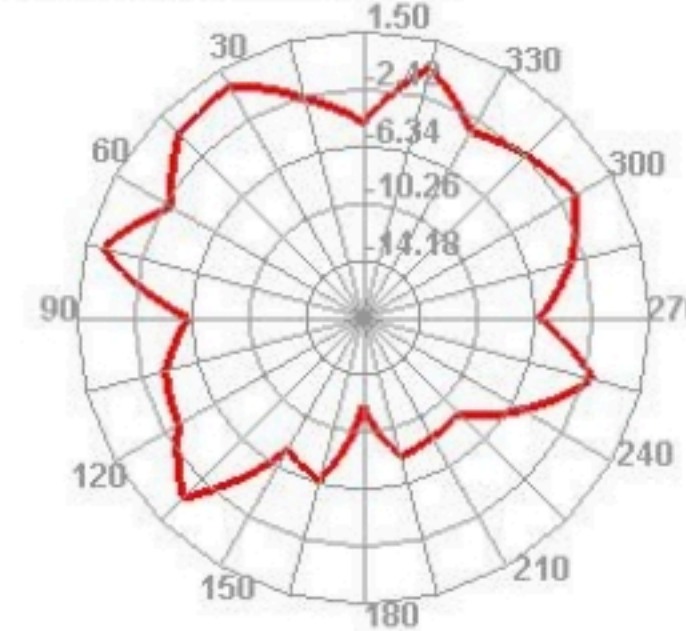
5500.000MHz



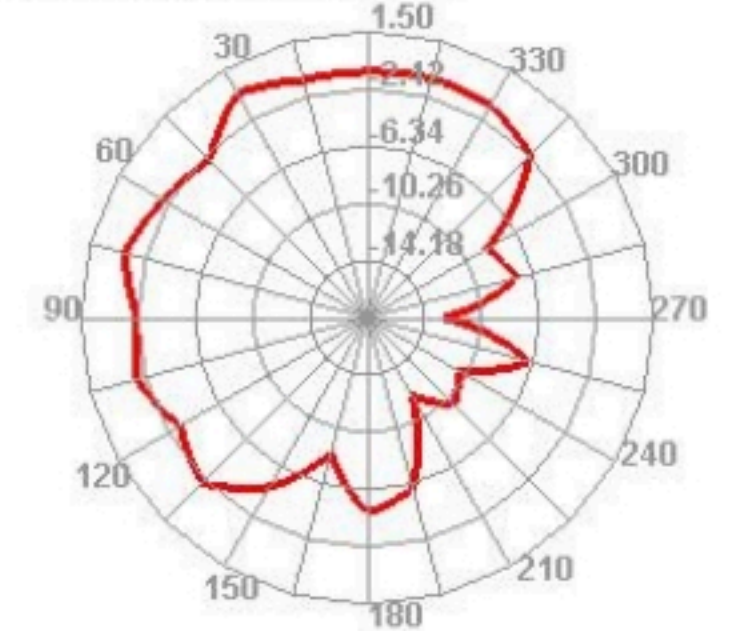
5500.000MHz H



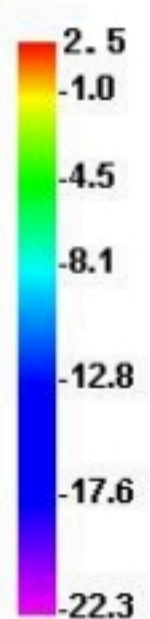
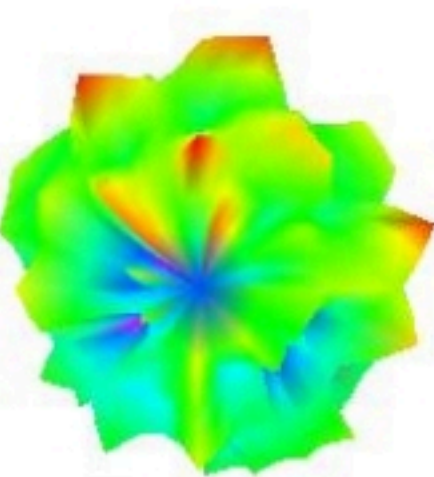
5500.000MHz E1



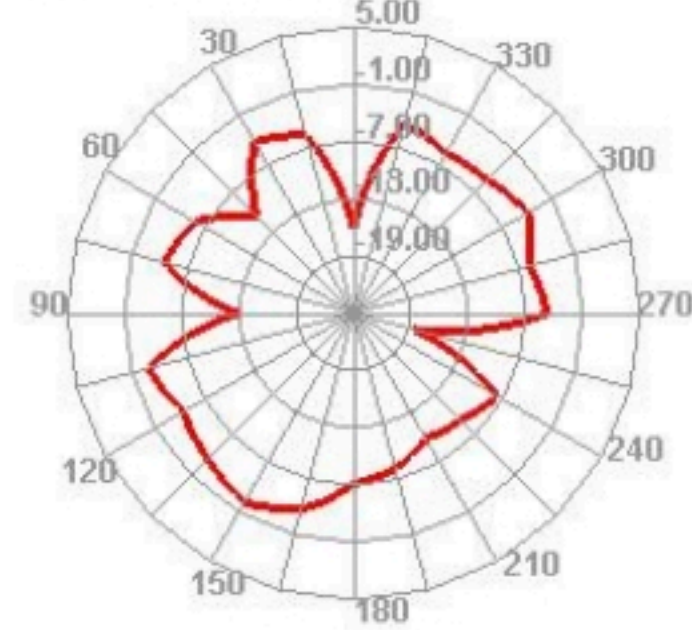
5500.000MHz E2



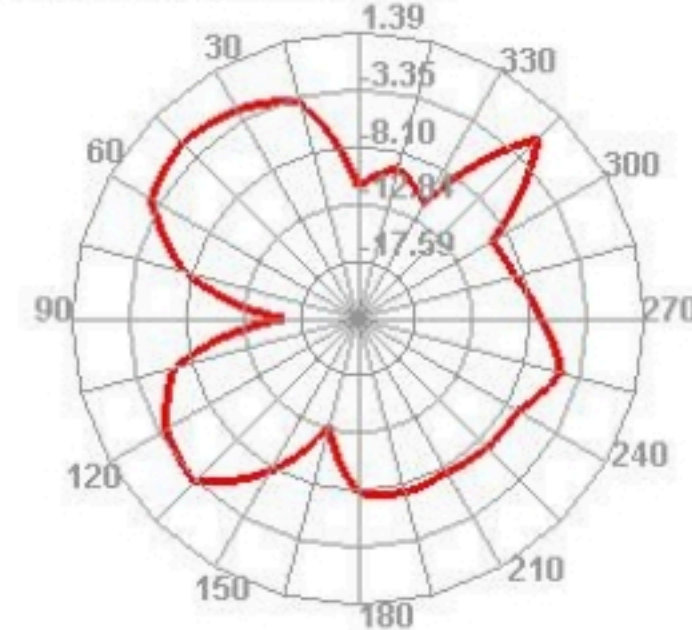
5900.000MHz



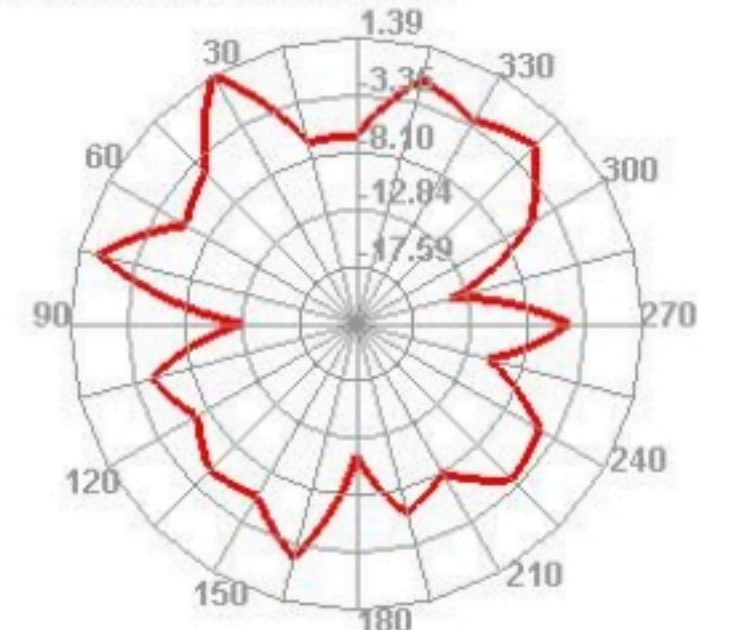
5900.000MHz H



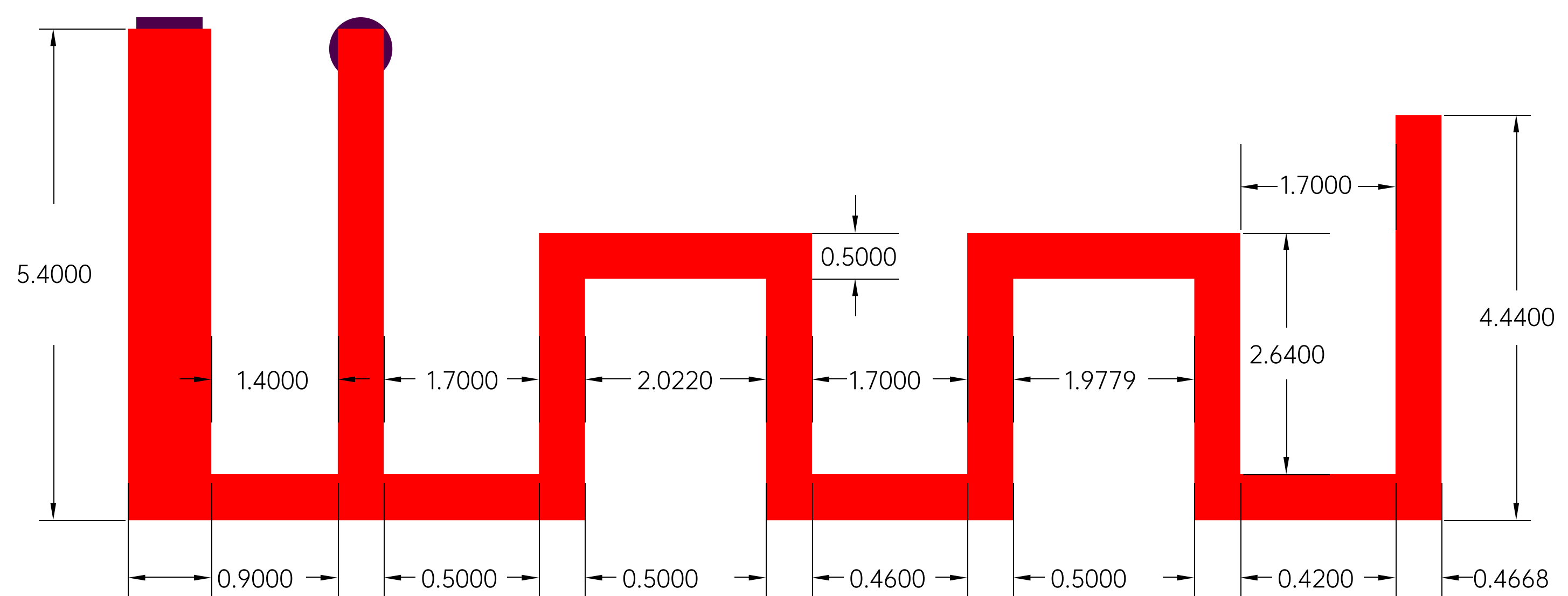
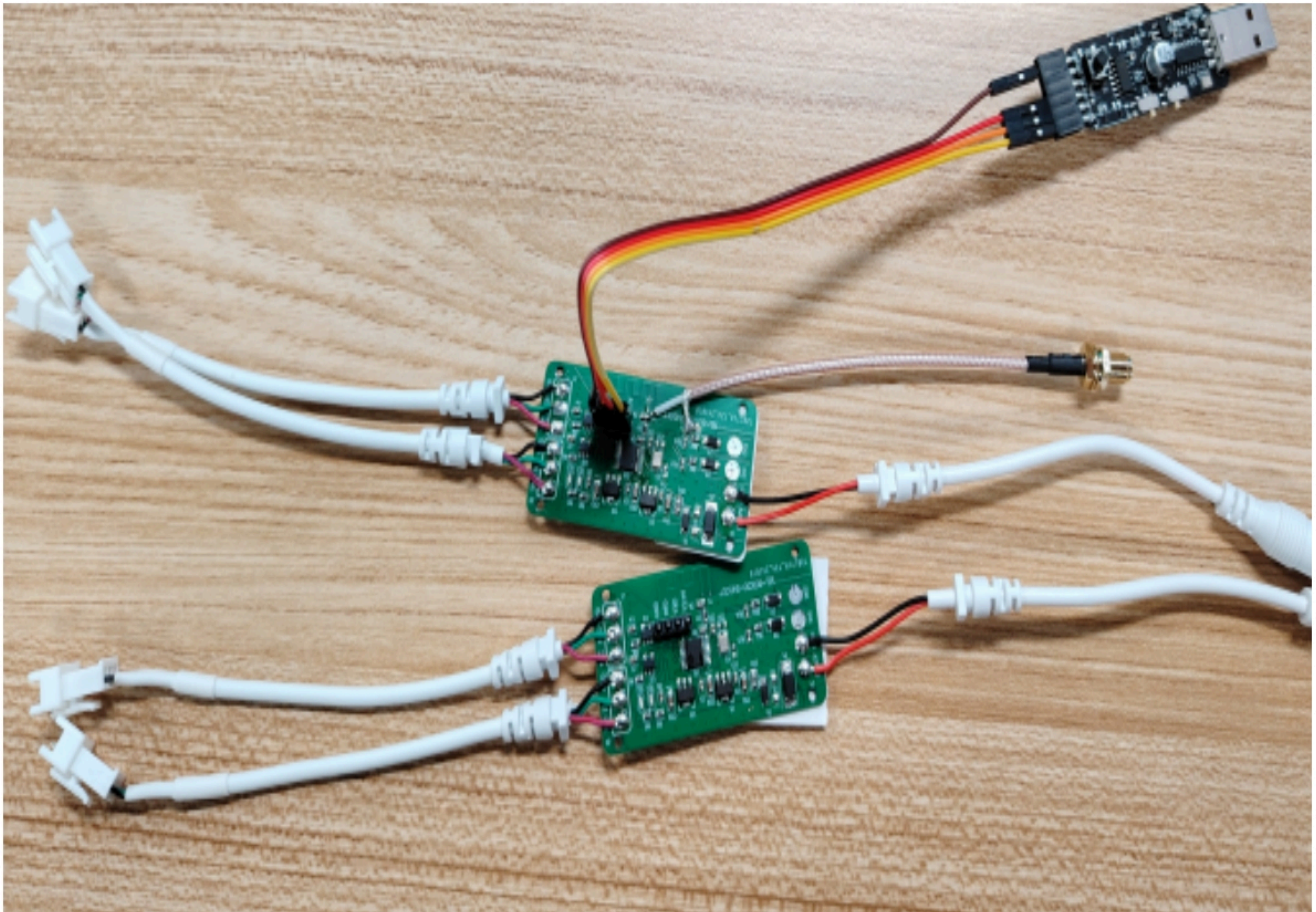
5900.000MHz E1



5900.000MHz E2



4. Antenna Position



5. Antenna Structure

No.	Date	Reason	Confirmer
A			
B			
C			

Dongguan Haohai Electronic Communication Co., ltd				
Part Name	Adapter Cable	Product Name	Adapter Cable	
Part Number	2305-20151230	Product Part Number	2305-20151230.dwg	
Zoom Scale		Mm		
Approver	Reviewer	Cartographer	Dimensional Tolerance X _s ±0.5 X _x ±0.1 X _{.xx} ±0.05 X° ±1°	Rev. A
		Wang Haiyu 2015.12.30		

4	SMA Male Pin	Cu	180° MALE	1
3	Shrink Tu	Heat shrinkable casing	3.5*15mm	2
2	Cable	RG316 All Copper	Φ2.5 L=150mm	1
1	SMA Female	Cu Au plated	180° FEMALE	1
No.	Part Number	Name	Material	Q'ty