

2L5R Test Report

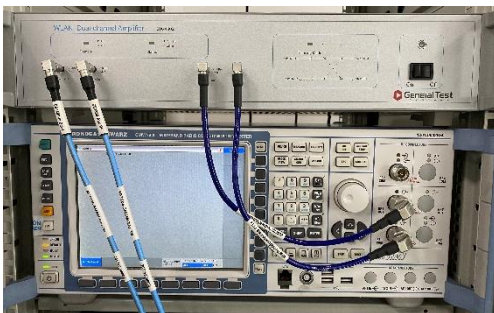
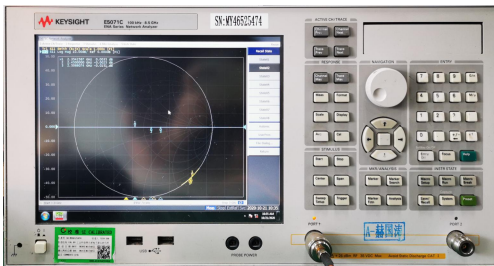
Customer name:	GNT
Product type:	BLuetooth
Email:	gqzhu@unictron.com
Engineer:	Joy
Data:	2023/04/26

- Test conditions
- Matching circuit
- S11
- Passive efficiency of antenna
- 3D Radiation Gain @2450MHz
- OTA Data

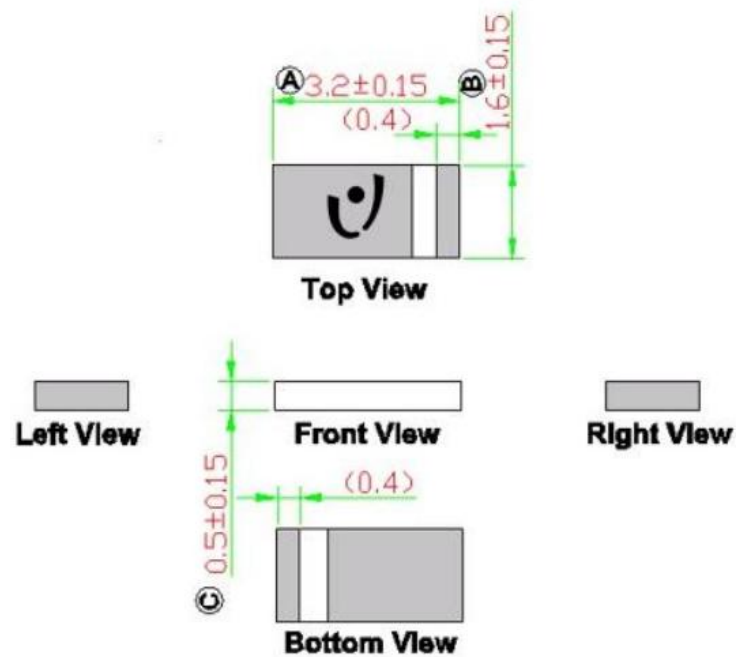
Test conditions

Test items	Test equipment	
S11	E5062A	Agilent
Passive efficiency	E5071C/RayZone 1800	Keysight/GTS
OTA	CMW500/RayZone 1800	R&S/GTS

Antenna Type: Ceramic Antenna



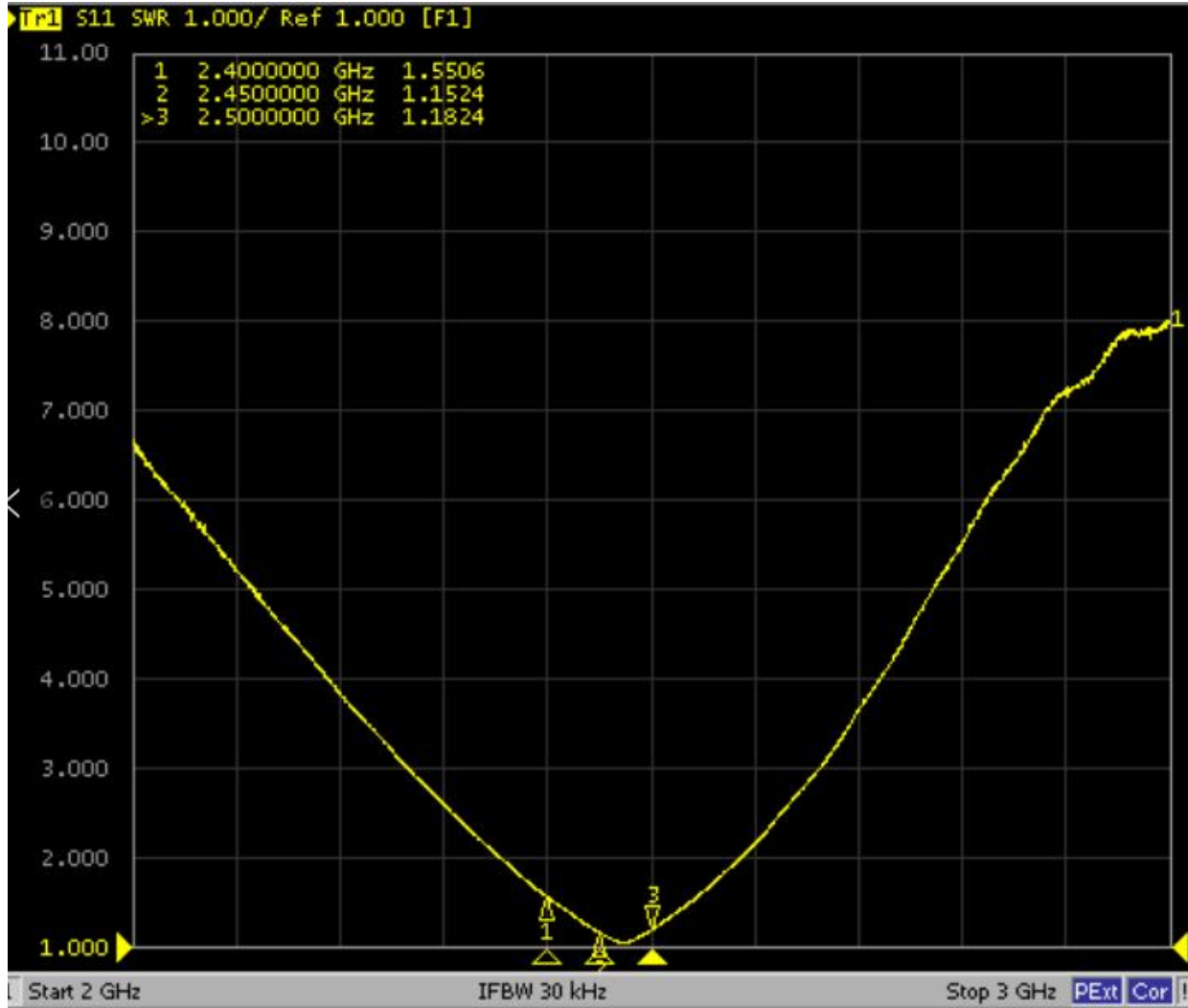
Antenna size



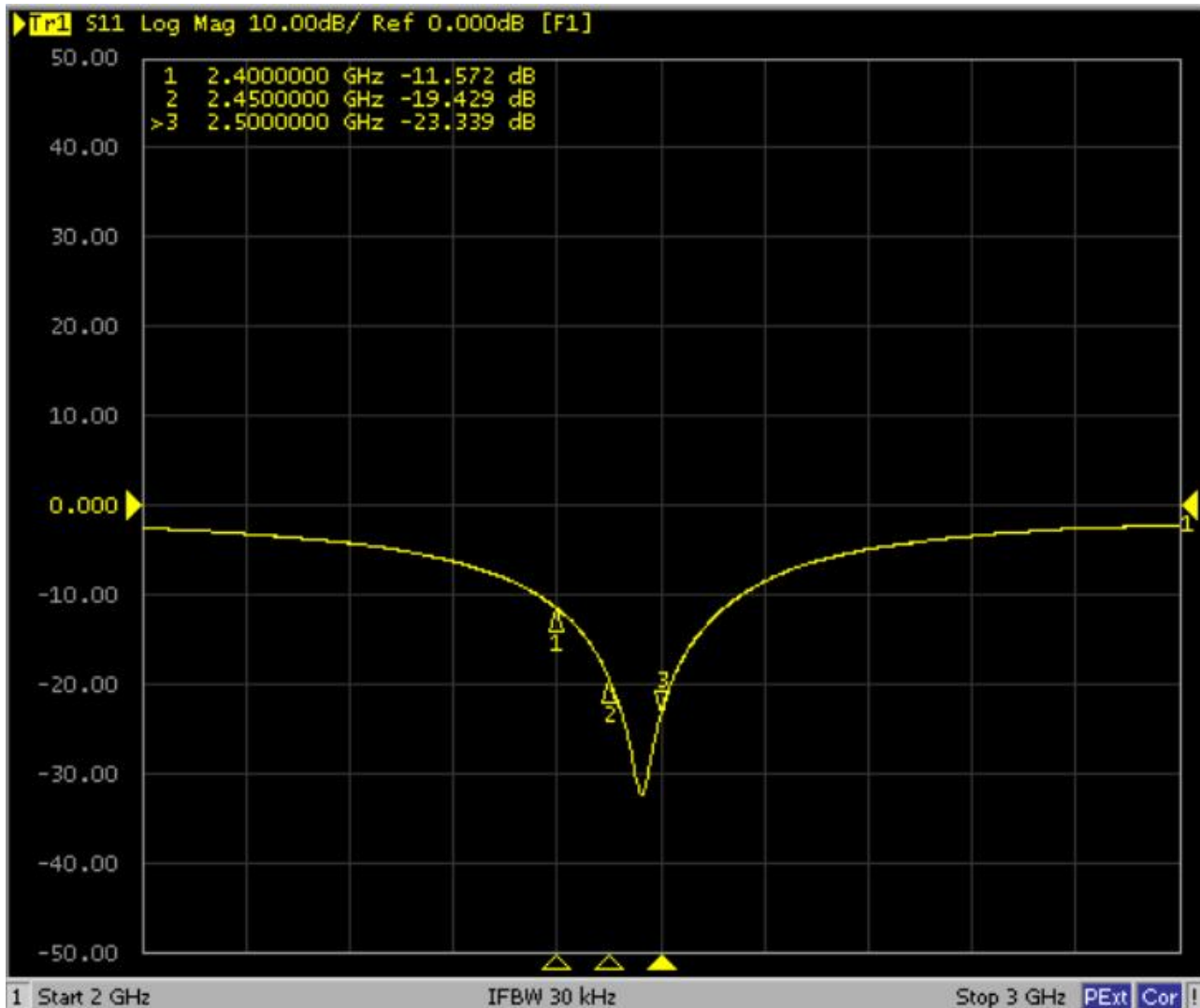
NOTE:
 1. All materials are RoHS 2.0 compliant.
 2. "A~C" Critical Dimensions.
 3. "()" Reference Dimensions.

PIN Definition

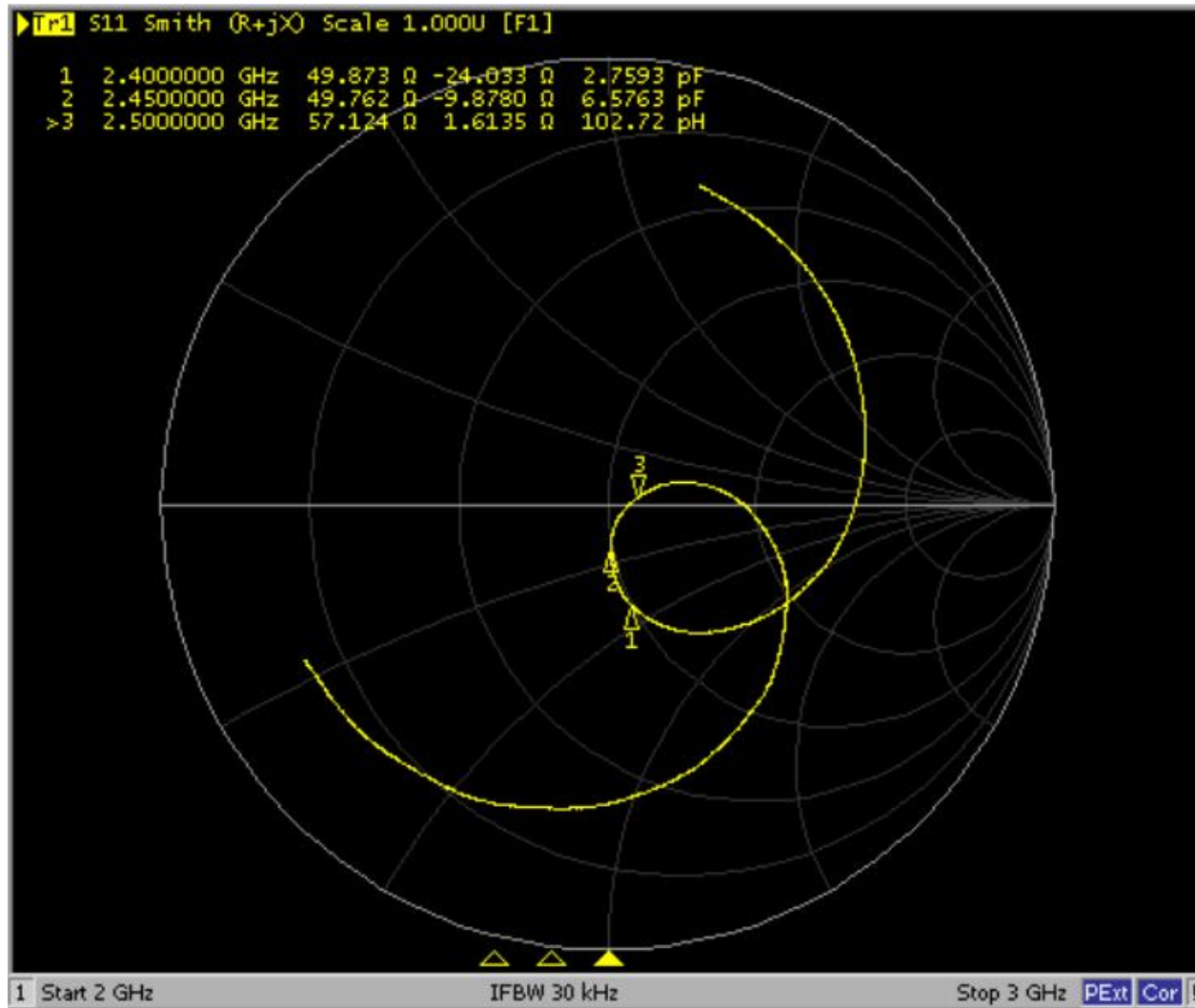
S11-VSWR



S11-Return Loss

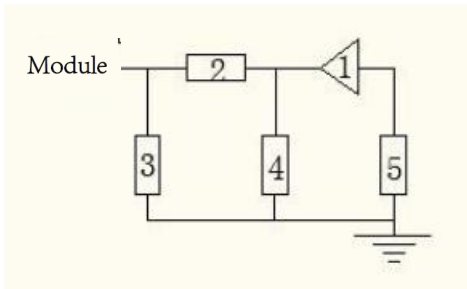


S11-Smith Chart



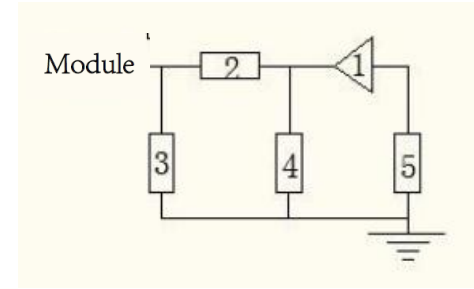
Matching circuit

L



No.	item
1	AA055U
2	$R=0\ \Omega$
3	$C=2.4\text{PF}$
4	NC
5	$C=1.2\text{PF}$

R

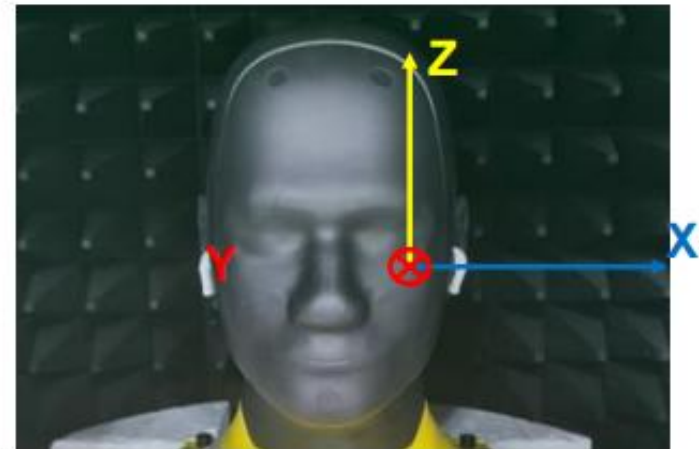
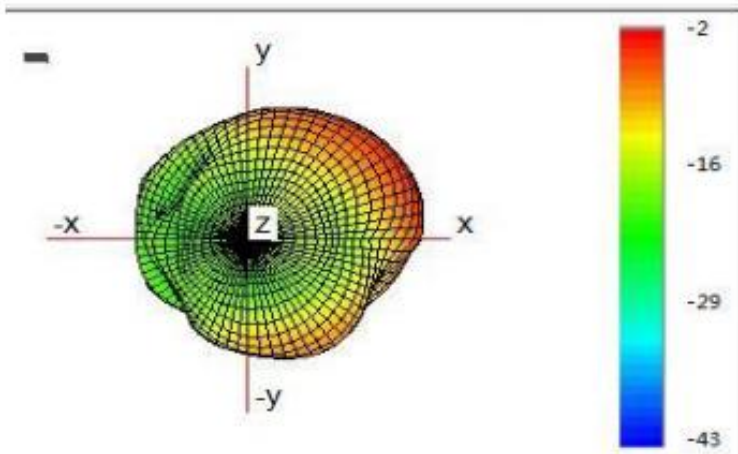
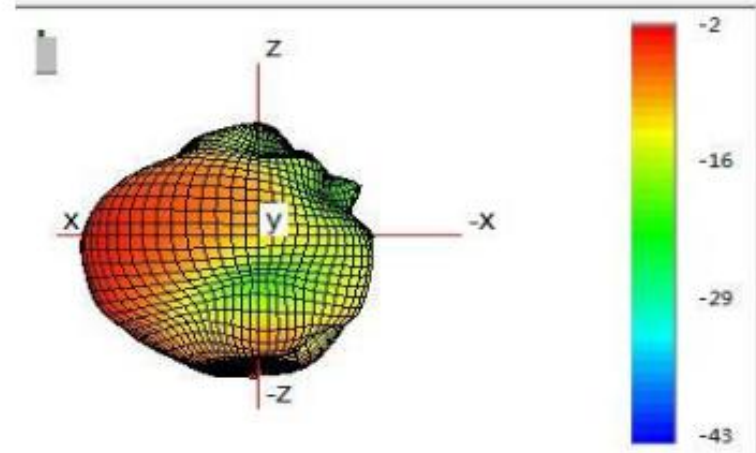
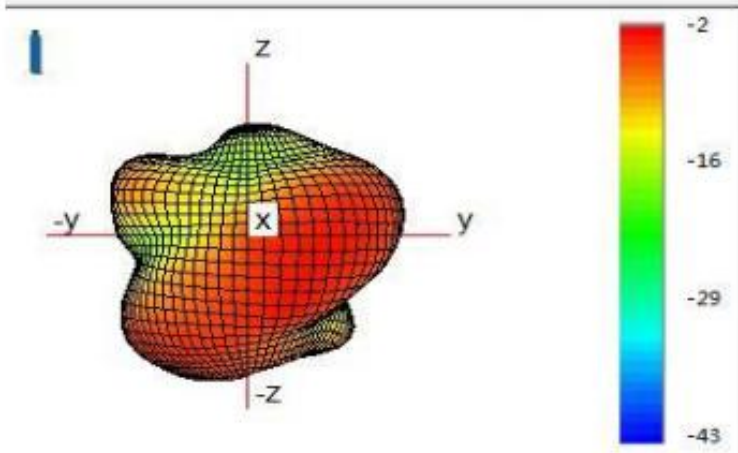


No.	item
1	AA055U
2	$C=10\text{PF}$
3	NC
4	$C=2.4\text{PF}$
5	$C=1.5\text{PF}$

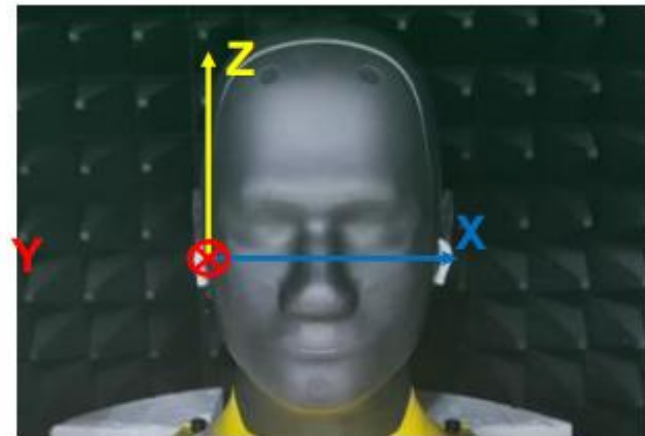
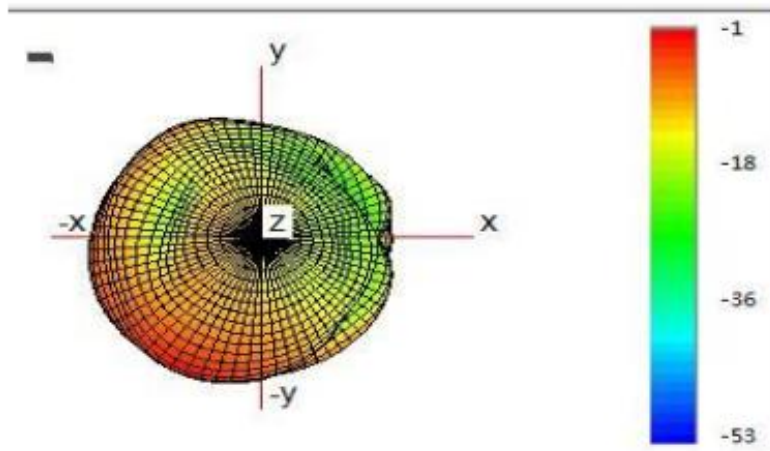
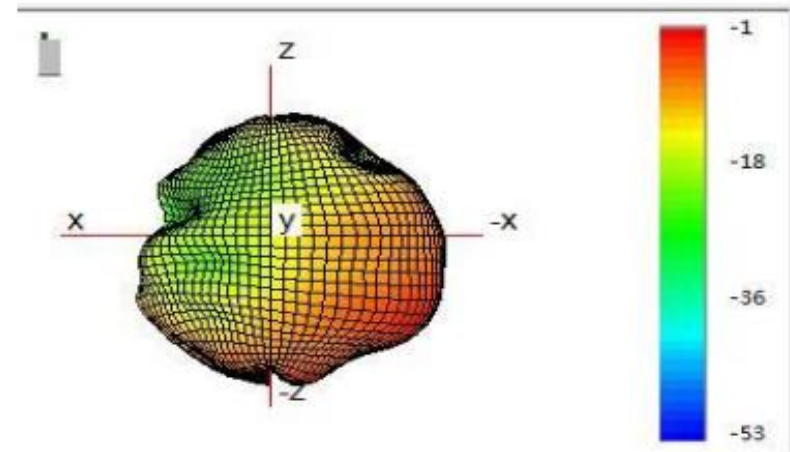
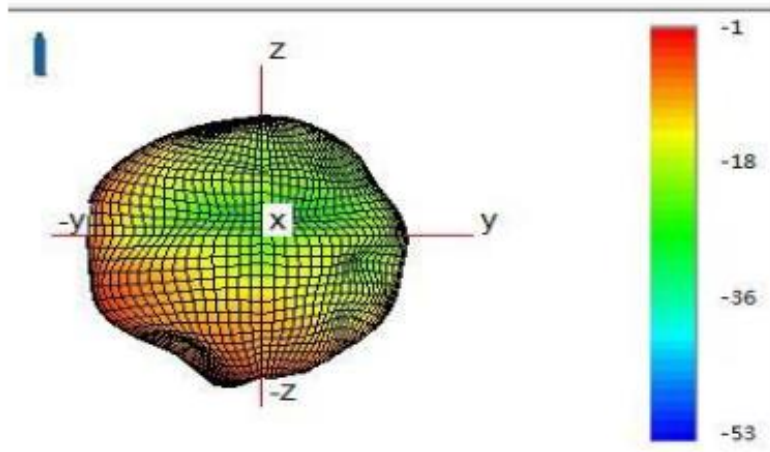
Passive efficiency of antenna

Freq(MHz)	L			R		
	Gain(dB)	Efficiency(dB)	Efficiency(%)	Gain(dB)	Efficiency(dB)	Efficiency(%)
2400	-2.56	-9.65	10.85	-1.66	-8.13	15.37
2410	-2.50	-9.57	11.04	-1.43	-7.99	15.87
2420	-2.53	-9.61	10.93	-1.32	-7.99	15.89
2430	-2.52	-9.66	10.80	-1.34	-8.03	15.76
2440	-2.65	-9.77	10.54	-1.31	-8.09	15.52
2450	-2.85	-9.97	10.08	-1.42	-8.27	14.91
2460	-3.12	-10.20	9.56	-1.62	-8.45	14.30
2470	-3.38	-10.46	9.00	-1.79	-8.71	13.46
2480	-3.68	-10.70	8.51	-1.99	-8.97	12.68
2490	-4.03	-10.99	7.96	-2.23	-9.24	11.92
2500	-4.38	-11.30	7.41	-2.58	-9.59	10.99

3D Radiation Gain @2450MHz-L Side



3D Radiation Gain @2450MHz-R Side



Thanks for Your Attention