



Dongguan RF Electronic Technology Co., Ltd

Tel:0769-38940168 Fax:0769-39010966 Website:http://rflink.net.cn

Address: No. 1, Sankeng Industrial Zone, Qinghutou, Tangxia Town, Dongguan City

Acknowledgment Letter

CUSTOMER NAME:

Yanji

PRODUCT NAME:

2.4G hardware parts

CUSTOMER P/N:

Ren Feng

P/N:

U00T03S000N03849 REV:A

Internal structure:

National invention patent No

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Ye Haodong	
AUDITOR BY:	Song Jun	
APPROVED BY:	Yao Dingjun	
DATE:	2023-07-19	



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II. Updating Resume

Version	Date	Change Record
A	2023-07-19	First edition release

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Dongguan RF Electronic Technology Co., Ltd

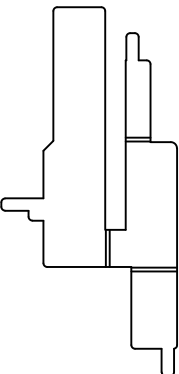
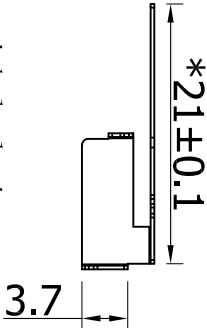
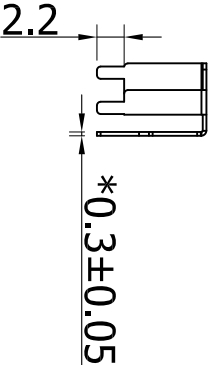
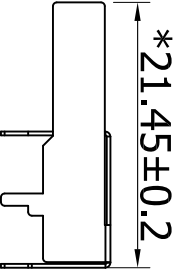
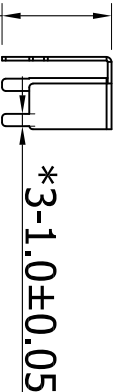
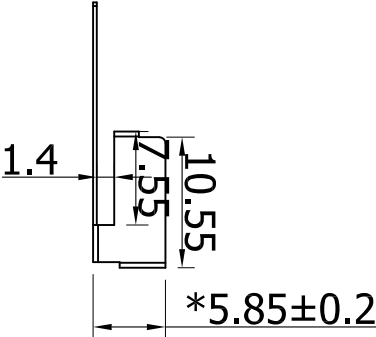
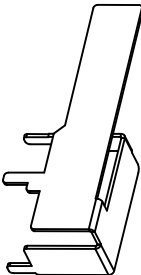
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Main technical specifications

Main technical specifications	
Frequency Range (MHZ)	2400-2500
Impedance(a)	50
Gain(dBi)	3 ± 0.5
Return Loss(dB)	≤ -10.88
VSWR	≤ 1.8
Polarization	Vertical polarization
Radiation	Omnidirectivity
Connector Type	/
Physical Properties	
Antenna Base	Stainless steel
Operating Temp	-20℃~+70℃
Storage Temp	-20℃~+70℃

F		G	
REV	DATE	DESCRIPTION	
A	2023-09-26	NEW ISSUE	



- Note:
1. Material: Stainless steel 304 with solderable nickel plating.
 2. The material must comply with the ROHS requirements and needs to be cleaned.
 3. Plate thickness: 0.3mm.
 4. The product should not deform.
 5. The surface should not have oil stains, black spots, burrs, or other defects.
 6. The dimensions marked with * are key controlled dimensions.
 7. The product needs to pass a salt spray test for 48 hours.

Sheet metal layout drawing

6			
1	Hardware components	1	Stainless steel 304 with weldable nickel coating
NO.	DESCRIPTION	QTY	REMARK
The tolerance dimension is the inspection dimension. The product complies with the environmental protection RoHS 2.0 requirements.			

APPROVED		COSTOMER:			
		PART NO :			
CHECKED		PARTNAME : RF Antenna Assembly			
		R.F P/NO : U00T03S000N03849			
DRAWING		REV	UNIT	SCALE	SIZE
		A	mm	1:1	A4
					SHEET
					10F1

RF link
RenFeng Electronic
technology Co., LTD.



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V. ROHS/Component List:

Compliant with RoHS requirements.

Component Number	Component Name	Main material	Quantity	unit	Manufacturer	UL	Note
1	Hardware components	Stainless steel with nickel plating	1	pc	Yuxinda	/	

I. Project Information

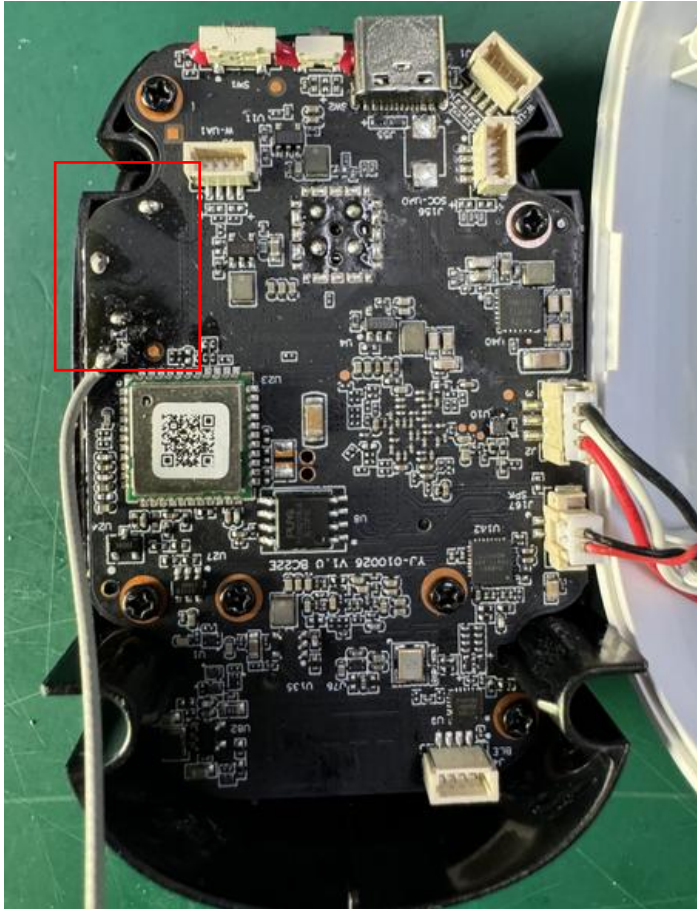
◆ Project information



I. Project Information

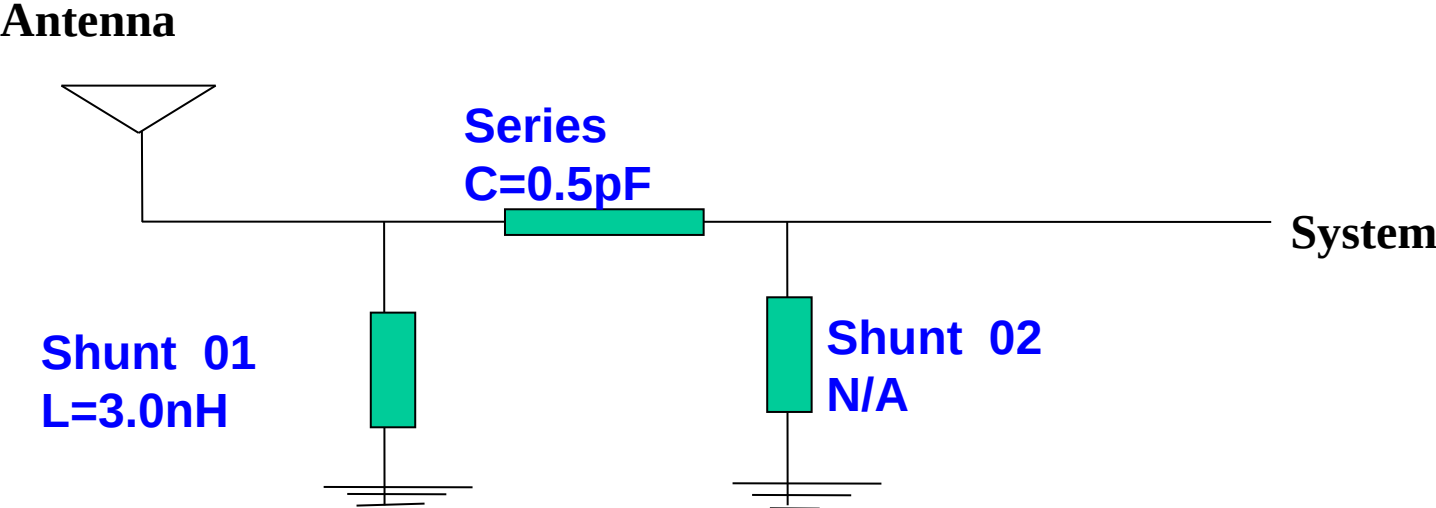
◆ Project information

ANT



And a 3.0nH inductor
Series a 0.5pF capacitor

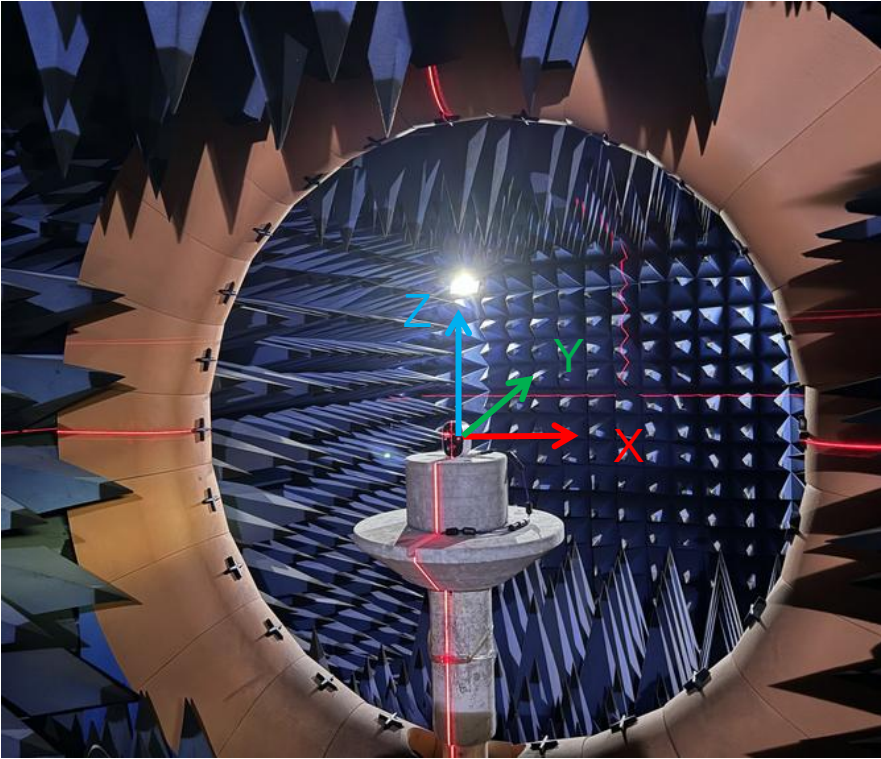
I. Project Information



Location	Description	Vendor
Shunt 01	L=3.0nH	Murata
Series	C=0.5pF	Murata
Shunt 02	N/A	N/A

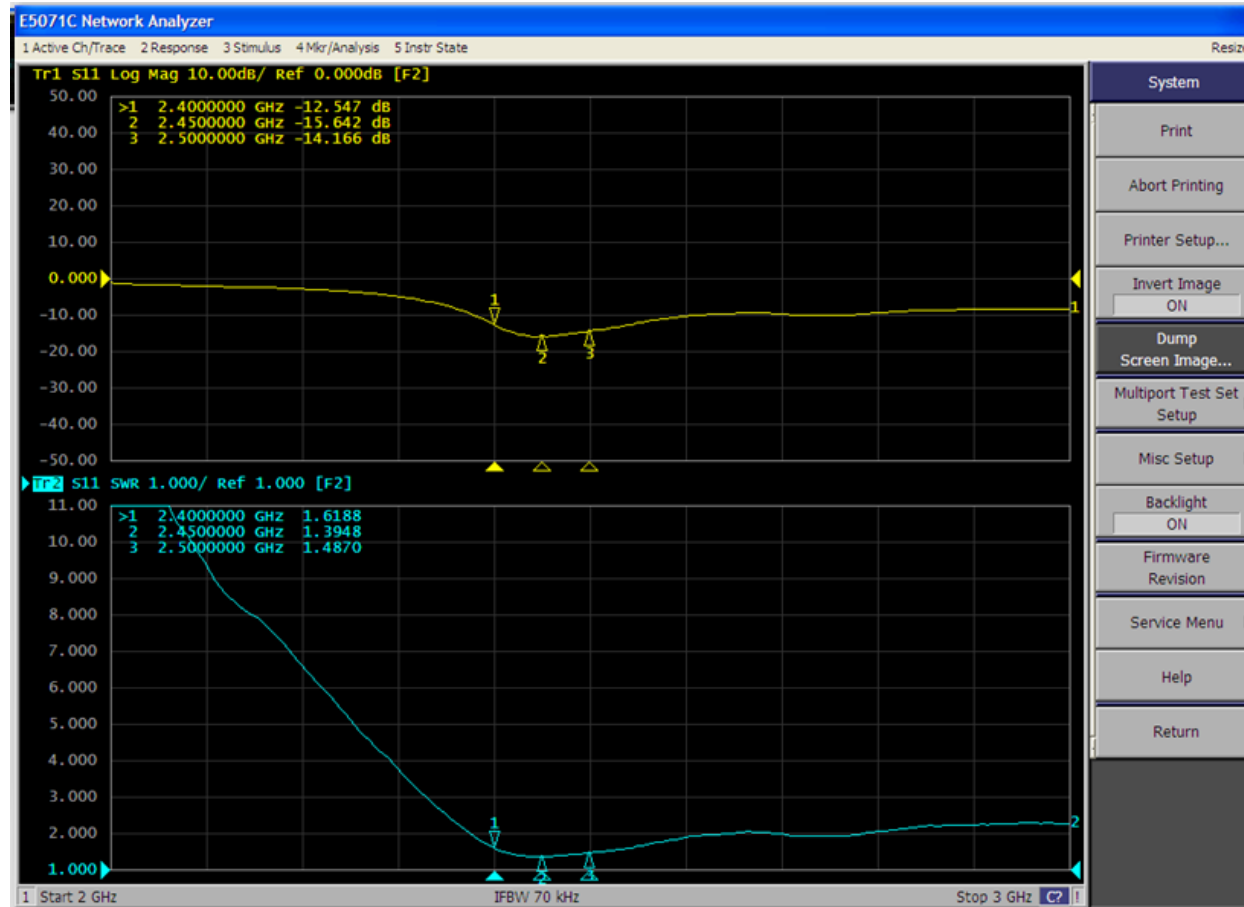
I. Project Information

◆ Project information



II. Passive Report

◆ Reflection parameters S11----ANT1



II. Passive Report

◆ Radiation Parameter Table

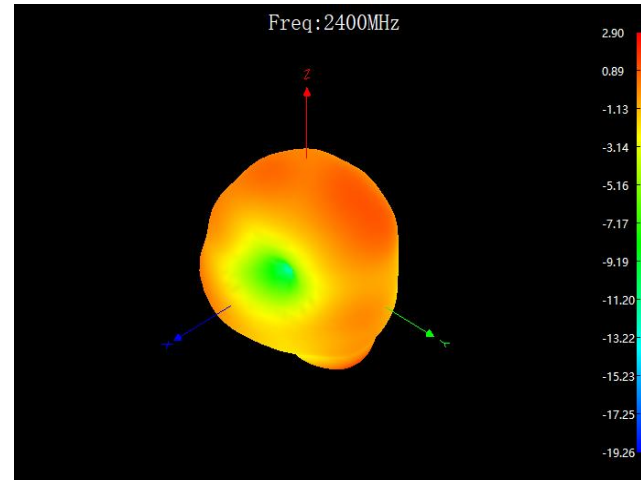
ANT1		
Frequency/ MHz	Efficiency/ %	Gain/ dBi
2400	59.7	2.9
2410	60.26	3.02
2420	61.38	3.15
2430	61.66	3.18
2440	62.95	3.31
2450	63.97	3.35
2460	63.39	3.38
2470	63.1	3.54
2480	63.53	3.64
2490	64.27	3.9
2500	63.97	4.03

II. Passive Report

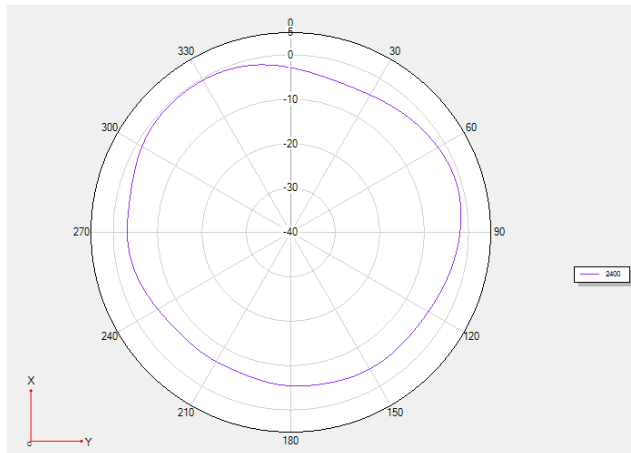
◆ Radiation pattern

ANT-2400MHz

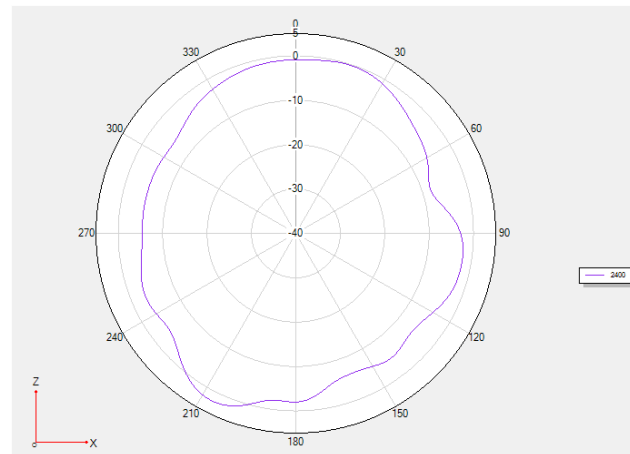
3D Directional pattern



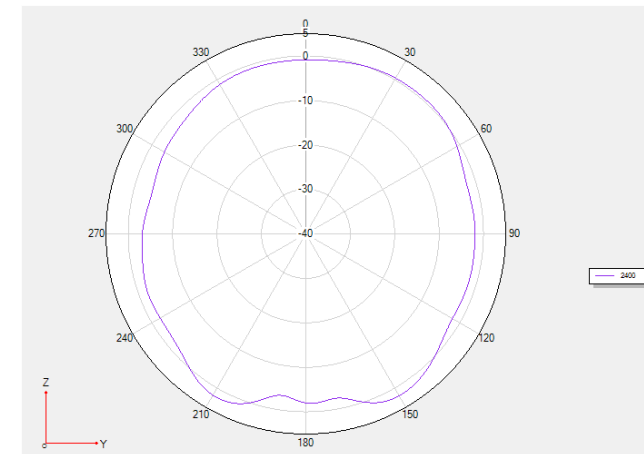
H face - THET = 90



E1 plane - PHI = 0



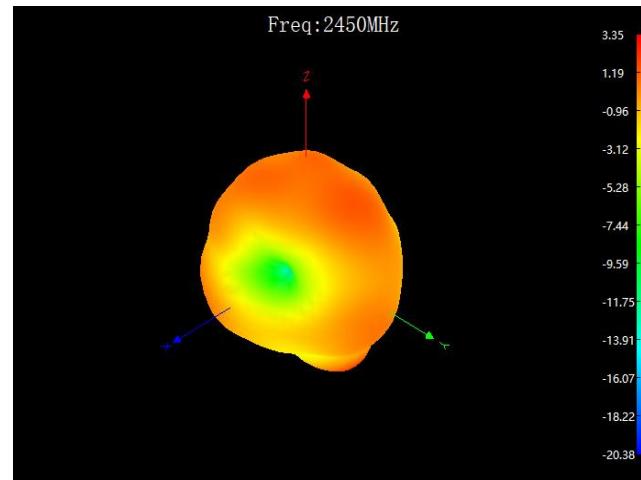
E2 plane - PHI = 90



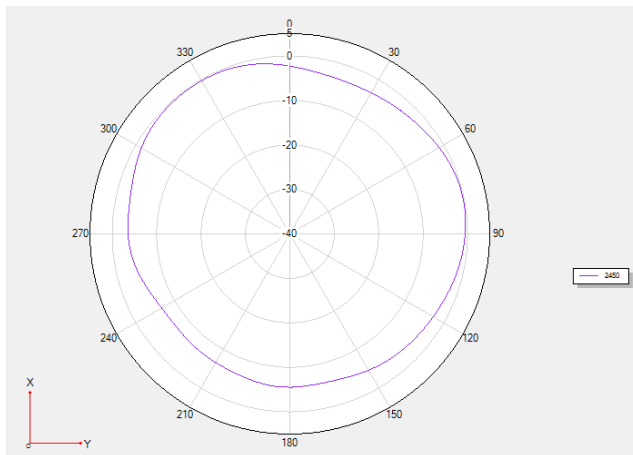
II. Passive Report

◆ Radiation pattern ANT-2450MHz

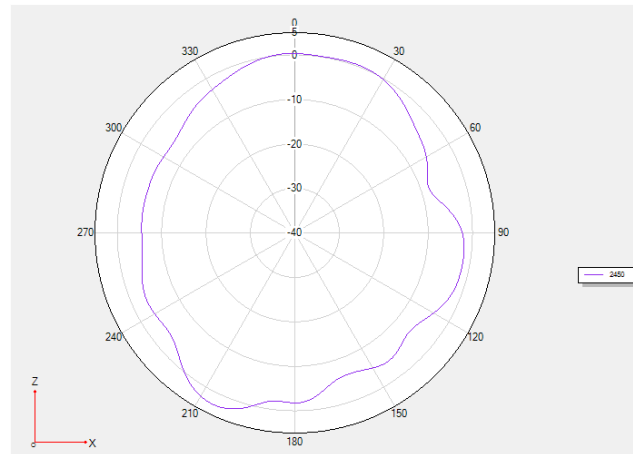
3D Directional pattern



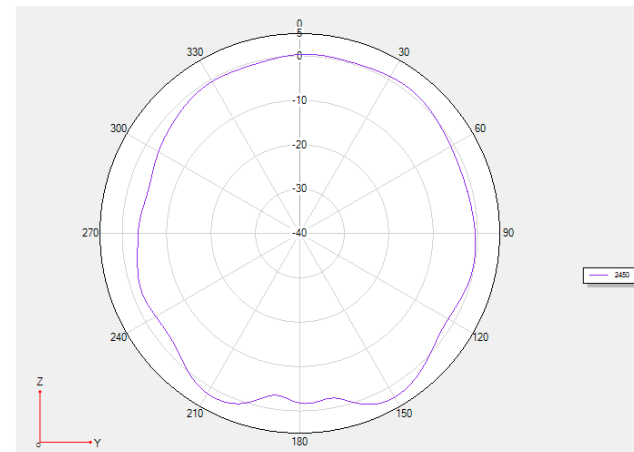
H face - THET = 90



E1 plane - PHI = 0



E2 plane - PHI = 90

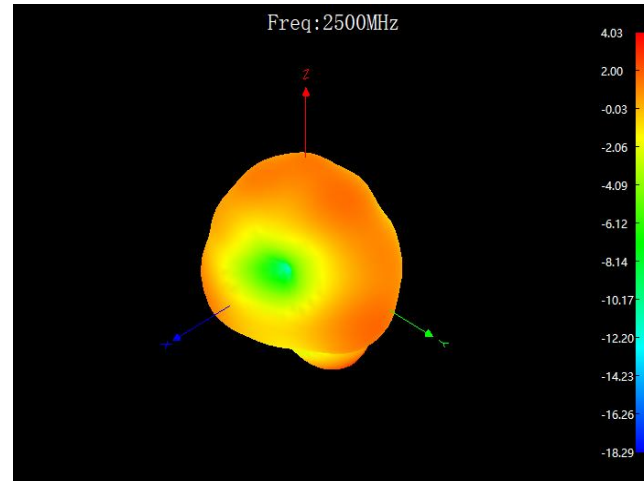


II. Passive Report

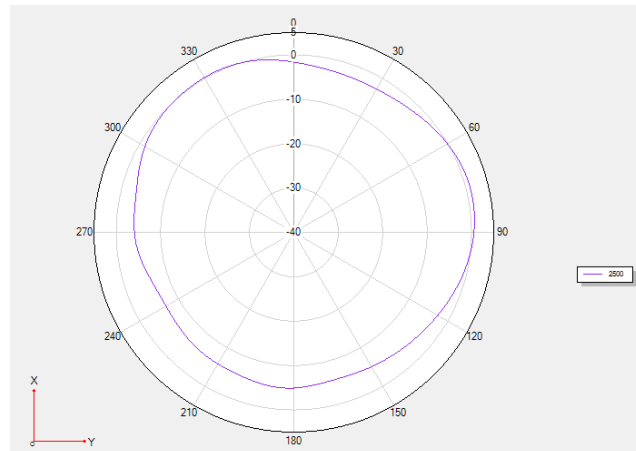
◆ Radiation pattern

ANT-2500MHz

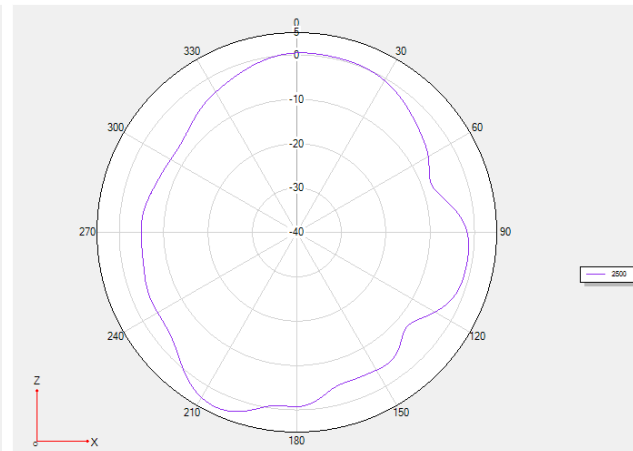
3D Directional pattern



H face - THET = 90



E1 plane - PHI = 0



E2 plane - PHI = 90



III. OTA Report

Item	Measurement	Band	Channel	Frequency	Max	Min	Total
1	TRP	WIFI_B (11M)	1	2412	24.3	14.27	19.89
2	TRP	WIFI_B (11M)	6	2437	24.26	12.17	20.09
3	TRP	WIFI_B (11M)	11	2462	23.28	13.17	19.44
4	TIS	WIFI_B (11M)	1	2412	-79.07	-92.31	-87.59
5	TIS	WIFI_B (11M)	6	2437	-81.17	-93.37	-88.28
6	TIS	WIFI_B (11M)	11	2462	-79.63	-92.26	-87.65
7	TRP	WIFI_G (54M)	1	2412	19.26	8.42	14.2
8	TRP	WIFI_G (54M)	6	2437	19.9	9.14	14.87
9	TRP	WIFI_G (54M)	11	2462	19.95	9.07	15.04
10	TIS	WIFI_G (54M)	1	2412	-69.49	-80.52	-75.43
11	TIS	WIFI_G (54M)	6	2437	-70.06	-80.9	-75.91
12	TIS	WIFI_G (54M)	11	2462	-69.72	-80.45	-75.54
13	TRP	WIFI_N_ISM (65M)	1	2412	17.79	6.86	12.72
14	TRP	WIFI_N_ISM (65M)	6	2437	17.76	6.9	12.78
15	TRP	WIFI_N_ISM (65M)	11	2462	18.04	7.32	12.98
16	TIS	WIFI_N_ISM (65M)	1	2412	-63.94	-75.02	-69.99
17	TIS	WIFI_N_ISM (65M)	6	2437	-64.63	-75.47	-70.44
18	TIS	WIFI_N_ISM (65M)	11	2462	-64.17	-74.99	-70.17