

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: _____ WIFI Antenna

Part NO. : _____ WF75B. C113. 170B. 1

Write By: _____ Damon Cui

Issued Date: _____ 2022-09-26

Customer

R&D Dept	Business Dept	Approved By

SKYLink

R&D Dept	Engineer Dept	Approval

□ Specification Summary

A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz
	5150MHz~5850MHz
VSWR	<2.0
Efficiency	>50%
Peak Gain	3.04dBi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	1.13MM, Black
Connector Type	I
Dimension	At Attachment
Heat-durability	280±5°C, 10sec.
C. Environmental Characteristics	
Operation Temperature	- 20 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C

□ Test Equipment & Conditions

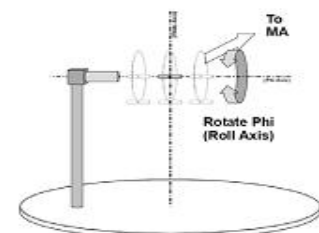
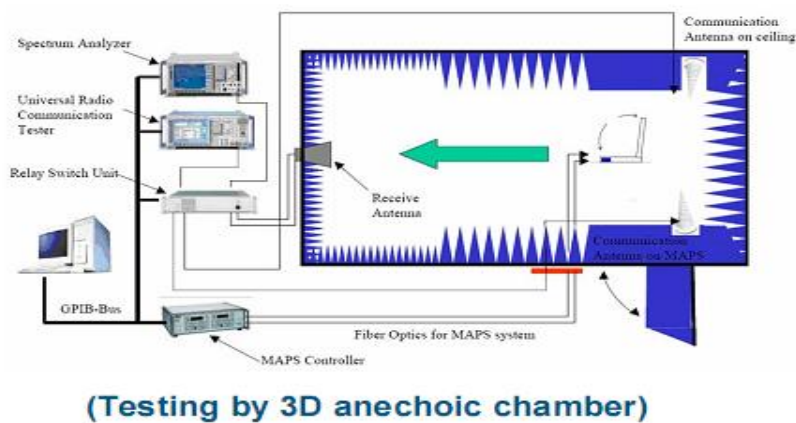
1. Network Analyzers :

Agilent 8753D 5071B

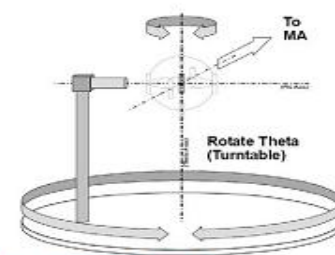
Communications Test Set:

Agilent E5515C CMW500

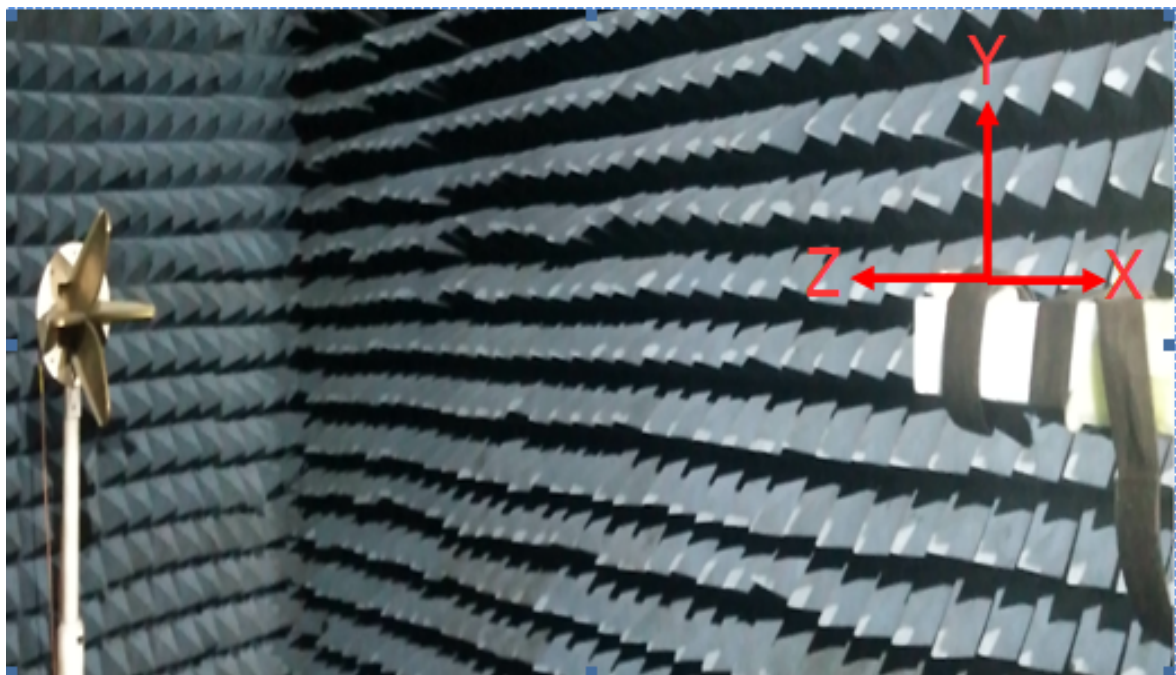
2. 3D Chamber Test System

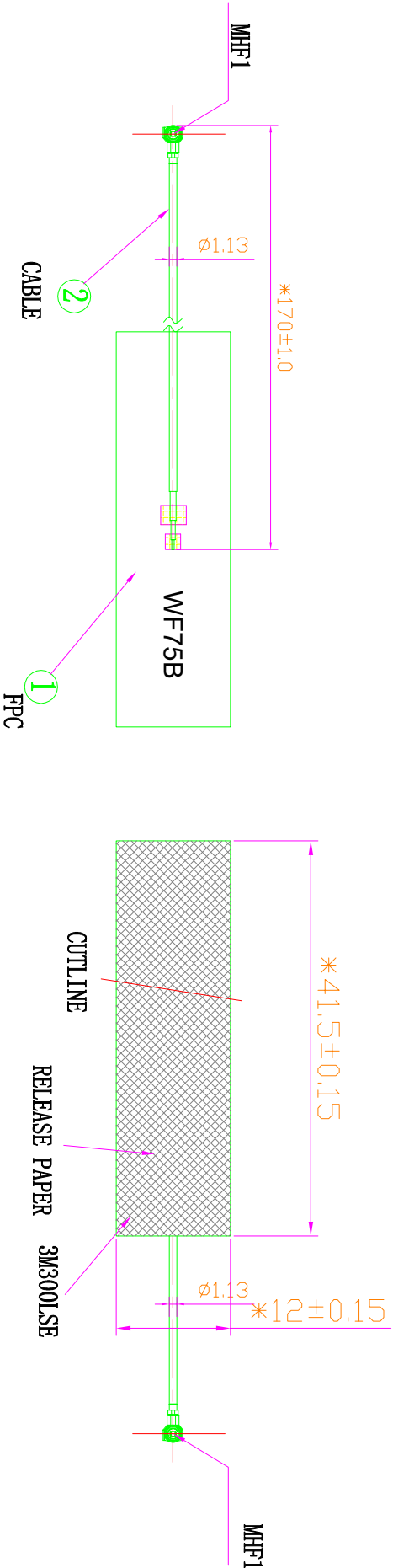
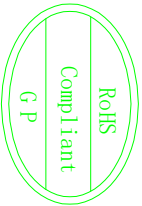


Phi axis test



Theta axis test





注:

1. “*”为重点尺寸；
2. 未标注尺寸请依图纸；
3. Pb、Hg、Cr+6、PBBS、PBDEs各项小于1000PPM, Cd小于100PPM。

Rev				Description		Date	Remark
A				New drawing			
1							

2	CABLE	Black	
1	FPC	Black	
No.	PartName	Colour	Remark

Third Angle				Project				Date			
0~10	±0.05	○	0.02	Part Name				Designed by			
10~18	±0.10	◎	0.03	Part No.				Checked by			
18~30	±0.12	⊥	0.02	Material				RF			
30~40	±0.15	∠	0.04	DWG No.				Approved by			
40~	±0.20	Angle	±0.5°					Unit			
Location								mm			

深圳天联凌科技有限公司
SHENZHEN SKYLINK CO., LTD

2022-09-26

1

2

3

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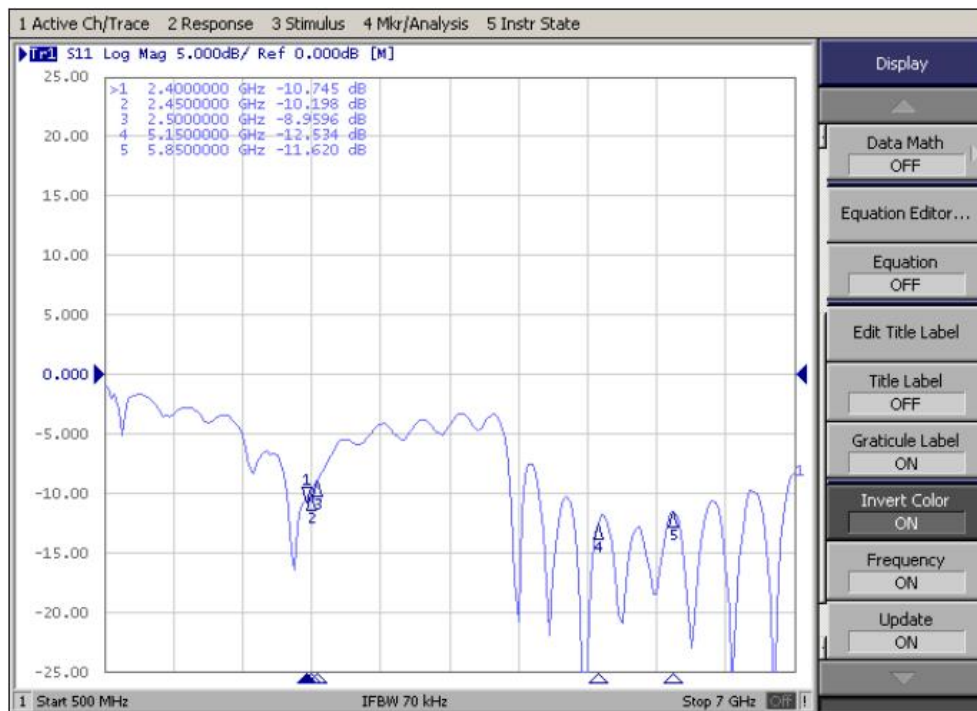
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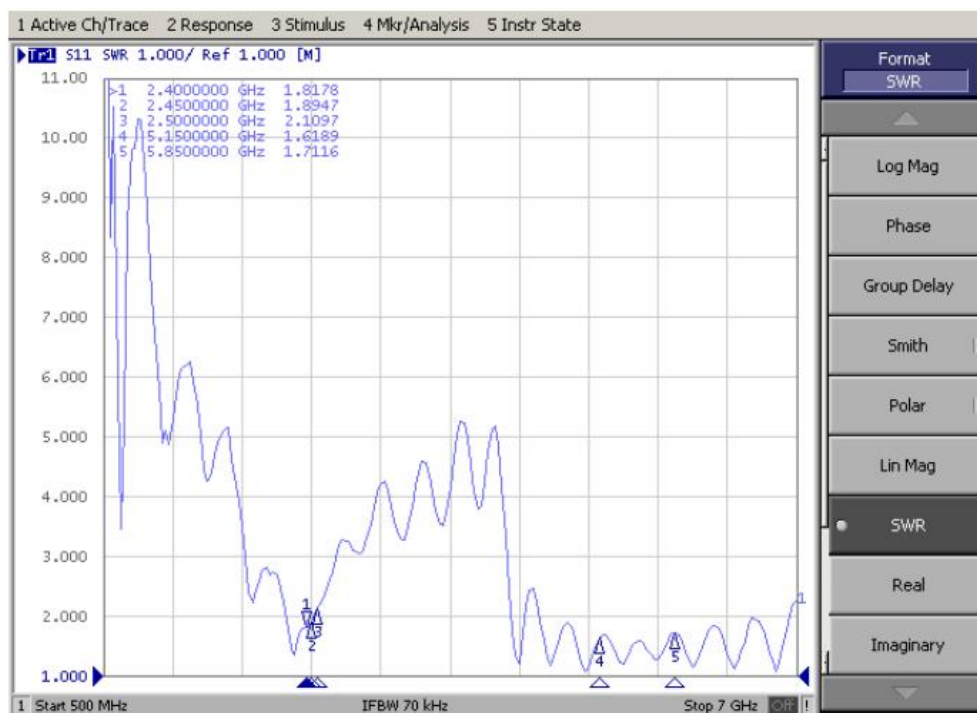
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Return Loss



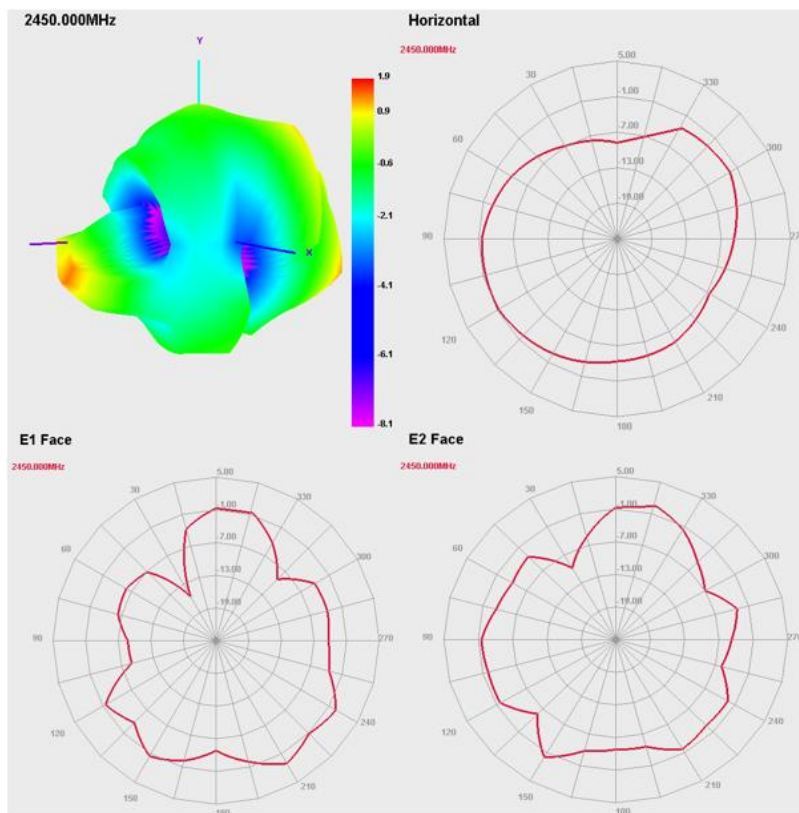
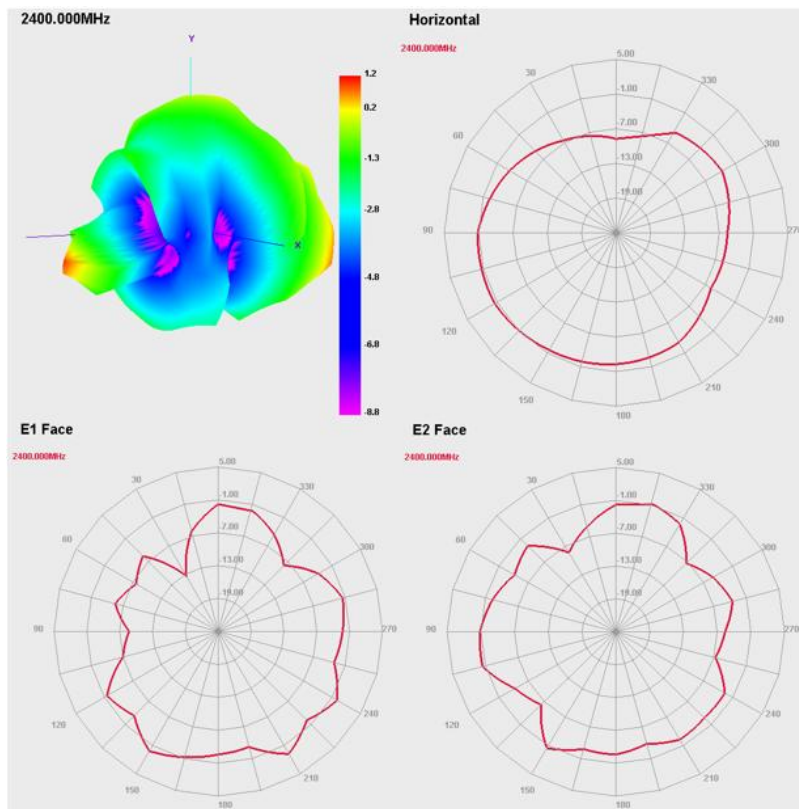
VSWR

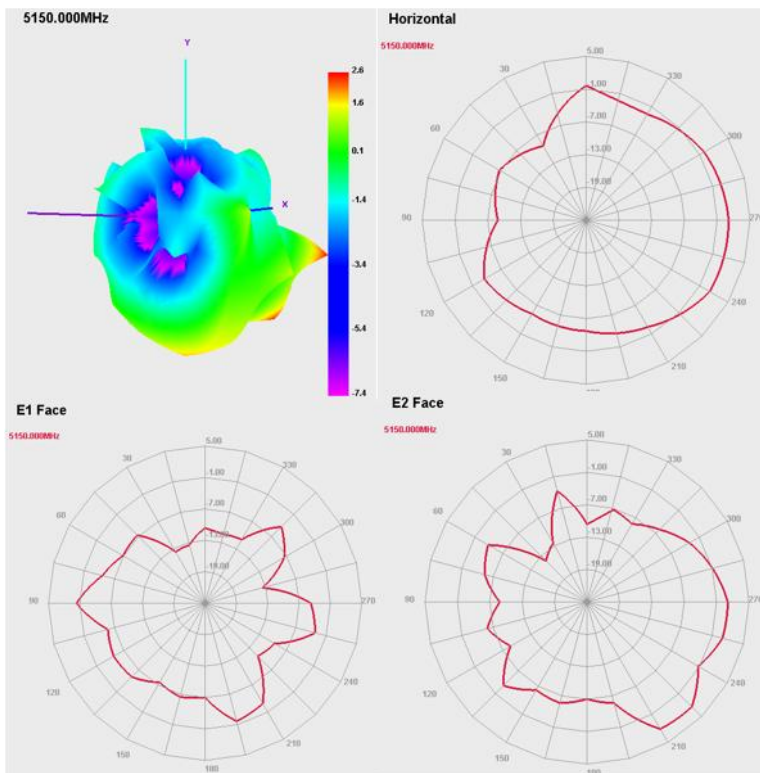
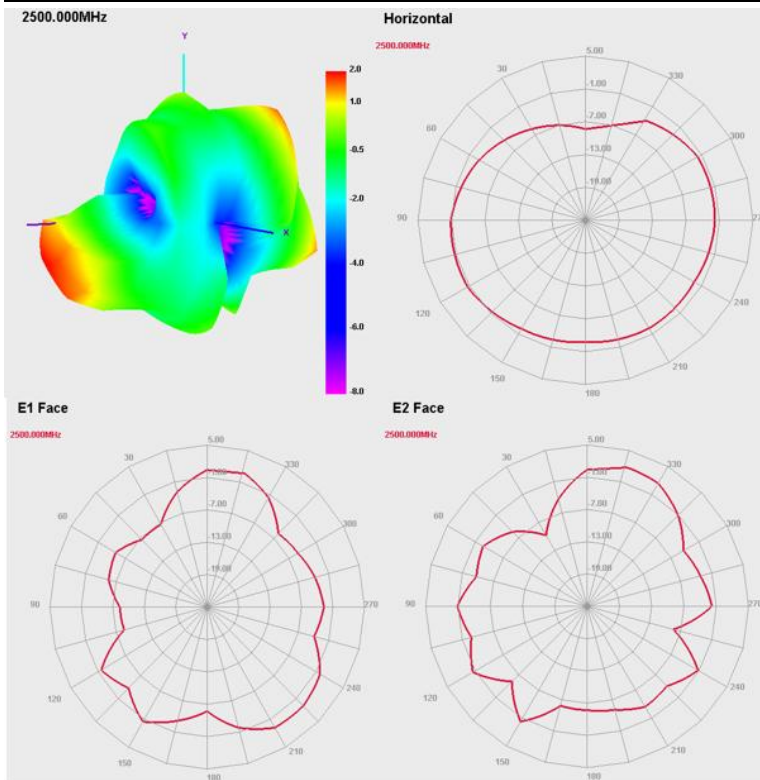


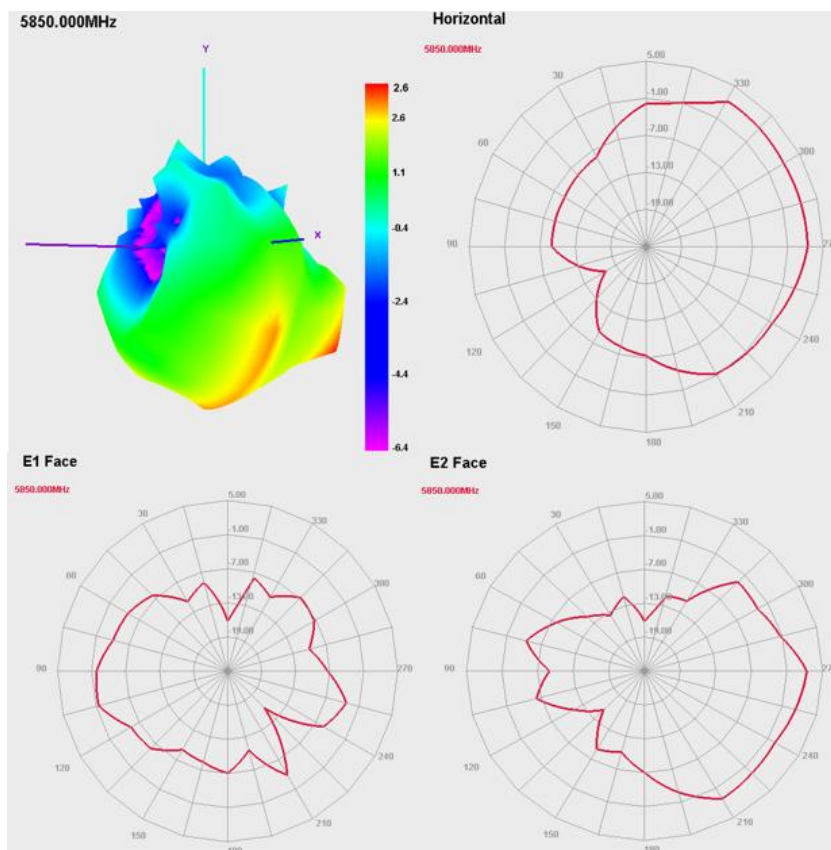
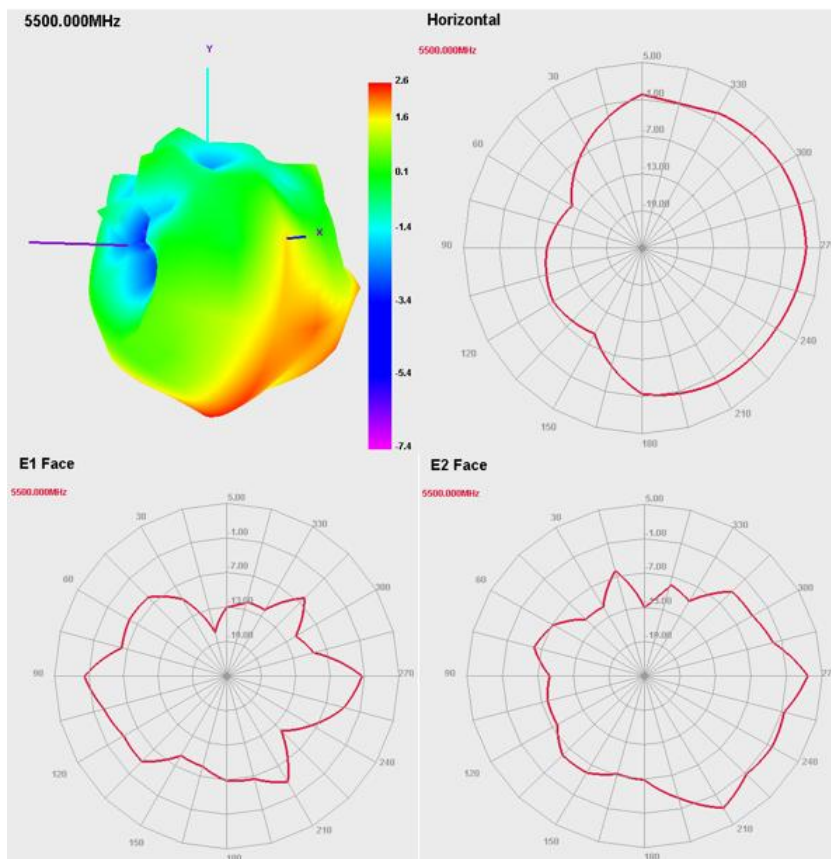
□ Gain & Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	48.66	1.2	5150	42.32	2.61
2410	48.75	1.3	5200	42.51	2.6
2420	50.37	1.63	5250	44.16	2.73
2430	52.61	2.05	5300	43.62	2.43
2440	51.4	2.11	5350	47.01	3.04
2450	48.39	1.85	5400	47	2.69
2460	48.18	1.75	5450	45.4	2.36
2470	49.04	1.55	5500	46.15	2.57
2480	51.19	1.48	5550	42.87	1.95
2490	54.81	1.89	5600	42.86	2.2
2500	54.16	1.95	5650	44.89	2.55
			5700	44.53	2.8
			5750	46	2.21
			5800	44.28	2.11
			5850	45.61	2.61

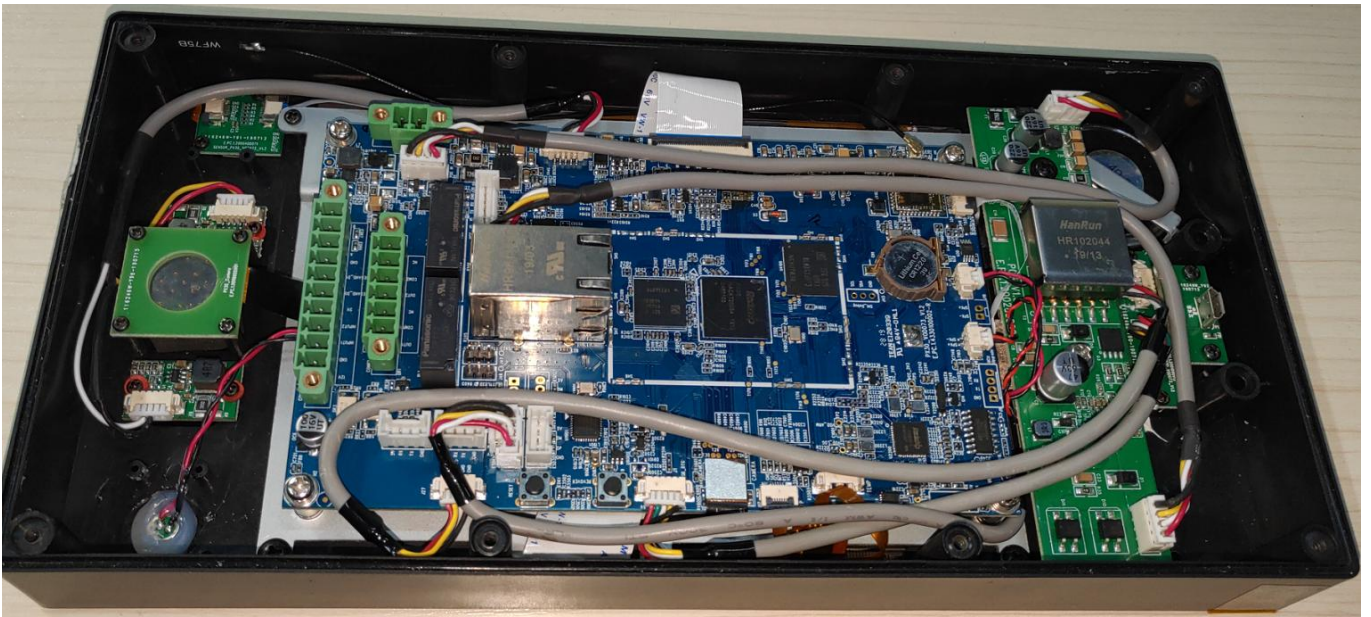
□ Radiation Pattern







□ Antenna Picture



□ Reliability Test

Test Item		Test condition	Equipment	Specification	Result
1	Low Temp. Storage Test	Temperature: -30℃, Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for 44 hours; step-up temp to 25℃,test antenna after 2 hours.	Temp.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
2	High Temp./High Humid Storage Test	Temperature: 85℃ Humidity: 85% RH Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-up the temp. to 80℃ and the humidity up to 85% in one hour, store antenna for 44 hours; step-down temp to 25℃,test antenna after 2 hours.	Temp.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
3	Salt-Spray 6 pray Test	Placing antenna in the Salt-Spray Tester ,set the test condition , Temp: $35 \pm 2^{\circ}\text{C}$ Humidity: 85% NaCl salt spray :5 ± 1 %.PH value :6.5~7.2 Test time:24hours	Salt-Spray Tester	No color change No appear rusting	PASS