

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: _____ TB662 WIFI5.8GTX Antenna _____

Part NO. : _____ WF215D. C113. 160G. 1 _____

Write By: _____ zhangchanghua _____

Issued Date: _____ 2022-08-27 _____

Edition: _____ V1.0 _____

Customer

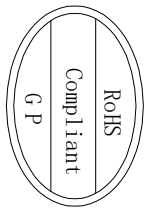
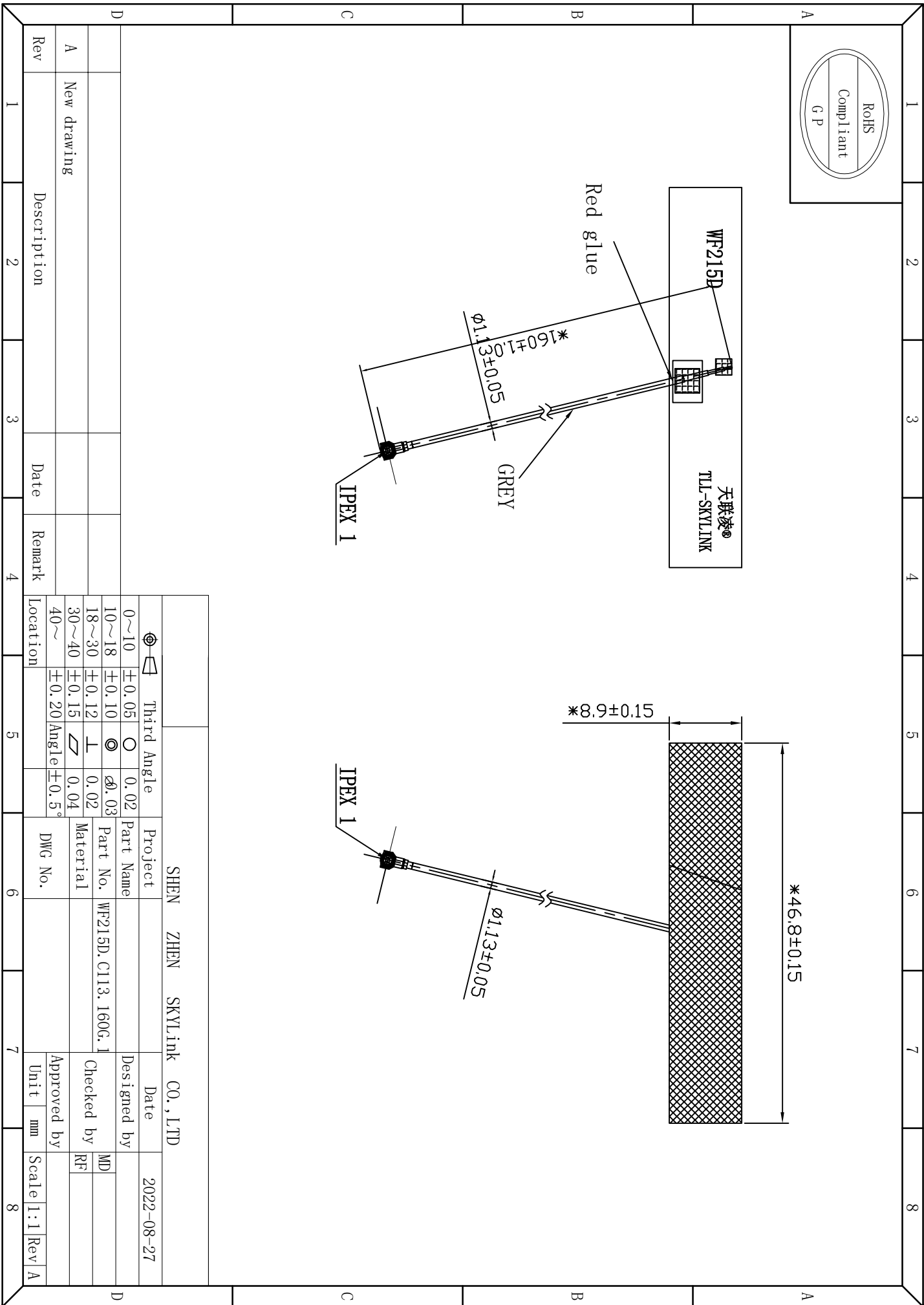
R&D Dept	Business Dept	Approved By

SKYLink

R&D Dept	Engineer Dept	Approval

● Specification Summary

A. Electrical Characteristics	
Frequency	5150MHz ~5850MHz
VSWR	<2.0
Efficiency	>30%
Peak Gain	2dbi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	FPC
Cable Type	1.13 gray
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



Rev	Description	Date	Remark
A	New drawing		
1			

Third Angle		SHEN ZHEN SKYLINK CO., LTD	
0~10	±0.05	○	0.02
10~18	±0.10	◎	∅0.03
18~30	±0.12	⊥	0.02
30~40	±0.15		0.04
40~	±0.20	Angle	±0.5°
Location		DWG No.	
Project		Date	2022-08-27
Part Name		Designed by	
Part No. WF215D, C113, 160G, 1		Checked by	MD
Material		RF	
Approved by		Unit	mm
Scale		1:1	Rev A

● Test Equipment & Conditions

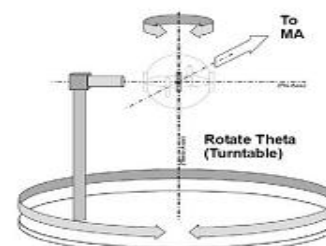
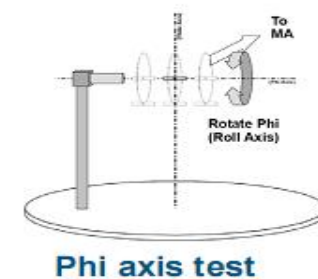
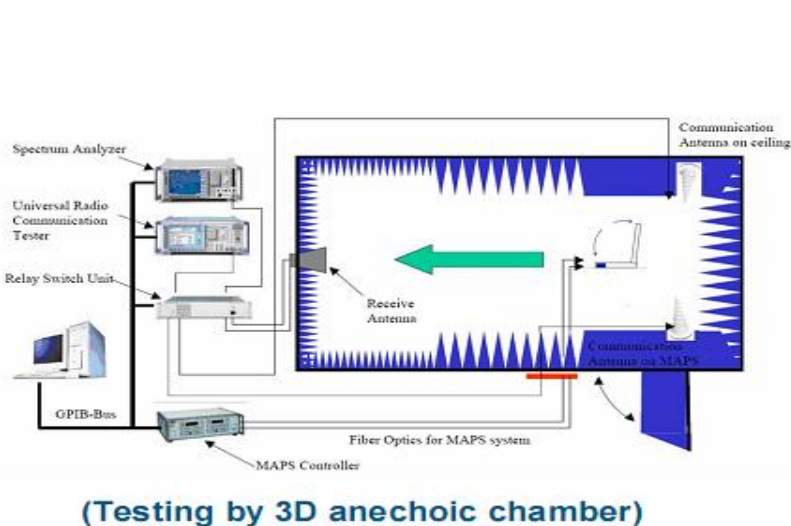
1. Network Analyzers :

Agilent 8753D 5071B

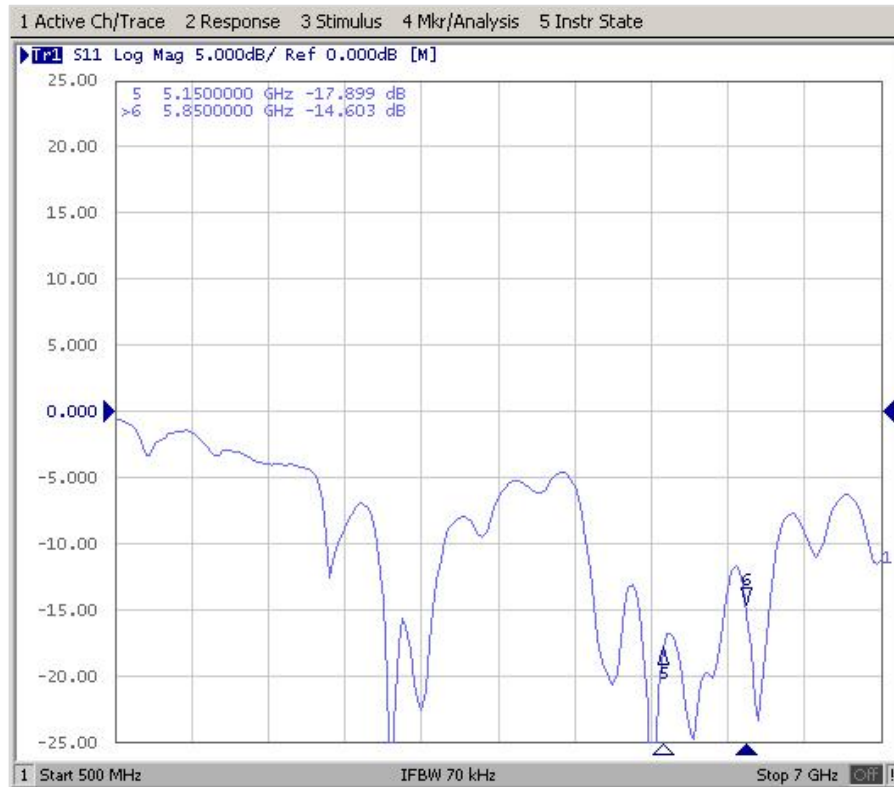
Communications Test Set:

Agilent E5515C CMW500

2. 3D Chamber Test System



◆ Return Loss



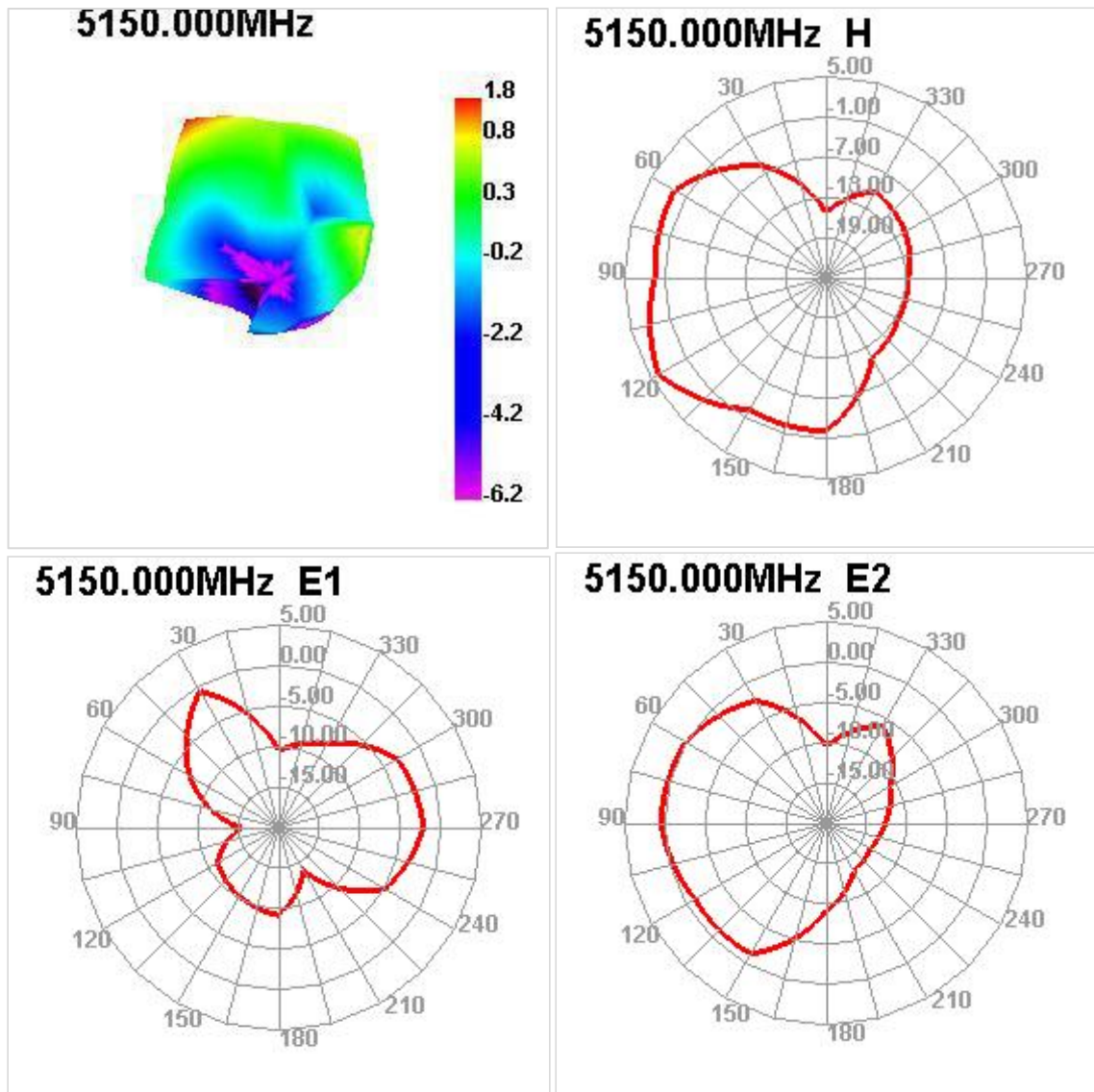
◆ VSWR

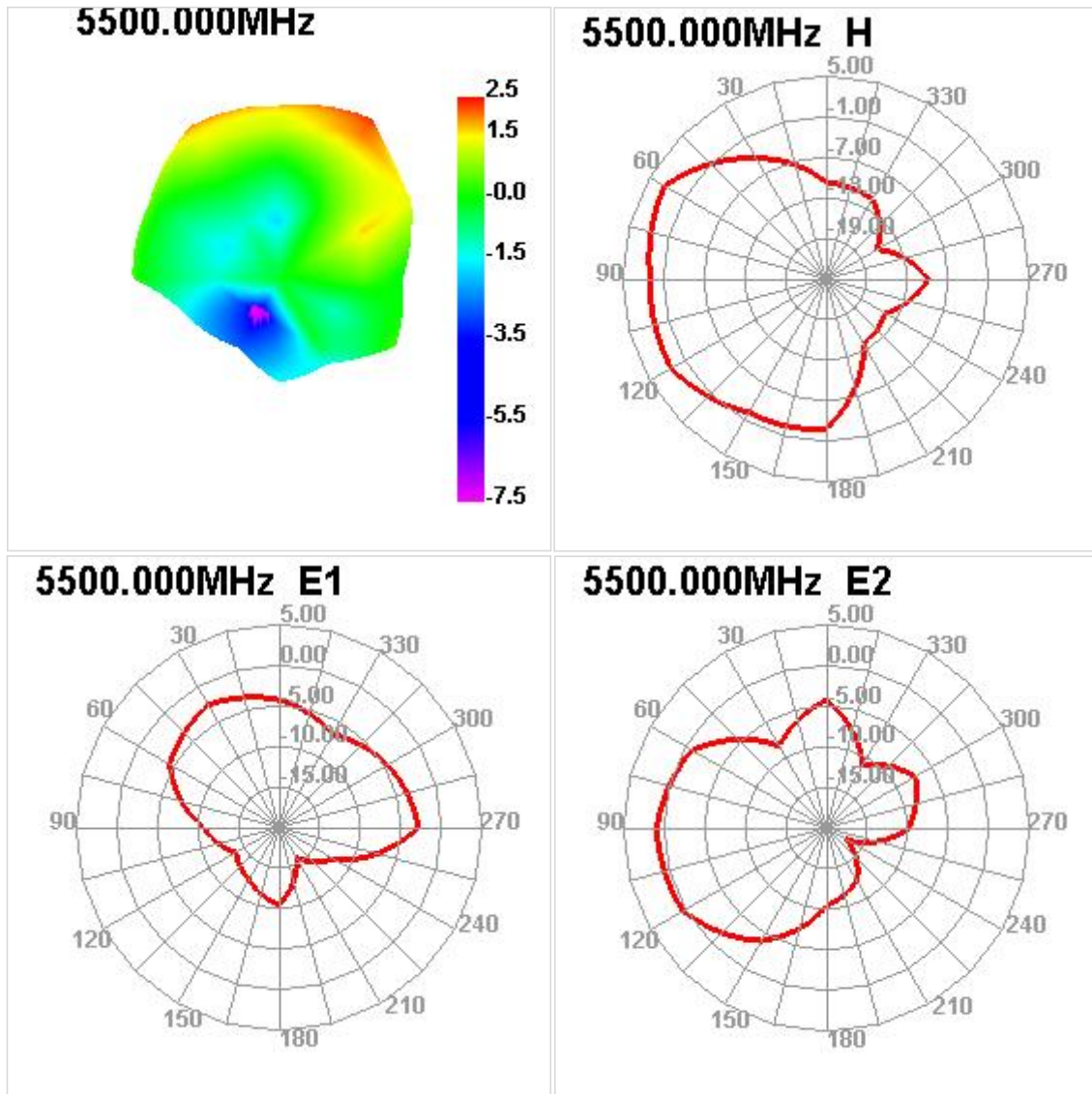


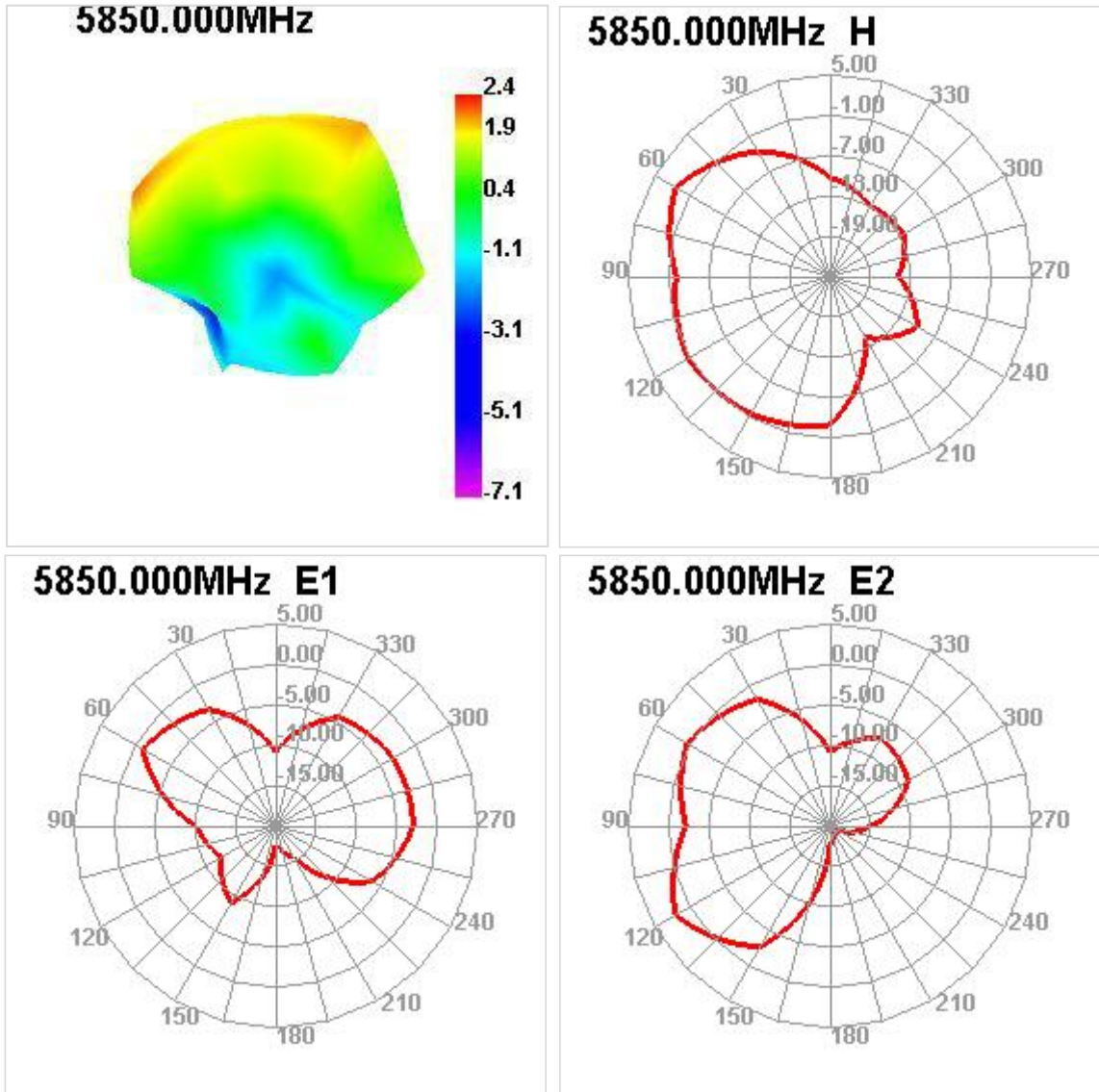
◆ Gain & Efficiency

Fre (MHz)	Eff (%) (dB)	Gain (dB)
5150	34.92	1.76
5200	33.57	2.27
5250	36.9	2.48
5300	35.06	2.39
5350	35.22	2.48
5400	35.01	2.43
5450	35.13	2.09
5500	37.41	2.48
5550	39.03	2.25
5600	38.22	2.29
5650	38.91	2.2
5700	42.1	2.53
5750	46.45	2.28
5800	45.11	2.49
5850	43.6	2.38

◆ Radiation Pattern







◆ Antenna Picture



◆ Reliability Test

Test Item	Test condition	Equipment	Specification	Result
1 Low Temp. Storage Test	<p>Temperature: -30℃, Time:48hrs</p> <p>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.</p>	Temp.&Humi. Tester	<p>No material deformation is allowed.</p> <p>Electronic Performance is ok .</p>	PASS
2 High Temp./High Humid Storage Test	<p>Temperature: 85℃ Humidity: 85% RH Time:48hrs</p> <p>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.</p>	Temp.&Humi. Tester	<p>No material deformation is allowed.</p> <p>Electronic Performance is ok .</p>	PASS
3 Salt-Spray 6 pray Test	<p>Placing antenna in the Salt-Spray Tester ,set the test condition , Temp: 35±2℃ Humidity: 85% NaCl salt spray :5 ±1 %.PH value :6.5~7.2 Test time:24hours</p>	Salt-Spray Tester	<p>No color change</p> <p>No appear rusting</p>	PASS