

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: _____ I6K WIFI Antenna

Part NO. _____ IK6. C113. 60B. 221

Write By: _____ zhangchanghua

Issued Date: _____ 2023-08-28

Customer

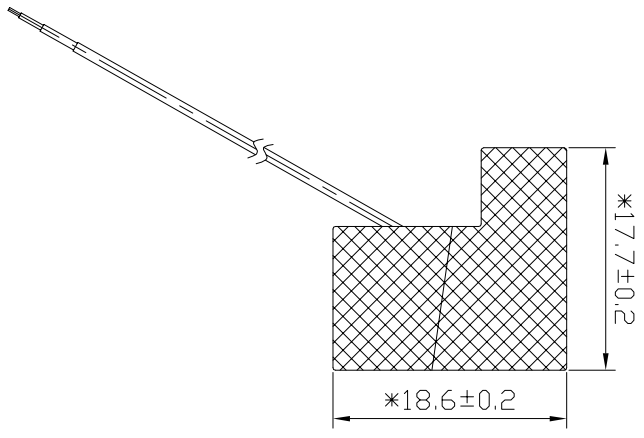
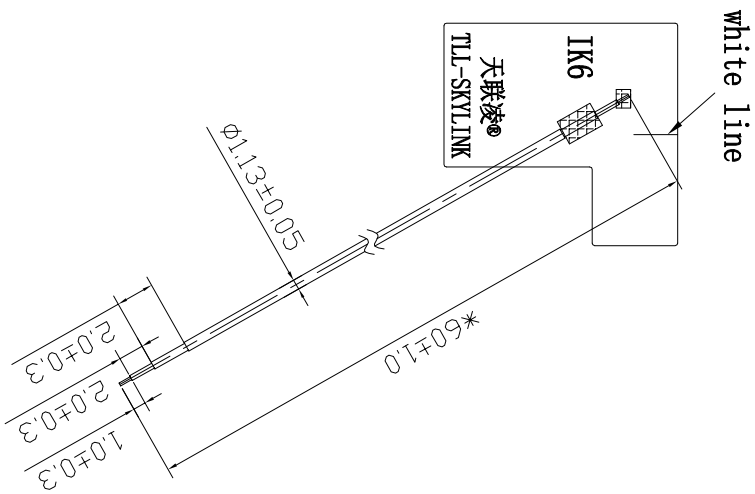
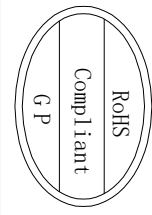
R&D Dept	Business Dept	Approved By

SKYLink

R&D Dept	Engineer Dept	Approval

● Specification Summary

A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz
Return Loss	-10dB
Efficiency	>35%
Peak Gain	0.79dbi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	FPC
Cable Type	1.13 Black
Connector Type	
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
1	New drawing		

Third Angle		深 圳 天 联 凌 科 技 有 限 公 司 SHEN ZHEN SKYLINK CO., LTD	
0~10 ± 0.05 10~18 ± 0.10 18~30 ± 0.12 30~40 ± 0.15 40~ ± 0.20	0.02 ◎ $\phi 0.03$ ⊥ 0.02 0.04 Angle $\pm 0.5^\circ$	Project Part Name Part No. IK6.C113.60B.221 Material	Date 2023-08-28 Designed by Checked by MD RF Approved by Unit mm Scale 1:1 Rev A
Location		DWG No.	

天联凌 SKYLINK 笔尖

● Test Equipment & Conditions

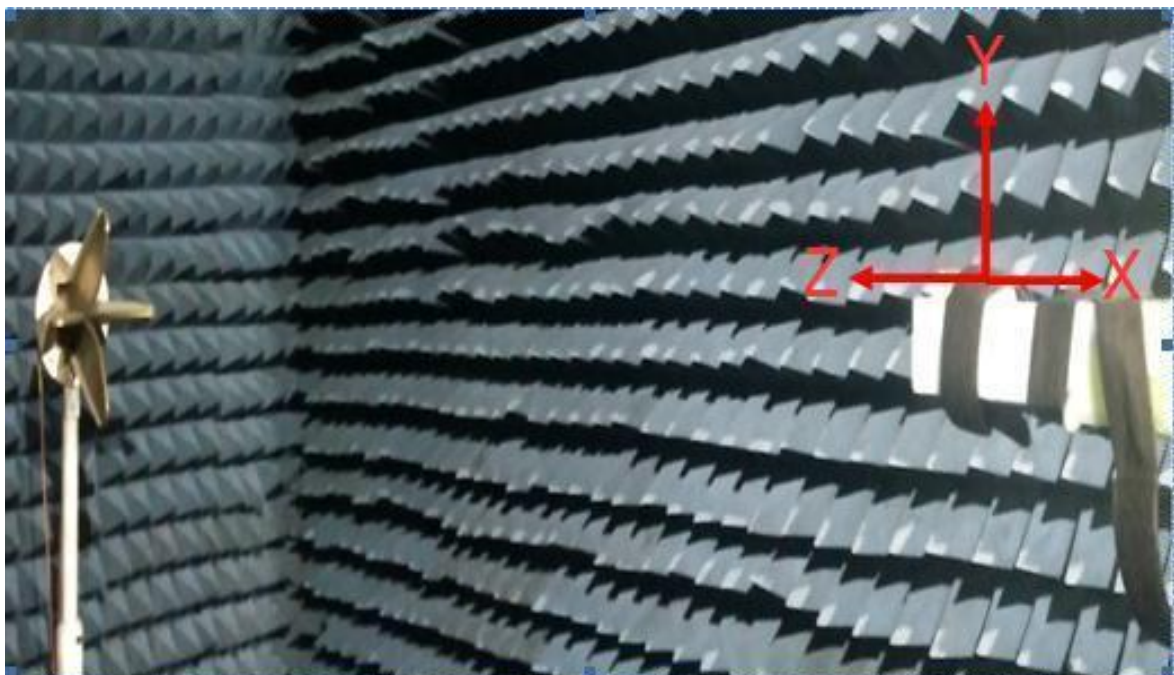
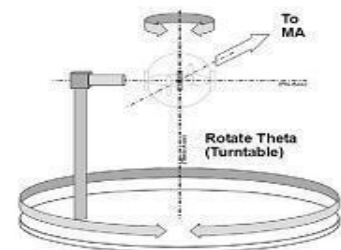
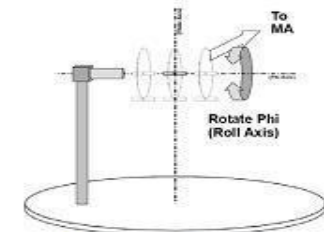
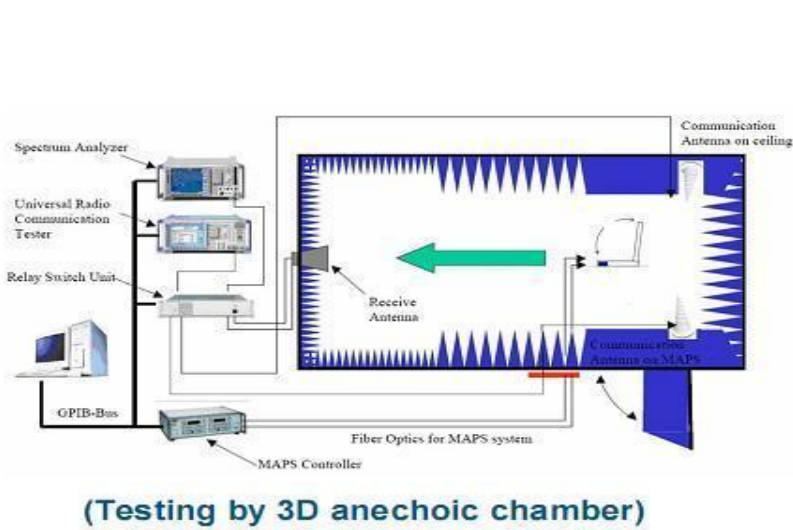
1. Network Analyzers :

Agilent 8753D 5071B

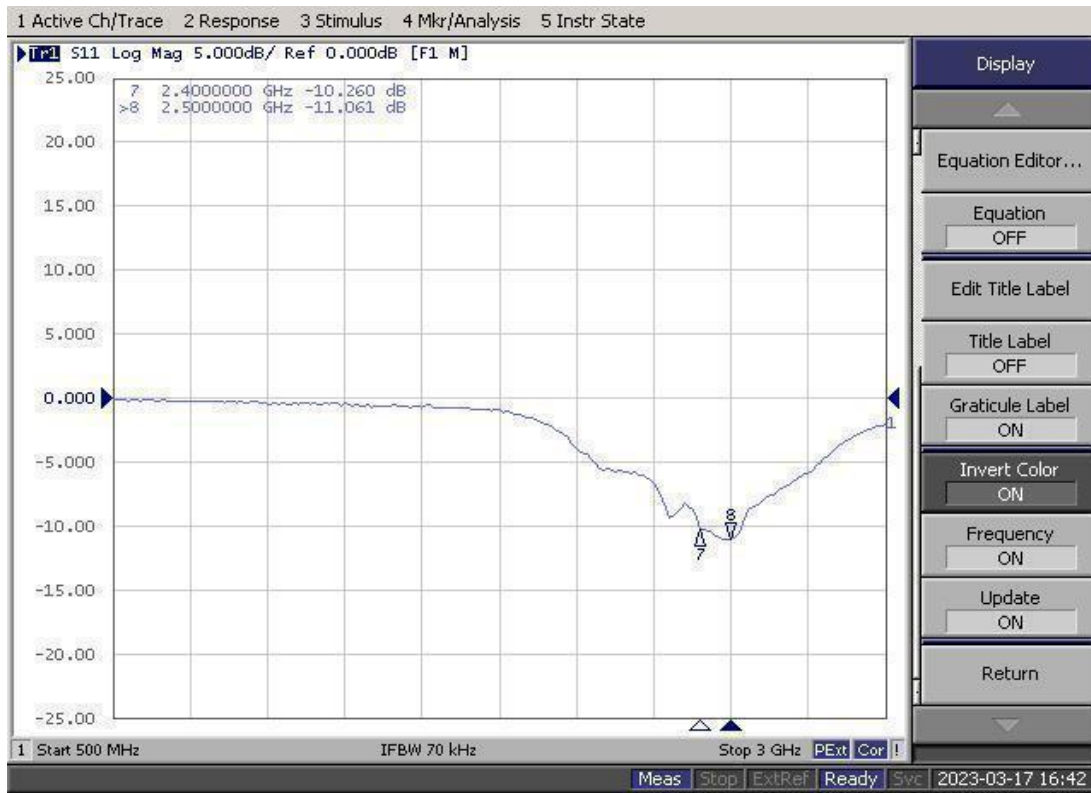
Communications Test Set:

Agilent E5515C CMW500

2. 3D Chamber Test System



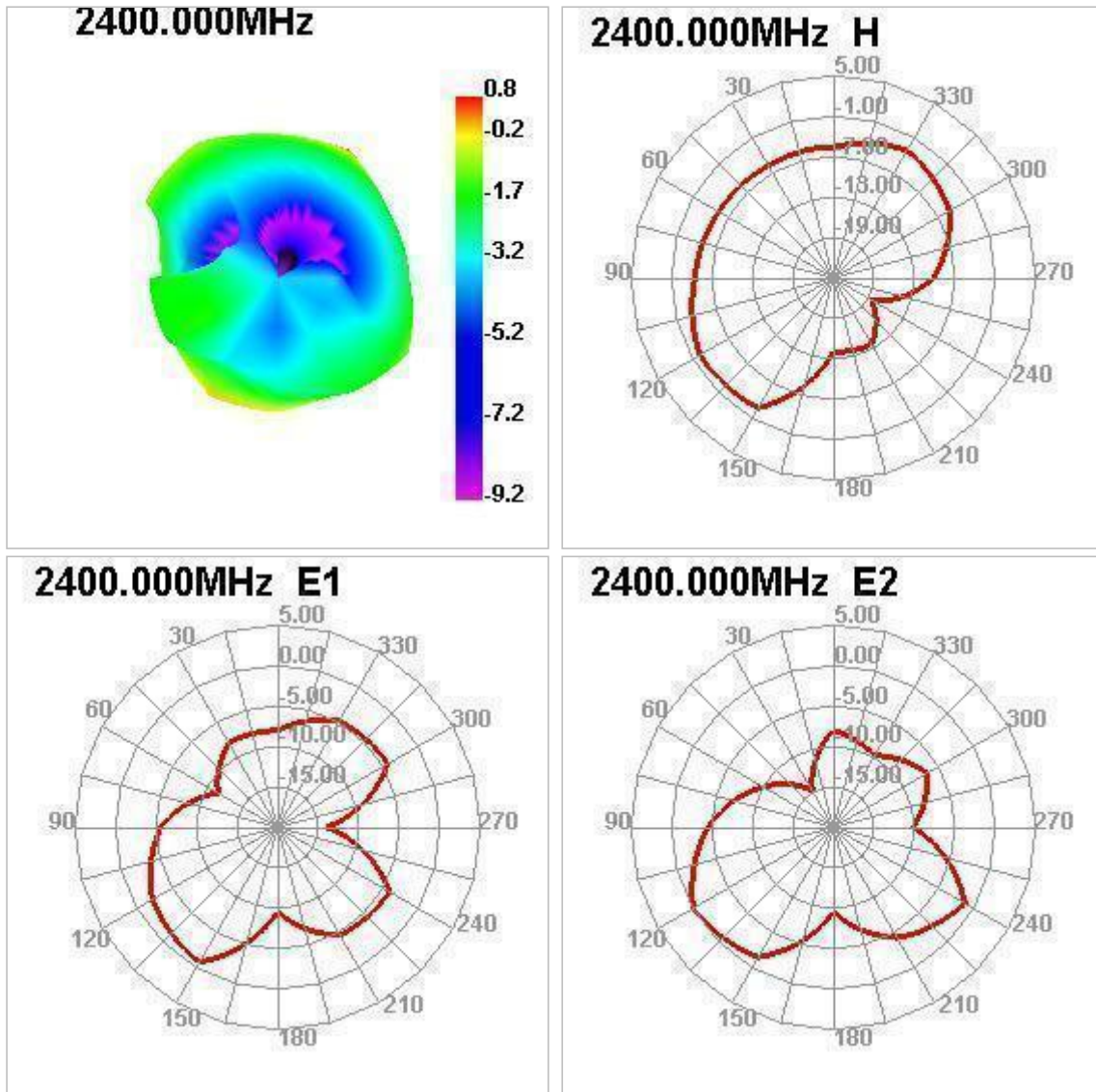
◆ Return Loss

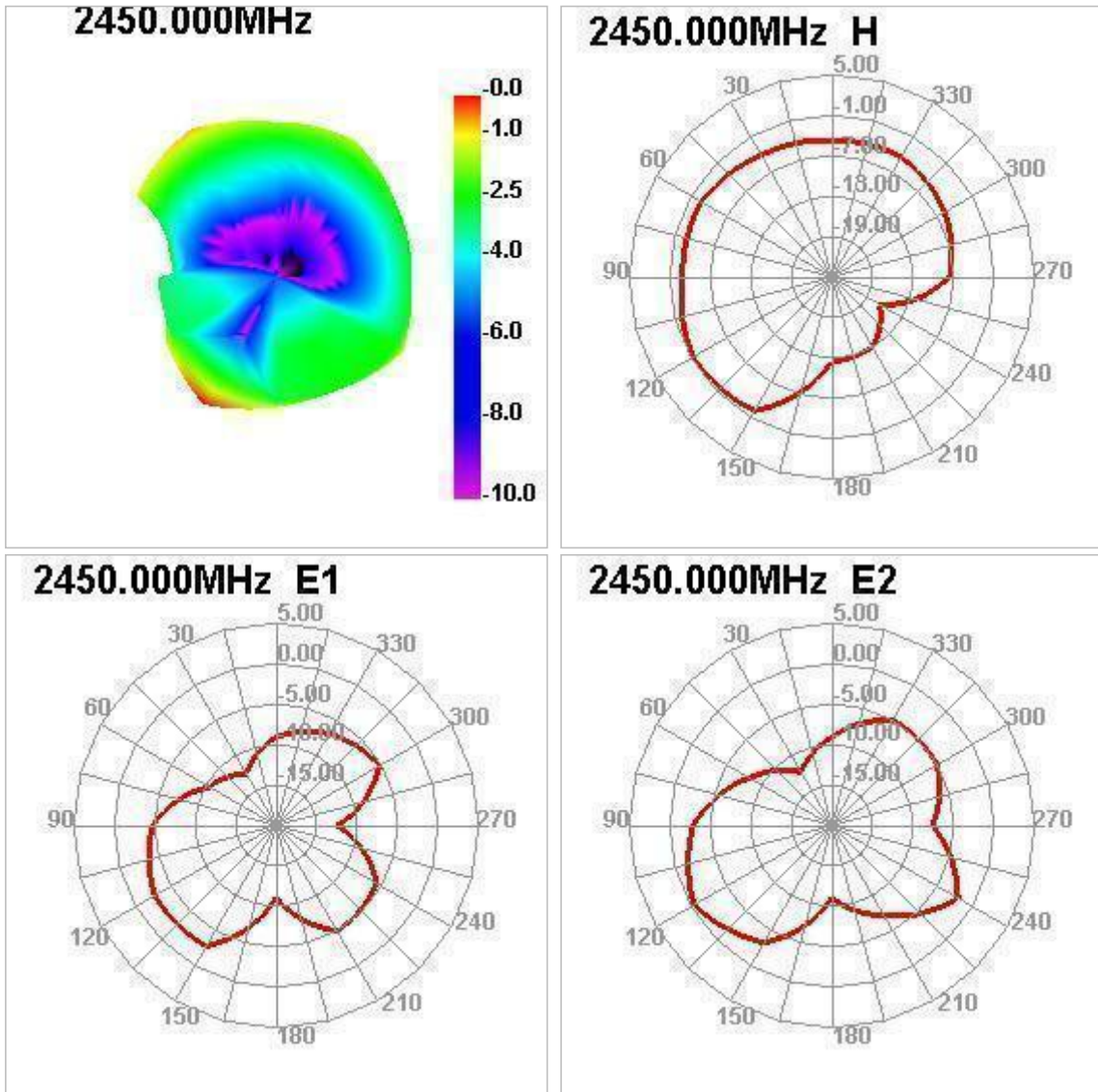


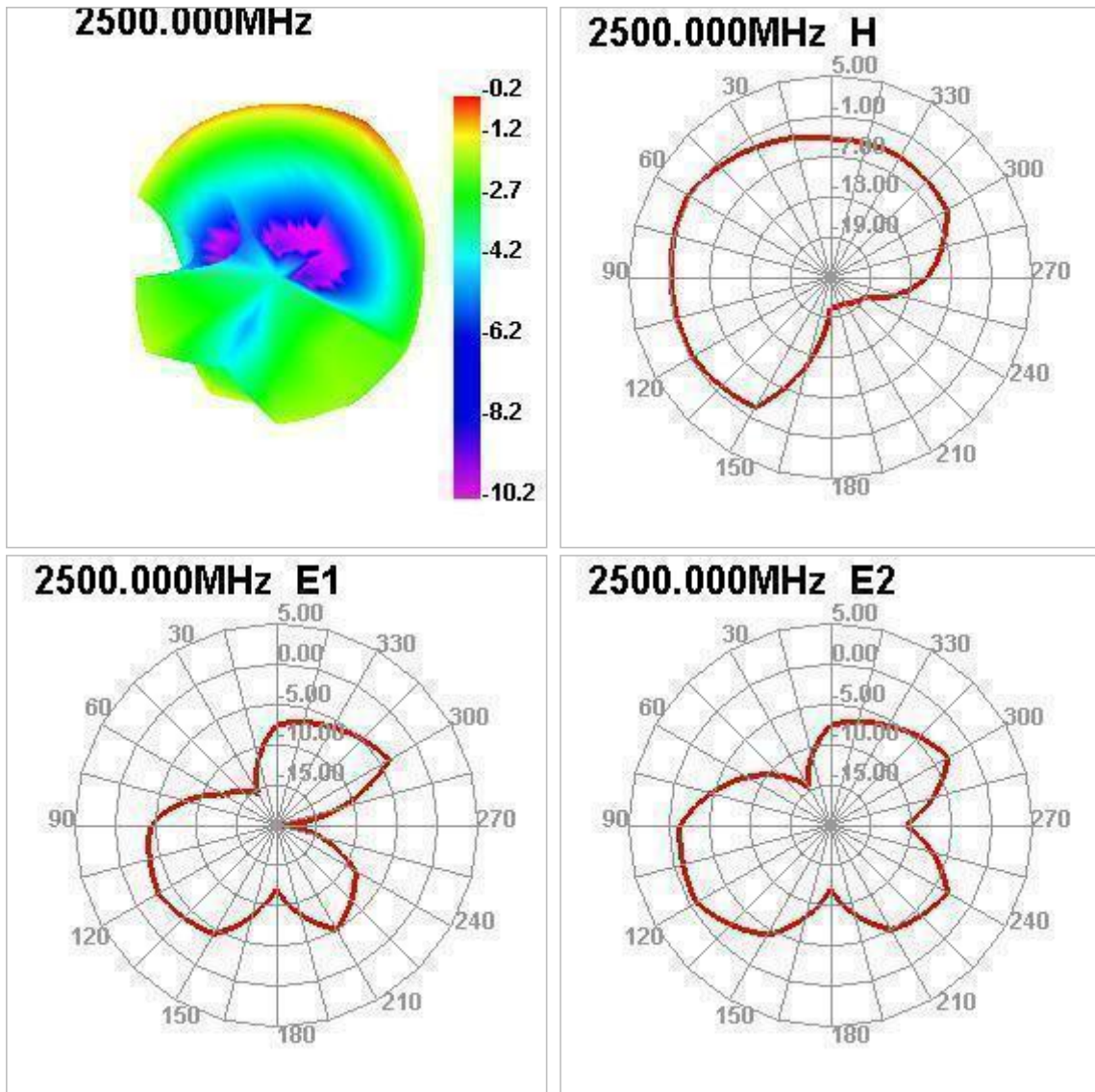
◆ Gain & Efficiency

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	38.85	0.79
2410	37.03	0.46
2420	36.41	0.05
2430	37.46	0.59
2440	39.04	0.62
2450	37.32	-0.02
2460	37.57	0.16
2470	37.6	0.23
2480	37.71	0.22
2490	37.76	0.15
2500	36.6	-0.24

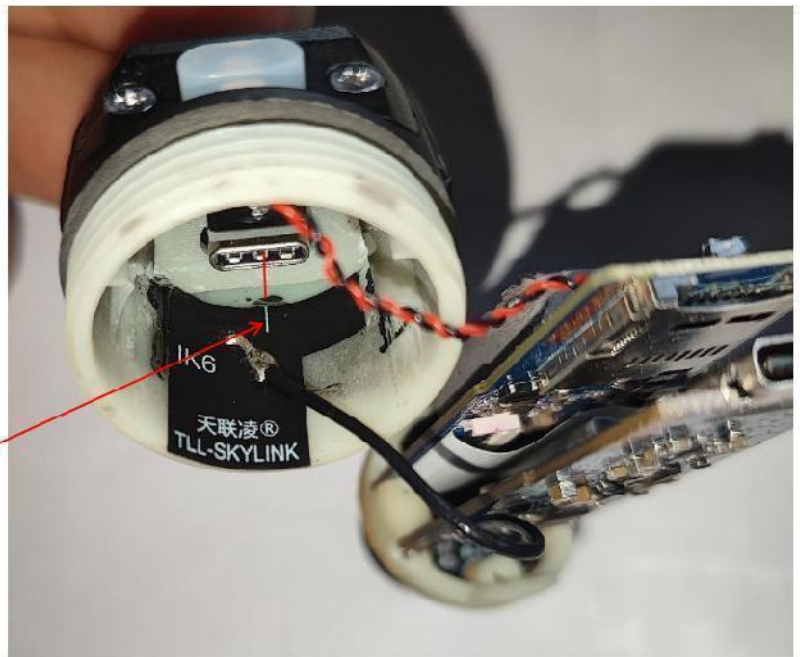
◆ Radiation Pattern







◆ Antenna Picture



antenna position

◆ 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±2℃ 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