

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: _____ 6863 WIFI Antenna _____

Part NO. : _____ 6863. C081. 120B. 4 _____

Part NO. : _____

Write By: _____ zhangchanghua _____

Issued Date: _____ 2024-12-28 _____

Customer

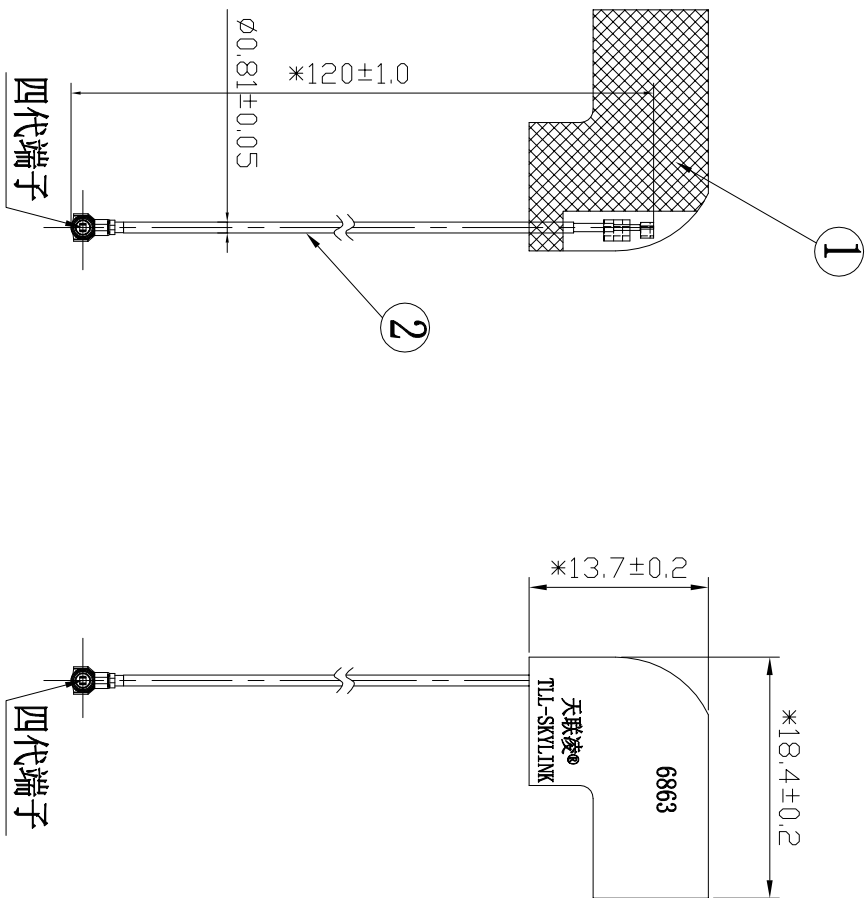
R&D Dept	Business Dept	Approved By

SKYLink

R&D Dept	Engineer Dept	Approval

● Specification Summary

A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz
VSWR	<3.0
Efficiency	>35%
Peak Gain	2dbi
Impedance	50 Ohm
Polarization	linear polarization
B. Material & Mechanical Characteristics	
Material of Radiator	FPC
Cable Type	0.81mm
Connector Type	IPEX 4
Dimension	At Attachment
Heat-durability	280±5°C, 10sec.
C. Environmental Characteristics	
Operation Temperature	- 20 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C



2	同轴线	镀银铜丝	黑色
1	天线	FPC	黑色
No.	PartName	Material	Colour Remark

深圳天联凌科技术有限公司					
			SHENZHEN SKYLINK CO., LTD		
	Third Angle	Project	Date	2024.12.28	
0~10	±0.05	○	0.02	Part Name	
10~18	±0.10	◎	Ø.03	Part No.	6863.C081.120B.4
18~30	±0.12	⊥	0.02	Material	
30~40	±0.15	∇	0.04		
40~	±0.20	Angle	±0.5°	DWG No.	
Location				Approved by	
				Unit	mm
				Scale	1:1
				Rev	A

A	New drawing		
Rev	Description	Date	Remark

注:

1. “*”为重点尺寸；
2. 未标注尺寸请依图纸；

● Test Equipment & Conditions

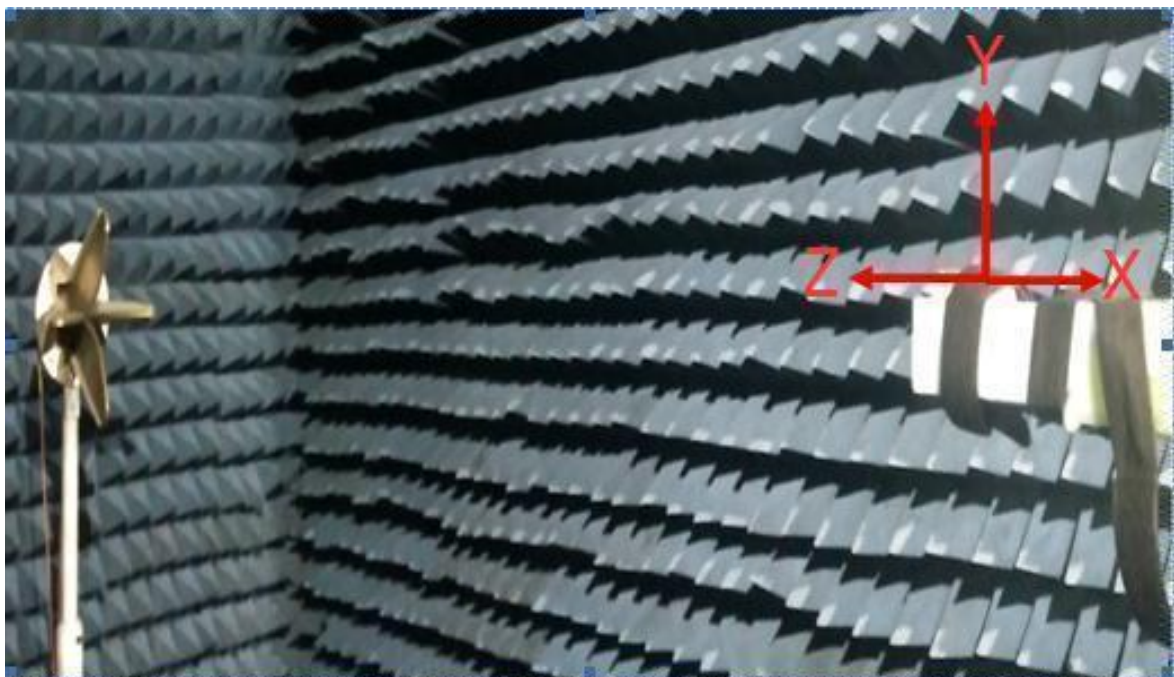
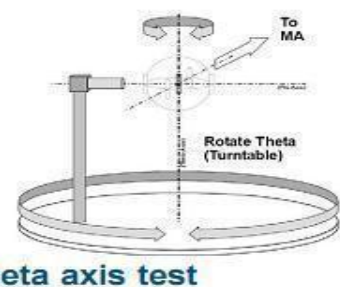
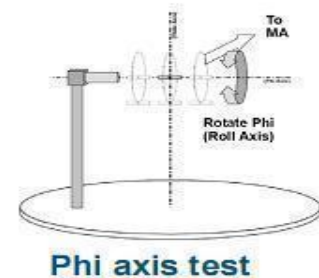
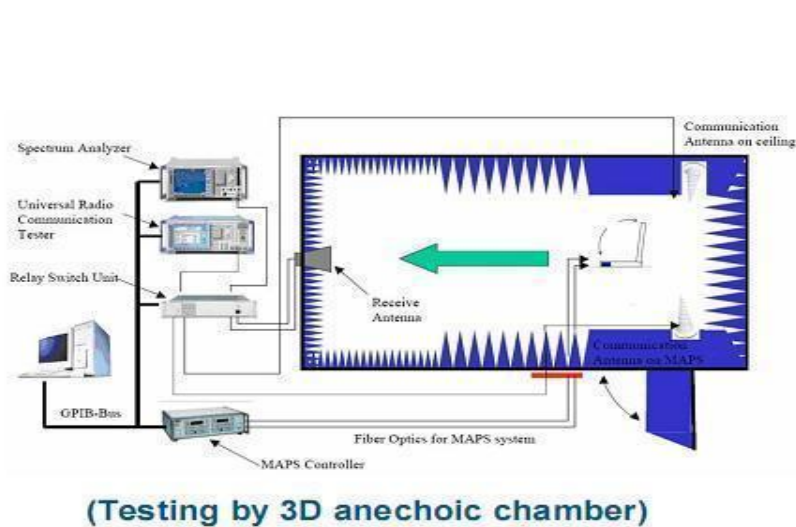
1. Network Analyzers :

Agilent 8753D 5071B

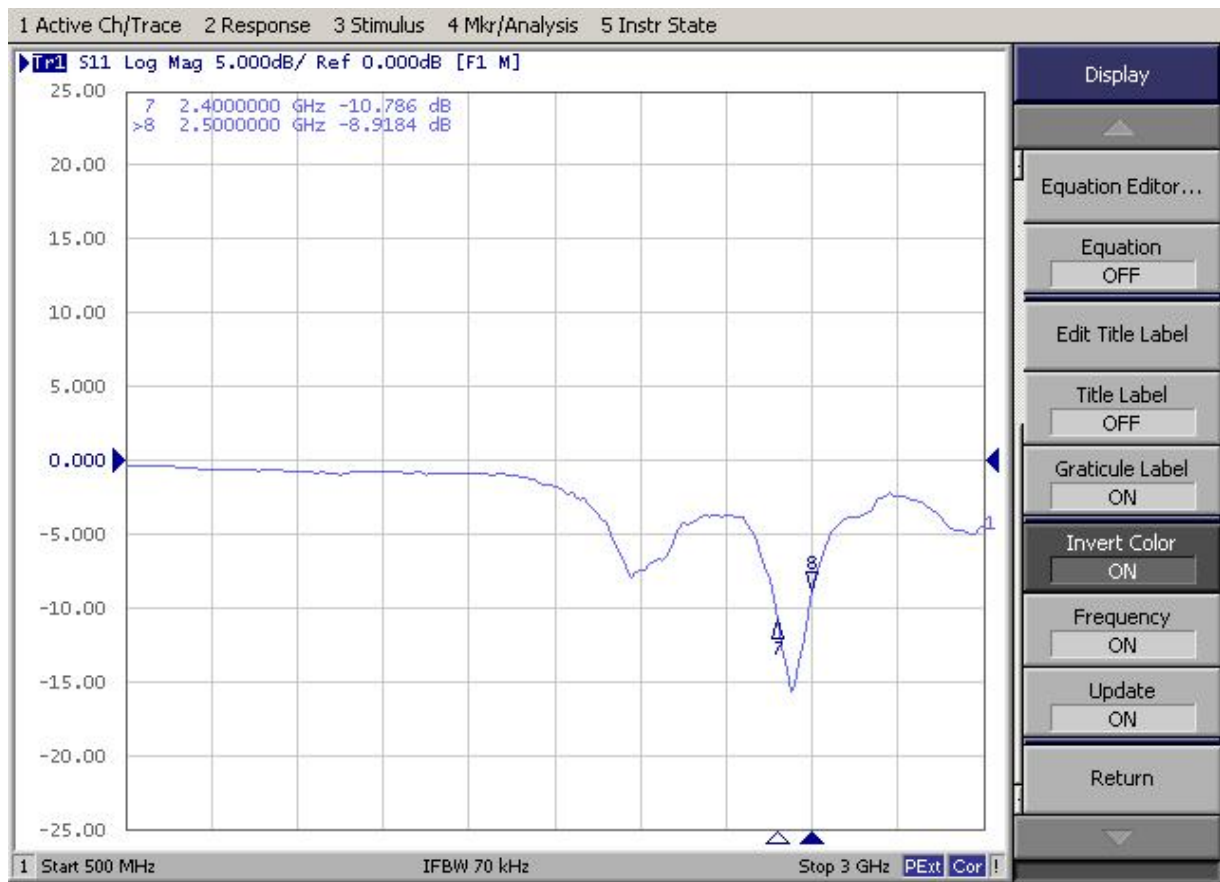
Communications Test Set:

Agilent E5515C CMW500

2. 3D Chamber Test System



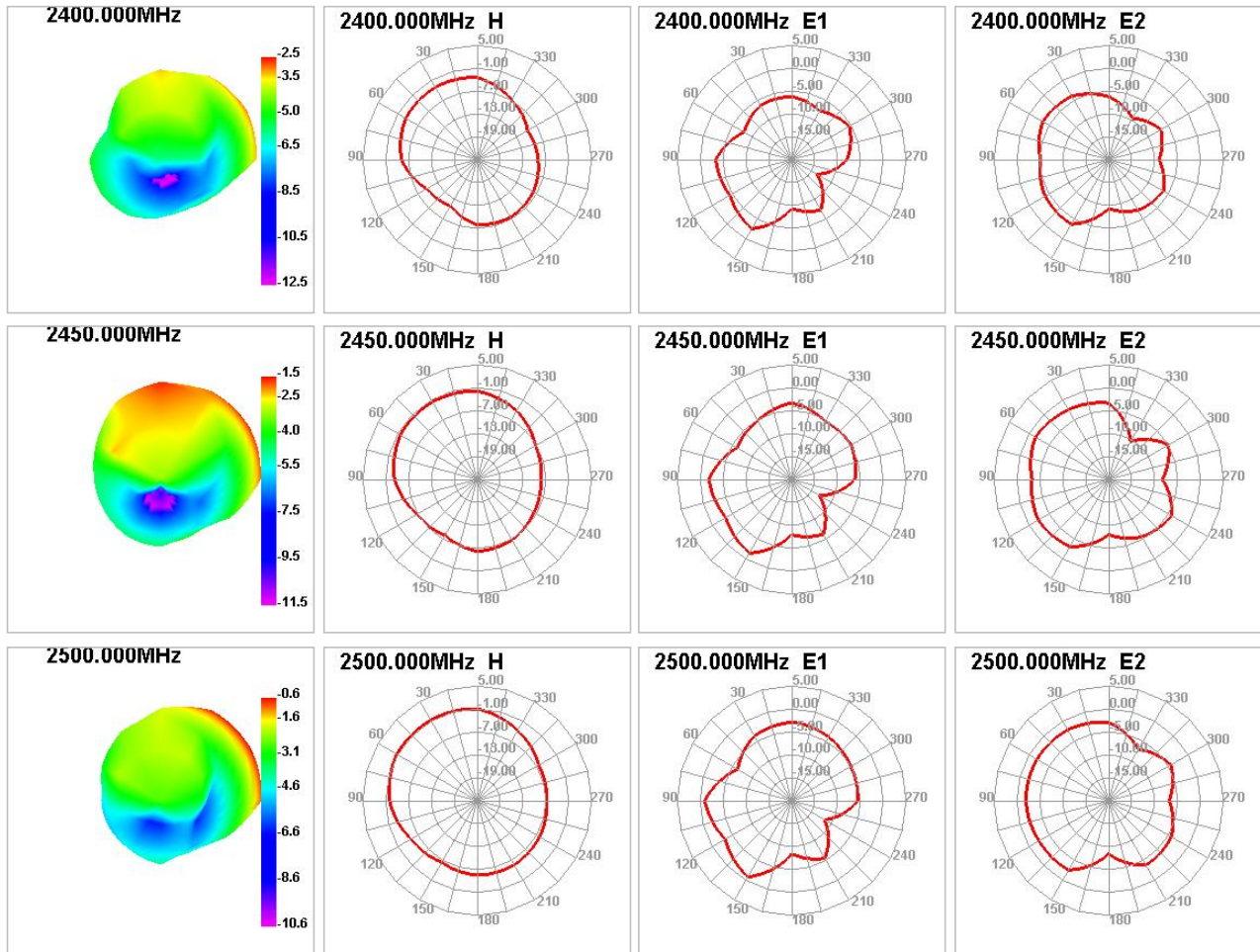
◆ Return Loss



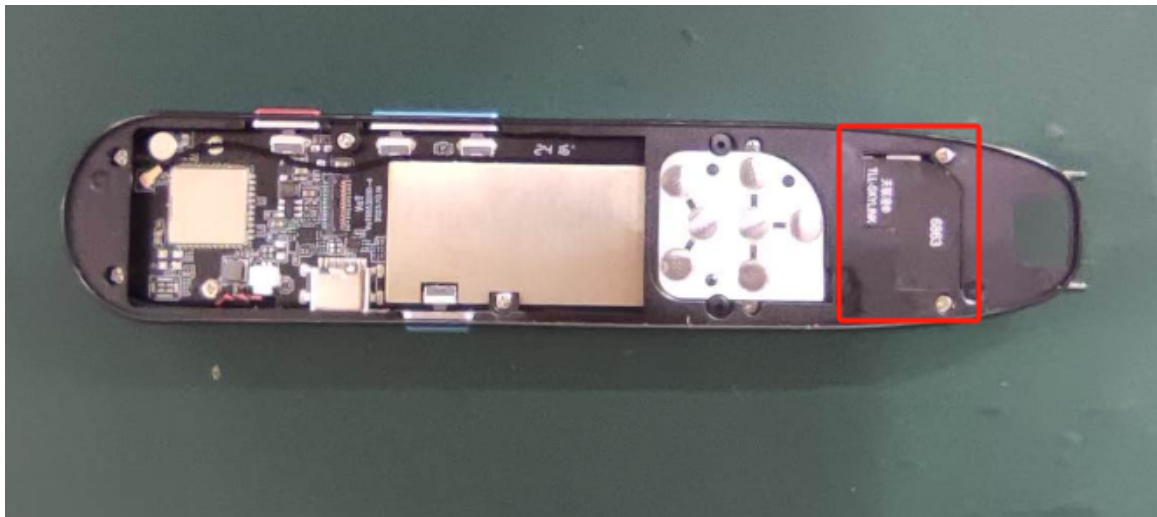
◆ Gain & Efficiency

Fre (MHz)	Eff (%) (dB)	Gain (dB)
2400	35.65	-2.55
2410	35.71	-2.17
2420	38.11	-1.96
2430	39.23	-1.78
2440	40.39	-1.51
2450	41.48	-1.45
2460	40.52	-1.08
2470	39.52	-0.91
2480	39.33	-0.82
2490	37.29	-0.69
2500	36.65	-0.63

◆ 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±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