

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: _____ 2.4G/5.8G WIFI Antenna

Part NO.: _____ F20.WIFI.C113.40B.1

Write By: _____ YAN PEI HAI

Issued Date: _____ 2026-09-01

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	<2.5
Efficiency	>40%
Peak Gain	2.4G: 1.37dbi 5.8G: 3.85dbi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	1.13mm
Connector Type	1
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

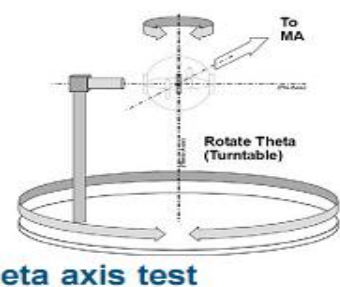
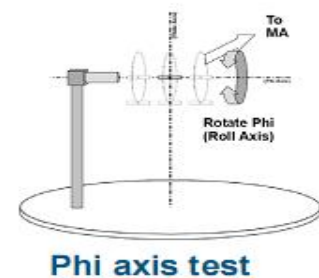
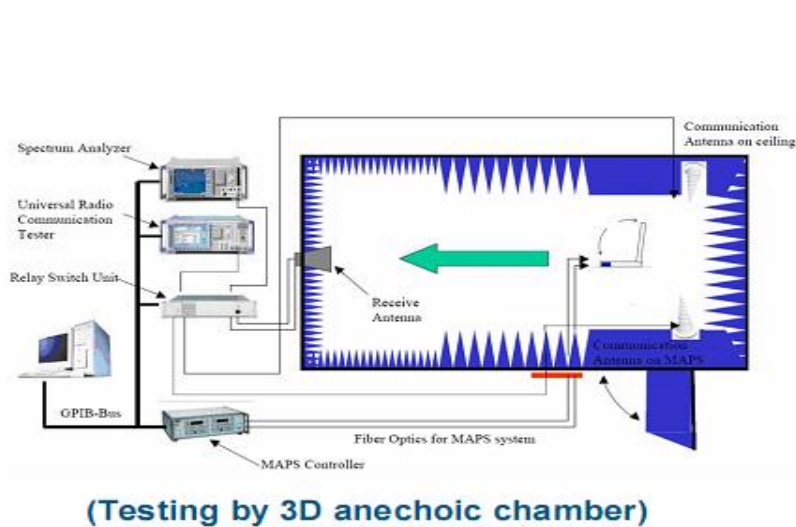
1. Network Analyzers :

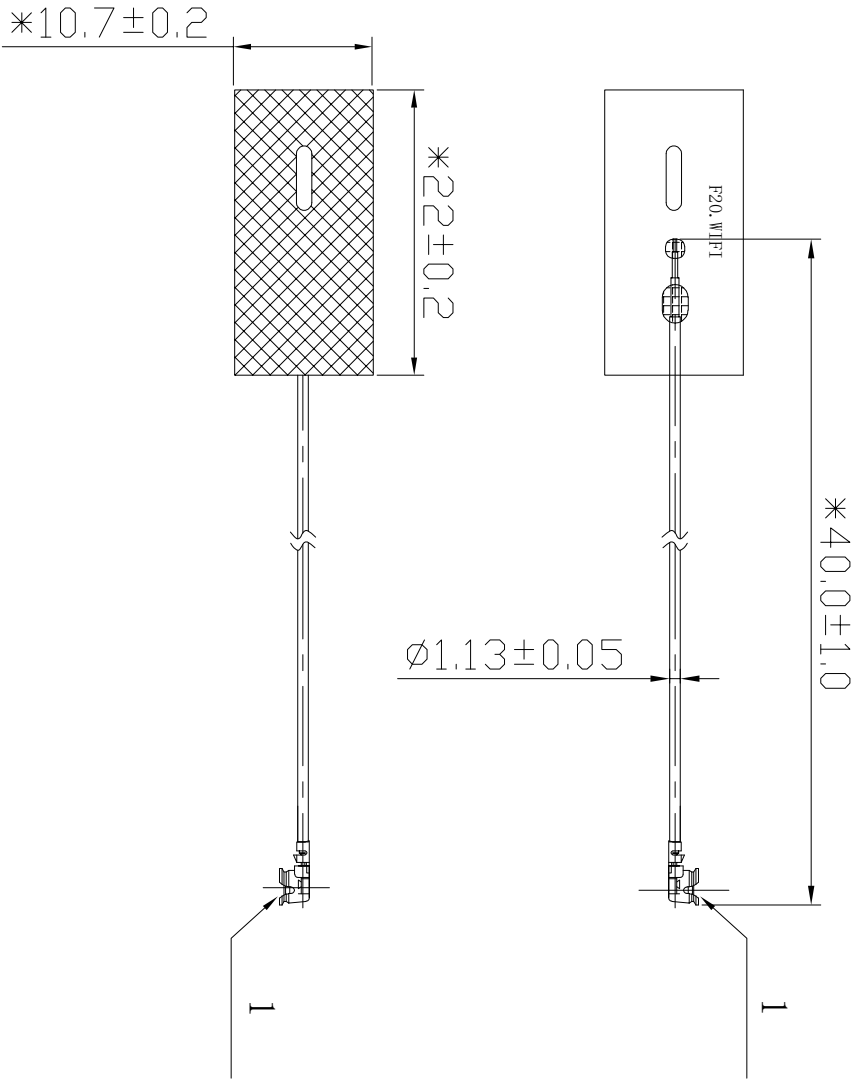
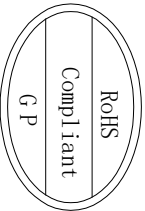
Agilent 8753D 5071B

Communications Test Set:

Agilent E5515C CMW500

2. 3D Chamber Test System





SHEN ZHEN SKYLink CO., LTD				2026-09-01			
Φ	Third Angle	Project	Date	Designed by			
0~10	±0.05	○	0.02	Part Name			
10~18	±0.10	◎	∅0.03	Part No.	F20. W1F1. C113. 40B. 1		
18~30	±0.12	⊥	0.02	Material			
30~40	±0.15	∇	0.04	DWG No.		Approved by	
40~	±0.20	Angle	±0.5°				
Location				Unit	mm	Scale	1:1
Rev	Description	Date	Remark	Unit			
1				Scale			
				Rev			
				A			

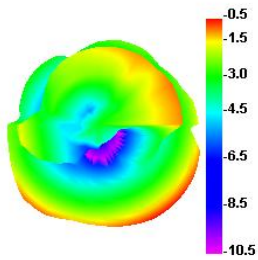
◆ Gain & Efficiency

Fre (MHz)	Eff (%) (dB)	Gain (dB)
2400	43.68	-0.48
2410	43.62	-0.1
2420	44.58	0.25
2430	44.73	0.38
2440	45.37	0.67
2450	45.67	0.82
2460	46.18	0.87
2470	46.37	0.94
2480	46.71	1.22
2490	46.22	1.18
2500	45.62	1.37

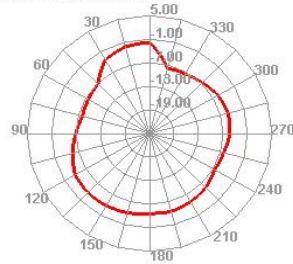
Fre (MHz)	Eff (%) (dB)	Gain (dB)
5100	46.87	1.57
5200	47.69	1.82
5300	48.72	2.26
5400	49.68	2.97
5500	50.67	3.85
5600	50.37	3.67
5700	48.62	3.27
5800	48.34	2.79

◆ Radiation Pattern

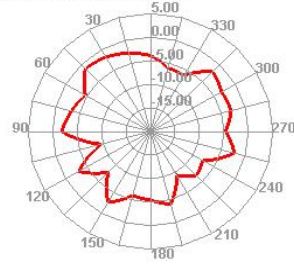
2400.000MHz



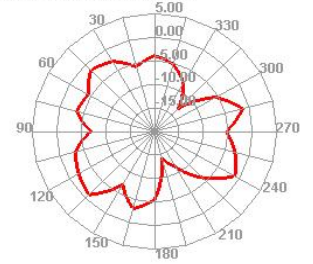
2400.000MHz H



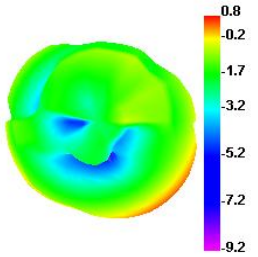
2400.000MHz E1



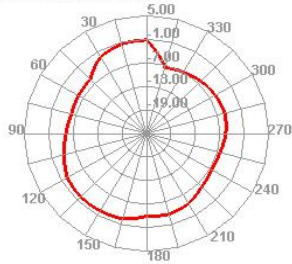
2400.000MHz E2



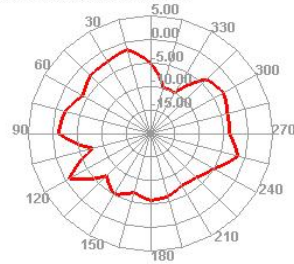
2450.000MHz



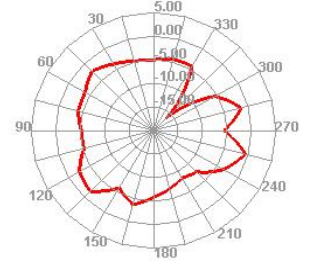
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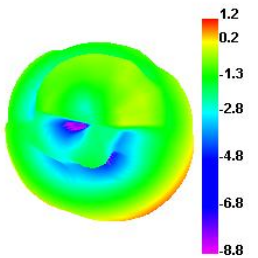
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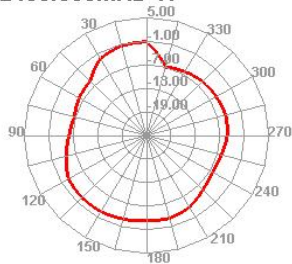
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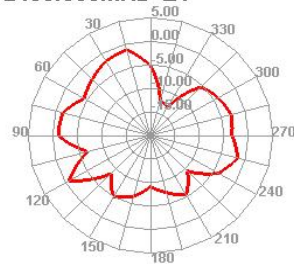
2480.000MHz



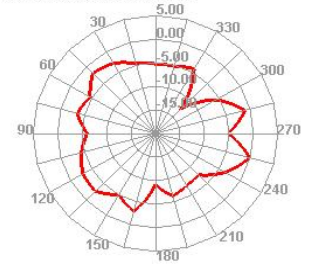
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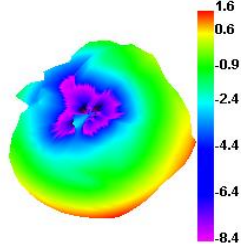
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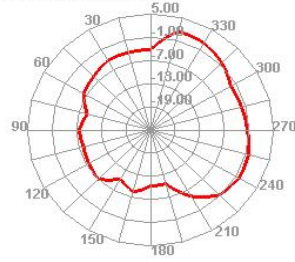
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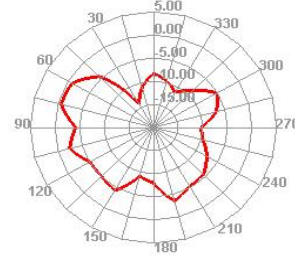
5150.000MHz



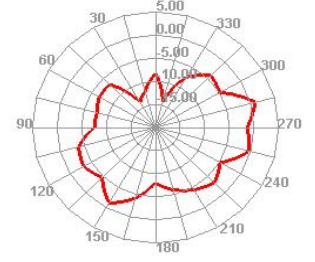
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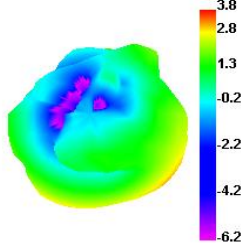
5150.000MHz E1



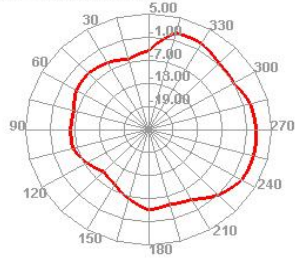
5150.000MHz E2



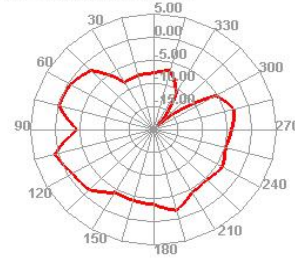
5500.000MHz



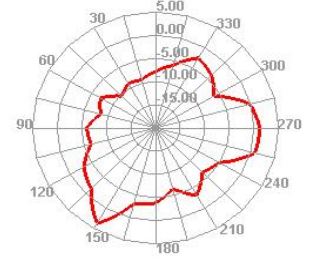
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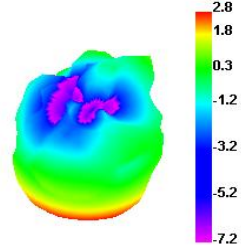
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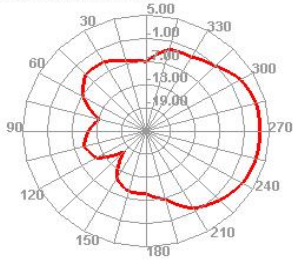
5500.000MHz E2



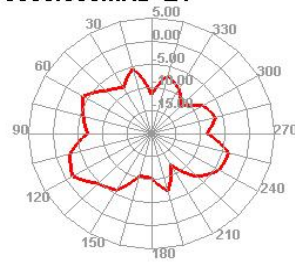
5800.000MHz



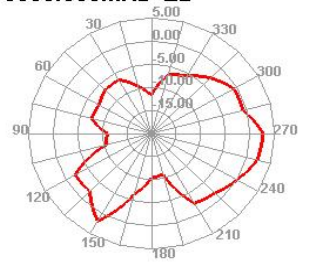
5800.000MHz H



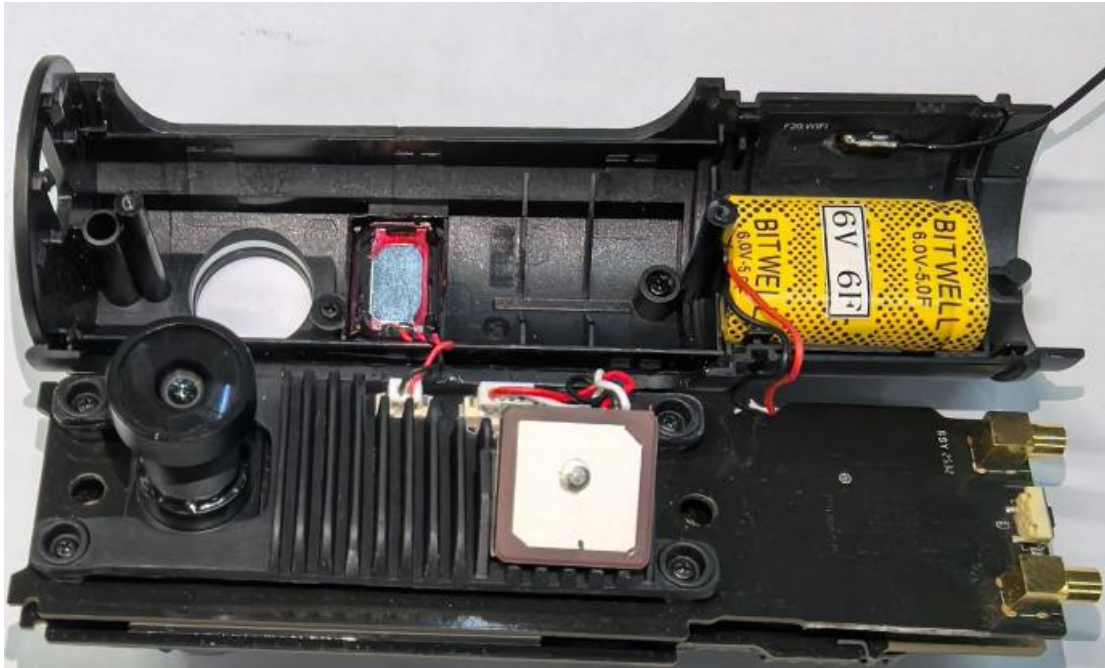
5800.000MHz E1



5800.000MHz E2



◆ 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 :$5 \pm 1\%$.PH value :6.5~7.2 Test time:24hours	Salt-Spray Tester	No color change No appear rusting	PASS