

Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: _____ 2.4G/5.8G WIFI Antenna

Part NO.: _____ S200.WF245806.V4.C137.150B.1

Write By: _____ Damon Cui

Issued Date: _____ 2024.07.29

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	4.4dbi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	1.37MM 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

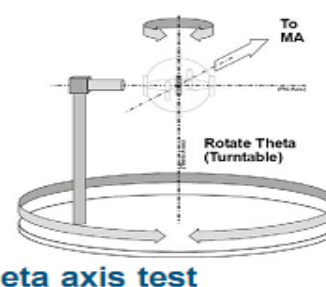
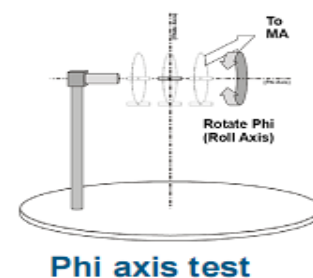
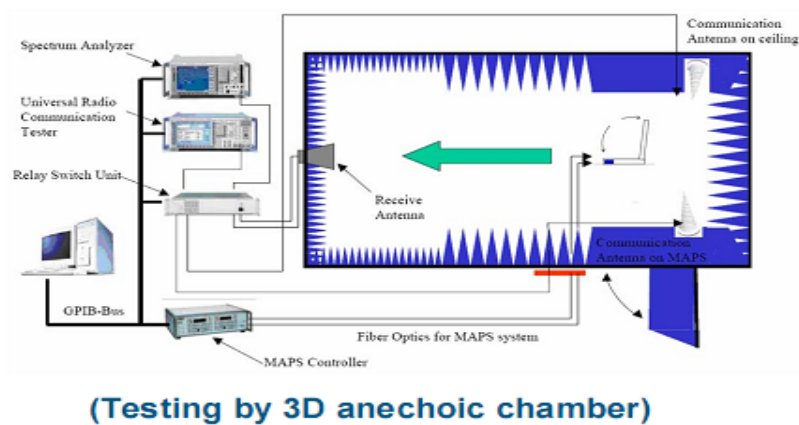
1. Network Analyzers :

Agilent 8753D 5071B

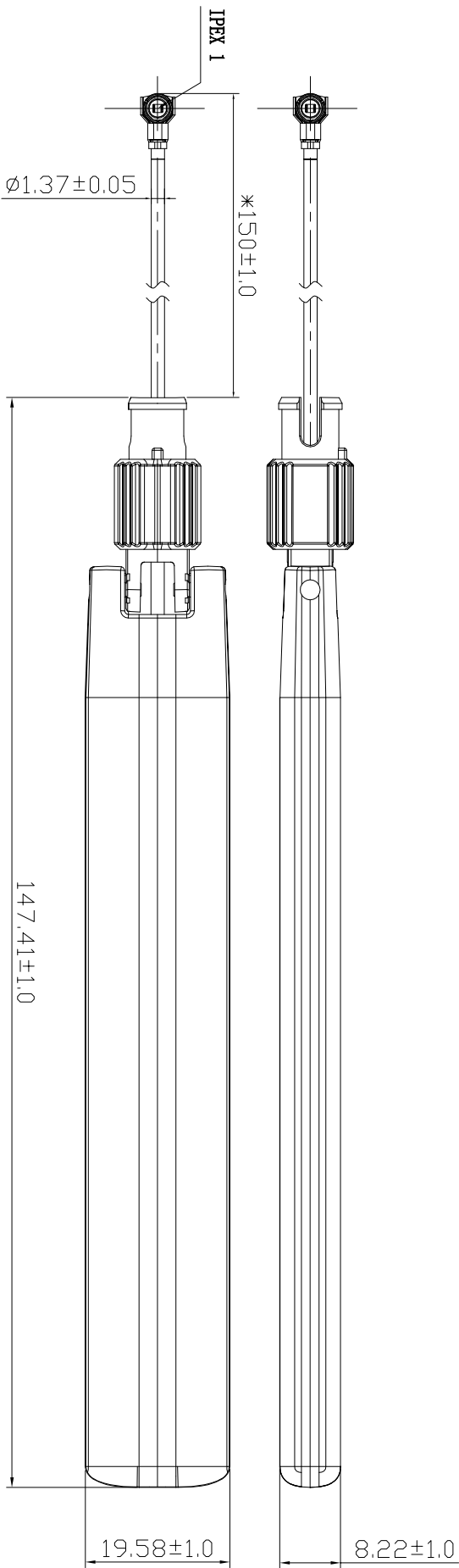
Communications Test Set:

Agilent E5515C CMW500

2. 3D Chamber Test System

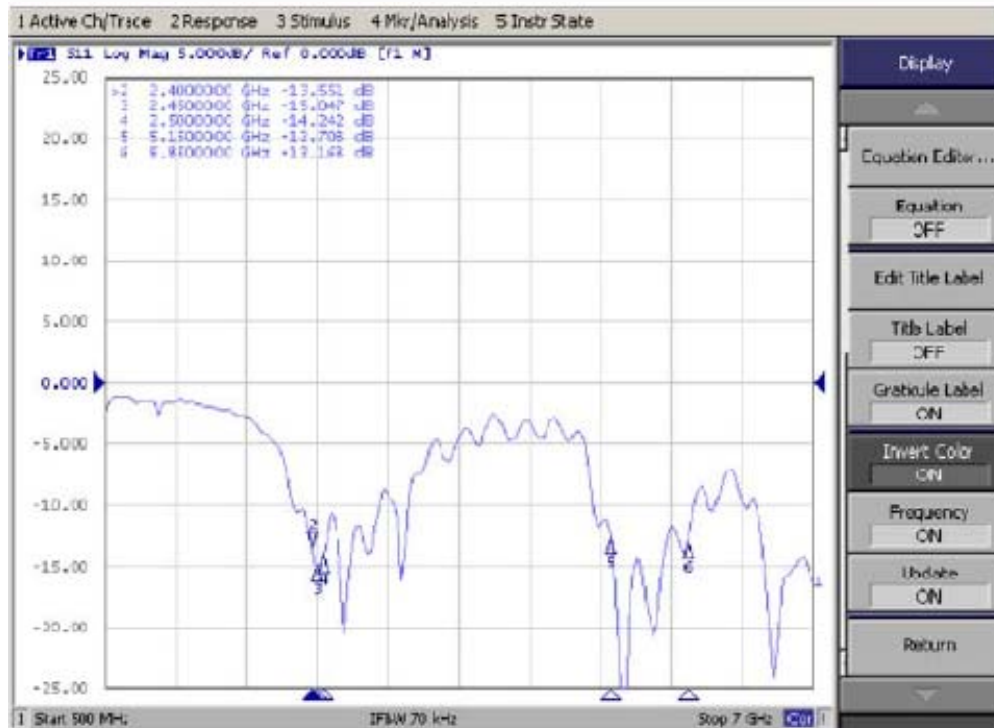


A	1	2	3	4	5	6	7	8
								
A								



										SHEN ZHEN SKYLink CO., LTD													
D												Third Angle		Project		Date		2024-07-27					
										0~10		± 0.05		○		0.02		Part Name					
										10~18		± 0.10		◎		$\phi 0.03$		Part No.		S200.WF245806.V4.C137.150B.1			
										18~30		± 0.12		┴		0.02		Material					
										30~40		± 0.15				0.04		DWG No.					
A		New drawing						40~		± 0.20		Angle $\pm 0.5^\circ$											
Rev		Description		Date		Remark		Location						Unit		mm		Scale 1:1		Rev A			
1		2		3		4		5		6		7		8									

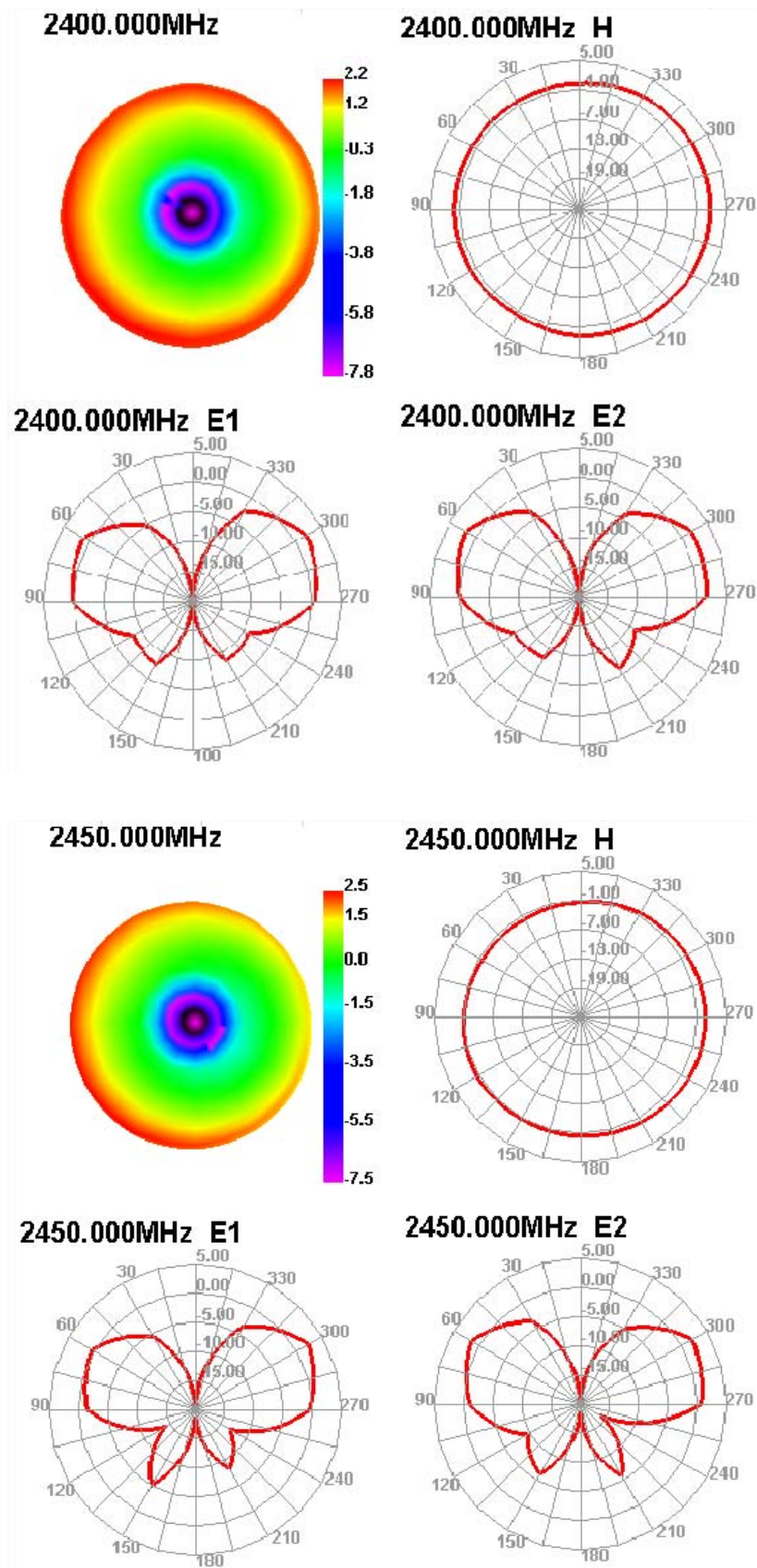
◆ Return Loss

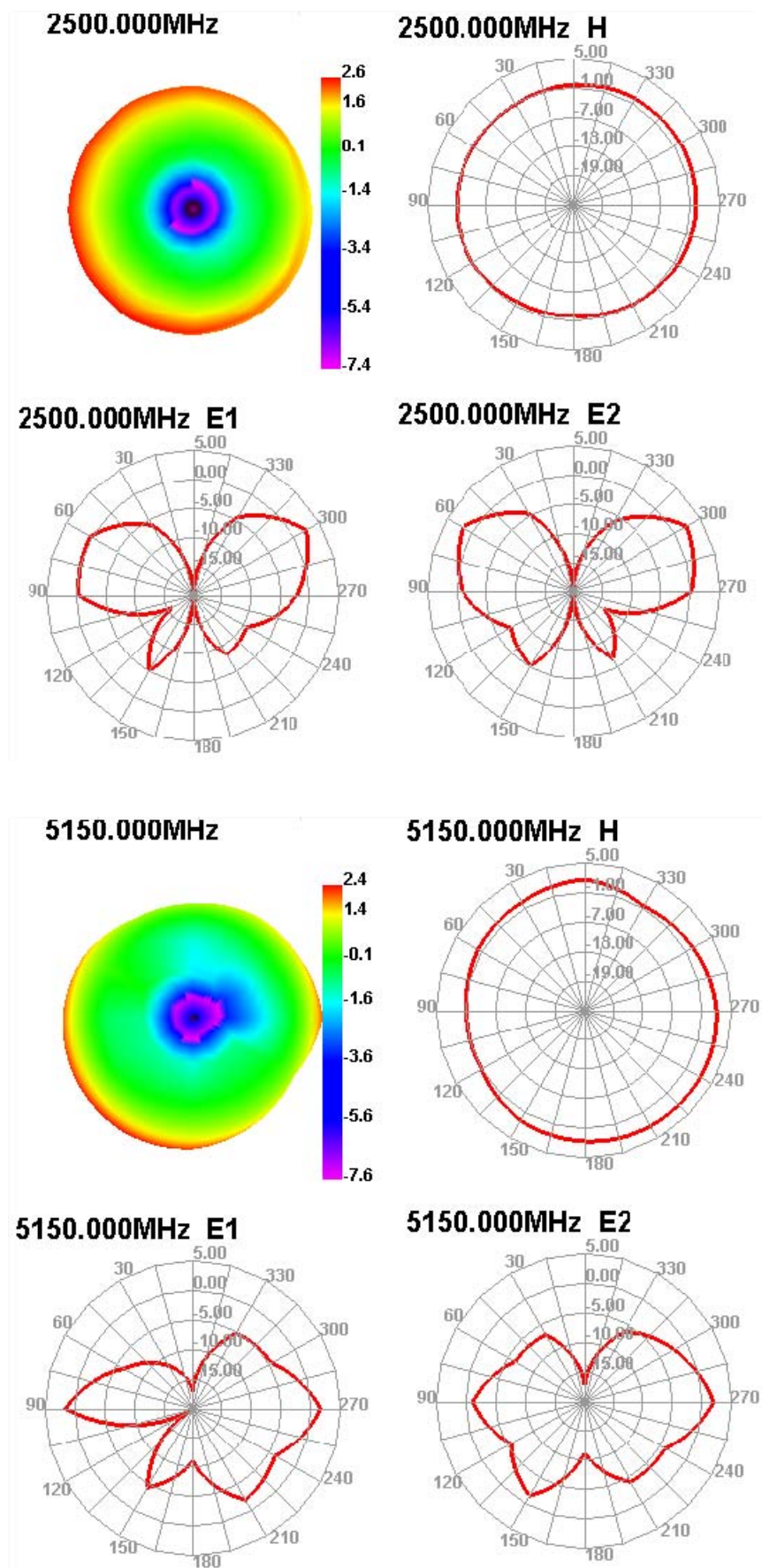


◆ Gain & Efficiency

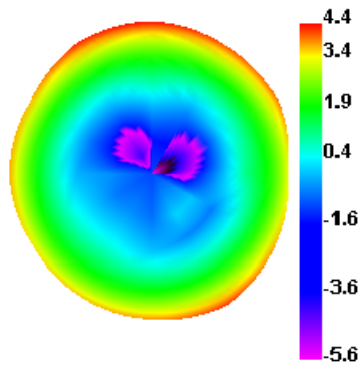
Freq	Effi	Gain	Freq	Effi	Gain
(MHz)	(%)	(dBi)	(MHz)	(%)	(dBi)
2400	75.33	2.16	5100	56.77	2.36
2410	74.24	2.31	5200	62.74	2.83
2420	73.73	2.52	5300	65.29	2.8
2430	71.1	2.64	5400	81.16	3.93
2440	70.37	2.77	5500	79.11	4.4
2450	65.92	2.53	5600	75.43	4.03
2460	68.26	2.69	5700	68.66	3.53
2470	66.13	2.53	5800	63.31	2.99
2480	66.14	2.58	5850	65.6	3.22
2490	64.83	2.55			
2500	66.02	2.64			

◆ Radiation Pattern

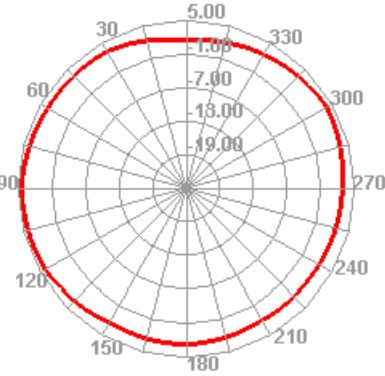




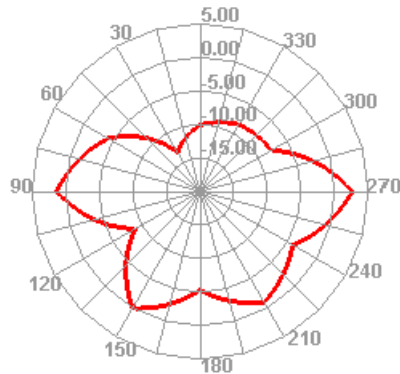
5500.000MHz



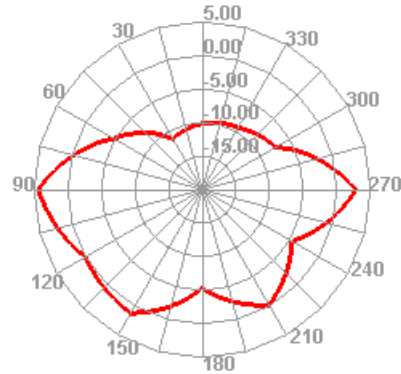
5500.000MHz H



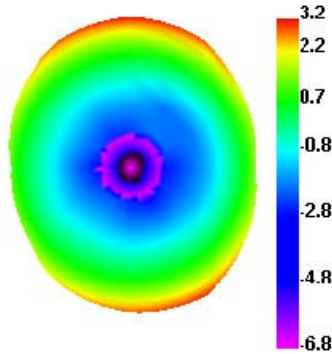
5500.000MHz E1



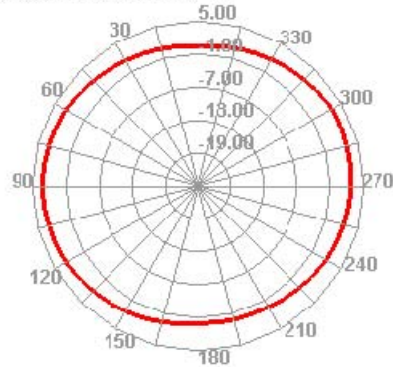
5500.000MHz E2



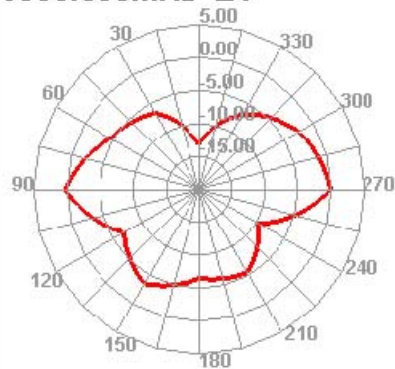
5850.000MHz



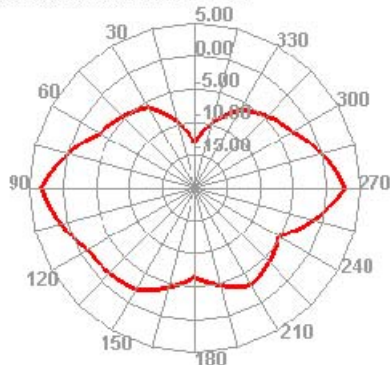
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



◆ 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