

深圳市天联凌科技有限公司

Shenzhen SKYLink Technology Co.,Ltd

天线规格承认书

编号: SLS0A20220416FZF01

客户名称: 卡微恩

项目名称:

产品描述: FPC 背胶 1.13mm 黑色同轴线 线长 190mm 剥线 221

客户料号:

我司料号: WF84A. C113. 190B. 221

板 本: V1.0

日 期: 2021-04-16

此承认书严禁修改

客户

工程	采购	承认

天联凌

研发	工程	审核

● Specification Summary

A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz 5150 MHz ~5850MHz
Log Mag	<-10dB
Efficiency	>40%
Peak Gain	2.5dbi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	1.13mm 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

● Test Equipment & Conditions

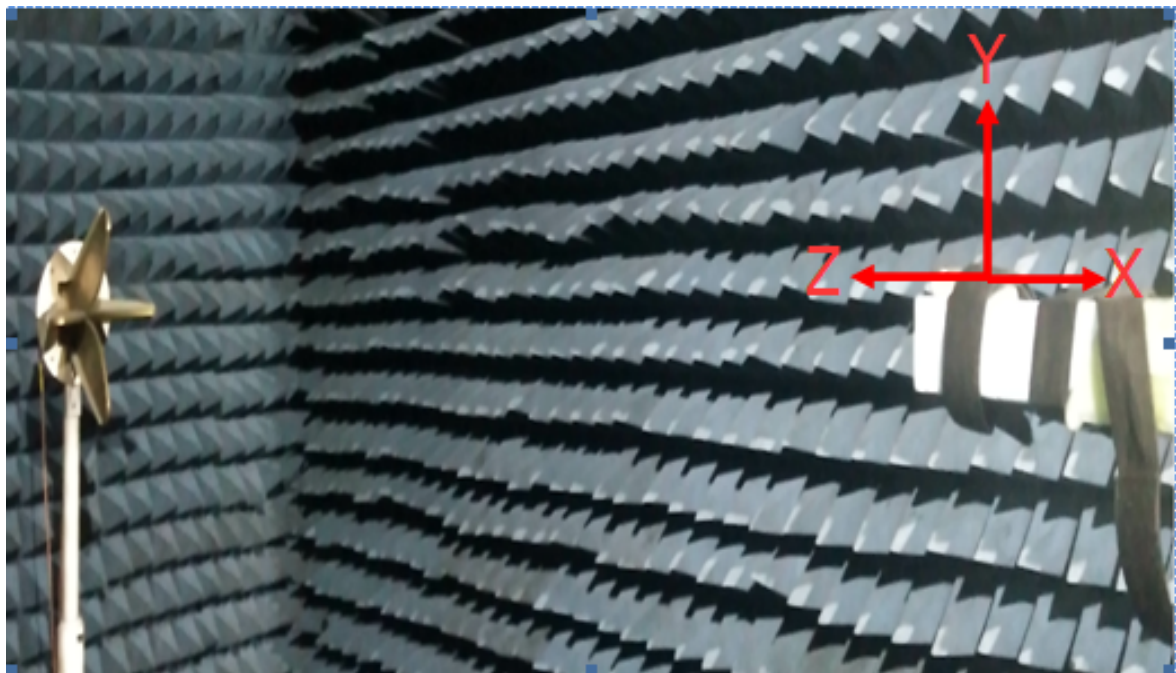
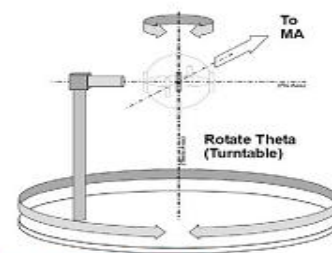
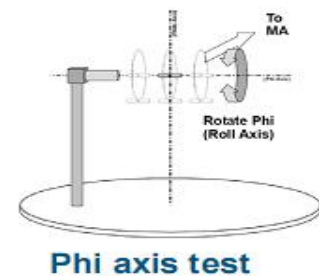
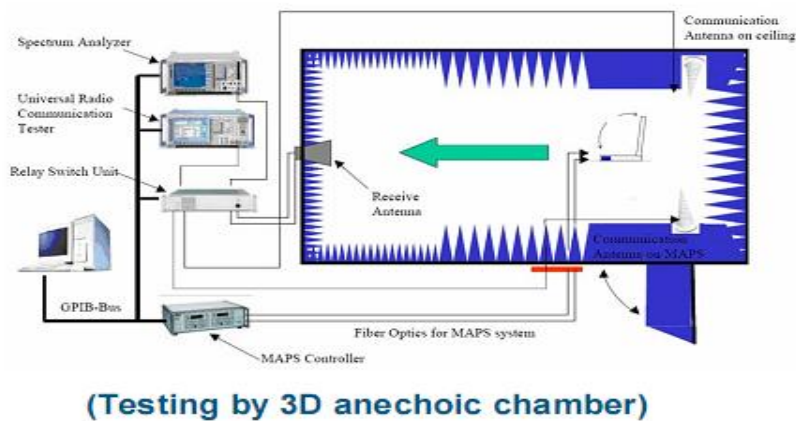
1. Network Analyzers :

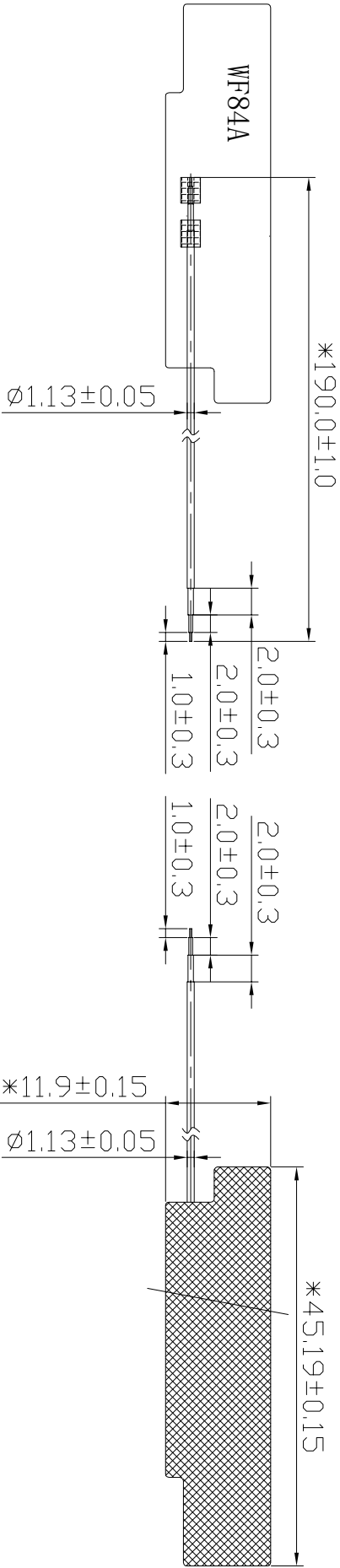
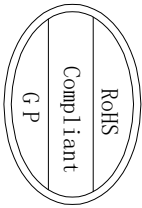
Agilent 8753D 5071B

Communications Test Set:

Agilent E5515C CMW500

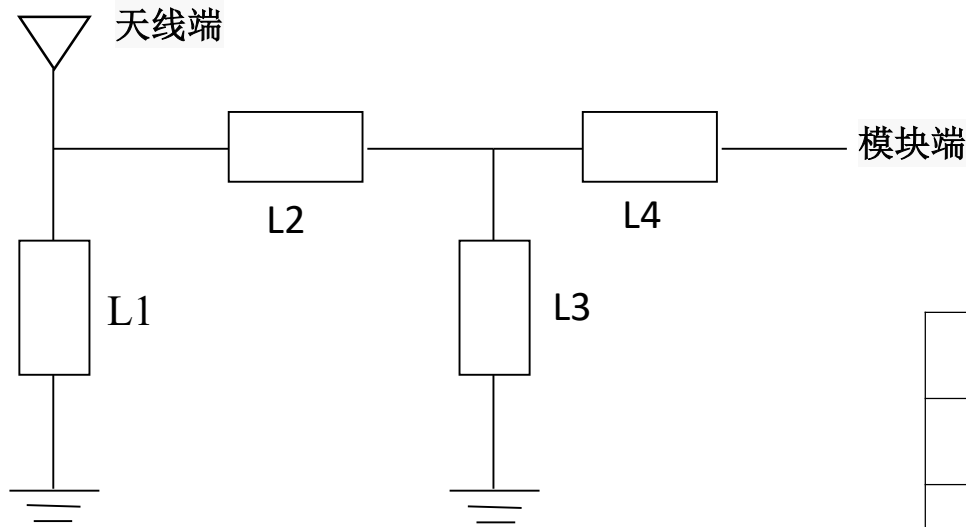
2. 3D Chamber Test System





1		2	3	4	5	6	7	8
A								A
B								B
C								C
D								D
Rev		Description		Date	Remark			
1								
A		New drawing						
Project		Part Name		Date		2022-11-10		
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								
SHEN ZHEN SKYLink CO., LTD		Project		Date		2022-11-10		
Part No.		Part No.		Designed by		MD		
Material		Material		Checked by		RF		
DWG No.		DWG No.		Approved by				
Unit		mm		Scale		1:1 Rev A		

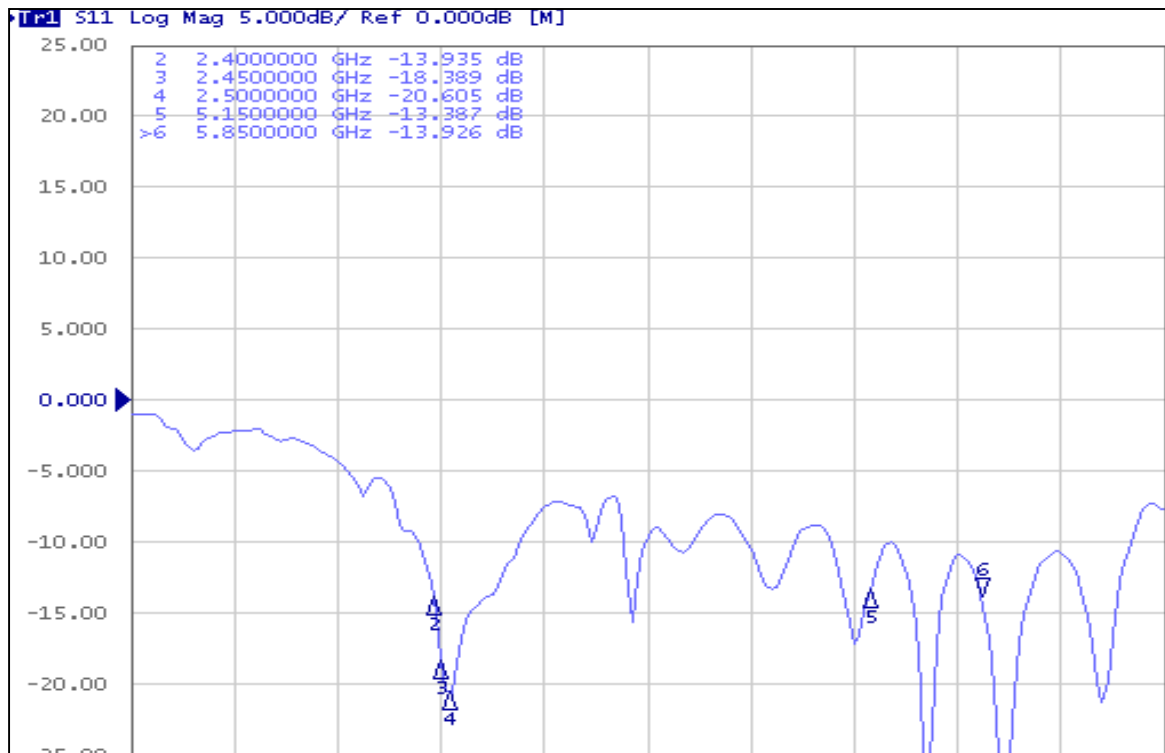
● 匹配电路（matching circuit）



L1	/
L2	/
L3	/
L4	/

原主板匹配电路不变

◆ Log Mag

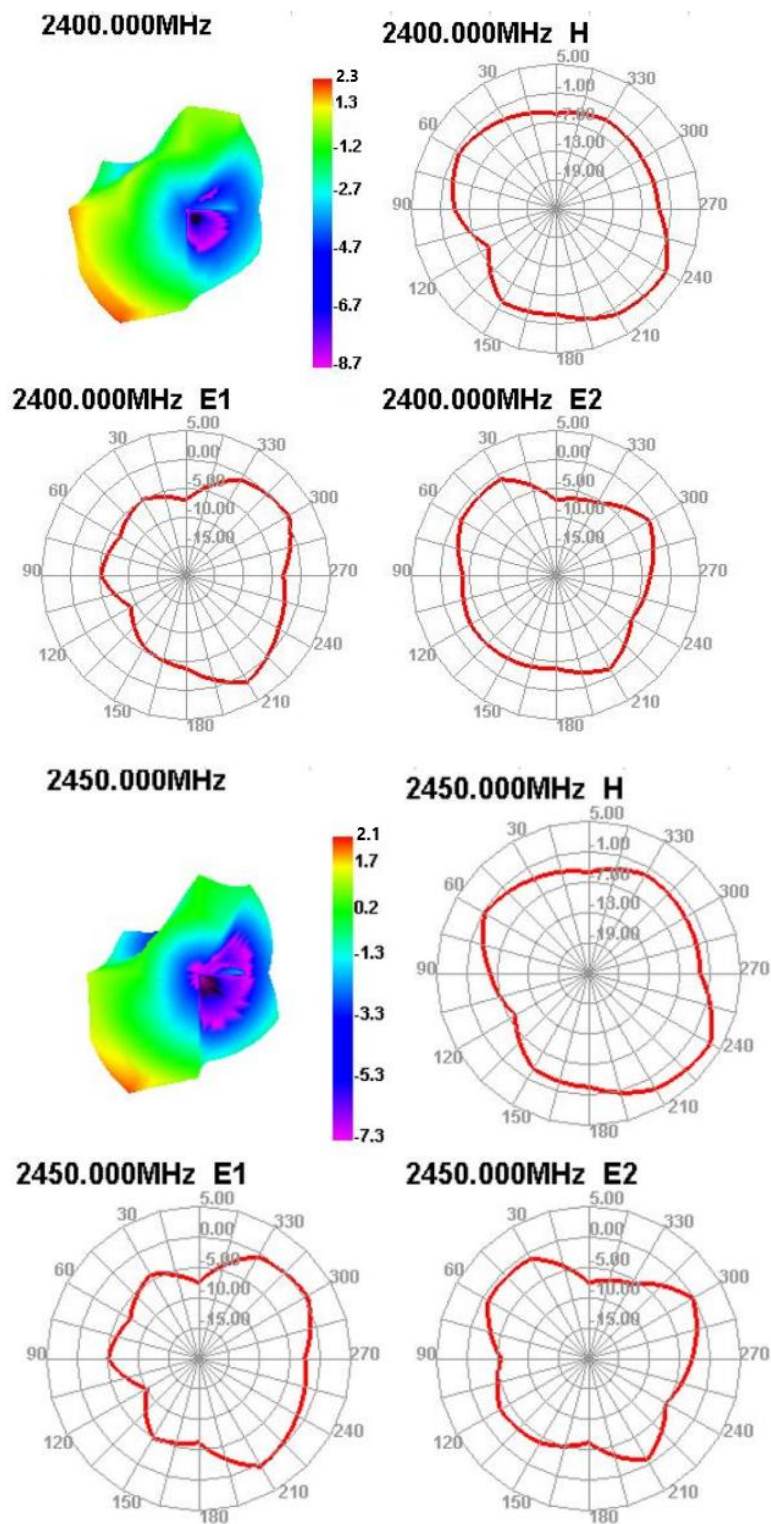


◆ Gain & Efficiency

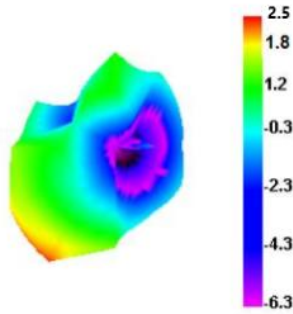
Fre (MHz)	Eff (%) (dB)	Gain (dB)
2400	60.03	2.29
2410	56.13	2.01
2420	55.18	2.01
2430	54.3	2.18
2440	53.95	2.31
2450	49.17	2.07
2460	47.63	2.03
2470	46.12	2.06
2480	47.7	2.16
2490	51.99	2.35
2500	52.03	2.49

Fre (MHz)	Eff (%) (dB)	Gain (dB)
5150	46.15	2.27
5200	43.66	1.92
5250	43.45	1.86
5300	42.93	1.76
5350	45.17	2.33
5400	41.91	1.92
5450	40.25	1.8
5500	41.1	1.35
5550	40.99	1.48
5600	42.87	1.47
5650	40.99	1.53
5700	41	1.61
5750	43.67	1.9
5800	43.4	1.49
5850	46.23	2.44

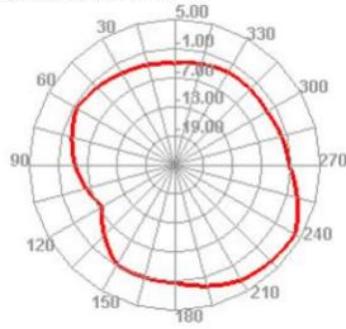
◆ Radiation Pattern



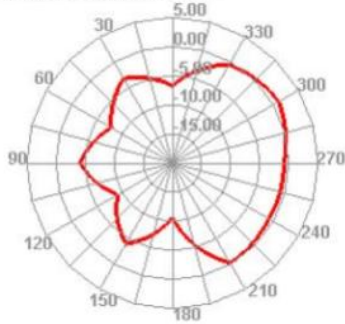
2500.000MHz



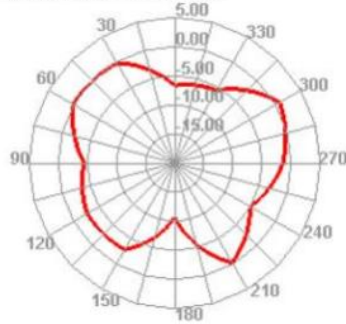
2500.000MHz H



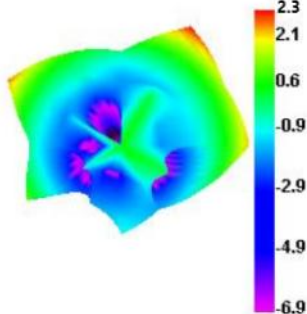
2500.000MHz E1



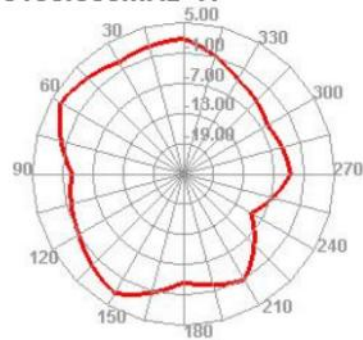
2500.000MHz E2



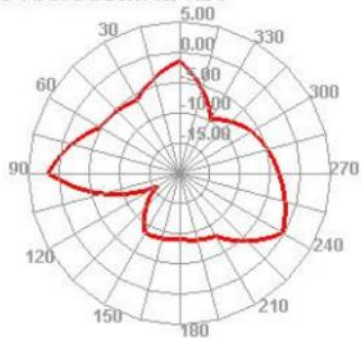
5150.000MHz



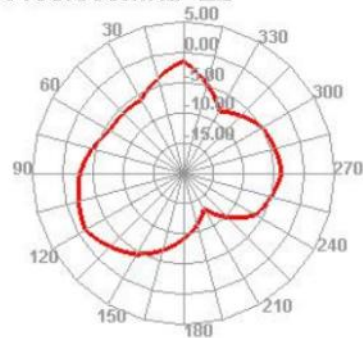
5150.000MHz H



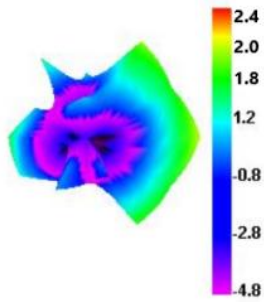
5150.000MHz E1



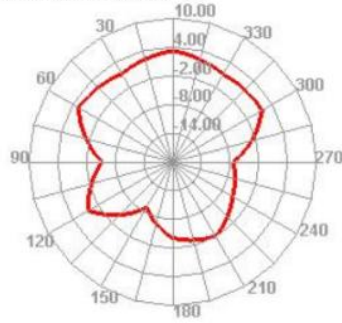
5150.000MHz E2



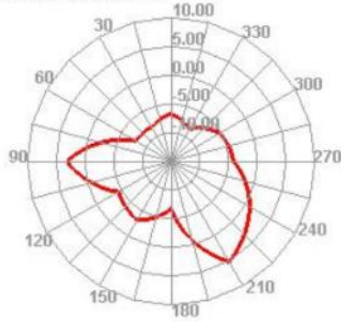
5850.000MHz



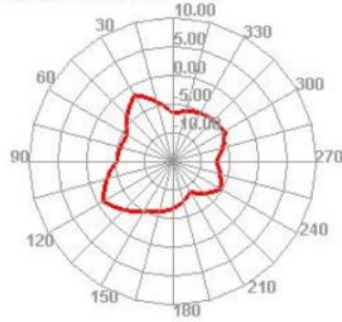
5850.000MHz H



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: $35 \pm 2^{\circ}\text{C}$ 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