
Shenzhen SKYLink Technology Co.,Ltd

Antenna Specification for Approval

Customer Name: _____

Product Name: 2.4G &5.8G Antenna _____

Part NO. : WF75J.C178.410B.MMCX _____

Write By: Damon Cui _____

Issued Date: 2025-03-18 _____

Customer

R&D Dept	Business Dept	Approved By

SKYLink

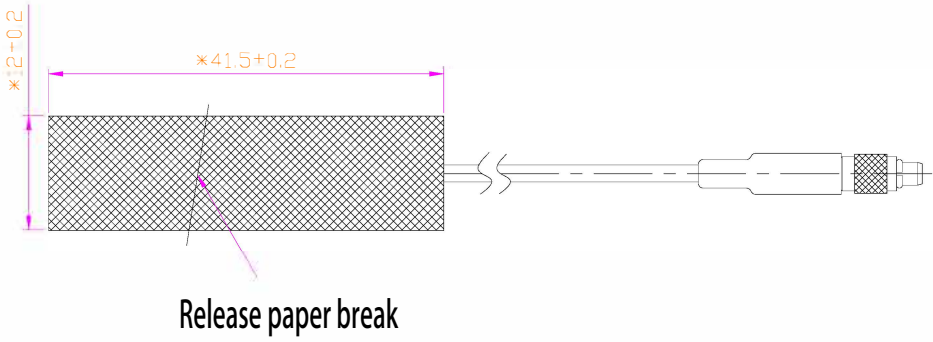
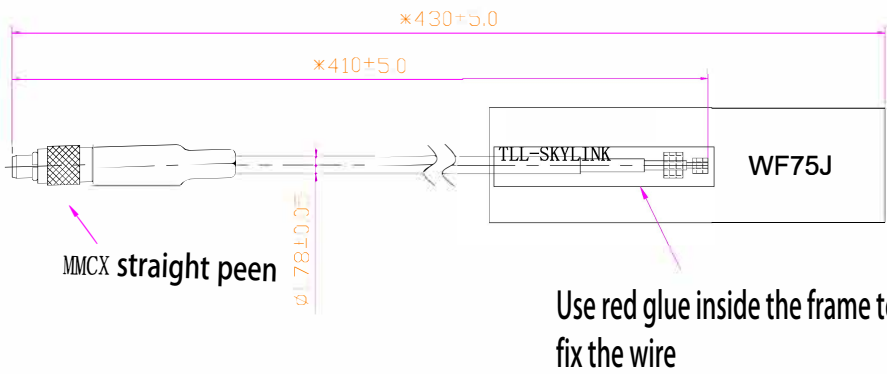
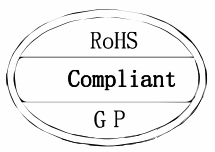
R&D Dept	Engineer Dept	Approval

● Specification Summary

A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz 5150MHz~5850MHz
VSWR	<3.0
Efficiency	>30%
Peak Gain	2.4G:0.45dBi 5G:0.39dBi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	RG178 Black
Connector Type	MMCX
Dimension	At Attachment
Heat-durability	280±5°C, 10sec.
C. Environmental Characteristics	
Operation Temperature	- 20 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C

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注:
1. "*"Emphasis dimension ;
2.Dimensions not marked,please refer to the drawing;
3.Pb、Hg、Cr+6、PBBs、PBDEs Item less than 1000PPM, Cd less than 100PPM.

Rev	Description			Date	Remark
	1	2	3		4

SHEN ZHEN SKYLink CO.,LTD					
Third Angle		Project	Date		2023-06-19
0~10	±0.05	○	0.02	Part Name	Designed by
10~18	±0.10	◎	0.03	Part No.	WF75J.C178.410B.MMCX
18~30	±0.12	⊥	0.02	Material	Checked by
30~40	±0.15	▱	0.04	DWG No.	Approved by
40~	±0.20	Angle	±0.5°		Unit mm Scale 1:1 Rev A
Location	5	6	7	8	

● Test Equipment & Conditions

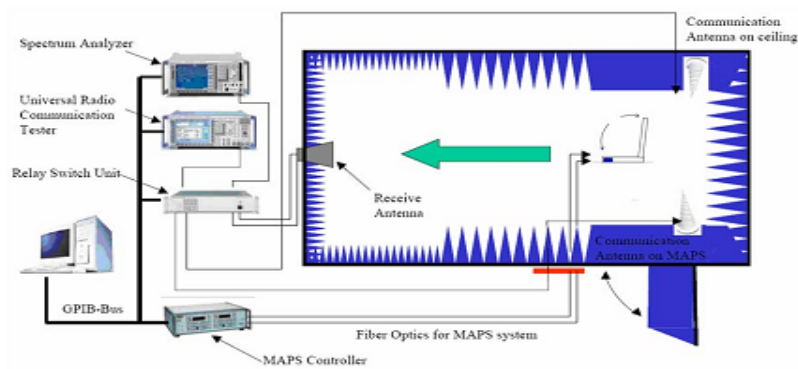
1. Network Analyzers :

Agilent 8753D 5071B

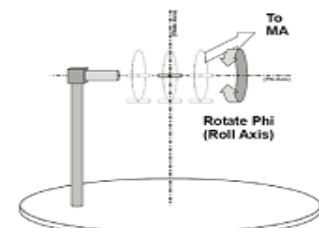
Communications Test Set:

Agilent E5515C CMW500

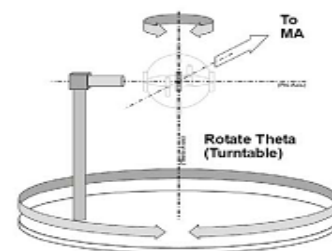
2. 3D Chamber Test System



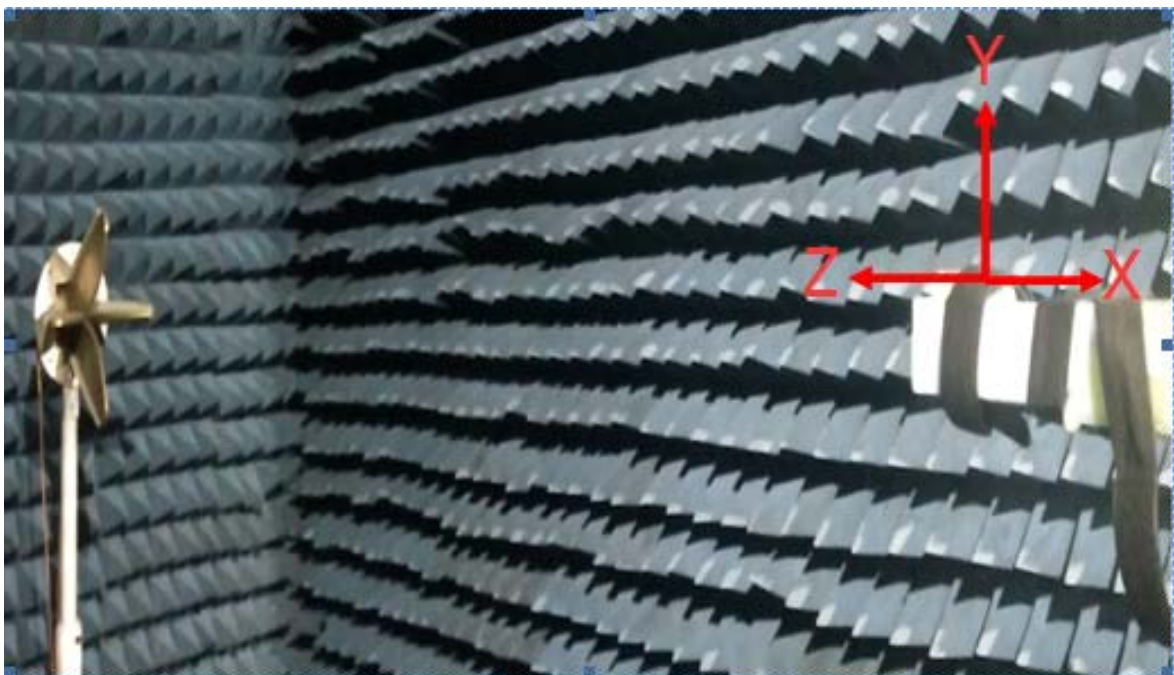
(Testing by 3D anechoic chamber)



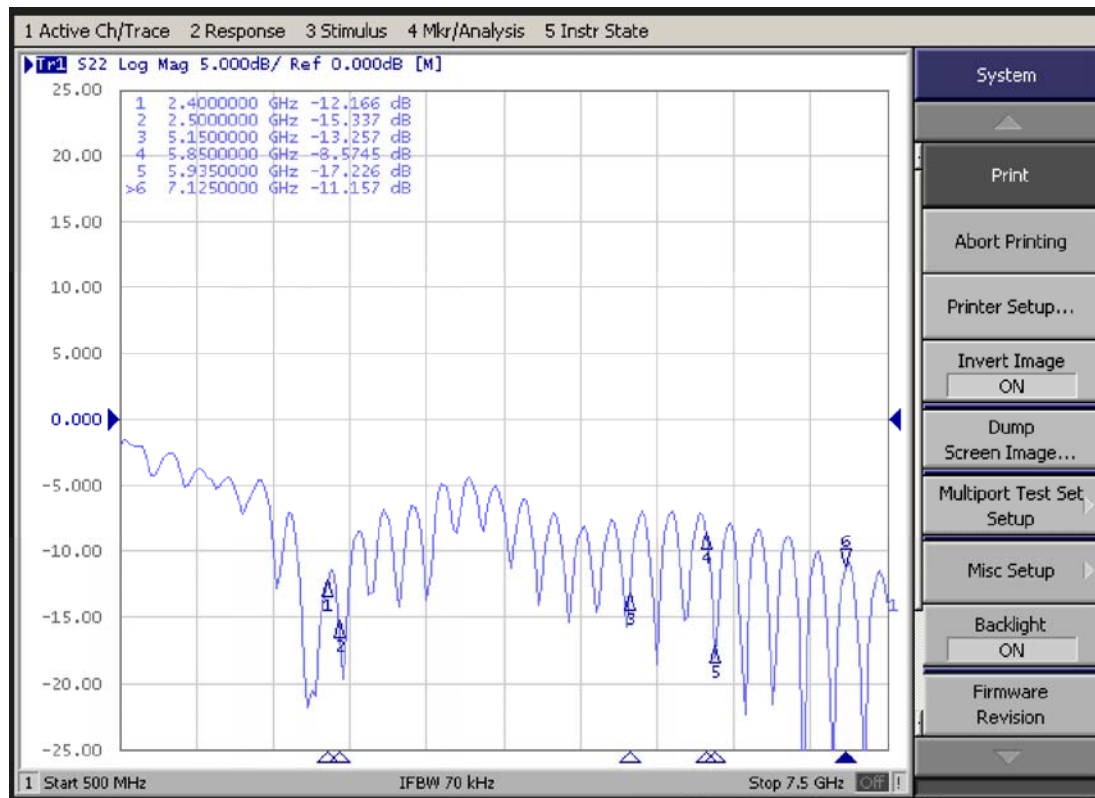
Phi axis test



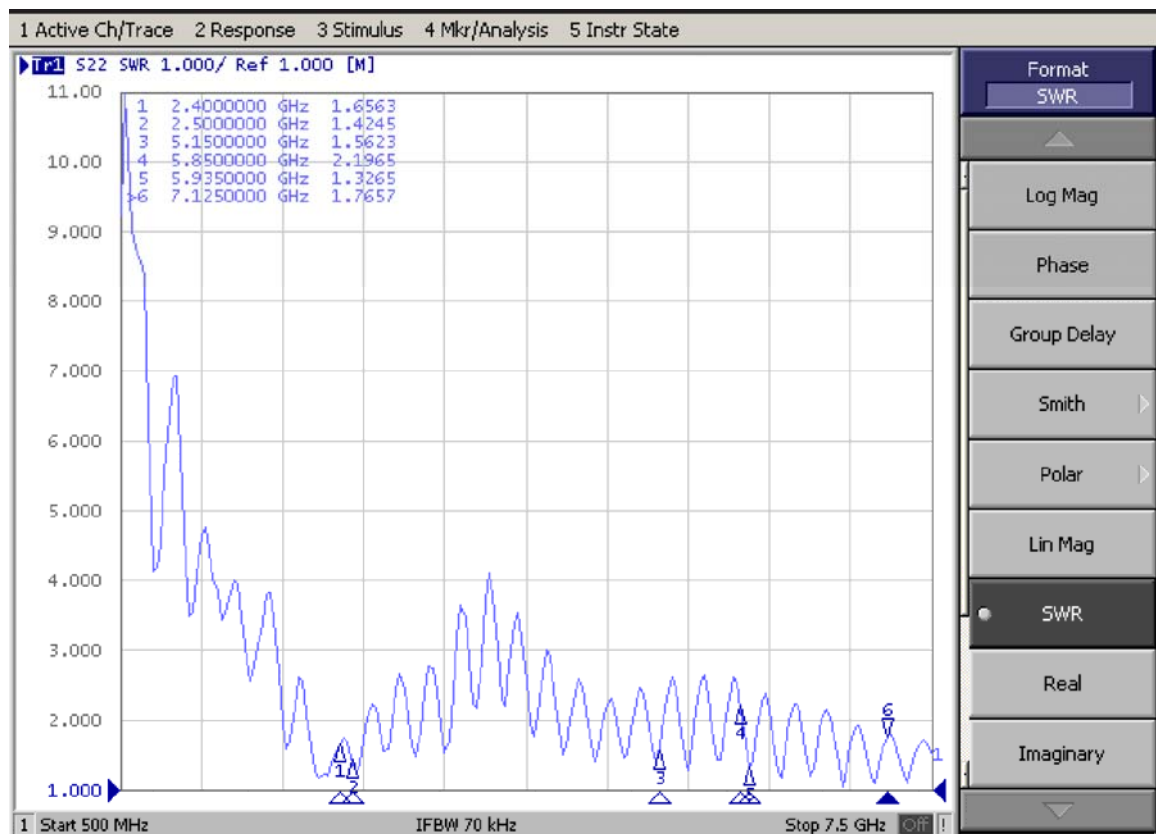
Theta axis test



◆ Return Loss



◆ VSWR



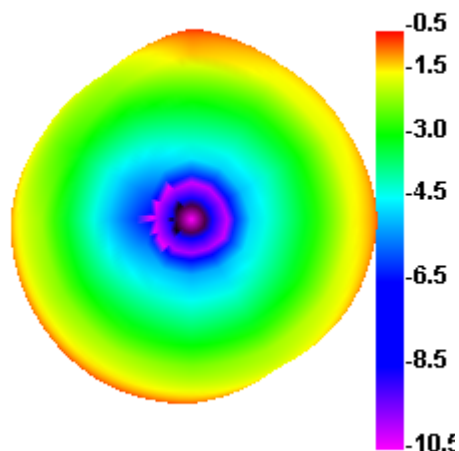
Efficiency & Gain

Freq (MHz)	Effi (%)	Gain (dBi)
2400	49.18	-0.16
2410	49.18	-0.23
2420	49.84	-0.28
2430	48.72	-0.47
2440	49.14	-0.41
2450	46.45	-0.5
2460	47.43	-0.18
2470	45.9	-0.08
2480	46.96	0.18
2490	49.13	0.44
2500	49.37	0.45

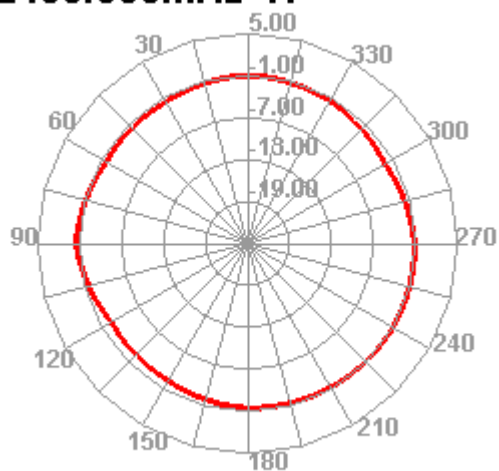
Freq (MHz)	Effi (%)	Gain (dBi)
5100	36.92	-0.89
5200	32.97	-1.61
5300	31.75	-1.57
5400	37.75	-0.3
5500	32.99	-0.5
5600	35.04	-0.13
5700	38.21	0.39
5800	30.79	-0.62
5900	34.79	-0.28

◆ Radiation Pattern

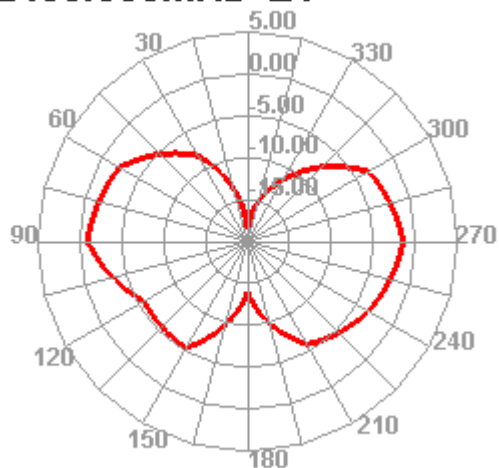
2450.000MHz



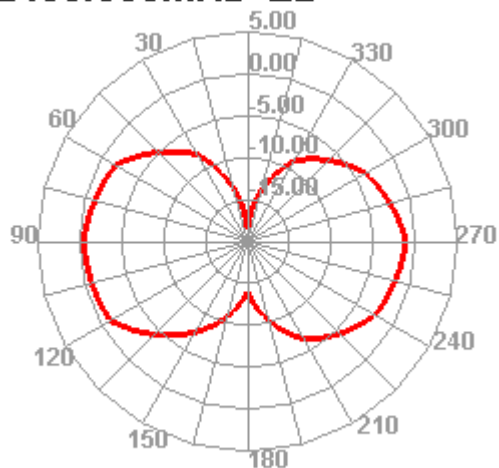
2450.000MHz H



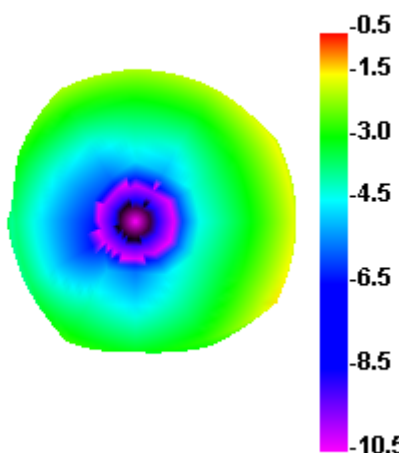
2450.000MHz E1



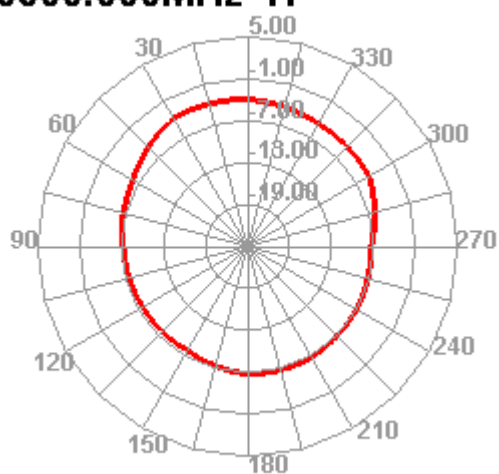
2450.000MHz E2



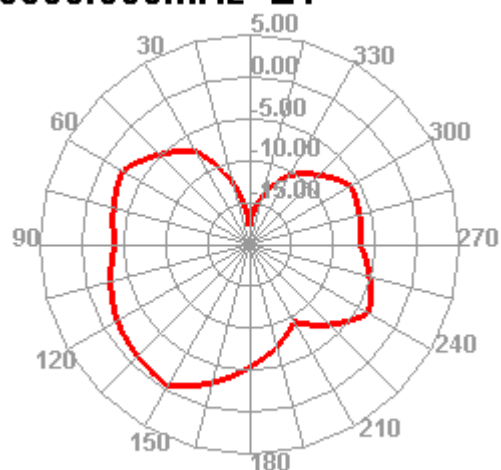
5500.000MHz



5500.000MHz H



5500.000MHz E1



5500.000MHz E2

