

# Shenzhen SKYLink Technology Co.,Ltd

## Antenna Specification for Approval

Customer Name: \_\_\_\_\_

Product Name: \_\_\_\_\_ 2.4G WIFI Antenna \_\_\_\_\_

Part NO. : \_\_\_\_\_ Z532.V4.C113.90B.221 \_\_\_\_\_

Write By: \_\_\_\_\_ Zhengfeng Fang \_\_\_\_\_

Issued Date: \_\_\_\_\_ 2023-06-20 \_\_\_\_\_

Customer

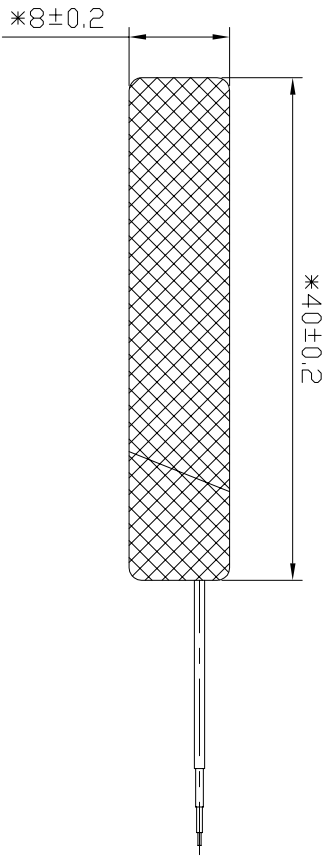
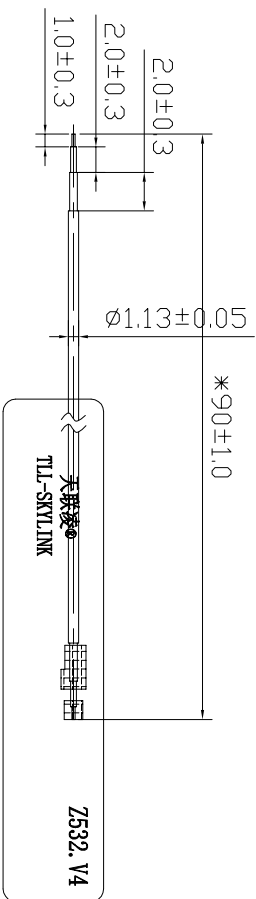
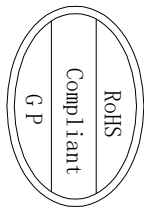
R&D Dept	Business Dept	Approved By

SKYLink

R&D Dept	Engineer Dept	Approval

## ● Specification Summary

A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz
Return Loss	<-10dB
Efficiency	>40%
Peak Gain	2.6dbi
Impedance	50 Ohm
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	FPC
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



Rev	Description	Date	Remark
1	New drawing		

SHEN ZHEN SKYLINK CO., LTD		Project		Date	
0~10	±0.05	○	0.02	2023-06-19	
10~18	±0.10	◎	∅0.03	Designed by	
18~30	±0.12	⊥	0.02	Part No. Z532.V4, C113.90B, Z21	
30~40	±0.15	∇	0.04	Material	
40~	±0.20	Angle	±0.5°	Checked by	
Location		DWG No.		Approved by	

Rev	Description	Date	Remark	Unit	Scale	Rev
1				mm	1:1	A

## ● Test Equipment & Conditions

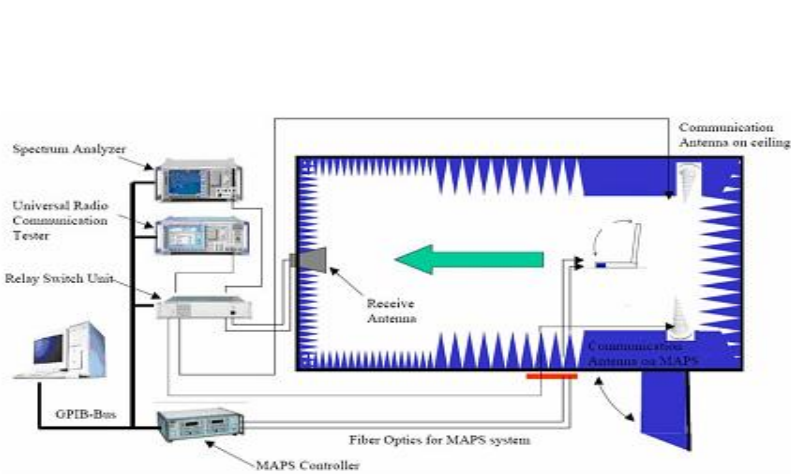
### 1. Network Analyzers :

Agilent 8753D 5071B

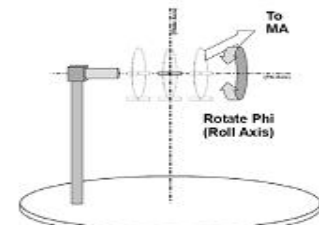
### Communications Test Set:

Agilent E5515C CMW500

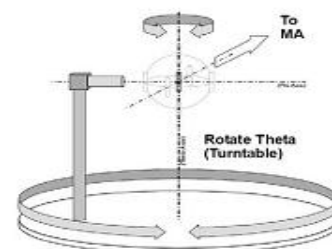
### 2. 3D Chamber Test System



(Testing by 3D anechoic chamber)



Phi axis test



Theta axis test



## ◆ Return Loss



◆ Gain & Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	40.14	1.42
2410	41.6	1.21
2420	40.17	1.16
2430	41.74	1.26
2440	40.83	1.34
2450	40.1	1.24
2460	40.79	1.05
2470	41.79	1.35
2480	42.22	1.7
2490	47.18	2.46
2500	46.45	2.6

◆ 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