

# Shenzhen QiBing Technology Co.,Ltd

5A, 5th Floor,Building B Anfeng Industrial District,Lianrun Road,  
Taoyuan Community,Dalang Street,Longhua District,Shenzhen City,China.

## Antenna Specification for Approval

NO. QBAC20250521001

Customer Name:     JingHua Precision Instrument

Product Name:         WIFI Antenna

Product descriptinon: FPC, D=1.13mm Black Cable Type, L=75mm, IPEX1

Part NO.:                 GSJV01.75B.1

Customer NO.:             \_\_\_\_\_

Version number:         V1.0

Issued Date:             2025-5-21

QIBING	
R&D Dept	
Business Dept	
Approved By	

CUSTOMER	
R&D Dept	
Business Dept	
Approved By	

## ● Specification Summary

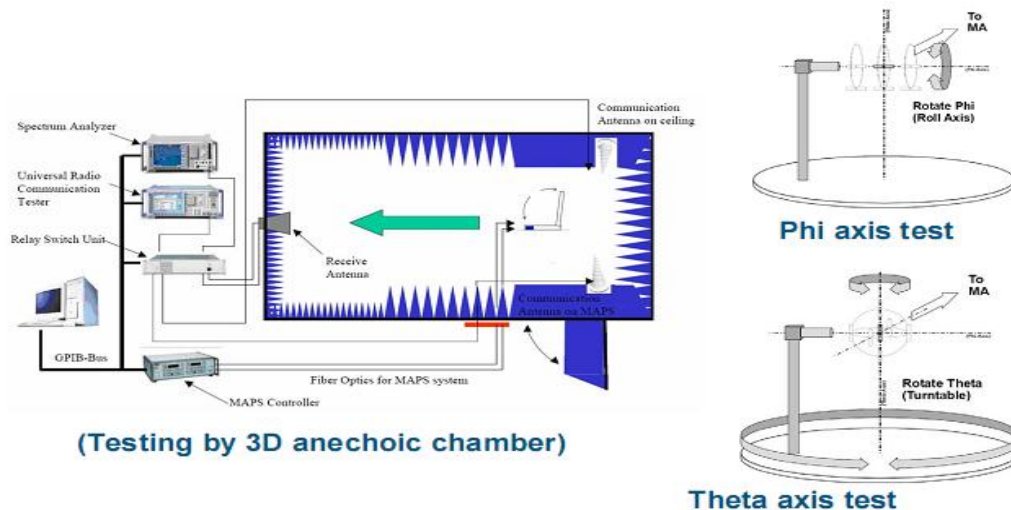
A. Electrical Characteristics	
Frequency	2400MHz ~2500MHz
LogMag	<-5.0
Efficiency	>30%
Peak Gain	2dbi
Impedance	50 Ω
Polarization	Line
B. Material & Mechanical Characteristics	
Material of Radiator	FPC/CU
Cable Type	1.13mm Black
Connector Type	IPEX I
Dimension	At Attachment
Silk-print	Black Bottom-White Font
C. Environmental Characteristic	
Storage Temperature	- 30 ° C ~ + 85 ° C
Heat-durability	280±5° C, 10sec.
Weld Temperature	320±5°C 2-3sec.

## ● Test Equipment & Conditions

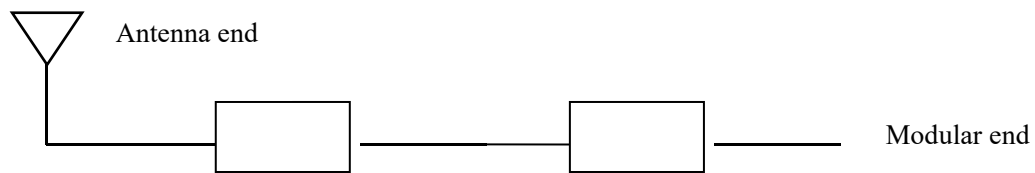
### 1. Network Analyzers :

1	Agilent E5071B / KEYSIGHT E5071C: Frequency 100KHz~8.5GHz, Test VSWR/Return Loss/Smith
2	CMW500: Test:BT /WIFI (802.11b/g/n/a/ac/ax, 2.4G/5.8G) / 2G (CDMA/GSM)/3G (EVDO/WCDMA/TD) 4G LTE TRP/TIS
3	GPS-101: Test GPS EMI Conduction
4	XH ATS260 24 Sondas OTA 3D Microwave Chamber
5	XH-ACTIVE V3.0/XH-PASSIVE V2.0/XH-Data Processing V2.0 Test System

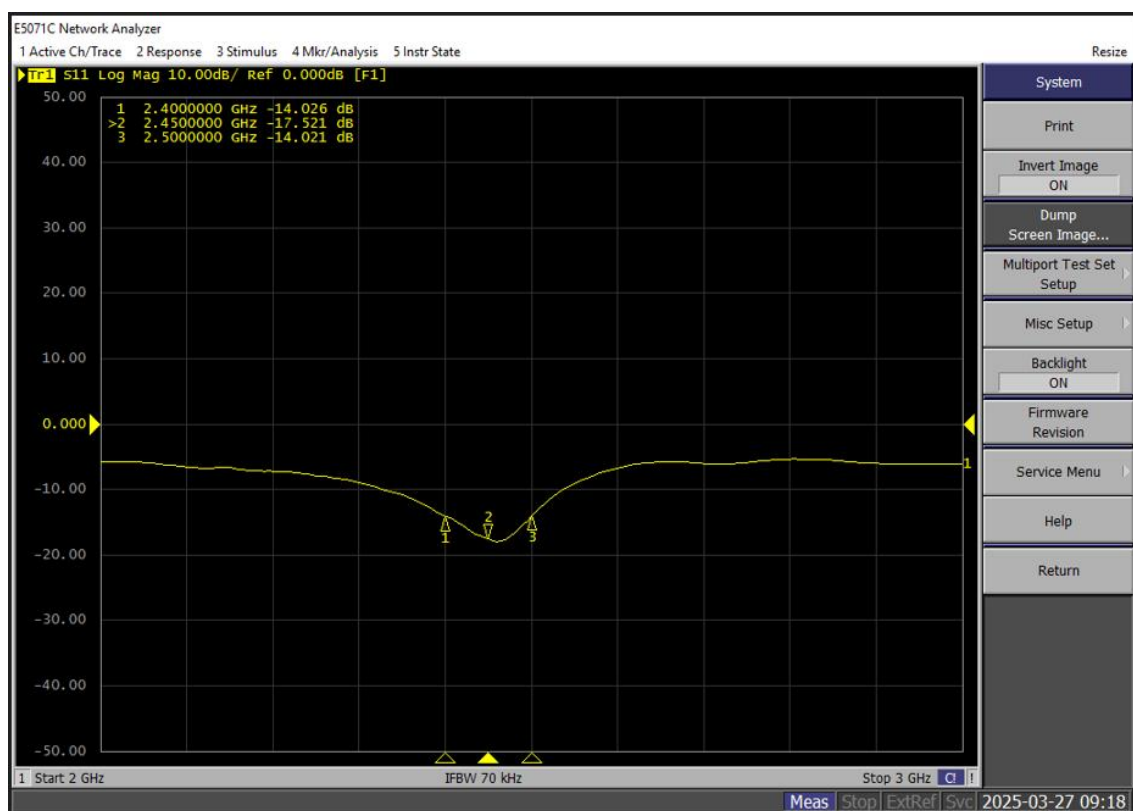
### 2. 3D Chamber Test System



## ● Matching Cricuit



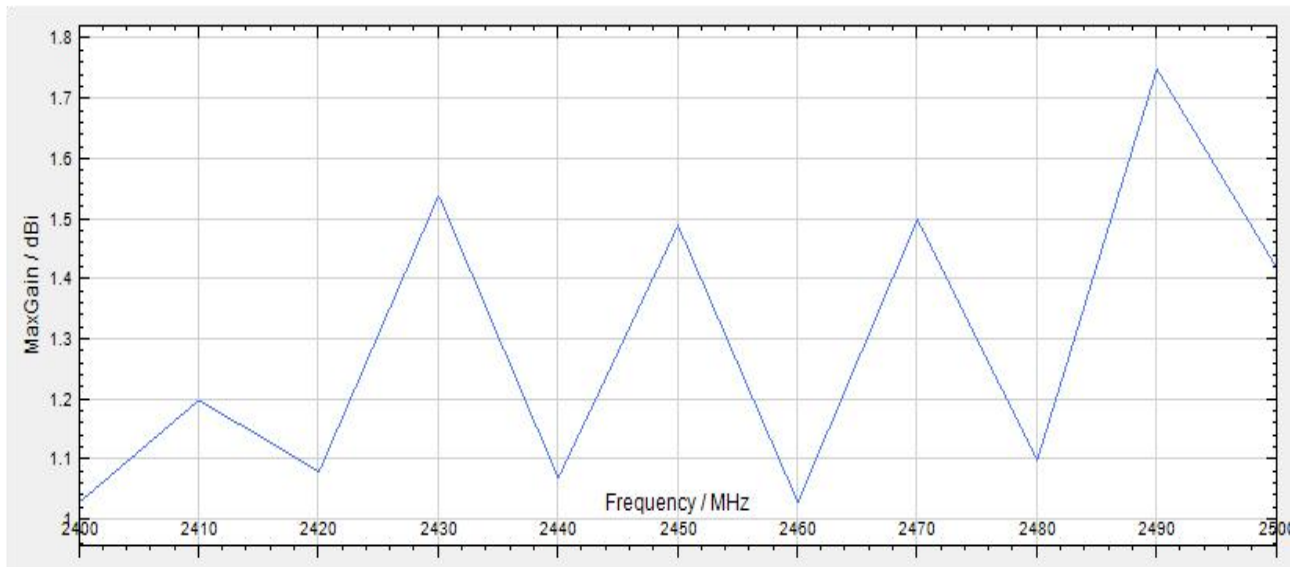
## ● Return Loss



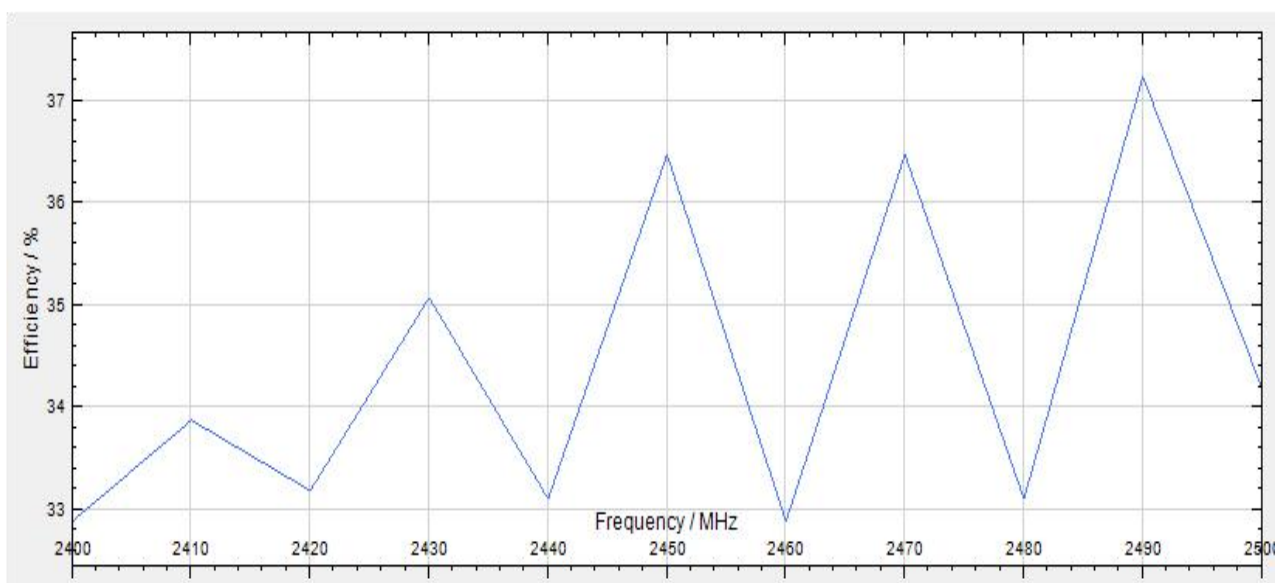
## ◆ 2. 4G Gain & Efficiency

Frequency/Mhz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency / %	32.89	33.88	33.19	35.08	33.11	36.48	32.89	36.48	33.11	37.24	34.2
Efficiency / dB	-4.83	-4.7	-4.79	-4.55	-4.8	-4.38	-4.83	-4.38	-4.8	-4.29	-4.66
Gain/dBi	1.03	1.2	1.08	1.54	1.07	1.49	1.03	1.5	1.1	1.75	1.42

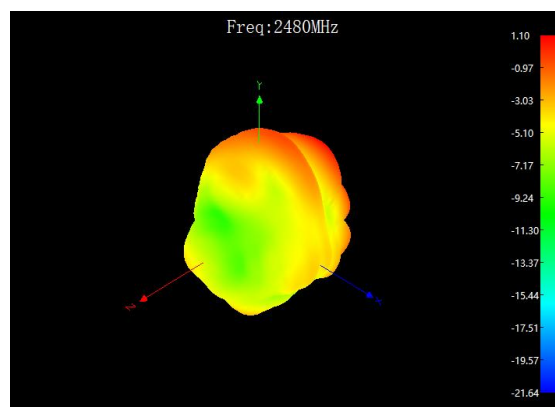
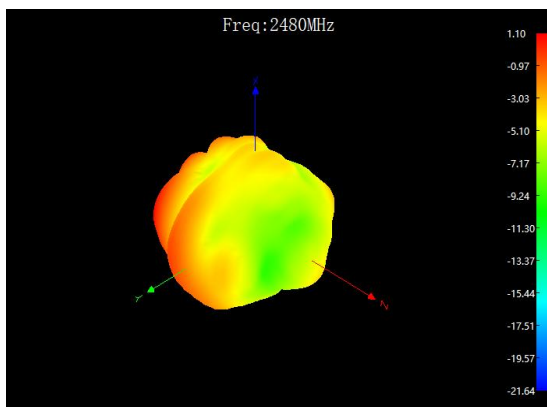
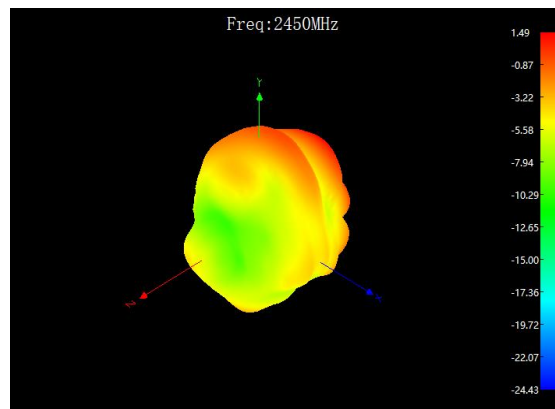
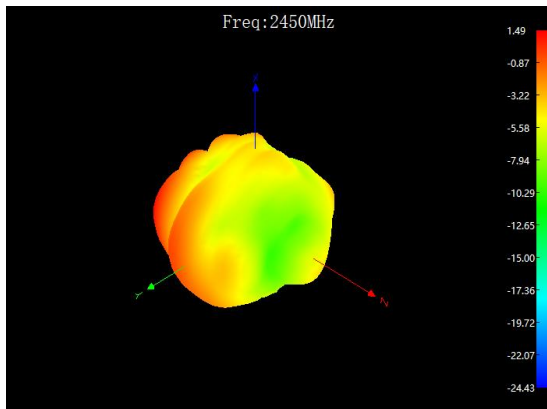
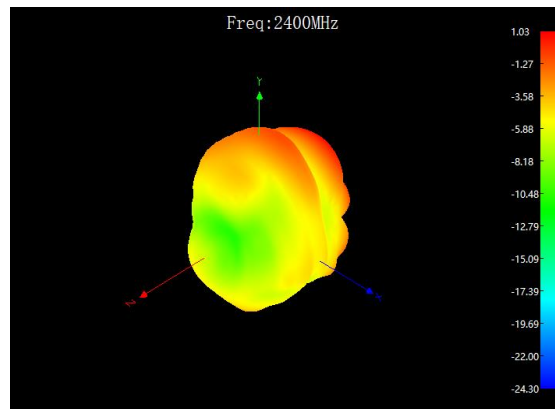
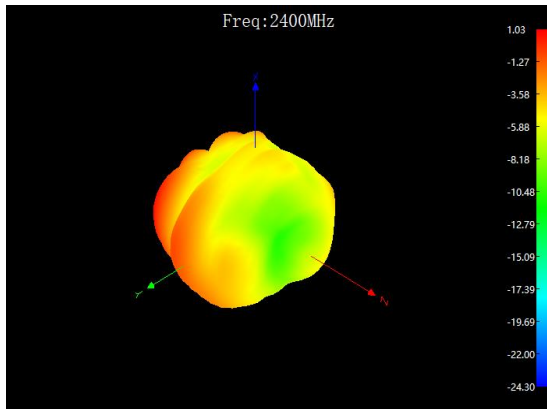
Gain:



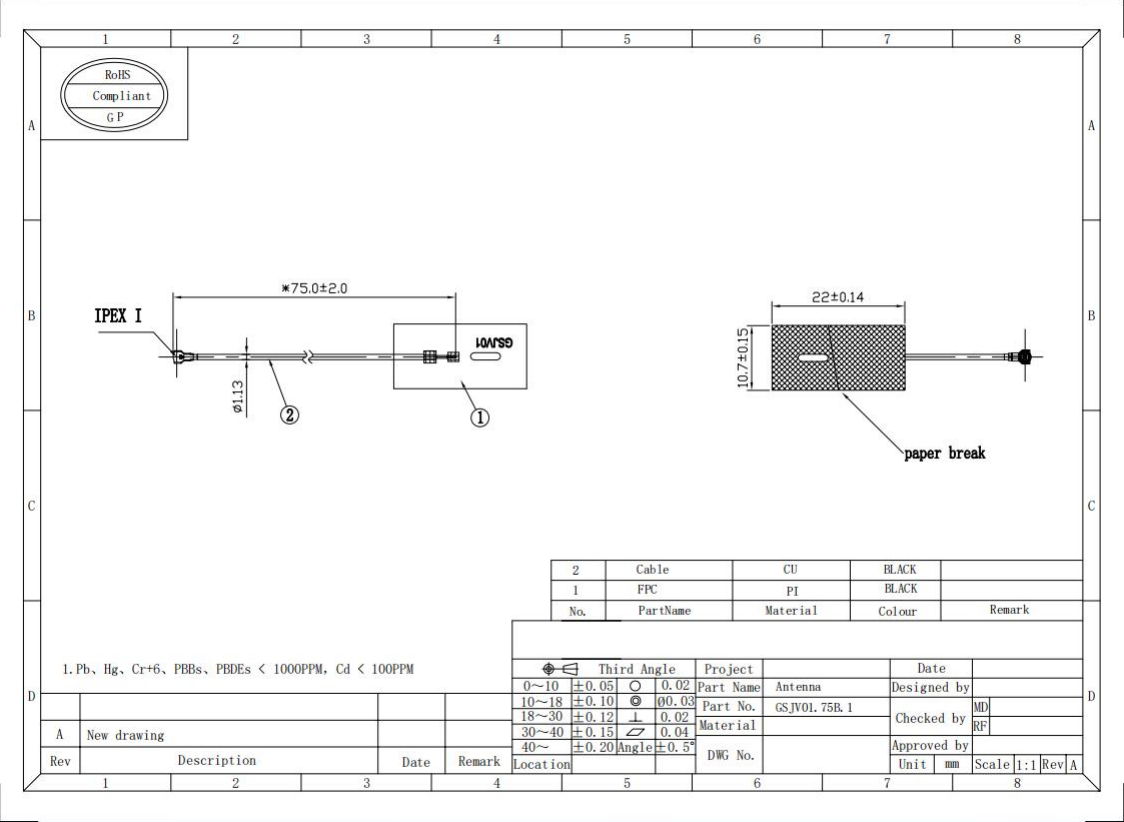
Efficiency:



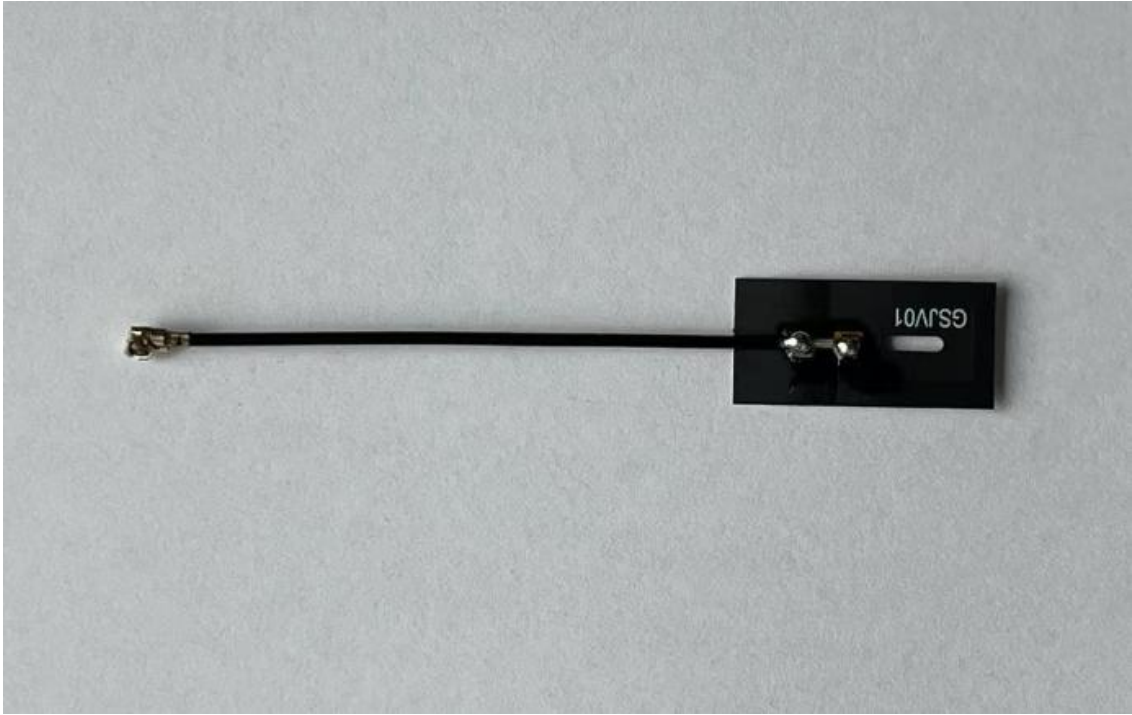
## ● 3D Graphic:



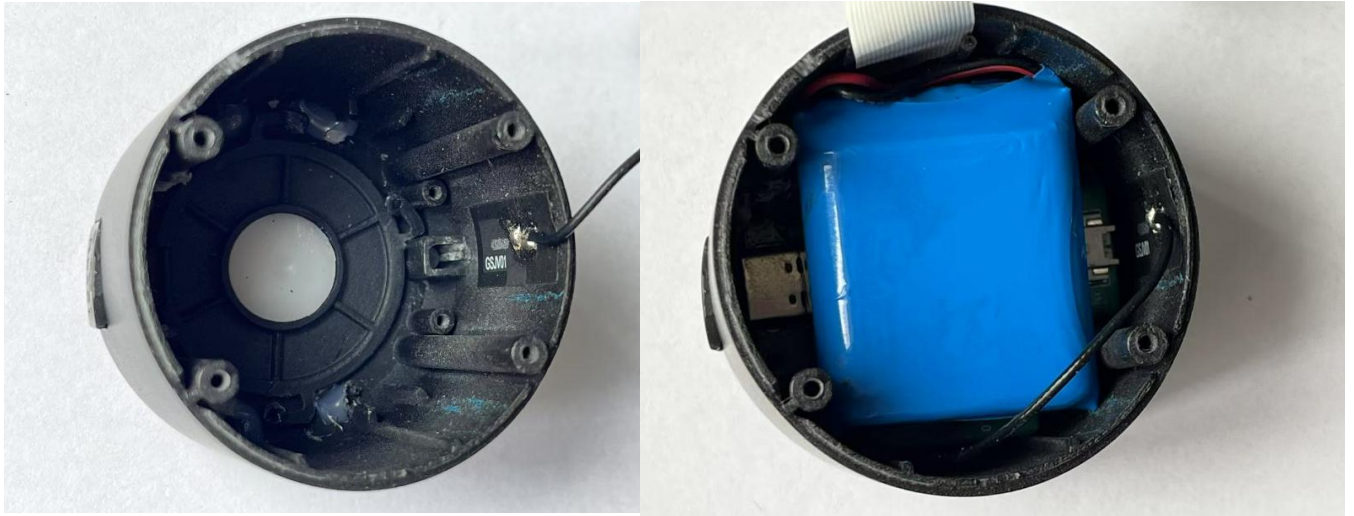
● Antenna Size:



● Antenna Picture:



- Installation Drawing:





## ● 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