



Product Specification Recognition Letter

Specification For Approval

customer name :

Customer

Tian Di Wei Ye Technology Co., Ltd.

Supplier:

Supplier

Huizhou Jinggu Communication Technology Co., Ltd.

Customer Part Number:

Customer P/N

Product name :

Production Name

2.4G Built-in Antenna

product model :

Production Number

JG-WIFI-5020-100

Supplier Confirmation Seal (Supplier Signature)

Engineering Engineer	Checked and verified by	Approved by
Wei Juming	Li Hui	Li Yinjie
March 26,2024	March 26,2024	March 26,2024

Customer Confirmation Stamp (Customer Signature)

Engineering Engineer	Checked and verified by	Approved by
YTD	YTD	YTD

Note: After the customer confirms and stamps it, please return this acknowledgment form to our company.

Huizhou Jinggu Communication Technology Co., Ltd.

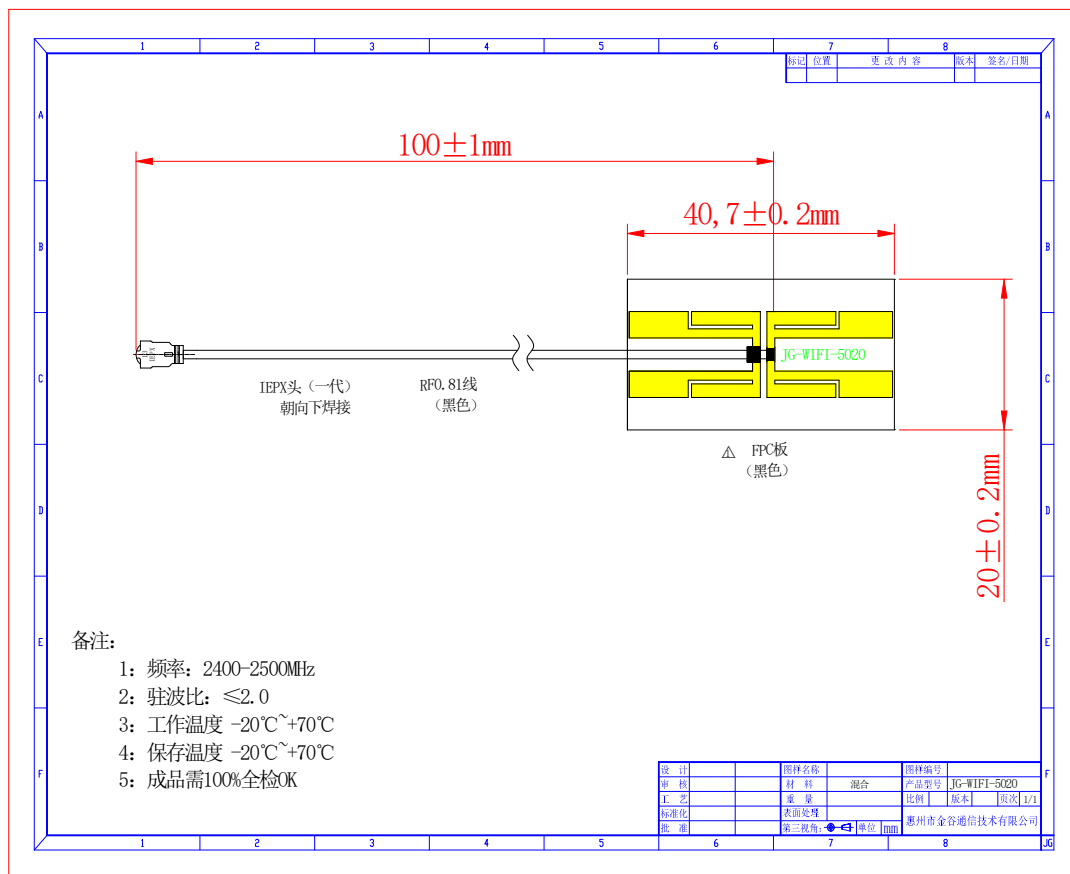
Factory Address: Building D, Yuhua Industrial Zone, Danshui Town, Huiyang District, Huizhou City

Contact: Wei Qiaoling Mobile: 18927480411



Change History Form Description Record			Number Serial Number		
			Version number Version Number	A/0	
			Product Model: Product Type		
			Product name Product Number	2.4G Built-in Antenna	
			Material code Materiel Number		
Order number NO:	Version number Version number	Description before modification	Description after modification	Date Date	
1	A/0	Create Initially	Wei Juming	2024-03-09	
2	A/1	Change the size from the original 50*20 mm to 40.7*20 mm	Wei Juming	2024-03-26	
Remarks :					

1. Product Structure Diagram (mm)



5、增益&效率数值表

频率(MHz)	增益 (dBi)	效率(%)
2400.0	2.77	61.02
2410.0	3.26	64.44
2420.0	3.53	63.78
2430.0	3.80	65.00
2440.0	3.79	63.83
2450.0	3.70	62.98
2460.0	3.57	64.80
2470.0	3.58	66.29
2480.0	3.60	67.23
2490.0	3.70	68.62
2500.0	3.66	67.04

II. Physical Images



III. Technical Parameters of the Antenna

Manufacturer's internal model number	Ex: JG-WIFI-5020-100
Class	Ex: 2.4G
Frequency range	Ex: 2400-2500MHz
Morphy	Example: Passive built-in antenna (FPC)
Polarization	Ex: linear polarization
Standing wave	Ex: ≤ 1.7
Productiveness	Ex: $\geq 50\%$
Gain	Ex: Greater than 3 dBi
Joint Type	Example: IPEX Generation 1 (domestically produced)
Active/Пассив	Ex: passive
Antenna Size	Ex: 40.7x20mm
Feeder Type and Size	Example: RF0.81 wire (black), length 100 mm
Working temperature	Ex: -20°C~70°C
Power capacity	Ex: 33dBm

IV. 0.81-Wire Specifications

1. Cable Material and Dimensions:

Project		Unit	Material and Dimensions
Electric conductor	Material quality	/	Tinned copper wire
	Root Count/Diameter	Root /mm	7/0.05 $\pm$ 0.02
	External diameter	mm	Φ 0.15
Insulation	Material quality	/	Teflon FEP (polyperfluoroethylene-propylene resin)
	Thickness	mm	0.13
	Complete Outer Diameter	mm	Φ 0.41 $\pm$ 0.03
Outer conductor	Material quality	/	Tinned copper wire
	Form	/	Knit



	Composition	/	3*16/0.05mm
	Density	%	≥93% (24 items)
	Complete Outer Diameter	mm	Φ0.63 ± 0.05 (for reference only)
Sheath	Material quality	/	Teflon FEP (Polyperfluoroethylene-propylene resin)
	Thickness	mm	0.09
	Complete Outer Diameter	mm	Φ0.81 ± 0.05
	Sheath Color	/	Black

2. Behaviour of Electricity :

Test item	Standard Requirements	Reference standard	Test method	Remarks
Insulation resistance	≥10MΩ . Km	GB3048	500 V AC for 1 minute	Resistivity tester
Maximum Load Capacity	8000N	/	/	/
Media Voltage Resistance	0.8KV	GB3048	1 kV alternating current for 1 minute	Pressure Resistance Tester
Working voltage	300V	GB3048	/	/
Characteristic impedance	50 ± 2 Ω	GB4098	/	Network Analyzer, TRK Tester
Electric capacity	96.65PF/M	GB4098	/	Digital Capacitometer
Transmission speed	70%	/	/	NetAnalysis Analyzer
Transmission delay	4.8ns/m	/	/	/
Maximum operation frequency	6GHZ	/	/	/
Shading rate has decreased.	100dB	/	GB9023	/
Fire resistance	passed	IEC332-3	/	/
Halogen Properties	passed	ICE754	/	/
Screen Aging Reduction (db/m)	Test Frequency		Damping	
	1000MHZ		3.6	
	2000MHZ		5.1	
	3000MHZ		6.2	
	4000MHZ		7.5	
	5000MHZ		8.5	
	6000MHZ		9.4	
Standing Wave Ratio	Below 6000 MHz	≤1.20	GB9023	/



VI. Performance Test Diagram

1、 Echo Loss & Standing Wave Ratio

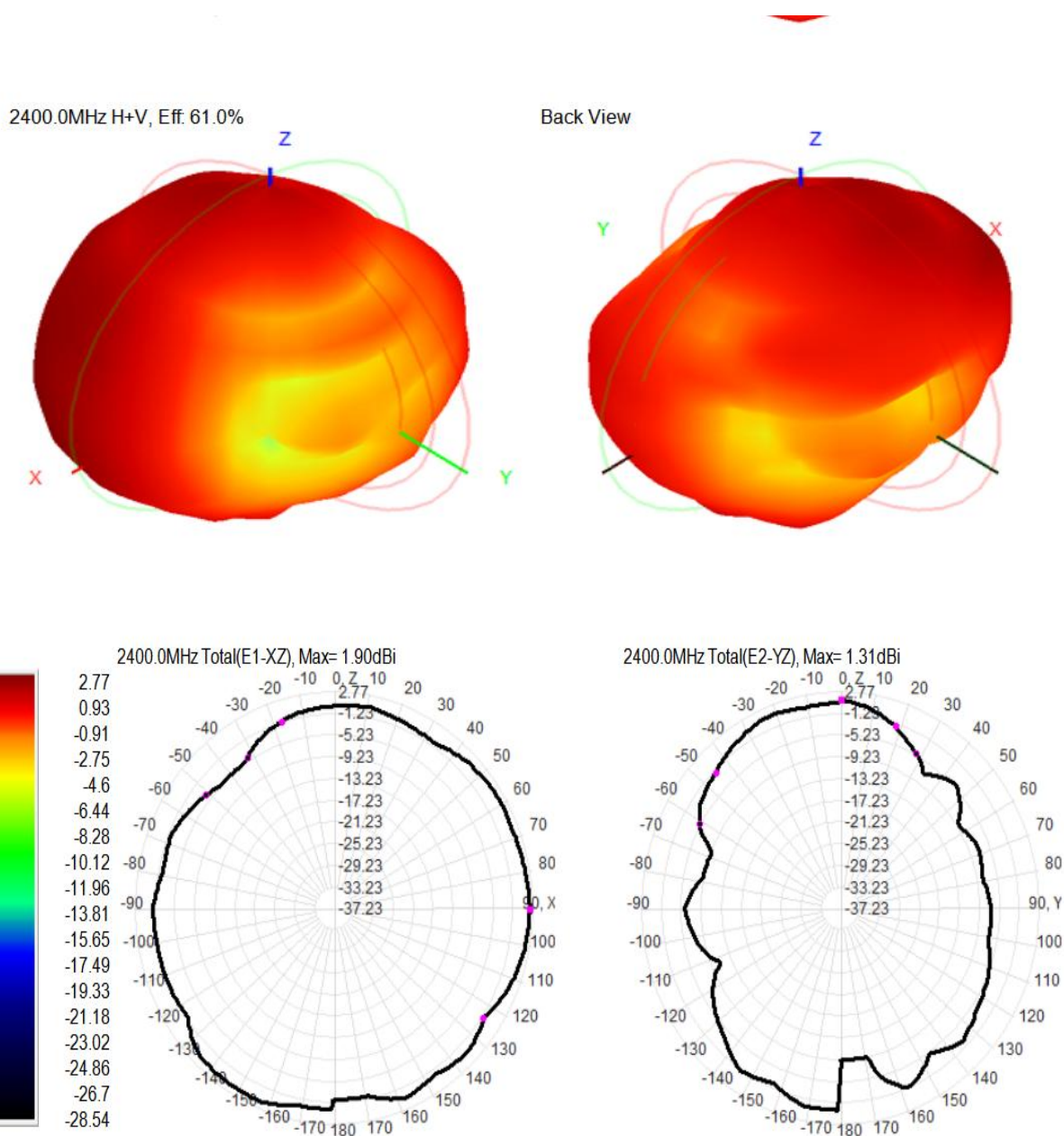
E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

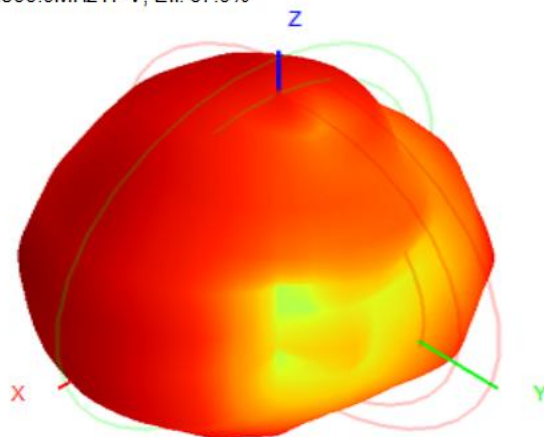
Resize



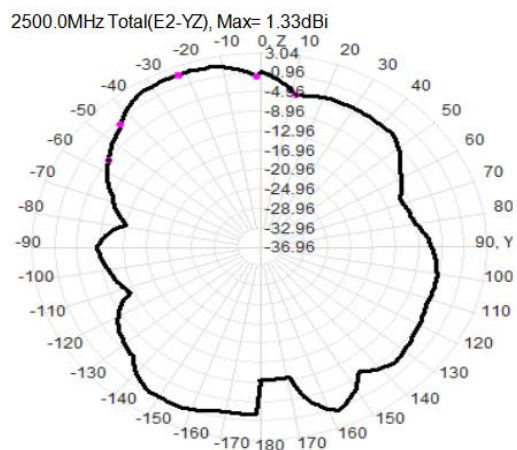
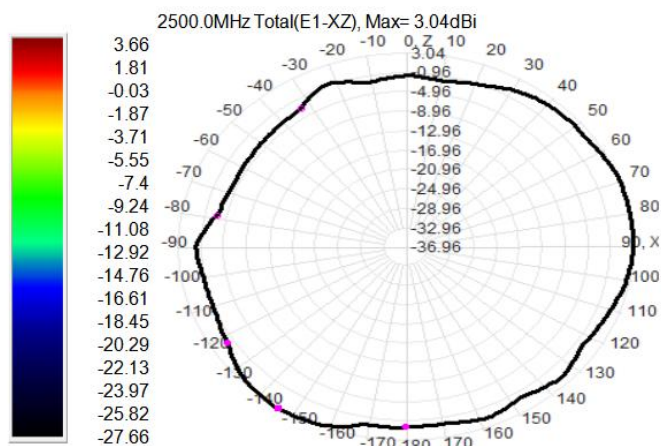
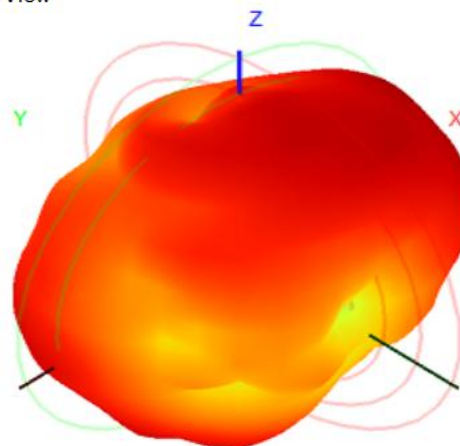
2、 Directional Diagram (2D & 3D)



2500.0MHz H+V, Eff: 67.0%

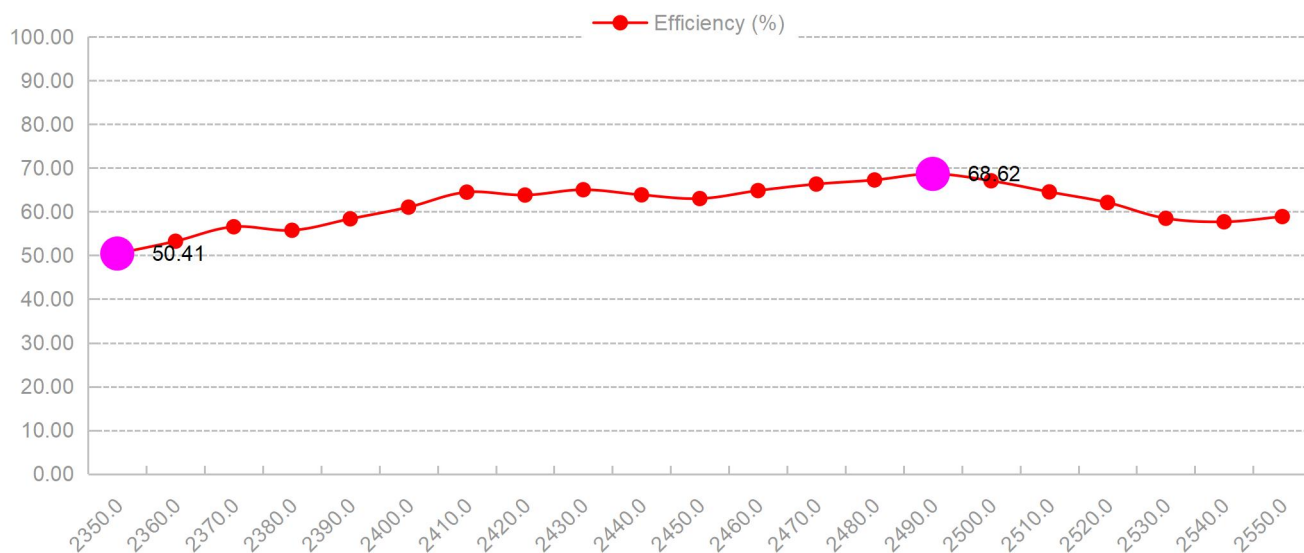


Back View

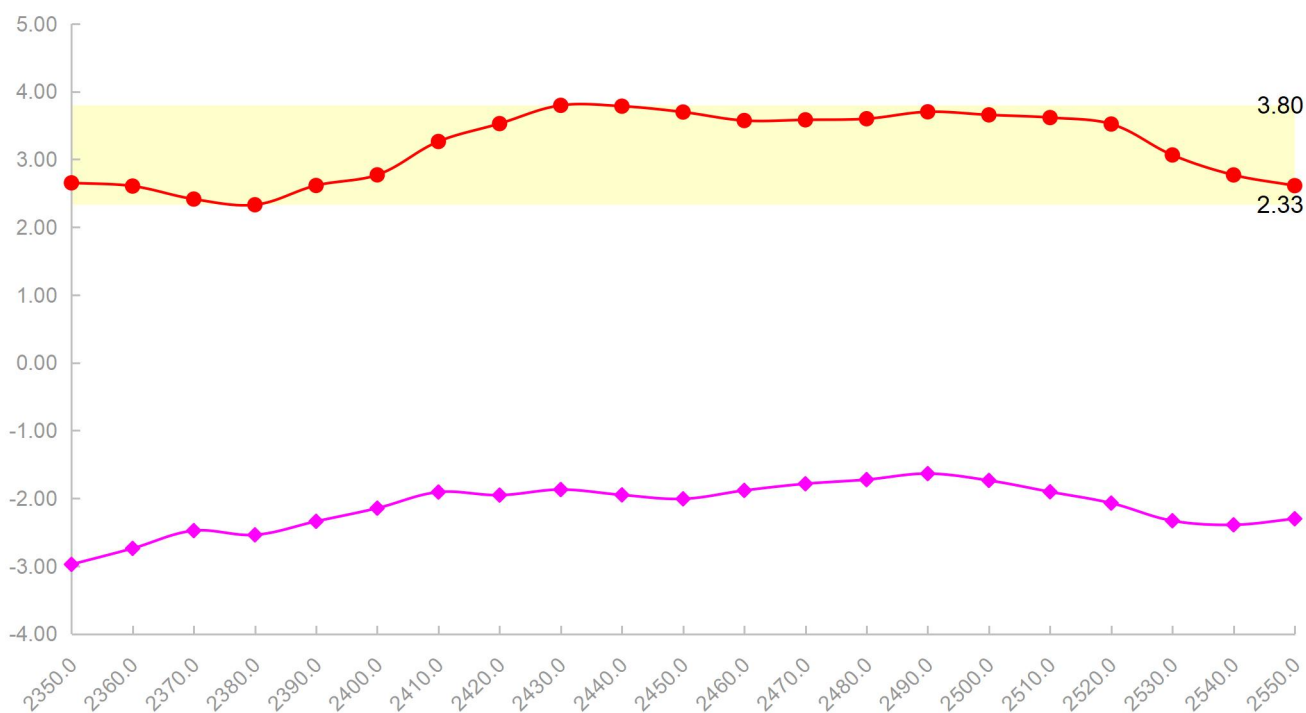




3、Efficiency Curve Diagram



4、Gain Curve





VII. Schematic Diagram of Antenna Installation



(Note: The antenna in this image is a hand-drawn sample for reference only.)

VIII. Packaging Requirements

100 Units in a Small Bag; 1,000 Units in a Large Bag. The Outer Packaging Boxes Are Available in Various Sizes Depending on Order Quantity.