



Shenzhen YJC Electronics Technology Co., Ltd.

<http://www.szsyjc.com>

APPROVAL SHEET

CUSTOMER NAME	Electric Co., Ltd. & Guangzhou Yituo Outdoor Technology Co., Ltd.	
CUSTOMER P/N	1204021700038	
PART NAME	2.4G/5G Black FPC Built-in Antenna, 1.13 black cable, L=120MM	
P/ N	YJC-6N120-B82	
APPROVAL REV.	A0	
DELIVERY DATE	Jan 16, 2026	
PREPARED BY	Yin Feijie	
CHECKED BY	Fang Wenfeng	
APPROVED BY	Xiao Han	
Customer Approved		
Prepared By	Checked By	Approved By
Yin Feijie	Fang Wenfeng	Xiao Han

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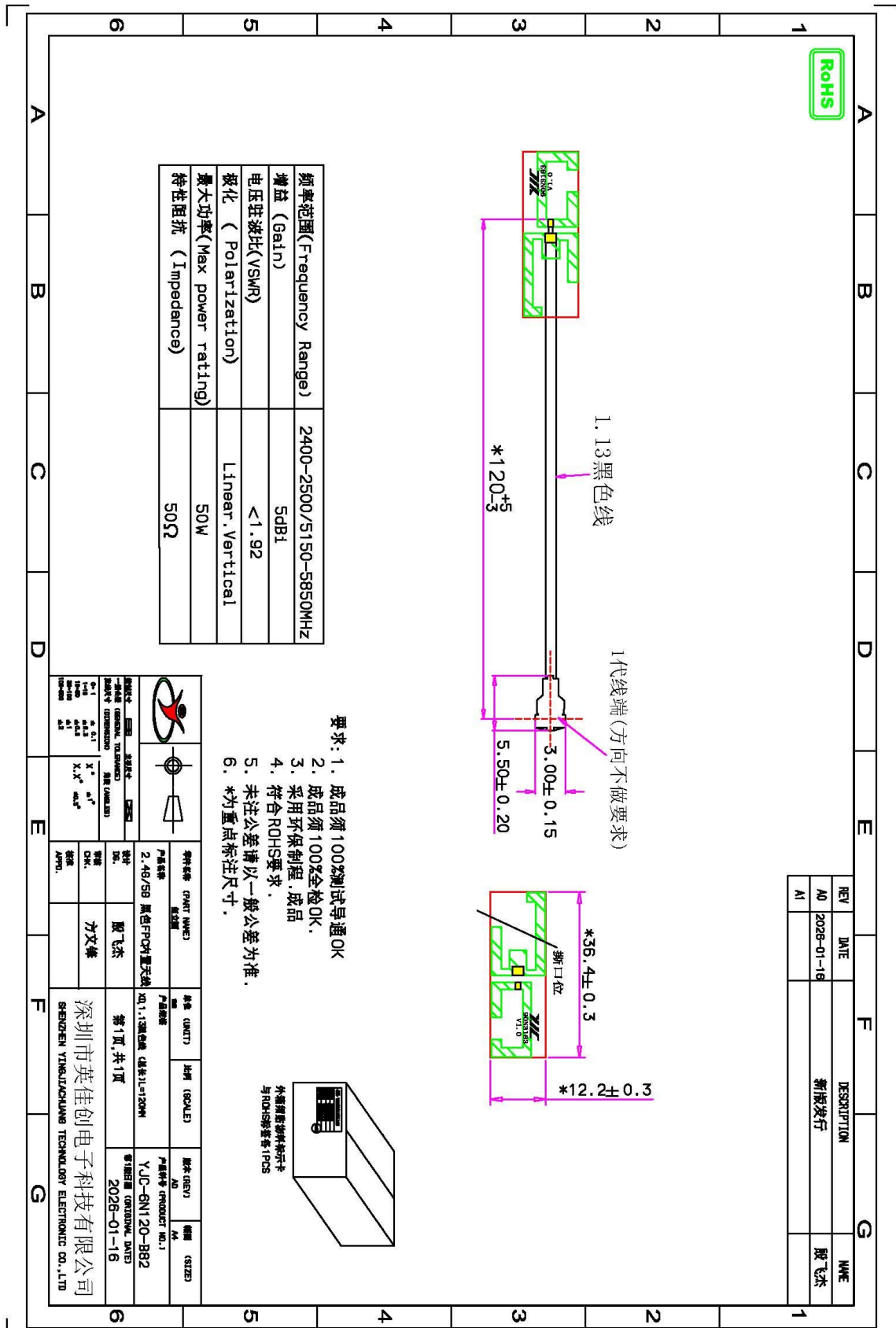
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Revision History:

Version	Description of Change	Date	Issued
A/0	Initial release	Jan 16, 2026	



Antenna Plan View:





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Full Dimensional Inspection Report

SUPPLIER: Shenzhen YJC Electronics Technology Co., Ltd.			PART NUMBER PartsNo.YJC-6N120-B82						
ITEM Item	DIMENSION / SPECIFICATION /mm	Measuring Tool	SUPPLIER MEASUREMENT RESULTS Suppliermm					OK Pass	NOT OK Fail
1	120.00+5.00/-3.00	Vernier Caliper	122.00	121.00	121.00	119.00	119.00	OK	
2	36.40±0.30	Vernier Caliper	36.45	36.51	36.50	36.48	36.53	OK	
3	12.20±0.30	Vernier Caliper	12.28	12.31	12.32	12.30	12.29	OK	
4	5.50±0.20	Vernier Caliper	5.53	5.55	5.42	5.45	5.48	OK	
5	3.00±0.15	Vernier Caliper	3.01	2.99	3.01	3.01	3.03	OK	
6									
7									
8									
9									
10									
11									
12									
13									
Conclusion: All dimensions conform		Inspector: Yin Feijie Date: 2026-01-16							



Antenna Technical Specifications & Environmental Tests:

Electrical Specifications			
Electrical Performance		Electrical Specifications	
Frequency Range	2400-2500	Frequency Range	5150-5850MHz
VSWR	1.92	VSWR	1.92
Input Impedance	50 Ω	Input Impedance	50 Ω
Direction	Omnidirectional	Direction	All
Gain	4.09dBi	Gain	5.3dBi
Mechanical Specifications		Mechanical Specifications	
Wire Color	Black	Wire Color	Black
Connector Type	XD	Input connector	XD
Wire Length	120MM	Wire Length	120MM
Operating Temperature	-20°C~+70°C	Working Temperature	-20°C~+70°C
Operating Humidity	20%~80%	Working Humidity	20%~80%

Environmental Performance Test:

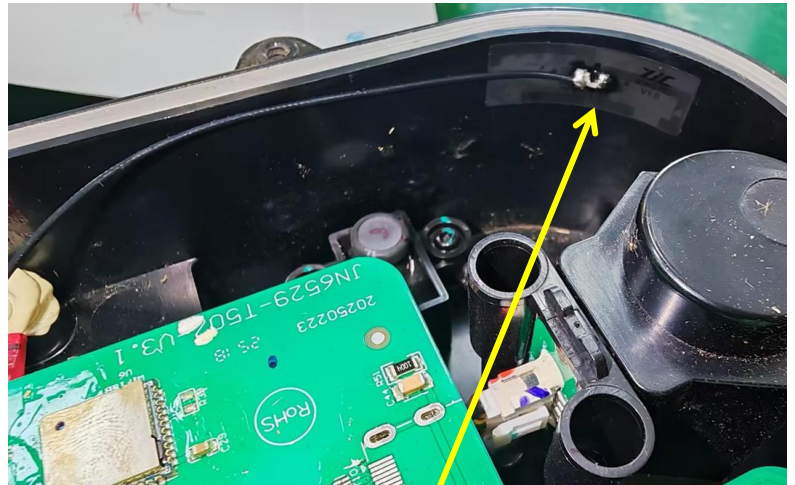
Item	Test Conditions	Specification
Storage Environment	Unless otherwise specified, the test temperature, humidity, and atmospheric pressure are as follows: 1. Temperature: -20°C ~ +70°C 2. Relative humidity: 45%-85% 3. Atmospheric pressure: 86 kPa - 106 kPa	Electrical and mechanical performance shall be normal
High/Low Temperature Test	5 cycles between 70°C and -20°C, then under normal conditions 1-2 h, inspect appearance.	Dimensions shall meet specifications and conform to mechanical & electrical performance
Constant Humidity & Heat Test	RH 95±3%, test temp 40°C, duration 2 h, after exposure measure electrical performance within 5 min of removal; under normal conditions 1-2 h, inspect appearance.	Dimensions shall meet specifications and conform to mechanical & electrical performance
Vibration Test	Frequency 10-55 Hz, displacement 0.35 mm, acceleration 50.0 m/s ² , 30 sweep cycles.	Electrical and mechanical performance shall be normal
Drop Test	Free drop from 1 m height, 3 times along each of 3 mutually perpendicular axes.	Electrical and mechanical performance shall be normal



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Antenna Photos and Mounting Position:



Antenna Mounting Position

Antenna Performance Test:

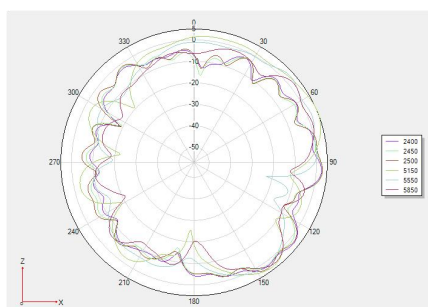




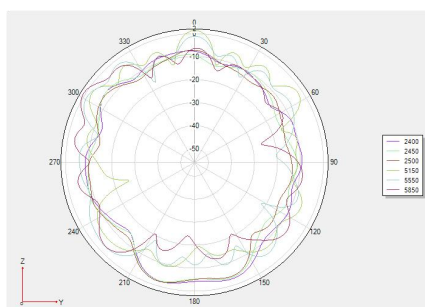
2D & 3D (2.4G/5G) Test Data:

Frequency(MHz)	Efficiency (%)	Gain. (dBi)
2400	53.58	3.33
2410	51.52	2.96
2420	56.89	3.93
2430	48.98	2.56
2440	52.97	4.09
2450	49.32	2.78
2460	50.82	3.73
2470	45.39	2.57
2480	50.47	3.5
2490	46.24	2.38
2500	44.06	3.28
5150	48.75	4.98
5250	47.86	4.03
5350	47.64	5.3
5450	41.21	4.47
5550	48.19	4.85
5650	41.78	3.44
5750	44.26	3.64
5850	43.65	4

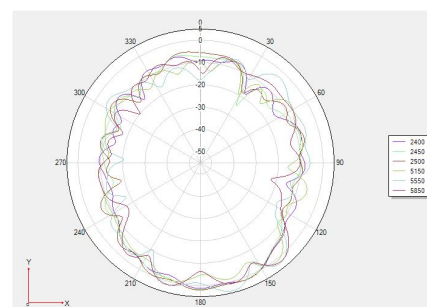
Phi 0 2D Plot:



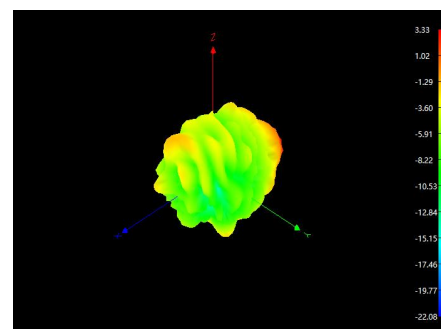
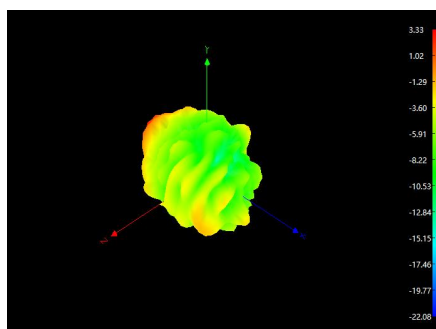
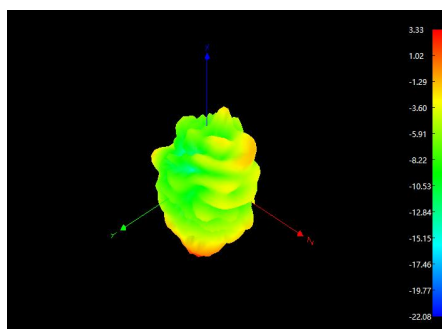
Phi 90 2D Plot



Theta 90 2D Plot

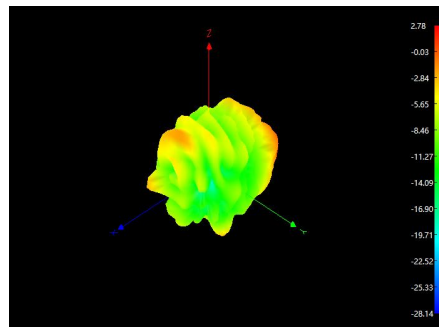
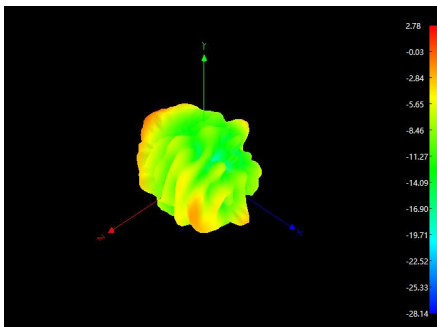
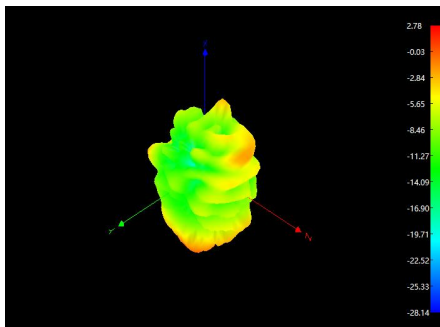


3D 2400

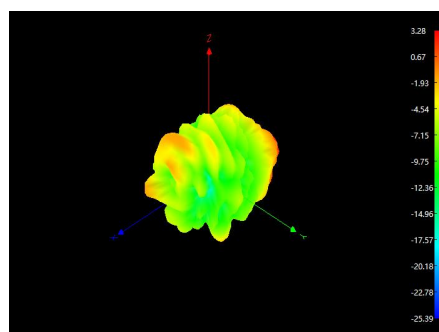
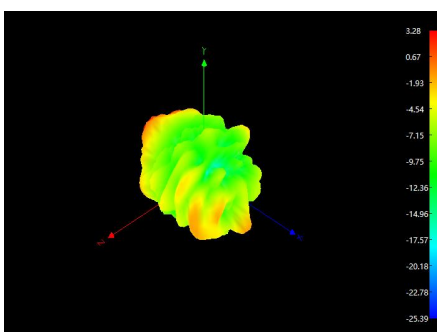
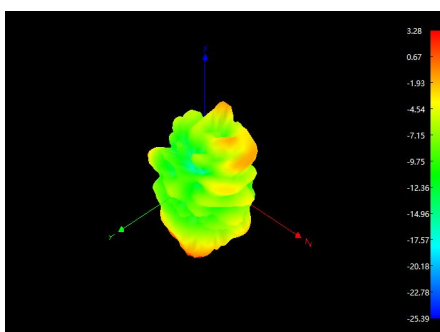




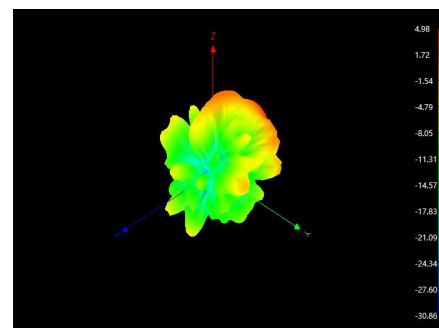
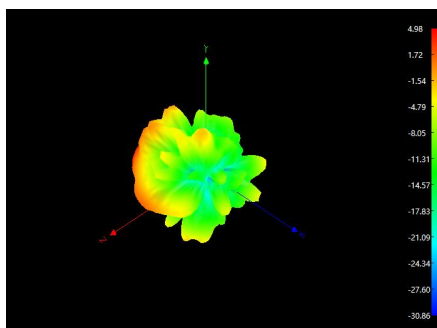
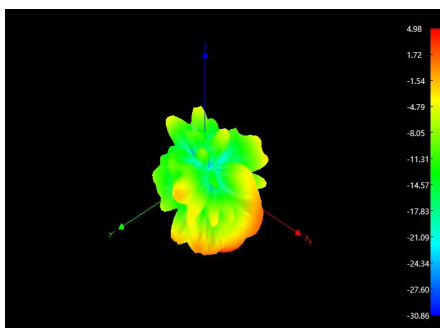
3D 2450



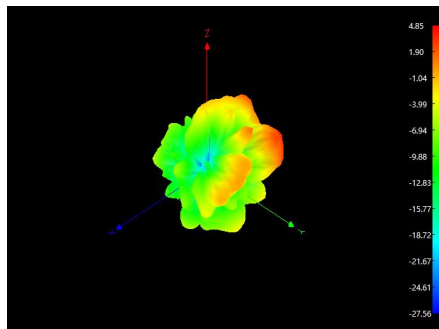
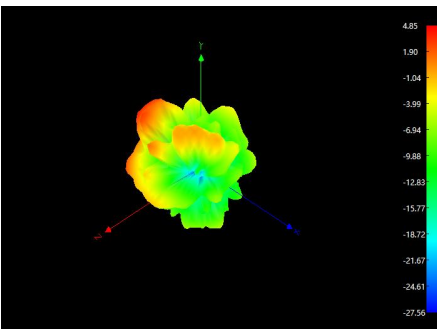
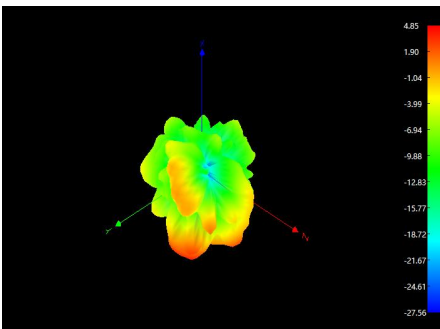
3D 2500



3D 5150

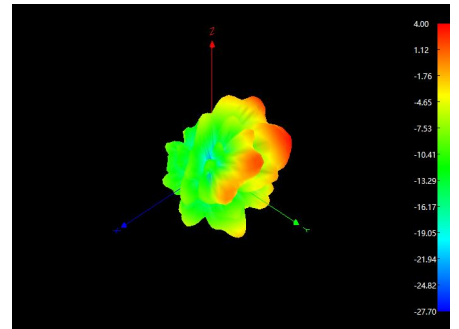
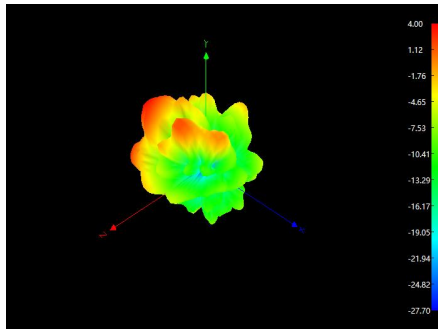
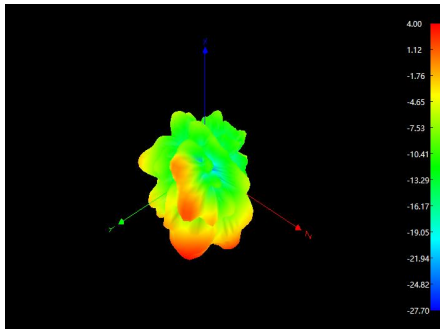


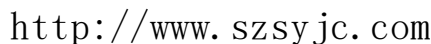
3D 5550





3D 5850





管理编号: QR-QC-002



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Production Process Flow Chart

Production Phase		Trial Production		Mass Production		Document No.		YJC-QC092		Rev.		A0			
Product Name		FPC Built-in Antenna				Date Prepared		2024/11/06							
Part Name / Process No.	Flow Chart				Process Name / Operation Description	Responsible Dept. / Group	Reference Documents / Standards (Control Tech.)	Control Item		Char.	Control Method			Executor	Defect Counter-measure
	Flow Chart	Part	Aux. Process	Main Process				Item	Output Documents / Standards / Records		Inspection Tool	Sample Size	Sampling Frequency		
FG Assembly / Inspection / Packaging	9			✱	Pre-production First Article Confirmation	Quality Dept.	Drawing / BOM / SOP / SIP / Internal Std. Q/YJC02-2-022 P/SI Q/YJC02-2022	1. Appearance, structure, function; 2. Gen-1 terminal pull force ≥1.5 kgf; 3. VSWR meets customer standard;	First Article Inspection Report		Visual / Tool	5pcs	Per batch	IPQC	If lot issues found, stop line and improve
	10			QC ↓	Soldering Components	Production Dept.	Work Instruction	Temperature Monitoring	Temperature Spot Check Record	Temperature	Thermometer	Once per shift	Once per shift	IPQC	Process Adjustment
	11			✱	Patrol Inspection	Quality Dept.	Drawing / BOM / SOP / SIP / Internal Std. Q/YJC02-2-022 P/SI Q/YJC02-2022	1. Appearance, structure, function; 2. Gen-1 terminal pull force ≥1.5 kgf; 3. VSWR meets customer standard;	Patrol Record		Visual / Tool	Random	Random	IPQC	Rework / Repair
	12			✱	100% In-process Visual & Functional Inspection	Production Dept. / Quality Dept.	Drawing / BOM / Work Instruction / Inspection Instruction	1. Appearance, structure, function; 2. VSWR test;	QC Original Record		Visual / VNA	100%	100%	QC	Repair / Scrap
	13			✱	Reliability Test	Quality Dept.	Drawing / BOM / SOP / SIP / Internal Std. Q/YJC02-2-022 P/SI Q/YJC02-2022	Salt spray, pull force, etc.	Type Test Report		Visual / Tool	New product & quality assessment	New product & quality assessment	IPQC / Group Leader	Rework / Scrap



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	14		QR ↓	Packaging	Production Dept.	Drawing / BOM / Packaging Work Instruction	Appearance, process, structure, function, packaging	Production Daily Report	▼	Visual / Tool	100%	100%	Operator	Repair / Scrap
Product Warehouse / Outbound / Delivery	15		*	Pre-shipment Inspection	Quality Dept.	Drawing / BOM / SOP / SIP / Internal Std. P/SI Q/YJC02-2-022 Q/YJC02-2022	Appearance, process, structure, function, packaging	OQC Pass		Visual / Tool / Scale	AQL	Per batch	OQC	Rework
	16		□ ↓	FG Warehousing	Production Dept.	Warehouse Management Regulation	Product name, quantity, labeling status	Warehousing Slip		Visual	Random m	Random m	Warehouse Keeper	Report & Handle
	17		▽ ↓	Finished Goods Storage	FG Warehouse	Warehouse Management Regulation	Temp & Humidity Monitoring	Temp & Humidity Spot Check Record		Thermohygrometer	Daily	Daily	Warehouse Staff	Report & Handle
	18		*	Outbound	FG Warehouse	Warehouse Management Regulation	Product name, quantity, labeling status	Per Customer Requirement		Visual	Random m	Random m	Warehouse Staff	Report & Handle
	19		QR	Delivery	Sales Dept.	Product Delivery Control Procedure	Transportation Status	Transportation Status		Visual	Random m	Random m	Sales Assist.	Report & Handle

·=Quantity Approved by=

·=Inspecto

·=Process

·=Customer

All raw materials, auxiliaries and tools must comply with RoHS requirements.

Prepared by: Feng Yingmei
2024-11-06

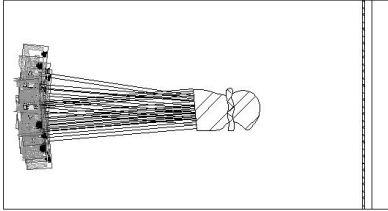
Reviewed by: Yang Yungang

Approved by: Xiao Han



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 Shenzhen YJC Electronics Technology Co., Ltd. Product Packaging Specification					
Customer	1226	Sample Material	FPC	Carton Specification	300*220*180MM
Sample Name	2.4G/5G FPC Built-in Antenna	Sample P/N	YJC-6N120-B82	Packaging Method	See below
Sample Size	36.4*12.2mm	Sample Color	Black		
Packaging Description	100 pcs/bag, 30 bags/carton, total 3000 pcs/carton (shipping label on outer carton, shipping report enclosed)				
No.	Workstation	Image	Description	Remark	
1	PE Bag		100 pcs/bag		
2	Carton Sealing		100 pcs/bag30 3000pcs/(Quantity ShipmentQuantity)		
3					
4					

Prepared by: Yin Feijie

Reviewed by: Fang Wenfeng

Approved by: Xiao Han