



SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO., LTD.

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APPROVAL SHEET

CUSTOMER NAME	Cheego	
CUSTOMER P/N		
PART NAME	2.4G Black FPC Built-in Antenna	
P/ N	YJC-6N100-B107	
APPROVAL REV.	V1.0	
DELIVERY DATE	June 25, 2024	
PREPARED BY	Huang Teng	
CHECKED BY	Wu Longfei	
APPROVED BY	Xiao Han	
Customer Approved		
Prepared By	Checked By	Approved By

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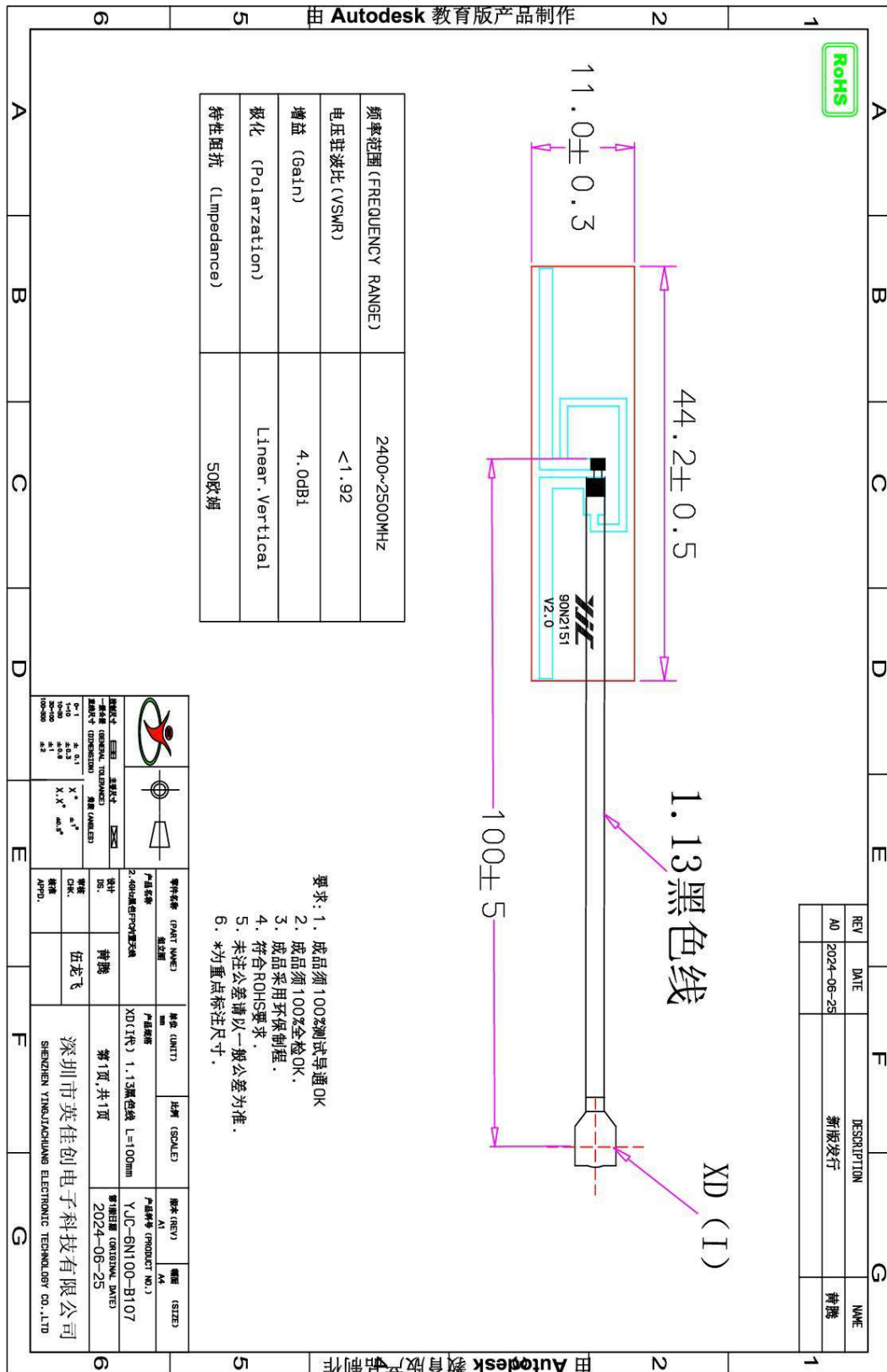
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Antenna Layout

Drawing:



**Antenna Technical Parameters & Environmental Testing:**

Electrical Specifications	
Frequency Range	2400-2500MHz
VSWR	<1.92
Input Impedance	50 Ω
Direction	All
Gain	4.0dBi
Mechanical Specifications	
Antenna Color	BLACK
Input connector	XD-1
Working Temperature	-20°C~+70°C
Working Humidity	20%~80%

Environmental Performance Test:

Item	Test Conditions	Specification
Storage Environment	Without specific requirements: 1. Temperature: -20°C~+70°C 2. Relative Humidity: 45%-85% 3. Air Pressure: 86kpa-106kpa	Normal electrical and mechanical performance
High-Low Temperature Test	5 cycles between 70°C and -20°C, then stand at normal conditions for 1-2H; inspect appearance quality	Dimensional compliance + normal mechanical & electrical performance
Steady Damp Heat Test	Relative Humidity: 95±3%, Test Temperature: 40°C, Duration: 2H; measure electrical performance within 5min after removal, then stand at normal conditions for 1-2H; inspect appearance quality	Dimensional compliance + normal mechanical & electrical performance
Vibration Test	Frequency Range: 10-55HZ, Displacement Amplitude: 0.35MM, Acceleration Amplitude: 50.0M/S, Sweep Cycle: 30 times	Normal electrical and mechanical performance
Drop Test	Free drop from 1M height for 3 times along mutually perpendicular axes	Normal electrical and mechanical performance



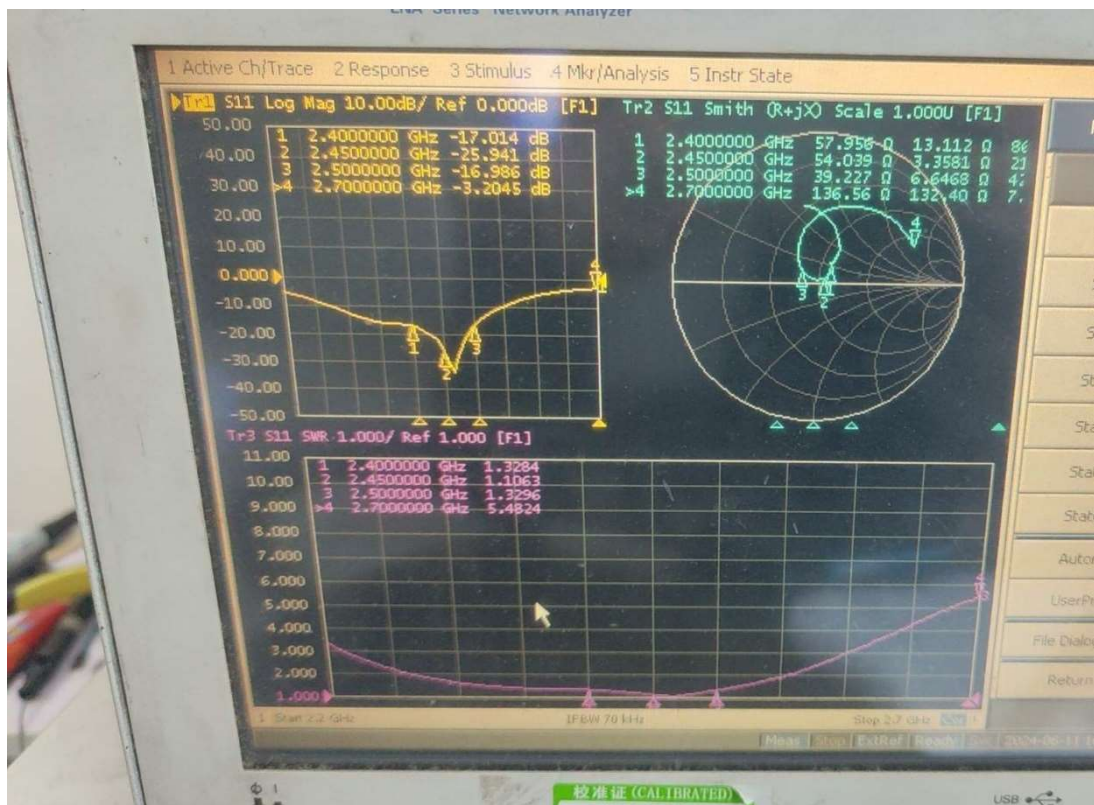
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Antenna Physical View & Mounting Layout:



Antenna Performance Test Chart:





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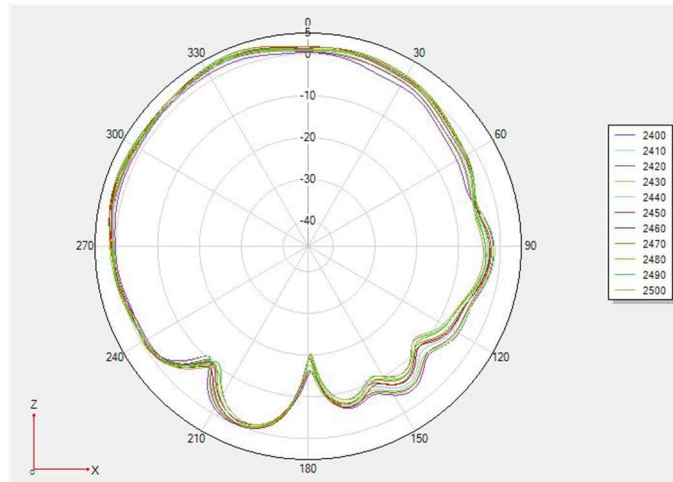
OTA Active Test Data Statistics (2.4G):

Item	Measurement	Band	Channel	Frequency	Max	Min	Total
1	TRP	WIFI_B (11M)	1	2412	20.96	-3.37	16.35
2	TRP	WIFI_B (11M)	6	2437	21.49	-2.93	16.92
3	TRP	WIFI_B (11M)	11	2462	21.18	-3.3	16.58
4	TIS(EIRP)	WIFI_B (11M)	1	2412	-67.58	-92.12	-87.55
5	TIS(EIRP)	WIFI_B (11M)	6	2437	-66.06	-90.56	-85.99
6	TIS(EIRP)	WIFI_B (11M)	11	2462	-65.71	-90.22	-85.63

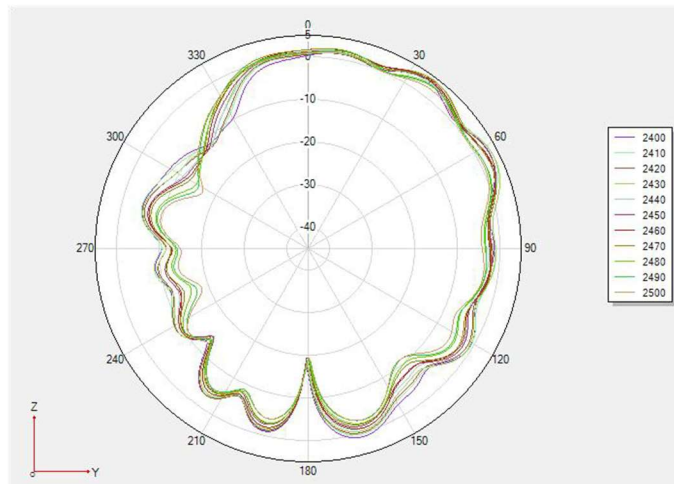
2D & 3D Test Data (2.4G):

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	56.75	3.39
2410MHz	62.23	4.13
2420MHz	59.57	3.72
2430MHz	60.81	4.51
2440MHz	52.48	3.36
2450MHz	59.70	3.80
2460MHz	57.94	4.00
2470MHz	57.54	4.23
2480MHz	52.12	3.12
2490MHz	51.29	3.27
2500MHz	48.64	2.76

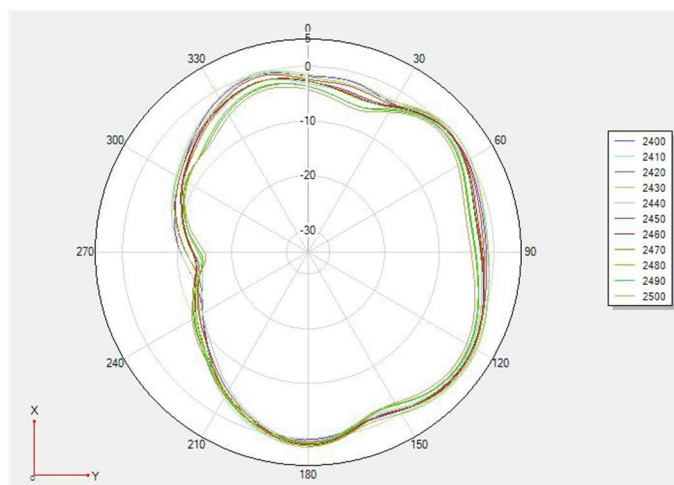
Phi 0 2D Plot:



Phi 90 2D Plot:

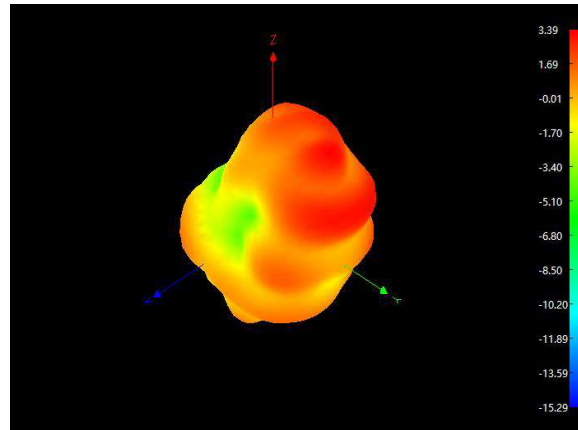


Theta 90 2D Plot:

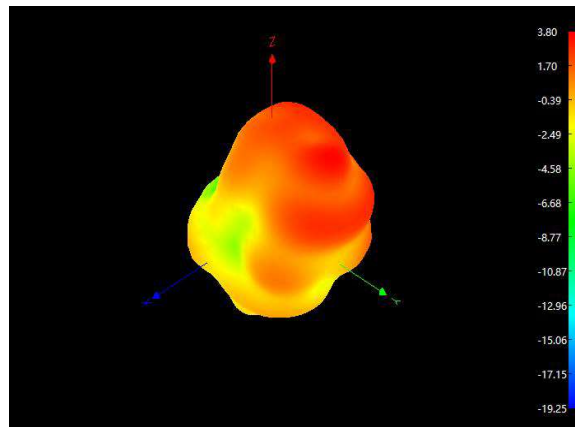


3D Test Plot

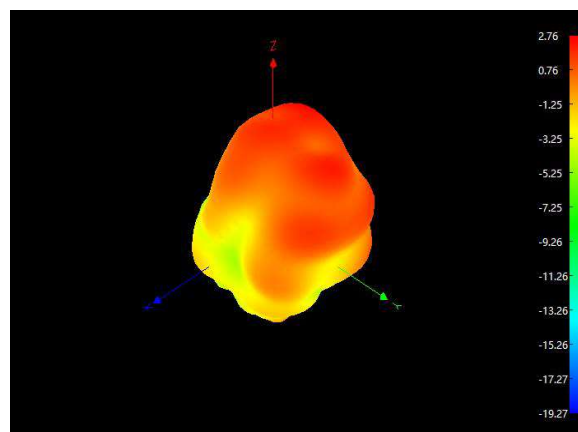
(3D 2400MHz):



(3D 2450MHz):



(3D 2500MHz):





RoHS Material Control Report											
We hereby certify that the raw materials used for components, auxiliary materials, and additives in the production process delivered to your company comply with the environmental requirements of the RoHS Directive (Restriction of Hazardous Substances) (RoHS Directive 2011/65/EC).											
The composition report for raw materials used in components and auxiliary materials, packaging materials, and additives utilized during the production process is as follows:											
Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of Hazardous Substances (ppm)						PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB	PBDE	PASS
Wire	Coaxial Cable	CANEC24002746203	SGS	24/02/22	ND	ND	ND	ND	ND	ND	PASS
FPC	Copper Foil	A2240082746101006E	CTI	24/03/01	ND	ND	ND	ND	ND	ND	PASS
	3M300LSE	SHAEC23021627701	SGS	23/12/27	ND	ND	ND	ND	ND	ND	PASS
	Ink	ETR23A00862M01	SGS	23/10/13	ND	4.86	ND	ND	ND	ND	PASS
Solder Wire	Environmental ly Friendly Solder Wire	SZXEC23001647206	SGS	23/07/28	ND	63	ND	ND	ND	ND	PASS
Connector	Phosphor Bronze (XD)	CANEC24000977302	SGS	24/01/22	ND	6	ND	ND	ND	ND	PASS
	Gold Plating	A2230400553101001E	CTI	23/08/12	ND	ND	ND	ND	ND	ND	PASS