



APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	2. 4G/5. 8G White custom waterproof antenna	
P/ N	YJC-60302-W30	
APPROVAL REV.	A1	
DELIVERY DATE	May 27, 2022	
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CHECKED BY	Fang Wunfeng	
APPROVED BY		
Customer Approved		
Prepared By	Checked By	Approved By

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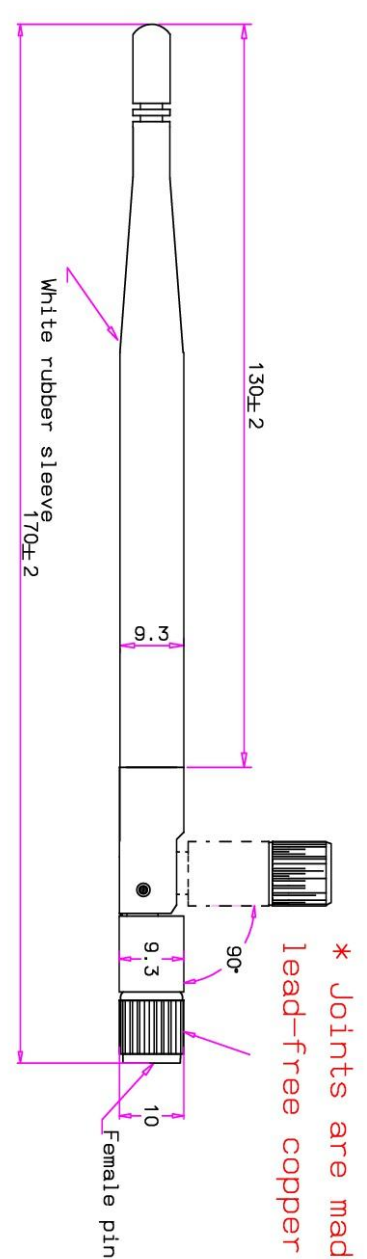
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Antenna plan:

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RoHS



* Joints are made of lead-free copper

REV	DATE	DESCRIPTION	NAME
A0	2022-05-08	New edition issue	Wu Jiaxiang
A1	2022-05-27	Updated torque standard	Wu Jiaxiang

(Frequency Range)	2400-2500/5150-5850MHz
(Gain)	2.0dBi
(VSWR)	<1.92
(Polarization)	Linear, Vertical
(Max power rating)	50W
(Impedance)	50Ω

The outer box must be labeled with material card with RoHS tags each IPCS

ITEM	DESCRIPTION	UNIT	QTY	REVISION	DATE
2.40/5.86	white waterproof antenna	(Joint type) female			
BR.	Wu Jiaxiang	Pin Length 130mm			
CHK.	Fang Wenfang				
APPD.					

The outer box must be labeled with material card with RoHS tags each IPCS

Requirement:

1. The finished product must be pass test 100% OK
2. The finished product shall be subject to 100% full inspection OK.
3. The finished product adopts environmental protection process.
4. Joint tension: 5KG
5. No tolerance shall be subject to general tolerances
6. Antenna torque: 300-700 gf.cm
7. Waterproof requirements: Soak the antenna in 20CM depth for 24 hours without water

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Antenna technical parameters and environmental performance testing

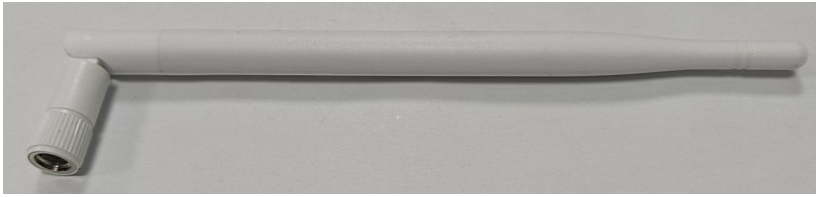
Electrical technical parameter			
Electrical Specifications		Electrical Specifications	
Frequency Range	2400-2500/5150-5850MHz	Frequency Range	2400-2500/5150-5850MHz
VSWR	<1.92	VSWR	<1.92
Input Impedance	50 Ω	Input Impedance	50 Ω
Direction	All	Direction	All
Gain	2.0 dBi		

Environmental performance test

Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows:: 1. Temperature is - 30 °C ~ + 80 °C 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performance is normal
High and low temperature test	Between 70 °C and -20 °C for 5 loops, then 1-2 h under normal conditions, check the appearance quality.	Size should meet the requirements and meet the performance of machinery and electric.
Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: 40 °C. Lasts 2 h after, try to take out the determination of electrical properties, within 5 min after try 1-2 h under article normal thing, check the appearance quality	Size should meet the requirements and meet the performance of machinery and electric.
vibration test	10-55 hz, vibration frequency range of displacement amplitude: 0.35 MM, acceleration amplitude: 50.0 M/S, sweep cycles: 30 times	Electrical and mechanical performance is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performance is normal



Antenna diagram



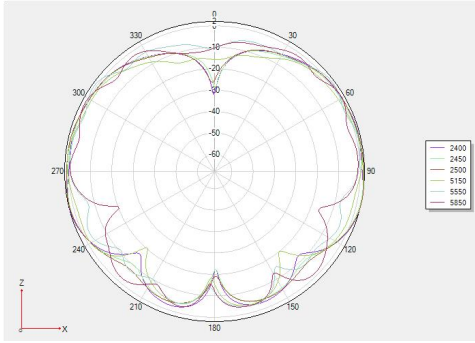
Antenna performance test diagram:



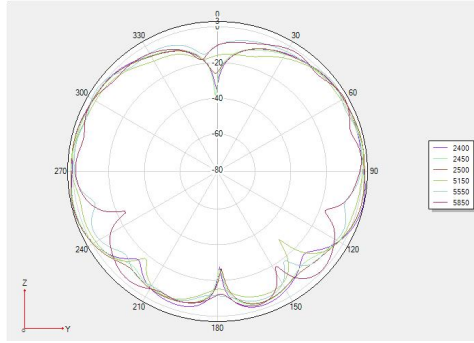
2D and 3D test data (2.4G/5.8G) :

Frequency (MHz)	Efficiency (%)	Gain. (dBi)
2400MHz	66.32	2.69
2410MHz	65.95	2.58
2420MHz	68.33	2.54
2430MHz	66.56	2.49
2440MHz	66.57	2.34
2450MHz	67.24	2.29
2460MHz	69.85	2.24
2470MHz	68.33	2.18
2480MHz	69.22	2.41
2490MHz	69.54	2.46
2500MHz	71.32	2.53
5150MHz	62.88	2.23
5250MHz	64.37	2.11
5350MHz	65.65	1.98
5450MHz	62.35	1.85
5550MHz	59.86	1.76
5650MHz	58.65	2.11
5750MHz	60.46	2.33
5850MHz	56.92	1.67

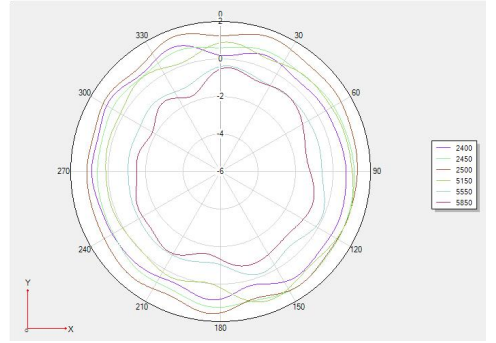
Phi 0 2D 图:



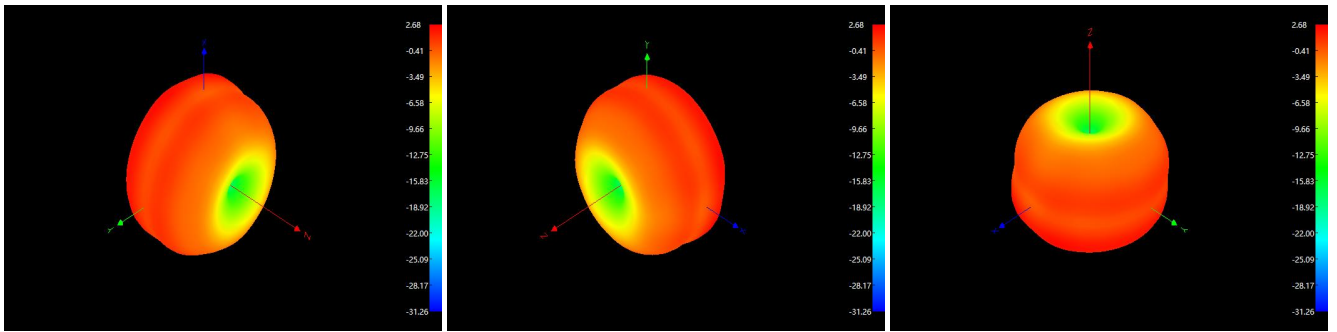
Phi 90 2D



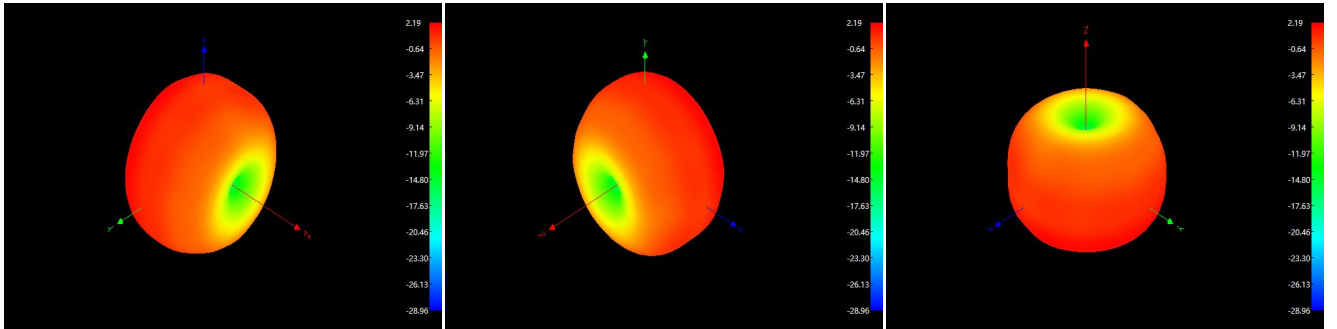
Theta 90 2D



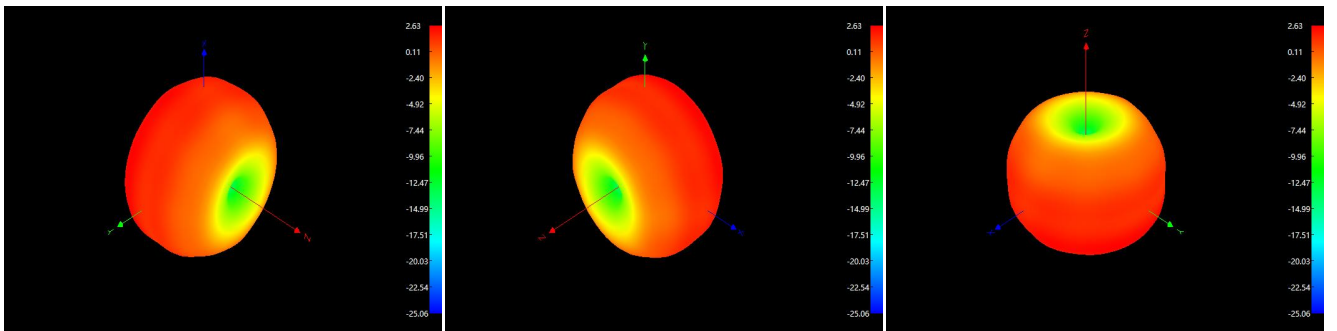
3D 2400:



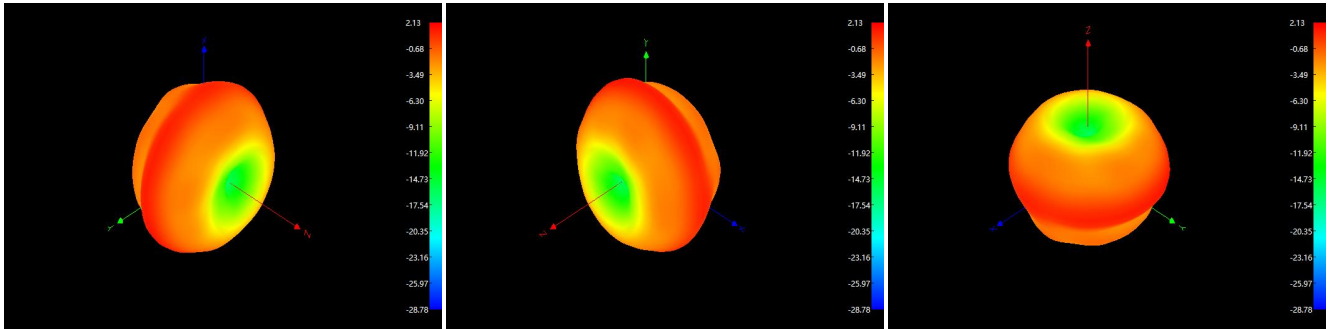
3D 2450:



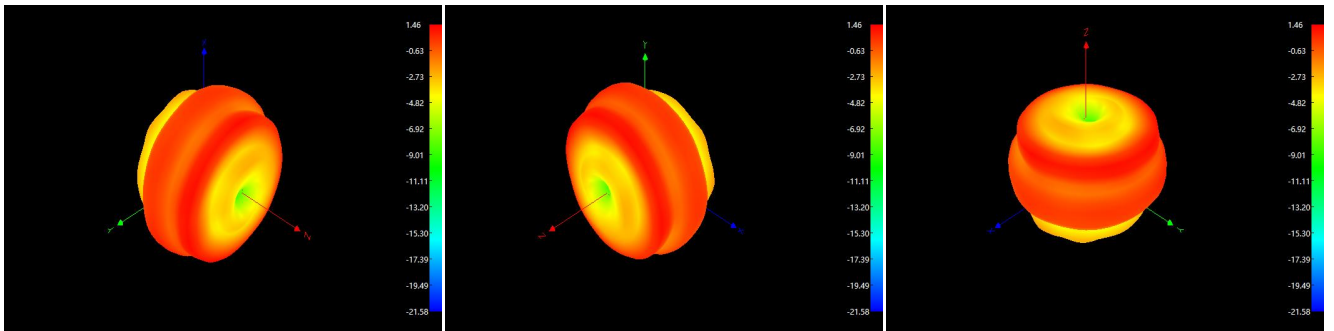
3D 2500:



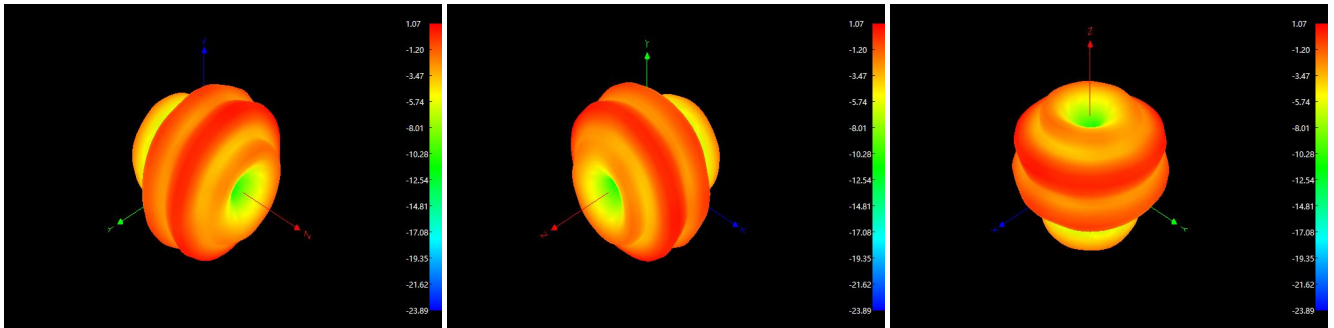
3D 5150:



3D 5550:



3D 5850:





Material RoHS conformity declaration form

This is to certify that the delivery to your company's components, raw materials, auxiliary materials used and the additives in the production engineering are accord with RoHS environmental requirements of the restrictions on the use of hazardous substances directive (RoHS directive 2011/65 / EU)

About components used raw materials, packaging materials, auxiliary materials and additives used in the production process such as composition of the report is as follows:

Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of harmful substances (ppm)						PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB	PBDE	PASS
Plastic parts	ABS	CANML2204785512	SGS	22/03/30	ND	ND	ND	ND	ND	ND	PASS
	PC	SZXML2200130001	SGS	22/01/20	ND	ND	ND	ND	ND	ND	PASS
Copper pipe	Brass strip	SHAEC2127949504	SGS	21/12/30	ND	35	ND	ND	ND	ND	PASS
Tin bar	Eco-friendly tin wire	SHAEC2112368002	SGS	21/06/22	ND	51	ND	ND	ND	ND	PASS
Wire rod	Teflon coaxial cable	SZXEC2102641803	SGS	21/08/23	ND	ND	ND	ND	ND	ND	PASS
Heat shrink bushing	Heat shrink bushing	CANEC2116449508	SGS	21/09/10	ND	ND	ND	ND	ND	ND	PASS
SMA	Lead-free copper	CANEC2200189310	SGS	22/01/12	ND	27	ND	ND	ND	ND	PASS
	Rubber core	SHAEC2118528402	SGS	21/08/30	ND	ND	ND	ND	ND	ND	PASS
	Nickel coating	SZXEC2103405307	SGS	21/11/12	ND	28	ND	ND	ND	ND	PASS