



Shenzhen Yingjia Chuang electronic technology Co., LTD

<http://www.szsyjc.com>

APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	4G black waterproof split antenna	
P/ N	YJC-60501-B93	
APPROVAL REV.	A0	
DELIVERY DATE	January 15th, 2024	
PREPARED BY	Yin Feijie	
CHECKED BY	Fang Wenfeng	
APPROVED BY	Chauhan	
Customer Approved		
Prepared By	Checked By	Approved By

Address: Building C, Hongyu Guangming Valley, No. 11, Youma Gang Road, Ma Tian Street, Guangming District, Shenzhen
Dongguan Branch: Yingjiachuang Industrial Park, No. 2 Yinhe 3rd Road, Shishuikou, Qiaotou Town, Dongguan City
Hangzhou Office: 212, Building B, Dahua Jianghong International Innovation Park, 369 Internet of Things Street, Binjiang District, Hangzhou
Mianyang Office: No. 4F-34 Wanxiang High-tech International, No. 35 Mianxing East Road, Mianyang High-tech Zone, Sichuan Province

telephone: 0755-27810060 fax: 0755-27810057 website: <http://www.szsyjc.com>



catalogue

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resume:

edition	Content of change and reasons for change	date	release
A0	Initial releas	January 15th, 2024	



Antenna plan:

A	B	C	D	E	F	G																																																																							
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6	<p>Requirements:</p> <ol style="list-style-type: none">1. The finished product must be 100% test conduction OK2. The finished product must be 100% inspected OK.3. The finished product uses an environmentally friendly process.4. Meet ROHS requirements.5. No tolerance is specified. Please refer to general tolerance.6. * Dimensioning for emphasis.					6																																																																							
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Antenna technical parameters and environmental testing:

Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	700-960/1710-2700MHz	Antenna Color	Black
VSWR	<4.0	Input connector	SMA
Input Impedance	50 Ω	Cable length	196mm
Direction	All	Working Temperature	-20℃~+70℃
Gain	3.0dBi	Working Humidity	20%~80%

Environmental performance test:

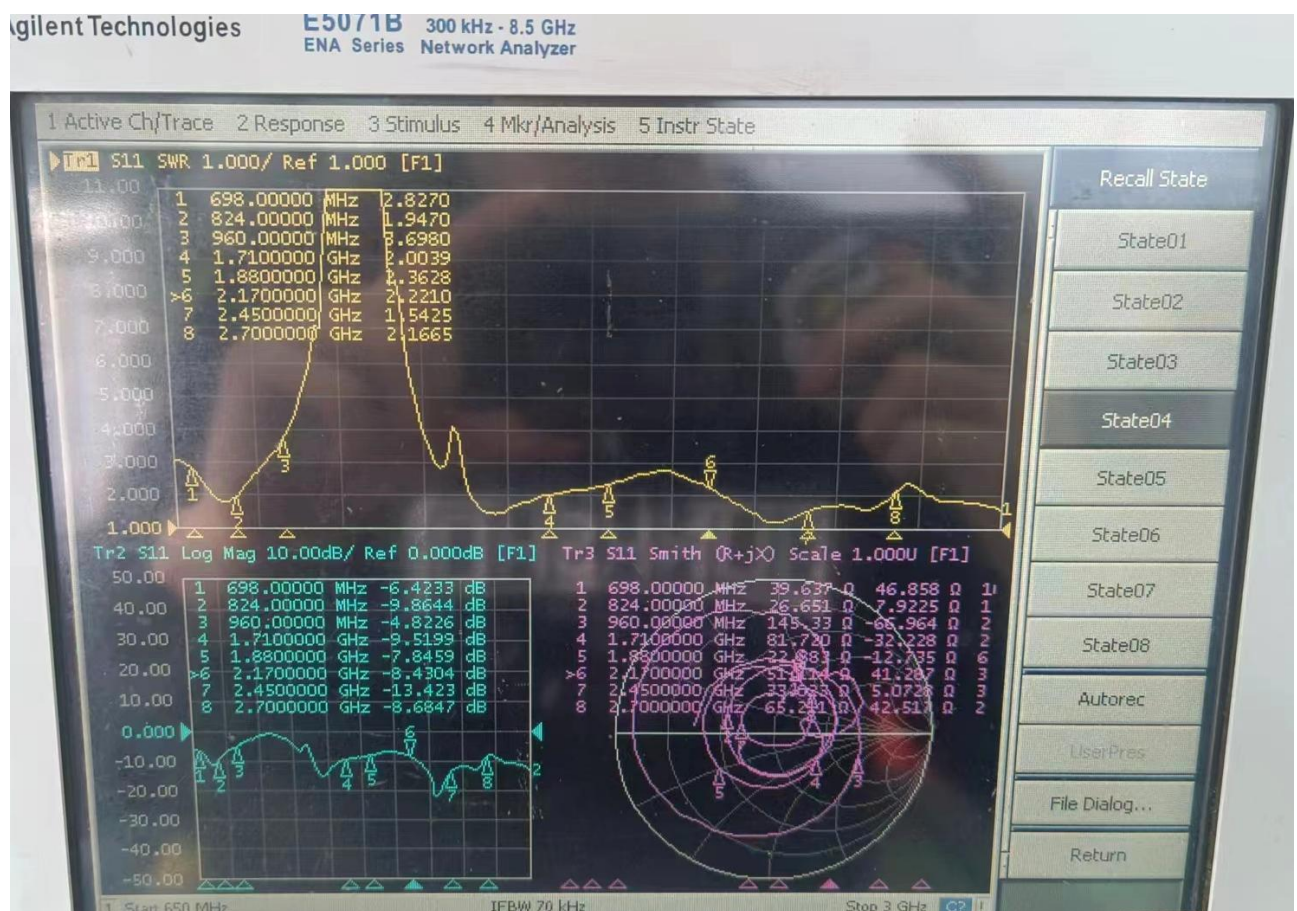
Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows:: 1. Temperature is - 30 ℃ ~ + 80 ℃ 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performace is normal
High and low temperature test	Between 70 ℃ and -20 ℃ for 5 loops, then 1-2 h under normal conditions, check the appearance quality.	Size should meet the requirements and meet the performance of mechnery and electric.
Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: 40 ℃. 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 mechnery 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 performace is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performace is normal



Antenna diagram:



Antenna performance test diagram:

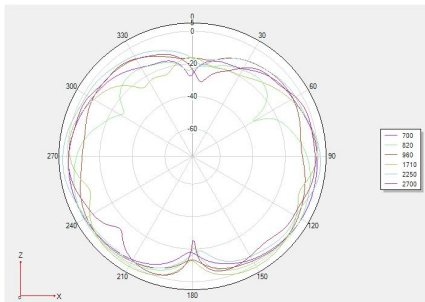




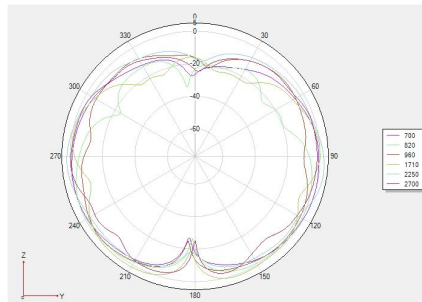
2D and 3D test data (4G):

Frequency	Efficiency (%)	Gain. (dBi)
700	52.60	0.31
720	45.60	-0.67
740	42.76	-0.48
760	39.90	-0.49
780	41.40	-0.25
800	42.17	1.24
820	41.98	1.03
840	42.95	1.33
860	43.05	1.69
880	40.64	1.62
900	41.59	1.80
920	43.25	1.69
940	44.26	1.86
960	44.98	0.06
1710	50.82	2.08
1800	62.81	3.09
1890	57.81	2.30
1980	67.45	2.33
2070	62.52	1.78
2160	72.95	2.66
2250	77.27	2.95
2340	65.92	2.32
2430	71.78	2.99
2520	55.72	2.08
2610	51.17	1.70
2700	44.36	0.04

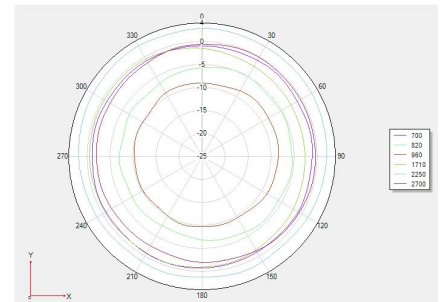
Phi 0 2D



Phi 90 2D

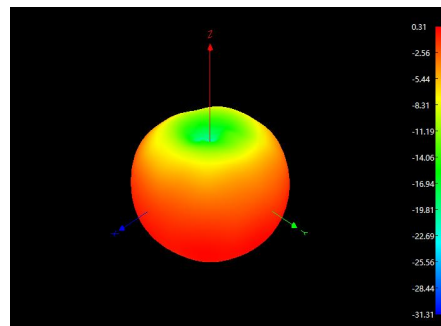
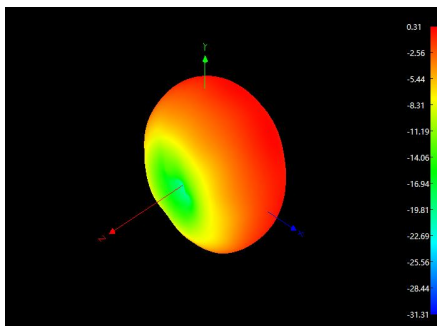
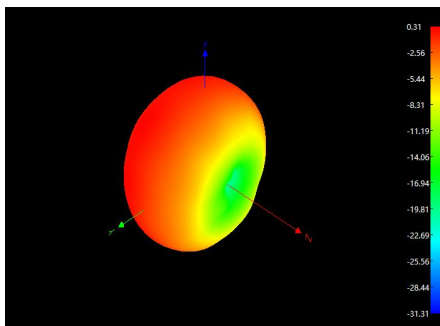


Theta 90 2D

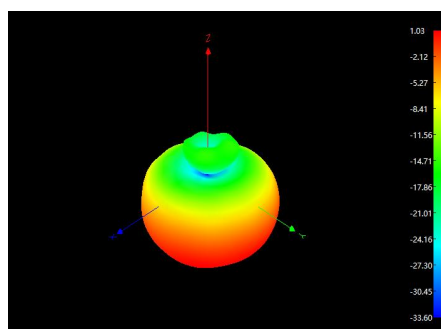
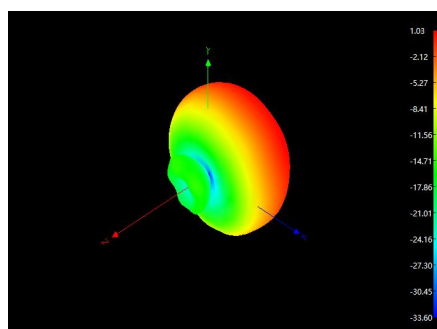
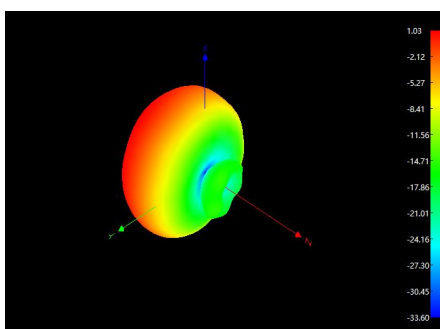




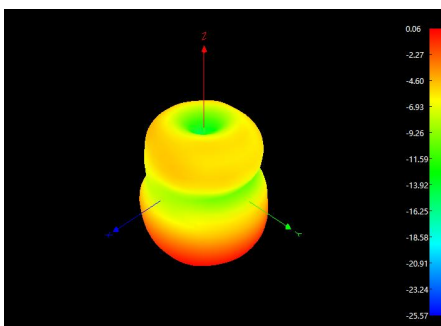
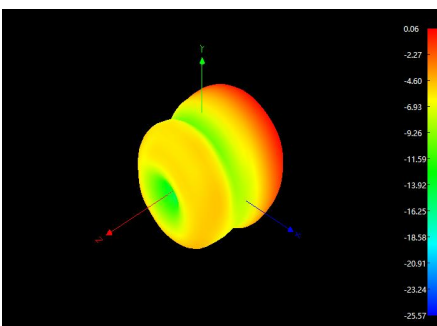
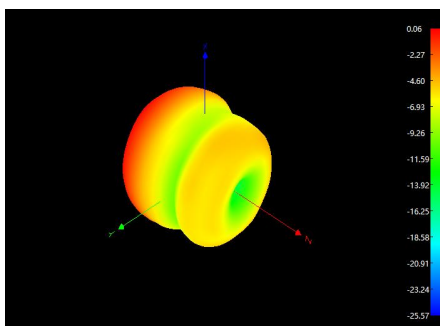
3D 700



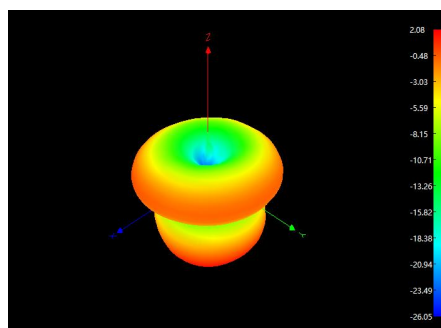
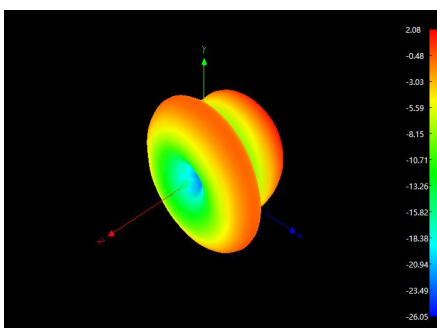
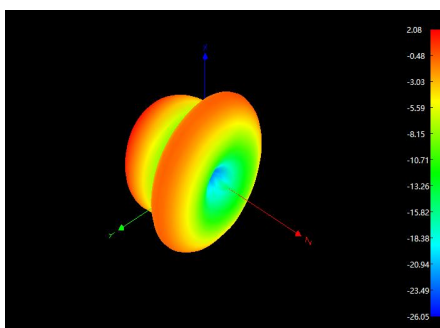
3D 820



3D 960

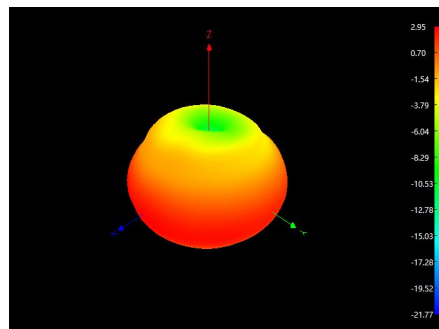
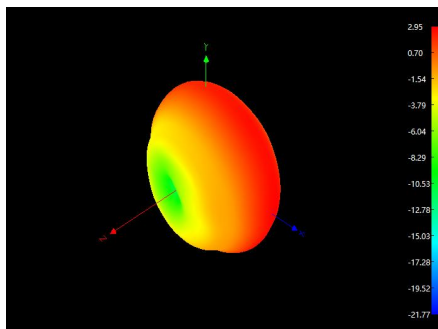
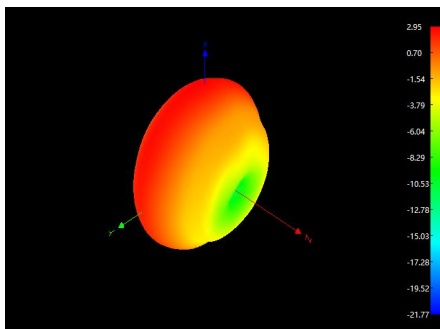


3D 1700

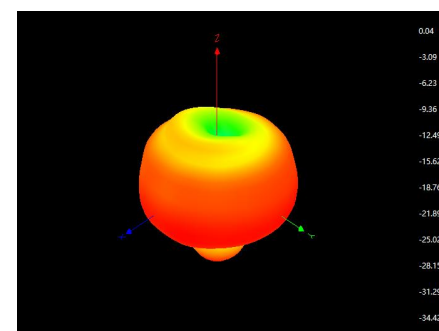
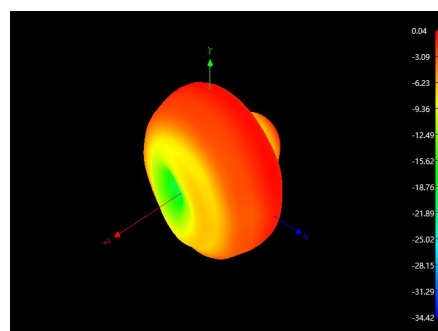
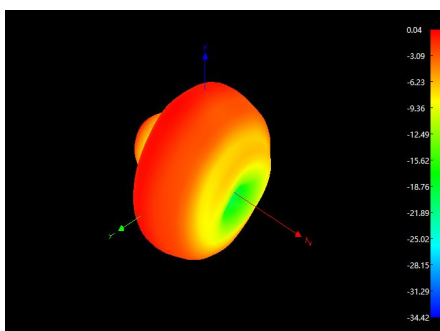




3D 2250



3D 2700





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
Wire rod	Coaxial cable	CANEC2301851701	SGS	23/02/23	ND	ND	ND	ND	ND	ND	PASS
Plastic parts	TPEE	CANEC23000634202	SGS	23/03/13	ND	ND	ND	ND	ND	ND	PASS
	PC +PBT	CANEC23000452601	SGS	23/03/02	ND	ND	ND	ND	ND	ND	PASS
SMA	Orichalcum	NGBEC23001515004	SGS	23/04/28	39	31298	ND	ND	ND	ND	PASS
	Rubber core	TAOEC2305841002	SGS	23/08/17	ND	ND	ND	ND	ND	ND	PASS
	Gold coating	SZXPC23000130502	SGS	23/03/01	ND	ND	ND	ND	ND	ND	PASS
	Nickel coating	SZXPC23000130506	SGS	23/03/01	ND	ND	ND	ND	ND	ND	PASS
Eco-friendl y tin wire	Eco-friendl y tin wire	SHAEC23006357502	SGS	23/05/23	ND	43	ND	ND	ND	ND	PASS
PCB	PCB	TAOEC2302260502	SGS	23/04/12	ND	17	ND	ND	ND	ND	PASS
Silicone plug	Silica gel	CANPC23008754202	SGS	23/08/31	ND	ND	ND	ND	ND	ND	PASS