



APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	4G FPC bracket main antenna (Suitable for model: ML22)	
P/ N	YJC-6N000-B227-F	
APPROVAL REV.	A0	
DELIVERY DATE	October 17th, '23	
PREPARED BY	Suqing Ye	
CHECKED BY	Longfei Wu	
APPROVED BY		
Customer Approved		
Approved By	Checked By	Prepared By

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Antenna plan:

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REV	DATE	DESCRIPTION	NAME
A0	2021-03-31	新版发行	叶紫清
A1			

RoHS



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频率范围(FREQUENCY RANGE)	增益 (Gain)	电压驻波比(VSWR)	极化 (Polarization)	最大功率(Max power rating)	特性阻抗 (Impedance)
700-960/1710-2700MHz	3.0dBi	<3.0:1	Linear Vertical	50W	50欧姆

由 Autodesk 教育版产品制作

零件名称 (PART NAME)	单位 (UNIT)	比例 (SCALE)	版本 (REV)	数量 (QTY)
4G5 金属主天线	1	1:1	A0	1

深圳市英佳创电子科技有限公司
SHENZHEN YINGJIACHUANG TECHNOLOGY ELECTRONIC CO., LTD

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2021-03-31

外部须贴物料标示卡
与 RoHS 标签各 1 PCS

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Antenna technical parameters and environmental testing:

Electrical technical parameters			
Frequency Range(1)	850-960/1710-2700MHz	VSWR	<3.0
Input Impedance	50 Ω	Antenna Color	BLACK
Direction	All	Working Temperature	-20℃~+70℃
Gain	3.0 dBi	Working Humidity	20%~80%

Environmental performance test:

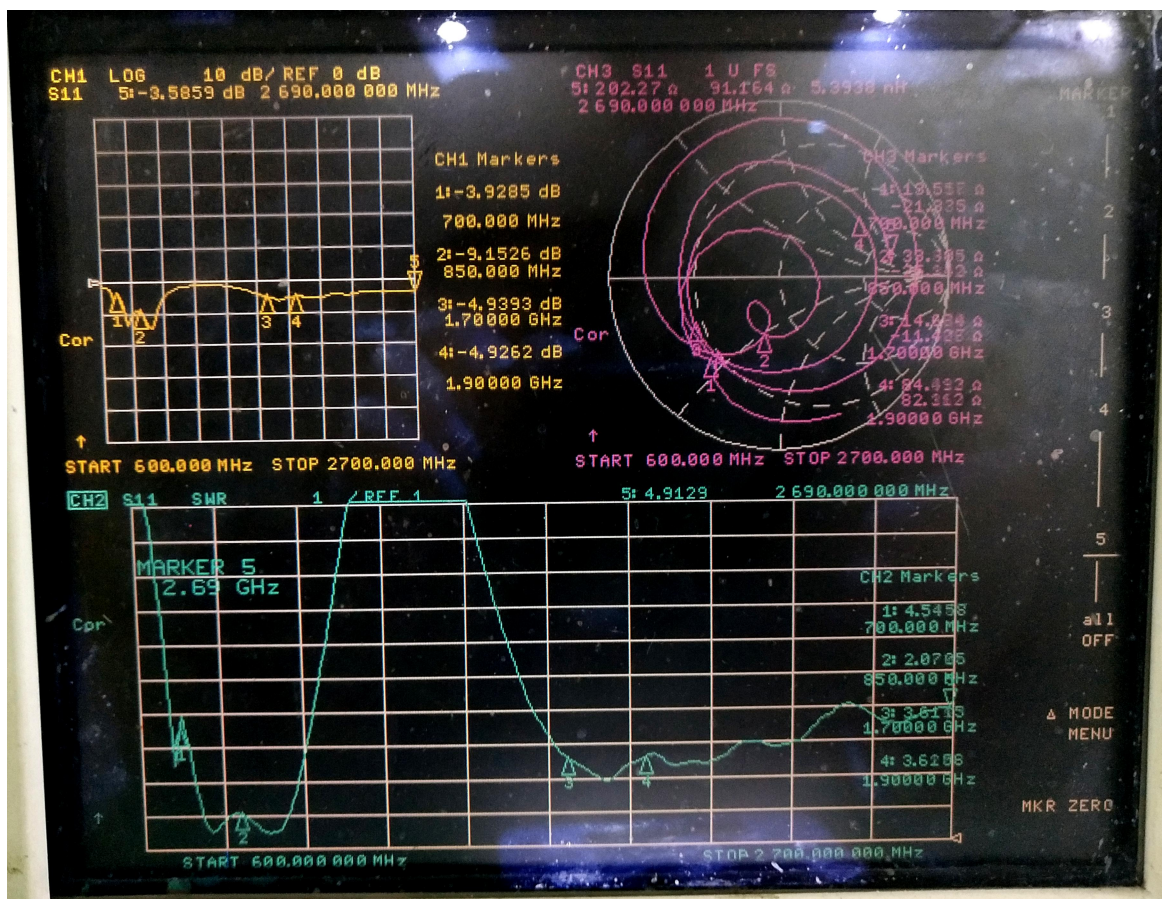
project	test condition	standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows: 1. Temperature is - 20 °C ~ + 70 °C 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical properties is normal
high and low 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 should satisfy the content with the electrical and mechanical properties
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 should satisfy the content with the electrical and mechanical properties
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 properties is normal
fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical properties is normal



Physical picture of antenna:



Antenna performance test chart (4G main antenna):

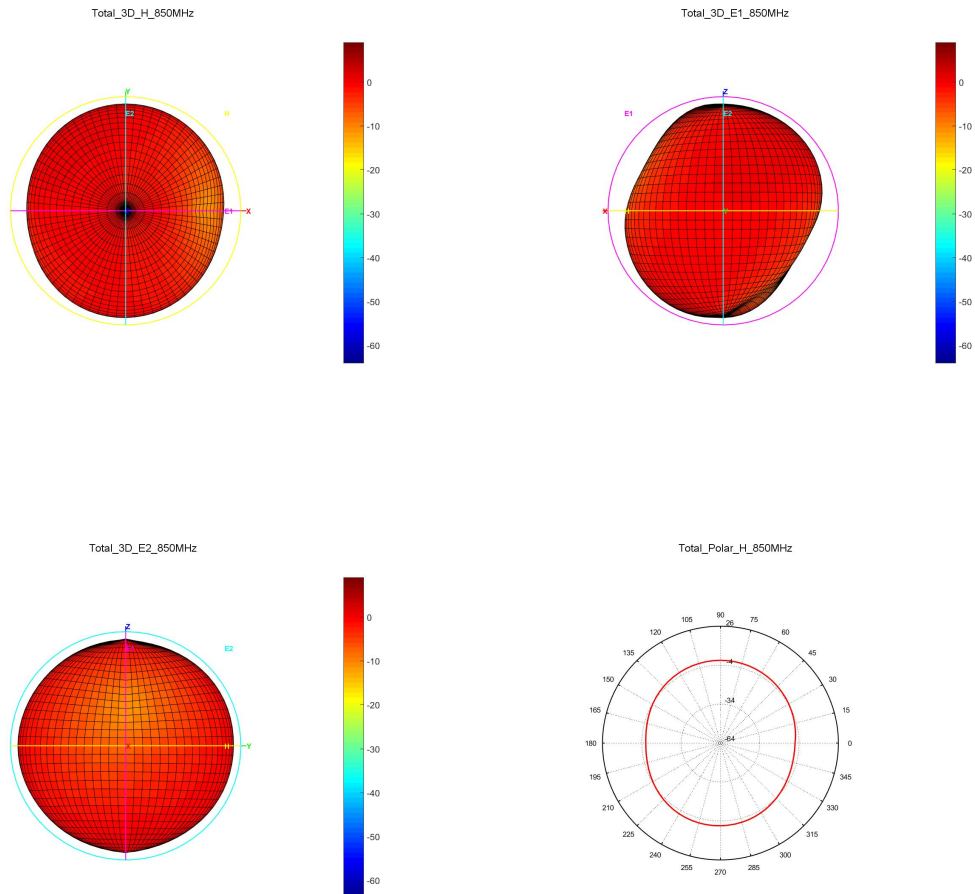




2D.3D Test Data:

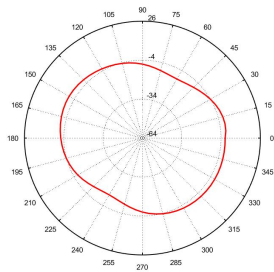
(4G)Test Data:

Frequency	Efficiency (%)	Gain. (dBi)
850MHz	59.70	0.64
860MHz	64.42	0.85
870MHz	64.57	1.13
880MHz	56.23	0.61
890MHz	34.04	-0.94
900MHz	43.25	-0.62
910MHz	57.15	0.21
920MHz	56.10	0.02
930MHz	51.05	-0.29
940MHz	45.19	-0.92
950MHz	40.09	-1.21
960MHz	33.73	-1.84

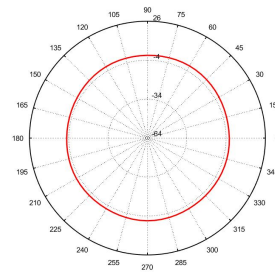




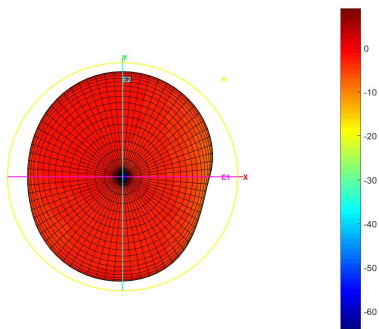
Total_Polar_E1_850MHz



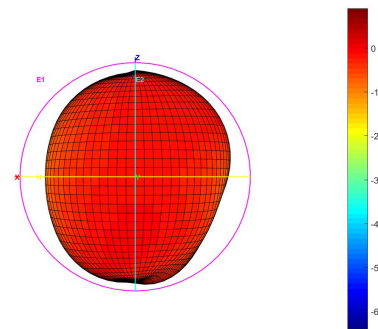
Total_Polar_E2_850MHz



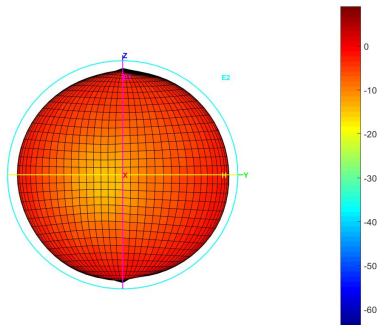
Total_3D_H_900MHz



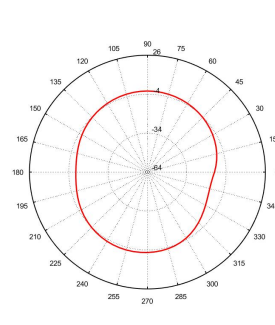
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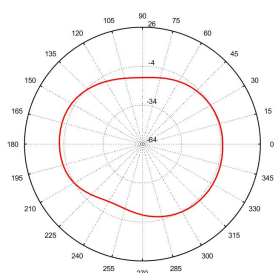
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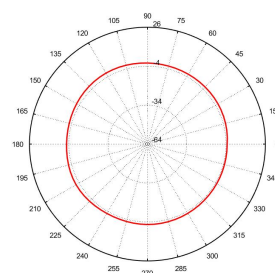
Total_Polar_H_900MHz



Total_Polar_E1_900MHz

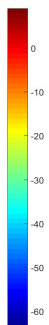
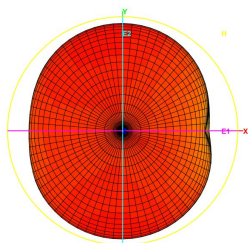


Total_Polar_E2_900MHz

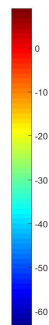
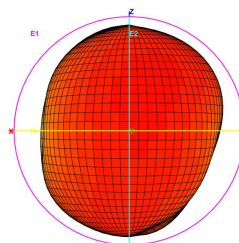




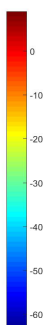
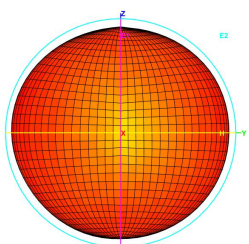
Total_3D_H_960MHz



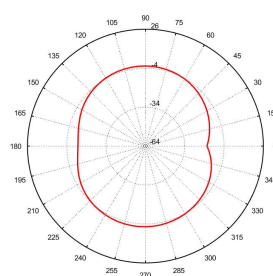
Total_3D_E1_960MHz



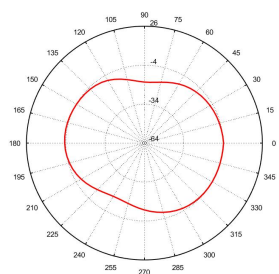
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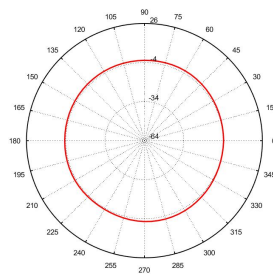
Total_Polar_H_960MHz



Total_Polar_E1_960MHz



Total_Polar_E2_960MHz

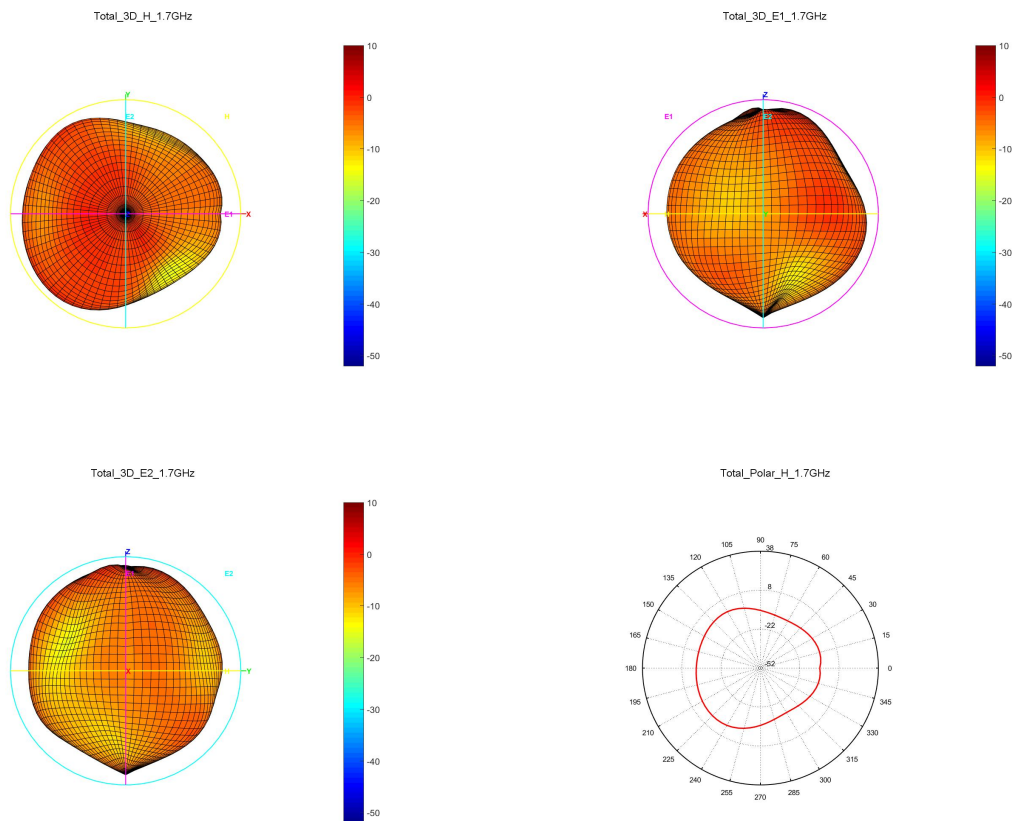




2D.3D Test Data:

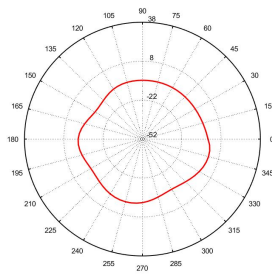
(4G)Test Data:

Frequency	Efficiency (%)	Gain. (dBi)
1700MHz	31.99	-0.85
1800MHz	30.06	-0.90
1900MHz	33.73	-1.00
2000MHz	37.15	0.50
2100MHz	44.98	1.12
2200MHz	37.76	1.20
2300MHz	40.09	2.38
2400MHz	57.02	3.95
2500MHz	61.24	3.67
2600MHz	39.63	1.31
2700MHz	31.33	-0.53

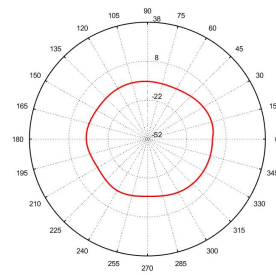




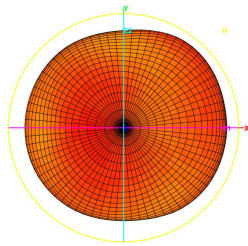
Total_Polar_E1_1.7GHz



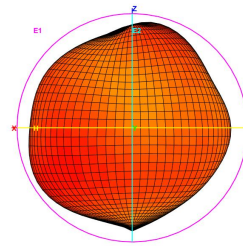
Total_Polar_E2_1.7GHz



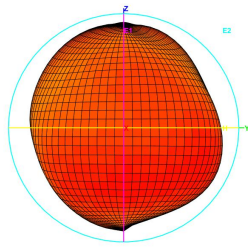
Total_3D_H_2.1GHz



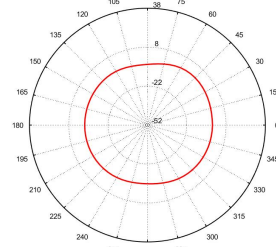
Total_3D_E1_2.1GHz



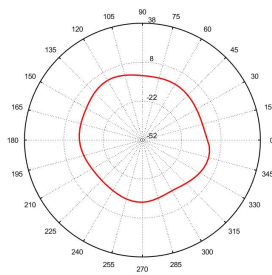
Total_3D_E2_2.1GHz



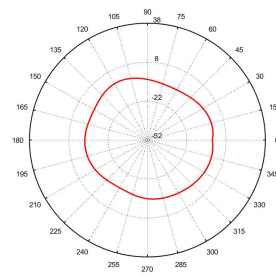
Total_Polar_H_2.1GHz



Total_Polar_E1_2.1GHz

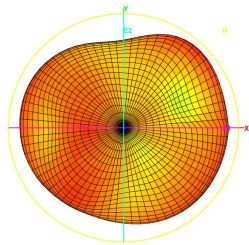


Total_Polar_E2_2.1GHz

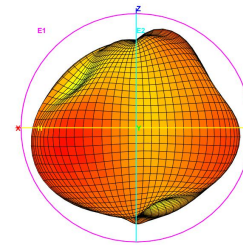




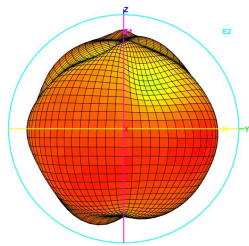
Total_3D_H_2.7GHz



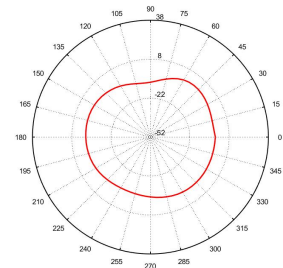
Total_3D_E1_2.7GHz



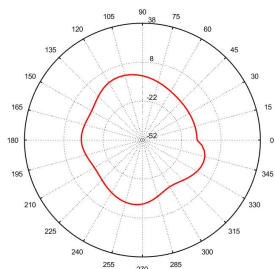
Total_3D_E2_2.7GHz



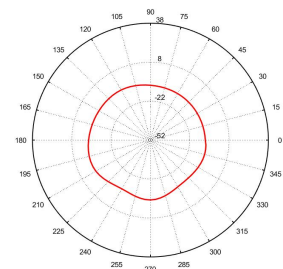
Total_Polar_H_2.7GHz



Total_Polar_E1_2.7GHz



Total_Polar_E2_2.7GHz





SHENZHEN YINGJIACHUANG TECHNOLOGY ELECTRONIC CO. LTD

<http://www.szsyjc.com>

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
FPC	FPC	FTS2302160201-01C1	SGS	23/02/20	ND	ND	ND	ND	ND	ND	PASS
Plastic bracket	ABS	CANPC23001081808	SGS	23/03/24	ND	ND	ND	ND	ND	ND	PASS