

SPECIFICATION



Shenzhen Guandetong Electronic Limited

2.4G/5G FPC (1.13*150MM) Product specification

Customers		Frequency	2400MHz—2500MHz 5150MHz—5800MHz
Name of wire rod		Version	A1
Customer data		GuandetongNo	
GuandetongNo			
R FDesign	Xiaobin	RF manager	Liuliang
Structural design	Wangdong	Structure manager	Wanghua
Technical Director	ANDY	Date	2023-11-07

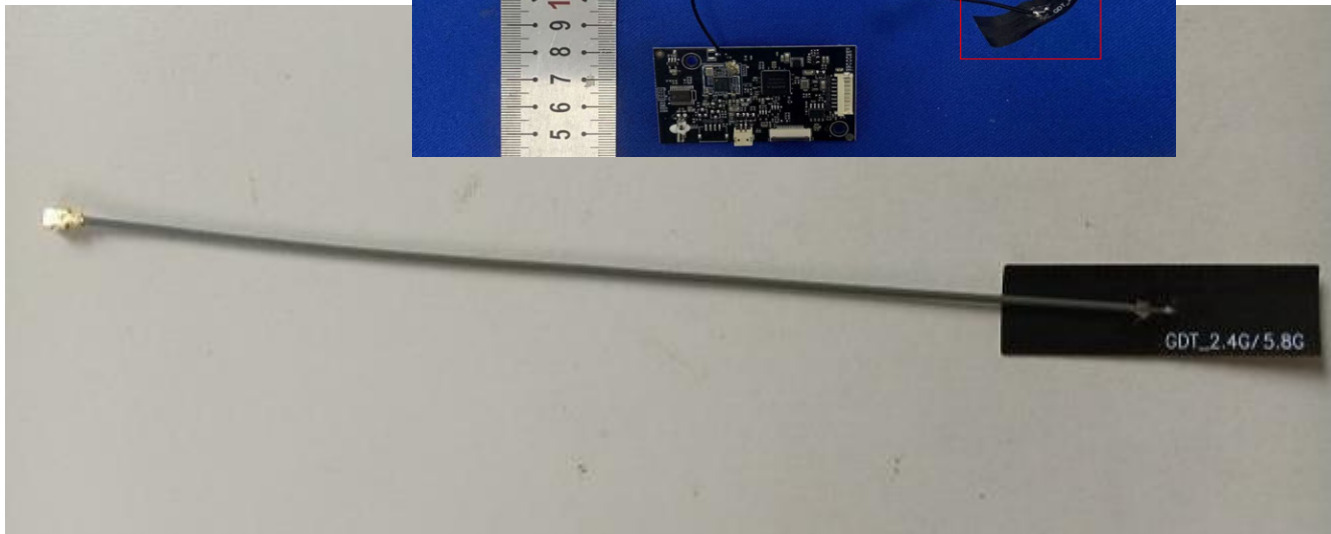
Customer confirmation:

Whether the Assembly meets your requirements: ☐OK ☐NG

catalogue

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一、Product pictures



二、Product parameters

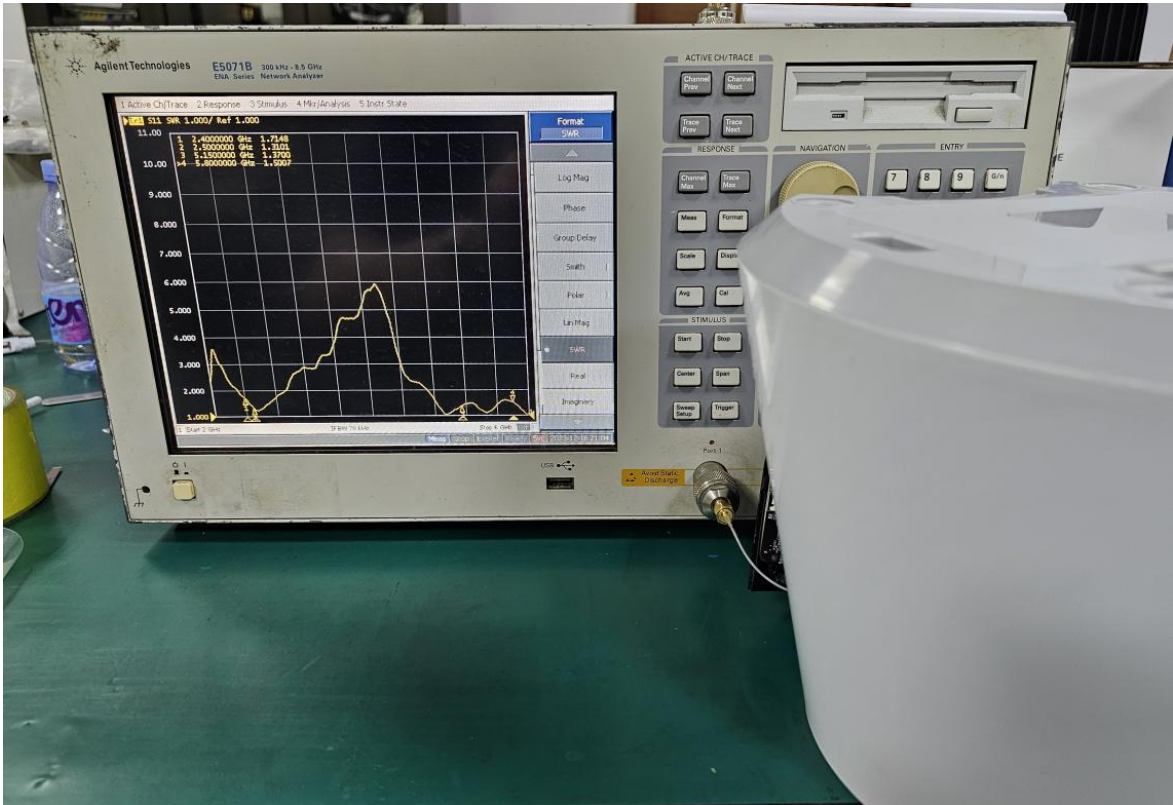
Product test parameters			
(Name)	2.4 g/5G antenna	(Model Type)	
(Electrical Specifications)			
(Frequency Range)	2400-2500MHZ 5150-5800MHZ	(Polarization)	perpendicular
(Impedance)	50 Ω	Radiation	QXCOMM
(VSWR)	≅2.0	(Power)	50W
(Gain)	3.42dBi&2.96dBi	(Bandwidth)	100M
(Mechanical Specifications)			
(Copper tube dimensions)	36*12±2mm	(Chassis Color)	black
(Connector)	IPEX	(Cable Length)	150±2mm
(Wire)	1.13 Gray		
(Working Temperature)	-40℃--+85℃	(Limit Temperature)	-40℃--+85℃

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<http://www.szgdtfr.com>

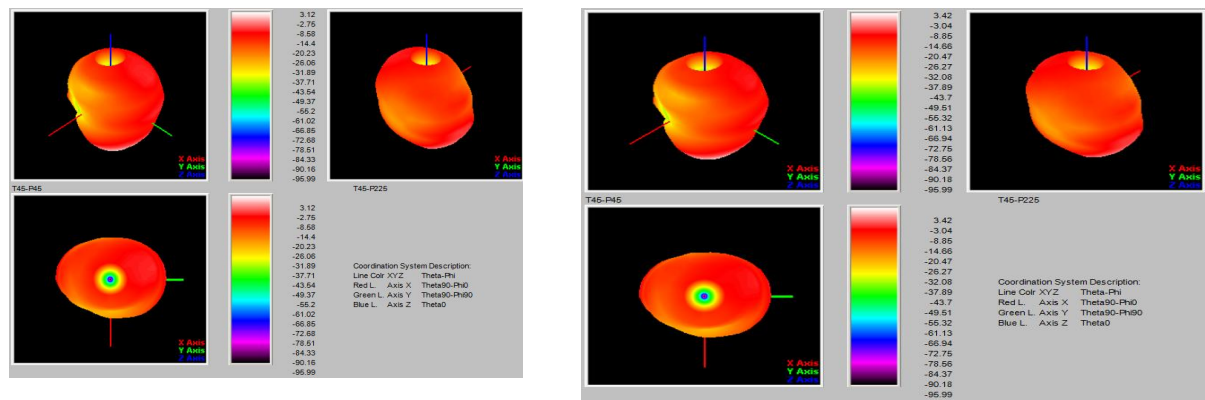
三、S11 (VSWR/Return/Smith



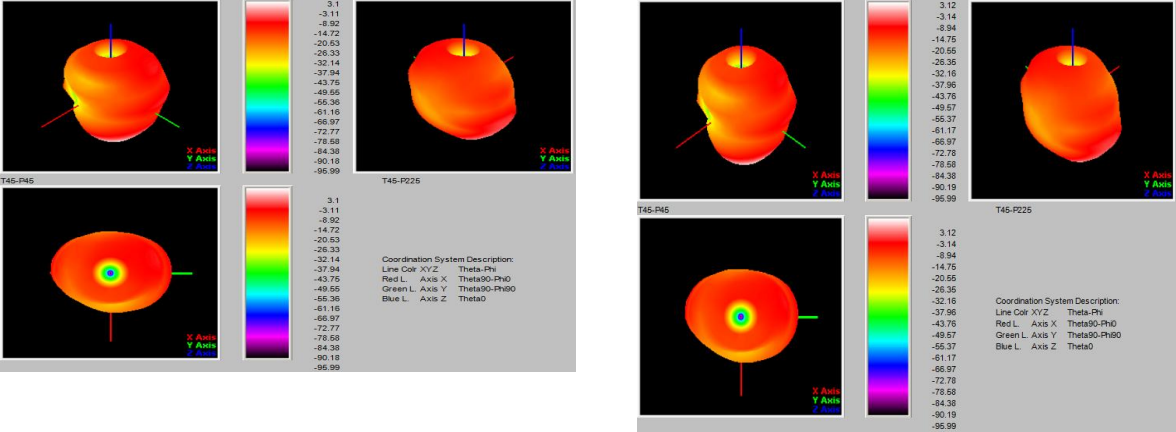
四、Antenna gain and efficiency

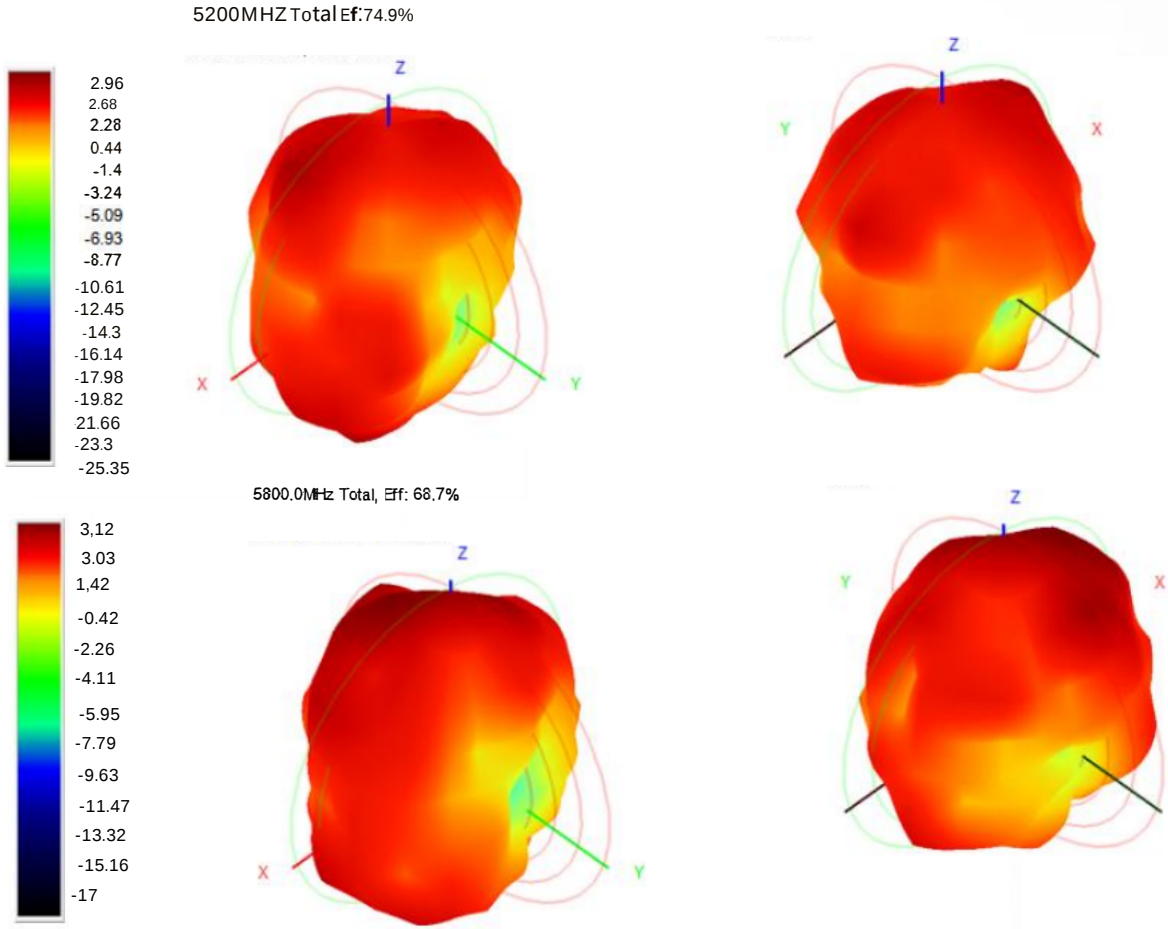
天线无源数据			天线无源数据		
频点(MHz)	效率(%)	增益(Gain)	频点(MHz)	效率(%)	增益(Gain)
2400	47.5%	3.12	5200	47.3%	2.96
2410	48.1%	3.25	5300	46.2%	2.92
2420	48.9%	3.28	5400	46.5%	2.87
2430	49.3%	3.32	5500	49.4%	2.95
2440	49.8%	3.35	5600	48.8%	3.25
2450	51.4%	3.42	5700	47.5%	3.18
2460	50.9%	3.36	5800	48.3%	3.12
2470	49.7%	3.25			
2480	49.5%	3.14			
2490	48.6%	3.05			
2500	49.2%	3.10			

2450MHz

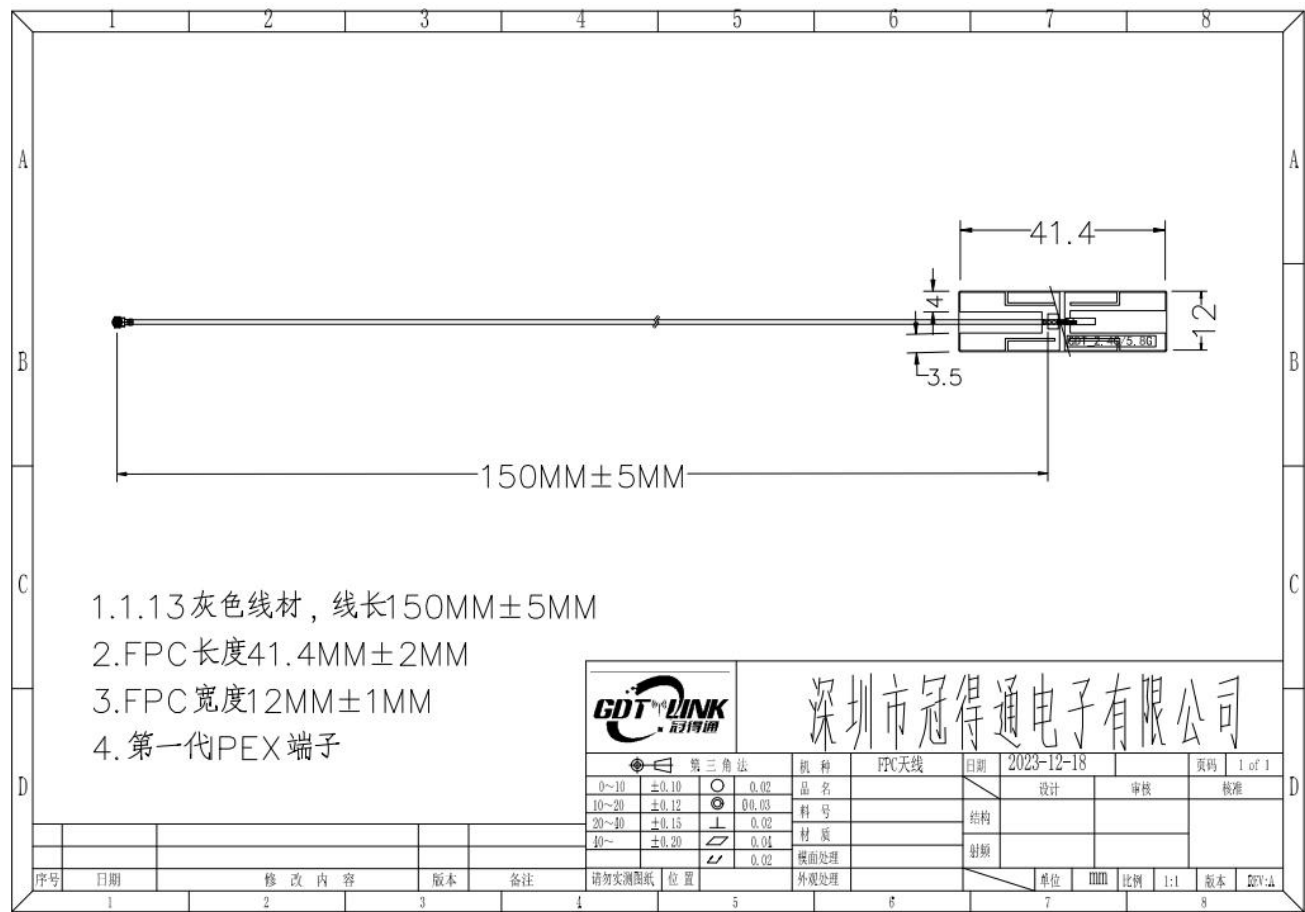


2500MHz





六、Structural drawings



七、Environmental performance test

project	Project test conditions	Specifications
Storage environment	The test temperature, humidity and air pressure are as follows when there is no specific condition: 1. The temperature is - 30 ℃~+80 ℃ 2. Relative humidity: 45% - 85% 3. The air pressure is 86kpa-106kpa	Normal electrical and mechanical performance

High and low temperature test	5 cycles between 70 ° C and 40 ° C, then under normal conditions1-2H, check the appearance quality.	The size shall meet the requirements and Mechanical and electrical performance
Constant damp heat resistance test	Relative humidity: 95 ± 3%, test temperature: 40 °C. After lasting for 2h, The electrical performance shall be measured within 5 minutes after the test object is taken out, and the test object shall be within the normal range Part 1-2H, check the appearance quality	The size shall meet the requirements and Mechanical and electrical performance
vibration test	Vibration frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/s, frequency sweep cycles: 30 times	Normal electrical and mechanical performance
Drop test	Free fall for 3 times in the direction of mutually perpendicular axes at a height of 1M	Normal electrical and mechanical performance