

SPECIFICATION



Shenzhen Guandetong Electronic Limited

2.4G/5.8G FPC antenna

Product specification

model number	GDT_2.4G/5.8G	Frequency	2400MHz—2500MHz 5150MHz—5800MHz
Name of wire rod		Version	A1
Customer data		GuandetongNo	
GuandetongNo			
R FDesign	肖彬	RF manager	刘亮
Structural design	王栋	Structure manager	王华
Technical Director	ANDY	Date	2024-8-6

Customer confirmation:

Whether the Assembly meets your requirements: ☐OK ☐NG

catalogue

Cover	1
catalogue.....	2
一、 Product pictures	3
二、 Product parameters	3
三、 S11(VSWR、 Return、 Smith)	4
四、 Antenna gain and efficiency.....	4
五、 Apple chart.....	5
六、 Structural drawings.....	6
七、 Environmental performance test.....	6- 7

Confidentiality requirements of Shenzhen Guanditong Electronic Co. , Ltd. . The company has proprietary technology to provide the information, which should be strictly confidential, it shall not be disclosed to any person or company without the prior written consent of Shenzhen Guanditong Electronic Co. , Ltd. .

一、 Product pictures



二、 Product parameters

Product test parameters			
(Name)	2.4 g/5.8G antenna	(Model Type)	
(Electrical Specifications)			
(Frenquency Range)	2400-2500MHZ 5150-5800MHZ	(Polarization)	perpendicular
(Impedance)	50 欧	Radiation	QXCOMM
(VSWR)	≤2.0	(Power)	50W
(Gain)	3dBi	(Bandwidth	100M
(Mechanical Specifications)			
(Copper tube dimensions)	36*12±2mm	(Chassis Color)	black
(Connector)	IPEX	(Cable Length)	130±2mm
(Wire)	1.13 gray		
(Working Temperature)	-40℃--+85℃	(Limit Temperature)	-40℃--+85℃

Address: 3/F, Tower D, Huanguan Nanmaoyuan Industrial Park, Guanhu Street,
Longhua District, Shenzhen. Tel: 0755-88298396 fax: 0755-89733896

<http://www.szgdtrf.com>

Confidentiality requirements of Shenzhen Guanditong Electronic Co. , Ltd. . The company has proprietary technology to provide the information, which should be strictly confidential, it shall not be disclosed to any person or company without the prior written consent of Shenzhen Guanditong Electronic Co. , Ltd. .

三、S11(VSWR/Return/Smith



四、Antenna gain and efficiency

Point ID	(MHz)	(dBm)	(dBi)	y (dBi)	(%)
1	2400.0	2400.00	0.16	4.32	38.4%
2	2410.0	2410.00	0.41	4.62	38.0%
3	2420.0	2420.00	0.83	4.90	39.2%
4	2430.0	2430.00	1.21	5.02	41.5%
5	2440.0	2440.00	1.01	4.91	40.7%
6	2450.0	2450.00	0.96	4.85	40.9%
7	2460.0	2460.00	1.02	4.82	41.7%
8	2470.0	2470.00	0.85	4.68	41.5%
9	2480.0	2480.00	0.32	4.36	39.5%
10	2490.0	2490.00	0.26	4.36	39.0%
11	2500.0	2500.00	0.26	4.33	39.1%
12	5300.0	5300.00	1.45	6.08	34.4%
13	5310.0	5310.00	1.40	5.91	35.4%
14	5320.0	5320.00	1.01	5.77	33.4%
15	5330.0	5330.00	0.96	5.82	32.6%
16	5340.0	5340.00	1.14	5.88	33.6%
17	5350.0	5350.00	1.01	5.86	32.7%
18	5360.0	5360.00	1.32	5.81	35.6%
19	5370.0	5370.00	1.03	5.80	33.4%
20	5380.0	5380.00	1.72	5.93	37.9%
21	5390.0	5390.00	2.49	6.04	44.2%
22	5400.0	5400.00	2.23	6.13	40.7%
23	5410.0	5410.00	3.00	6.39	45.7%
24	5420.0	5420.00	2.95	6.61	43.1%
25	5430.0	5430.00	3.14	6.78	43.3%
26	5440.0	5440.00	3.58	7.01	45.3%
27	5450.0	5450.00	3.25	7.07	41.5%
28	5460.0	5460.00	3.05	7.13	39.1%
29	5470.0	5470.00	3.10	7.01	40.6%
30	5480.0	5480.00	2.71	6.80	38.9%
31	5490.0	5490.00	2.85	6.82	40.0%
32	5500.0	5500.00	3.10	6.81	42.6%
33	5510.0	5510.00	2.54	6.72	38.2%
34	5520.0	5520.00	2.95	6.58	43.3%
35	5530.0	5530.00	2.99	6.67	42.8%

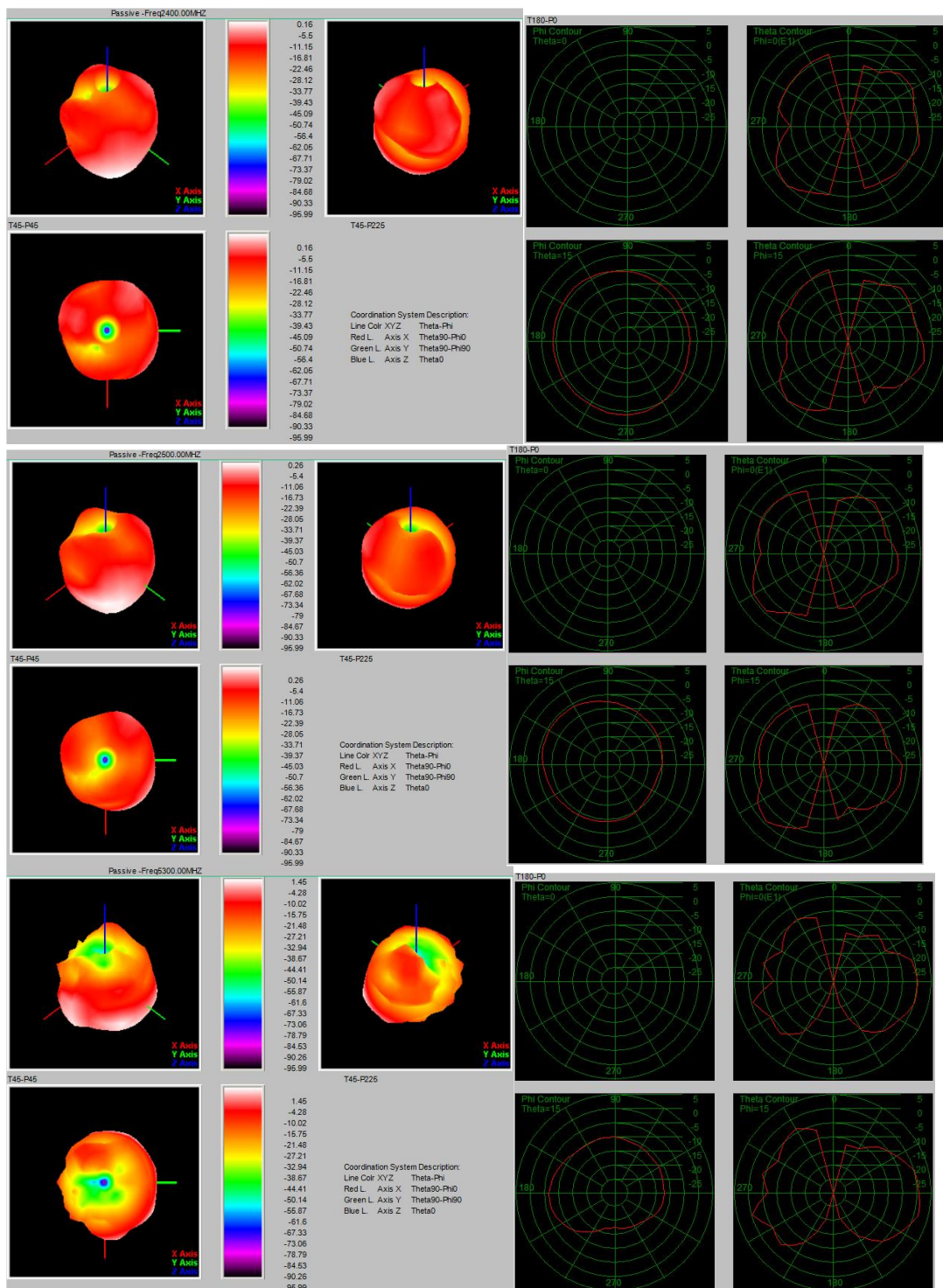
36	5540.0	5540.00	2.84	6.71	41.0%
37	5550.0	5550.00	3.42	6.80	46.0%
38	5560.0	5560.00	3.23	6.82	43.7%
39	5570.0	5570.00	3.33	6.85	44.4%
40	5580.0	5580.00	3.15	6.94	41.7%
41	5590.0	5590.00	2.66	6.77	38.9%
42	5600.0	5600.00	2.59	6.65	39.3%
43	5610.0	5610.00	2.30	6.66	36.6%
44	5620.0	5620.00	2.21	6.63	36.1%
45	5630.0	5630.00	2.22	6.66	36.0%
46	5640.0	5640.00	2.40	6.60	38.1%
47	5650.0	5650.00	2.54	6.70	38.4%
48	5660.0	5660.00	2.37	6.41	39.5%
49	5670.0	5670.00	2.72	6.39	42.9%
50	5680.0	5680.00	2.26	6.14	41.0%
51	5690.0	5690.00	2.74	6.29	44.1%
52	5700.0	5700.00	2.56	6.29	42.4%
53	5710.0	5710.00	2.53	6.28	42.2%
54	5720.0	5720.00	3.13	6.35	47.6%
55	5730.0	5730.00	3.02	6.34	46.6%
56	5740.0	5740.00	2.87	6.20	46.5%
57	5750.0	5750.00	3.12	6.20	49.2%
58	5760.0	5760.00	2.57	6.09	44.4%
59	5770.0	5770.00	2.52	6.05	44.4%
60	5780.0	5780.00	2.41	6.01	43.7%
61	5790.0	5790.00	1.75	5.72	40.0%
62	5800.0	5800.00	1.68	5.52	41.4%

Address: 3/F, Tower D, Huanguan Nanmaoyuan Industrial Park, Guanhu Street,
Longhua District, Shenzhen. Tel: 0755-88298396 fax: 0755-89733896

<http://www.szgdtrf.com>

Confidentiality requirements of Shenzhen Guanditong Electronic Co. , Ltd. . The company has proprietary technology to provide the information, which should be strictly confidential, it shall not be disclosed to any person or company without the prior written consent of Shenzhen Guanditong Electronic Co. , Ltd. .

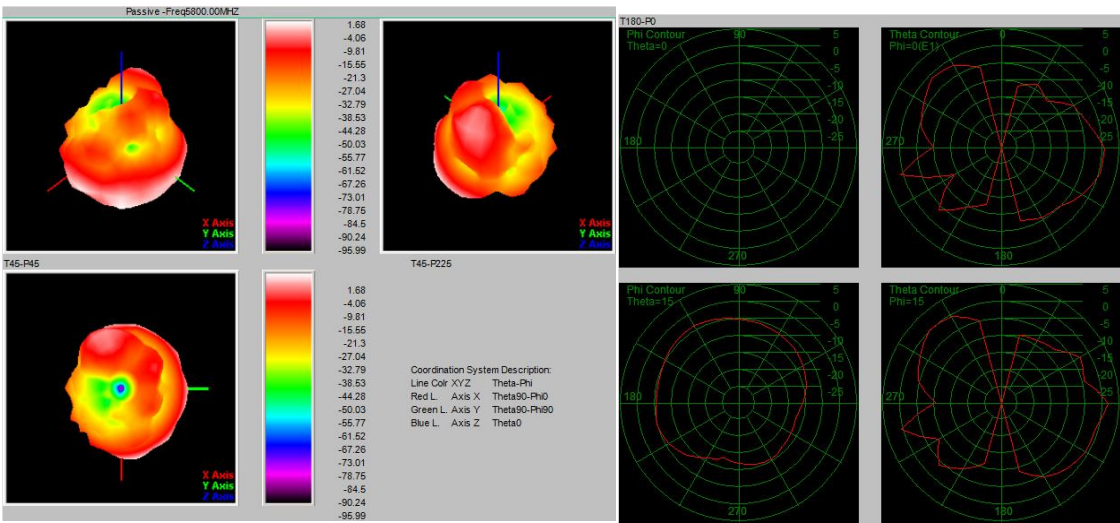
五、Apple chart



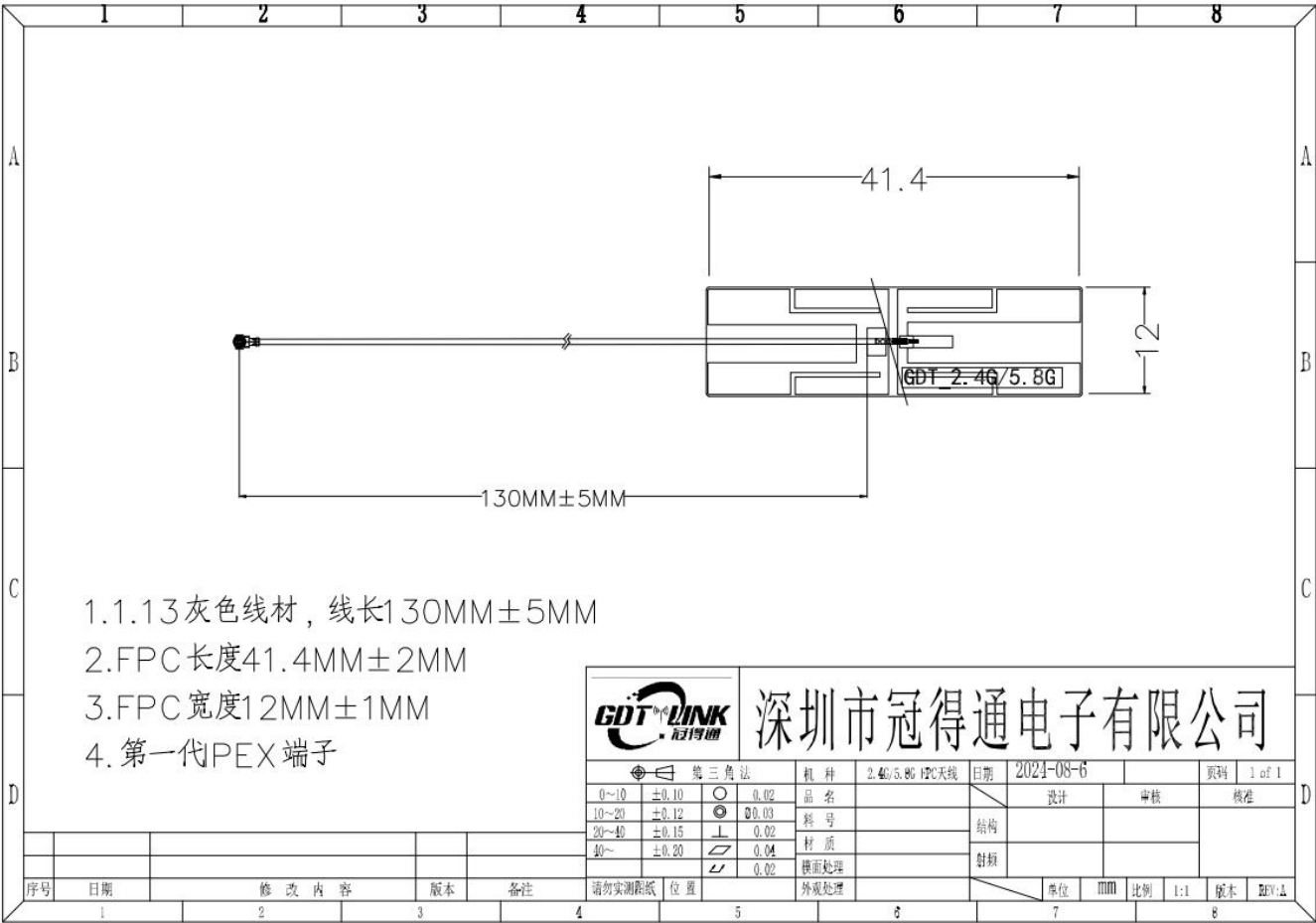
Address: 3/F, Tower D, Huanguan Nanmaoyuan Industrial Park, Guanhu Street,
Longhua District, Shenzhen. Tel: 0755-88298396 fax: 0755-89733896

<http://www.szgdtrf.com>

Confidentiality requirements of Shenzhen Guanditong Electronic Co. , Ltd. . The company has proprietary technology to provide the information, which should be strictly confidential, it shall not be disclosed to any person or company without the prior written consent of Shenzhen Guanditong Electronic Co. , Ltd. .



六、Structural drawings



Confidentiality requirements of Shenzhen Guanditong Electronic Co. , Ltd. . The company has proprietary technology to provide the information, which should be strictly confidential, it shall not be disclosed to any person or company without the prior written consent of Shenzhen Guanditong Electronic Co. , Ltd. .

七、 Environmental performance test

project	Project test conditions	Specifications
Storage environment	<p>The test temperature, humidity and air pressure are as follows when there is no specific condition:</p> <ol style="list-style-type: none">1. The temperature is $-30^{\circ}\text{C}\sim+80^{\circ}\text{C}$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 conditions 1-2H, check the appearance quality.	<p>The size shall meet the requirements and</p> <p>Mechanical and electrical performance</p>
Constant damp heat resistance test	<p>Relative humidity: $95 \pm 3\%$, test temperature: 40°C. After lasting for 2h,</p> <p>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</p> <p>Part 1-2H, check the appearance quality</p>	<p>The size shall meet the requirements and</p> <p>Mechanical and electrical performance</p>
vibration test	<p>Vibration frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/s, frequency sweep cycles: 30 times</p>	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

Address: 3/F, Tower D, Huanguan Nanmaoyuan Industrial Park, Guanhu Street, Longhua District, Shenzhen. Tel: 0755-88298396 fax: 0755-89733896

<http://www.szgdtrf.com>