Shenzhen Lxc Electronics Technology Co ., Ltd

深圳市连兴创电子科技有限公司

APPROVAL SHEET

承认书

客户（Customer）:_____

产品（Product）:_ 2.4G/5G Antenna(L=215MM)_

型号（Model）:_ Y4-4G/5.G

料号（Part Number）:__ YN-PM0300470 __

制作人（Written By）:_____ 唐红交_____

签发时间（Issued Date）:___2024-07-18_____

客户 CUSTOMER

频率范围(Frequency range)	WIFI:2400-2500 5150-5850（MHz）
驻波比系数(VSWR)	<2.0
输入阻抗(Input Impedance)	50（Ω）
极化方式(Polarization)	垂直极化 Vertical Polarization
半功率波束（3dB）HPW	180° H-plane 120° E-plane
天线类型(Antenna type)	FPC Antenna（Built-in 内置天线 antenna）
天线增益峰值(Antenna gain MAX (dBi)	3dBi+/-1
天线供应商（Antenna supplier）	Shenzhen Lxc Electronics Technology Co ., Ltd
天线型号（Antenna Model）	YN-PM0300470

RF by		**Checked by**	
ME by		**Date**	
Customer Confirm			

8Project:		Author:Wang	File Name:
Date: 2024-07-18			**YN-PM0300470 天线**
TEST:	Language:	Check: Zhong	
A	English		

Address: 4th Floor, Building C, Jinruihua Industrial Park, No. 12 Huafang Road, Dalang Street, Longhua District, Shenzhen, China
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Revision History

Date	Revision	Description of Changes
2024-07-18	RA	Measured with SUS301 sample.

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1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the program. We test the antenna with the latest version handset. And it seems to be acceptable.

2 General Description

2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

3 Mechanical Description

4 Electrical Performance

4.1 Set-up

4.1.1 VSWR

VSWR measurements (S11) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

4.1.2 Gain & Radiation Patterns

The gain of the antenna was measured in the Lxc's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than –30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quite zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

4.1.3 Matching Circuit Description

整机有源测试数据

WiFi(5G/A)	CH	功率(54M)	灵敏度(54M)	WiFi(2.4G/G)	CH	功率(54M)	灵敏度(54M)
	36	15.34	-75.64		1	14.35	-71.28
	149	15.46	-75.52		6	14.28	-71.45
	165	16.15	-74.61		11	14.68	-70.82
WiFi(2.4G/B)	CH	功率(11M)	灵敏度(11M)	WiFi(2.4G/N)	CH	功率(MCS7)	灵敏度(MCS7)
	1	14.41	-80.47		1	13.12	-68.72
	6	14.49	-81.20		6	13.32	-68.46
	11	14.70	-80.05		11	13.18	-68.84

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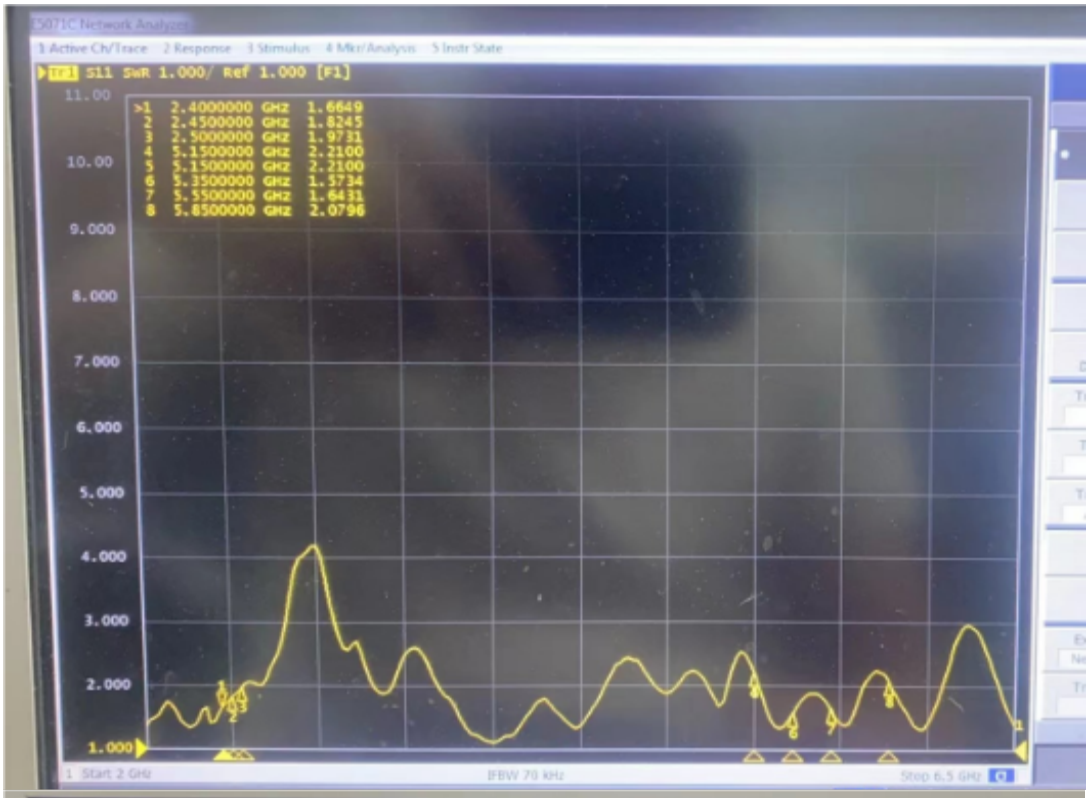
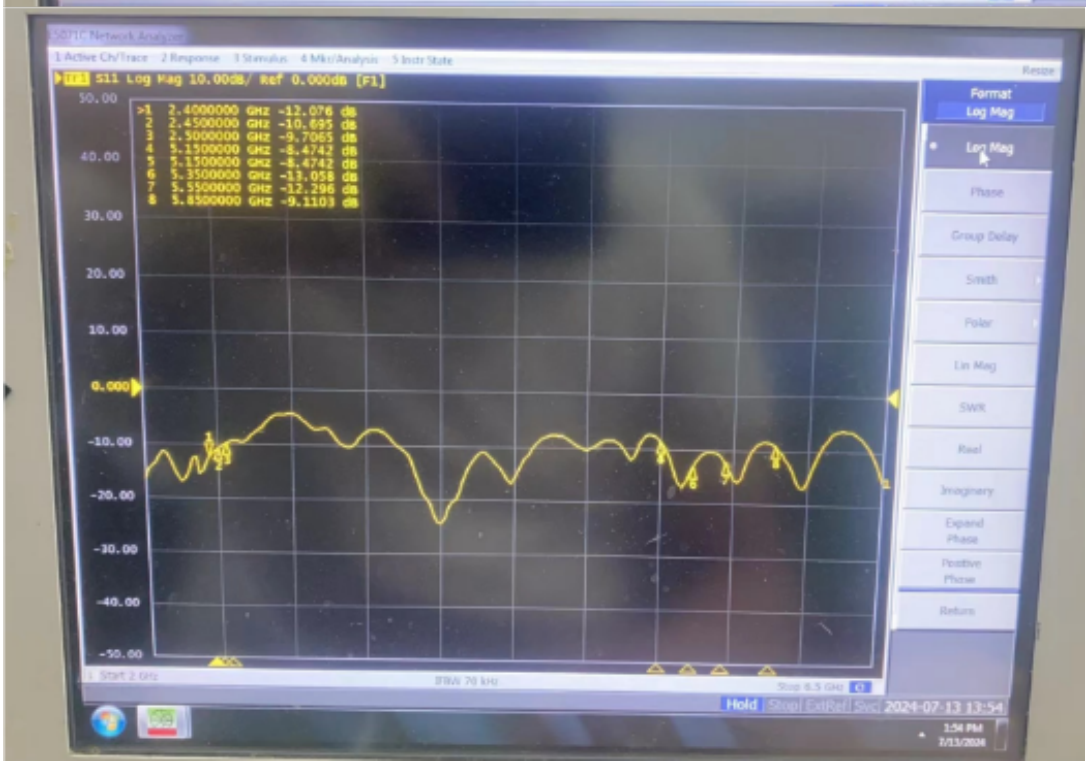
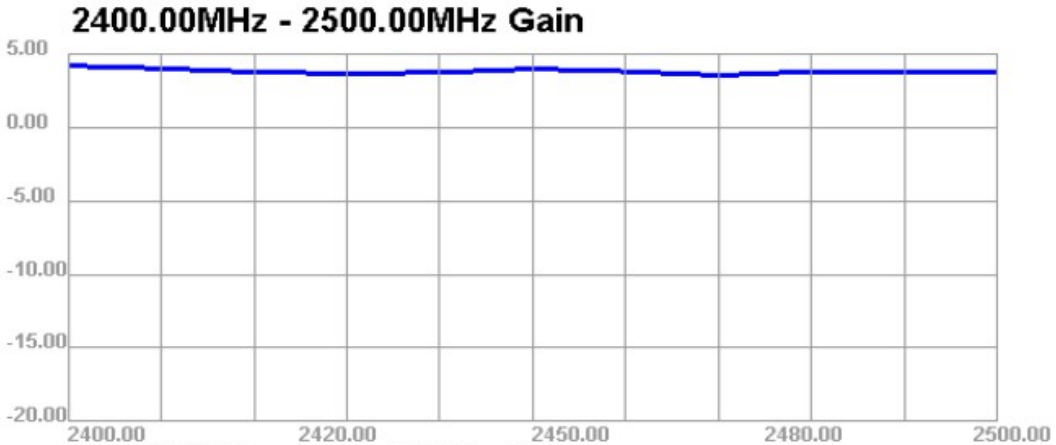
4.2 Measurement Data

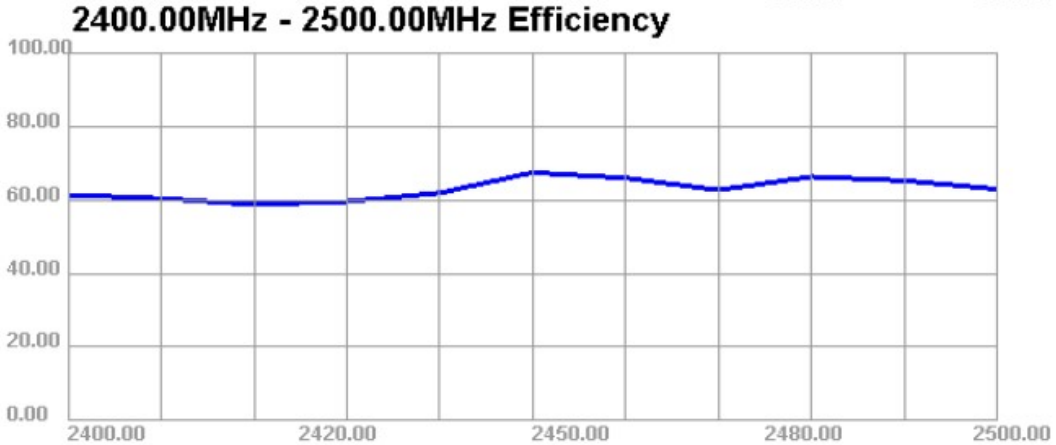
4.2.1 Active result（2.4G/5.8G/WIFI）





Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	61. 4	4. 18
2410	60. 44	4
2420	58. 78	3. 75
2430	59. 6	3. 66
2440	61. 92	3. 72
2450	67. 47	3. 97
2460	65. 96	3. 8
2470	62. 7	3. 53
2480	66. 32	3. 79
2490	65. 24	3. 79
2500	62. 96	3. 78





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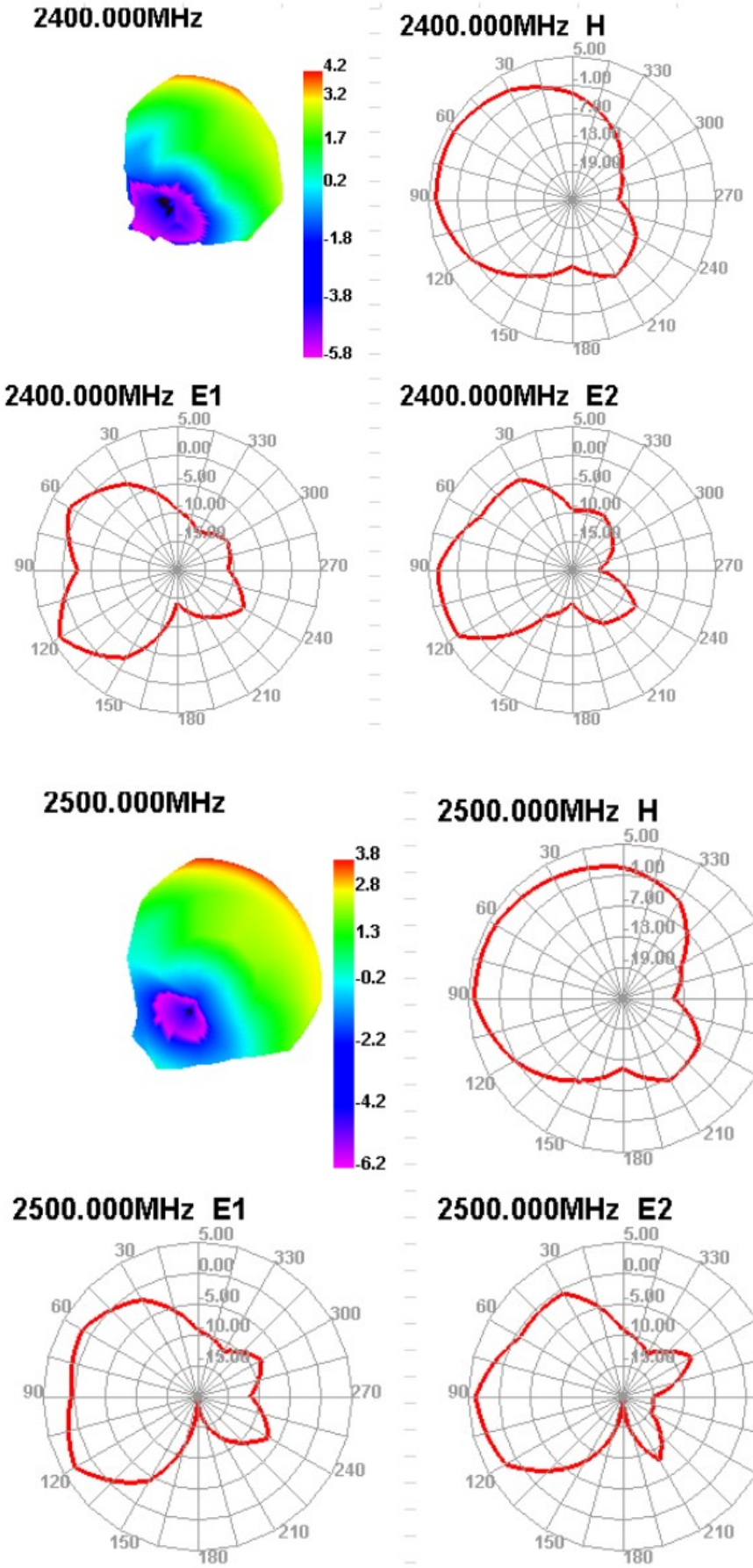

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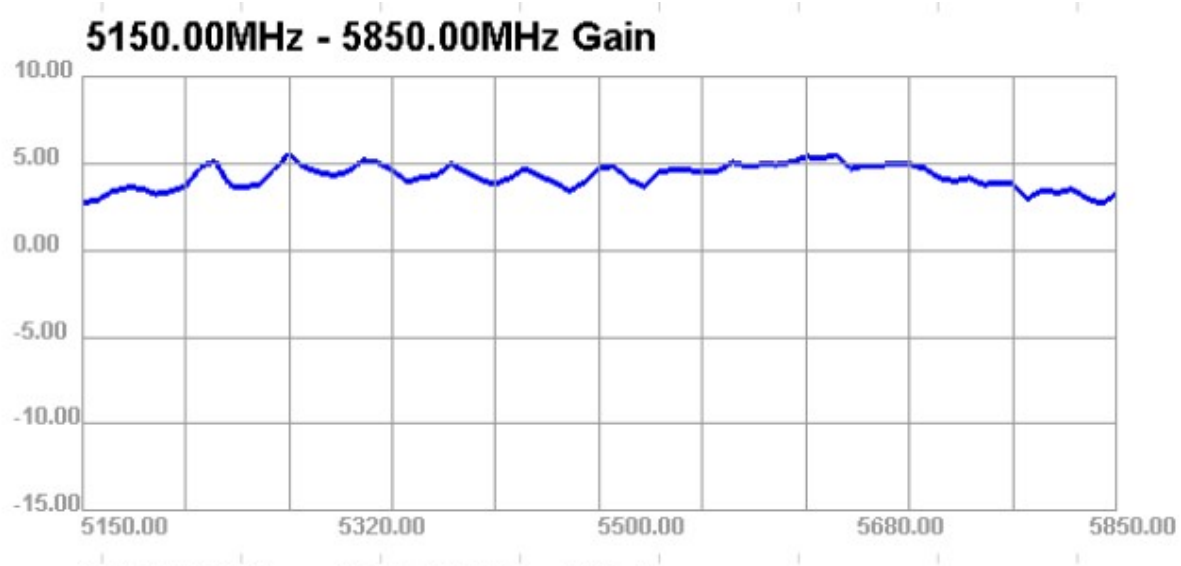
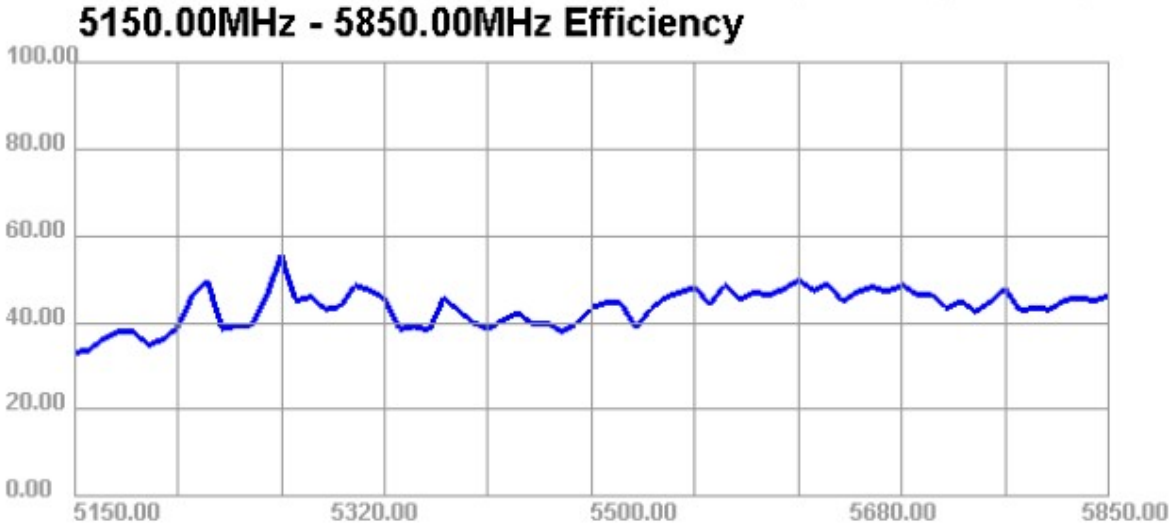
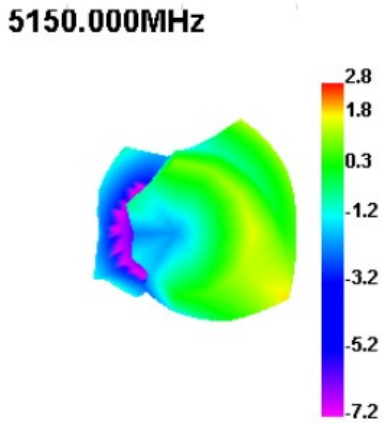
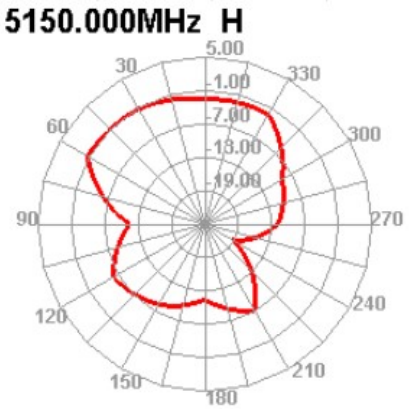
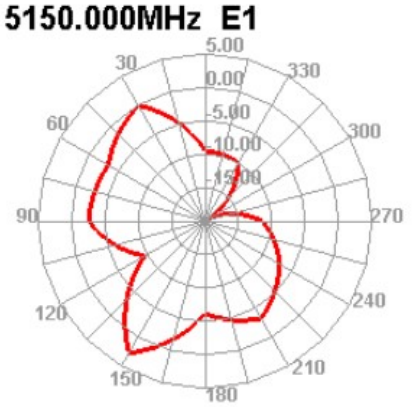
Freq (MHz)	Effi (%)	Gain (dBi)
5150	33. 06	2. 76
5350	47. 55	5. 06
5550	45. 81	4. 62
5650	47. 48	5. 25
5850	46. 21	3. 22

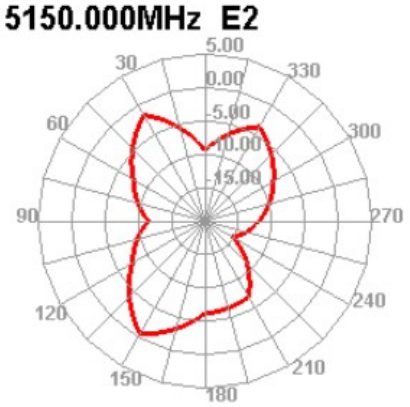


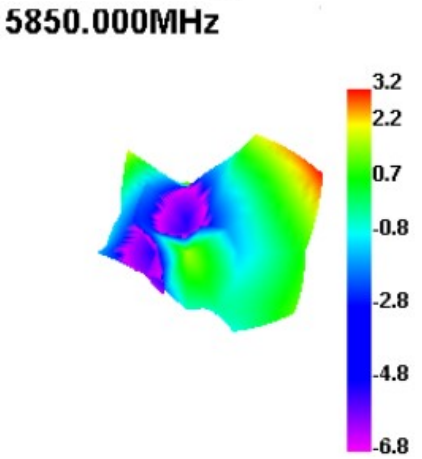


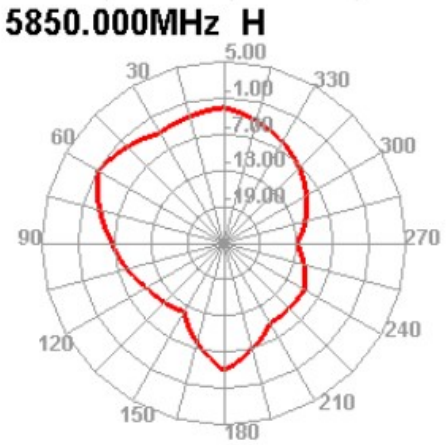


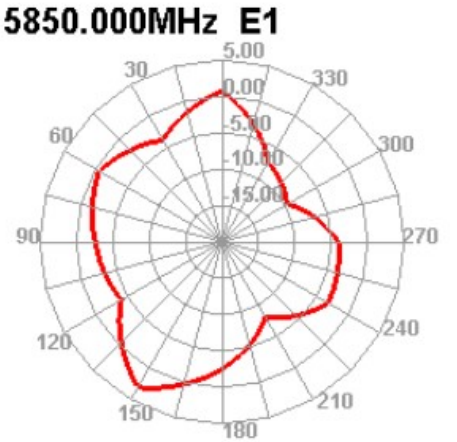


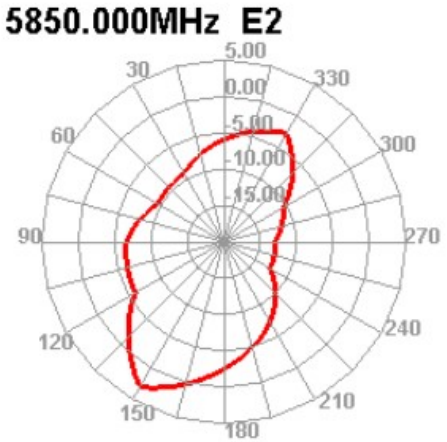












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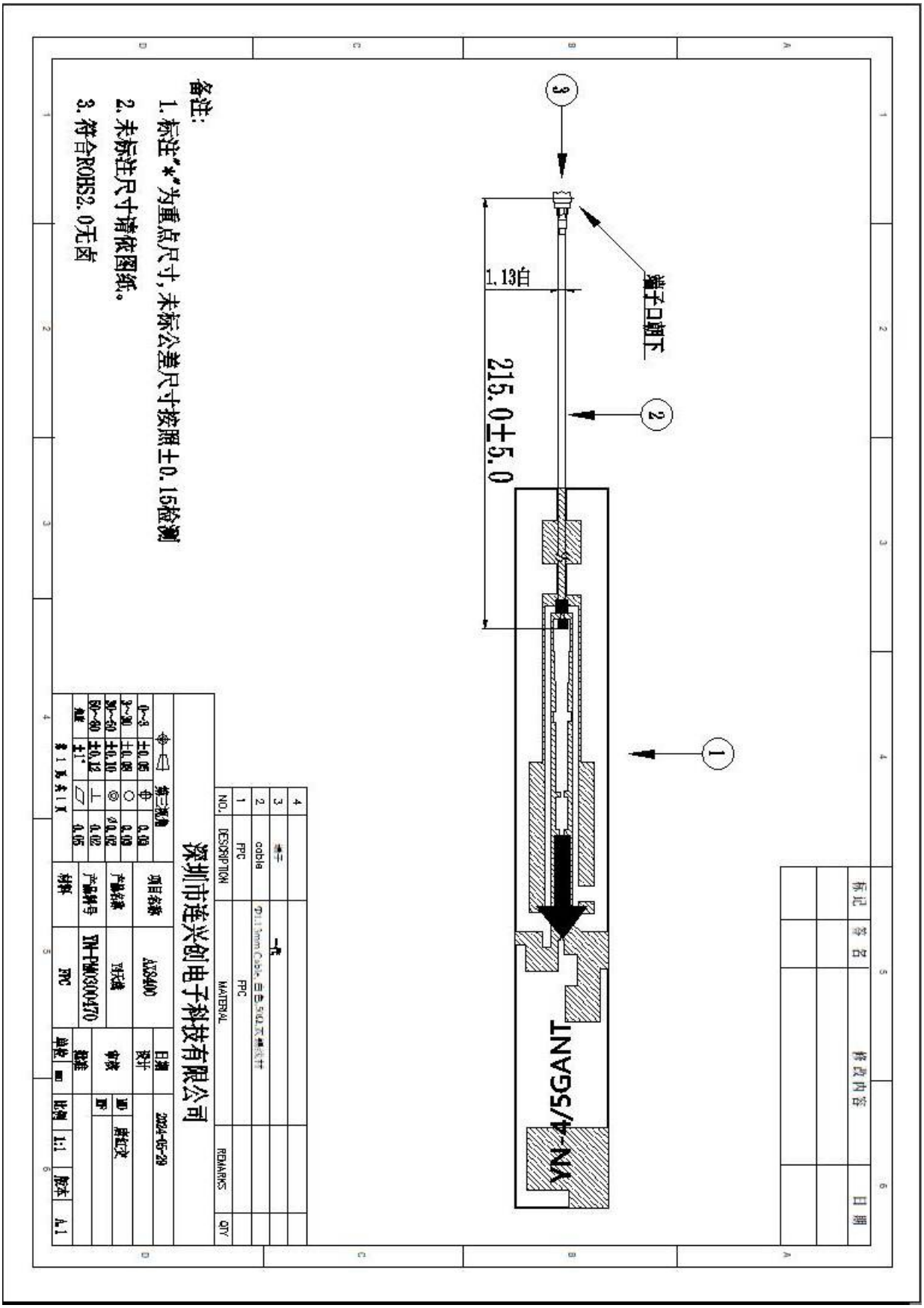
6 Mechanical drawing



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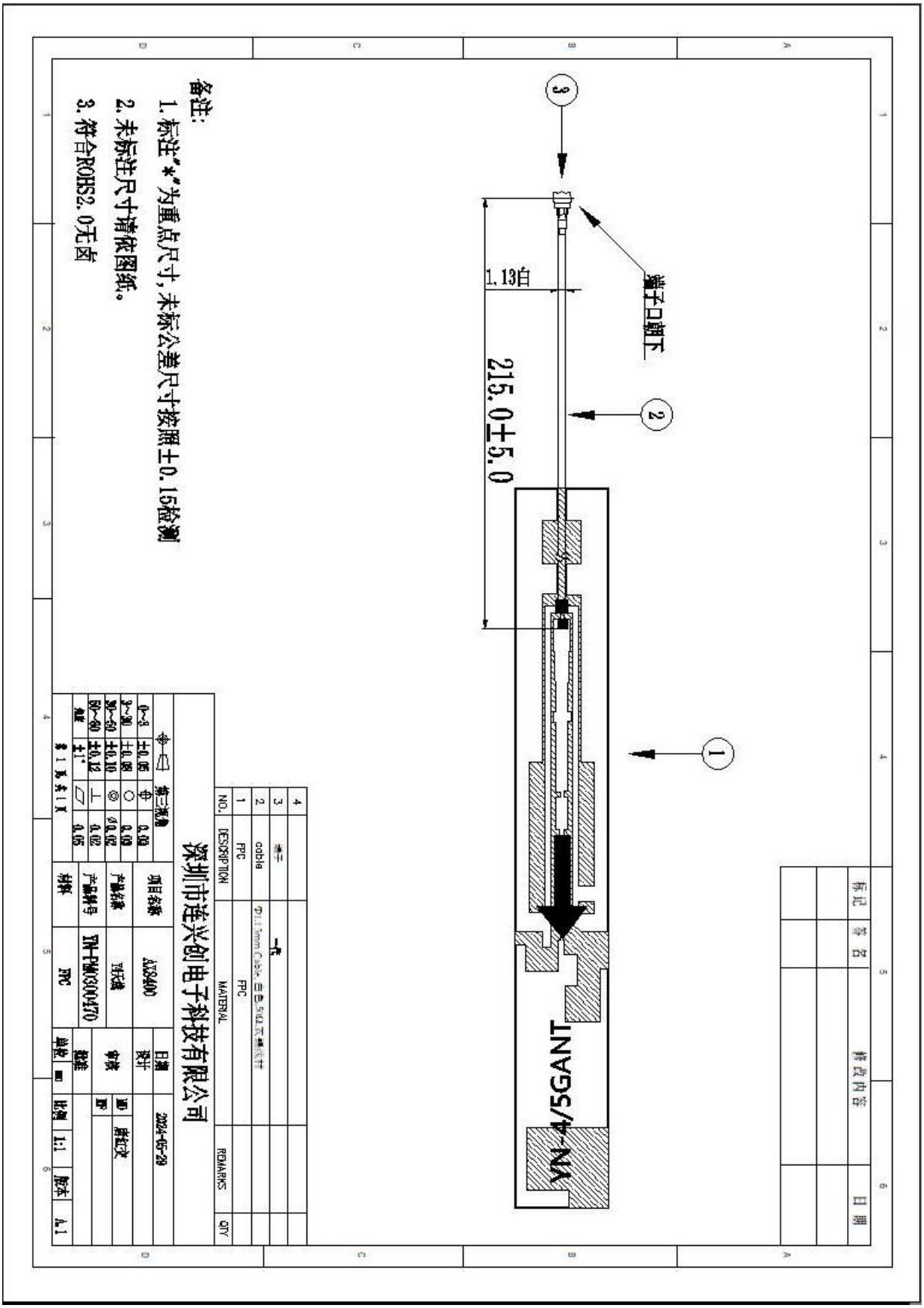

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