

东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

承 认 书

Specification For Approval

Customer:

客户名称

Customer P/N:

客户料号

QC P/N:

群创料号

AN2400-PCB212BX

Description :

规格描述

WIFI PCB Antenna 0.81mm Black Cable L=49mm+IPEX (4)

QC Checked By:	Customer Approved By:
	

Address: Room 303, Building 1, No. 1, Xinfu Road, Shangjiaopu, Chang'an Town, Dongguan City, Guangdong Province

Version: 1.0

东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

Product Number: AN2400-PCB212BX

Product Name: Antenna

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- 1. Specification
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Revision History

Revision	Date	Change Notification	Description
1.0	2025.10.28	1.0	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500 MHz/5150-5850MHz
S.W.R.	Reference waveform
Antenna Gain	-1.05dBi /0.04dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type	OD0.81mm ,Black
Connector Type	I-PEX (4)
C. Environmental	
Storage Temperature	- 40°C ~ +80 °C
Operation Temperature	- 40°C ~ +80 °C

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2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements	Result
1	V.S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification	PASS
2	Insertion Loss	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification	PASS
3	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification	PASS
4	Solderability	GB / T2423.28-2005 Temp: $260 \pm 5^{\circ}$ C; Duration: 5 seconds	Tin evenly on full	PASS
5	Pull Test	Holding with individual specification; force applied to axis of terminal .	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$	PASS
6	Dimension	Inspection of dimension, color, material, package, surface process.	Directive DUT specification	PASS
7	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321	Directive RoHS 2015/863/EU	PASS

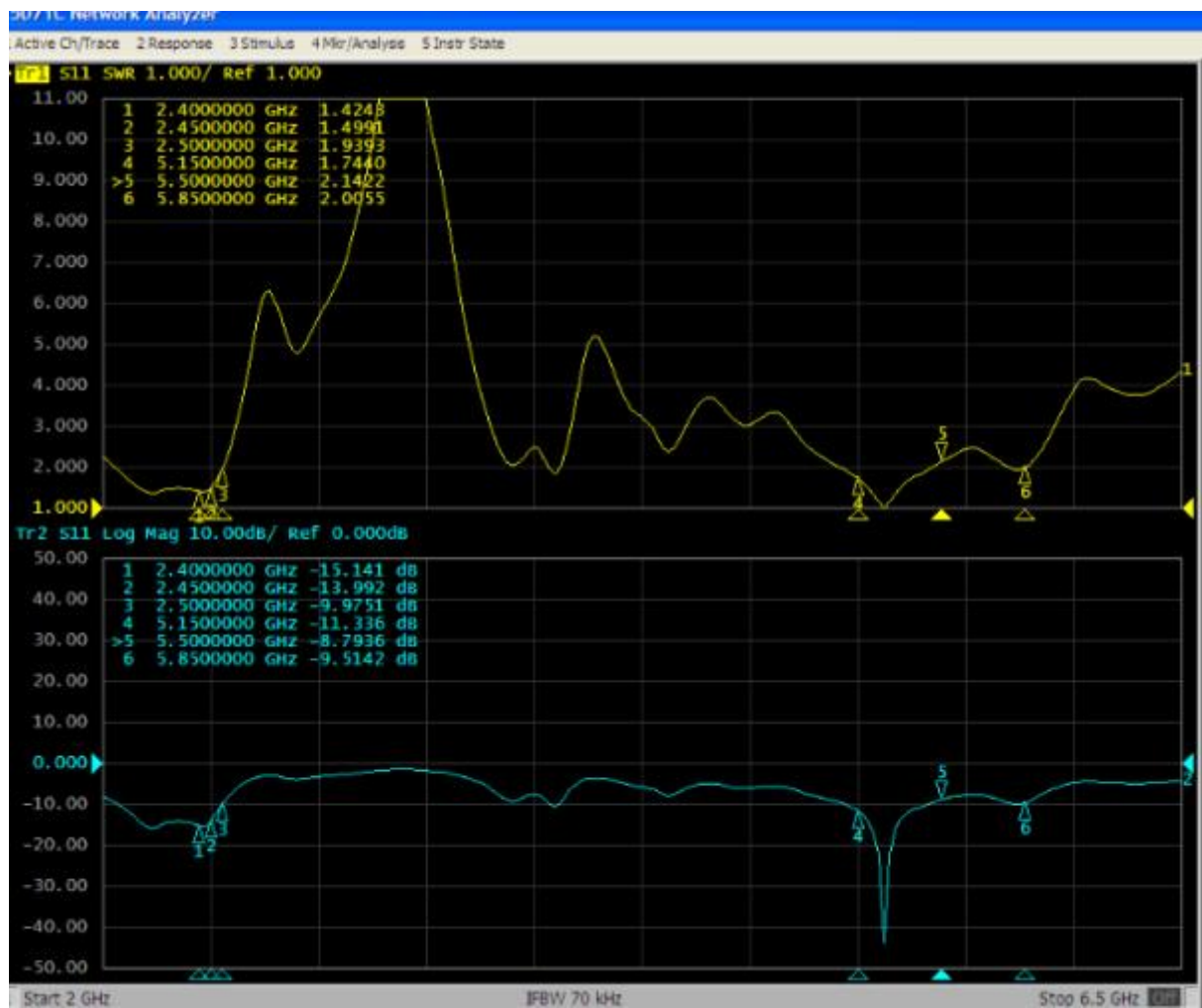
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3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	-1.97	-1.66	-1.59	-1.76	-1.42	-1.15	-1.05	-1.16	-1.48	-1.42	-1.22	-1.04	-1.42	-1.19	-0.44	-0.09	-1.08	-0.36	0.01	0.04	-0.80	-1.37	-1.12	-0.46	-0.91	-1.08
Efficiency (%)	12.76	13.54	14.32	14.78	15.39	16.36	16.77	17.45	17.58	17.65	17.93	19.15	16.82	16.02	16.77	17.18	17.97	17.61	20.32	19.62	18.98	18.30	17.14	18.32	18.93	18.83

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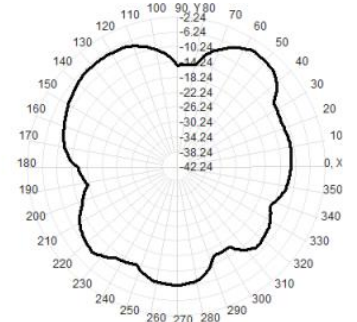
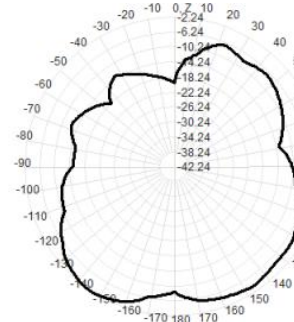
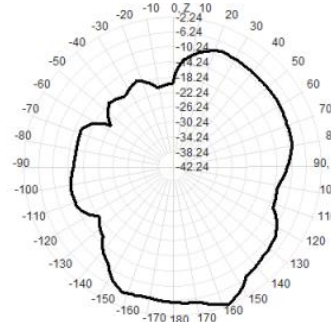
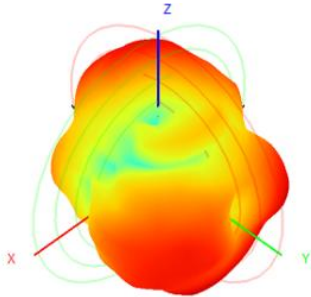
Product Name: Antenna

XZ

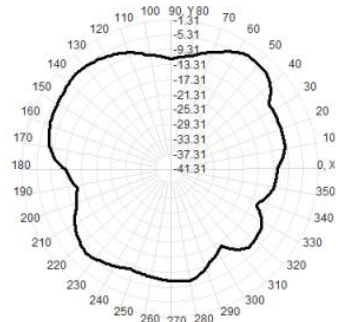
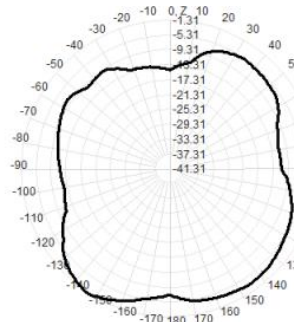
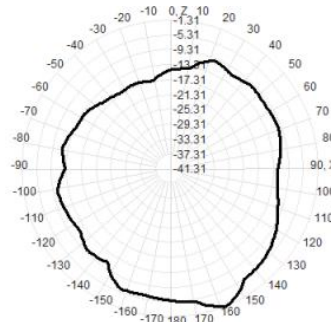
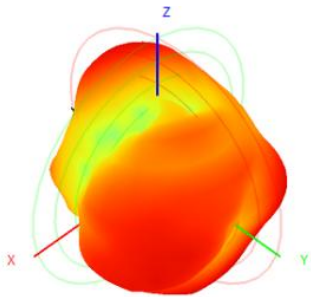
YZ

XY

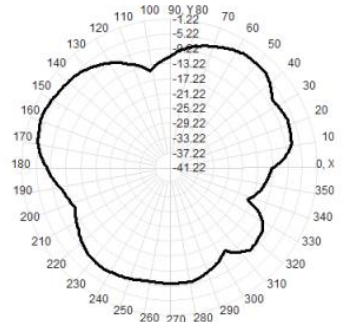
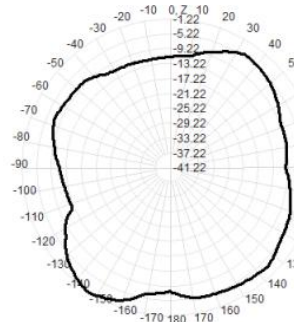
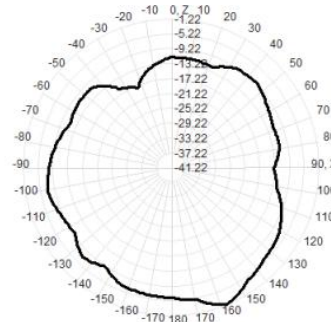
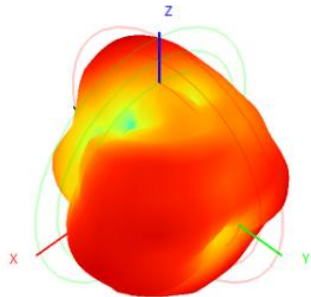
2400MHz



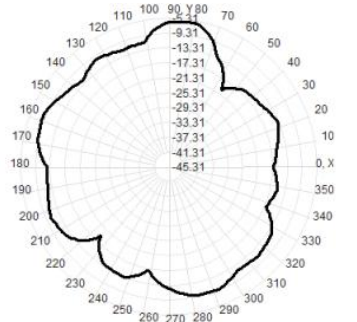
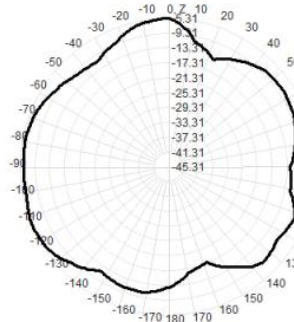
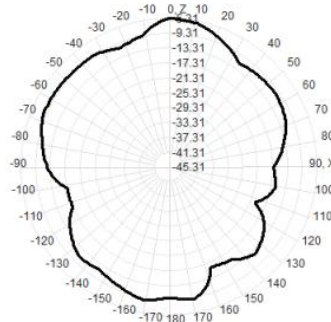
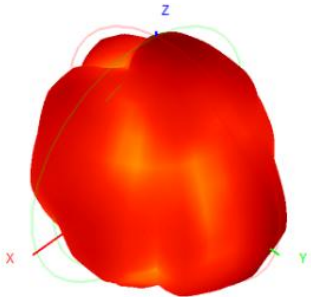
2450MHz



2500MHz



5150MHz



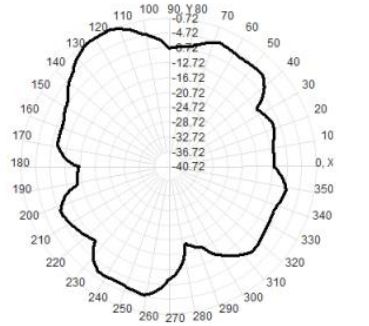
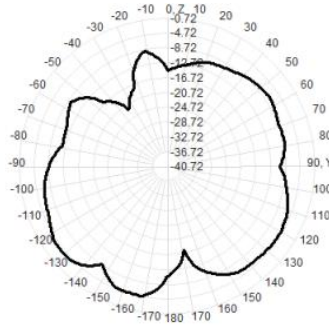
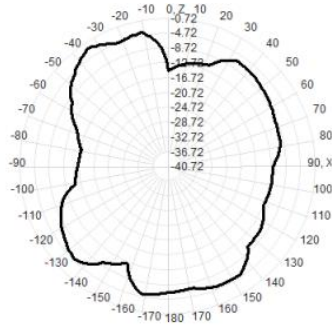
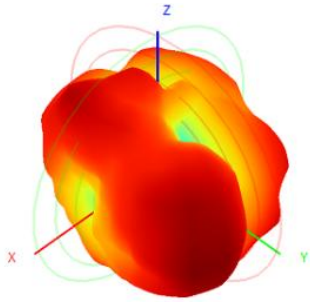
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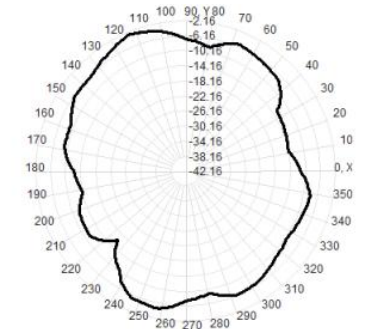
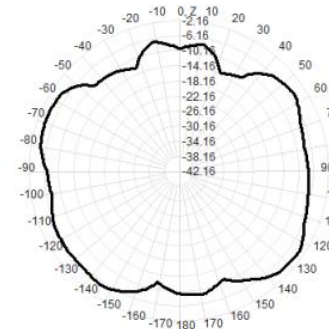
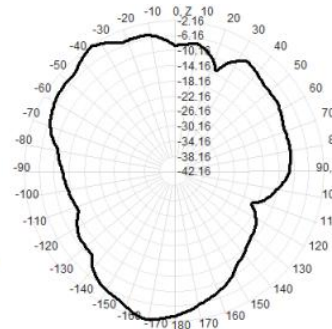
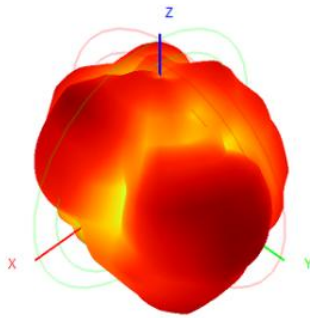
Product Number: AN2400-PCB212BX

Product Name: Antenna

5550MHz



5850MHz



5. Mechanical Drawing See attached files

1	2	3	4	5	6	7	8																																																	
HF☐ RoHS 2.0☒ REACH☐ CONFIDENTIAL					<table><tr><td>SIGN</td><td>DATE</td><td>DESCRIPTION</td><td>APPROVER</td></tr><tr><td>△</td><td></td><td></td><td></td></tr><tr><td>△</td><td></td><td></td><td></td></tr><tr><td>△</td><td></td><td></td><td></td></tr></table>			SIGN	DATE	DESCRIPTION	APPROVER	△				△				△																																				
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C	59.6±0.2 49.0±3.0 5.6±0.2 WIFI 1 2 3 Insulating tape Magenta area front detachment paper + back glue					The direction of the terminal is shown in the figure																																																		
B						Note: 1.Mark * is important dimension;"Cpk "Identify for process control(CpK≥ 1.33). 2.Tolerance:Unmarked tolerance refer to the standard tolerance please. 3.Pay attention to the direction of the connector.																																																		
A	<table><tr><td>3</td><td></td><td>Insulating tape</td><td></td><td></td><td>1</td></tr><tr><td>2</td><td></td><td>Coaxial Cable+IPEX(4代)</td><td></td><td>Ø0.81mm,Black</td><td>1</td></tr><tr><td>1</td><td>AN2400-PCB596056-L</td><td>PCB</td><td>FR4</td><td>Black T=0.2mm</td><td>1</td></tr><tr><td>No.</td><td>Part Number</td><td>Name</td><td>Material</td><td>Finish</td><td>Q'ty</td></tr></table>					3		Insulating tape			1	2		Coaxial Cable+IPEX(4代)		Ø0.81mm,Black	1	1	AN2400-PCB596056-L	PCB	FR4	Black T=0.2mm	1	No.	Part Number	Name	Material	Finish	Q'ty	东莞市群创通信技术有限公司 TITLE: Antenna PART NO.: AN2400-PCB212BX CUSTOMER P/N: / <table><tr><td>APP BY</td><td>CHK BY</td><td>RF BY</td><td>DES BY</td><td></td><td>Tolerance</td></tr><tr><td></td><td></td><td></td><td></td><td>UNITS: mm</td><td>X.X ±0.5</td></tr><tr><td></td><td></td><td></td><td></td><td>SCALE: 1/1</td><td>X.XX ±0.2</td></tr><tr><td></td><td></td><td></td><td></td><td>REVISION: A</td><td>X° ±1</td></tr></table>			APP BY	CHK BY	RF BY	DES BY		Tolerance					UNITS: mm	X.X ±0.5					SCALE: 1/1	X.XX ±0.2					REVISION: A	X° ±1
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