



Shenzhen Shuodian Electronic Technology Co.,Ltd
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SPECIFICATION

for

CDX2 4 inches antenna

Customer No.

Product No.

YMGD-CDX2 4 inches antenna-FPC

Author: XiaofengZeng Review: Liming

Release Date: 2025.02.21

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Shenzhen Shuodian Electronic Technology Co.,Ltd



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1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		



2. General

2.1 Scope of application

This specification is only applicable to CDX2 4 inches antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	CDX2 4 inches antenna
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.0
4	Gain	$2.5 \pm 1\text{dBi}$
5	Impedance	50Ω
6	Antenna Type	dipole
7	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	FPC	36. 54*8. 64 Black
2	CABLE	IPEX-1 ϕ 1.13 L=45 black

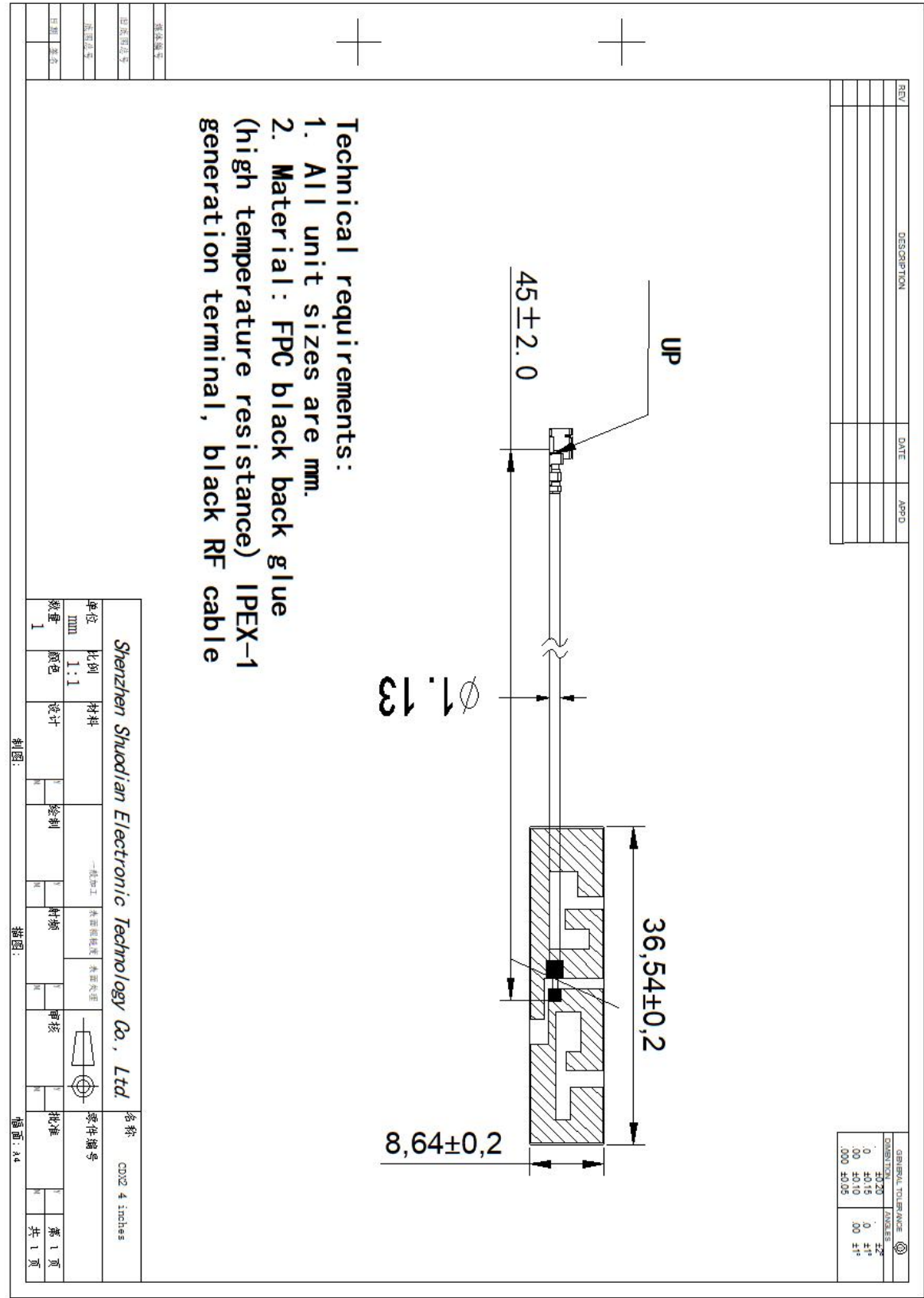
4.12 Apperance

Good appearance without scars 、 dirt、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Productdrawings:

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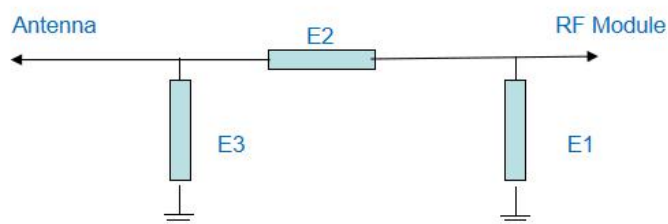
4.2 Electric Performance

4.21 Test condition

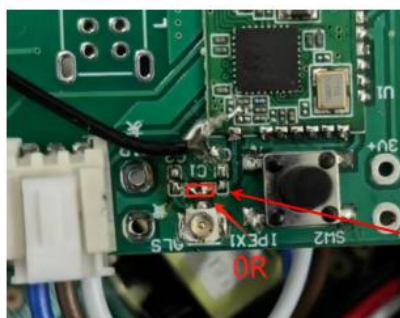
Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: KEYSIGHT E5071C
Humidity: ≤80% (+40℃)	Multi-probe microwave anechoic chamber
Atmospher: 750mmkg±30mmkg	

4.22 Test Data for Electrical Performance:

BLE 1 antenna matching parameters:



Element	Value
E1(0402)	NC
E2(0402)	0R
E3(0402)	NC

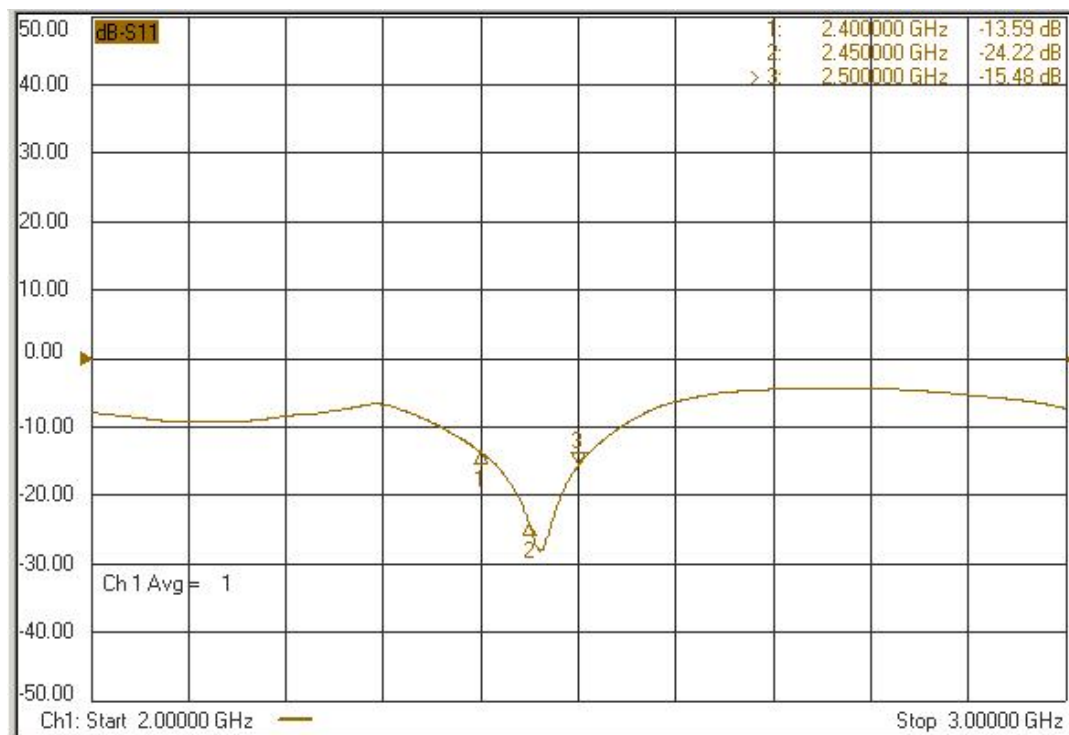


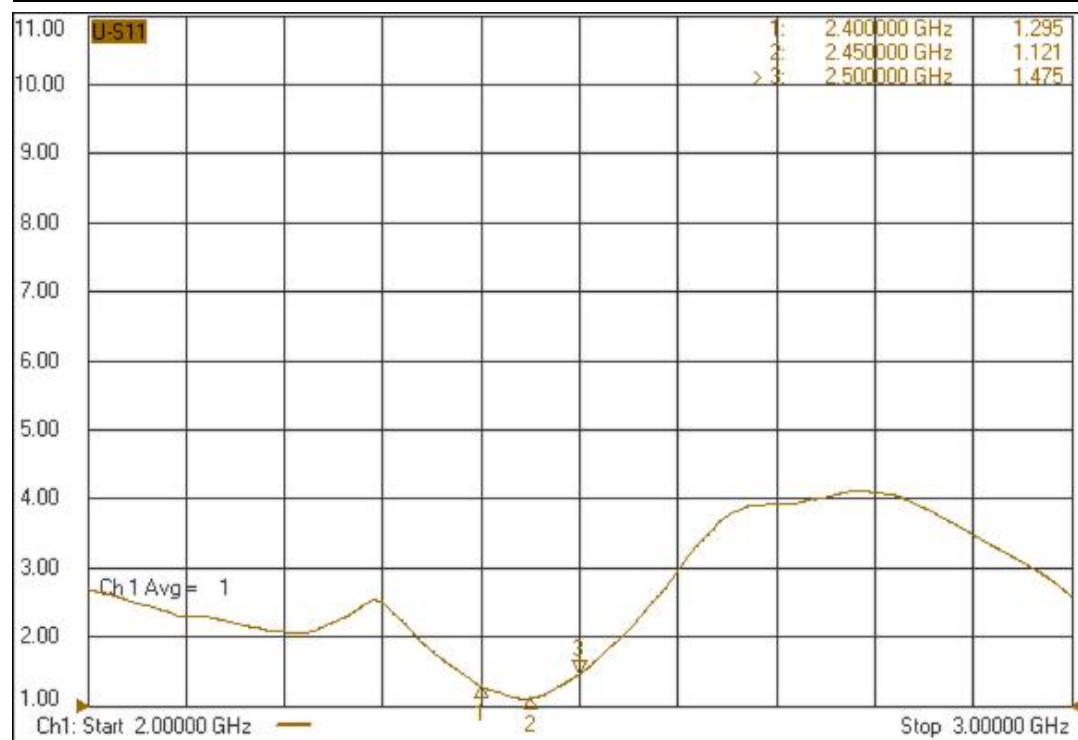
将原两并一串的匹配
修改为只串 0R。



4.22.1 S11 of the Antenna:

Marker (MHz)	2400	2450	2500
ReturnLoss	-13.59	-24.22	-15.48
VSWR	1.29	1.12	1.47





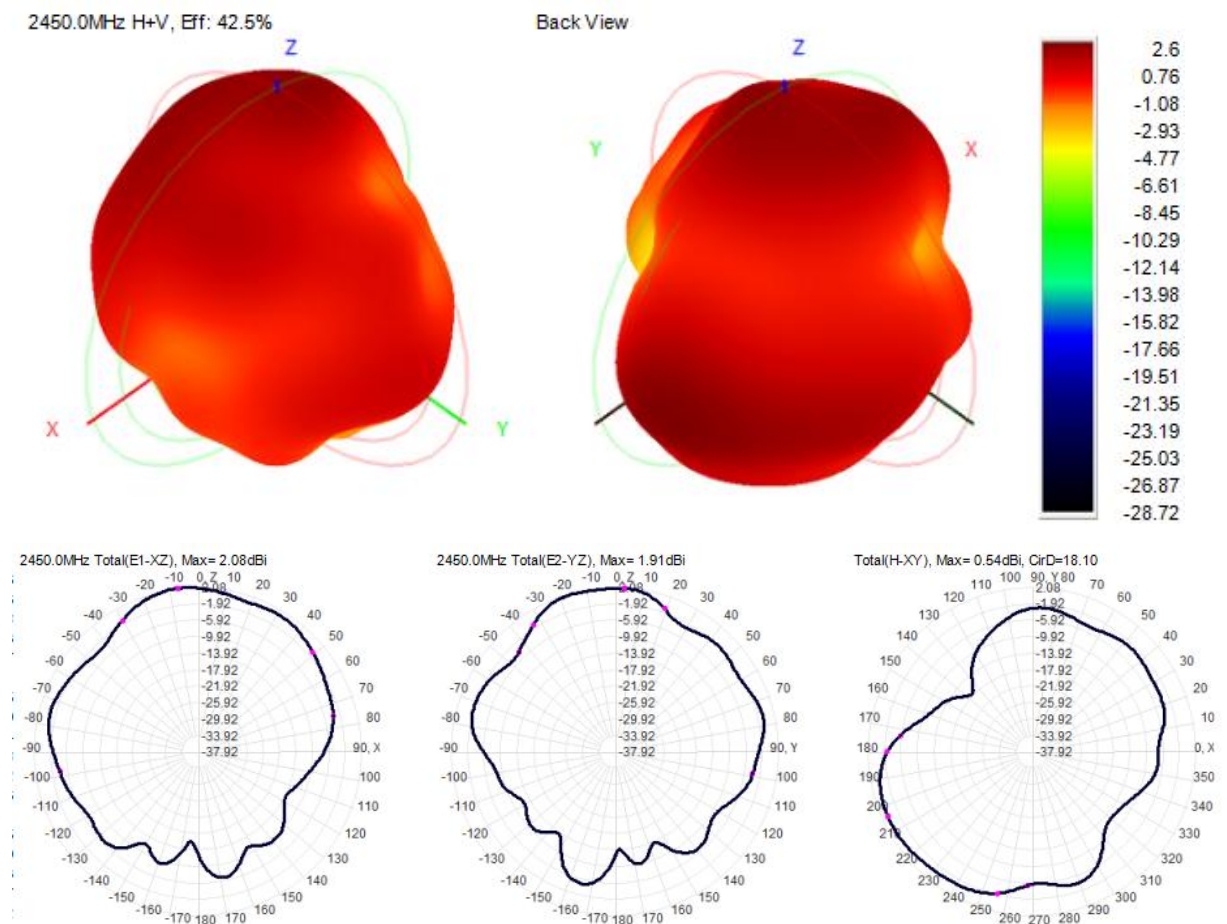
4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	2.32	2.34	2.38	2.52	2.68	2.60	2.45	2.39	2.62	2.73	2.58
Efficiency (%)	41.84	42.65	43.38	43.63	43.91	42.54	41.34	41.05	40.61	42.21	42.45



Radiation Pattern 2450MHz

@2450MHz





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2025/2/21
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2025/2/21	1.00	New Project