

# Shenzhen Xiangboyi Technology Co. Ltd

# Antenna Specification

<b>Customer</b>	SHENZHEN FCAR TECHNOLOGY CO., LTD
<b>Project</b>	<b>ANCEL-8000-1</b>
<b>Project NO</b>	XBY230439

**Shenzhen Xiangboyi Technology Co. Ltd**

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**Production Base:** 5 / F, building B, Huazhi chuangu, No. 7, Yuhua street, 138 Industrial Zone, Tangxia Town, Dongguan City.

Date : 2023/11/8



<b>Customer confirmation</b>			
<b>Engineer</b>	<b>PM</b>	<b>Quality</b>	<b>Approval</b>

<b>Supplier confirmation</b>			
<b>ME</b>	<b>RF</b>	<b>Examine</b>	<b>Approval</b>

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# Catalogue

1 Test System and Equipment.....	- 4 -
2 Product Description.....	- 5 -
3 Device Description.....	- 6 -
4 Matching Circuits.....	- 7 -
5 Test Data.....	- 8 -
6 EngineeringDrawing.....	- 11 -
7. Physical Assembly Picture	- 11 -

## **Shenzhen Xiangboyi Technology Co. Ltd**

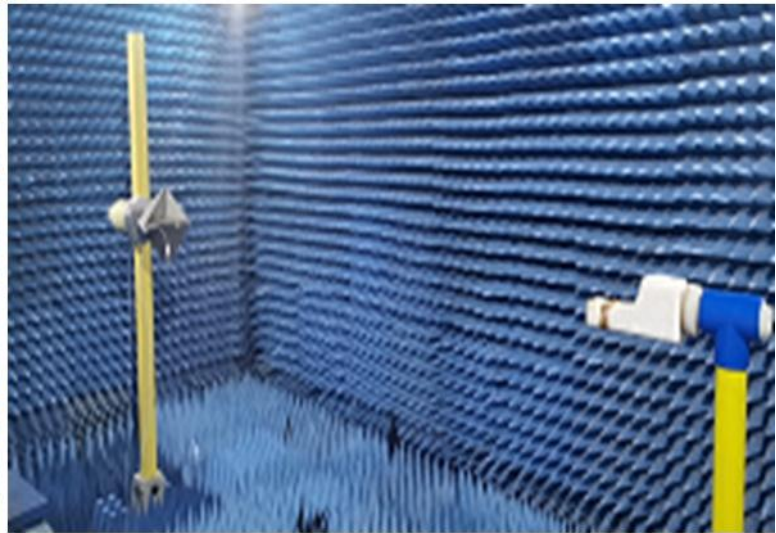
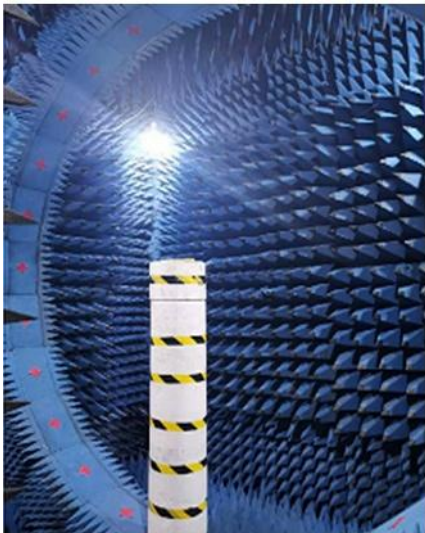
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# 1 Test System and Equipment

	Test items	equipment
1 : S parameter	<ol style="list-style-type: none"> <li>Return loss</li> <li>VSWR</li> </ol>	Network analyzer: A338/A333/HP8753D
2 : Active test		Comprehensive test instrument: Agilent 8960/ CMW500
3 : Radiation mode and gain	<ol style="list-style-type: none"> <li>Radiation mode</li> <li>Gain</li> </ol>	<ol style="list-style-type: none"> <li>Shielding room: 7x4x3 m (ETS-3D)</li> <li>Network analyzer: HP 8753D</li> </ol>



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## 2 Product Description

Technical requirements	Technical index	Remarks
<b>Band</b>	BT	
<b>Range Of Frequency</b>	2400–2500Mhz;	
<b>VSWR</b>	2400–2500Mhz<2. 0	Center Frequency
<b>Impedance</b>	50Ω	
<b>Polarization</b>	Linear polarization	
<b>operating temperature</b>	-32℃ / +55℃	
<b>storage temperature</b>	-55℃ / +85℃	
<b>Salt Fog</b>	24h(24h alternating wet & dry)	
<b>RoHS Compliant</b>	yes	

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### 3 Device Description

The whole machine photo



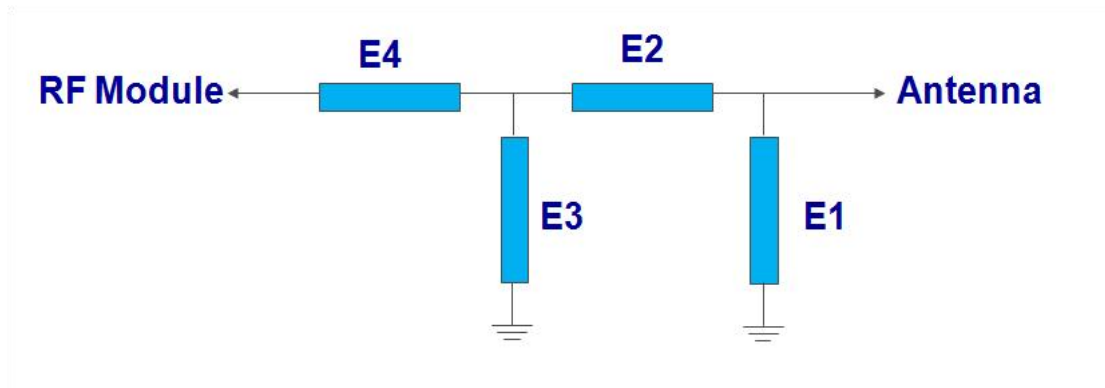
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## 4 Matching Circuits



Element	Value	Vender
E1(0402)	NA	
E2(0402)	0Ω	
E3(0402)	NA	
E4(0402)	0Ω	

Original match unchanged.

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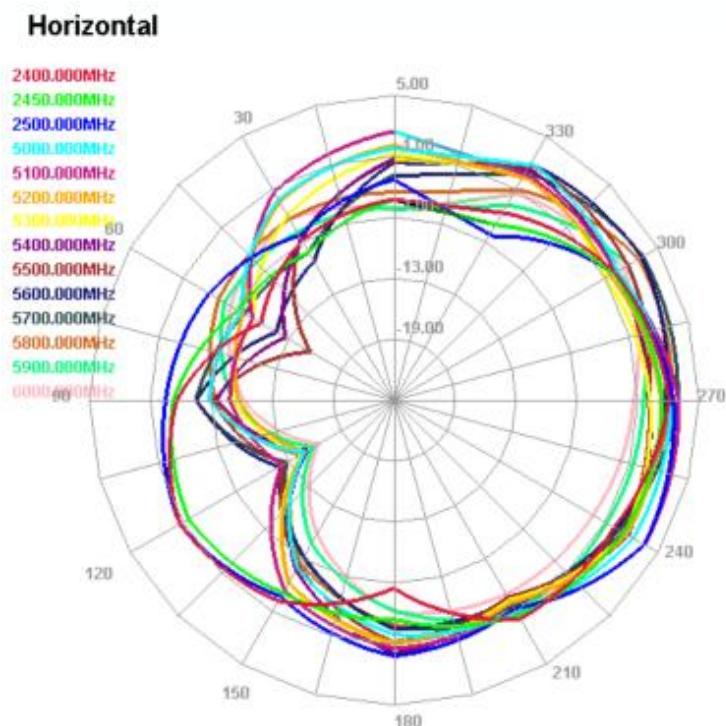
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# 5 Test Data

Freq (MHz)	Effi (%)	Gain (dBi)
2400	45.75	1.94
2450	47.08	1.76
2500	60.15	2.69
5000	50.21	2.27
5100	57.1	3.46
5200	45.51	1.47
5300	43.55	1.23
5400	46.35	1.61
5500	48.3	1.85
5600	49.63	3.15
5700	49.46	3.29
5800	47.18	2.81
5900	45.71	1.64
6000	44.52	1.07

## WiF directivity diagram



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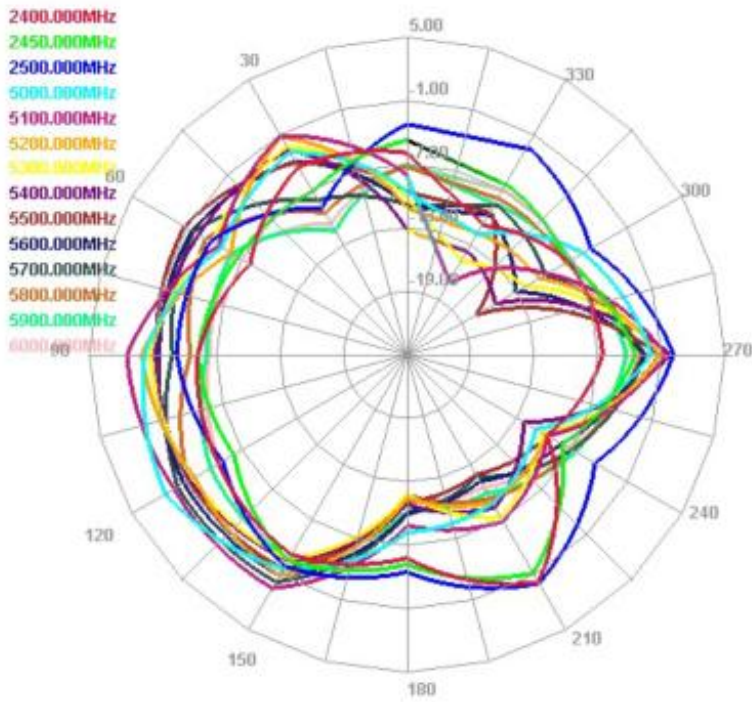
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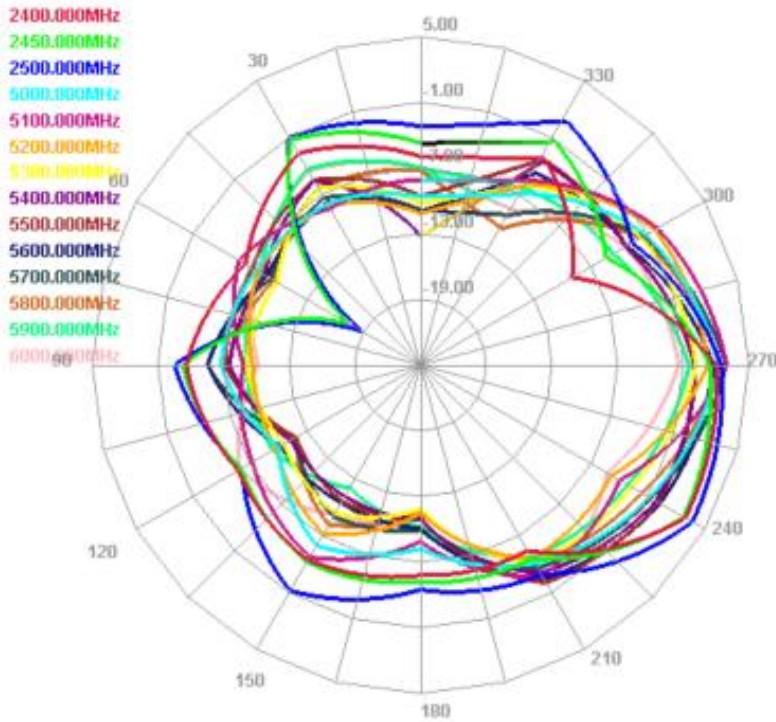
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### E1 Face



### E2 Face

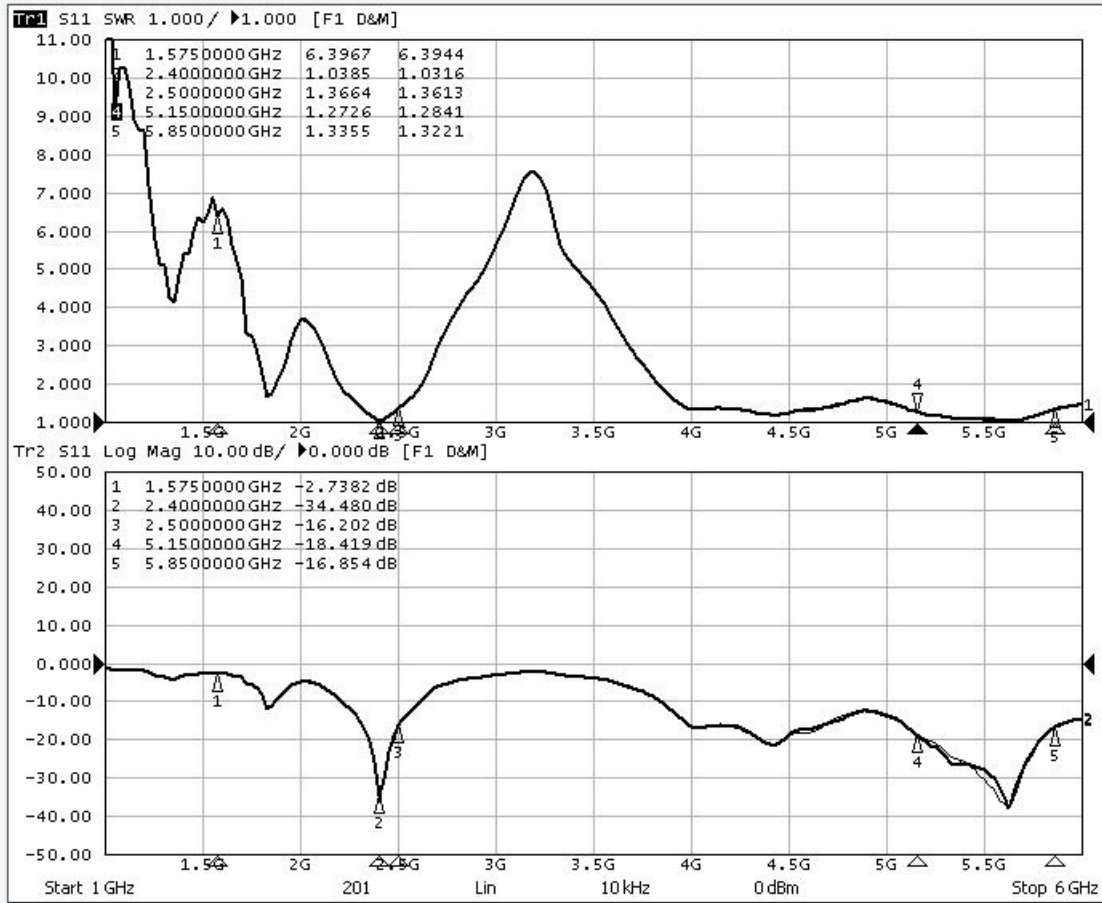


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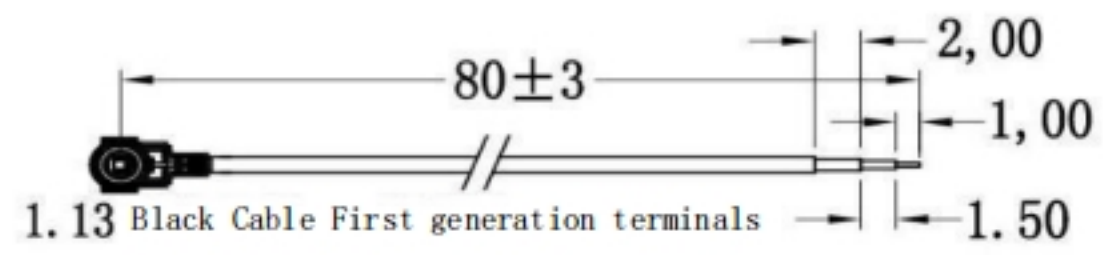
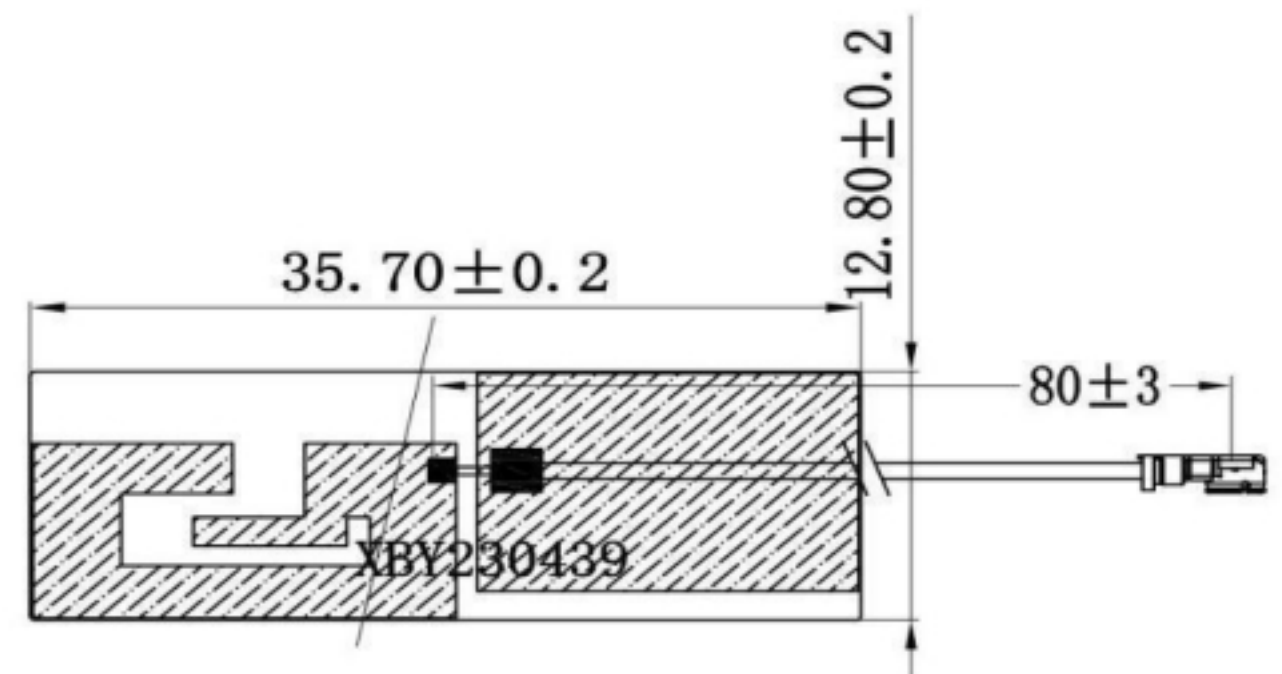
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Version	Changes	Date	Changed by	Confirmation



1.13 Black Cable First generation terminals

**Process Requirements**

1. Material: Single-sided electro-deposited copper (1/H)
2. Backing Adhesive:
3. Ink: Halogen-free ink, matte black
4. Character: Matte white character
5. Feeding point: Antioxidant
6. No surface defects such as squash, scratches, oil stain, spots, etc

Packaging requirements: After welding, it needs to be disassembled and packed into a sealing bag of 100 pieces. The sealing bag must have a label indicating the project approval number, date, quantity, and other information

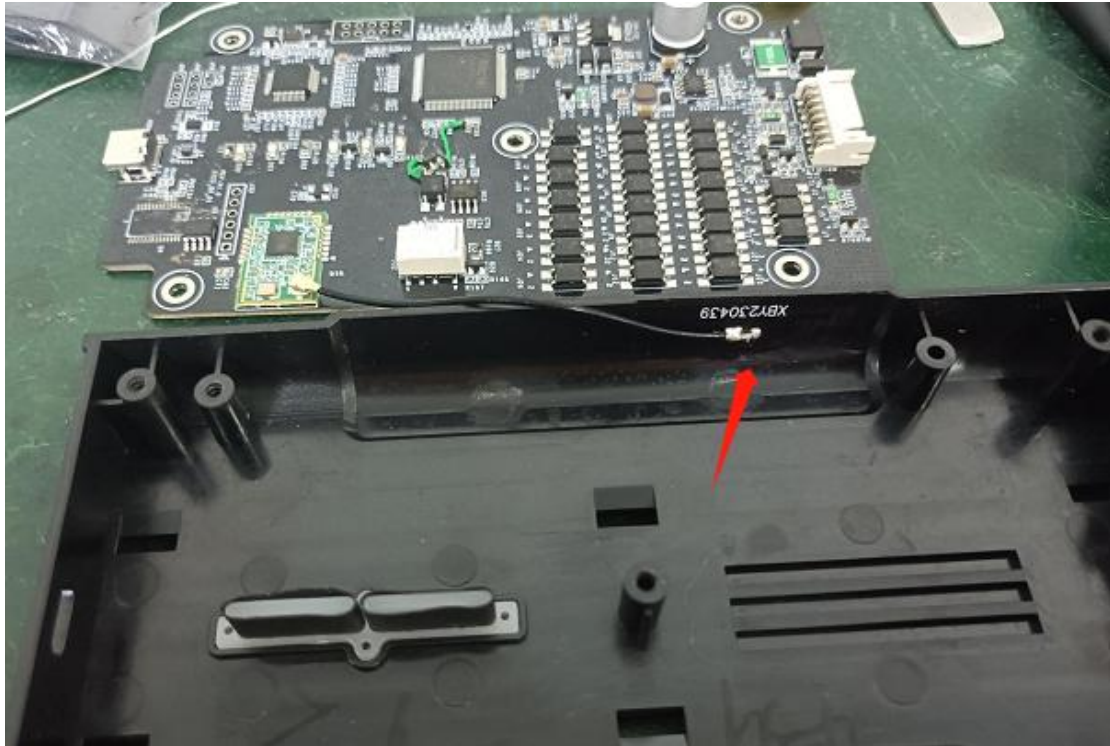
Measuring tools: Calipers

Serial number	Name	Colour	Specification	Quantity
2	RF wire	Black	1.13	1
1	FPC	Black		1

LENGTH	A	B	C
L ≤ 10	±0.05	±0.10	±0.15
10 < L ≤ 50	±0.10	±0.15	±0.20
50 < L ≤ 150	±0.15	±0.20	±0.30
L > 150	±0.20	±0.25	±0.40
Angle Tolerance	±1°	Tolerance Grade	B

<b>Shenzhen Xiangbo Yi Technology Co., Ltd.</b>			
<b>Material Code</b>		<b>Project</b>	庄永根
<b>XBY Material Code</b>	XRY230439	<b>Approved</b>	
<b>Version</b>	1A	<b>Date</b>	2023.11.04
<b>Unit</b>	MM	↻ Third View	

## 7. Physical Assembly Picture



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