

Shenzhen yixin Electronic Technology Co.,Ltd

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Specification

for

Customer part number

**Material Code of Our
Company**

YX-ALK-HK-LS01 Walkie-talkie-V1.0

Compiled:Zeng Xiaofeng:Wen Shihao

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Shenzhen Yixin Electronic Technology Co., Ltd.

201, Building 2, Nantai Cloud Valley, Fenghuang Street, Guangming

District, Shenzhen Email:1791995010@qq.com

Tel: 17898458992

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1. Both Parties Confirm

1.1 Customer Confirmation Signature Ailika Electronic Technology

Customer Department/Position	Confirm signature	Confirm date
Hardware/RF		
Structure		
Project manager		
Business/Procurement		
Examine and verify		

1.2 CoreX Technology Confirms Signing

Department/Position	Confirm signature	Confirm date
Antenna Engineer		
Construction engineer		
Project manager		
QA		
Examine and verify		

2. General Matters

2.1 Scope of Application

This specification is only applicable to

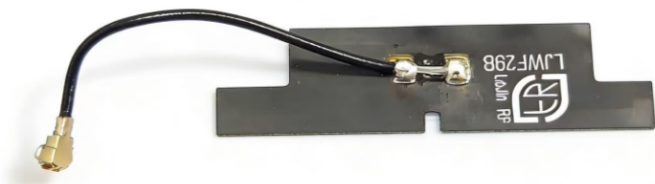
2.2 Temperature Range

The operating temperature range of this product is -20 to +65°C.

2.3 Storage Temperature Range

This product is stored at -30 to +75°C.

3. Product Specifications

NO.	ITEMS	DETAILS
1	Type	HK-LS-01
2	Frequency range	2400-2500MHz
3	VSWR	≤2.0
4	Impedance	50 Ω
5	Realization of antenna	FPC
6	Antenna image	

4. Product Specification Details

4.1 Product Structure Parameters

4.11 Product Material Composition:

Order number	Material	Specifications (MM)
1	FPC	46MM*4.2MM Black
2	Coaxial cable	Single terminal, total wire length 30 mm, black wire with diameter 1.13mm

4.12 Surface

The appearance of the product is good, without scars, sweat marks, protrusions and other defects that seriously affect the appearance.

4.13 Structure Size

Refer to the product drawings:

Technical drawing of a component, likely a connector or probe, showing dimensions and a table.

Dimensions:

- Overall length: 46.00 ± 0.20
- Width: 4.20 ± 0.20
- Pin diameter: $\phi 1.13$
- Pin length: $*30 \pm 2$

Table:

GENERAL TOLERANCE	UNIT	INCHES
± 0.15	± 0.006	± 0.006
± 0.15	± 0.006	± 0.006
± 0.15	± 0.006	± 0.006
± 0.15	± 0.006	± 0.006

Notes:

- 1. 所有单位尺寸为mm。
- 2. 材料:
 - 背胶: 3M 3000SE (9471);
 - 基材: 一对半, 电解铜。
 - 表面哑光黑油。
- 3. 焊盘做黑铜, 抗氧化处理。
- 4. 所有尺寸标注前有*符号的为管控尺寸。

4. 2 Product Electrical Performance Test Data

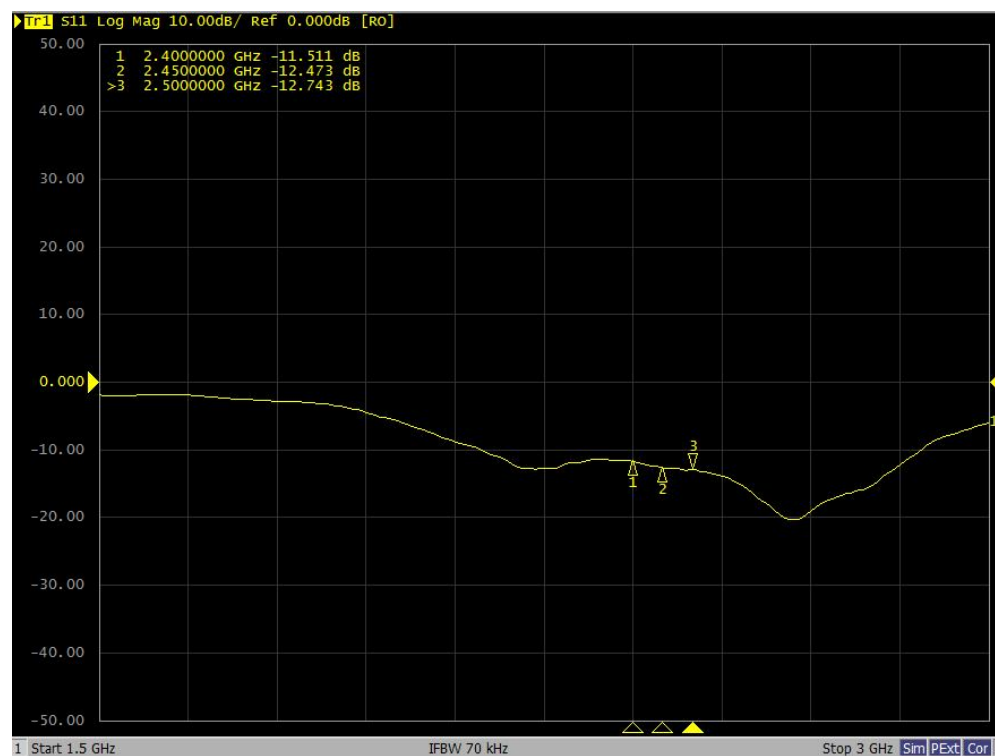
4.21 Test Environment and Instrumentation

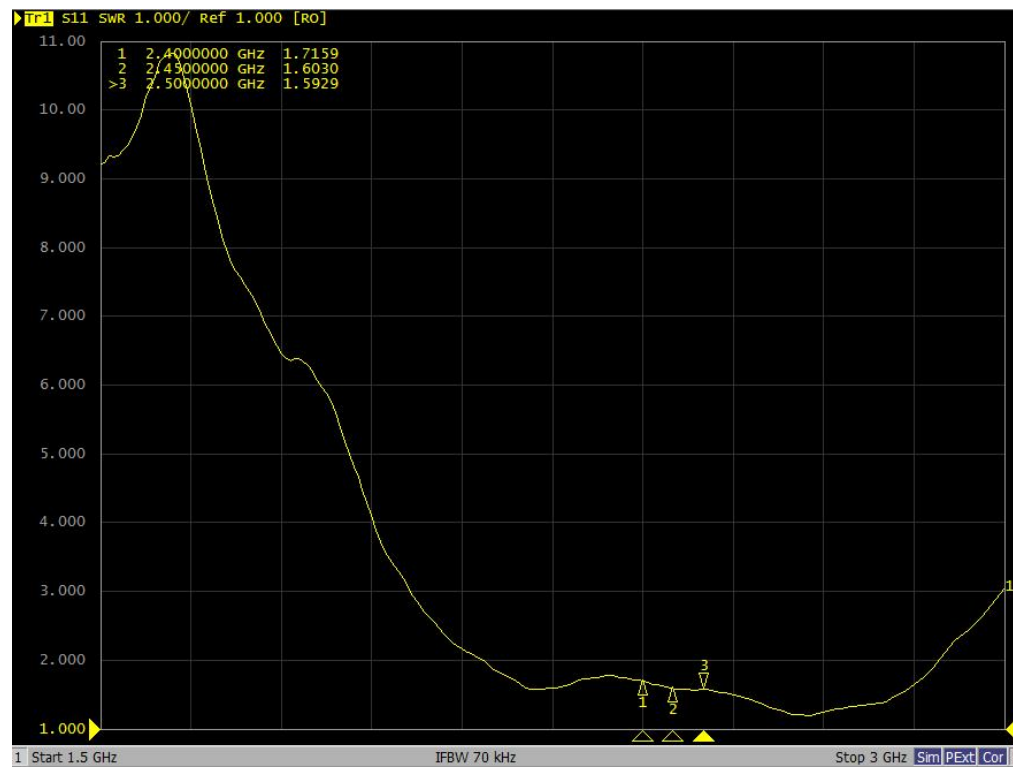
Testing environment :	Testing facility :
Temperature : 10°C——+30°C	Network analyzer
Relative humidity: ≤80% (+40°C)	KEYSIGHT E5071C
Atmospheric pressure: 750 mmHg ±30 mmHg	Multi probe microwave anechoic chamber

4.22 Product Electrical Performance Test Data:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	1. 71	1. 60	1. 59
VSWR	-11. 51	-12. 47	-12. 74

Product S11 Figure:



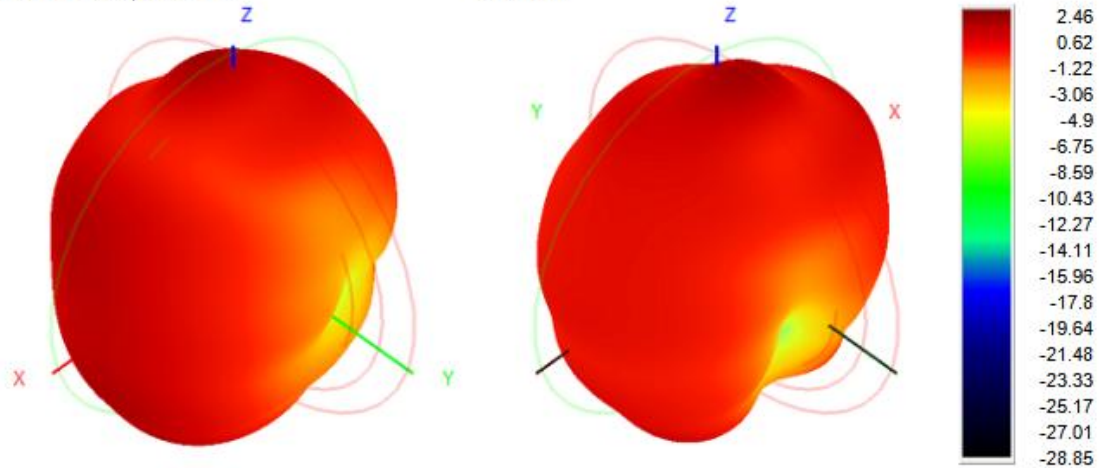


4.23 Gain, Efficiency and Radiation Pattern

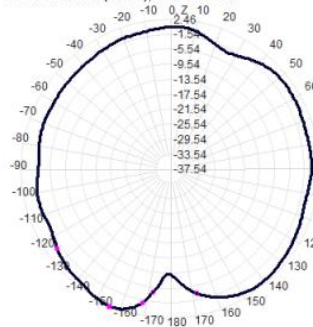
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	2.46	54.17
2450	3.43	60.63
2500	3.64	61.50

Radiation pattern frequency point 2400MHz

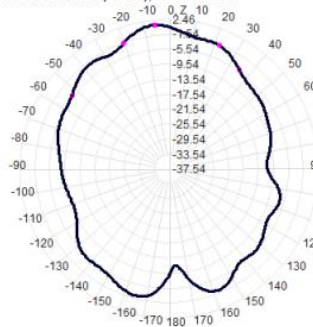
2400.0MHz H+V, Eff: 54.2%



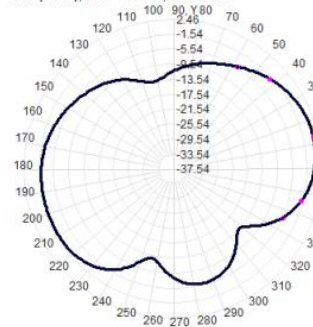
2400.0MHz Total(E1-XZ), Max= 2.46dBi



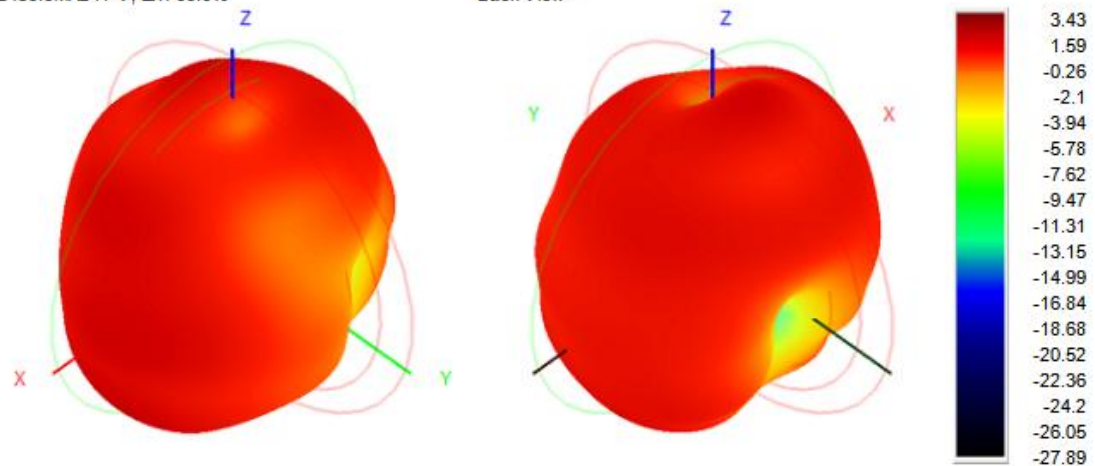
2400.0MHz Total(E2-YZ), Max= 1.09dBi

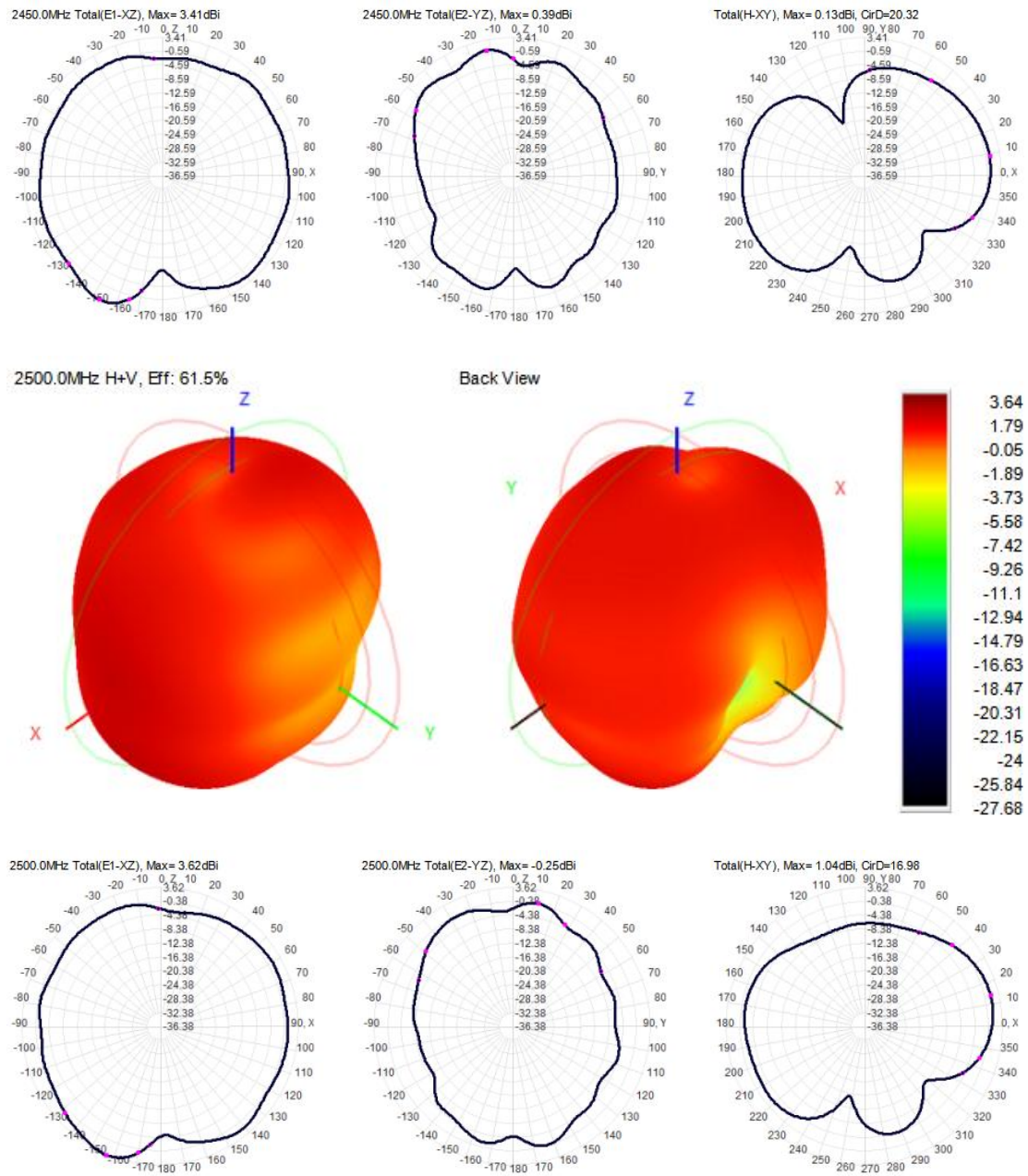


Total(H-XY), Max= 0.80dBi, CrD=14.67



2450.0MHz H+V, Eff: 60.6%





5. Product Packaging Method

manner of packing :

Self-sealing bag packaging, 200 pieces per pack.

6. Document Re-
sume

Document number Document No.	
Date Release Date	2025/12/11
Author	Hungjie
Rech- eck	WH

File History Table

Revised History

Date	Version	Revised Record
2025/12/11	1.00	New Project