

# Specification for Approval

## CONTENTS

<b>Customer:</b>	N/A	<b>Vendor:</b>	N/A
<b>CustomerP/N:</b>	N/A	<b>HL P/N:</b>	N/A
<b>Productmodel:</b>	HSEL4_01_54M_30	<b>HL Device Name:</b>	N/A
<b>Pcbantenna brand:</b>	Fuxiang	<b>Approval Date:</b>	2023-12-14

Internal Approval		
Approved By:	Checked By:	Prepared By:
		Zhang Bin
Customer Approval		

Revision:

Date	Rev	Description of Changes
2021-10-18	A	Initial Release

## 1、Products Electrical

### PCB Antenna

1	Antenna Model	PCB IFA Antenna
2	Frequency Range	2400-2500MHz
3	VSWR	<2
4	Broadband	>100MHz
5	Impedance	50 ohm
6	Gain	-0.4dbi
7	Polarization	LP

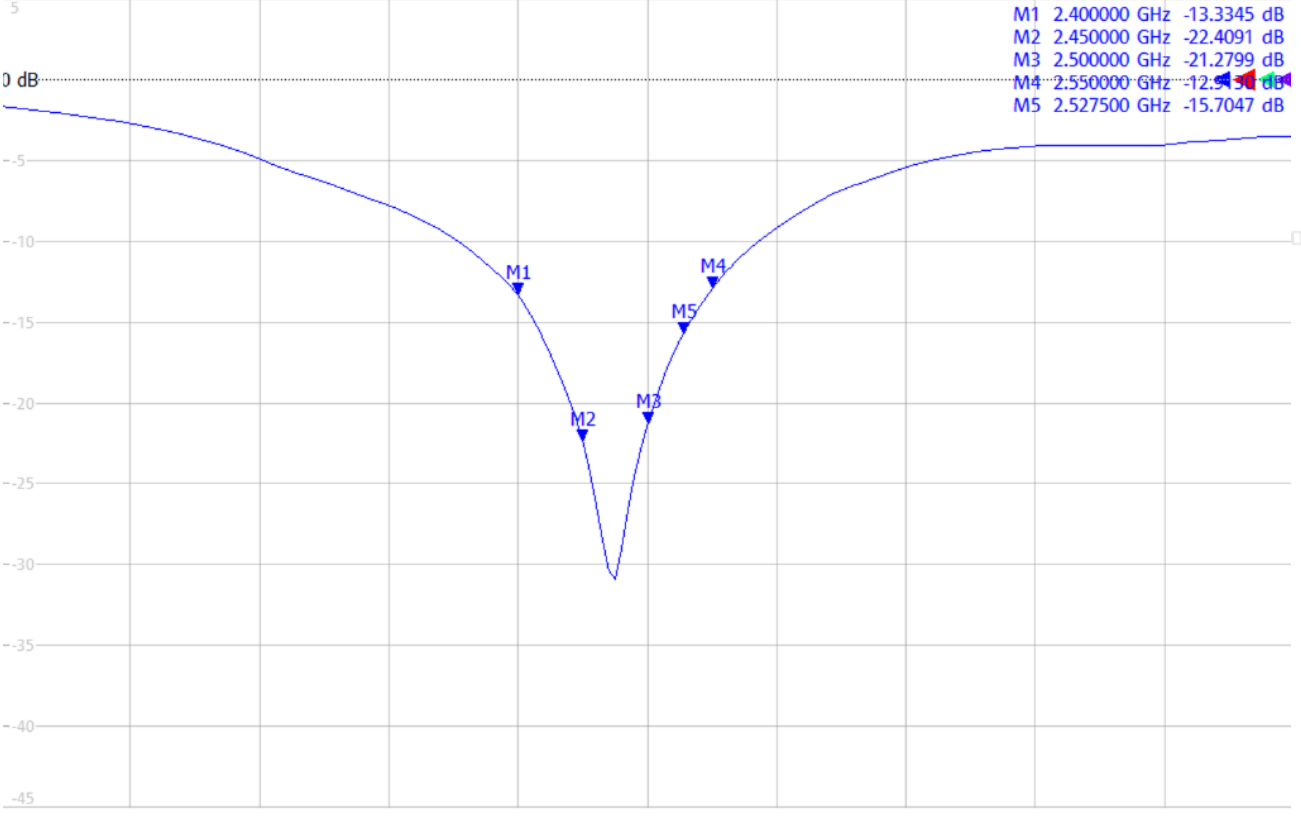
## 2、Antenna Test Data

2024-04-28

### 2.1VSWR

5/10/2023 4:32:43 PM  
1311.6010K42-101830-Fs

Trc1 S22 dB Mag 5 dB/ Ref 0 dB Cal Off Offs Mem2[Trc1] S22 dB Mag 5 dB/ Ref 0 dB Invisible 1  
Trc3 S22 dB Mag 5 dB/ Ref 0 dB Invisible Mem4[Trc3] S22 dB Mag 5 dB/ Ref 0 dB Invisible

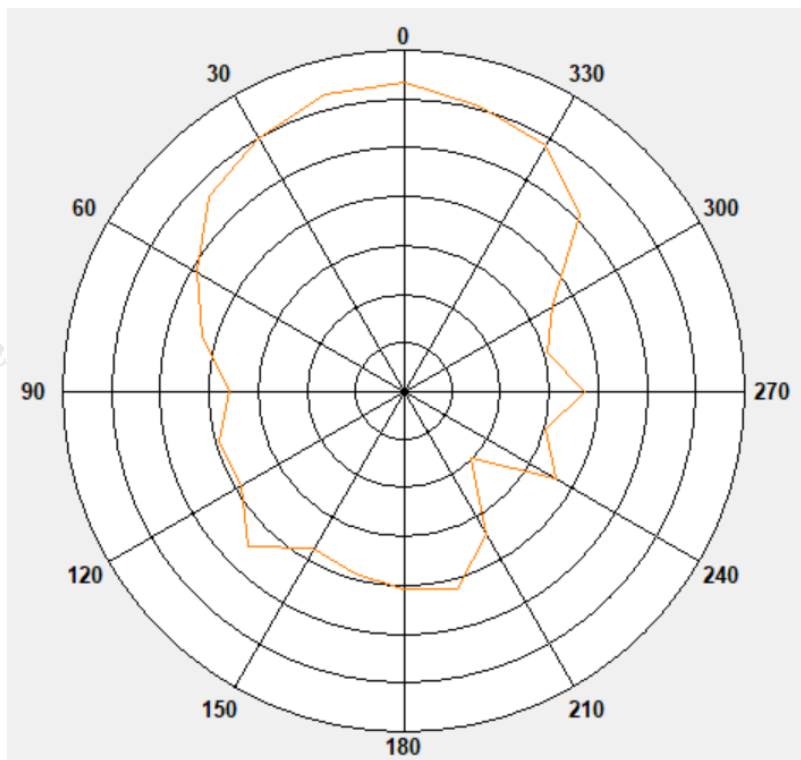
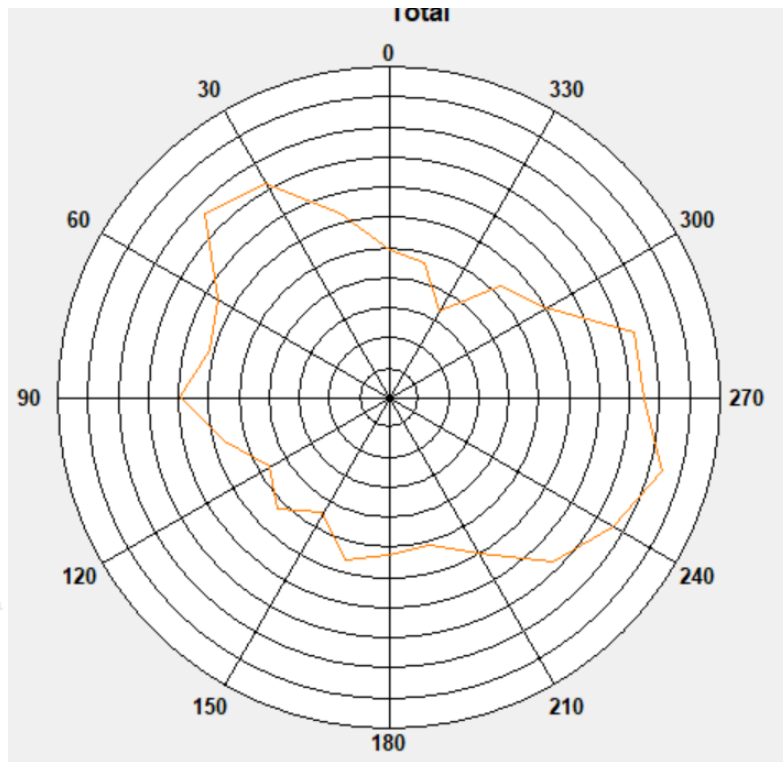


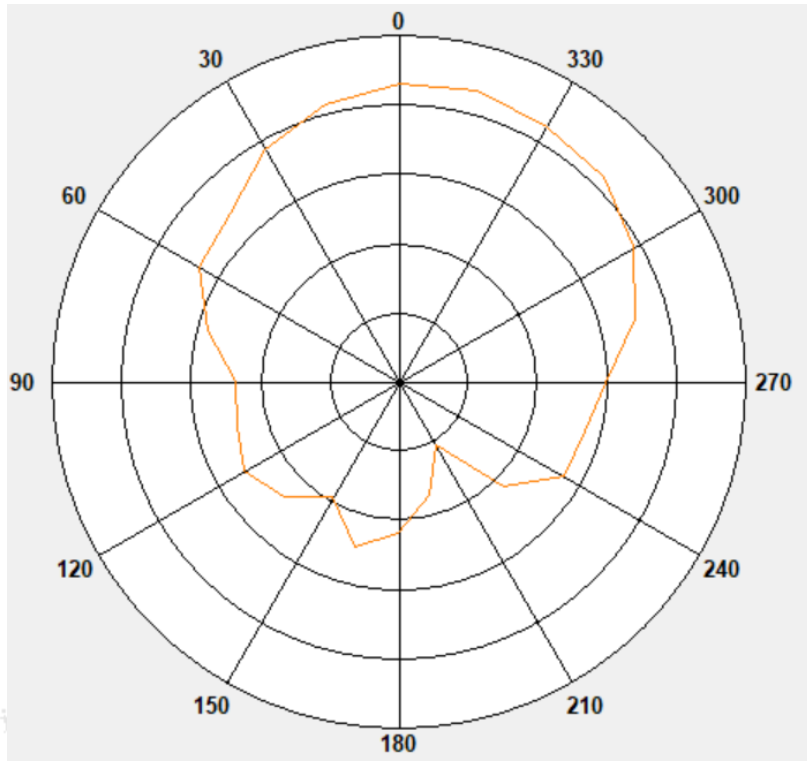
Ch1 Start 2 GHz Pwr -10 dBm Bw 10 kHz Stop 3 GHz

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## 2.2 RADIATION PATTERNS 2450MHz





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### 2.3 GAIN AND EFFICIENCY

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	37.6	-0.4
2410	35.0	-0.6
2420	31.4	-1.2
2430	33.3	-1.5
2440	33.5	-1.4
2450	35.8	-1.4
2460	34.2	-0.6
2470	34.0	-0.5
2480	34.6	-0.7
2490	32.5	-1.2
2500	33.2	-1.3

### 3、PCB ANTENNA (MM)

