

Specification for Approval

CONTENTS

Customer:	N/A	Vendor:	N/A
Customer P/N:	N/A	HL P/N:	N/A
Product model:	HSEL3_05_90M_13	HL Device Name:	N/A
Pcb antenna brand:	Yuwei	Approval Date:	2026-4-21

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

Revision:

Date	Rev	Description of Changes
2023-9-22	A	Initial Release

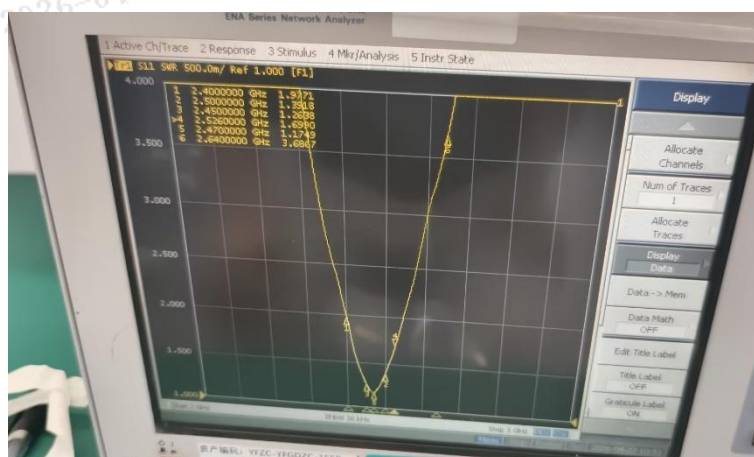
1、Products Electrical

PCB Antenna

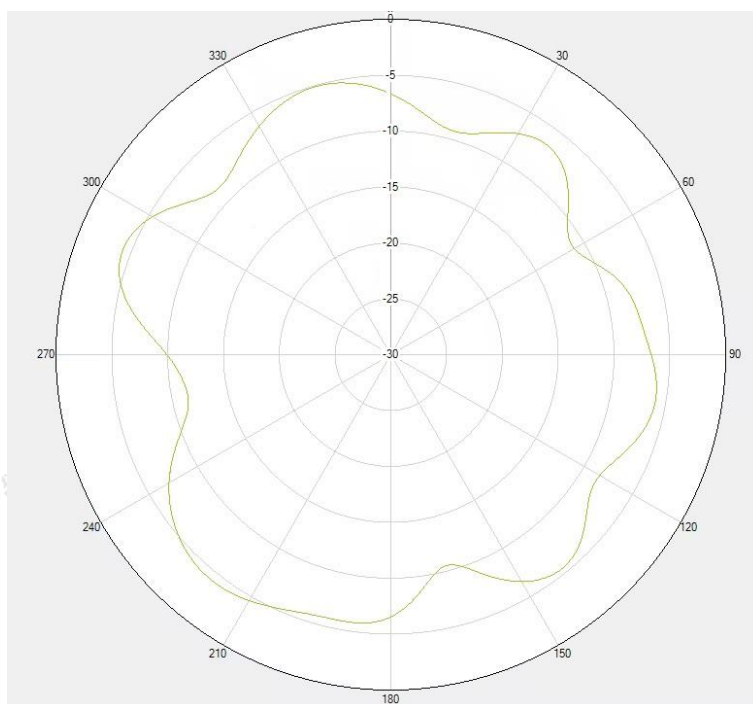
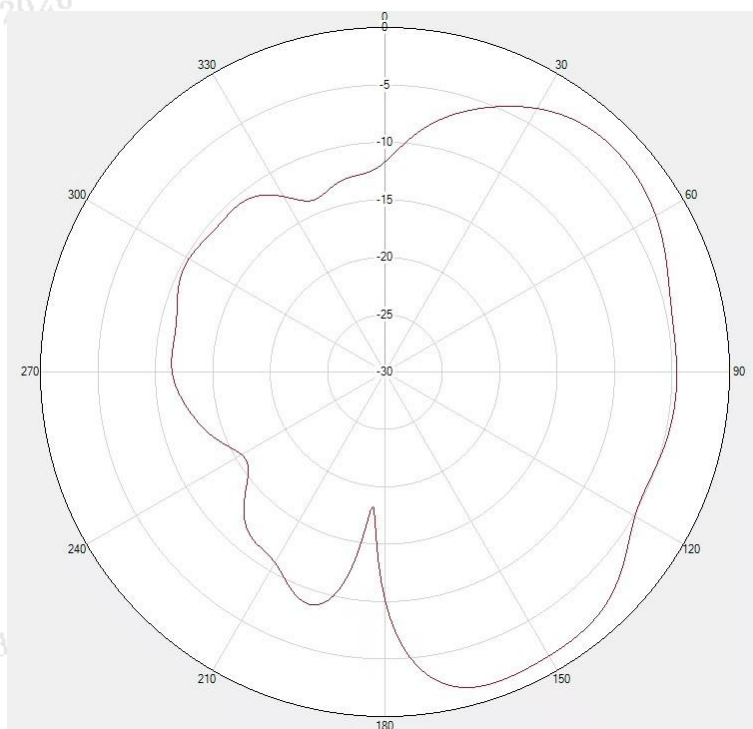
1	Antenna Model	PCB IFA Antenna
2	Frequency Range	2400-2500MHz
3	VSWR (or return loss)	<2 (<-9.5dB)
4	Broadband	>100MHz
5	Impedance	50 ohm
6	Gain	-1.4dBi
7	Polarization	LP

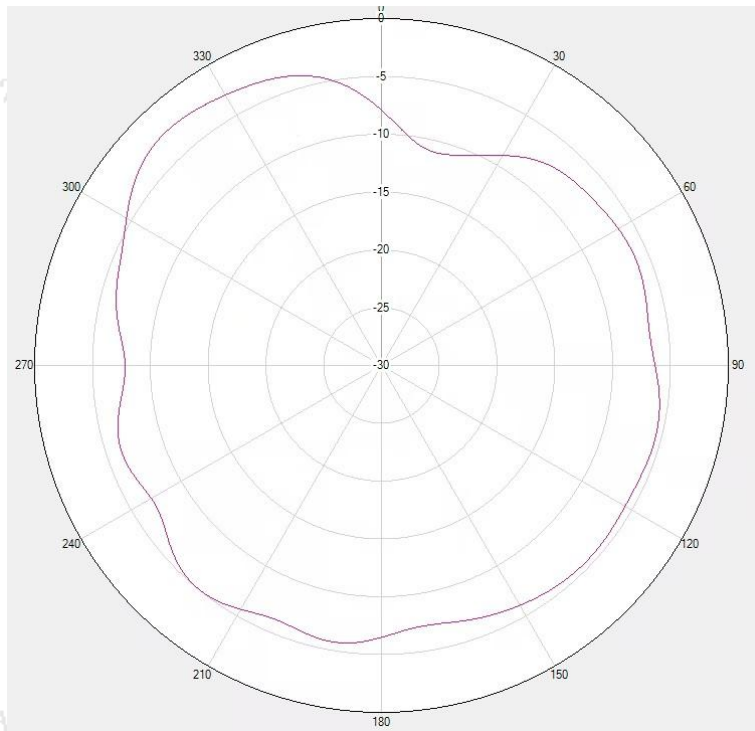
2、Antenna Test Data

2.1 VSWR



2.2 RADIATION PATTERNS 2450MHz





2.3 GAIN AND EFFICIENCY

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	39.6	-1.8
2410	40.0	-1.7
2420	39.4	-1.9
2430	39.3	-1.4
2440	36.5	-1.5
2450	37.8	-1.7
2460	35.2	-1.8
2470	36.0	-1.6
2480	38.6	-1.5
2490	39.5	-1.8
2500	38.1	-1.7

3、PCB ANTENNA (MM)

