

# Specification for Approval

## CONTENTS

<b>Customer:</b>	N/A	<b>Vendor:</b>	N/A
<b>Customer P/N:</b>	N/A	<b>HL P/N:</b>	N/A
<b>Product model:</b>	HSEL4Q_09_70M_12	<b>HL Device Name:</b>	N/A
<b>Pcb antenna brand:</b>	Fuxiang	<b>Approval Date:</b>	2024-6-12

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

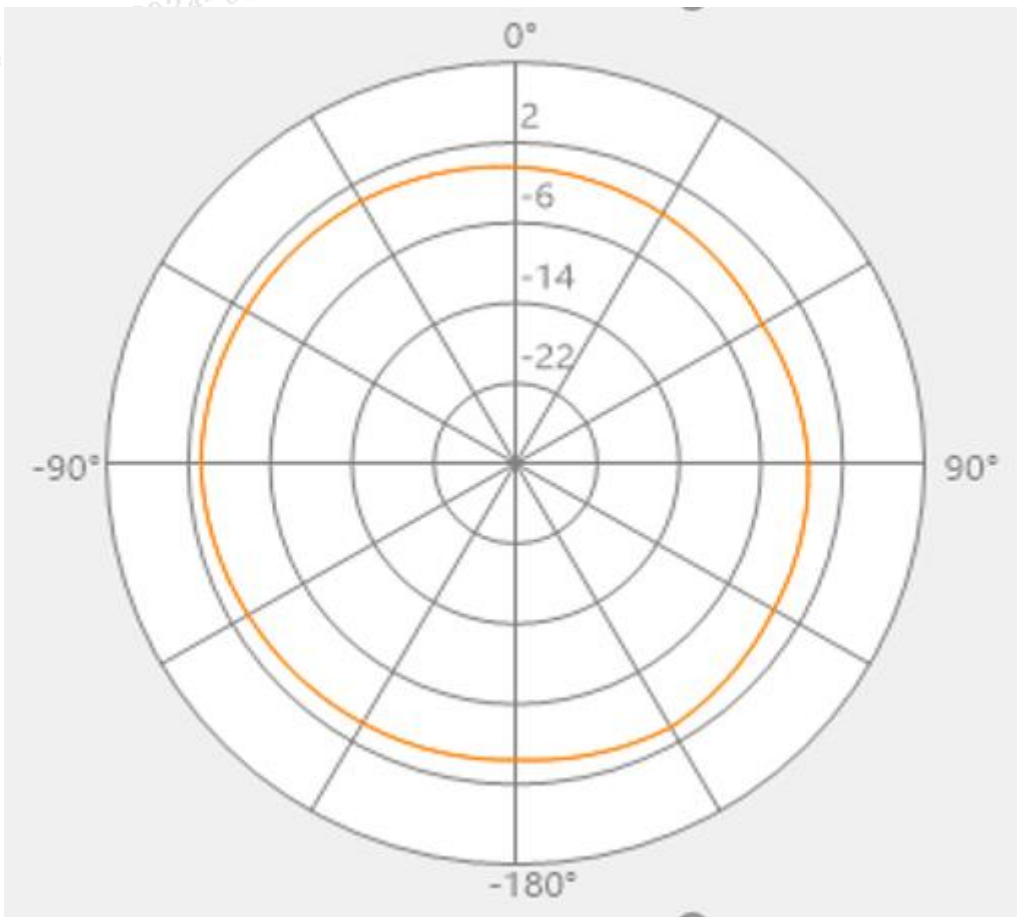
1	Antenna Model	PCB IFA Antenna
2	Frequency Range	2400-2500MHz
3	VSWR (or return loss)	<2 (<-9.5dB)
4	Broadband	>100MHz
5	Impedance	50 ohm
6	Gain	-1.1dbi
7	Polarization	LP

## 2、Antenna Test Data

## 2.1 VSWR



## 2.2 RADIATION PATTERNS 2450MHz



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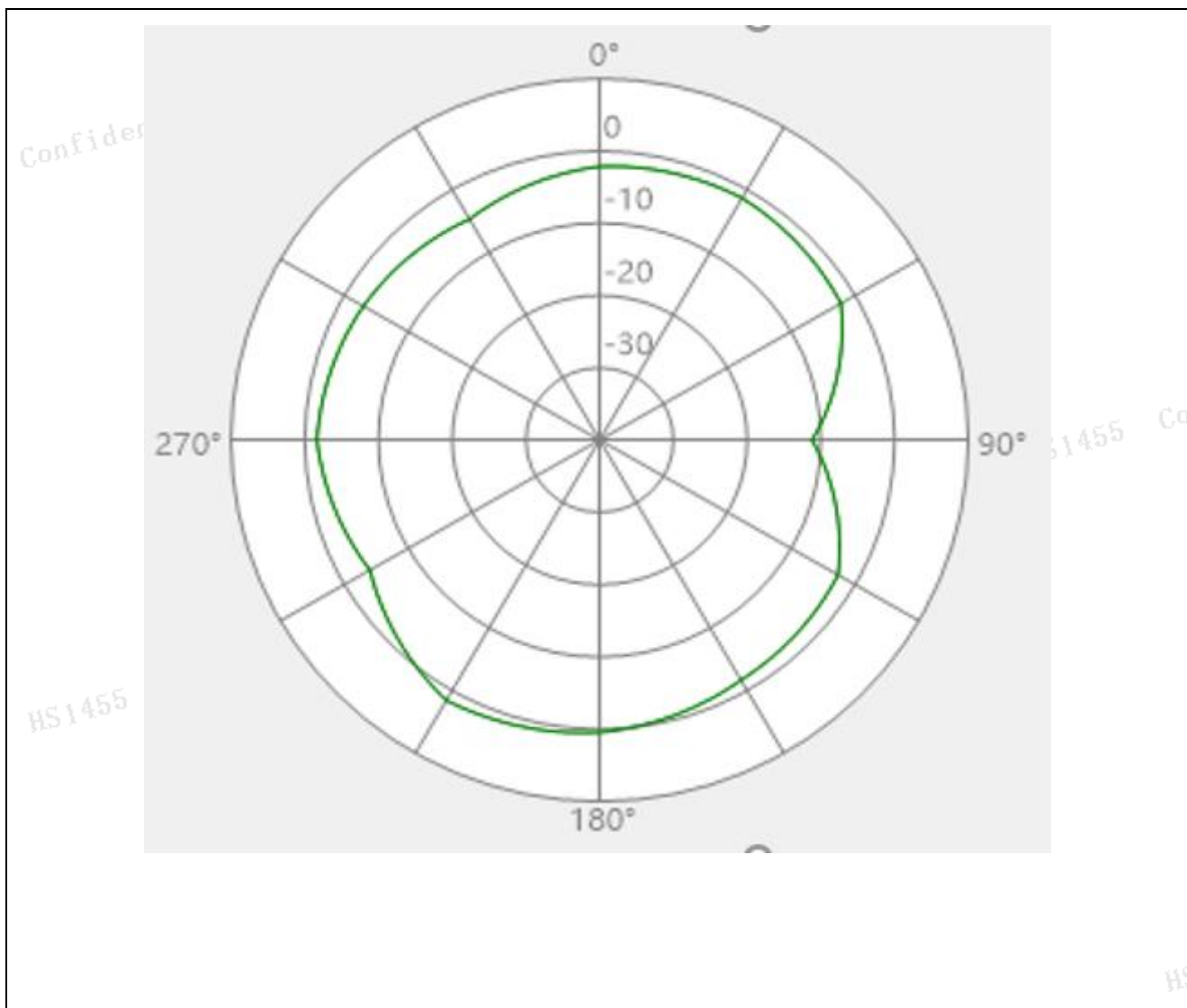
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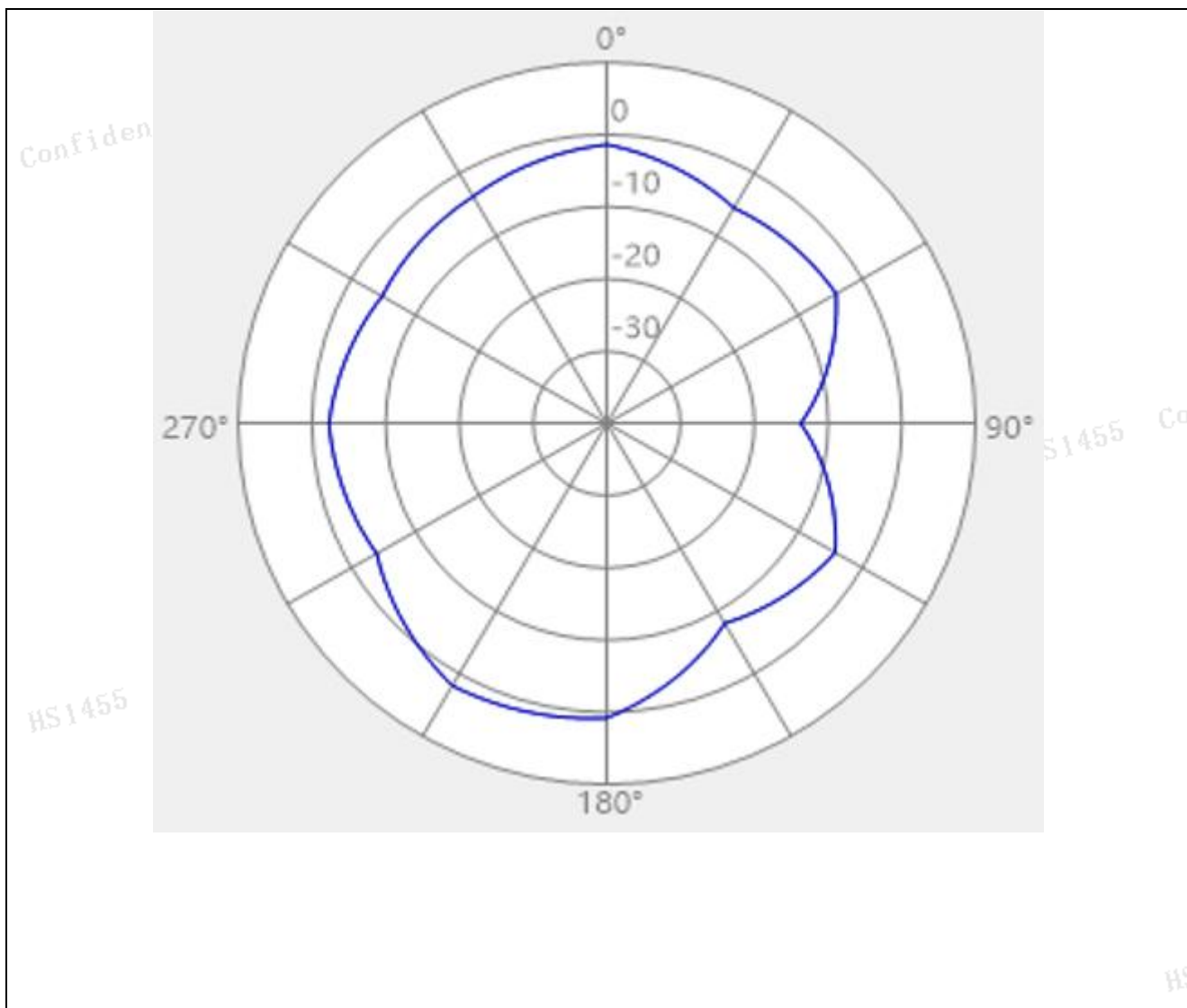
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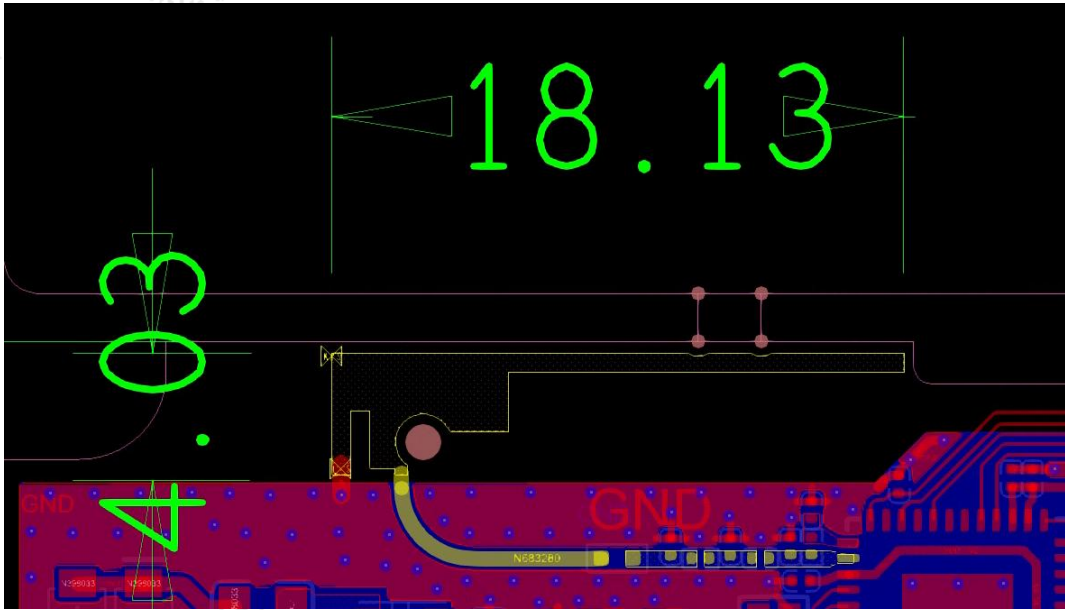
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### 2.3 GAIN AND EFFICIENCY

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	42.6	-1.3
2410	40.0	-1.3
2420	41.4	-1.1
2430	41.3	-1.3
2440	41.5	-1.6
2450	40.8	-1.3
2460	40.2	-1.3
2470	41.0	-1.2
2480	41.6	-1.5
2490	41.5	-1.6
2500	41.2	-1.4

### 3、PCB ANTENNA (MM)



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