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# 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>Customer Device Name:</b>	N/A	<b>HL Device Name:</b>	N/A
<b>Version:</b>	Initial Release	<b>Approval Date:</b>	2023-08-08

<b>Internal Approval</b>		
<b>Approved By:</b>	<b>Checked By:</b>	<b>Prepared By:</b>
		TIAN XIANG
<b>Customer Approval</b>		

Revision:

Date	Rev	Description of Changes
2018-03-09	A	Initial Release

# 1、Products Electrical

## PCB Antenna

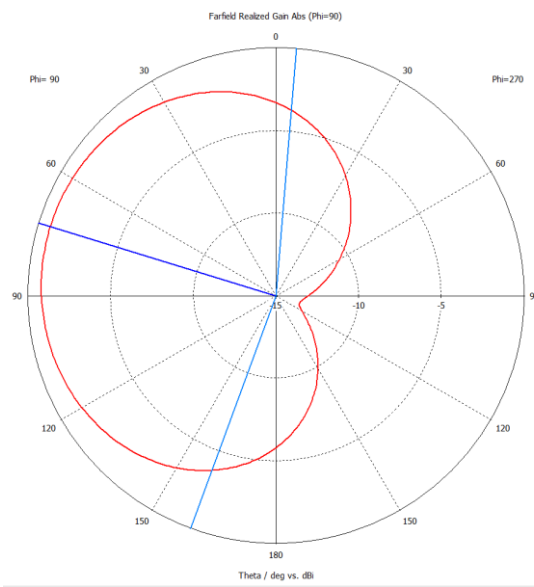
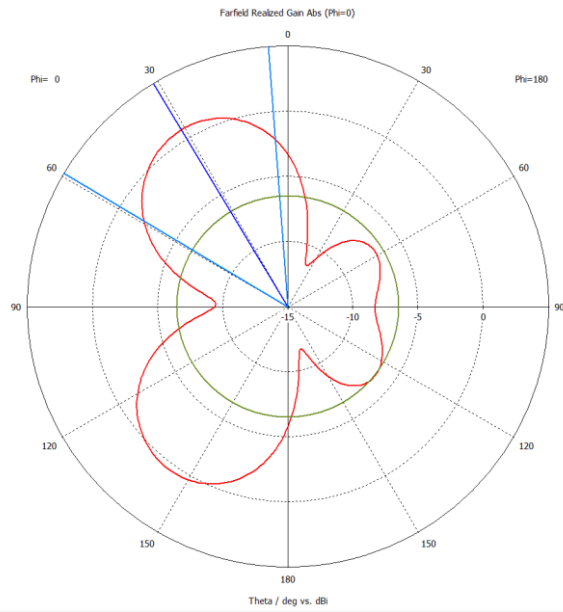
1	Antenna Model	PCB IFA Antenna
2	Frequency Range	2400-2500MHz
3	VSWR	<2
4	Broadband	>100MHz
5	Impedance	50 ohm
6	Gain	0.7dbi
7	Polarization	LP

## 2、Antenna Test Data

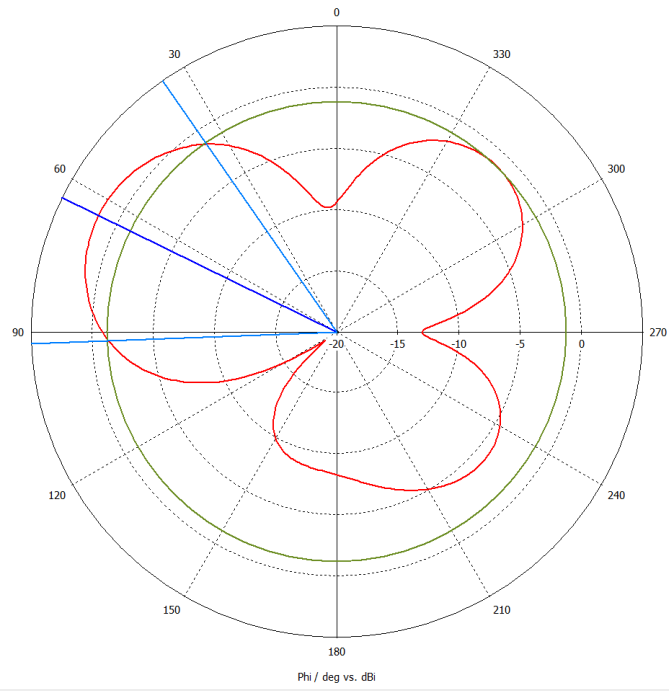
### 2.1 VSWR



## 2.2 RADIATION PATTERNS 2450MHz



Farfield Realized Gan Abs (Theta=90)



### 2.3 GAIN AND EFFICIENCY

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	29.6	-1.3
2410	34.9	-0.2
2420	36.1	0.1
2430	34.6	-0.2
2440	31.3	-0.8
2450	30.7	0.7
2460	27.6	-0.8
2470	28.6	-1.5
2480	29.5	-1.3
2490	30.3	-1.1
2500	30.6	-1.2

### 3、PCB ANTENNA (MM)

