

Specification for Approval

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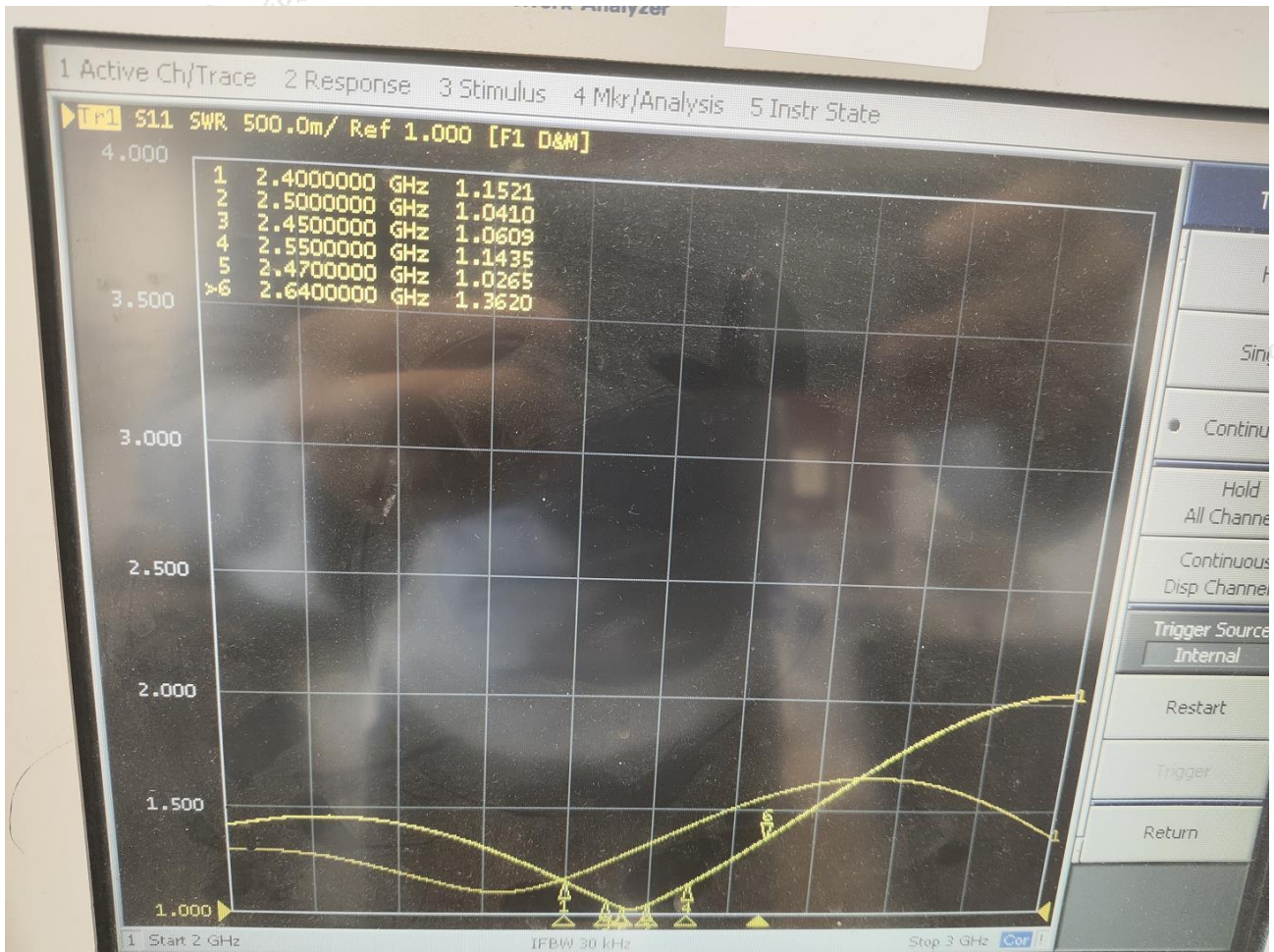
Customer:	N/A	Vendor:	N/A
Customer P/N:	N/A	HL P/N:	N/A
Product model:	HSEL4Q_04_20M_	HL Device Name:	N/A
Pcb antenna brand:	Fuxiang	Approval Date:	2024-3-29
Manufacturer	HANSHOW PTE. LTD.		
Address	138 ROBINSON ROAD #02-33 OXLEY TOWER SINGAPORE(068906)		

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

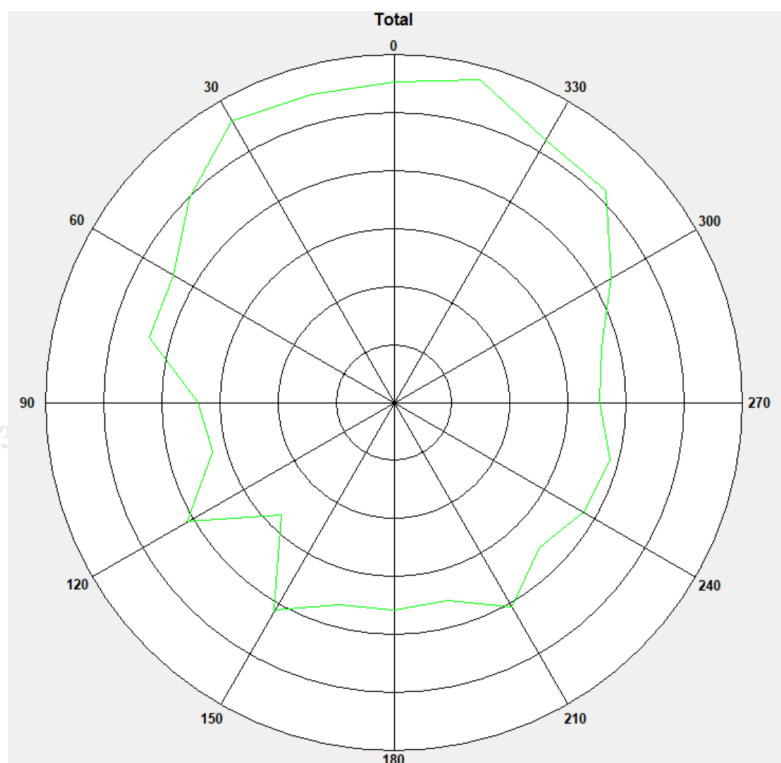
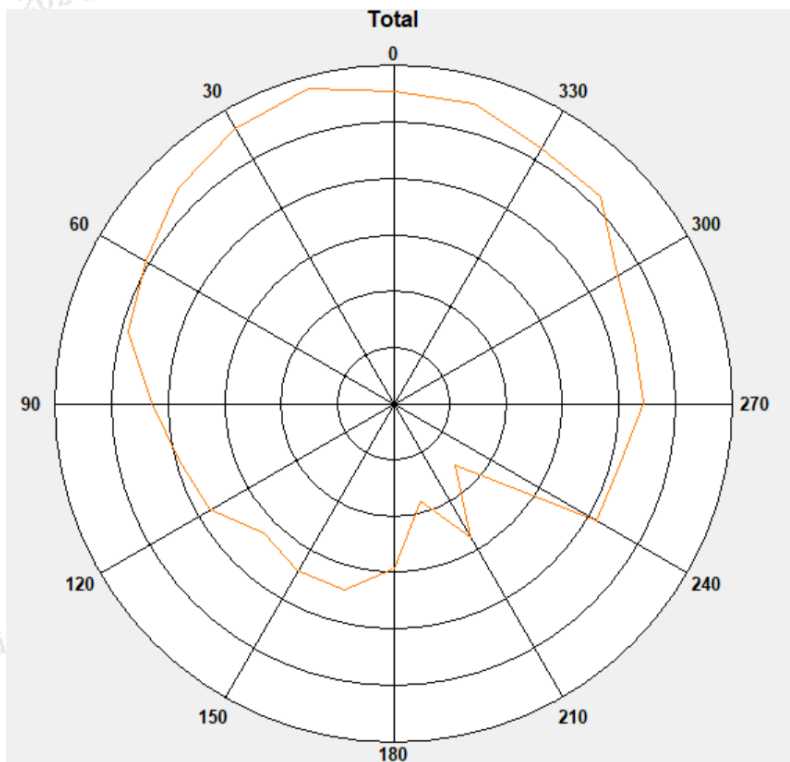
Revision:

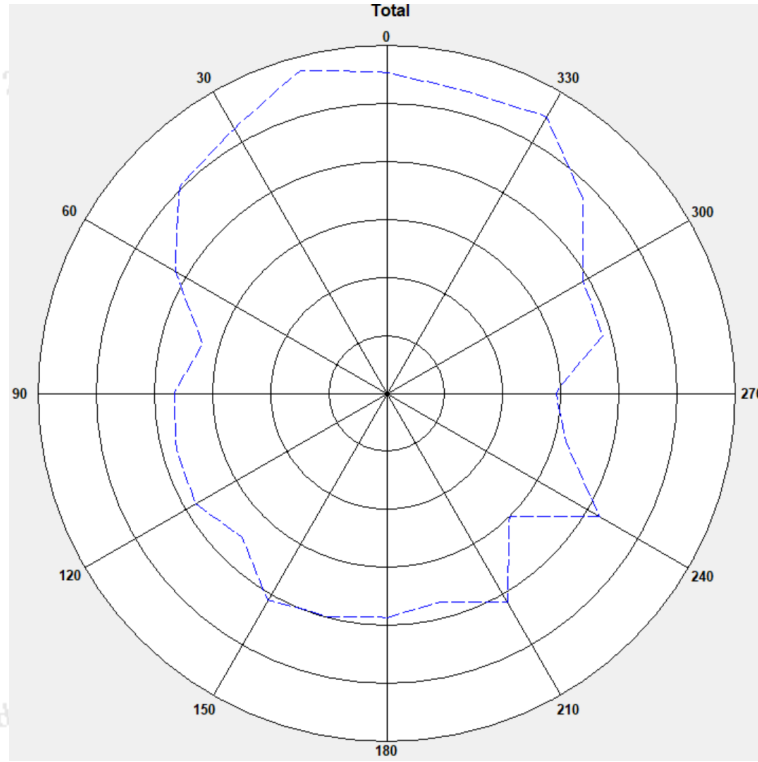
Date	Rev	Description of Changes
2023-9-19	A	Initial Release
1、Products Electrical		
PCB Antenna		
1	Antenna Model	PCB IFA Antenna
2	Frequency Range	2400-2500MHz
3	VSWR (or return loss)	<2 (<-9.5dB)
4	Broadband	>100MHz
5	Impedance	50 ohm
6	Gain	-0.4dbi
7	Polarization	LP
2、Antenna Test Data		

2.1 VSWR



2.2 RADIATION PATTERNS 2450MHz





2.3 GAIN AND EFFICIENCY

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	37.6	-0.9
2410	35.0	-0.7
2420	31.4	-1.4
2430	33.3	-0.5
2440	33.5	-0.4
2450	35.8	-0.4
2460	34.2	-1.6
2470	34.0	-1.5
2480	34.6	-0.4
2490	32.5	-1.1
2500	33.2	-1.1

3、PCB ANTENNA (MM)

