



Integral Antenna

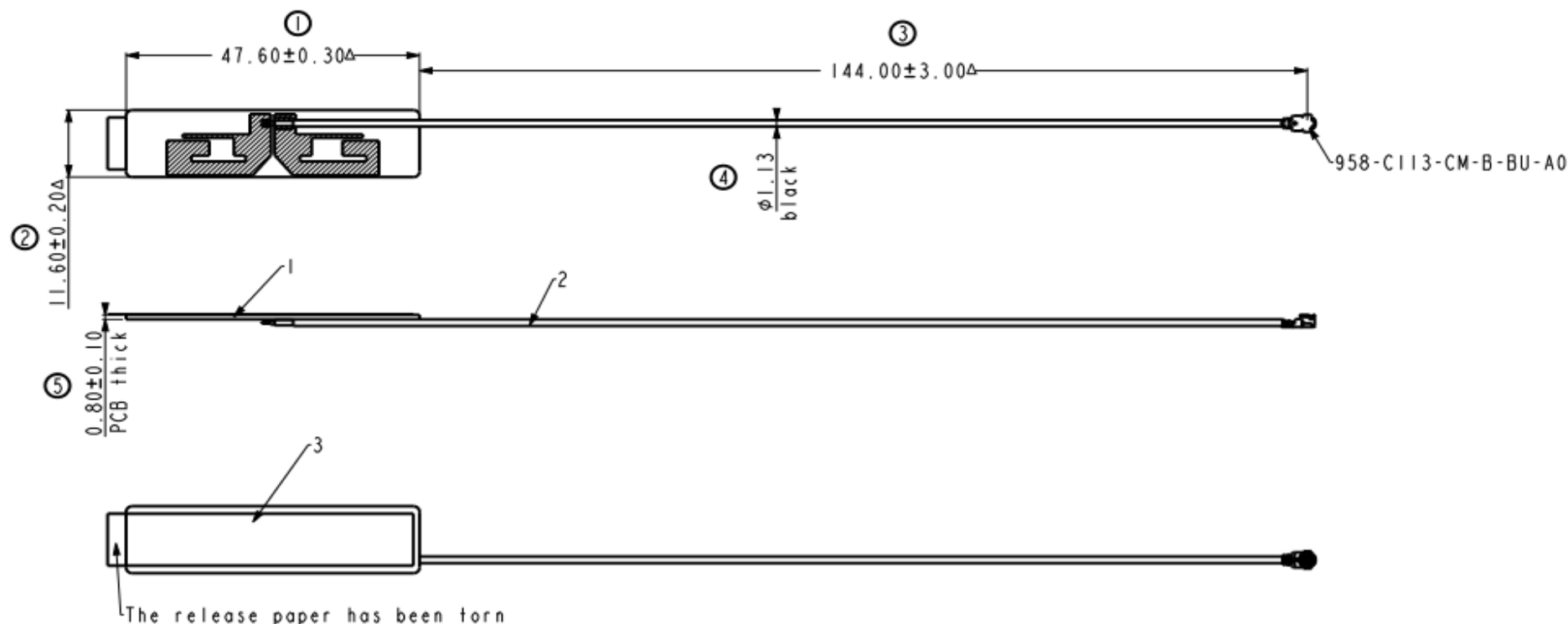
Part Description	Manufacturer Kunshan Yunzhihong Electronic Technology Co. LTD.		Description: CM0452-W03-00					
	Manufacturer Address:No.399, Jujin Road, Zhangpu Town, Kunshan City, Jiangsu Province							
	Product Name: IMI_IPC120_ACE1, WIFI Ant		Project: IPC120					
	Antenna type: Built in antenna PCB+cable							
	Part No.: 5022AA013647							
Attachments:	☒ Specification		☒ Drawing		☒ Sample		☒ RoHS Report	
	☐ CPK Report		☐ FAI Report		☐ Reliability Report		☐ RoHS Questionnaire	
	☒ QC Flow Chart		☐ Material Verification Sheet		☒ Packing Content		☐ Safety Report	
	* ROHS							
Vendor	Design	huang wei gang	Check	Approval: huang fei				
Technology Check	Mechanical		Hardware		ID		Sourcing	
	Software		Keypart		Engineering		SQE	
	Project Manager		Product Manager		Customer			
Final Check	Quality Planning			Rohs Status		☒ RoHS ☐ Non-RoHS		
Approval condition Approval condition	☐ Approved			☐ Reject				
	☐ Conditional Approved		Conditions:					
	☐ Temporary Approved		Limited_____Pcs for purchasing					
Approval by	RD Leader (Technology Director)				Quality Director			
	* Audit by Technology Director or Qunality director on the conditions of special approval							
Distribute	☐ IQC	☐ hardware	☐ ME	☐ Software	☐ Components	☐ ID		
	☐ Vendor	☐ Customer	☐ outsoucing	☐ Engineering	☐ SQE	☐ Others _____		



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REV	DESCRIPTION	DRAWN	DATE
A0	First edition release	Hwg	2025-06-19



Technical Requirements:

- Components should conform to all 2D/3D data, and if dimensions are not specified, refer to actual drawings;
- There should be no obvious cosmetic defects after assembly, and welded products must not have false or weak welds;
- No modifications may be made to the relevant materials and processes without permission;
- 100% consistency testing of antenna performance;
- Dimensions marked with "Δ" are key dimensions; dimensions marked with "*" are CPK dimensions;
- Products must comply with RoHS requirements.

Serial	part number	material/specification	quantity
3	CM0829-W03-80	Adhesive, cotton paper adhesive SDK-DS-1	1
2	CM0452-W03-60	Shenyu 1.13mm, black, Caimei, 958-C113-CM-B-BU-A0	1
1	CM0452-W03-30	FR4, 0.8mm, copper foil 0.5 OZ, single sideboard	1

Unmarked tolerances (mm)		Part Name	IMI_IPC120_ACEI_WIFI_ANT	Drawing No. / Part No.	CM0452-W03-00	Drawing No. / Part No.
Size range	Tolerance	Spec.	Subassembly	Customer P/N:	5022AA013647	
>	≤					
0.00	3.00	±0.10				
3.00	6.00	±0.10				
6.00	30.00	±0.20				
30.00	120.00	±0.30				
120.00	400.00	±0.50				
400.00	~	±0.80				
Unmarked angle		±0.5°				

Kanshan Yunzhihong Electronics and Technology Co., Ltd.

Full Dimensions Report

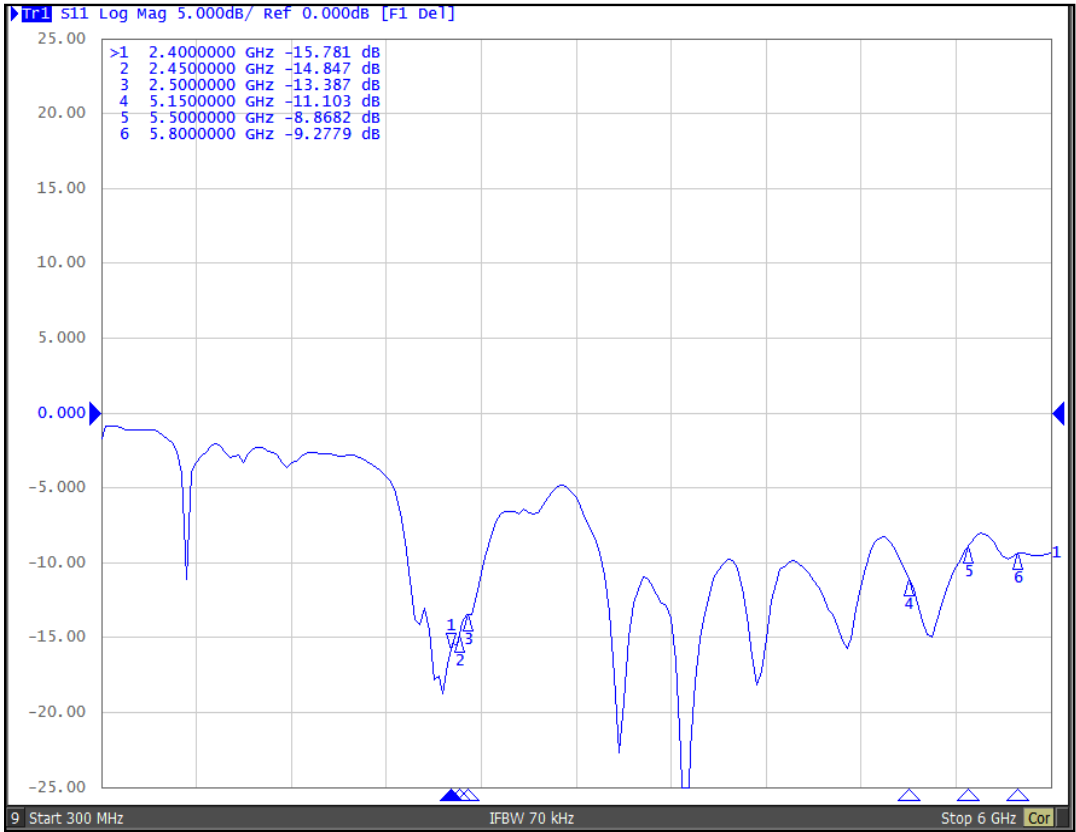
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Reliability test report

Customer	Chuangmi	Written By	WENFENG	Orig. Date	2025/6/9
Part Number	5022AA013647	Revised By	lanxuehua	Revised Date	2025/6/9
Description1	IMI_IPC120_ACE1, WIFI ANT	Approved By	panxinpu	Approved Date	2025/6/9
Test date: 2025/6/09			The experimental code: 2025060901		
The experimental method: Salt spray test			The experimental standard: Box test		
sample	The name of the	CM0452-W03-00	The thickness of the coating	NI	AU
	The material	PCB+CABLE			
	Appearance before experiment	ok	Quantity	5 PCS	
Experimental conditions	The experimental time: 06/09, 09:00 ~ 06/11, 09:00				
	Spray time: 48 hours		Moisturizing time: 48 hours		
	Laboratory temperature: 35℃±2℃		Pressure drum temperature: 46℃±2℃		
	Laboratory relative humidity: 65%—75%		Atmospheric pressure: 101-02KPA		
	NACL concentration: 5%±0.5%		PH: 6.5-7.2 (neutral)		
The experiment described	Post-experiment appearance	Appearance normal, no obvious corrosion phenomenon			
	Appearance after removal of corrosion products	Appearance of the normal			
The experimental results	OK				
note					
Approved by the :maruiguo audit:sunny Testing persone:tangyinglong					

Antenna Performance Report

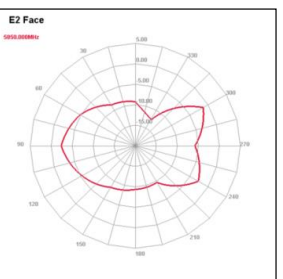
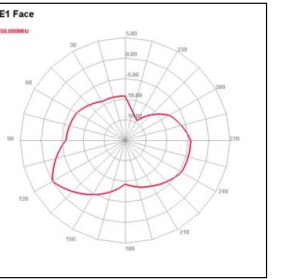
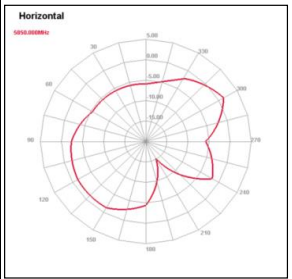
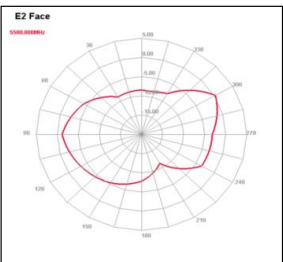
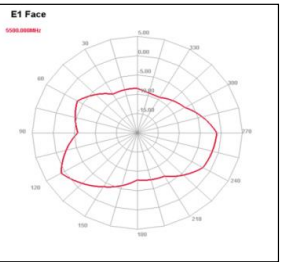
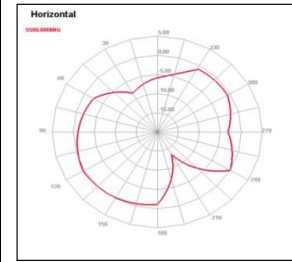
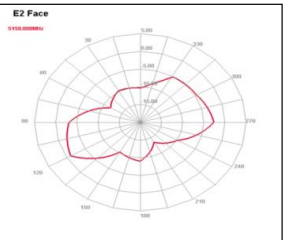
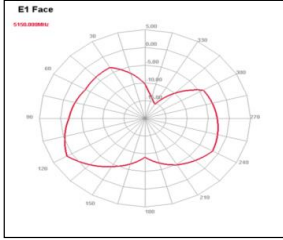
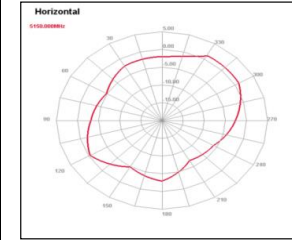
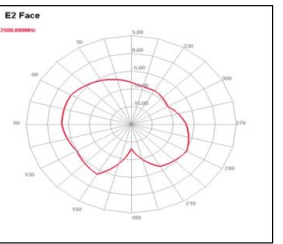
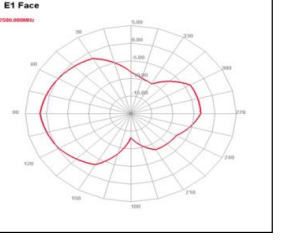
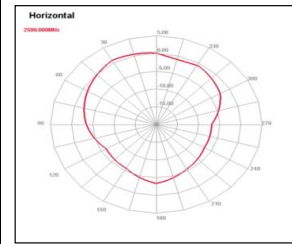
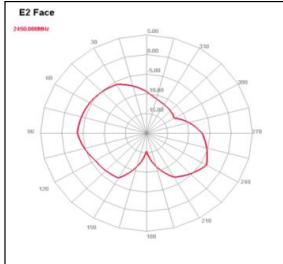
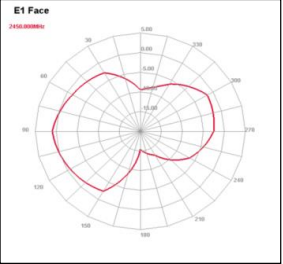
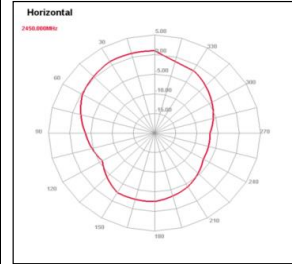
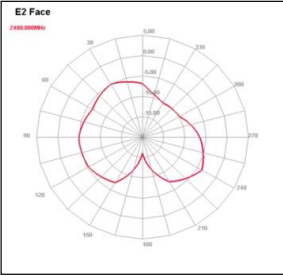
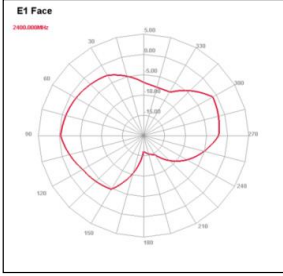
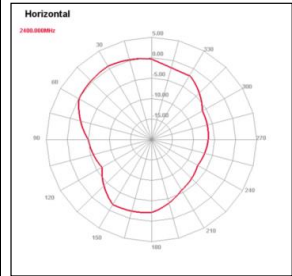
Customer	Chuangmi	Written By	WENFENG	Orig. Date	2025/6/16
Part Number	5022AA013647	Revised By	Xuehua Lan	Revised Date	2025/6/16
Description1	IMI_IPC120_ACE1, WIFI ANT	Approved By	Sinfo Pan	Approved date	2025/6/16



Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	44.6	-3.5	0.4	5150	49.7	-3.0	1.3
2410	48.0	-3.2	0.3	5200	56.2	-2.5	1.6
2420	51.5	-2.9	0.4	5250	57.3	-2.4	1.7
2430	51.3	-2.9	0.5	5300	59.0	-2.3	1.6
2440	52.0	-2.8	0.6	5350	56.6	-2.5	1.4
2450	54.6	-2.6	0.9	5400	54.2	-2.7	1.7
2460	58.7	-2.3	0.8	5450	50.7	-3.0	1.3
2470	60.7	-2.2	1.0	5500	45.6	-3.4	0.8
2480	57.2	-2.4	1.2	5550	48.1	-3.2	0.9
2490	56.9	-2.5	1.4	5600	48.4	-3.2	0.6
2500	57.8	-2.4	1.5	5650	51.1	-2.9	0.6
AVG	53.9	-2.7	0.8	5700	51.2	-2.9	0.6
				5750	49.2	-3.1	1.0
				5800	52.0	-2.8	1.3
				5850	51.4	-2.9	1.3
				AVG	52.0	-2.8	1.2

Performance Test Report (Directional Diagram)

Customer	Chuangmi	Written By	WENFENG	Orig. Date	2025/6/16
Part Number	5022AA013647	Revised By	Xuehua Lan	Revised Date	2025/6/16
Description1	IMI_IPC120_ACE1, WIFI ANT	Approved By	Sinfo Pan	Approved date	2025/6/16



Antenna test status

Customer	Chuangmi	Written By	WENFENG	Orig. Date	2025/6/16
Part Number	5022AA013647	Revised By	Xuehua Lan	Revised Date	2025/6/16
Description1	IMI_IPC120_ACE1, WIFI ANT	Approved By	Sinfo Pan	Approved date	2025/6/16

OTA Test System			
No.	Name	Model	Manufacturer
1	RF shielded <u>Anechoic Chamber</u>	4*3*3	GP
2	RF switch box		GP
3	ENA	E5071C	<u>Keysight</u>
4	Radio Communication Analyzer	CMW500	R&S

