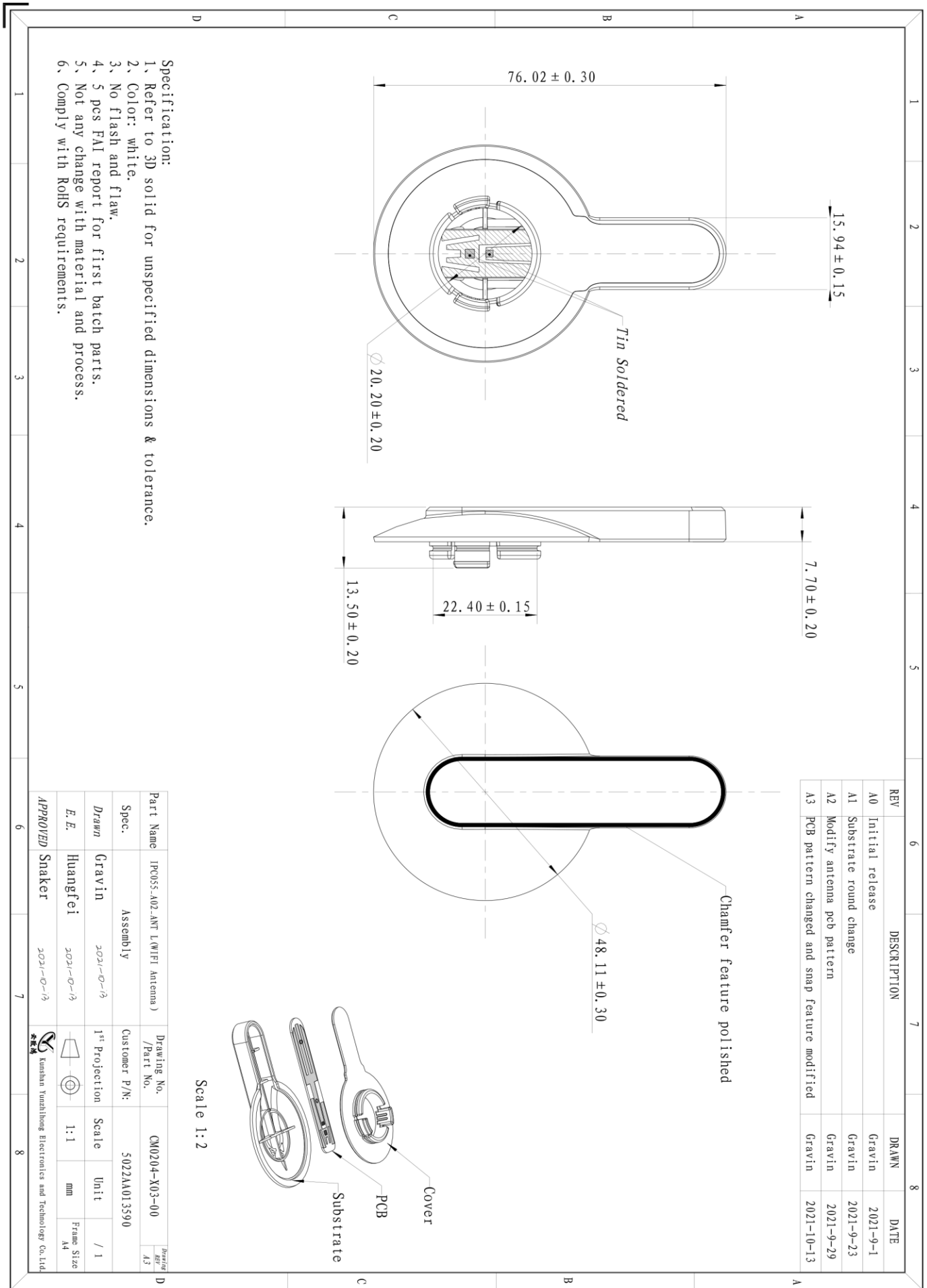


APPROVAL SHEET

Part Description	Vendor: Kunshan Yunzhihong		Description: CM0204-X03-00
	Product Name: IMI_IPC055_A02-Antenna L (WIFI Antenna)		Project: IMI_IPC055
	Part No. 5022AA013590		
Attachments	▲ Spec ▲ Drawing ▲ Sample ■ RoHS Report ▲ Cpk Report ■ FAI Report ▲ Reliability Report ■ RoHS Questionnaire ■ QC Flow Chart □ Material Verification Sheet ▲ Packing Content □ Safety Report ▲ Symbol is necessary to provide to chuangmi with attachment. ■ Symbol is necessary to provide to chuangmi by soft copy. □ Symbol is provided by specific requirements.		
Vendor	Design	Check	Approval:
Technology Check	Project Manager	Hardware	Testing
	Product Manager	ID	Mechanical
	SQE		
Final Check	□ Approved □ Reject □ Condition Approved Meet requirements: _____ □ Temporary Approved _____ Pcs is limited by purchasing □ Quality Planning Rohs Status □ RoHS material □ Non-RoHS material		Quality Director (Only for special dispensation)
Notes: Four copies is needed. It is effective to be approved. Approved documents will be filed by below departments except color box, instructions, pallets and label. ■ Vendor ■ OEM ■ SQE ■ Quality planning Color box, instructions, pallets and label approve documents, should be reserved by: ■ Vendor ■ OEM ■ SQE ■ Mechanic or Package engineering			

Content

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2	Content
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4	Full Dimensions Measurement
5	Inspection report
6	Process Flow Chart
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9	Antenna Performance
10	Antenna Pattern
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14	Material Certification
15	Package



REV	DESCRIPTION	DRAWN	DATE
A0	Initial release	Gravin	2021-9-1
A1	Substrate round change	Gravin	2021-9-23
A2	Modify antenna pcb pattern	Gravin	2021-9-29
A3	PCB pattern changed and snap feature modified	Gravin	2021-10-13

Part Name	IPC055-A02-AWT L(WIFI) Antenna)	Drawing No. /Part No.	CM0204-X03-00	Drawing REV	A3
Spec.	Assembly	Customer P/N:	5022A013590		
Drawn	Gravin	2021-0-13	1st Projection	Scale	Unit
E. E.	Huangfei	2021-0-13	1:1	mm	Frame Size A4
APPROVED	Snaker	2021-0-13			

Full Dimensions

[illegible]

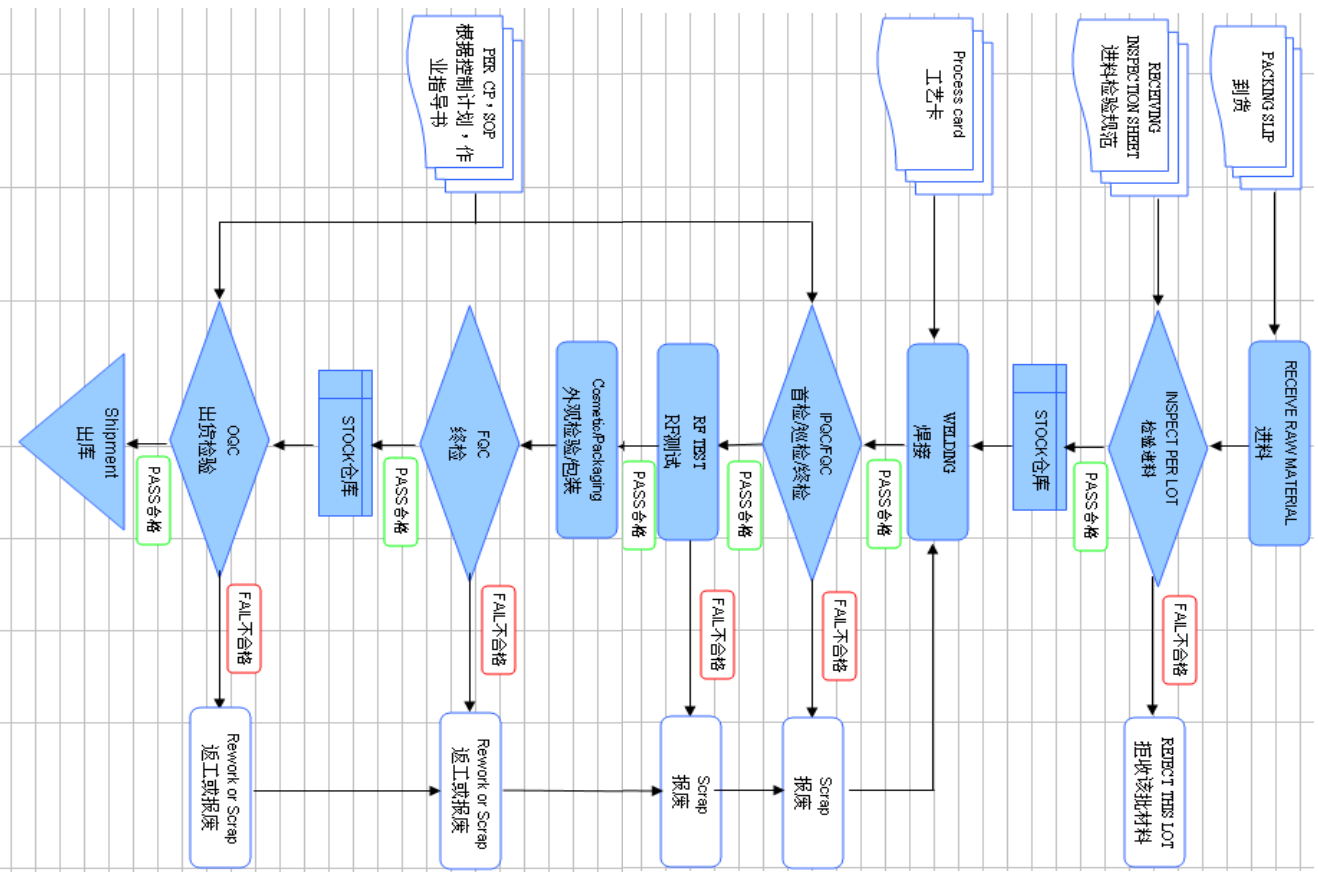
Inspection Report										
Customer	Chuangmi	Part Name	IML_IPC055_A02-Antenna L (WIFI Antenna)							
P/N	5022AA013590	Manu. Date							Rev	A
Standard	GB/T2828.1-2012					Sample Level	AQL=0.4			
Item	Test	Method and comments		Standard		Samples no.	Acc rej.	Rej.	Judge OK/NG	
1	Appearance	Visual		Dirt			0	0	OK	
2	Color	Visual Color difference		No obvious color difference			0	0	OK	
3	Dimensions	actual dimensons							Judge OK/NG	
		1	2	3	4	5				
4	76.02±0.3	75.89	76.10	76.20	75.80	75.83				OK
5	15.94±0.15	15.88	16.06	15.89	15.99	16.00				OK
6	7.7±0.2	7.78	7.65	7.69	7.75	7.78				OK
7										OK
8										
9	RF consistence									OK
Conclusion (OK/NG)		OK								
					Edited	张驰	Approved	黄晴		

Process Flow Chart

Customer	Chuangmi	Written By	Wenfeng	Orig. Date	2021-10-22	
Part Number	5022AA013590	Revised By	Lan xuaehua	Revised Date	2021-10-22	
Description	IMI_IPC055_A02-Antenna L (WIFI antenna)	Approved By	Sinfo Pan	Approved Date	2021-10-22	
	Raw material					
	↓			RF Test		
	IQCI Insp.			↓		
	↓			Inspection		
	↓			↓		
	FAI			↓		
	↓			QC insp.		
	↓			↓		
	Molding			↓		
	↓			Final Inspection		
	Assembly			↓		
	↓			↓		
	SonicWelding			Package and Storage		
	↓			↓		
	↓			↓		
	↓			↓		

QC Flow chart

Customer	Chaungmi	Written By	Wheifeng	Orig. Date	2021-10-22
Part Number	5022AA013590	Revised By	Lan Xueghua	Revised Date	2021-10-22
Description	IMI_IPC055_A02-Antenna L (WiFi Antenna)	Approved By	Sirifo Pan	Approved Date	2021-10-22

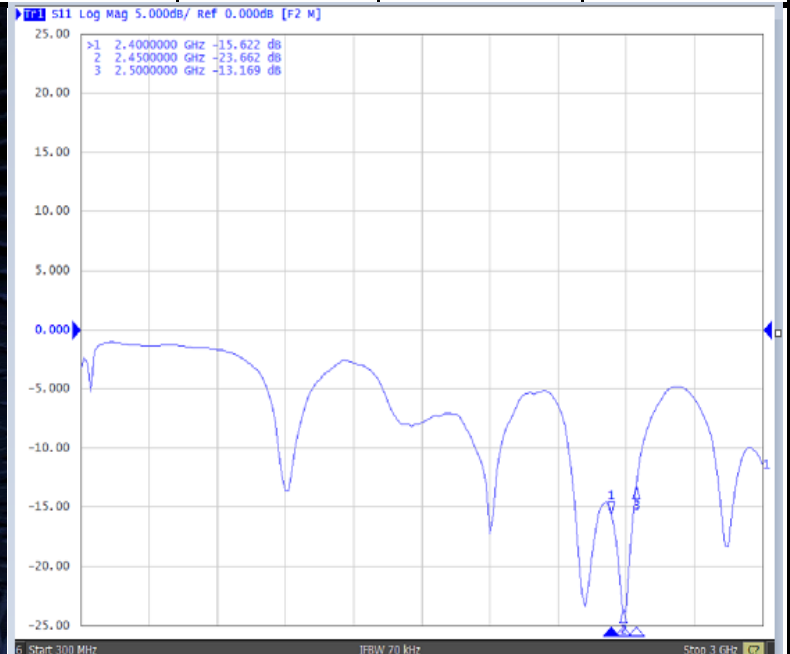
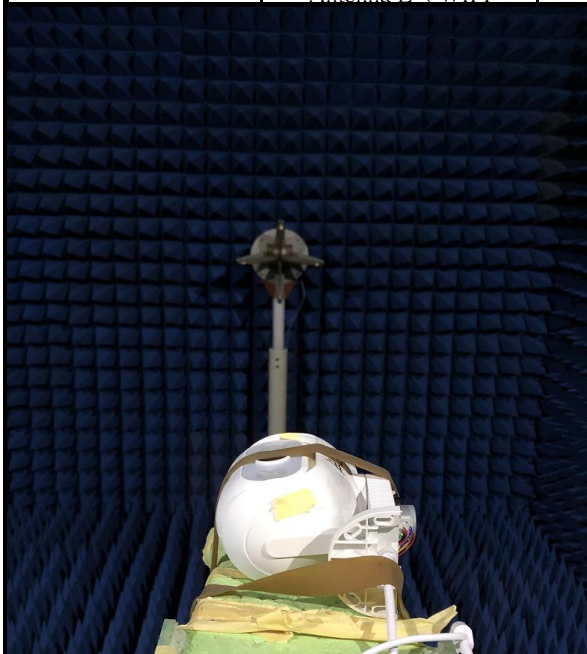


Reliability Test Report

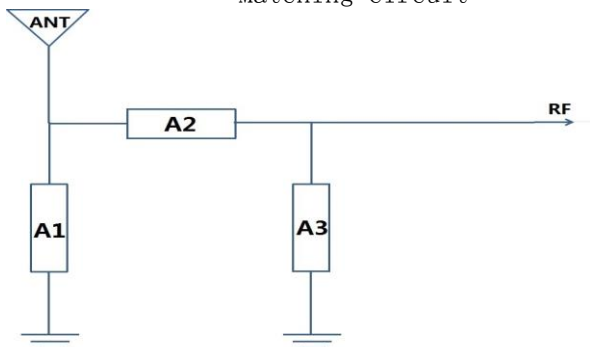
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Antenna Performance

Customer	Chuangmi	Written By	Xiaowei	Orig. Date	2021-10-12
Part Number	5022AA013590	Revised By	Lai Weijian	Revised Date	2021-10-12
Description	IMI_IPC055_A02-Antenna L (WIFI)	Approved By	Huangfei	Approved Date	2021-10-12



Matching Circuit



		Passive			
		Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
A1	NC	2400	50.4	-3.0	0.6
A2	0ohm	2410	47.3	-3.3	0.4
A3	NC	2420	50.5	-3.0	0.8
		2430	47.3	-3.3	0.7
		2440	50.8	-2.9	1.0
		2450	51.8	-2.9	1.0
		2460	47.2	-3.3	0.6
		2470	48.8	-3.1	0.6
		2480	44.3	-3.5	0.3
		2490	47.5	-3.2	0.7
		2500	49.5	-3.1	0.8

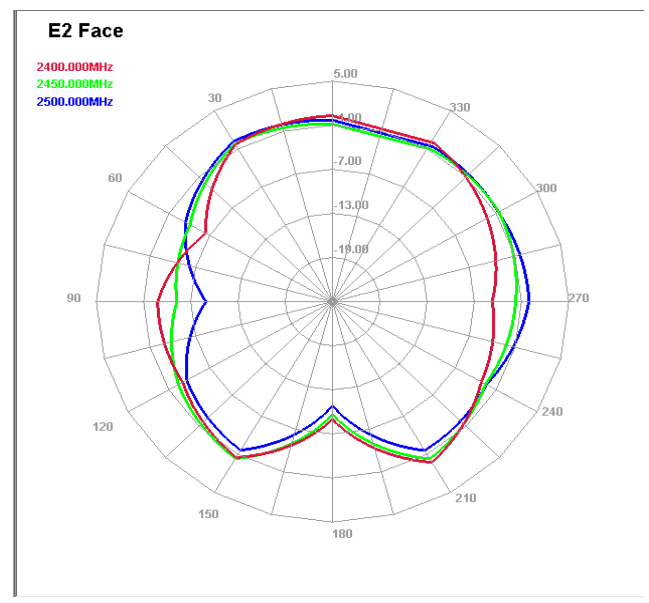
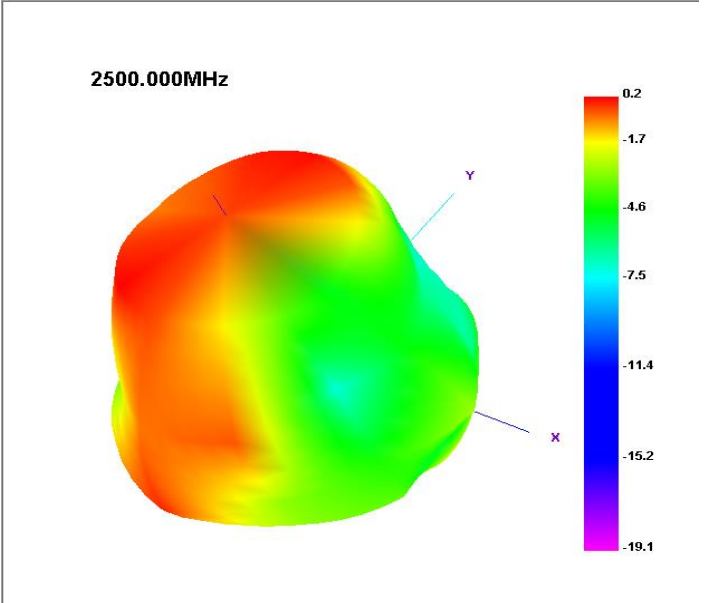
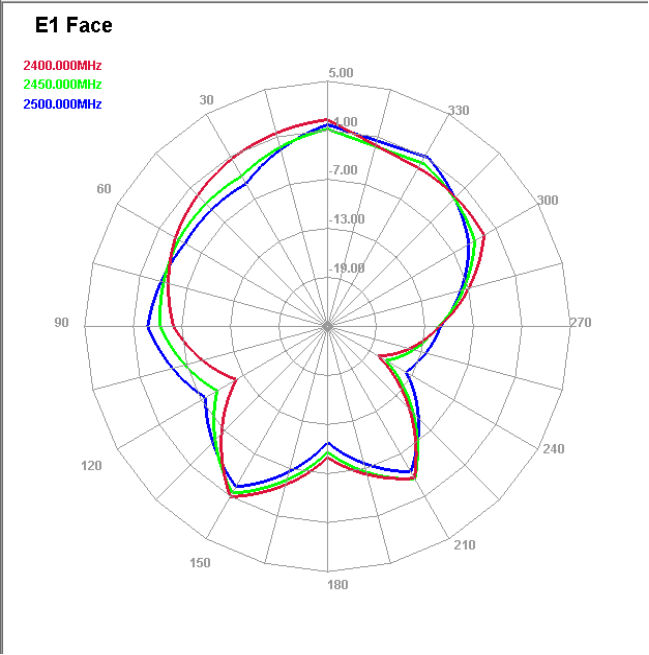
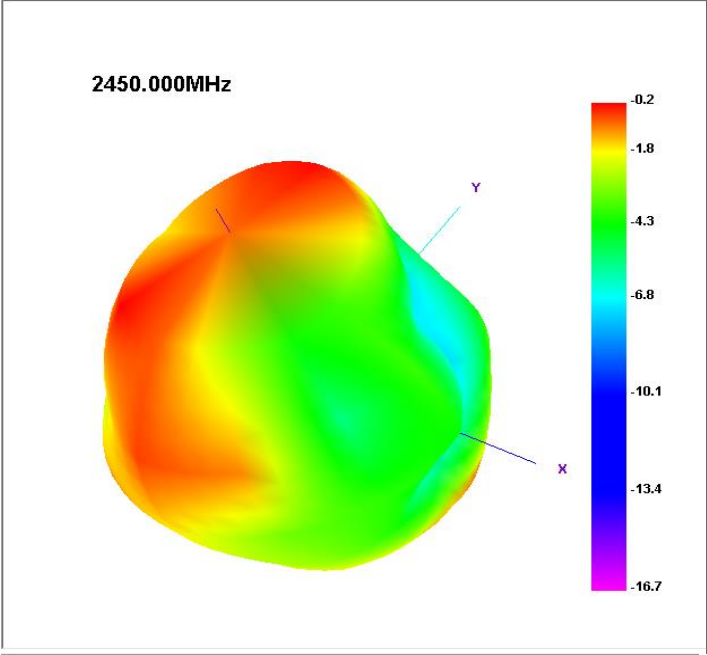
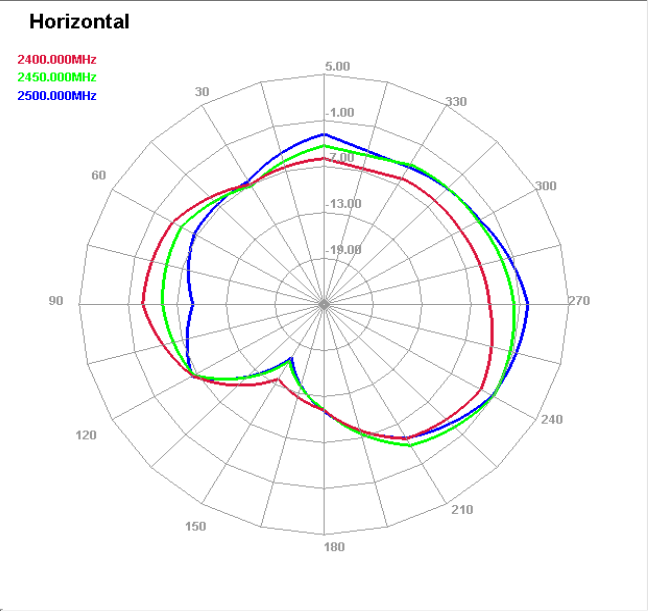
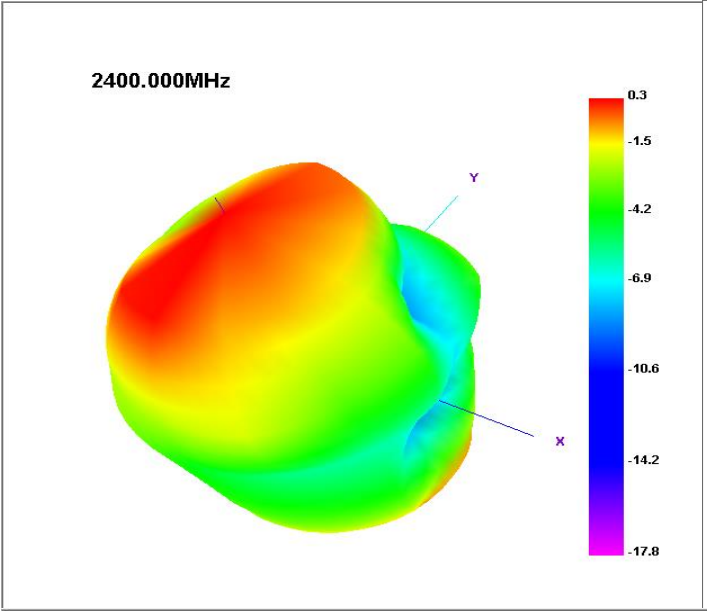
Antenna Type : External (monopole)

Active						
11b	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	13.7	14.3	14.1	-83.6	-84.0	-83.6

11g	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	12.2	12.8	12.0	-69.4	-70.5	-69.4

11n	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	12.0	12.8	11.8	-66.9	-68.1	-67.2

Antenna Pattern



Antenna Gain

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	50.4	-3.0	0.6
2410	47.3	-3.3	0.4
2420	50.5	-3.0	0.8
2430	47.3	-3.3	0.7
2440	50.8	-2.9	1.0
2450	51.8	-2.9	1.0
2460	47.2	-3.3	0.6
2470	48.8	-3.1	0.6
2480	44.3	-3.5	0.3
2490	47.5	-3.2	0.7
2500	49.5	-3.1	0.8
AVE	48.66	-3.13	0.7

BOM List

[illegible]

QR-QA20-08

RoHS Restricted Substance Element Questionnaire

Supplier: Kunshan Yunzhihong Electronic and technology Co., Ltd.

Part information															
Yunzhihong P/N		cm0204-x03-00-a1			Manufacturer				Kunshan Yunzhihong Electronic and technology Co., Ltd.						
Part structure information															
No	Part name	Part type	Vendor	3rd part report			限用物质含量PPM							Attachement	
				date	code		Pb	Cd	Hg	Cr ⁶⁺	PBB	HTH E-20-SCS CROB4 PP	BBP		DBP
1	CM0204-X03-30	OSP	Yibao	2020-12-17	ETR200C2368		☐	☐	☐	☐	☐	☐	☐	☐	
2	CM0204-X03-30	PCB	Yibao	2020-12-11	SHAEC2024450002		☐	☐	☐	☐	☐	☐	☐	☐	
3	CM0204-X03-30	Oil ink	Yibao	2021-2-01	SHAEC2101778606		☐	☐	☐	☐	☐	☐	☐	☐	
							☐	☐	☐	☐	☐	☐	☐	☐	
							☐	☐	☐	☐	☐	☐	☐	☐	
Notes															

Editor: huangqing

Department: QC

Material Certification

Customer	Chuangmi	Written By	Liushiqiang	Orig. Date	2021-10-22
Part Number	5022AA013590	Revised By	huangfei	Revised Date	2021-10-22
Description	IMI_IPC055_A02-Antenna L (WIFI Antenna)	Approved By	Laiweijian	Approved Date	2021-10-22

CHIMEI
a step up

奇美實業股份有限公司
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+886-6-296-5000
www.chimei.com.tw

CHIMEI CORPORATION
No. 306, Sec. 1, Zhongzheng Rd., Sande Dist., Tainan City 77000, Taiwan

General PC Alloy WONDERLOY® PC-385

產品敘述: Ultra high impact

特性	ISO 測試方法	測試條件	單位	PC-385
熔融指數	1133	260°C×5KG	mg/10 min	21
Spiral flow	CHIMEI	260°C, 2mm, V.50%, P.50%	cm	30
比重	1183	23 °C	g/cm³	1.15
拉伸強度	527	50 mm/min, yield	MPa	55
		50 mm/min, break	MPa	57
延伸率	527	50 mm/min	%	130
彎曲強度	178	2 mm/min	MPa	85
彎曲彈性模數		2 mm/min	GPa	2.3
IZOD 衝擊強度	180/1A	23°C, Notched	KJ/m²	55
		-30°C, Notched	KJ/m²	45
Charpy 衝擊強度	179	23°C, Notched	KJ/m²	55
		-30°C, Notched	KJ/m²	45
維氏軟化溫度	306	50°C/hr; 1KG	°C	143
		50°C/hr; 5KG	°C	135
熱變形溫度	75/A	1.8MPa, unannealed	°C	108
		1.8MPa, annealed	°C	—
介電系數	IEC 60250	1MHz	—	3
體積電阻率	IEC 60093	—	Ohm X m	1E+16
表面電阻率	IEC 60093	—	Ohm	1E+16
線膨脹係數	11359	—	—	7.5*10 ⁻⁴
燃燒等級	—	UL-94	—	1.5mm HB
成型收縮率	294-4	—	%	0.4~0.6
標記	1043	—	—	>ABS+PC<

April 12, 2021

Notes : These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests

The above statement is based on our current level of knowledge and covers the above products directly manufactured and supplied by CHI MEI CORPORATION at the date of issue. CHI MEI CORPORATION makes no warranty, whether express or implied, and assumes no liability in connection with any use of above information. Notwithstanding the foregoing, CHI MEI CORPORATION shall in no event be held obligated or liable for any claims due to or arising from (i) any customer provided, consigned, materials and/or parts, which are incorporated or adopted in the products; (ii) any combination of the products with material not provided or authorized by our company; (iii) any modifications to the products which are made or directed by customer; (iv) not compliance with the specifications, instructions, and/or designs provided by customer; (v) any anti-trust, unfair competition and/or other unlawful actions effected by customer; or (vi) any defects, infringement, breach and/or violation which are arising out of customer's faults or otherwise not solely and directly attributable to CHI MEI CORPORATION. In no event will CHI MEI CORPORATION be liable for any indirect, special, exemplary, punitive, or consequential damages (including but not profits) of any nature whatsoever whether arising out of the purchase, shipment, unloading, handling, or use of any product or otherwise.

Package

Pakcing Requirement:

- 1.Custoename ,part name and part No.
- 2.Show the package methold.
- 3.Marked the pakcing qty.

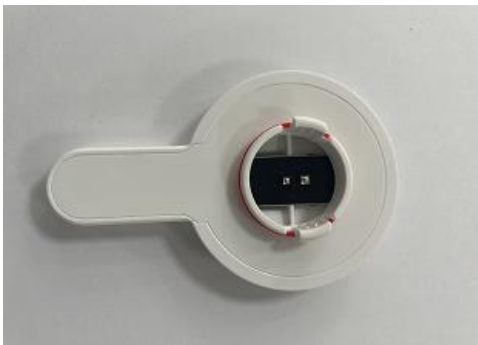


Fig 1 Antenna part

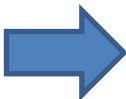


Fig 2 50 pcs per PE bag



Fig 3 Labled the part info.

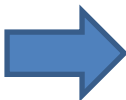


Fig 4: 40 bags per cartoon



Fig: Enveloped the cartoon and label the part info.2000PCS per cartoon.

Part No.	5022AA013590	
Part Name	IMI_IPC055_A02-Antenna L (WIFI antenna)	
Rev	A3	
Package	Cartoon	
inner	PE bags	40 bags
Outer	Total	2000 pcs