



SHENZHEN ATN COMMUNICATION TECHNOLOGY CO., LTD.

SHENZHEN ATN COMMUNICATION TECHNOLOGY CO., LTD.

SPECIFICATION FOR APPROVL

CUSTOMER: Boeleo

CUSTOMER P/N: L3547F

OUR MODEL NO: ATN1438

SPECIFICATIONS: 2.4G WIFI/ BT: 2400-2500MHz

Q' TY: 1 PCS

DATE: 2024. 01. 22

A T N			CUSTOMER		
make	examine	Approver	Structure	Electronics	Approver

Address: 504-505, XiaGu, Wonderful life creative valley, Xinan, Baoan, ShenZhen.
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Record			
Date	Content	version	notes
2024-01-22	Initial release	A1.0	



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一、Test Equipment&Conditions

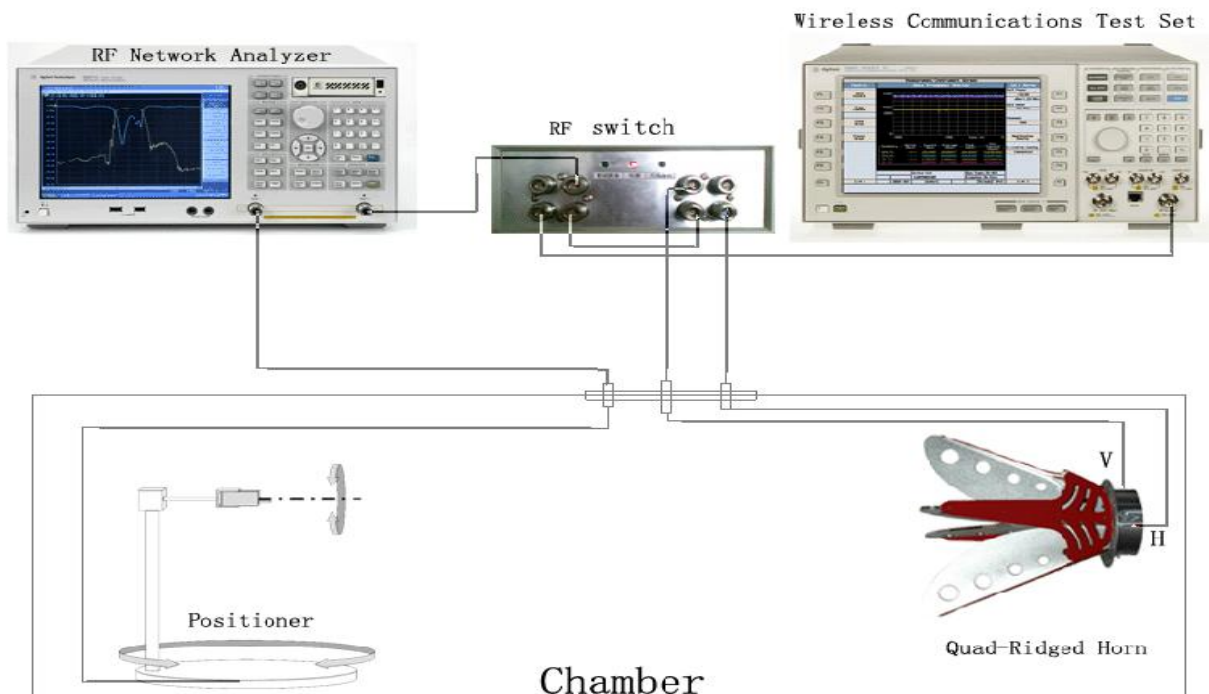
1.1 (Network Analyzers)

Agilent Technologies E5071B

1.2 (Communications Test Set)

CMW500

1.3 (3D Chanber Test System)





二、Product Specification

2.1、Material&Mechanical Characteristics

Material	FPC
Dimension	mm

2.2、Storage conditions

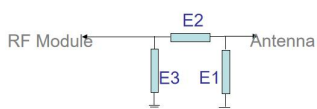
Storage Temperature	22℃±5℃
relative humidity	35-65%
Storage life	365 day

三、Environmental report

NO.	report	Report number	Testing agency	Test date	website	notes
1	RoHS	TCT230621C024	TCT	2023.06.28	www.tct-lab.com	
2	REACH	TCT230209C014	TCT	2023.02.15	www.tct-lab.com	
3.	BF	TCT230621C025	TCT	2023.07.05	www.tct-lab.com	

四、Matching circuit

WIFI

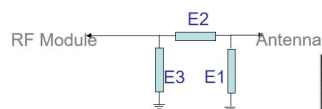


Element	Value
E1(0201)	NC
E2(0201)	0Ω
E3(0201)	NC

NOT MODIFIED

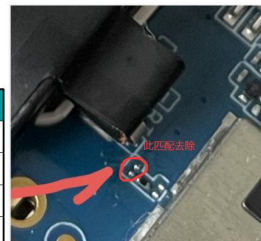


BT



Element	Value
E1(0201)	NC
E2(0201)	0Ω
E3(0201)	NC

MODIFIED





五、Test Data Report

5.1 Gain & Efficiency

WIFI

Freq (MHz)	Effi (%)	Gain (dBi)
2400	38.11	1.32
2410	39.56	1.06
2420	36.54	0.77
2430	38.62	0.9
2440	38.6	0.88
2450	40.5	1.07
2460	41.15	1.09
2470	39.98	0.99
2480	37.4	0.82
2490	37.77	1.03
2500	36.46	0.84
AVERAGE	38.61	0.98

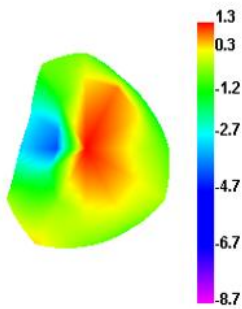
BT

Freq (MHz)	Effi (%)	Gain (dBi)
2400	39.76	0.76
2410	40.07	0.22
2420	37.94	0.08
2430	38.61	0.18
2440	37.64	0.22
2450	38.82	0.46
2460	38.25	0.41
2470	38.24	0.22
2480	36	-0.08

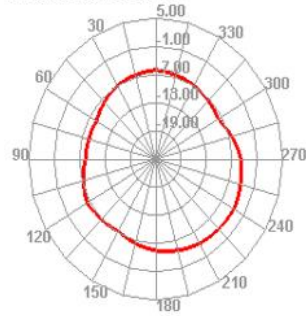
5.2 Radiation pattern

Wifi

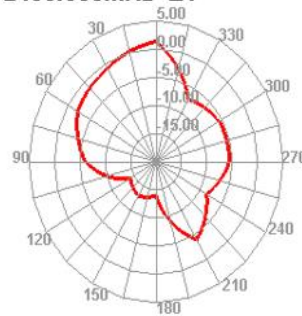
2400.000MHz



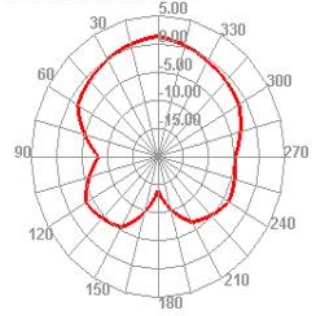
2400.000MHz H



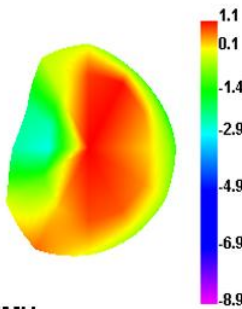
2400.000MHz E1



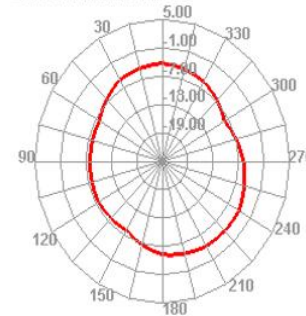
2400.000MHz E2



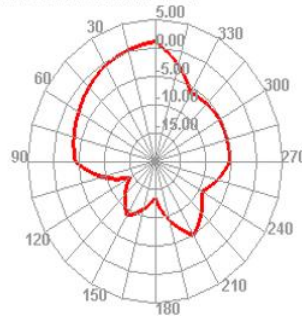
2450.000MHz



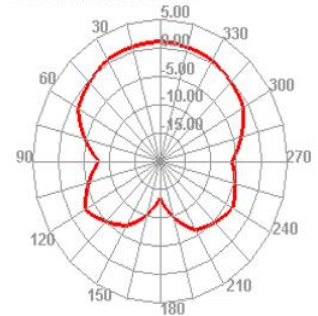
2450.000MHz H



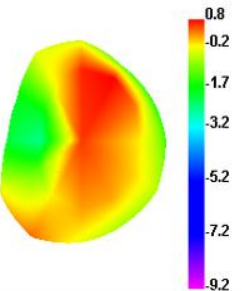
2450.000MHz E1



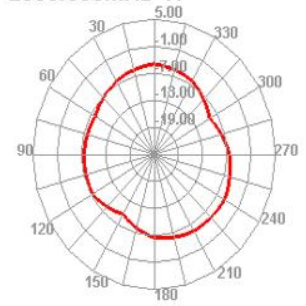
2450.000MHz E2



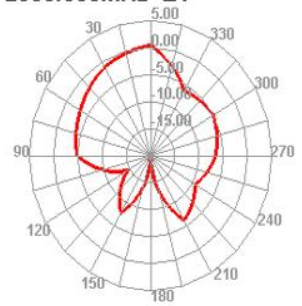
2500.000MHz



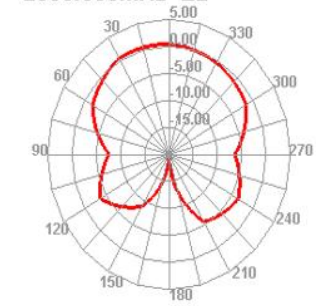
2500.000MHz H



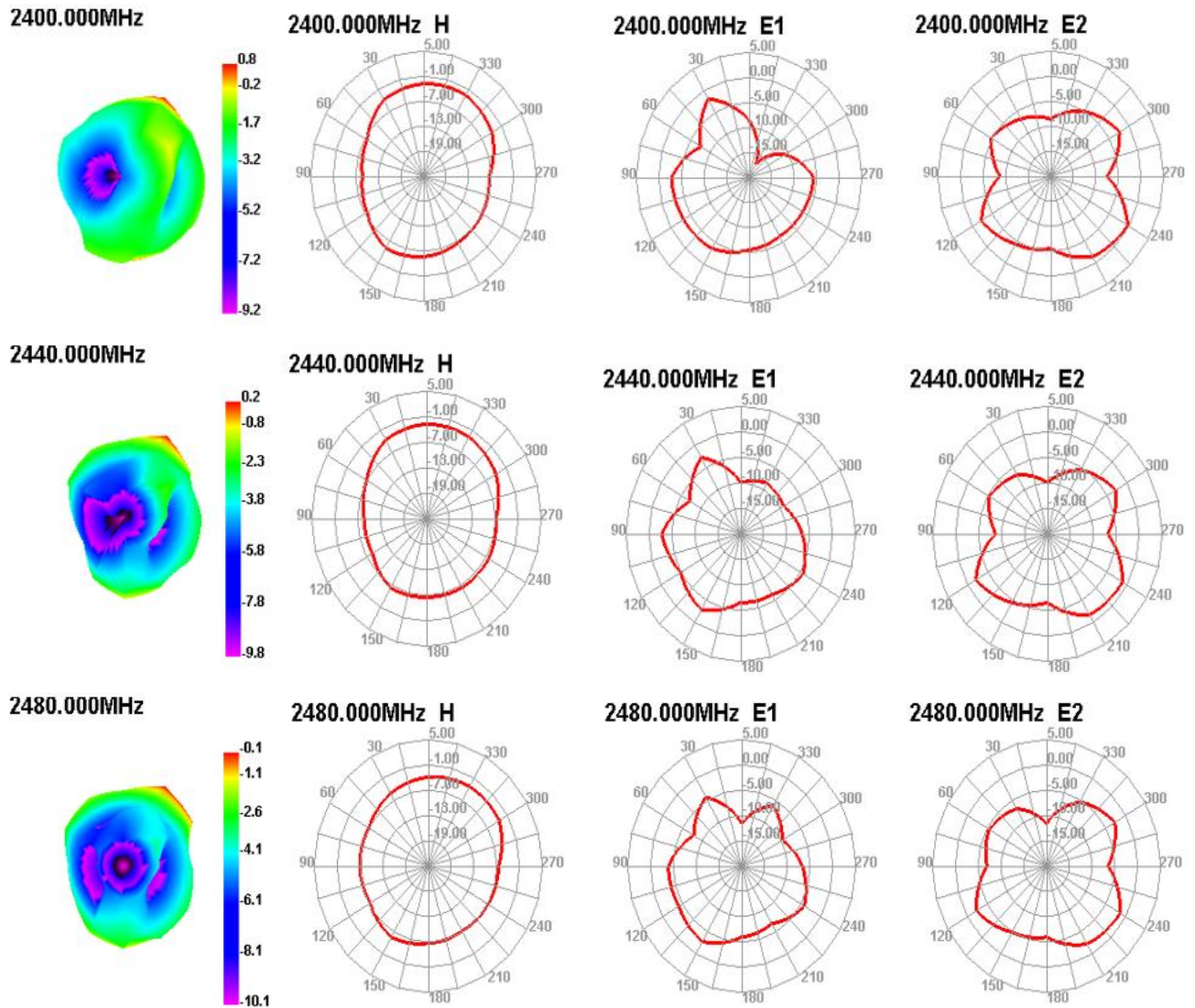
2500.000MHz E1



2500.000MHz E2



BT



5.3 Test Data Report

WIFI OTA testing

Band	channel	TRP (dBm)	TIS (dBm)
802.11b	1	12.4	-81.3
	7	13.2	-83.1
	13	12.3	-82.9

BT Actual testing

test distance	testing mode	test result	Test equipment
10 M	Headband headphone test, 360 degree rotation test.	OK	

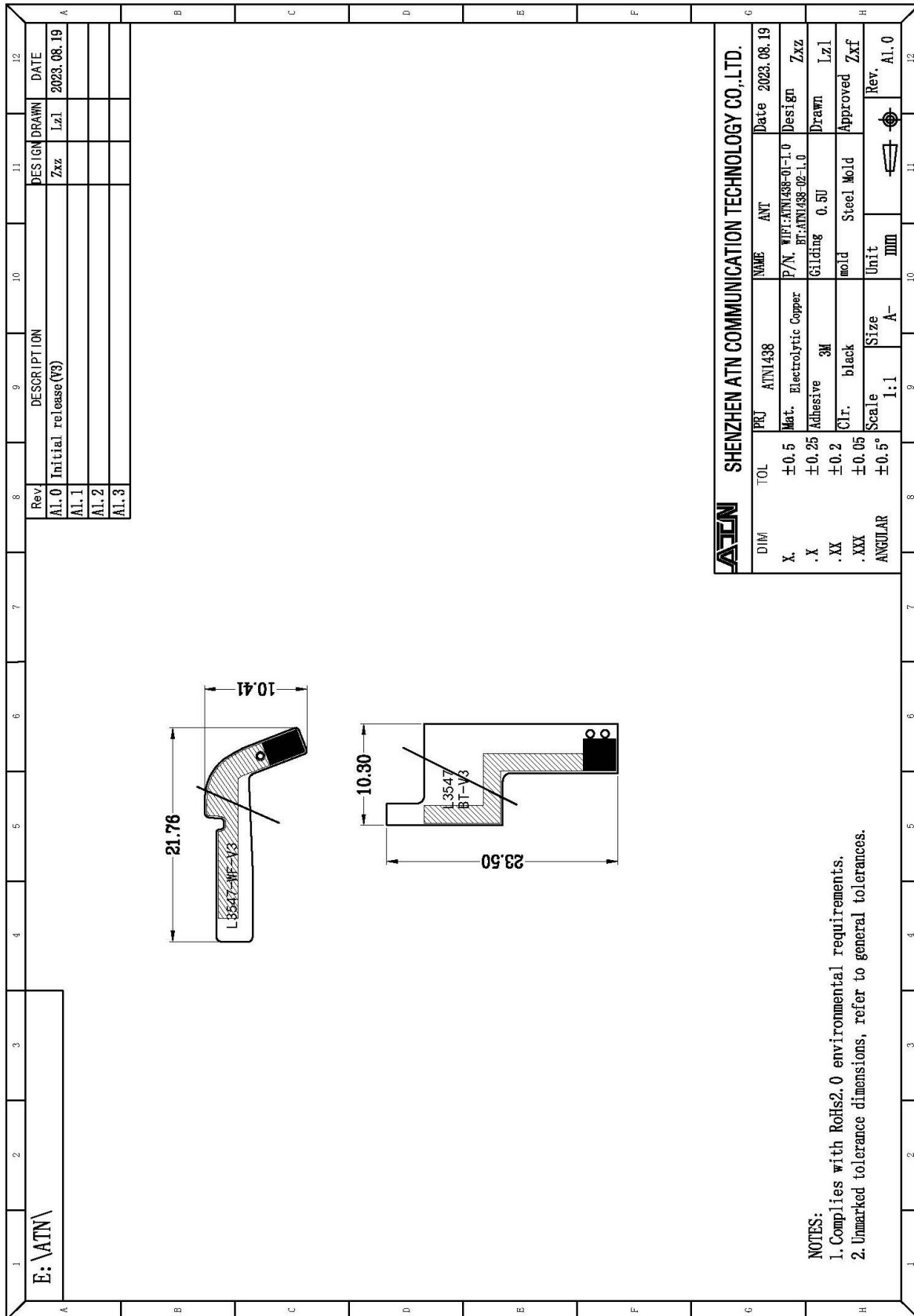
六、Assembly requirements





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七、Product Drawing





八、Size test report

Dimension test report									
project: L3547F			Product Name: ant						
category: FPC			Quantity: 5 PCS				Date: 2024.01.22		
Inspection basis and standard			☒ Engineering drawings ☐ Standard template ☐ Other_____						
Inspection items			test value					determine	
			1	2	3	4	5		
Appearance inspectio	1.visual inspection		√	√	√	√	√	OK	
	2、 Other								
Dimensional inspection	1	21.76±0.15	21.82	21.8	21.86	21.84	21.78	OK	
	2	10.41±0.15	10.52	10.48	10.48	10.46	10.54	OK	
	3	23.5±0.15	23.58	23.62	23.6	23.54	23.56	OK	
	4	10.3±0.15	10.4	10.36	10.36	10.34	10.38	OK	
	5	/							
	6								
	7								
	8								



九、Salt spray test report

project	L3547F	SPECIFICATIONS	FPC
Test information	Number of tests: 5 PCS		
	base material: Electrolytic Copper	Gold plating: 0.5U"	
Test conditions	salt solution: 5%	PH:7.0	
	Box temperature: 35℃	relative humidity: 5%	
	spray mode: ☒ continuous ☐ intermittence	Compressed air pressure: 1kg/cm²	
	rate of salt spray precipitation:	Mist collection: PH7.0nac	
	Test cycle: __1__cycle	Spray time: 24 h	
	test result	Appearance after test: the appearance is intact without obvious change	
Coating: no peeling and corrosion			
Surface spraying and silk screen printing: no falling off and bubble			
Test judgment	OK		
notes: 1. The operation standard of salt spray test shall be in accordance with the national standard of the people's Republic of China GB / t2423 17-2008 implementation			



2. The judgment standard of test piece results shall be in accordance with the national standard of the people's Republic of China GB / t6461-02

十、Manner of packing

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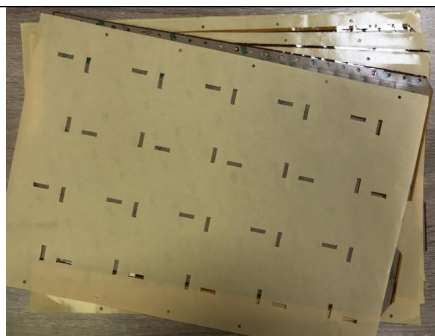
Product packaging

edition: : V1.0

Page: 1/1

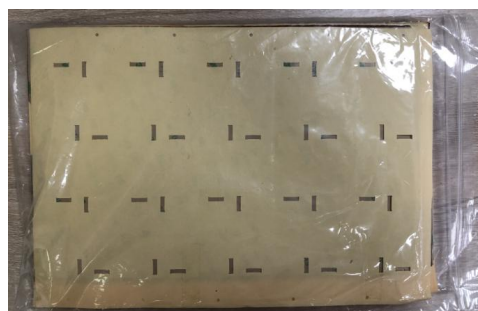
1.

Barrier paper protection products



2.

Sealing bag packaging effect



3. Carton sealing effect

