

SPECIFICATION FOR APPROVAL

CUSTOMER	Shenzhen Ruili Acoustic Technology Co. , Ltd.	
CS P/N	RL11AB200020	
PART NAME	Built-in FPC antenna (RT-FPC306 V0.0) 2.4G ϕ 1.13 Gray L=200MM Take IPEX Puffy foam ROHS	
FREQUENCY	2.4-2.5GHz	
RTANT NO.	RT404-10005-A	
DATE	2023.07.04	
Sample signature		
APPROVED BY	CHECKED BY	DRAWED BY
liu	Song	Jiang
Remark:		
Customer acknowledges signature		
APPROVED BY	CHECKED BY	TESTED BY
Sign: _____		

Dongguan Ante Communications Co. , Ltd.

TEI: 0769-85833836

FAX: 0769-82582573

Http://www.rtant.com

Address: Building E, Industrial Innovation Park, Shalong road, Shatang industrial zone, Houjie Town, Dongguan City

1. Contents

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7	2D illustration/packaging	Appendices

2. Revision history

Revision	Date	Change the content
X0	23. 07. 04	New Edition

3. Product picture



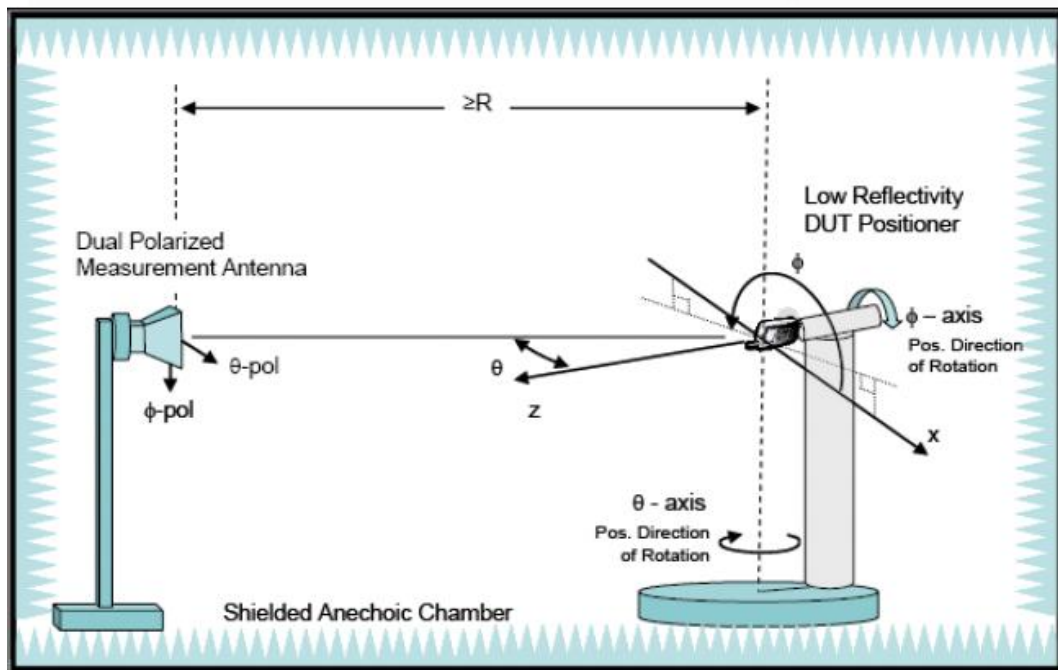
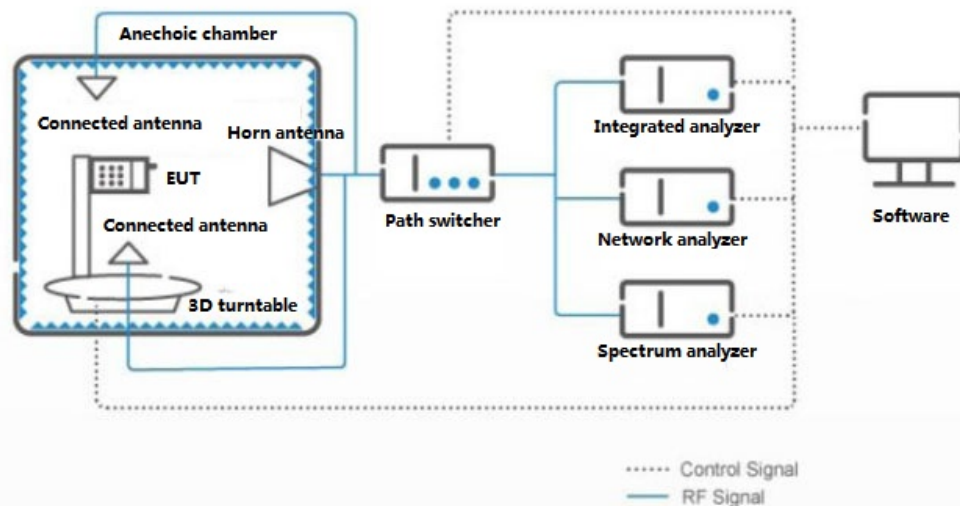
4. Specification

A. Electrical Properties	
Frequency Rang	2.4-2.5GHz
Impedance	50 Ω Nominal
VSWR	2.0Max.
Gain(peak)	2.32dBi
Efficiency	>40%
Out of roundness	3.0dB (Max.)
Radiation	Omni-Directional
Polarization	Linear Vertical
B. Physical Properties	
Connector Type	IPEX
Cable	Φ 1.13mm Gray
Antenna Radiator	FPC
Antenna Plastic	Body: Holder:
C. Environmental	
Storage Temp	-40℃~+85℃
Operating Temp	-10℃~+60℃
Storage humidity	95%
Working humidity	5%~95%

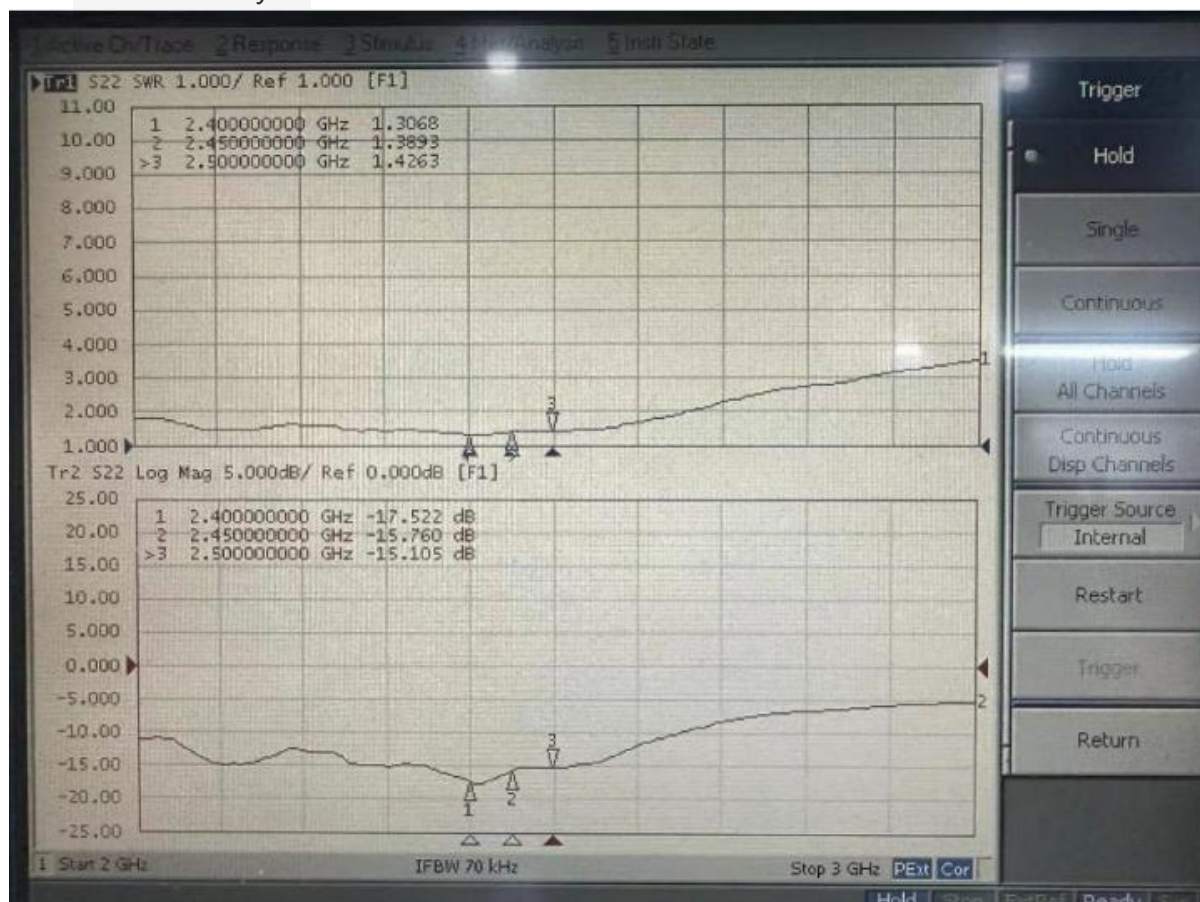
5. Electrical Test Report

5.1 Test equipment

OTA system architecture diagram



5.2 Network Analyzer



Frequency Rang	2. 4G	2. 45G	2. 5G
VSWR	1. 3	1. 39	1. 43

5.3 OTA Passive test data

Frequency	Efficiency (%)	Gain (dBi)
2.4GHz	49.85	2.28
2.41GHz	52.94	2.14
2.42GHz	53.75	2.22
2.43GHz	54.71	2.13
2.44GHz	55.89	2.23
2.45GHz	56.09	2.32
2.46GHz	56.13	2.08
2.47GHz	55.6	2.07
2.48GHz	55.77	2.19
2.49GHz	52.61	2.19
2.5GHz	51.31	2.01

6. Sample inspection report

Date: 2023.07.04

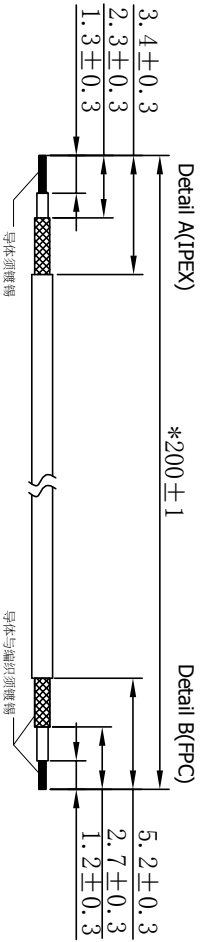
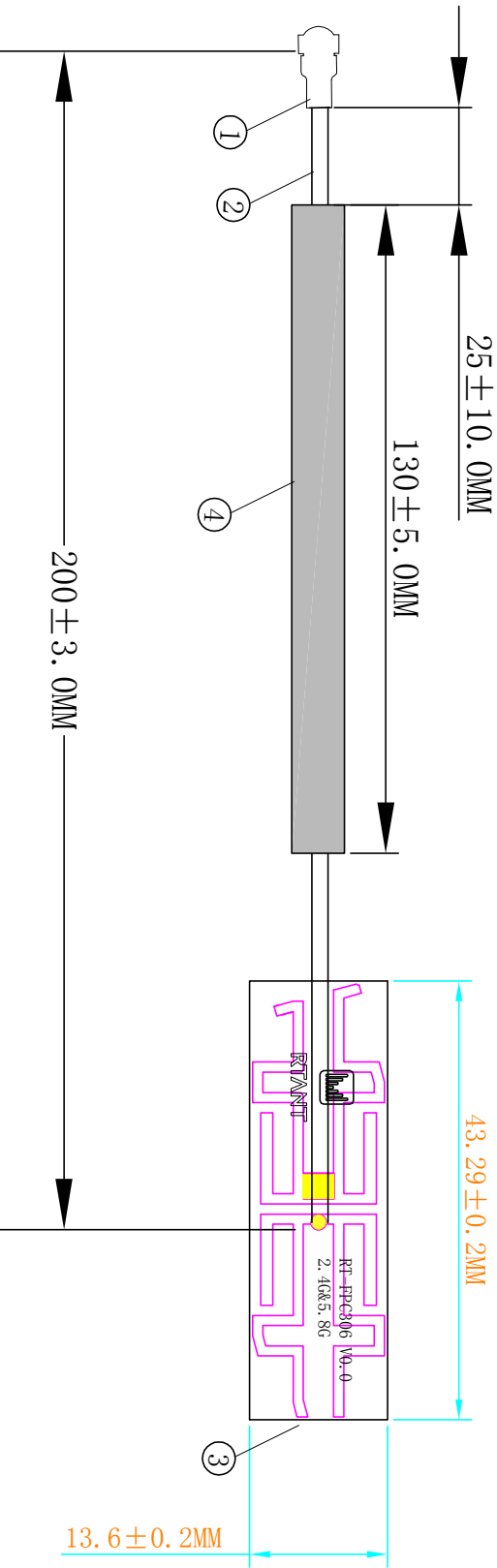
For inspection Quantity		5PCS	Qualified Quantity		5PCS			
Inspection items		Inspection standards and specifications	Test results					判定
			No. 1	No. 2	No. 3	No. 4	No. 5	
Appearance	Wire	No color difference, no dirt, no damage, no scratch	pass	pass	pass	pass	pass	■OK □NG
	IPEX	No color difference, no dirt, no damage, no scratch	pass	pass	pass	pass	pass	■OK □NG
	Plastic	No color difference, no dirt, no damage, no scratch						□OK □NG
	Welding	After welding can not cold welding, false welding, tin tip, tin beads, solder leakage	pass	pass	pass	pass	pass	■OK □NG
	Dip Tin	Dip Tin Tin can not have Tin tip, solder ball, no Dip Tin, deformation						□OK □NG
	Other							□OK □NG
Main dimensions	1	43.29±0.2mm	43.29	43.29	43.29	43.29	43.29	■OK □NG
	2	13.6±0.2MM	13.6	13.6	13.6	13.6	13.6	■OK □NG
	3	200±3.0MM	200	200	200	200	200	■OK □NG
	4	25±10.0MM	25	25	25	25	25	■OK □NG
Testing								
Electrical and functional testing	Frequency Rang	2.4-2.5GHz						
	VSWR	<2.0	pass	pass	pass	pass	pass	■OK □NG
Mechanical properties	Terminal tension	>1.0KG	1.8	1.6	1.8	1.8	1.7	■OK □NG
Notes								
Final Judgment		■ Qualified □ Disqualified □ Conditions						

Audit: Zhang

Inspection: Lei

Engineering drawings

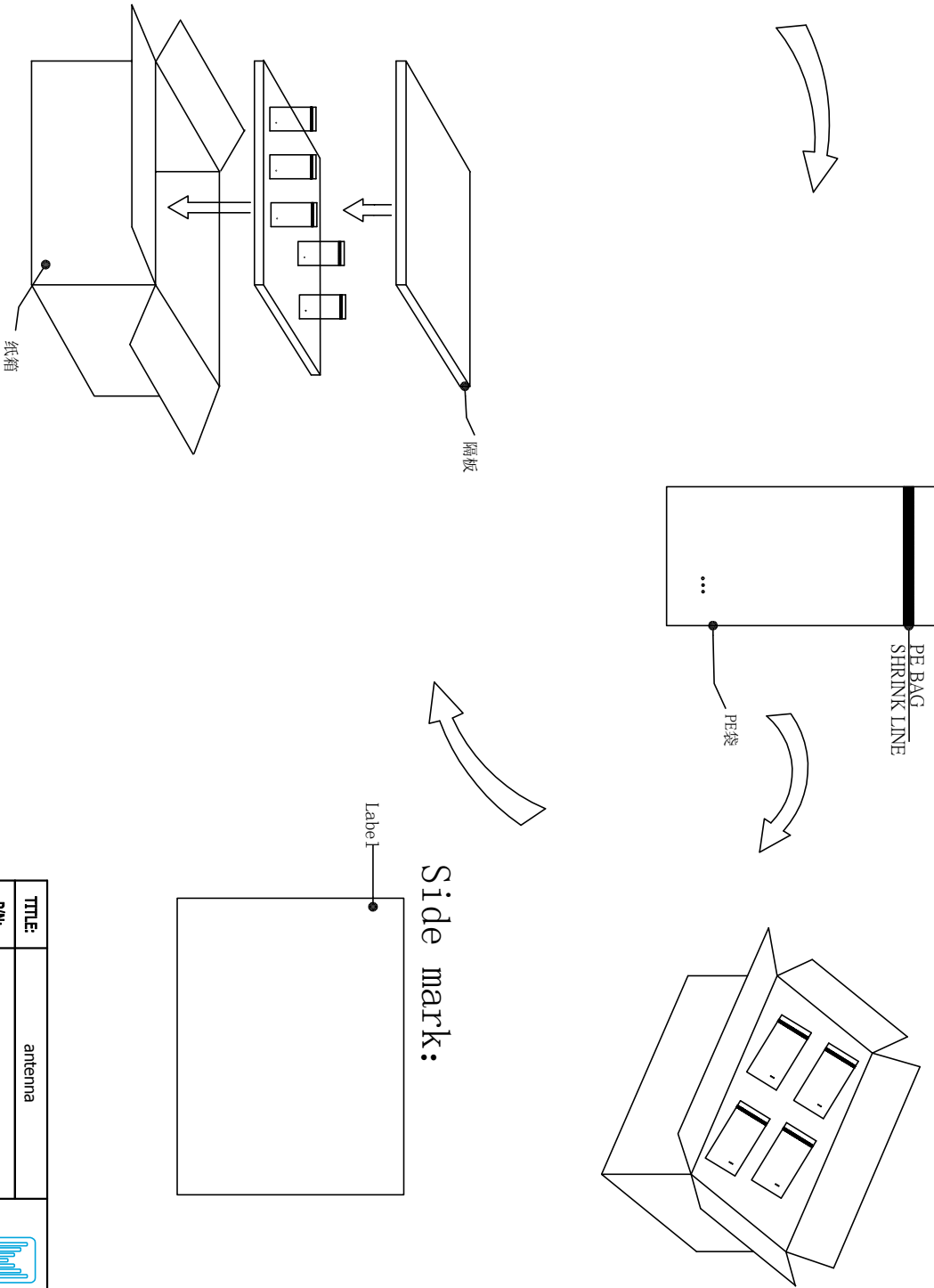
SIGN	DATE	DESCRIPTION	APPROVER
A0	23.06.25	New drawing	Jiang



4	---	Foam	---	L130. 0*W15. 0*T4. 0MM	1
3	---	FPC	Electrolytic copper	"RT-FPC306 V0. 0 ..."	1
2	W10-080009-A	ø1.13mm CABLE	Tinned copper	50 Ω Gray ROHS	1
1	Q20-160024-A	IPEX CONN#	CU	1.13 Gold plated	1
No.	Part Number	Name	Material	Describe	Q'ty

TITLE:	antenna	RTANT COMMUNICATIONS CO.,LTD	
P/N:	---	http://www.rtant.com Tel: 0769-8583386	
CUSTOMER:	Ruili	E-mail:dragn@rtant.com Fax:0769-82582573	
DRAW NO.:	RT404-10005-A	Tolerance: 1/1	
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED		SHEET: 1/1	
TOLERANCE		SCALE: NONE	
.XXX ±0.1		X ±1.0	
X ±1.0		X ±3.0	
UNIT: mm		REVA1	
APPROVED		CHECKED	
DRAWN		姜文祥	

- NOTE:
1. With " " as the key control size;
 2. Electrical testing: FREQUENCY: 2.4~2.5GHz VSWR: 2.0MAX (With case)
 3. Working Environment: -40℃~+85℃
 4. Environmental requirements: RoHS;



TITLE:		antenna																		
P/N:		---																		
CUSTOMER:		Ruili																		
DRAW NO.:		RT404-10005-A																		
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED																				
<table><tr><td rowspan="4">TOLERANCE</td><td>.00X</td><td>±0.1</td><td>.XX</td><td>±.5</td></tr><tr><td>.XX</td><td>±0.5</td><td></td><td></td></tr><tr><td>X</td><td>±1.0</td><td></td><td></td></tr><tr><td>X</td><td>±3.0</td><td></td><td></td></tr></table>				TOLERANCE	.00X	±0.1	.XX	±.5	.XX	±0.5			X	±1.0			X	±3.0		
					TOLERANCE	.00X	±0.1	.XX	±.5											
						.XX	±0.5													
						X	±1.0													
X	±3.0																			
SHEET: 1/1		SCALE: NONE																		
UNIT: mm		REV:A0																		
DRAWED		姜文祥																		
APPROVED																				
CHECKED																				

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