

acknowledgement

product description:

Manufacturer: Shenzhen Yusheng Communication Equipment Co., LTD

Material: BT antenna

Name:

Material: 3.01.TGW01XX000

Code: R:a

version number:

Electrical and mechanical performance description (specifications)

manufacturing flow chart

CPK Report

full-size measurement report

List of raw materials / RoHS Report / HF / REACH

QC engineering drawing

sample

Reliability test report

Packaging mode

(Everything needs to be provided)

Supplier signature and draft:

audit:

Approval:

(All of the above require manual signature, and printing is not allowed)

The above should be filled in by the supplier and the following by Aidu

	department	Confirm content				Confirm the results	Valfirm person / date
Technical confirmation field	Supplier quality	☐ RoHS material ☐ Non-RoHS materials	☐ Compliance with the REACH requirements	☐ Meet the halogen-free requirements	☐ Other environmental protection requirements		
	Design department ID:	☐ Customer request ID	☐ color confirmation	☐ Surface process validation	☐ Shell, hardware, key material		
	construction engineer	☐ 2D drawing file dimensional confirmation ☐ Specification and technical requirements	☐ Focus on controlling the dimension labeling ☐ electrical performance parameters	☐ adaptation validation ☐ function	☐ Shell, hardware, key material ☐ effect		
	hardware engineer	☐ 2D drawing file dimensional confirmation ☐ Specification and technical requirements	☐ Focus on controlling the dimension labeling ☐ electrical performance parameters	☐ adaptation validation ☐ function	☐ Shell, hardware, key material ☐ effect		
	Research and development quality:	☐ Test criteria confirm the appearance ☐ appearance	☐ Normative dimension labeling (key ruler cun)	☐ reliability verification ☐ adaptation validation	☐ Function ☐ effect		

Final Confirmation of the Project Manager:

☐ Acknowledge the integrity of the documents	☐ Specification and technical requirements	☐ Electrical performance parameters	☐ function	☐ effect
☐ Normalization of dimensions (key dimensions)	☐ appearance			

Conditions of recognition: ☐ formal recognition

☐ limited recognition

☐ disallow

Distribution department: ☐ IQC ☐ supplier ☐ customer ☐ after-sales ☐ SQE / text control

☐ other_____

QF -QMP -QA 01-01

catalogue

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1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for DR03 products.

This requirement applies to the selection, testing and acceptance of DR03 antennas.

2. Technical index requirements

2.1 Introduction of test items and equipment

inventory	test item	equipment
S11 parameter	Standing wave ratio, echo loss	network analyzer
Active test	TRP,TIS	Integrated tester, microwave darkroom
Passive test	Gain, efficiency	network analyzer

2.2 Active Reporting

2.2.1 Test instructions

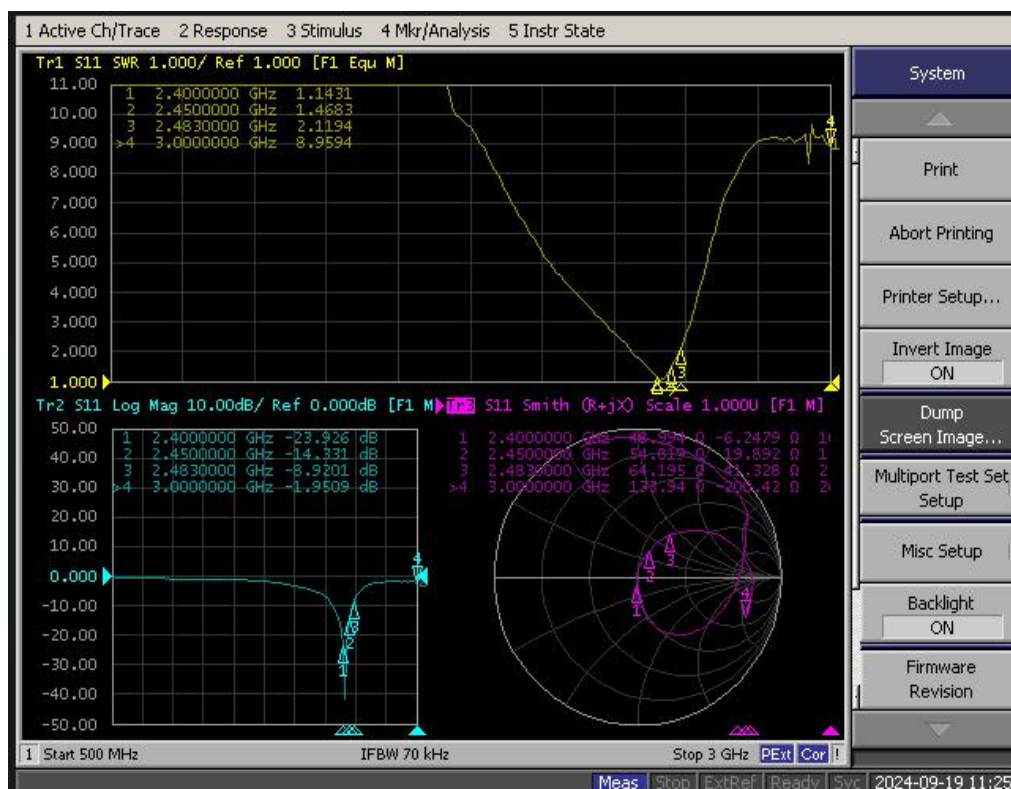
Test tools: Agilent8960 instrument, R & SCMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

Test environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$

Test method: DUT is fixed in the center of the turntable with H plane, on the same horizontal line as the center of the horn antenna.

The positioning system enables the DUT to rotate in the whole sphere to satisfy the high-precision 3 D positioning. Each RF instrument and turntable controller communicate with PC with automatic test software through GPIB interface.

2.2.2 Antenna S11 passive parameters



2.2.3 BT antenna Passive parameter -FS

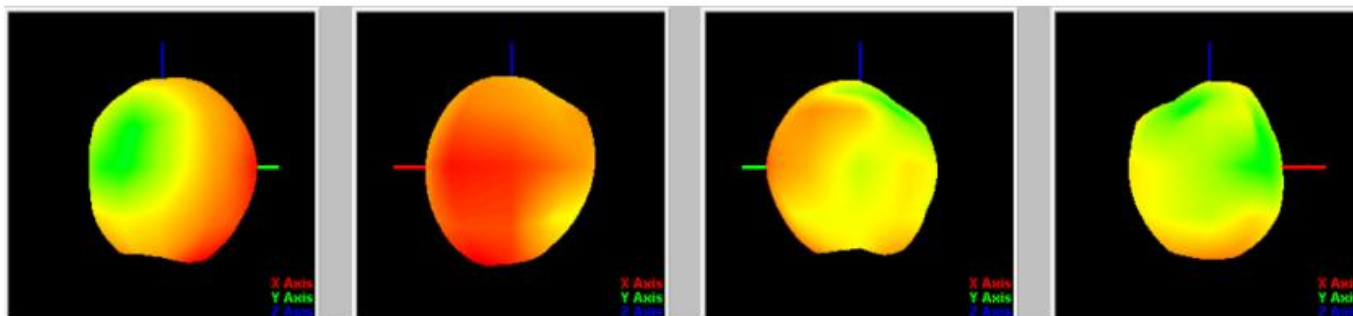
Test	Free-space								
Test Point ID	1	2	3	4	5	6	7	8	9
Freq.(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480
Efficiency (%)	19.1	19.5	19.8	20.5	20.8	20.4	19.7	18.5	18.2
productiveness (dB)	-7.2	-7.1	-7.0	-6.9	-6.8	-6.9	-7.1	-7.3	-7.4
gain (dBi)	-3.95	-3.76	-3.57	-3.62	-3.24	-3.57	-3.67	-3.81	-3.95

2.2.4 BT antenna Passive parameters -ARM

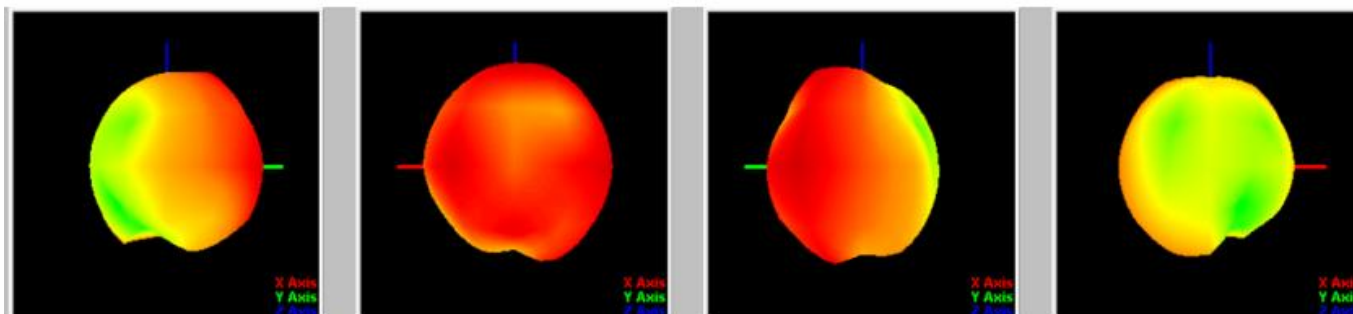
Test	ARM								
Test Point ID	1	2	3	4	5	6	7	8	9
Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480
Efficiency (%)	6.9	7.1	7.5	8.1	8.2	8.1	7.8	7.3	7.0
productiveness (dB)	-11.6	-11.5	-11.3	-10.9	-10.9	-10.9	-11.1	-11.4	-11.6
gain (dBi)	-6.57	-6.52	-6.39	-5.76	-5.69	-5.77	-5.95	-6.27	-6.53

2.2.5 Antenna pattern -BT

FS

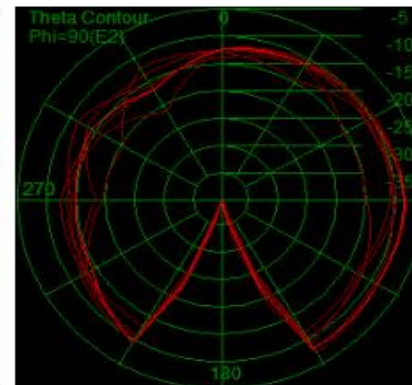
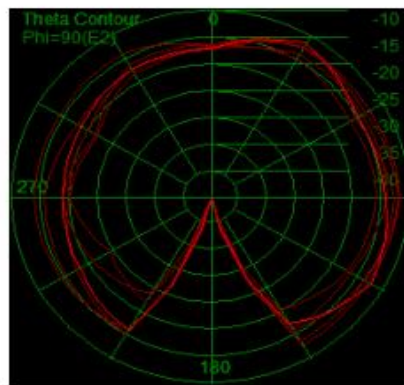
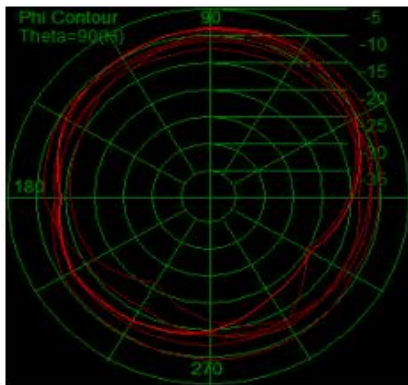


ARM

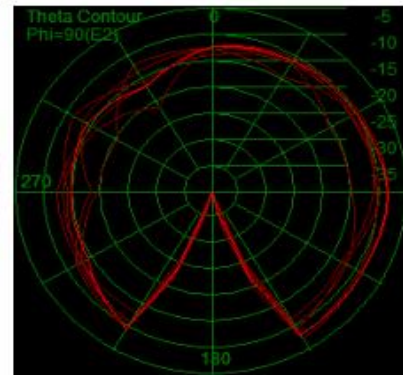
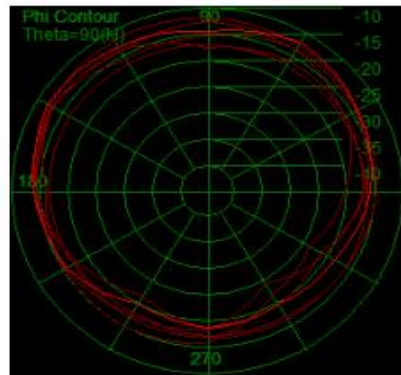
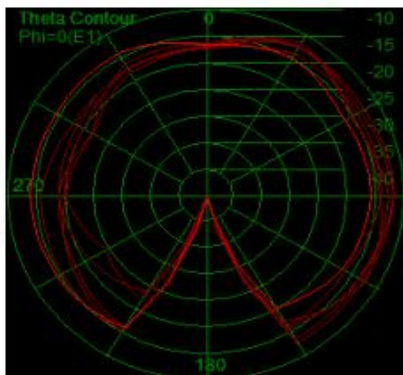


2.2.6 Antenna plan -BT-ARM

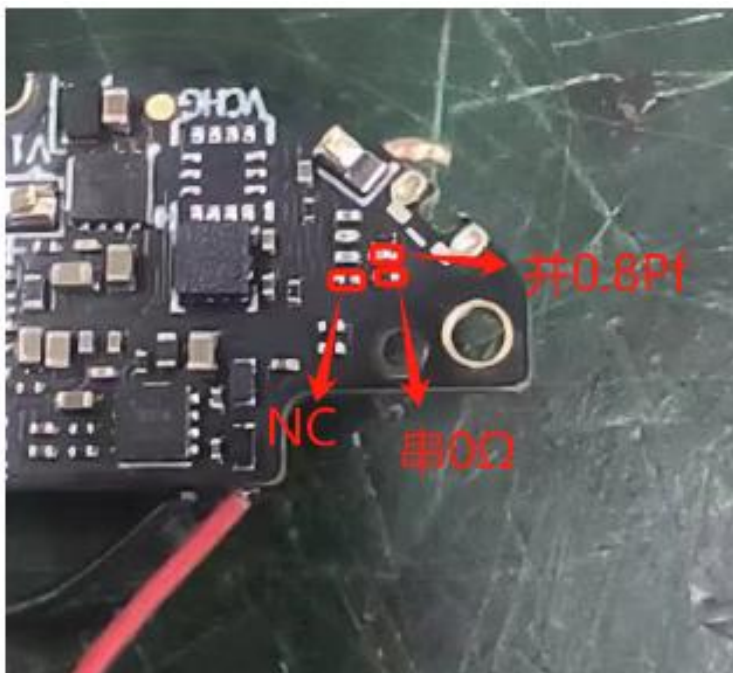
FS



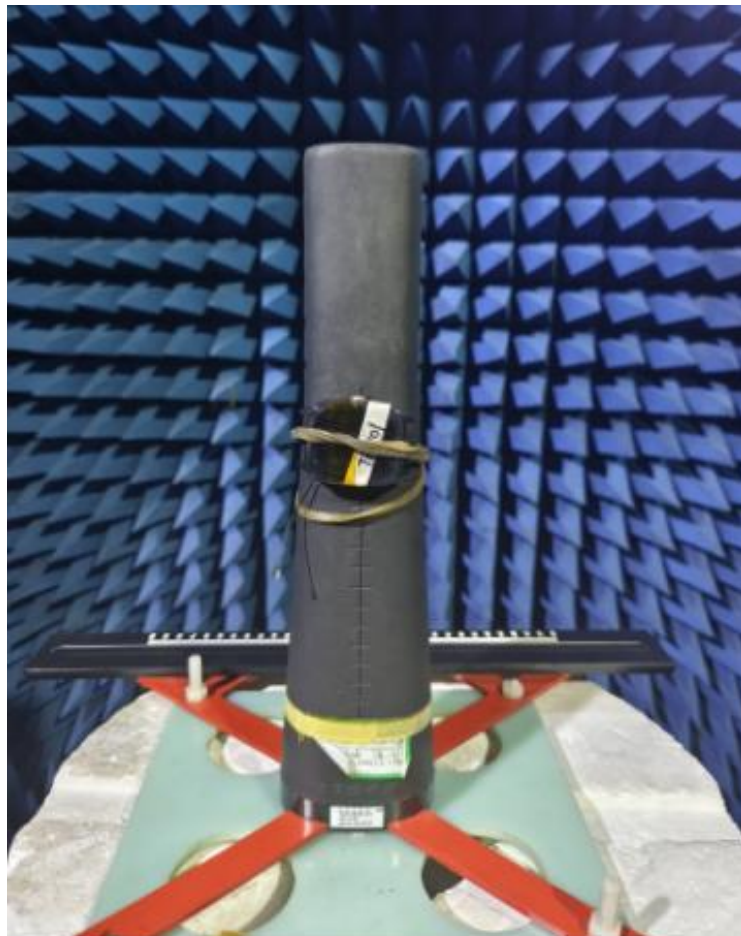
ARM



2.2.7 antenna loading coil



2.2.8 Antenna test environment



3.Engineering drawing file

911



Shenzhen Yusheng Communication Equipment Co., LTD

4.Bill Of Material



Shenzhen Yu Sheng communication preparation Co., LTD

063046 (TGW01) -BOM

edition: R:A

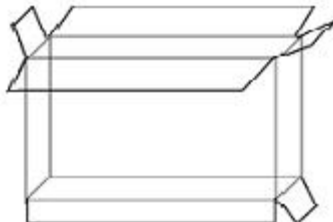
client: 063

Type of aircraft: 063046

Set a date: 2024/10/24

Ite	*Material code	*Material name	name	*Machine type	Specification and model	colour	*UNIT.	dosage	remark
1	063046-IA-TA	BT-FPC		TGW01	Black FPC electrolytic copper 1 half with 0.3mmPET reinforcing plate gold plated 10.83*12.42*0.12MM	black	PCS	1	
1.1	063046-IA-01-TA	BT-FPC		TGW01	Black FPC electrolytic copper 1 half with 0.3mmPET reinforcing plate gold plated 10.83*12.42*0.12MM	black	PCS	1	
verify:			examine:			manufacture: BYZ			

5. Packaging information

Packaging method diagram		
product name	FPC antenna	
P / N	063046	
Project model	TGW01	
File details	Carton Size 1: 270*260*200MM Carton Size 2: 260*200*200MM Carton Size 3: Depending on the order quantity / volume	
	Boating method	Packaging by order quantity
	Total number of binning	Packaging by order quantity
labeling requirement	Tag Size 1: Universal use 100 * 100mm Tag Size 2: According to customer requirements	
matters need attention		
1. Due to the limitation of order quantity, the packing method of each material is the size of the box according to the total quantity of the order or the physical volume		
2. Storage temperature: room temperature		
3. Preservation conditions: store them in a cool and dry place		