

2.4/5.8G-Bunghol mushrooms Project antenna specification

Customer name: BuTingKeji

Product name: 2.4/5.8G-Bunghol mushrooms

Supplier part number: 557002

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RF				

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The demander's judgment result: ☐ qualified ☐ unqualified			
Development & Design Engineer / Date	SQE Engineer / Date	Purchasing Leader / Date	Development Manager approval / date

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1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for 2.4/5.8G-Bunghol mushrooms products.

This requirement applies to the selection, testing and acceptance of 2.4/5.8G-Bunghol mushrooms antennas.

1.2 Project basic information

Antenna name:	<u>2.4/5.8G-Bunghol mushrooms</u>
Antenna frequency:	WIFI: 2.4G-2.5G 5.1G-5.8G
Antenna material:	External antenna

2. Technical index requirements

2.2.1 Introduction of test items and equipment

inventory	test item	equipment
Active test	TRP,TIS	Integrated tester, microwave darkroom

2.2.2 Test instructions

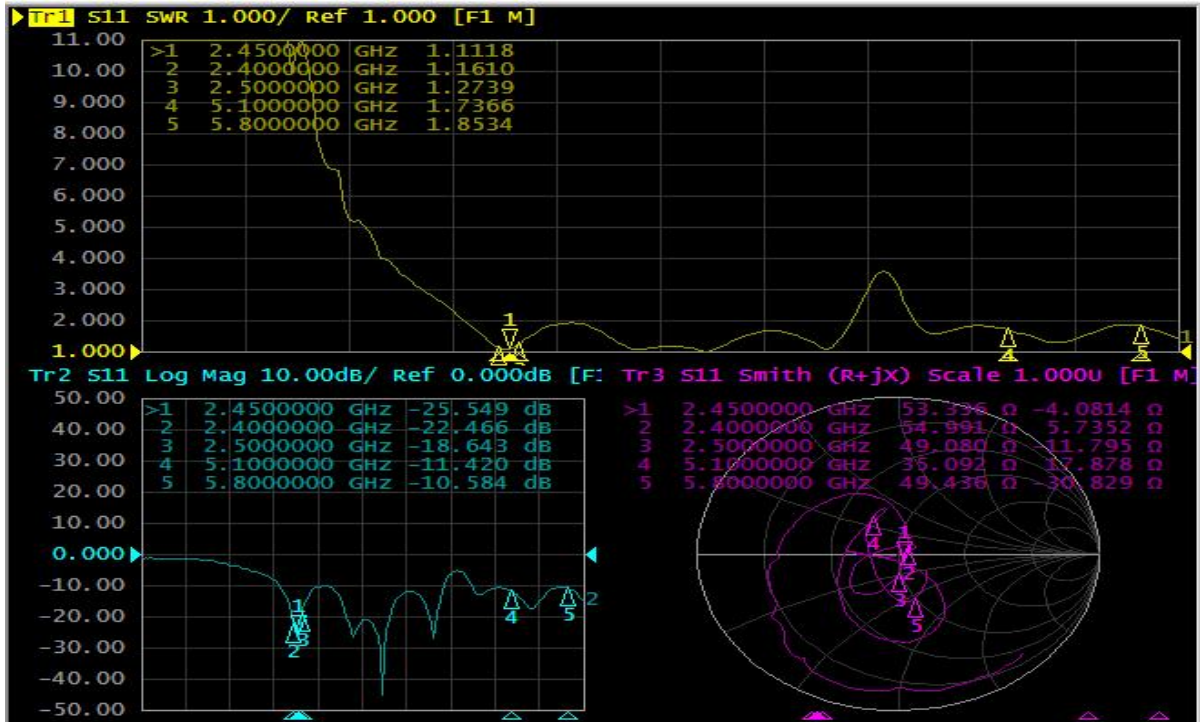
Test tools: Agilent8960 instrument, R & SCMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

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 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 the PC with automatic test software through the GPIB interface.

2.2.3 WIFI Antenna (Figure LOGMAG+VSWR+SMITH)

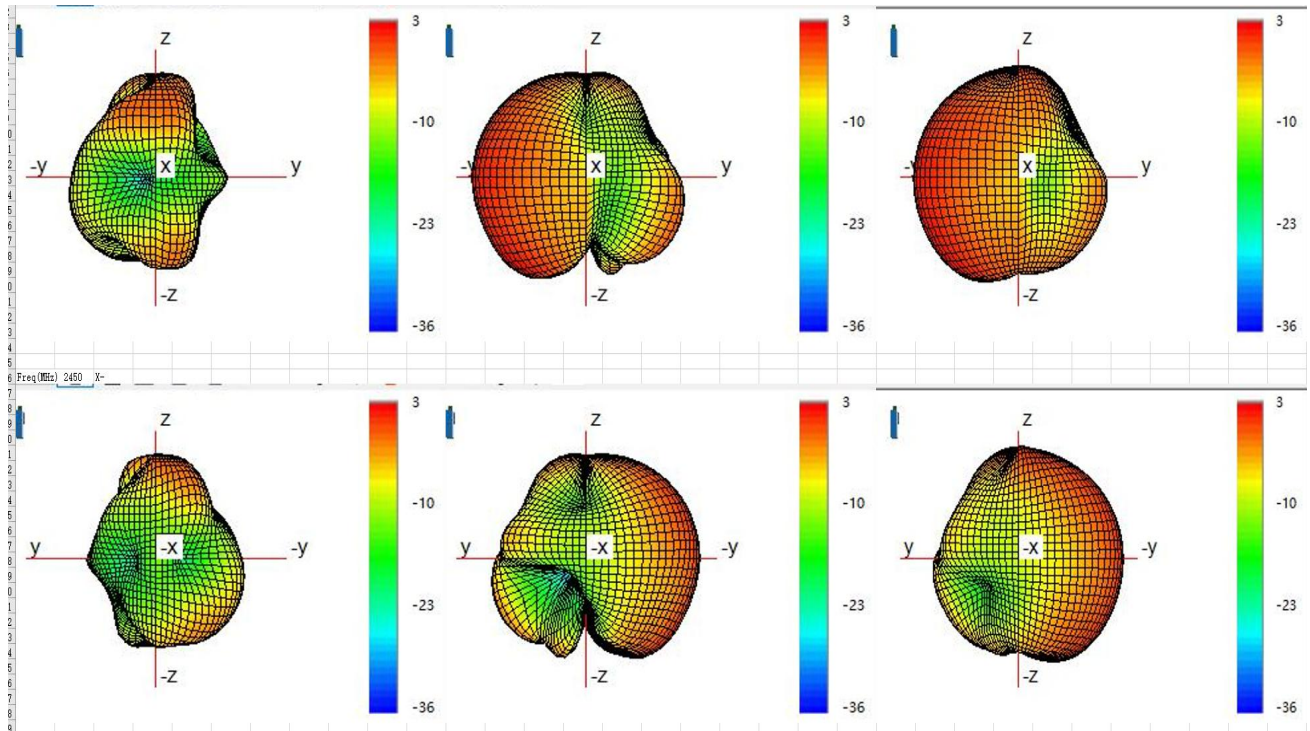


2.2.4 WIFI1-Antenna efficiency and gain

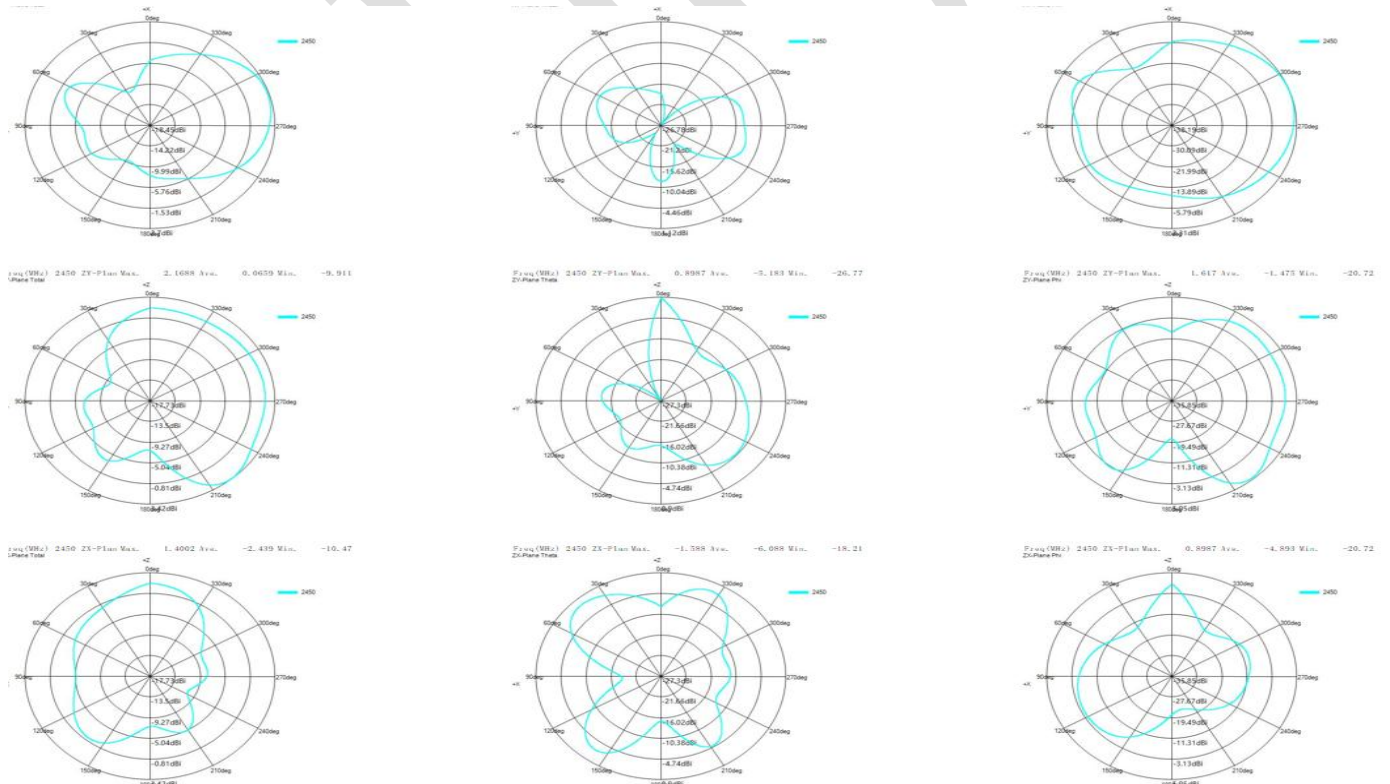
Passive Test For 2400MHz~2500MHz				
Freq	Effi	Effi	Gain	
(MHz)	(%)	(dB)	(dBi)	
2400	60.2%	-2.20	1.76	
2410	60.5%	-2.18	1.84	
2420	61.2%	-2.13	2.03	
2430	62.1%	-2.07	2.26	
2440	63.4%	-1.98	2.37	
2450	64.5%	-1.90	2.48	
2460	63.3%	-1.99	2.34	
2470	62.2%	-2.06	2.23	
2480	61.5%	-2.11	2.19	
2490	60.9%	-2.15	2.02	
2500	60.3%	-2.20	1.81	

Passive Test For 5100MHz~5800MHz				
Freq	Effi	Effi	Gain	
(MHz)	(%)	(dB)	(dBi)	
5170.0	61.6%	-2.10	1.56	
5210.0	62.4%	-2.05	1.67	
5250.0	63.1%	-2.00	1.72	
5290.0	64.6%	-1.90	1.74	
5330.0	62.5%	-2.04	1.81	
5370.0	65.3%	-1.85	1.95	
5410.0	66.2%	-1.79	2.04	
5450.0	66.8%	-1.75	2.16	
5490.0	67.4%	-1.71	2.52	
5530.0	66.2%	-1.79	2.44	
5570.0	65.6%	-1.83	2.27	
5610.0	64.8%	-1.88	1.96	
5650.0	63.7%	-1.96	1.85	
5690.0	62.6%	-2.03	1.72	
5730.0	61.4%	-2.12	1.61	
5770.0	60.7%	-2.17	1.57	
5810.0	60.1%	-2.21	1.53	
5850.0	59.5%	-2.25	1.48	

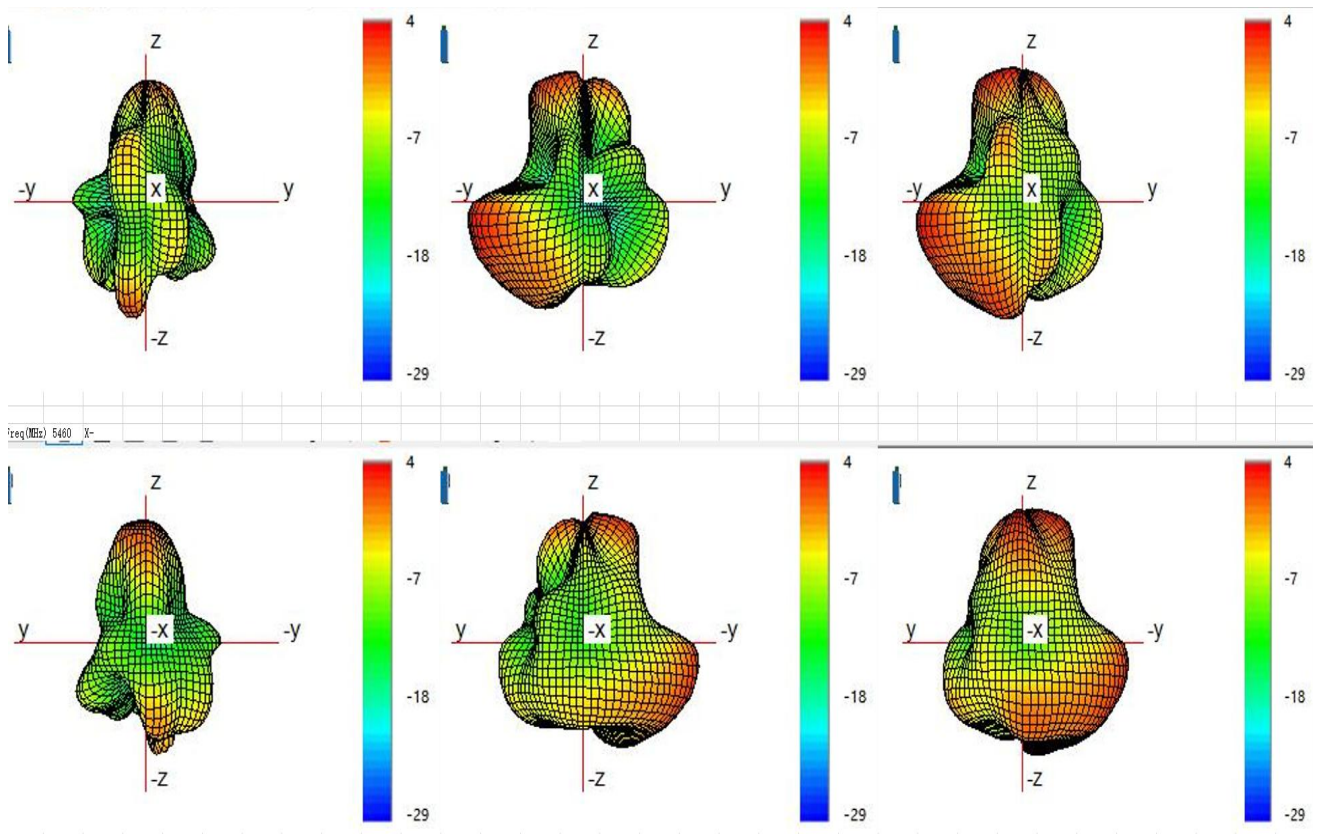
2.2.5 ANT1-2.4G



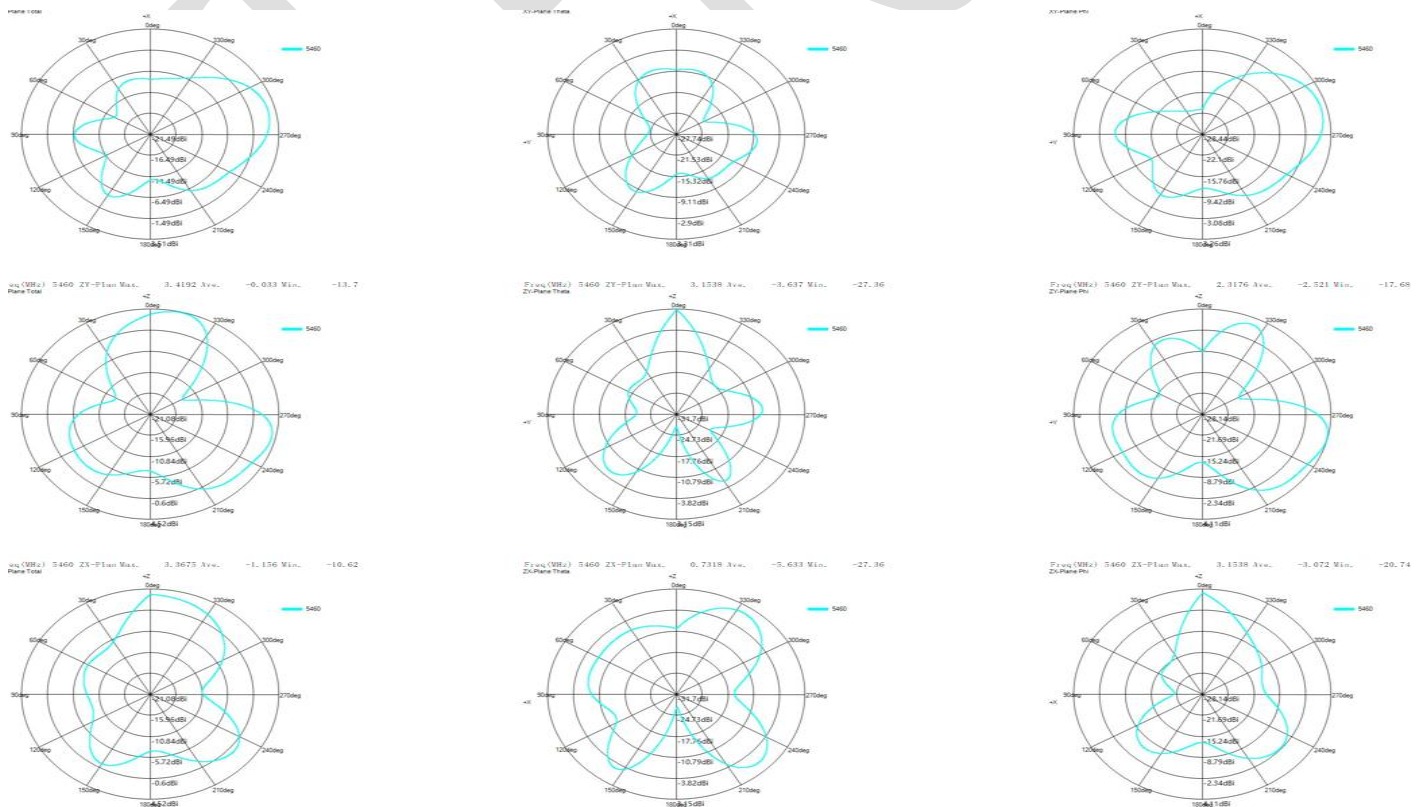
2.2.6 ANT1-2.4G



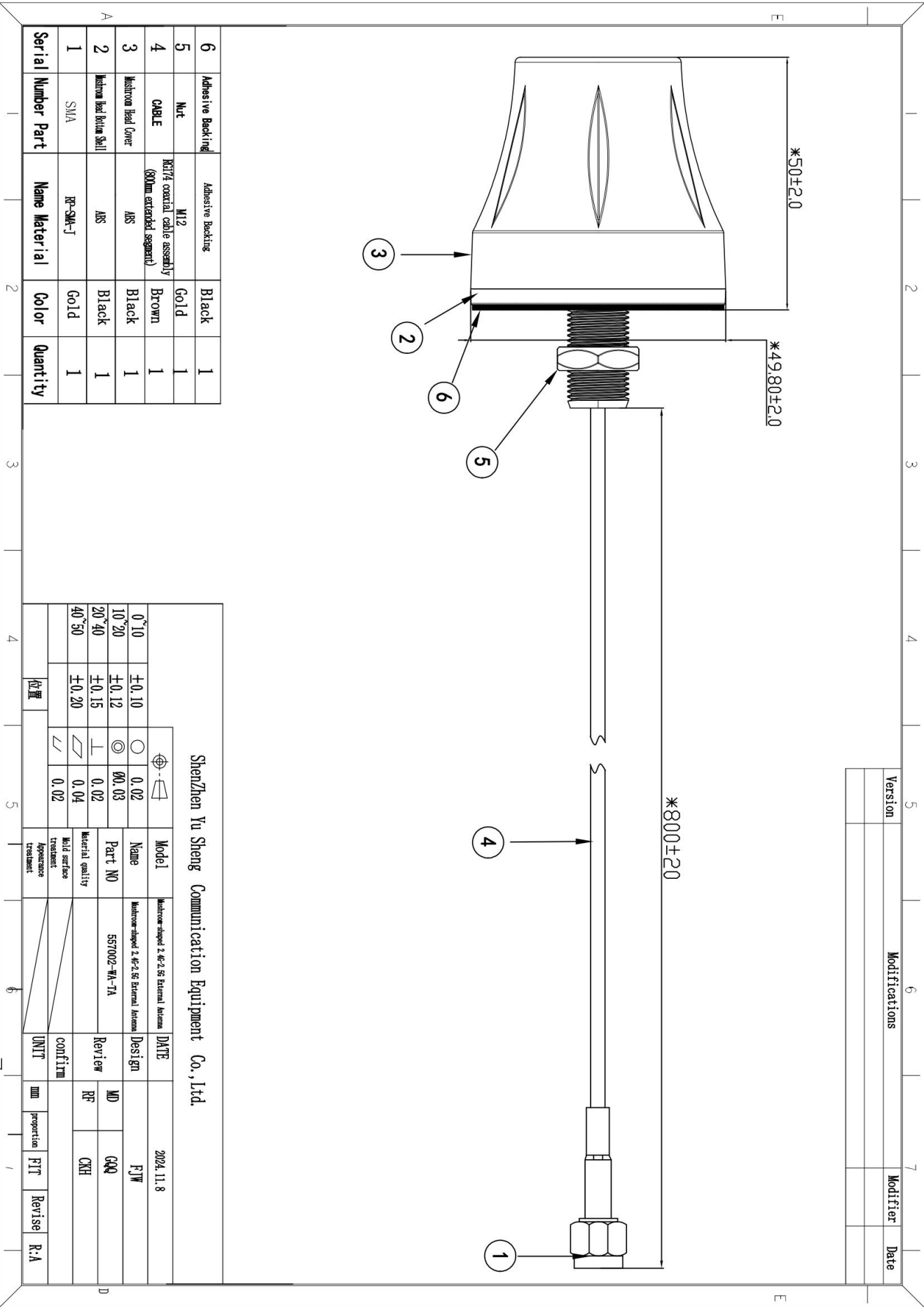
2.2.7 ANT1-5.8G



2.2.8 ANT1-5.8G



3.Antenna size diagram



4.BOM

557002 (Mushroom-shaped 2.4G-2.5G External Antenna) BOM

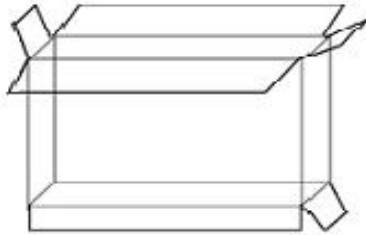
edition: T:A

Type of aircraft: 557002

Set a date: 2025/1/2

Item numb	* Material code	* Material name	* Machine type	Specification and model	colour	*unit.	dosage	remark
1	557002-WA-TA	Mushroom-shaped 2.4G-2.5G External Antenna	Mushroom-shaped 2.4G-2.5G External Antenna	RG174 Black Cable Assembly with RP-SMA-J Connector	Black	PCS	1	
1.1	557002-WA-01-TA	Mushroom-shaped 2.4G-2.5G External Antenna	Mushroom-shaped 2.4G-2.5G External Antenna	RG174 Black Cable Assembly with RP-SMA-J Connector	Black	PCS	1	
verify:			examine:			manufacture: BYZ		

5.Package drawing

Packaging method diagram		
P / N	577002	
Project model	<u>2.4/5.8G-Bunghol mushrooms</u>	
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		

6. Manufacturer information

Manufacturer: Shenzhen Yusheng Communication Equipment Co., LTD

Address: 4th Floor, Building 2, Nantai Cloud Valley Park, southeast of the intersection of Guangming Avenue and Dongchang Road, Guangming District, Shenzhen

THOT