

Material requirement specification for the G-CW1303D project antenna

Customer name: XieChuang

Customer product name: G-CW1303D

Product name: WIFI antenna

Product specification: See the BOM table for more details

Product code: 400105680

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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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Catalogue

1. OVERVIEW	3
1.1 SCOPE OF APPLICATION	3
1.2 PROJECT BASIC INFORMATION	3
2. TECHNICAL INDEX REQUIREMENTS	3
2.1 ACTIVE REPORTING	3
2.2 TEST INSTRUCTIONS	3
2.2.1 WIFI ANTENNA PASSIVE PARAMETERS	4
2.2.2 WiFi ANTENNA EFFICIENCY AND GAIN	5
2.2.3 2. 4G-WiFi ANTENNA DIRECTION PATTERN	5
2.2.4 5G-WiFi ANTENNA DIRECTION PATTERN	6
2.2.5 ANTENNA POSITION	6
3. ENGINEERING DRAWINGS	7
3.1 WIFI	7
4. BILL OF MATERIAL	8
5. PACKAGE SCHEMATIC DIAGRAM	9
6. SUPPLIER INFORMATION	10

1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for G-CW1303D products.

This requirement is applicable to the antenna selection, testing and acceptance of G-CW1303D products.

1.2 Project basic information

Antenna name:	G-CW1303D
Antenna band:	WIFI : 2400MHz-2500MHz
Antenna material:	FPC antenna + coaxis

2. Technical index requirements

2.1 Active Reporting

2.2 Test instructions

Test tools: Agilent8960 instrument, R & S CMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

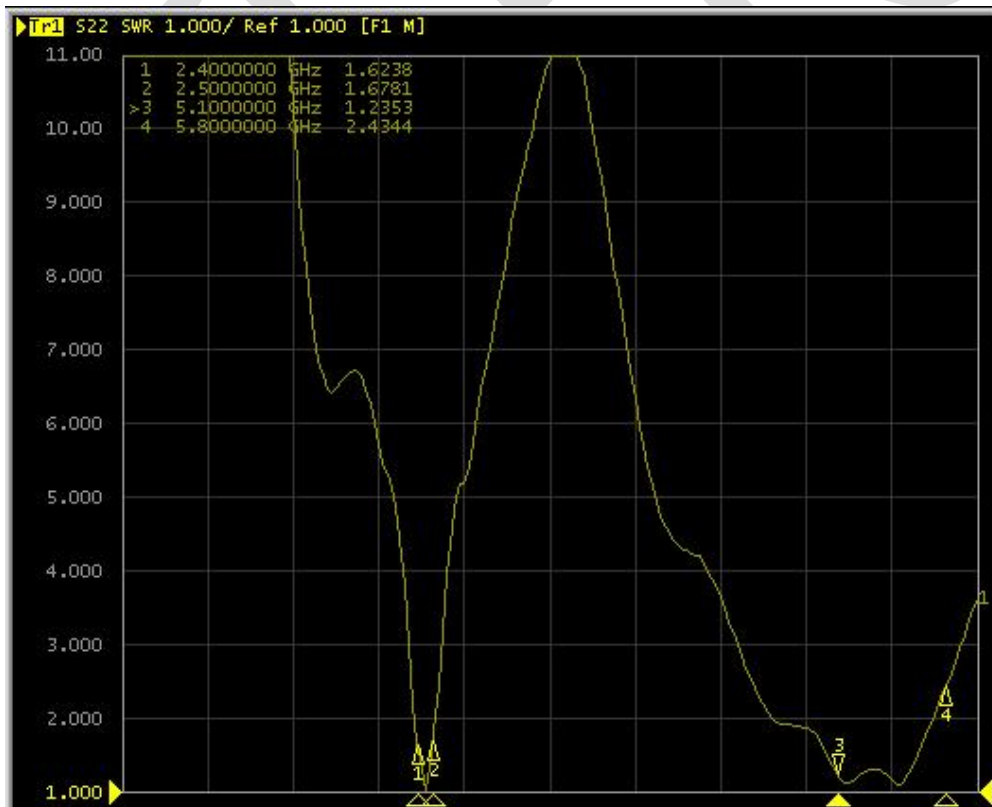
Test environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$

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 the PC with automatic test software through the GPIB interface.

2.2.1 WIFI antenna passive parameters

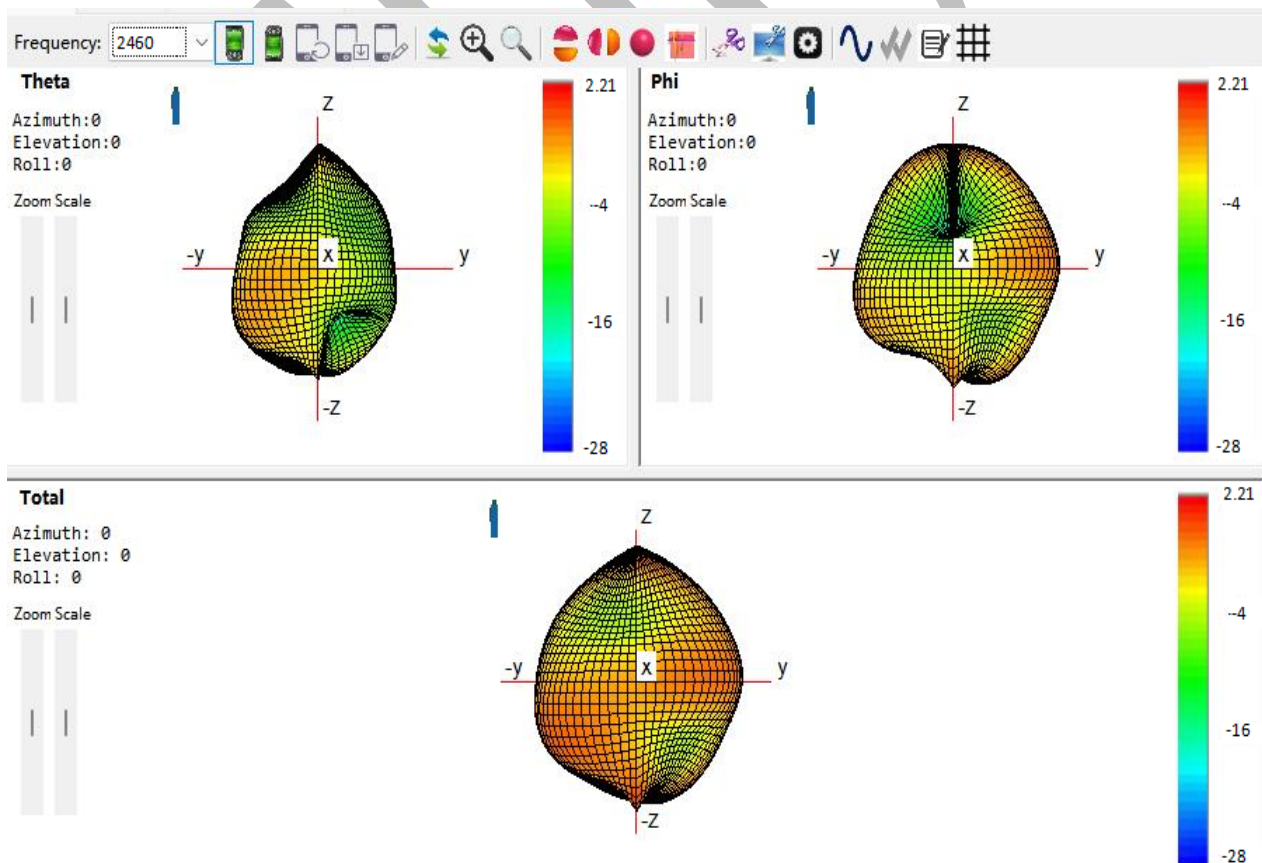
	frequency range	CH	TRP (db)	TIS (dbm)
WIFI	11B	CH1	15.72	-83.52
		CH6	15.60	-82.79
		CH11	15.35	-82.81
	11G	CH1	13.51	-72.55
		CH6	13.77	-71.59
		CH11	13.46	-71.70
	11N	CH1	13.62	-70.55
		CH6	13.54	-69.63
		CH11	13.40	-69.16
	11A	36	12.92	-73.54
		149	12.86	-73.21
		165	12.60	-73.37
	11A	36	15.72	-90.10
		149	15.60	-90.43
		165	15.57	-90.40



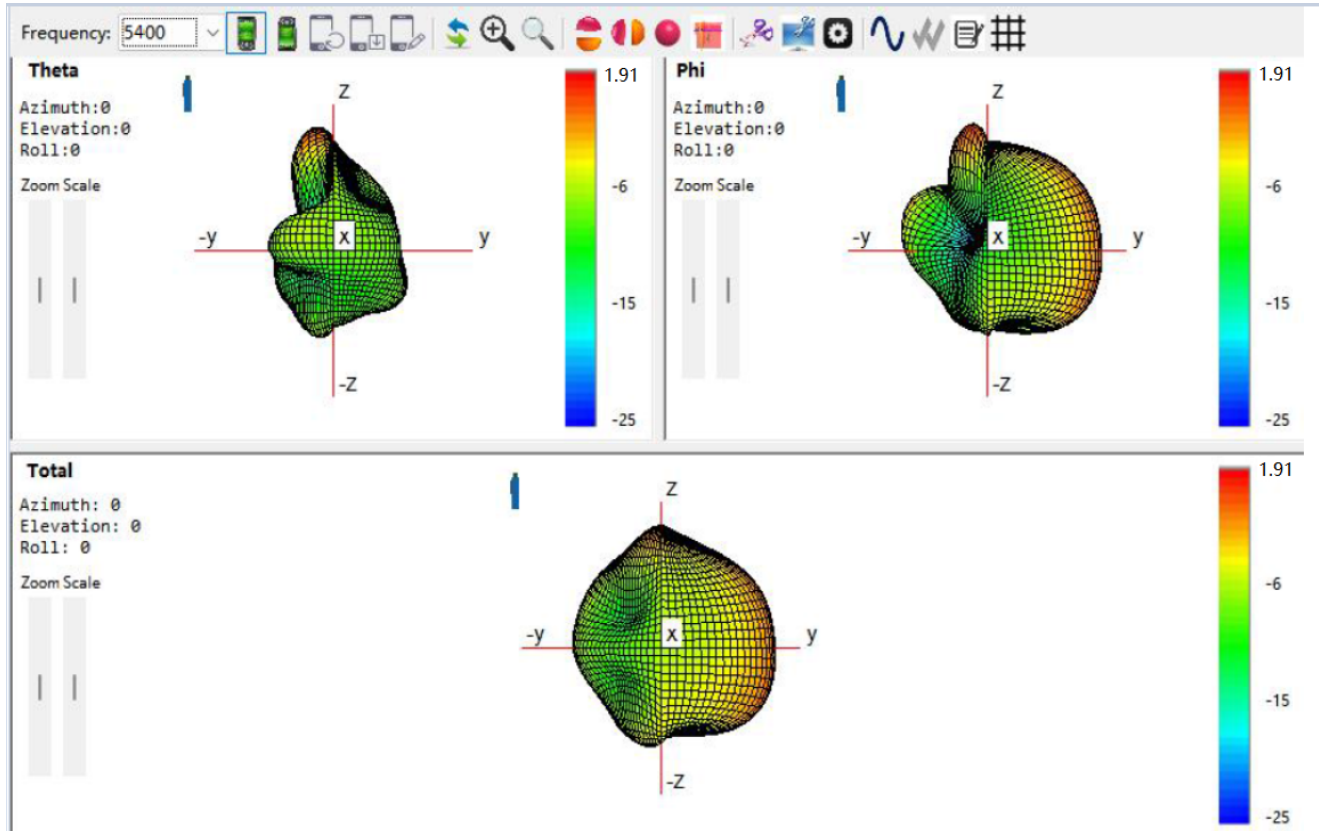
2.2.2 WiFi Antenna Efficiency and Gain

Freq (MHz)	Effi (%)	Gain	Freq (MHz)	Effi (%)	Gain
2400	51.4	1.92	5100	54.6	1.53
2410	52.3	1.97	5200	55.1	1.65
2420	52.8	2.08	5300	55.6	1.77
2430	53.4	2.11	5400	55.9	1.91
2440	54.7	2.16	5500	56.4	1.84
2450	55.3	2.17	5600	55.7	1.73
2460	55.7	2.21	5700	55.3	1.67
2470	54.8	2.14	5800	53.8	1.61
2480	53.3	2.10			
2490	52.7	2.06			
2500	52.1	2.02			

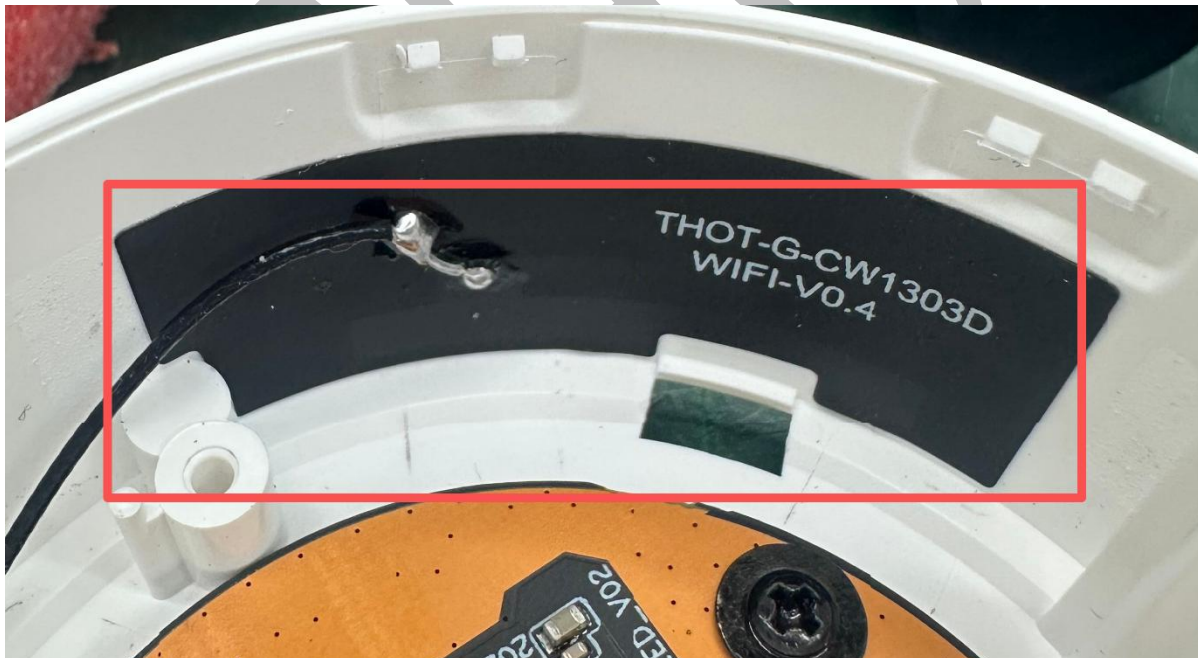
2.2.3 2. 4G-WiFi Antenna Direction Pattern



2.2.4 5G-WiFi Antenna Direction Pattern

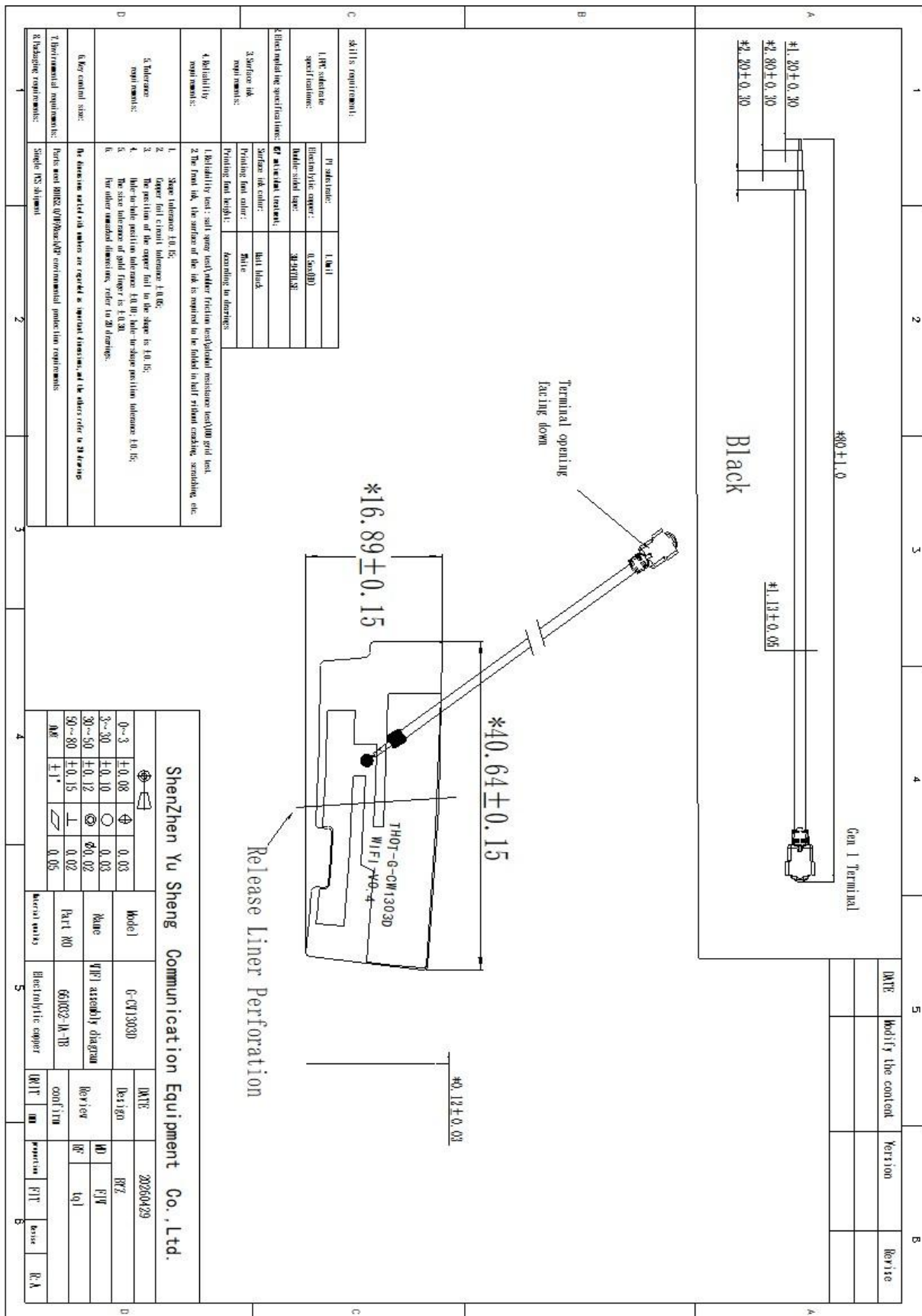


2.2.5 Antenna position



3.Engineering drawings

3.1 WIFI



4. Bill Of Material

661032 (G-CW1303D)-BOM

Edition : T:B

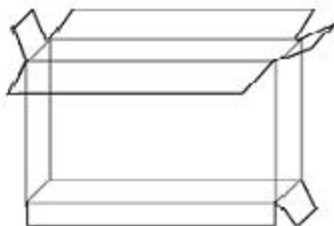
client : 661

Type of aircraft : 661007

Set a date : 2026/6/16

NO.	*Material code	*Material name	name	*Machine type	Specification and model	colour	*UNIT.	dosage	remark
2	661032-IB-TA	3216 Chip Antenna		G-CW1303D	Bluetooth Chip Antenna, 3.23×1.66×1.23 mm	black	PCS	1	
verify : examine : manufacture : BYZ									

5.Package schematic diagram

Packaging method diagram		
product name	Antenna components	
P / N	661032	
Project model	G-CW1303D	
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. Supplier Information

Supplier Name: Shenzhen Yusheng Communication Equipment Co., Ltd.

Supplier Address: Rooms 407–411, 4th Floor, Building 2, Nantai Cloud Innovation Valley Park, southeast side of the intersection of Guangming Avenue and Dongchang Road, Guangming District, Shenzhen

THOT