

SPECIFICATION FOR APPROVAL

Customer Name

Beijing Shenzhou Anfu Technology Co.,Ltd

Customer P/N.

123020069-11

Product Description

AF980 WIFI/BT

BGS P/N

AFB-061C （ver.RA）

Manufacturer

Shenzhen bogesi communication technology co.,ltd

Approve Date

2025/8/13

BGS Sign and Seal	Customer Sign and Seal

Change the content	Version	Date
first edition	RA	2025/8/13

Note: 1. After the electronic file or paper file that has been stamped by BGS and was provided to the customer,, the customer need to sign the paper or electronic file of the approval back to BGS before place the formal order to BGS. If there is no formal change or change notice, BGS acqu iesce that the customer approvel and accept this specification of product .

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1.Antenna Specification

1.1: Electrical Specification

Freq.Range（MHz）	1560-1580； 2400-2500； 5150-5850
Impedance（Ω）	50
VSWR	≤3
Directional	Omni directional
Polarization	Linear
Gain（dBi）	1560-1580： -5.05
	2400-2500： -4.29
	5150-5850： -0.8

1.2: Mechanical Specification

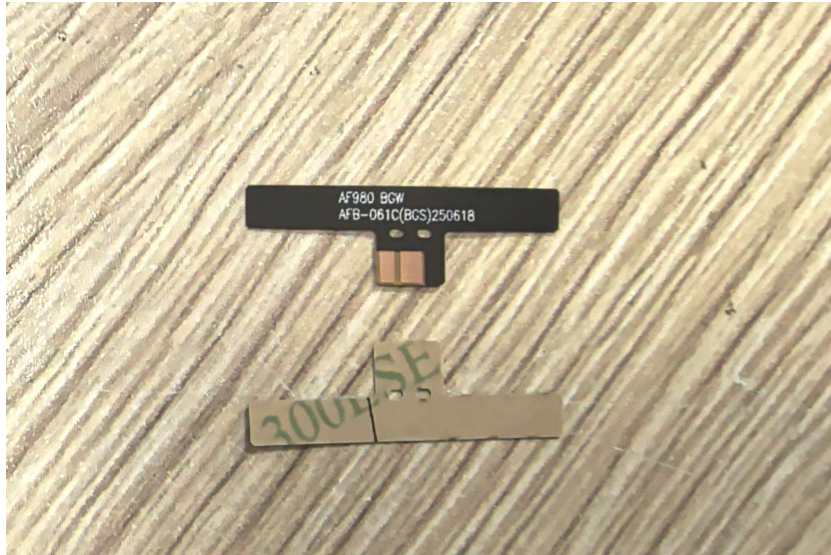
Material	FPC
RF Cable Type	N/A
Connector Type	N/A

1.3: Environmental Specification

Operation temp	-40℃～+85℃
storage temperature	-40℃～+85℃

2. Antenna Picture and Installation Instructions

2.1: Antenna Picture



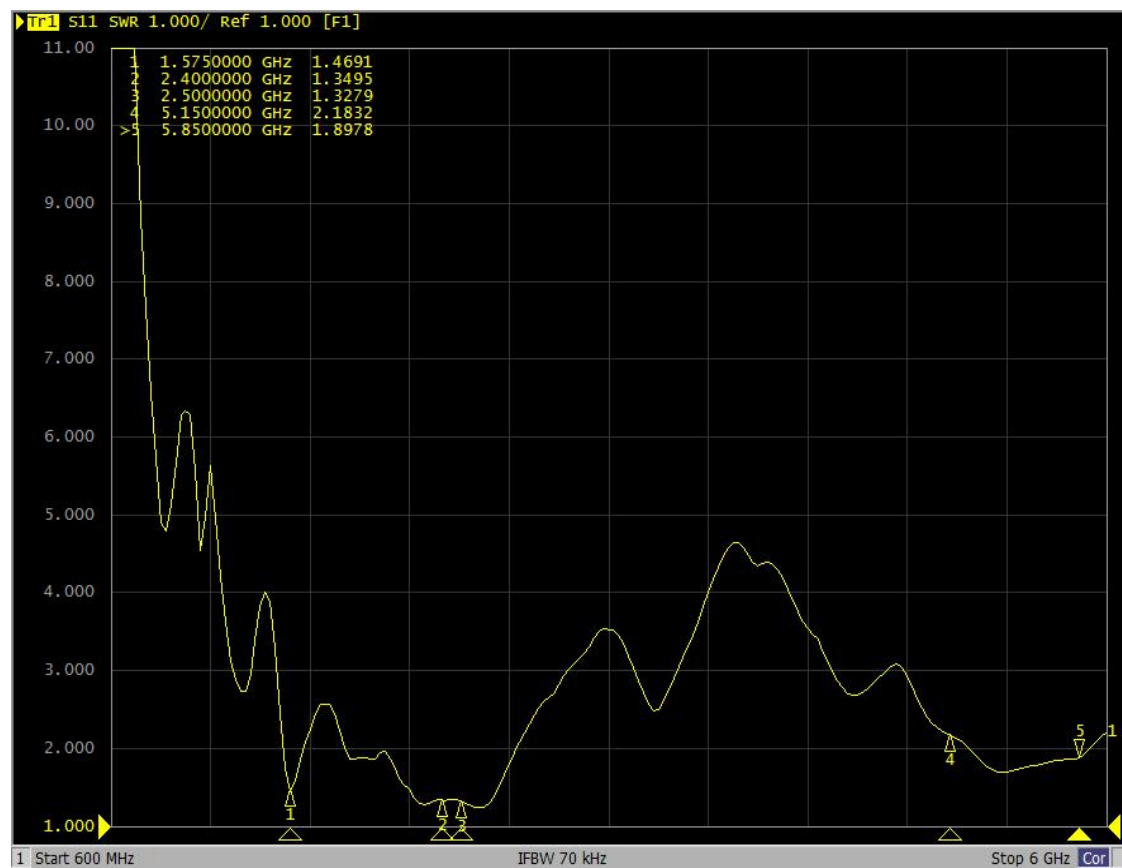
2.2: Installation Instructions



FPC mounting diagram

3.Test Report

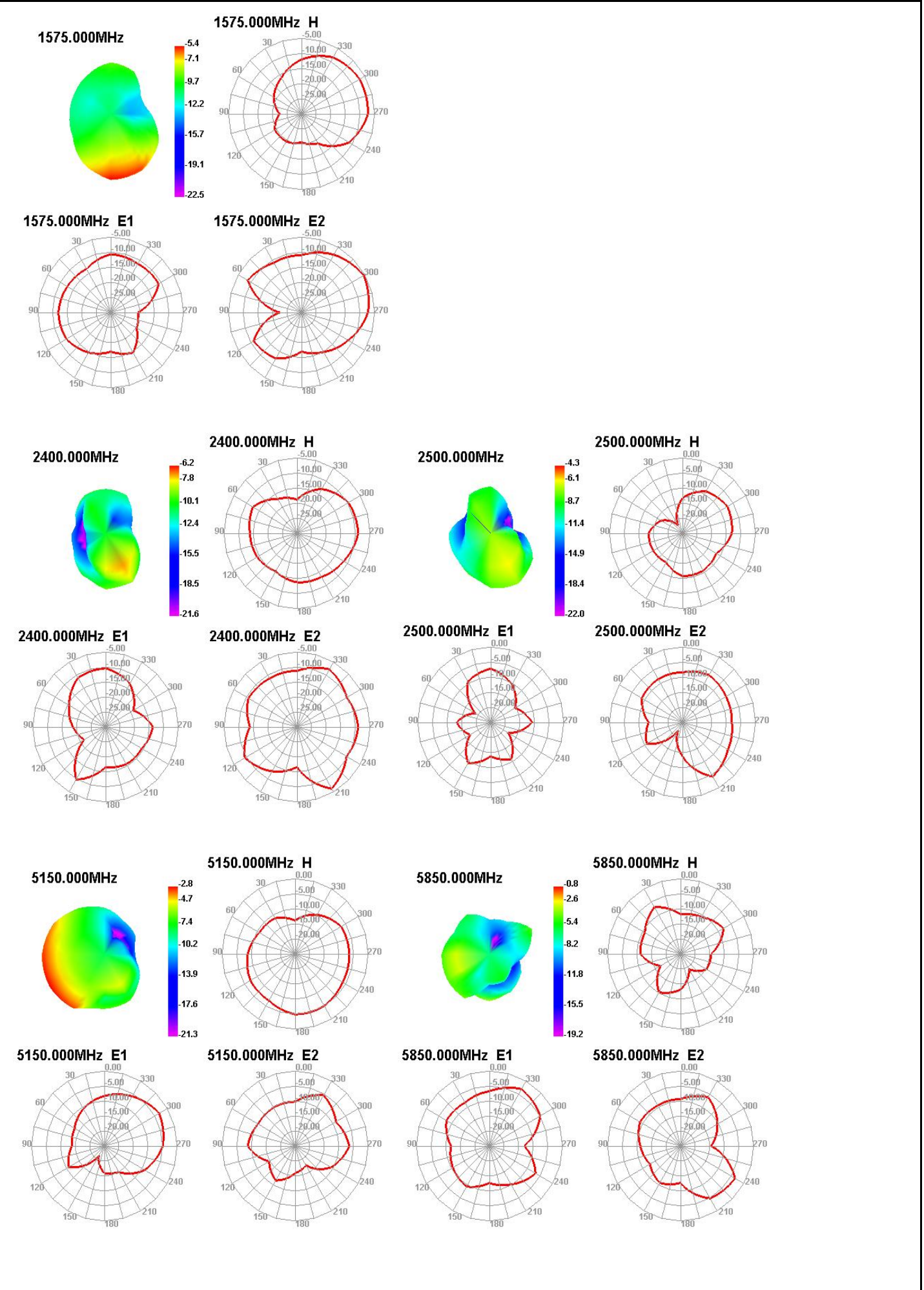
3.1:VSWR



3.2: Antenna efficiency and gain

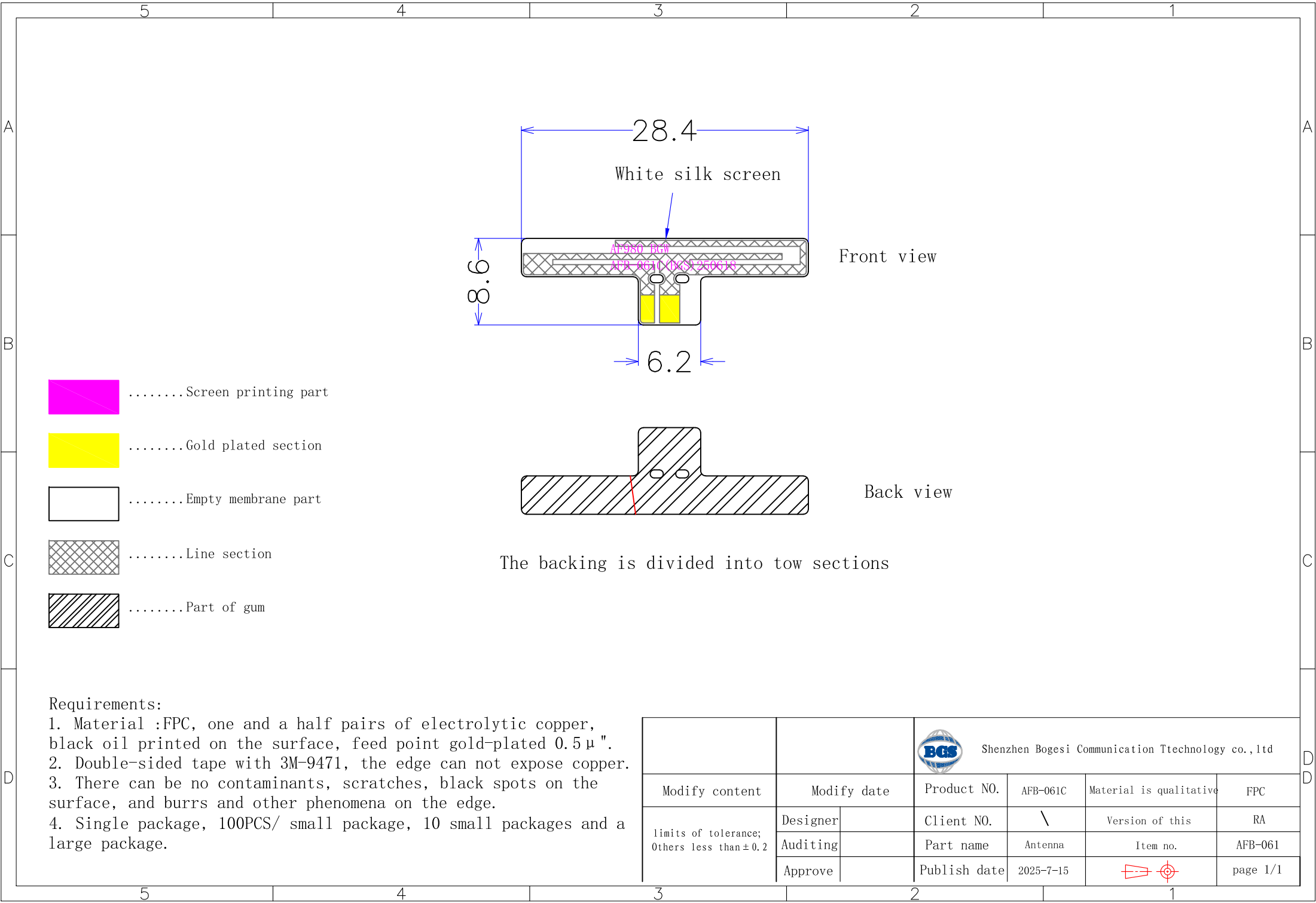
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
1560	10.76	-5.3	2470	11.26	-5.31
1561	10.63	-5.38	2480	11.75	-5.02
1562	10.54	-5.43	2490	12.08	-4.62
1563	10.49	-5.43	2500	12.44	-4.29
1564	10.47	-5.41	2440	11.16	-5.46
1565	10.5	-5.4	2450	11.4	-5.29
1566	10.56	-5.32	2460	11.33	-5.31
1567	10.65	-5.27	2430	10.9	-5.57
1568	10.74	-5.23			
1569	10.84	-5.19	5150	14.24	-2.82
1570	10.91	-5.15	5200	14.96	-3.09
1571	11.19	-5.15	5250	15.63	-2.99
1572	11.3	-5.09	5300	17.02	-2.35
1573	11.35	-5.06	5350	20.34	-1.66
1574	11.38	-5.05	5400	24.12	-1.06
1575	11.36	-5.06	5450	23.27	-1.32
1576	11.31	-5.08	5500	20.07	-2.16
1577	11.22	-5.11	5550	17.74	-2.8
1578	11.11	-5.17	5600	16.13	-3.43
1579	10.98	-5.21	5650	14.97	-2.71
1580	10.86	-5.29	5700	14.91	-2.33
			5750	15.48	-2.05
2400	9.75	-6.24	5800	17.89	-0.88
2410	10.46	-5.7	5850	17.38	-0.8
2420	10.43	-5.76			

3.3: Directional diagram



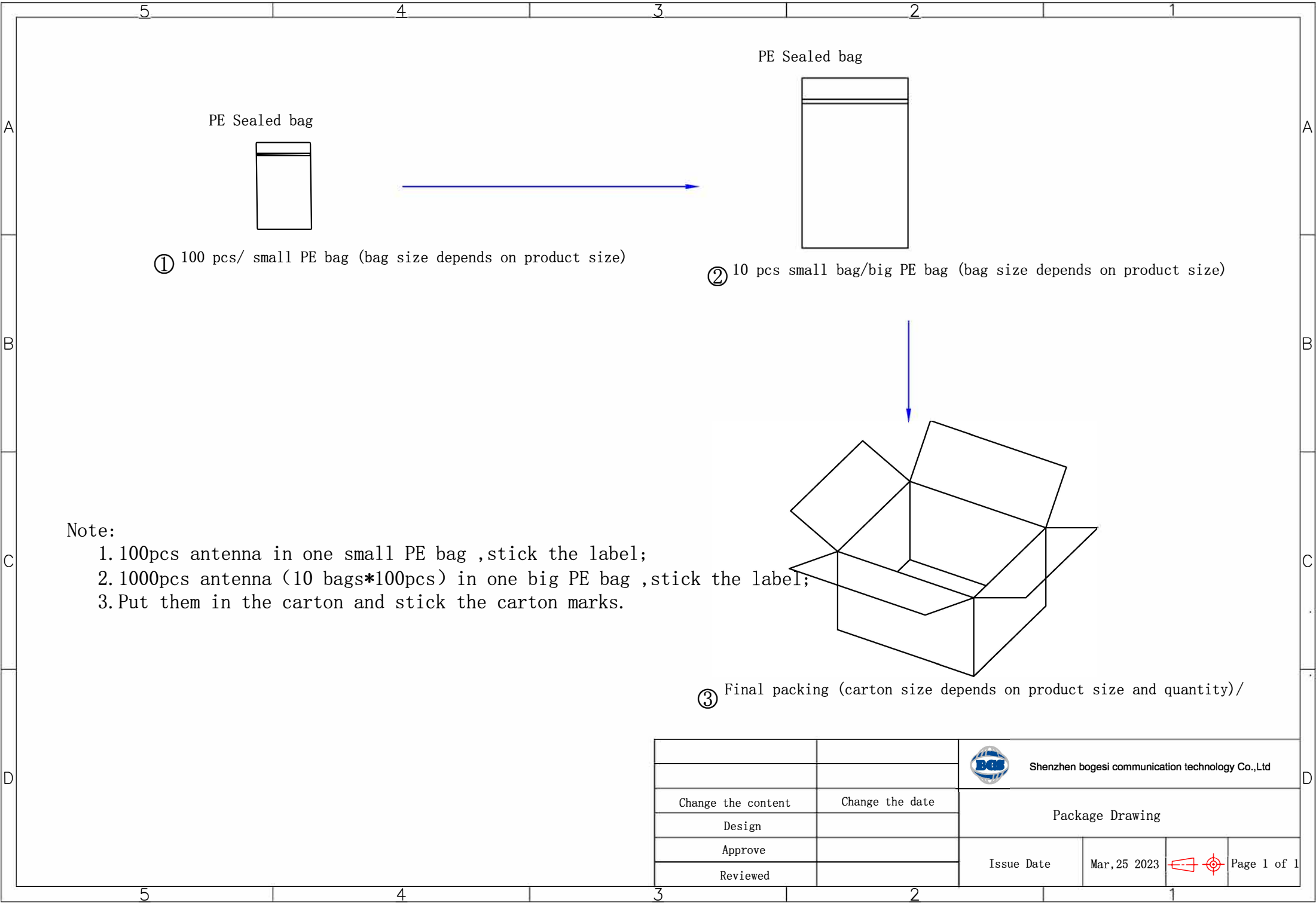
3.4: Active test data

Band	Channel	TRP (dBm)	TIS (dBm)
		11g/6M	11g/54M
WIFI 2.4G	Low	5.12	
	Mid	6.19	
	High	5.07	
		11a/6M	11a/54M
WIFI 5G	Low	8.14	-66.01
	Mid	8.46	-66.13
	High	7.42	-65.42



- Requirements:
- 1. Material :FPC, one and a half pairs of electrolytic copper, black oil printed on the surface, feed point gold-plated 0.5μ ".
 - 2. Double-sided tape with 3M-9471, the edge can not expose copper.
 - 3. There can be no contaminants, scratches, black spots on the surface, and burrs and other phenomena on the edge.
 - 4. Single package, 100PCS/ small package, 10 small packages and a large package.

		 Shenzhen Bogesi Communication Ttechnology co.,ltd			
Modify content	Modify date	Product NO.	AFB-061C	Material is qualitative	FPC
limits of tolerance; Others less than ± 0.2	Designer	Client NO.	\	Version of this	RA
	Auditing	Part name	Antenna	Item no.	AFB-061
	Approve	Publish date	2025-7-15		page 1/1



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Change the content	Change the date	Package Drawing			
Design					
Approve					
Reviewed		Issue Date	Mar,25 2023		Page 1 of 1

6.ROHS Report

Product Description		AF980 WIFI/bt	BGS P/N		AFB-061C			Declaration Date		2025/8/13
No.	Part name	Homogeneous Material Name	The homogeneous material contains the value of RoHS restricted substance （ppm）						Certification number	Test date
			Cd	Pb	Hg	Cr+6	PBB	PBDE		
1	FPC	Electrolytic flexible copper-clad foil substrate	ND	ND	ND	ND	ND	ND	SHAEC24028809006	2024/12/20
2		Solder resist ink	ND	ND	ND	ND	ND	ND	ETR25501383	2025/3/20
3		3M glue	ND	ND	ND	ND	ND	ND	SHAEC24027480901	2024/12/6
4		Gold	ND	ND	ND	ND	ND	ND	A2250164855101001E	2025/3/21

Notes:

Material analysis expansion table is similar to our company's machine type BOM, which describes the composition of each material provided by the supplier, and then conducts RoHS control on each component (or the supplier shall conduct RoHS compliance management on his supplier, and provide tripartite inspection certificate).

A complete material analysis expansion table that includes:

- 1. Material expansion table: component composition decomposition
- 2. Third-party verification report of each component