



**深圳市博格斯通信技术有限公司**  
shenzhen bogesi communication technology co., ltd

## Product Specification

Customer: Chengdu Vantron Technology Co., Ltd.


Customer code: YAA003R088

Specification : 5081 2.4G/5G WIFI ANT

Manufacturer code: WCC-005A (RD version)

Manufacturer: Shenzhen Bogesi Communication Technology Co., Ltd

Recognition date: Sep 26, 2021

Supplier Sign and Seal	Customer Sign and Seal
	



Scope of application:

test suitability of F 2.4/5G antenna scheme of 5081 project

Test standard & procedure:

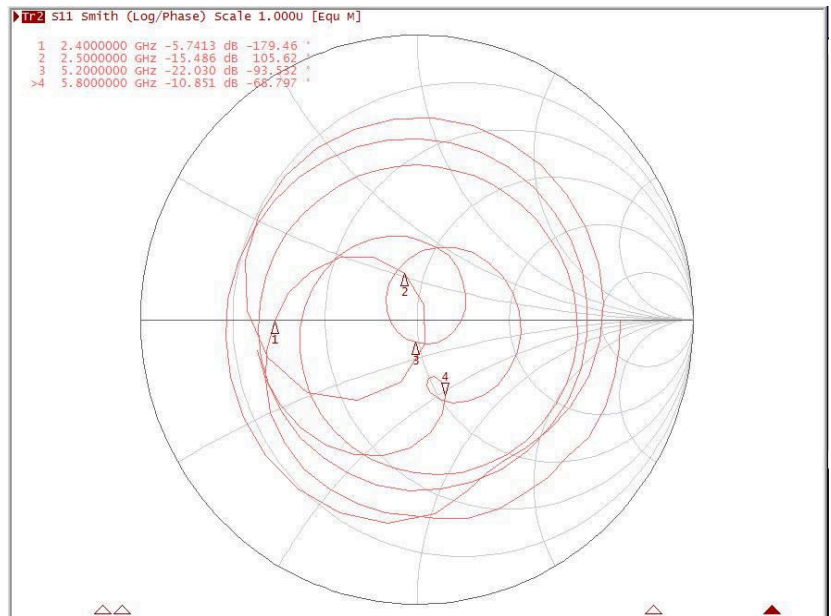
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-2021

Equipment list:

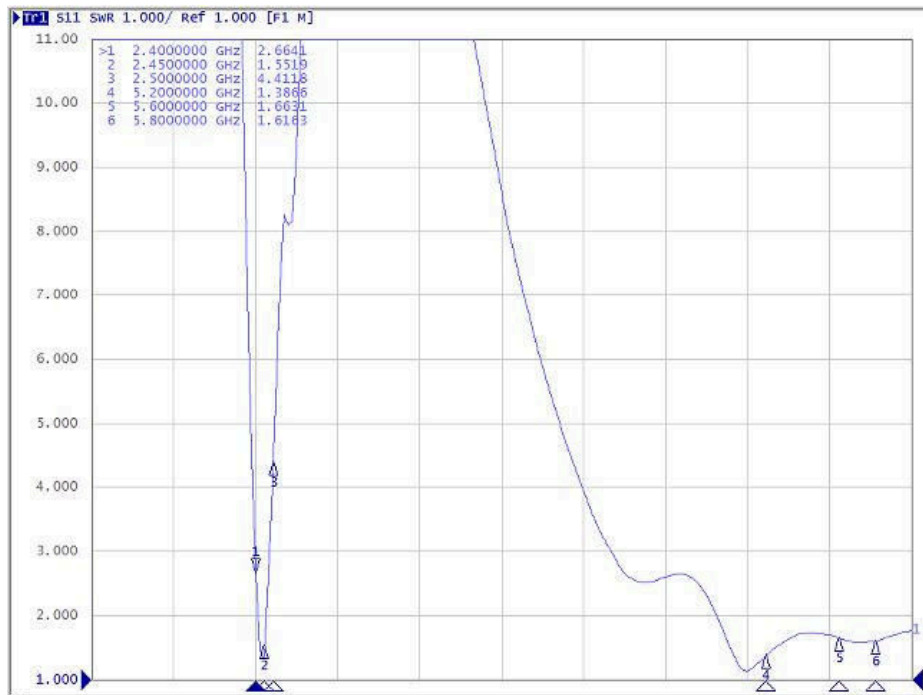
Equipment	Manufacturer	Model No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	2021.01.20	2023.01.19

Test Data:

		11g/54m	
		Channel	TIS
2.4G WiFi	LOW	9.34	-63.61
	MID	10.18	-66.04
	HIGH	9.53	-60.11
		11a/54m	
5G WiFi	LOW	7.34	-64.71
	MID	10.26	-66.06
	HIGH	10.06	-65.13

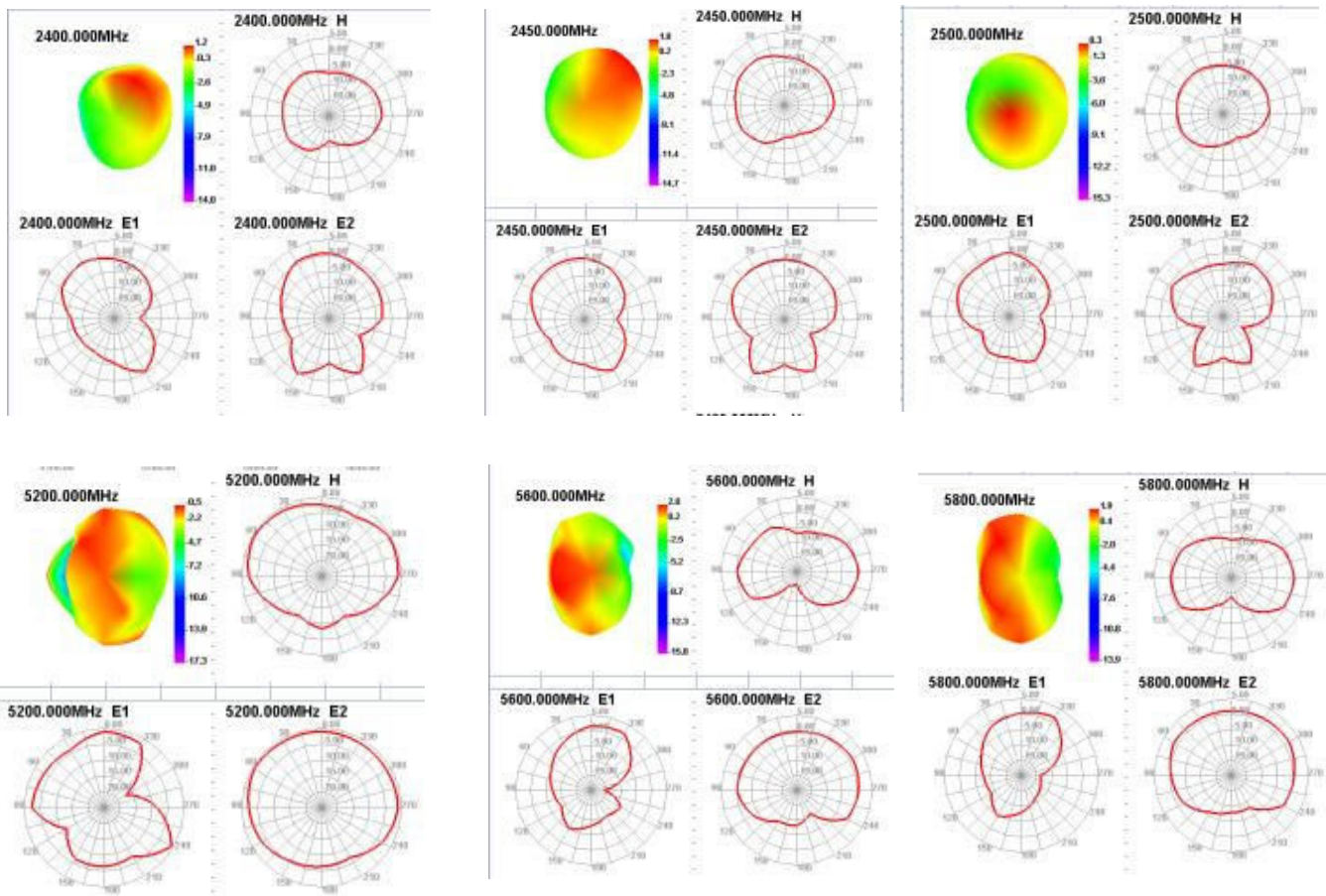


Frequency(GHz)	2.4	2.45	2.5	5.2	5.6	5.8
VSWR	2.66	1.55	4.41	1.38	1.66	1.6

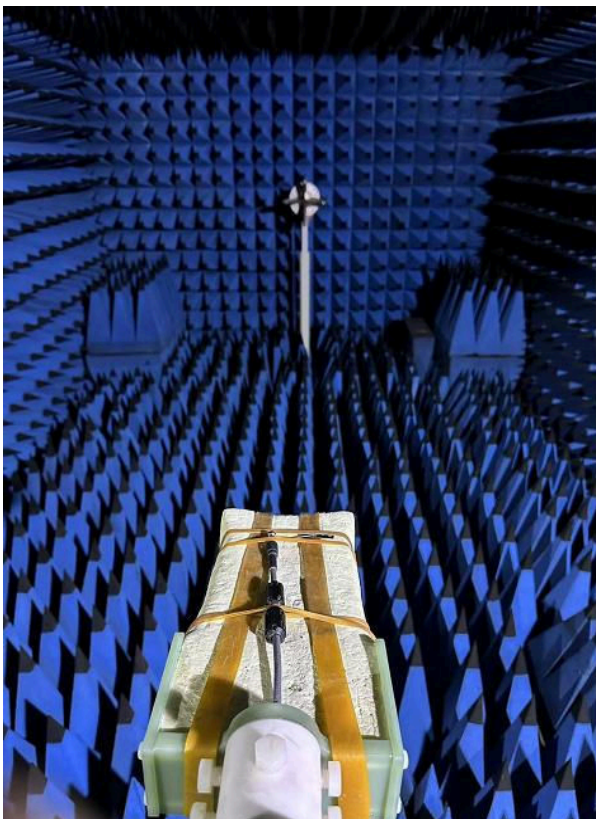


### WiFi效率

Passive Test For 2.4-2.5			Passive Test For 5100-5900					
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	45.87	1.17	5100	56.04	2.23	5500	46.7	1.56
2410	45.35	1.01	5125	53.47	3.27	5525	46.04	1.32
2420	46.68	1.11	5150	55.19	1.65	5550	44.1	1.09
2430	45.75	1.25	5175	46.93	0.75	5575	44.89	1.35
2440	45.37	1.04	5200	47.2	0.57	5600	46.25	2.36
2450	47.19	0.85	5225	47.12	1.13	5625	46.41	2.02
2460	47.28	1.26	5250	47.48	0.56	5650	45.36	1.66
2470	50.2	1.14	5275	46.54	1.21	5675	43.52	2.89
2480	53.48	1.18	5300	45.63	2.09	5700	46.12	3.08
2490	55.91	1.02	5325	46.2	2.11	5725	45.43	2.18
2500	53.14	1.14	5350	46.17	2.29	5750	47.86	2.32
			5375	50.98	2.44	5775	50.9	1.76
			5400	48.97	1.95	5800	53.56	2.08
			5425	43.4	1.3	5825	52.59	2.16
			5450	39.25	0.32	5850	53.16	2.22
			5475	39.28	-0.05			



Testing environment antenna picture:



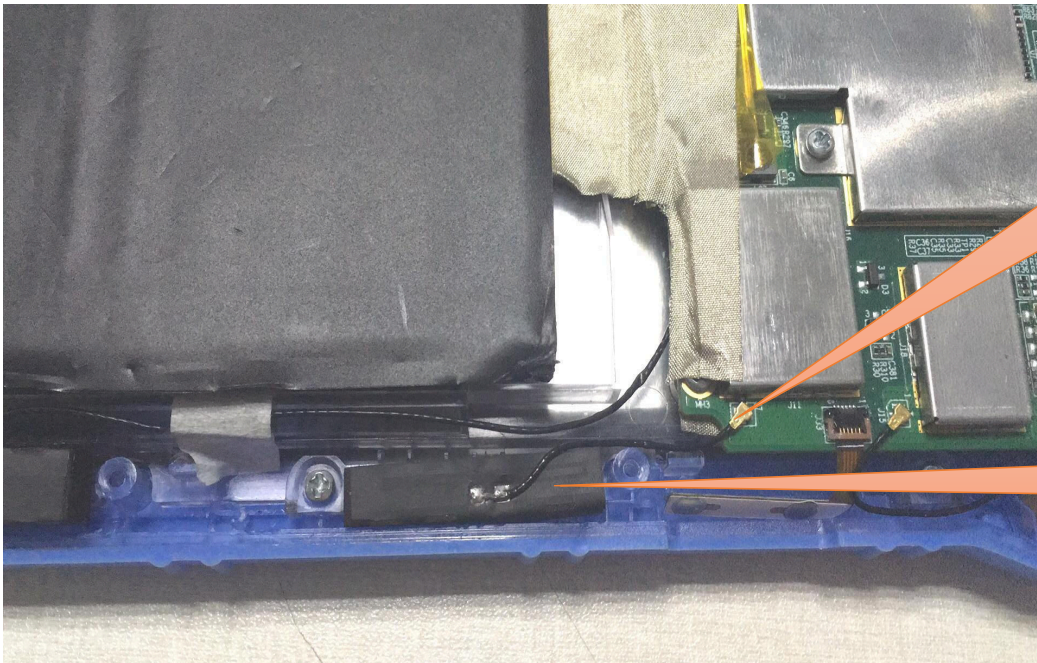




Sample Pictures:



Antenna installation diagram:



Schematic diagram of the connection line placement

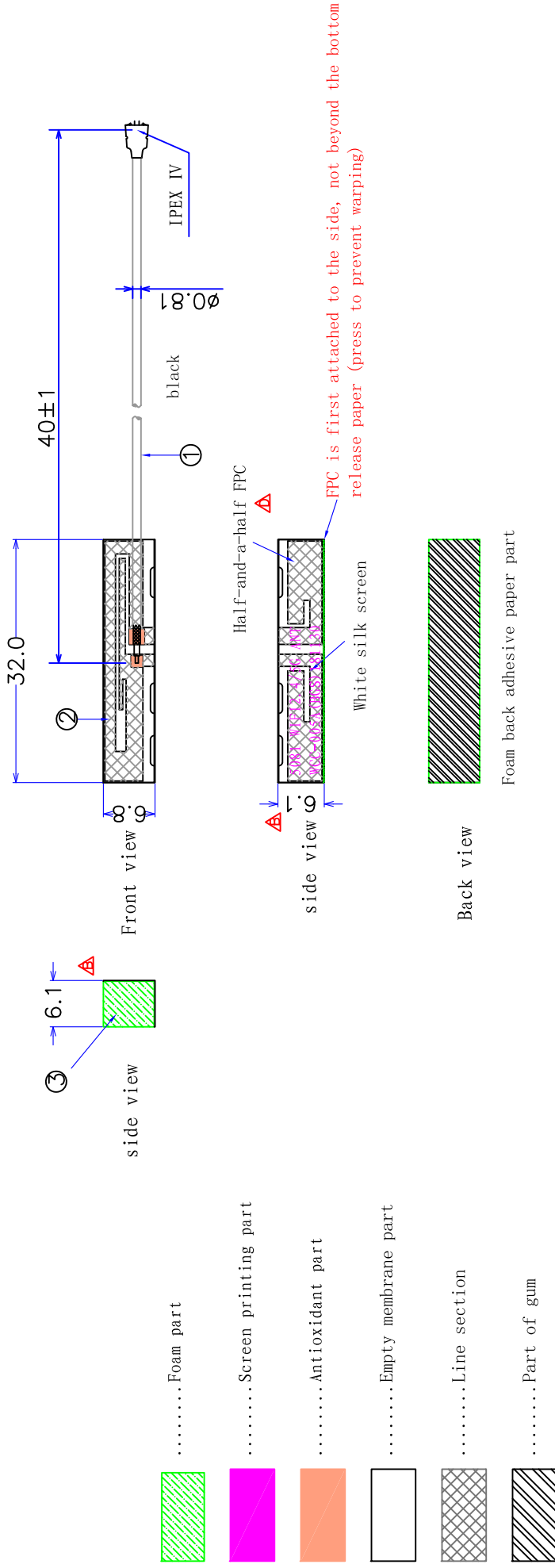
Antenna paste schematic

A A

B B

C C

D D



Technical Requirements:

- 1: Black EV foam is shipped with the FPC after mounting.
- 2: Pack 100 antenna components in a small package, 10 small packages in a large package, and then box.

Replace with half and half	Aug 18, 2012
Change the packaging method	Mar 23, 2018
Change the shape of the line and the height of the foam	Dec 3, 2018
Modify content	Designer
Limits of tolerance; Others less than ±0.2	Auditing
	Approve

深圳市博格斯通信技术有限公司 Shenzhen bogesi communication technology co.,ltd			
Product NO.	WCC-005A	Material is	FPC+CABLE
Client NO.	5081	Version of this	RD
Part name	The antenna components	Item no.	WCC-005
Publish date	Nov 21, 2018		page 1/1

NO.	PART NO.	NAME	DESCRIPTION	QTY
③	WCC-005A-12A	Black EV foam	EV foam, specification: 32*6.7*6MM, single-sided adhesive	1
②	WCC-005A-01A	Antenna radiation unit	FPC, front spray black oil, feed point antioxidant, single side adhesive 3M-9471	1
①	WCC-005A-20L	Cable	Ø0.81, Black outer cover, one end strip plating, one end rivet four generation terminal	1





## Antenna packaging instructions

### 一、Outer packing (carton packing)



二、Inner packaging (Each 100PCS is packed in a small bag, and each 10 small packages are packed in a large bag. The size of the bag depends on the size of the product)





**Declaration form of product material composition**

The product name		5081 2.4G/5G WIFI ANT	Product model		WCC-005A			Declaration date		Sep 26, 2022
The name of the company		Shenzhen Bogesi Communication Technology Co., Ltd		The contact		Zhou Xuebing		The phone		0755-86083452
The serial number	Part name	Name of homogeneous material	The amount of RoHS limiting substance contained in homogeneous material (ppm)						Test report no.	Inspection date
			Cd	Pb	Hg	Cr+6	PBB	PBDE		
1	Antenna radiation unit	Electrolytic flexible copper clad plate	ND	ND	ND	ND	ND	ND	SHAEC2202460504	2022/2/21
2		Printing ink	ND	ND	ND	ND	ND	ND	ETR22705905	2022/8/5
3		3M-9471	ND	ND	ND	ND	ND	ND	CANEC2200386501	2022/1/12
4	wire	Silver plated copper wire	ND	ND	ND	ND	ND	ND	SHAEC2127051115	2021/12/16
5		Tin plated copper wire	ND	ND	ND	ND	ND	ND	A2220186128101ER1	2022/5/17
6		insulation	ND	ND	ND	ND	ND	ND	NGBML2200124301	2022/1/27
7	terminal	Electric plating	ND	ND	ND	ND	ND	ND	A2210394436101001	2021/9/27
8		Rubber core	ND	5.53	ND	ND	ND	ND	NGBEC22001678607	2022/6/7
9		Copper plate	ND	5	ND	ND	ND	ND	CANEC2201952007	2022/2/18

Make people: Liang Jinghua

The reviewer: Liang Deliu

Description:

The material analysis expansion table is similar to the machine BOM of our company, which explains the composition of each material provided by the supplier, and then carries out RoHS control for each component (or the supplier shall conduct RoHS compliance management for his supplier and provide inspection certificates of each three parties).

A complete material analysis expansion table, which includes:

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

Company: Shenzhen bogesi communication technology co., ltd

Address: B308, Building B, Subeno GMP Plant, No. 19, Keji Zhongyi Road, Maling Community, Yuehai Street, Nanshan District, Shenzhen