

Antenna SPEC

Manufacturer: Shenzhen Unique Scales Co., Ltd.

model: CF609 _____

Part Number: _____

B&T P/N: 74300182

Spec. : Built-in antenna, 2.4 / 5G-Black 0.81 silver-tin wire,
2-generation terminal, L=45mm, FPC-40 x 18mm

sealed by corporation:

compilation	verify	approval
Qiucui ping	Huchong	Liulihua

Contact information of B&T:

Contact person for sales: Liu Zhen	MB:13215945658	E-mail: liuz@tech-now.com
Contact person for technical: Liulihua	MB:13590104459	E-mail: liulh@tech-now
Contact person for technical: Huchong	MB:15986832541	E-mail: huc@tech-now.com

表单编号: B&T-QR-EN-002 版本: B3

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3、 Product drawing

		REV.	Revise	Date
		A0	24-1-29	
		A0-0202	24-2-2	Updated FPC shape and cable length
		A0-0320	24-3-20	Update antenna structure, cable length and electrical performance reports

The drawing shows a side view of an antenna assembly. Key features include:

- Dimensions:**
 - Total width: $\ast 40.00 \pm 0.20$
 - Cable diameter: $\ast 4.5 \pm 0.3$
 - Release type paper punch width: $\ast 20.00 \pm 0.20$
- Components and Labels:**
 - 1:** Terminal cup mouth as shown
 - 2:** Release type paper punch
 - BAT-CF609-A1:** Part number label
 - Silk screen white:** Material specification
 - R40.51:** Radius dimension

Technical requirement

- 1: The antenna welding part is firm, the cable size is accurate (terminal maintenance force $\geq 0.5\text{Kgf}$).
- 2: Screen printing color is bright white, the font is clear and not easy to fall off.
- 3: "＊" is the IQC key inspection size.
- 4: Packaging and quality standards refer to Boantong packaging specifications and Boantong quality standards respectively.
- 5: The material meets the requirements of ROHS2.0.
- 6: The terminal mouth faces.

Number	Part name	Note	Designer	XieMei	quan			Name	
①	2 terminals RF terminals		Verify						
②	Coaxial line								
③	FPC		Approval						
			1 > X		± 0.05				
			1 ~ 9.99		± 0.10				
			10 ~ 19.99		± 0.15				
			20 ~ 39.99		± 0.20				
			40 ~		± 0.20				

Project No. Y240112707

Part No. 74300182

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B&T

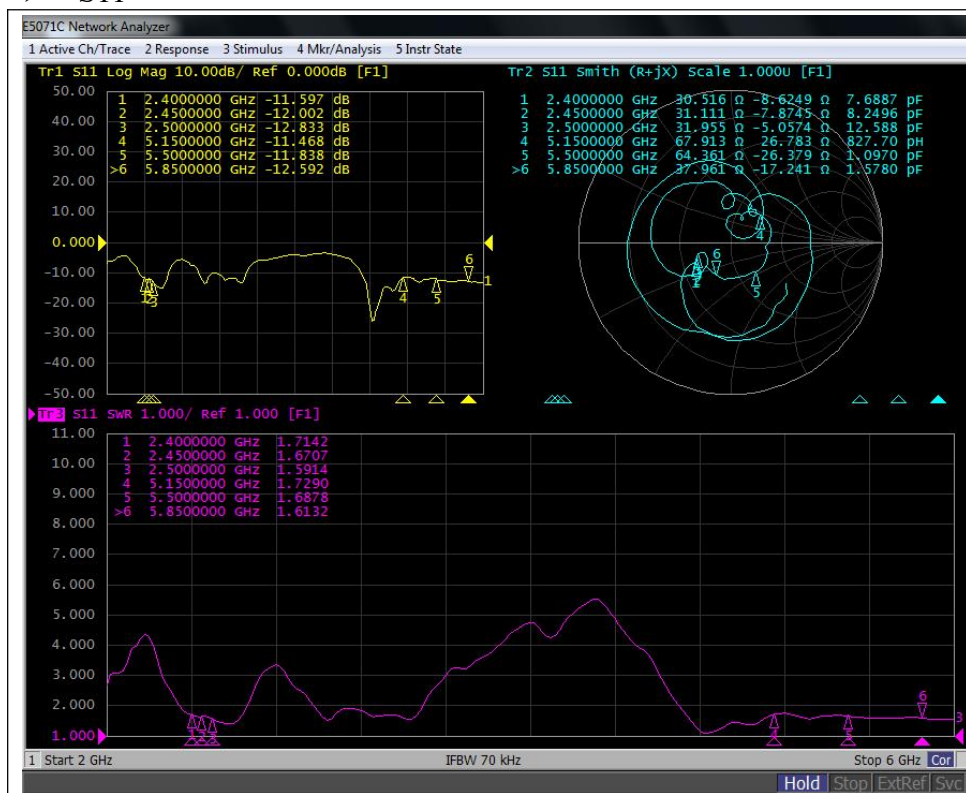
Built-in antenna, 2.4 / 5G-Black 0.8l silver-tin wire, 2-generation terminal, l=45mm, FPC-40 x 18mm

4、Properties ¶meter

Electrical Parameter	
Freq Range	2400~2500/5150~5850MHz
Characteristic Impedance	50 Ω
VSWR	≤ 1.72
gain	≥ 1.34 dBi, ≤ 4.72 dBi
The Max input power	<10w
Polarization mode	Polar linearization
Radiation mode	Omni directional
Connector style	Second generation terminal
Mechanics Properties	
Length	45 ± 3 mm
Maintain the force	≥ 0.5 kgf
Coaxial cable	Black 0.81 silver tin wire
Salt spray test	24H
Environment parameter	
Operating Temp	-30℃~65℃

5、Electrical Performance Test report (complete machine)

➤ S11



➤ standing wave ratio data

Freq/MHz	2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz
VSWR	1.71	1.67	1.59	1.72	1.68	1.61

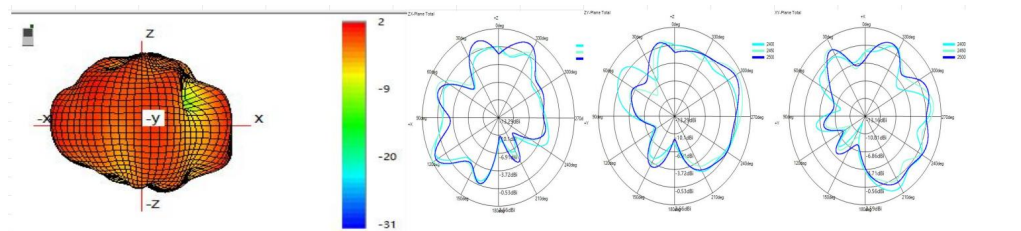
➤ antenna darkroom test data

Frequency (MHz)	BT/WiFi	
	Gain (dBi)	Efficiency (%)
2400	1.34	45.03
2410	1.74	45.97
2420	2.01	46.42
2430	2.27	46.44
2440	2.39	46.26
2450	2.59	46.97
2460	2.58	47.90
2470	2.44	46.27
2480	2.22	47.04
2490	2.32	47.35
2500	2.32	47.24

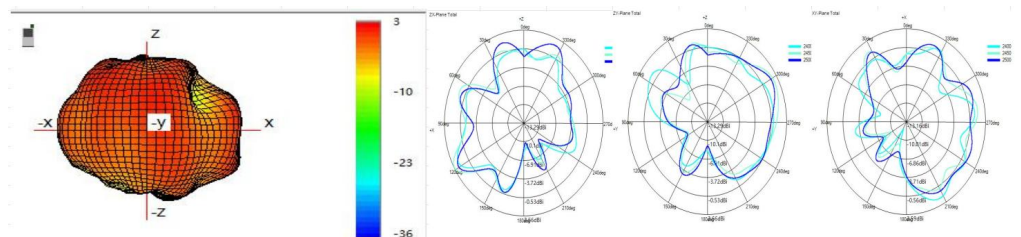
Frequency (MHz)	WiFi	
	Gain (dBi)	Efficiency (%)
5150	2.55	42.82
5200	3.32	46.83
5250	2.96	45.00
5300	2.86	47.00
5350	2.69	42.47
5400	2.82	43.75
5450	2.17	43.52
5500	2.29	43.44
5550	2.18	43.00
5600	1.67	42.30
5650	2.70	46.59
5700	3.00	47.97
5750	3.97	48.46
5800	4.36	45.23
5850	4.72	47.84

➤ antenna direction diagram

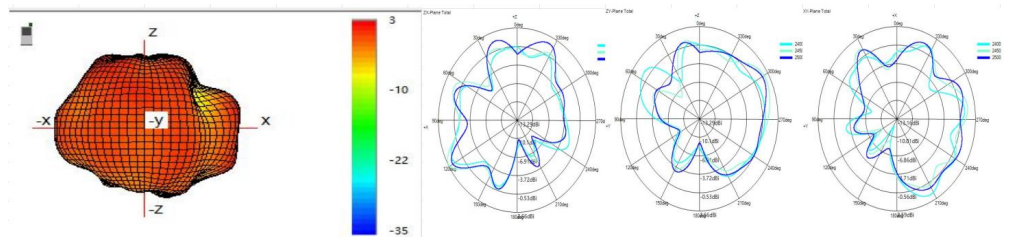
2400M 3D-E1-E2-H



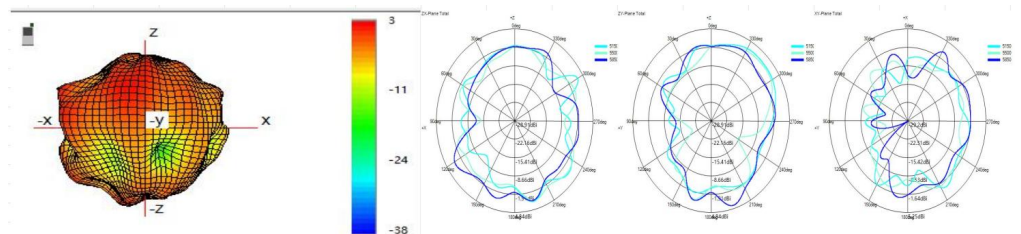
2450M 3D-E1-E2-H



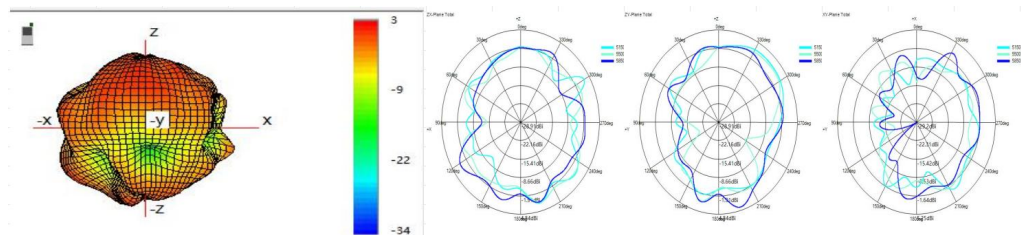
2500M 3D-E1-E2-H



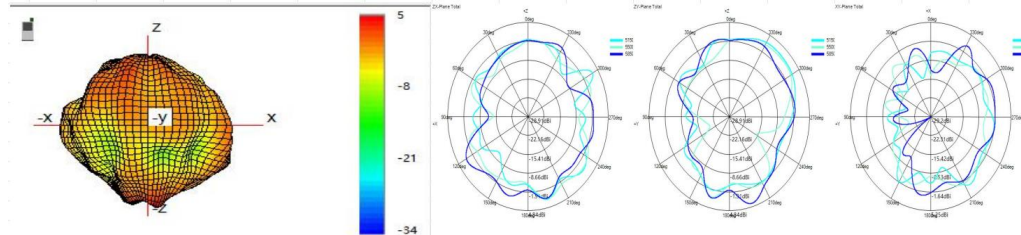
5150M 3D-E1-E2-H



5500M 3D-E1-E2-H



5850M 3D-E1-E2-H



PACKING CRITERION

P/N: 74300182

Spec.: Built-in antenna, 2.4 / 5G-Black 0.81 silver-tin wire, 2-generation terminal, L=45mm, FPC-40 x 18mm

一、contents of label(according to the customer's name, refer to the corresponding finished product label production requirements. If there is no requirement, it will follow the ordinary label requirements.)

Label for PE bag/ carton, L:10cm;W:6cm

buyer	*****		
vender	Zhongshan B&T Communication Technology Co., Ltd. Sichuan B&T Communication Technology Co., Ltd.		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	****.*.*
Trace code	*****	Running water number	*****

Label for PE bag/ carton, L:10cm;W:6cm

buyer	*****		
vender	Zhongshan B&T Communication Technology Co., Ltd. Sichuan B&T Communication Technology Co., Ltd.		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	****.*.*
Trace code	*****	Running water number	*****

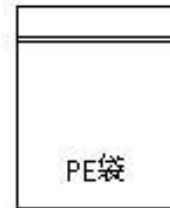
二、Packing requirement

Operating description:

1. inner packing:

50 PCS/ small bag,

200 PCS/ big bag

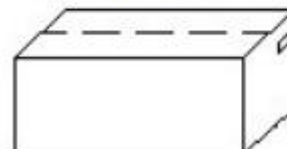


2. outer packing:

Quantity according to actual packing PCS/carton



Carton



Notice:

7、Antenna installation diagram

