

Project :Y220818061

Date. 2022.10.12

REV: A0

# Antenna SPEC

Customer name: UBTECH ROBOTICS CORP LTD

Customer project: UGOT Robot

Customer P/N: \_\_\_\_\_

B&T P/N: 74220118

Spec.: internal antenna -2.4 / 5G-Black 0.81 wire-terminal-

L=100mm-FPC-41.2×12.3mm

Sealed by corporation:

compilation	verify	approval
Huangfeihui	Liulihua	Liulihua

Sealed by customer:

check	verify	approval

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Economic Development Zone, Mianyang City, Sichuan Province**

Form no. : B&T-qr-en-002 version: B3



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### **3、 Product drawing**

REV.	Revise	Date
A0	22-10-11	

**Front view**

**Back**

From the type of paper  
The line cut off

The terminal cup as shown on the drawing

The technical requirements

1: the antenna welding part is firm, and the cable size is accurate: (Cable maintenance force  $\geq 0.5\text{Kgf}$ ).

2: the screen printing color is bright white, the font is clear and not easy to fall off;

3: "\*" important dimensions;

4: Packaging and quality standards refer to BAT packaging specifications quality standards respectively;

5: Products must meet the requirements of ROHS 2.0;

6: The cup of terminal orientation requirement .

Number	Part name	Note	Designer	Duqinglin	Weight	Quantity	Scale	Unit
①	Generation 2 RF-terminal Coaxial Line		Verify					
②			Approval					
③	FPC		1 > X	$\pm 0.05$			1 : 1	mm
			1 ~ 9.99	$\pm 0.10$				
			10 ~ 19.99	$\pm 0.15$				
			20 ~ 39.99	$\pm 0.20$				
			40 ~	$\pm 0.30$				

Name	Project No.	Part No.
internal antenna -2.4G-Black 0.81 wire-terminal-L=100mm-FPC-41.2X12.3mm	Y220818061	74220118

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ZHONGSHAN B&T TECHNOLOGY HOLDINGS Co.,.Ltd

## Electrical Parameter

Form no. : B&T-qr-en-002 version: B3

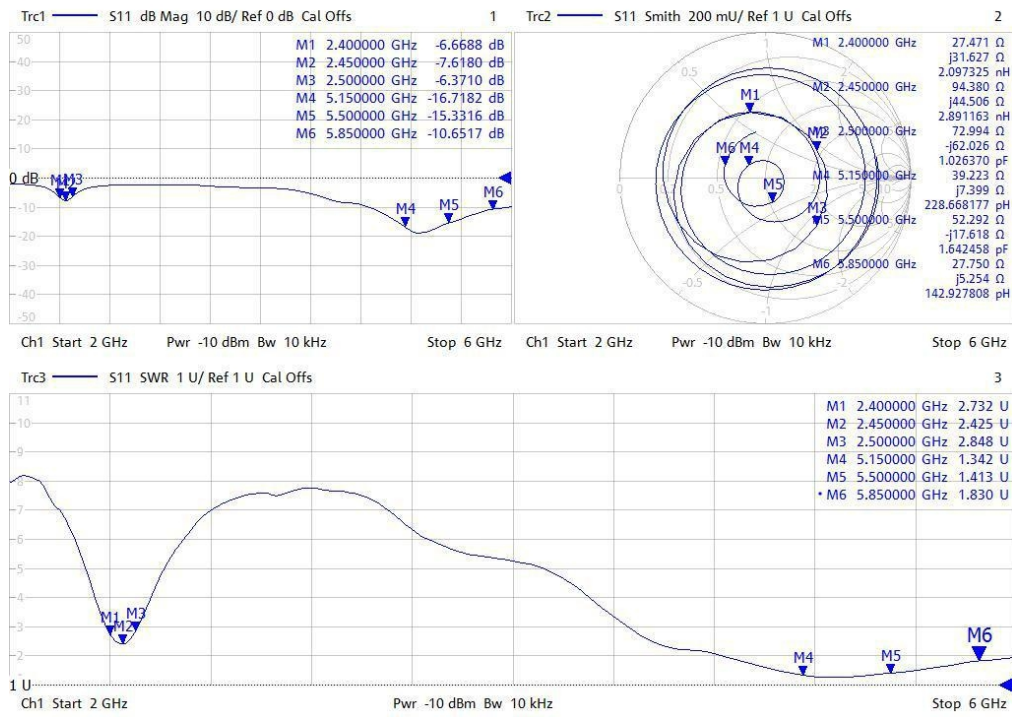
Freq Range	2400~2500/5150~5850MHz
Characteristic Impedance	50Ω
VSWR	sample of reference project
The Max input power	<10w
Polarization mode	Polar linearization
Radiation mode	Omni directional
Connector style	Generation 2 RF terminal
<b>Mechanics Properties</b>	
Length	100±3mm
Maintain the force	≥0.5kgf
Coaxial cable	Black 0.81 wire
Salt spray test	24H
<b>Environment parameter</b>	
Operating Temp	-30°C~65°C

#### 4、 Properties &parameter

### 5、 Electrical test report

S11 Parameter

4/20/2023 2:47:12 PM  
1328.5170K92-102079-Qn



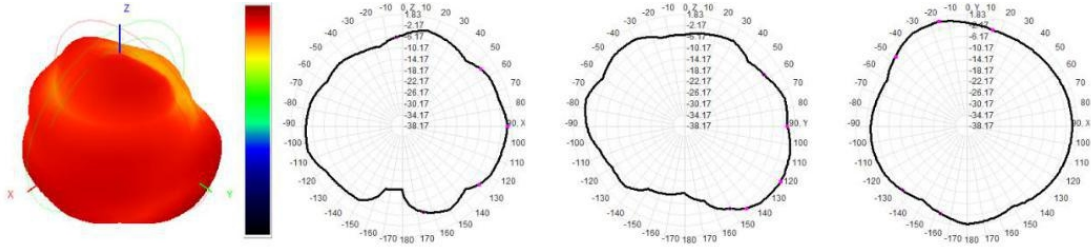
Electrical Performance Test Parameter Table

Freq/GHz	2.4	2.45	2.5	5.15	5.50	5.85
VSWR	2.73	2.42	2.84	1.34	1.41	1.83

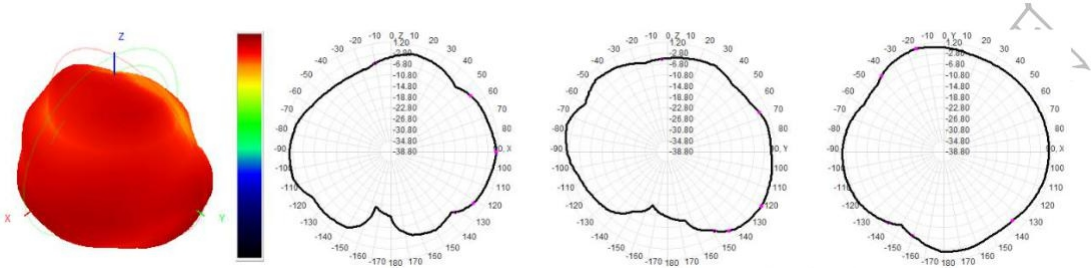
Gain & efficiency

Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	1.83	42.71
2410.0	1.83	43.32
2420.0	1.94	45.44
2430.0	1.65	45.39
2440.0	1.41	44.39
2450.0	1.20	43.82
2460.0	1.06	42.84
2470.0	1.02	42.36
2480.0	0.92	42.06
2490.0	0.53	40.28
2500.0	0.22	40.19
5150.0	1.98	50.44
5200.0	2.08	50.14
5250.0	2.37	52.00
5300.0	2.91	53.24
5350.0	2.89	51.66
5400.0	3.01	55.48
5450.0	3.33	53.89
5500.0	3.52	51.34
5550.0	2.93	53.98
5600.0	3.30	50.16
5650.0	3.22	47.21
5700.0	3.07	49.33
5750.0	3.10	47.57
5800.0	3.78	46.82
5850.0	3.06	49.39

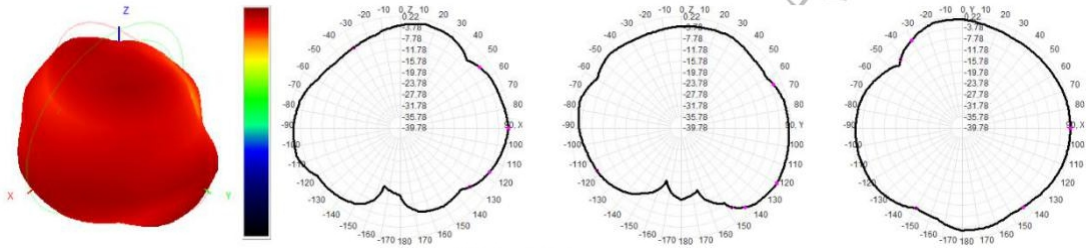
Direction diagram  
2400M 3D-E1-E2-H



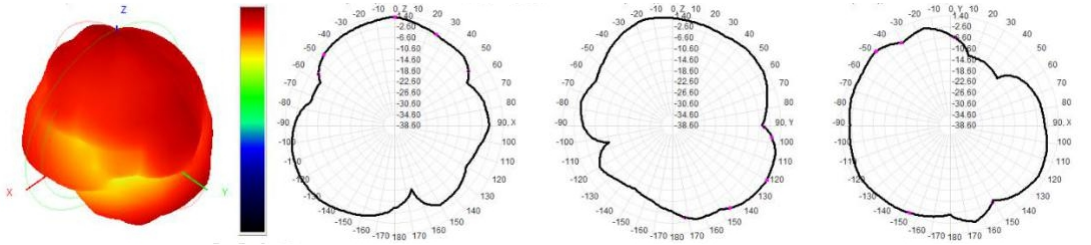
2450M 3D-E1-E2-H



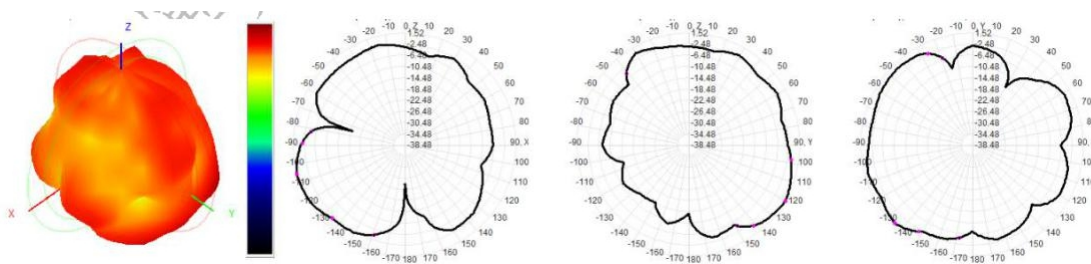
2500M 3D-E1-E2-H



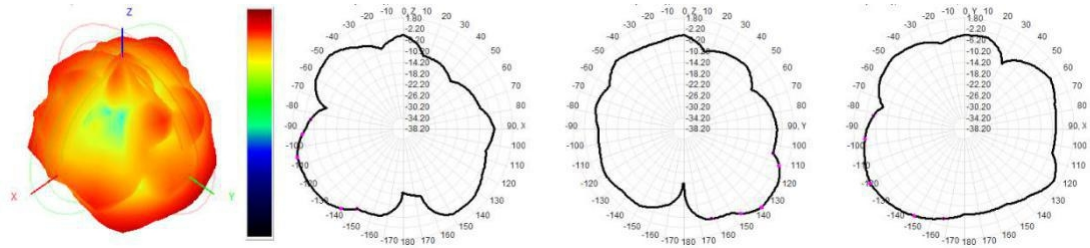
5150M 3D-E1-E2-H



5500M 3D-E1-E2-H



5850M 3D-E1-E2-H



## 6、Table of Materials and Hazardous Substances

Items are	specifications	The material	RoHS The inspection results (PPM)						ICP Test number	Detection time
			Cd	Pb	Hg	Cr+6	PBB	PBDE		
1	1.13 line	FEP	ND	ND	ND	ND	ND	ND	NGBML2200124302	2022/1/27
		Tin plated copper wire	ND	ND	ND	ND	ND	ND	CANEC2215409701	2022/7/22
2	FPC	PI	ND	ND	ND	ND	ND	ND	SHAEC2202460504	2022/2/21
		Tape	ND	ND	ND	ND	ND	ND	CANEC2200386501	2022/1/12
3	terminal	PBT	ND	ND	ND	ND	ND	ND	NGBEC22001678609	2022/6/8
		Phosphor bronze	ND	ND	ND	ND	ND	ND	CANEC2201952007	2022/2/18



**PACKING CRITERION**

P/N: 74220118

Spec.: internal antenna -2.4/5G-Black 0.81 wire-terminal-L=100mm-FPC-41.2×12.3mm

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	*****		
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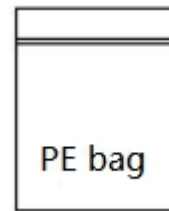
二、 Packing requirement

Operating description:

1. inner packing:

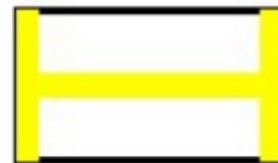
    50     PCS/ small bag,

   200    PCS/ big bag



2. outer packing:

Quantity according to actual packing PCS/carton



**Carton**



Notice: