

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: 74300074

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

L=50mm-FPC-45.62×12.32mm

Sealed by corporation:

compilation	verify	approval
Huangfeihui	Liulihua	Liulihua

Sealed by customer:

check	verify	approval

Contact information of B&T:

Contact person for sales: Zhangyanhua	MB:13510808863	E-mail: zhangyh@tech-now.com
Contact person for technical: Liulihua	MB:13590104459	E-mail: liulh@tech-now
Contact person for Quality: Leihao	MB:15681917991	E-mail: sc_qe2@tech-now.com

**Address:Room No. 2 and 3, 5F, Building 8, No. 218, Wenwu Middle Road, Tangxun Street,
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

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		Verify					
②	RF-terminal		Approval					
③	Coaxial line		1 > X	± 0.05			1:1	mm
	FPC		1 ~ 9.99	± 0.10				
			10 ~ 19.99	± 0.15				
			20 ~ 39.99	± 0.20				
			40 ~	± 0.30				

Name	Project No.	Part No.
internal antenna -2.4 / 5G-Black 0.81 wire-terminal-l=50mm- FPC-45.62X12.32mm	Y220818061	74300074

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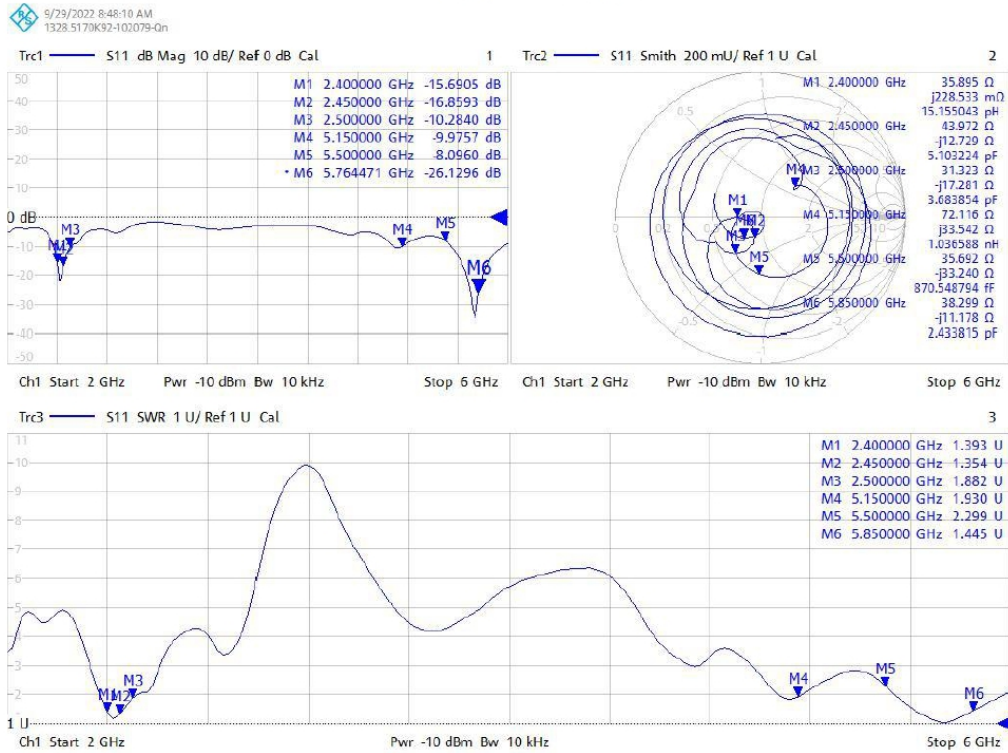
ZHONGSHAN B&T TECHNOLOGY HOLDINGS Co., Ltd

4、 Properties & parameter

Electrical Parameter	
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
Mechanics Properties	
Length	50±3mm
Maintain the force	≥0.5kgf
Coaxial cable	Black 0.81 wire
Salt spray test	24H
Environment parameter	
Operating Temp	-30°C~65°C

5、Electrical test report

S11 Parameter



Electrical Performance Test Parameter Table

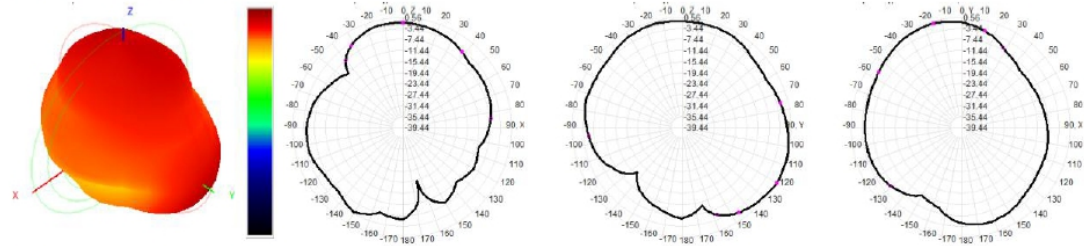
Freq/GHz	2.4	2.45	2.5	5.15	5.50	5.85
VSWR	1.39	1.35	1.88	1.93	2.29	1.44

Gain & efficiency

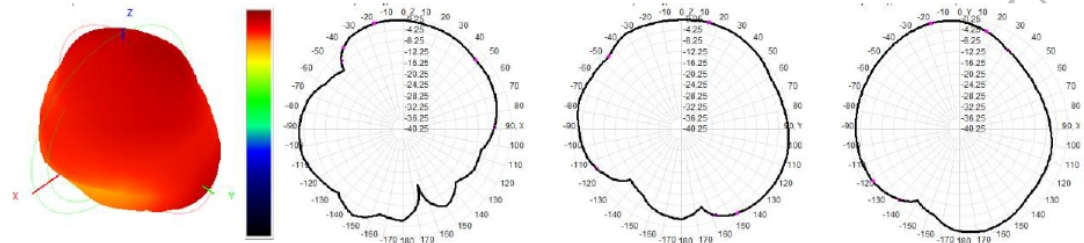
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	1.85	33.44
2410.0	1.92	35.50
2420.0	1.91	37.29
2430.0	1.85	38.69
2440.0	1.69	38.81
2450.0	1.68	39.75
2460.0	1.57	39.24
2470.0	1.33	38.58
2480.0	1.03	37.96
2490.0	0.71	38.73
2500.0	0.36	37.10
5150.0	1.92	36.97
5200.0	0.90	33.11
5250.0	0.25	35.38
5300.0	-0.22	35.89
5350.0	-0.25	33.01
5400.0	0.00	33.80
5450.0	0.80	35.11
5500.0	0.30	32.82
5550.0	1.01	34.77
5600.0	2.12	38.30
5650.0	2.95	41.11
5700.0	1.87	43.33
5750.0	2.89	43.55
5800.0	2.78	43.03
5850.0	3.07	42.65

Direction diagram

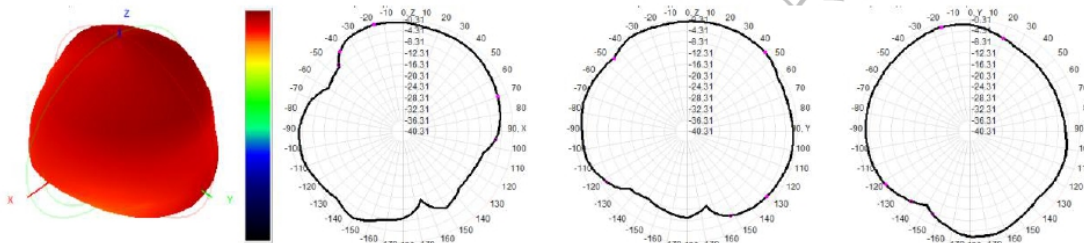
2400M 3D-E1-E2-H



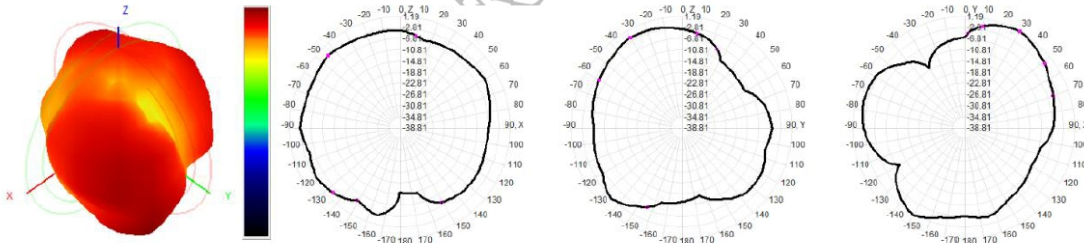
2450M 3D-E1-E2-H



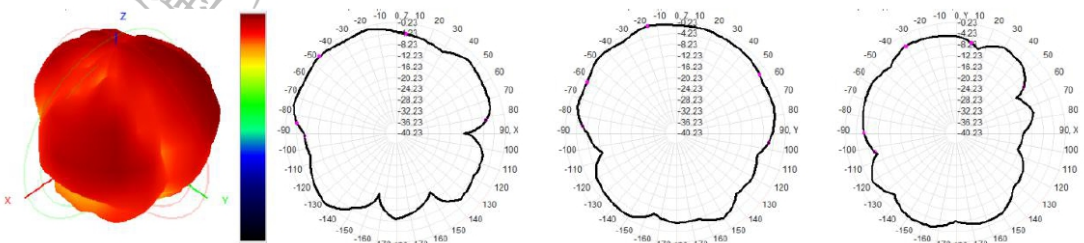
2500M 3D-E1-E2-H



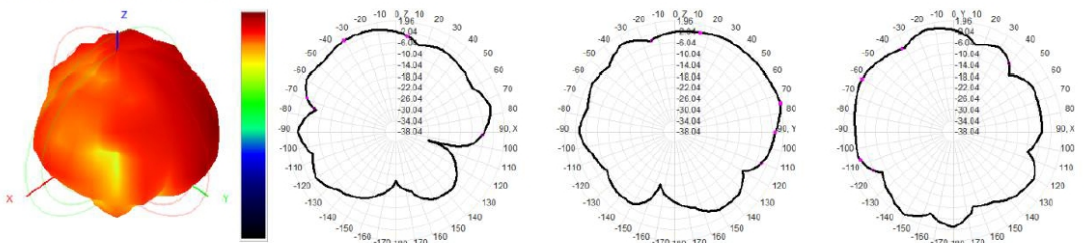
5150M 3D-E1-E2-H



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: 74300074

Spec.: internal antenna -2.4 / 5G-Black 0.81 wire-terminal-L=50mm-FPC-45.62×12.32mm

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	*****

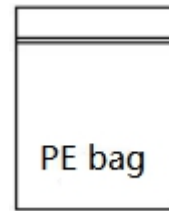
二、 Packing requirement

Operating description:

1. inner packing:

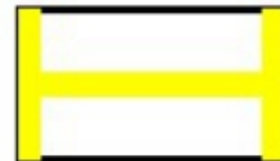
 50 PCS/ small bag,

 200 PCS/ big bag



2. outer packing:

Quantity according to actual packing PCS/carton



Carton



Notice: