

Project :Y220908080

Date. 2023.02.27

REV: A1

Antenna SPEC

Customer name: 国光Customer project: Spark GoCustomer P/N: EAN00308B&T P/N: 74220129Spec.: VZPT-internal antenna -2.4G-Black 0.81 wire-terminal-L=55mm-FPC-35.5×11.85mm

SSealed by corporation:

compilation	ver if y	approval
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Sealed by customer:

check	verify	approval

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3、 Product drawing

		REV.	Revise	Date
		A0	23-01-12	
		A1	23-02-27	Add the amount of magnetic ring

The technical requirements

- the antenna welding part is firm, and the cable size is accurate; (Cable maintenance force $\geq 0.5\text{Kgf}$).
- the screen printing color is bright white, the font is clear and not easy to fall off;
- "*" important dimensions;
- Packaging and quality standards refer to BAT packaging specifications quality standards respectively;
- Products must meet the requirements of ROHS、REACH及 VOC、CP65、PAHS、TSCA;
- The position of the magnetic ring shall be fixed with a sponge and cannot be loosened .

Number	Part name	Note	Designer	Duqinglin	Name	VZPT-internal antenna -2.4G-Black 0.81 wire-terminal-L=55mm-FPC-3S-5x11.85mm
①	2nd generation terminals		Verify		Project No.	Y220908080
②	Coaxial line		Approval		Part No.	74220129
③	Sponge		1 > X	± 0.05		
④⑤	Magnetic ring	Model: W8 RH 3*3*1.2	1~9.99	± 0.10		
⑥	FPC		10~19.99	± 0.15		
			20~39.99	± 0.20		
			40~	± 0.30		
				Page 1 of 1		
						ZHONGSHAN B&T TECHNOLOGY HOLDINGS Co., Ltd

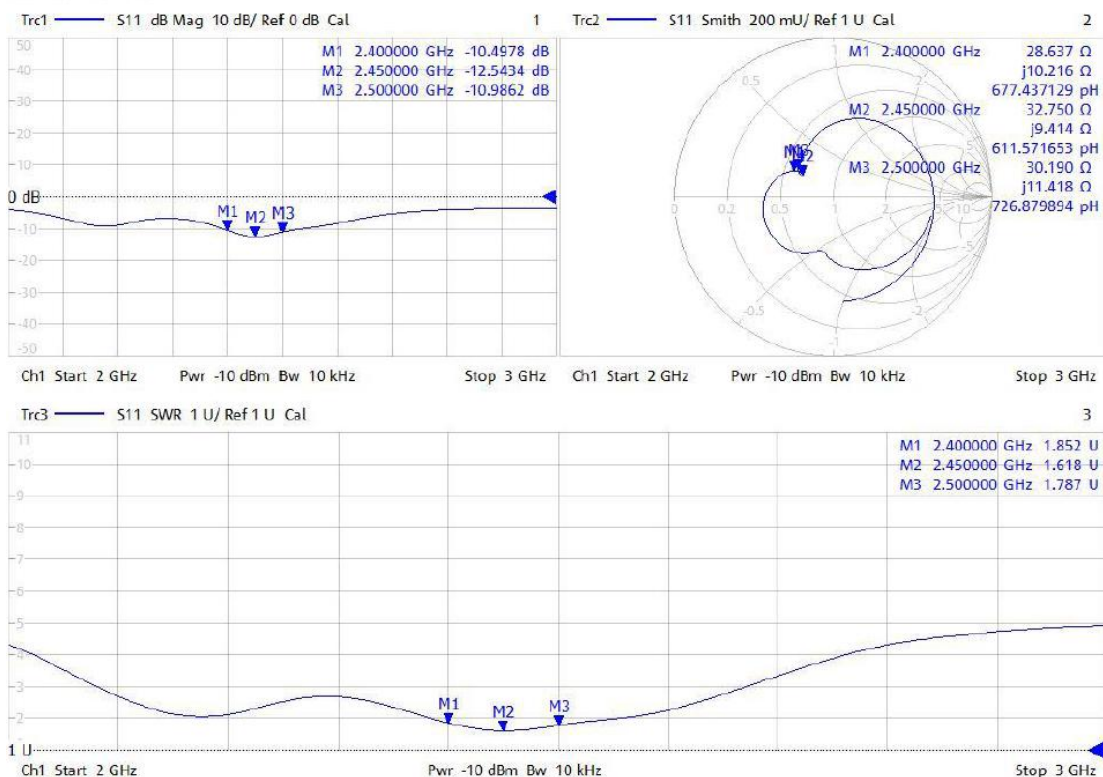
4、Properties ¶meter

Electrical Parameter	
Freq Range	2400~2500MHz
Characteristic Impedance	50 Ω
VSWR	sample of reference project
The Max input power	<10w
Polarization mode	Polar linearization
Radiation mode	Omni directional
Connector style	2nd generation terminals
Mechanics Properties	
Length	55 \pm 3mm
Maintain the force	\geq 0.5kgf
Coaxial cable	Black 0.81 wire
Salt spray test	24H
Environment parameter	
Operating Temp	-30 $^{\circ}$ C~65 $^{\circ}$ C

5、Electrical test report

S11 Parameter

3/27/2023 10:12:35 AM
1328.5170K92-102079-Qn



Electrical Performance Test Parameter Table

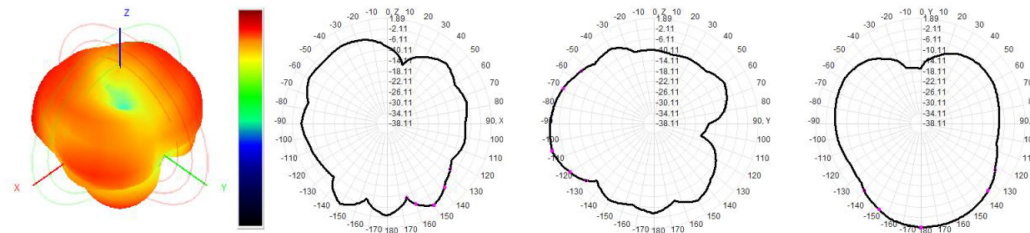
Freq/GHz	2.4	2.45	2.5
VSWR	1.85	1.61	1.78

Gain & efficiency

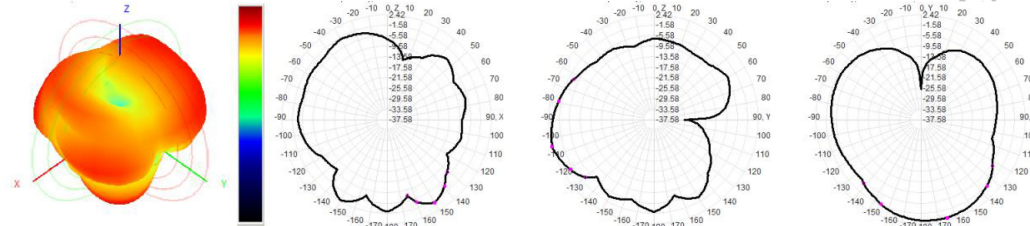
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	1.89	31.29
2410.0	2.20	33.09
2420.0	2.12	31.85
2430.0	2.25	32.33
2440.0	2.42	34.09
2450.0	2.27	33.47
2460.0	2.30	34.90
2470.0	2.27	35.91
2480.0	2.01	35.40
2490.0	1.54	33.81
2500.0	1.37	35.09

➤ Direction diagram

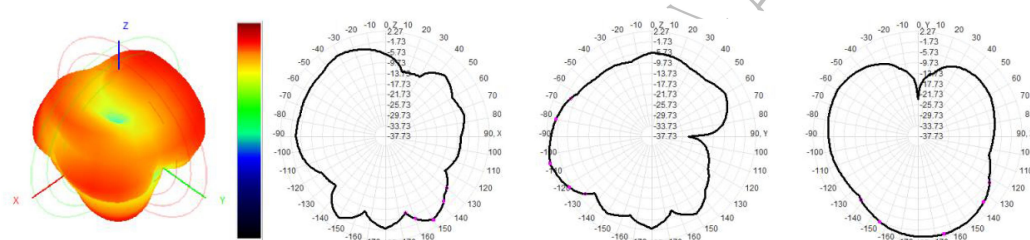
2400M 3D-E1-E2-H



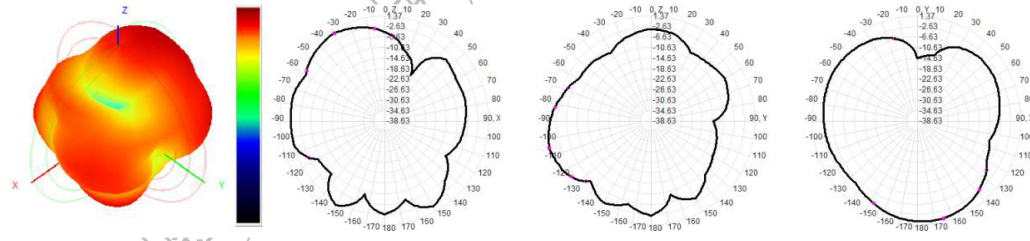
2440M 3D-E1-E2-H



2450M 3D-E1-E2-H

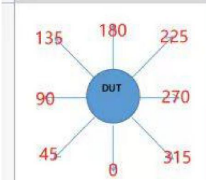


2500M 3D-E1-E2-H



➤ 拉距测试

测试方法:	将DUT放置在70cm高平台上（依次测试5个面），BTS固定放于支持上，通过蓝牙从BTS给DUT播放音乐信号，逐渐增大DUT和BTS的距离。若音乐播放正常，则DUT继续远离BTS；当音乐开始出现卡顿、断续时，则再往回靠近BTS直至音乐恢复正常。按以上方法找出临界点，记录下当前角度和距离。
评估方法:	没有任何音乐断音卡顿，蓝牙连接无异常，无异常noise，则为pass；如出现断音卡顿，蓝牙连接异常和异常noise，则为fail；



Sample#1

PHONE TYPE	前	后	左	右	顶
Samsung s20	85	90	85	90	85
Iphone 12	90	95	90	95	90

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	0.81 line	FEP	ND	ND	ND	ND	ND	ND	NGBML2200124302	2022/1/27
		Tin plated copper wire	ND	ND	ND	ND	ND	ND	CANEC2202119401	2022/02/23
		Silverplated 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
4	Sponge	PU	ND	ND	ND	ND	ND	ND	A2220488415101004	2022/11/7
		Tape	ND	ND	ND	ND	ND	ND	WTF22H07151004C	2022/7/28

PACKING CRITERION

P/N: 74220129

Spec.: VZPT-internal antenna -2.4G-Black 0.81 wire-terminal-L=55mm-FPC-35.5×11.85mm

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 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 TECHNOLOGY Co., Ltd		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	****.*.*
Trace code	*****	Running water number	*****

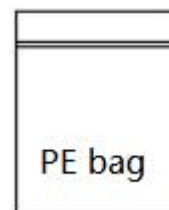
二、Packing requirement

Operating description:

1. inner packing:

50 PCS/ small bag,

200 PCS/ big bag

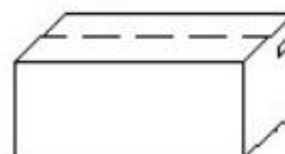


2. outer packing:

Quantity according to actual packing PCS/carton



Carton



Notice:

8、 Installation diagram of complete antenna



9、 Location of antenna test darkroom

