

SPECIFICATION

Shenzhen Daxian Technology Co., Ltd.



GGEC SS5-B BT antenna assembly

Product specification

Guest households	GCEC	frequency band	2400MHz~2500MHz
Project name	SS5-B	version	V1.3
Material No.	2S-S5XXX-119	color	White
Customer Item Number	EAN004704		
R F design	Chuan.Shen	structure design	RuiBin.Zhou
Quality Manager	ZiYin.Hu	R & D director	Lei.Zhang
Date	2025-2-26		



client confirmation:

Whether the assembly meets your requirements: ☐OK ☐NG

Shenzhen Daxian Technology Co., Ltd.

Shangshuijing Village, No. 513, ihua Road, BujiTown, Longgang District, Shenzhen (opposite to theNational Defense Training Base)reached the 7thfloor of the Industrial Park Complex

TEL:0755-28576002

FAX:0755-84276383

Shanghai Branch: Room 201, Building 8 No, 3000Longdong Avenue,Integrated Circuit IndustrialZone, Zhangjiang Hi-tech Park, Shanghai

TEL:021-61630552

FAX:755-84276383

Change resume

www.Topant.com.cn

Confidential requirement

Index

一、 Project description.....	4
二、 BT antenna.....	4
1、 specifications.....	4
1.1 Electrical specification standard.....	5
1.1.1 Electricalperformanceindex.....	5
1.2 Antenna composition.....	5
2、 The Equipment of Active Test.....	6
3、 test.....	7
3.1 The Test of standing Wave (VSWR).....	7
3.1.1 test connection.....	7
3.2 Measurement of Efficiency, Power (TRP) and Sensitivity (TIS).....	7
3.2.1 Test site.....	7
3.2.2 Test instrument.....	7
3.2.3 test data	7-8
4、 Parameterdiagram.....	8
5、 Passiveefficiencyfieldpatterndiagram.....	9
6、 OutdoorPulldistancetest.....	10
7、 Conclusion.....	10
三、 Schedule drawing.....	11

www.Topant.com.cn

Confidential requirement

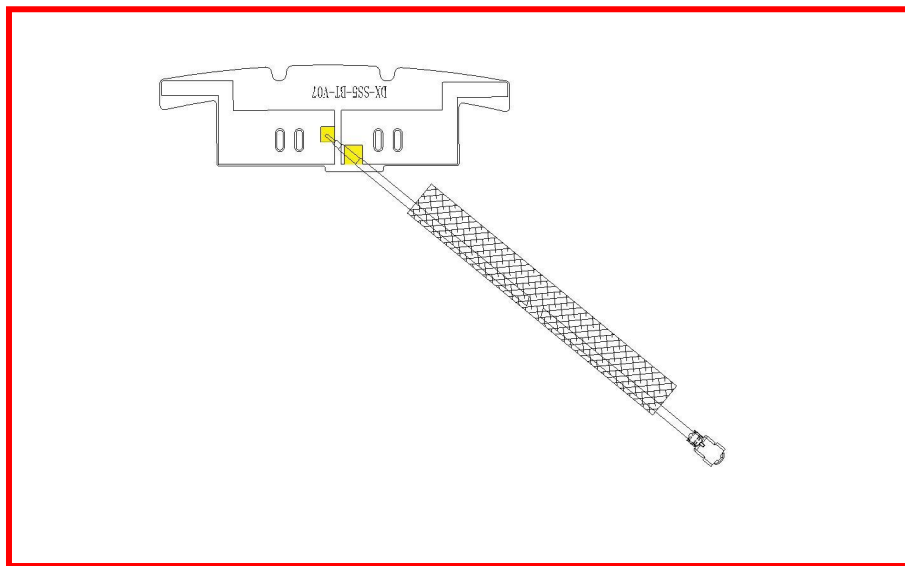
Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

— Project description

Customer name:	GSEC
Whole machine type:	Loudspeakerbox
Antenna band:	2400 ~ 2500MHz
Antenna form:	FPC+coaxialline+wiresponge
Feed form:	weld
Hardwareversion:	/

一、 BT antenna

This report provides a variety of measurements of the electrical performance of the SS5-B Bantenna. Figure 1 shows the antenna designed by the display.



antenna appearing diagram

Figure 1

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

1.1 Electrical specification standard

The frequency range of the antenna is 2400 ~ 2500MHz. The following table indicates the electrical performance specifications of the antenna. The antenna is designed and manufactured by a large display.

Frequency Range	Frequency (MHz)	VSWR
BT	2400 ~ 2500	≤ 2

1.2 Antenna composition

The antenna is mainly composed of FPC+coaxialline+wiresponge.

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

2、 The Equipment of Active Test

Satimo 3D Chamber $6 \times 4 \times 4$ (m)

Agilent 8960 E5515c

Network analyzer-R&S ZVL



Figure 2

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

3 test

3.1 The Test of standing Wave (VSWR)

3.1.1 The Test of standing Wave (VSWR): In turn, the connection of the VSWR testing device is as follows: RES ZVL Network Analyzer / testing Line / testing tool

Actual measurement (with diagram)

3.2 Measurement of Efficiency, Power (TRP) and Sensitivity (TIS)

3.2.1 Test site:

Large-scale microwave darkroom. The test frequency range is 400MHz / 6GHz, the static range is 50cm circumferential and the reflectivity is less than-50 dB..

3.2.2 Test instrument:

Rs ZVL Network Analyzer, Agilent8960 E5515C, Standard Horn Antenna, French SATIMO-SG24SYSTEM system, Printer, etc.

3.2.3 test data : In microwave anechoic chambers, the power and sensitivity values measured are shown in the following table:

OTAactivetesting:

BAND	CH	TRP (dBm)	TIS (dBm)
BT	0	6. 49	-92. 32
	39	6. 83	-92. 77
	78	6. 65	-92. 58

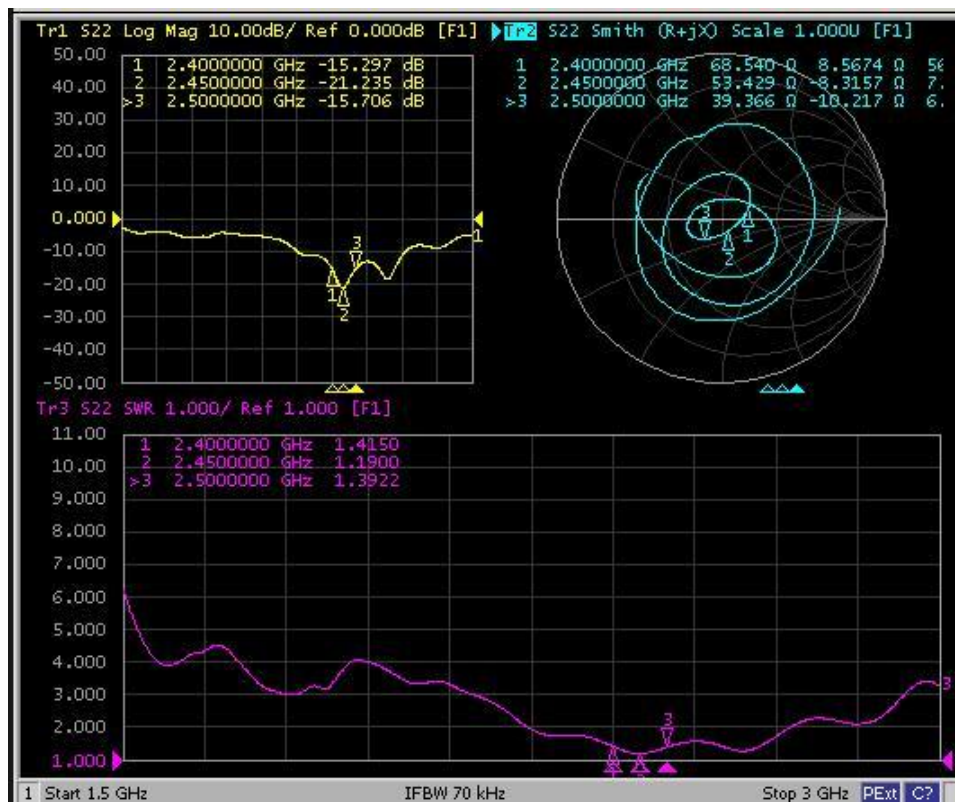
www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive efficiency & gain:

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	52.38	-2.81	2.19
2410	52.61	-2.79	2.24
2420	53.18	-2.74	2.29
2430	53.29	-2.73	2.36
2440	54.03	-2.67	2.33
2450	54.63	-2.65	2.38
2460	54.33	-2.63	2.31
2470	54.14	-2.66	2.33
2480	53.87	-2.69	2.24
2490	53.04	-2.75	2.26
2500	52.17	-2.83	2.17

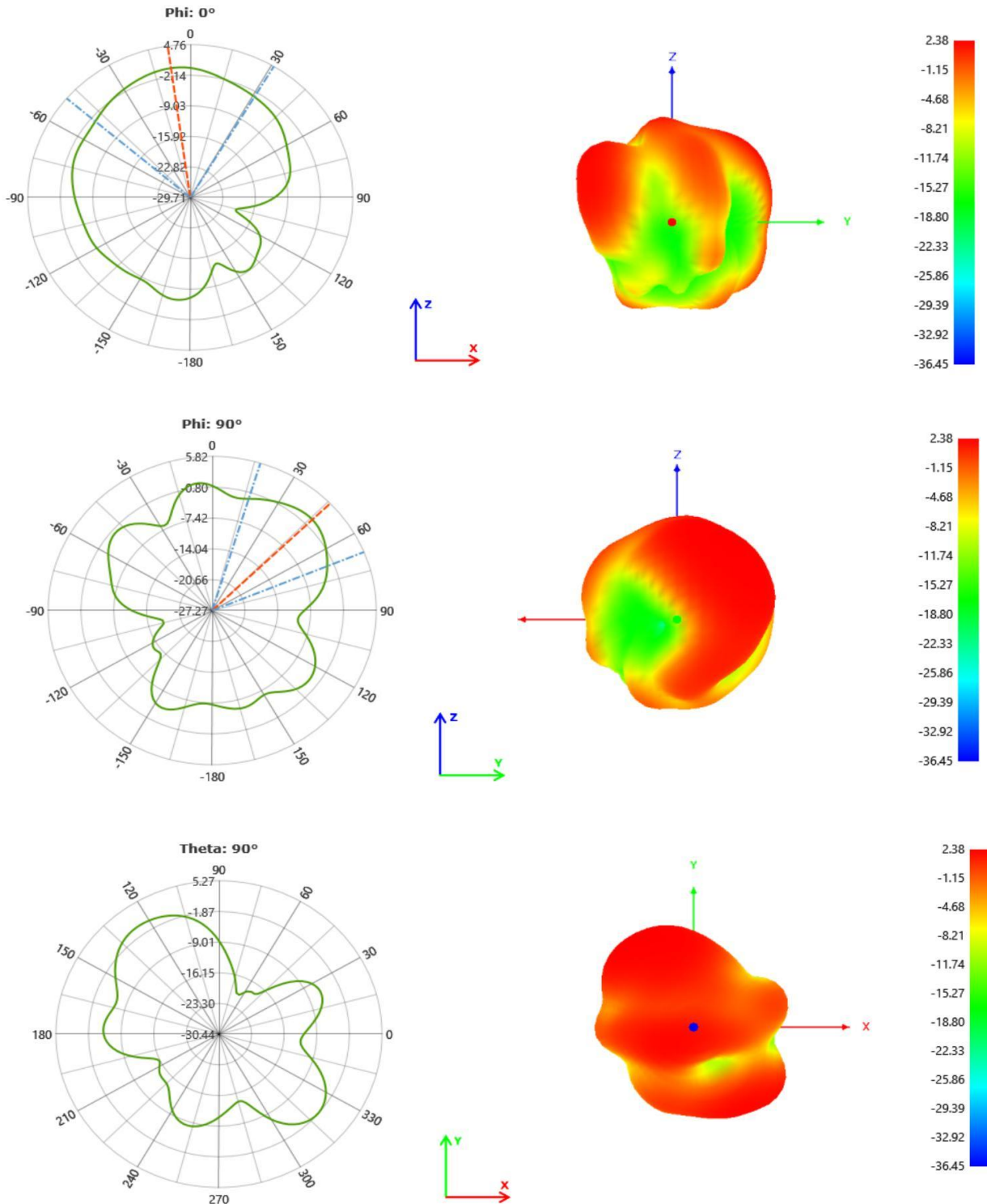
4、VSWR parameter diagram

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

5、 Antenna passive field pattern diagram



www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

6、Outdoor Pull distance test:

Pull distance test:

Testing time: 2025/02/08

test site : Near Tiegang Reservoir, Shenzhen

Test Cell Phones : Iphone 14 Pro

Test direction	ahead	empress	left	right
	Test Distance			
BT	100M	100M	100M	100M

7、 conclusion:

This antenna is designed on the basis of the prototype provided by the customer, electrical parameters and structural performance have reached the technical requirements, please confirm!

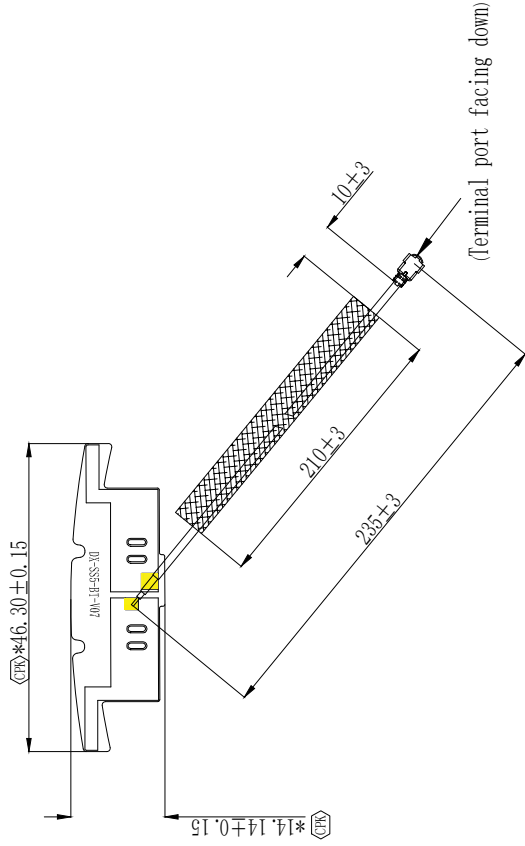
www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

1		2		3		4		5		6	
				0~10	10~30	30~50	50~				
				0.05	0.10	0.15	0.20	1°	0.02	0.02	0.05

A



B

C

Technical requirement:

1. "*" is the key dimension;
2. Please refer to the drawing for unspecified dimensions;
3. There should be no poor operation such as faulty soldering, missing soldering, short wires, broken wires, etc;
4. Meet RoHS requirements.

D

B

C

D

C	Cable sponge	EVA	white	
B	RF connector	Cable	white	
A	FPC	Electrolytic copper PI	white	
Serial number	Part Name	Material	Colour	Note



Shenzhen Daxian Technology Co., Ltd.

Machine model	SS5B (BT)	Product Color	White	Date	2025/03/03
Project Code	CS-S5XXX-119	Mold surface treatment	NA	MD	RuiminZhou
Part Name	BT antenna	Unit	mm	RF	ChuanShen
Part Number	2S-S5XXX-119	比例 (scale)	1:1	Check	KangZhou
material	FPC+sponge+RF connector	Third perspective		Ratify	LeiZhang
Save Path				Current version	A

1

2

3

4

5

6