



Shenzhen Shuodian Electronic Technology Co.,Ltd
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SPECIFICATION

for

2.4G antenna

Customer No.

Product No.

SD-2.4G-BT-CABLE-41MM

Author: XiaofengZeng Review: Liming

Release Date: 2025.09.22

ShenZhen Shuodian Electronic Technology Co., Ltd

Room 201, Building 2, Nantaiyun Chuanggu Park, Tangwei Community, Fenghuang Street,
Guangming District, Shenzhen City, Guangdong Province

E-mail: sz_shuodian@163.com

Tel: 0755-86006322

Fax: 0755-86006323

Shenzhen Shuodian Electronic Technology Co.,Ltd



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1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		



2. General

2.1 Scope of application

This specification is only applicable to 2.4G antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	2.4G antenna
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.0
4	GAIN	0 $\pm$ 0.5dBi
5	Impedance	50 Ω
6	Antenna Type	Monopole
7	Antenna composition	CABLE
8	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

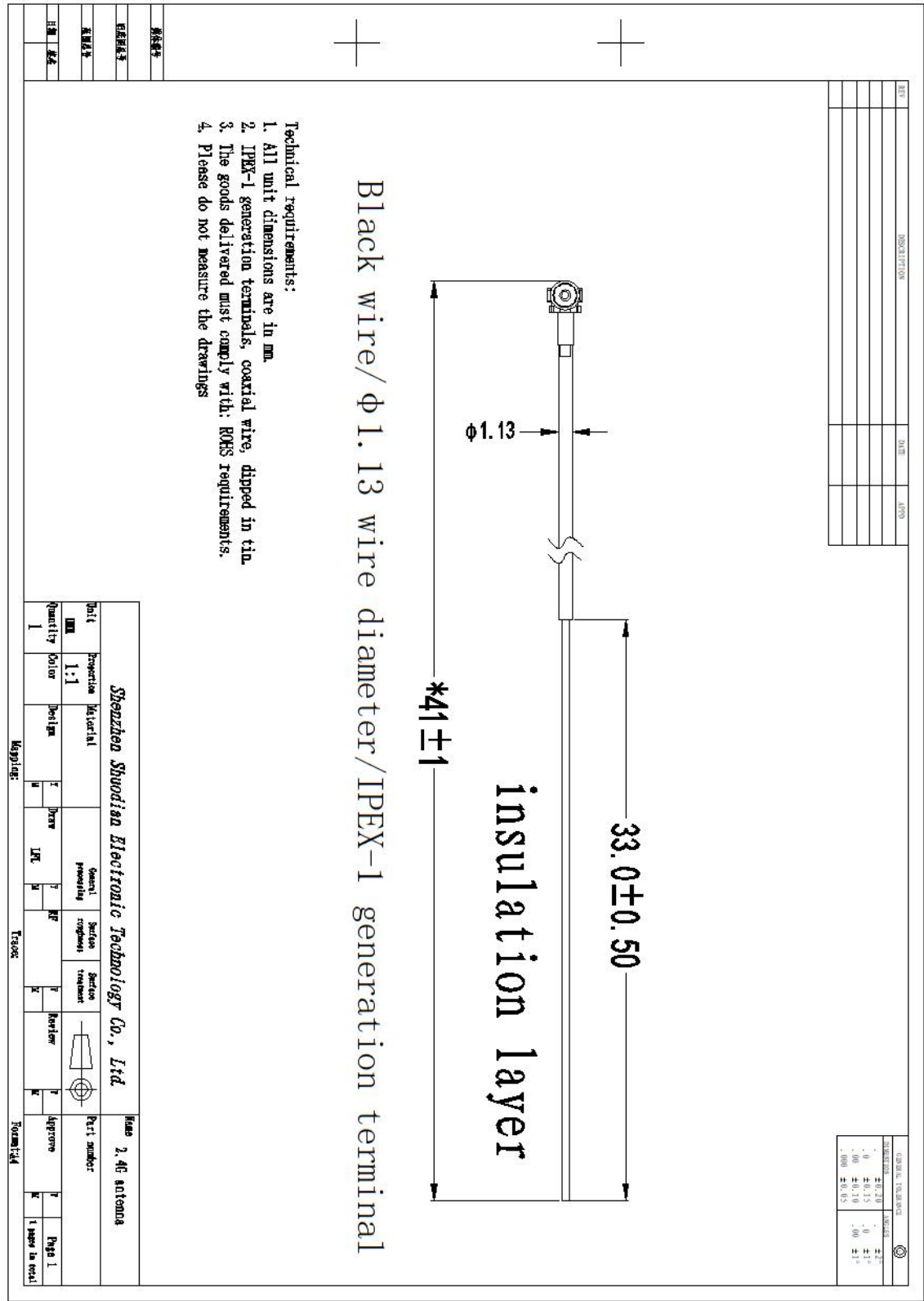
No.	Material	Size (MM)
1	CABLE	IPEX-1 ϕ 1.13 L=41 black

4.12 Apperance

Good appearance without scars 、 dirts、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Productdrawings:





4.2 Electric Performance

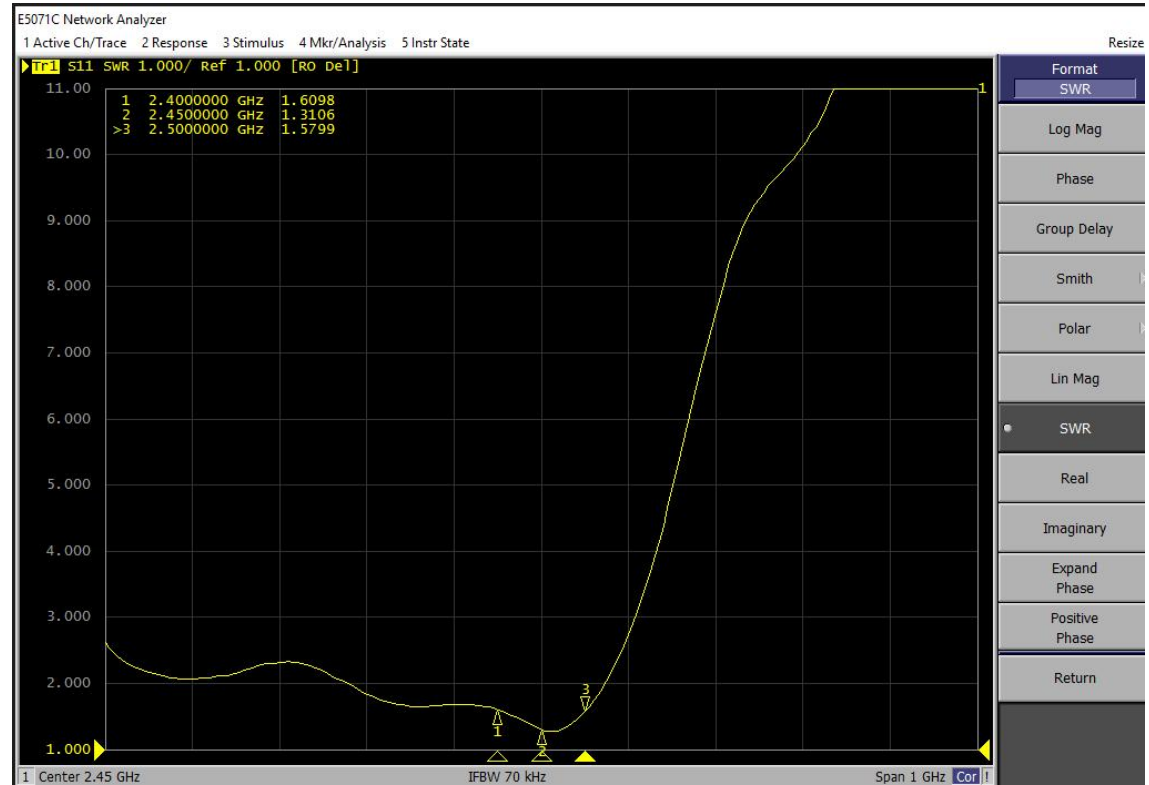
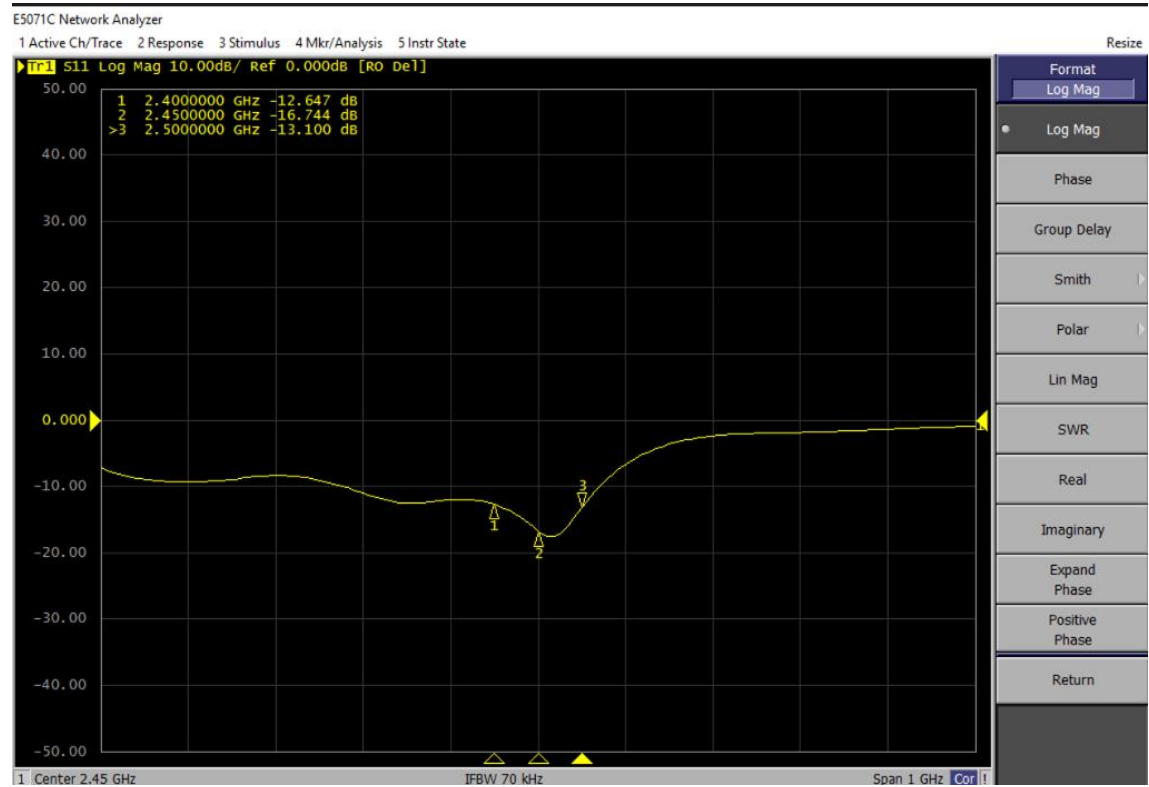
4.21 Test condition

Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: KEYSIGHT E5071C
Humidity: ≤80% (+40℃)	Multi-probe microwave anechoic
Atmospher: 750mmkg±30mmkg	chamber

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker (MHz)	2400	2450	2500
Returnloss	-12.64	-16.74	-13.10
VSWR	1.60	1.31	1.57



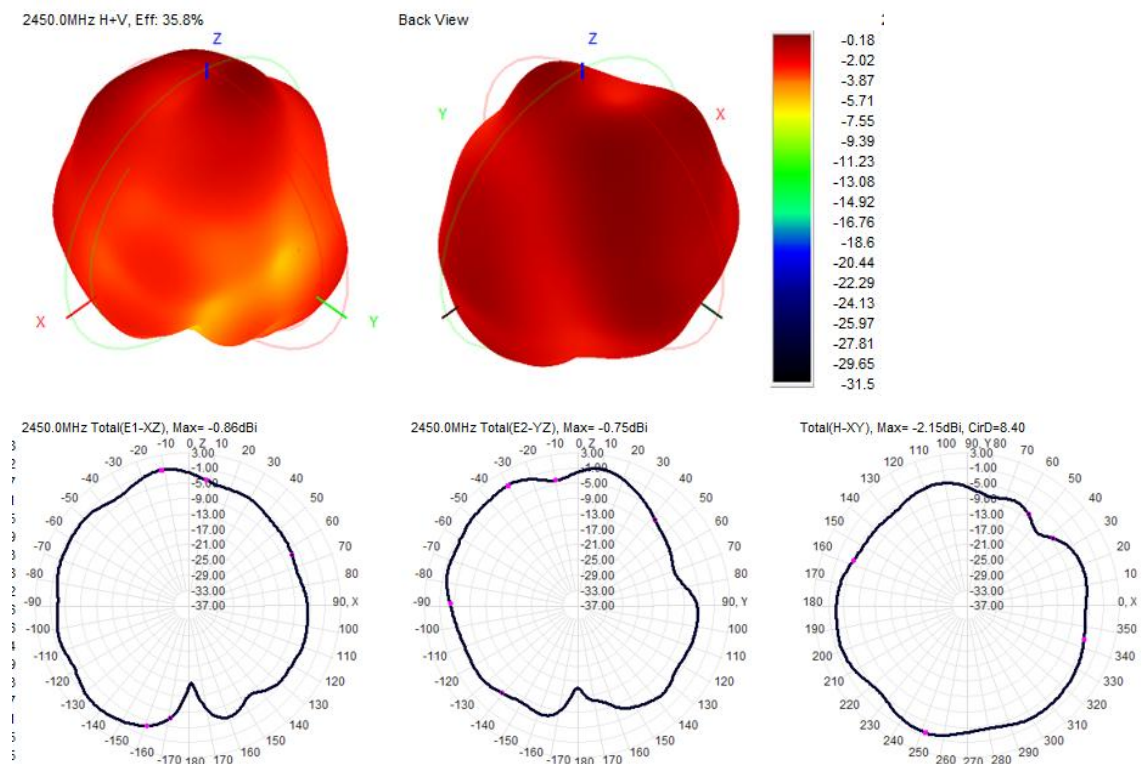


4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	0.42	0.39	0.26	-0.05	-0.10	-0.18	-0.16	-0.09	-0.19	-0.36	-0.52
Efficiency (%)	40.9	39.8	38.9	37.4	36.9	35.8	34.1	32.5	30.7	29.7	29.2

Radiation Pattern 2450MHz

@2450MHz





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2025/09/22
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2025/09/22	1.00	New Project