



Shenzhen Shuodian Electronic Technology Co.,Ltd
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SPECIFICATION

for

DoorBell outdoor BT antenna

Customer No.

Product No.

WA-DoorBell-out-Right_BT- FPC

Author: XiaofengZeng Review: Liming

Release Date: 2024.11.22

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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 WOAN DoorBell outdoor BT 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	DoorBell outdoor BT antenna
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.5
4	Impedance	50Ω
5	Antenna Type	Monopole
6	Antenna composition	FPC
7	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	FPC	28. 5*20. 94 Black
2	CABLE	IPEX-4 ϕ 0.81 L=85 black

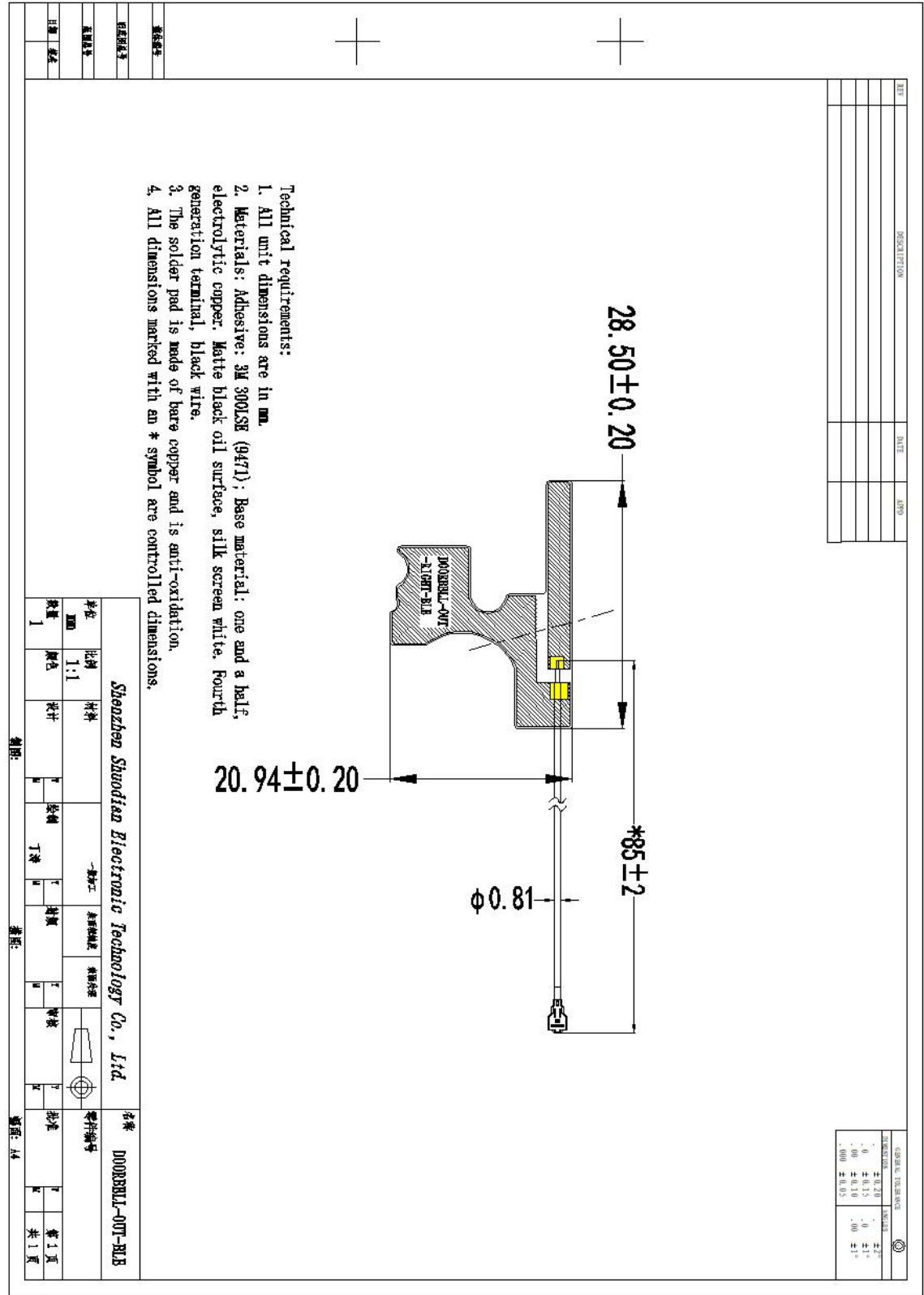
4.12 Apperance

Good appearance without scars 、 dirt、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Productdrawings:

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4.2 Electric Performance

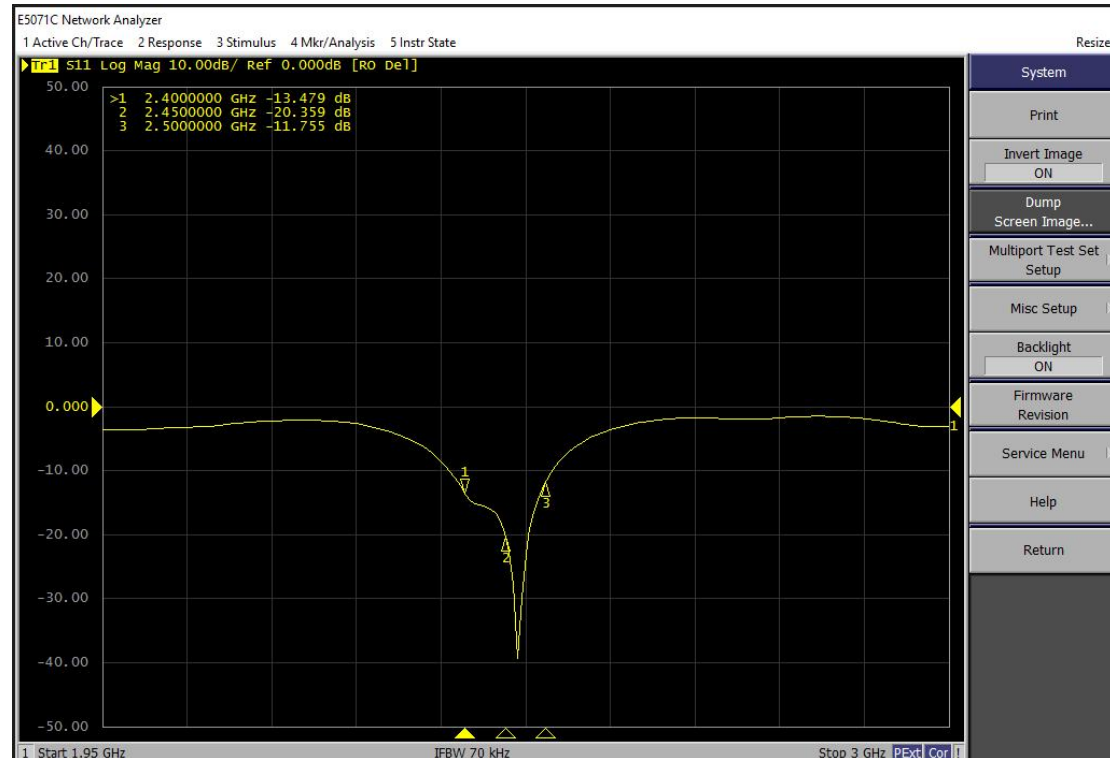
4.21 Test condition

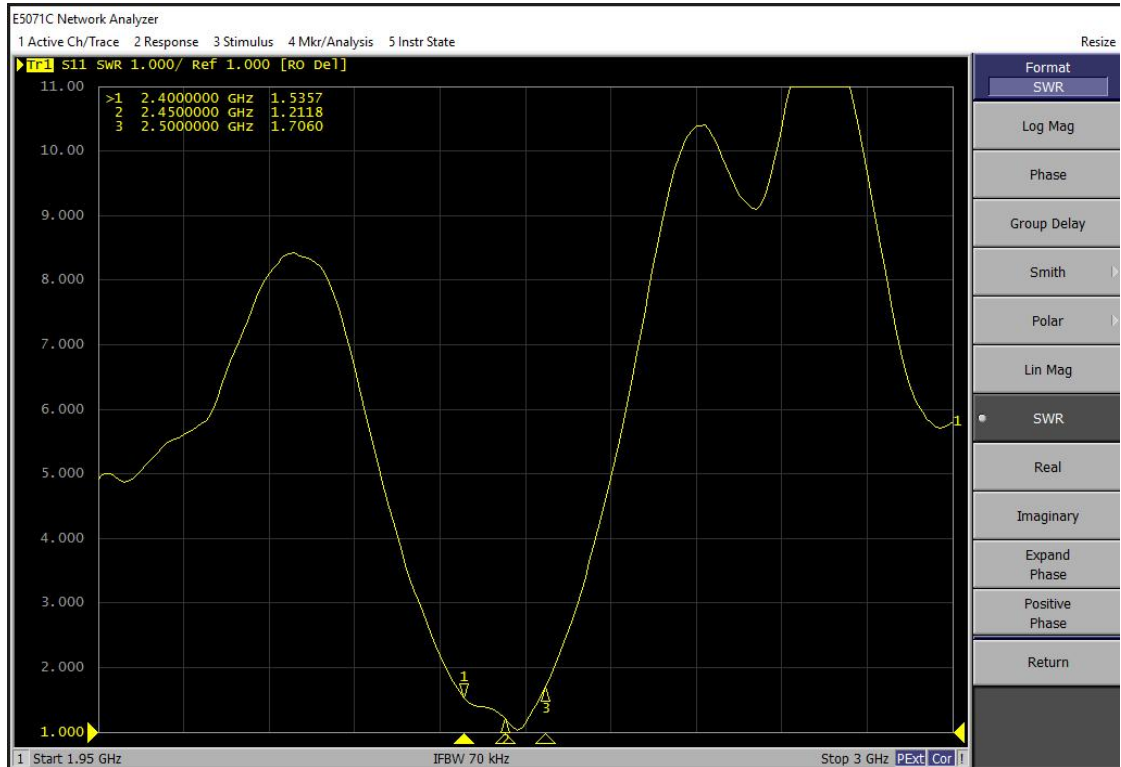
Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: KEYSIGHT E5071C
Humidity: ≤80% (+40℃)	Multi-probe microwave anechoic
Atmospher: 750mmkg±30mmkg	chamber

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-13.48	-20.36	-11.75
VSWR	1.53	1.21	1.70





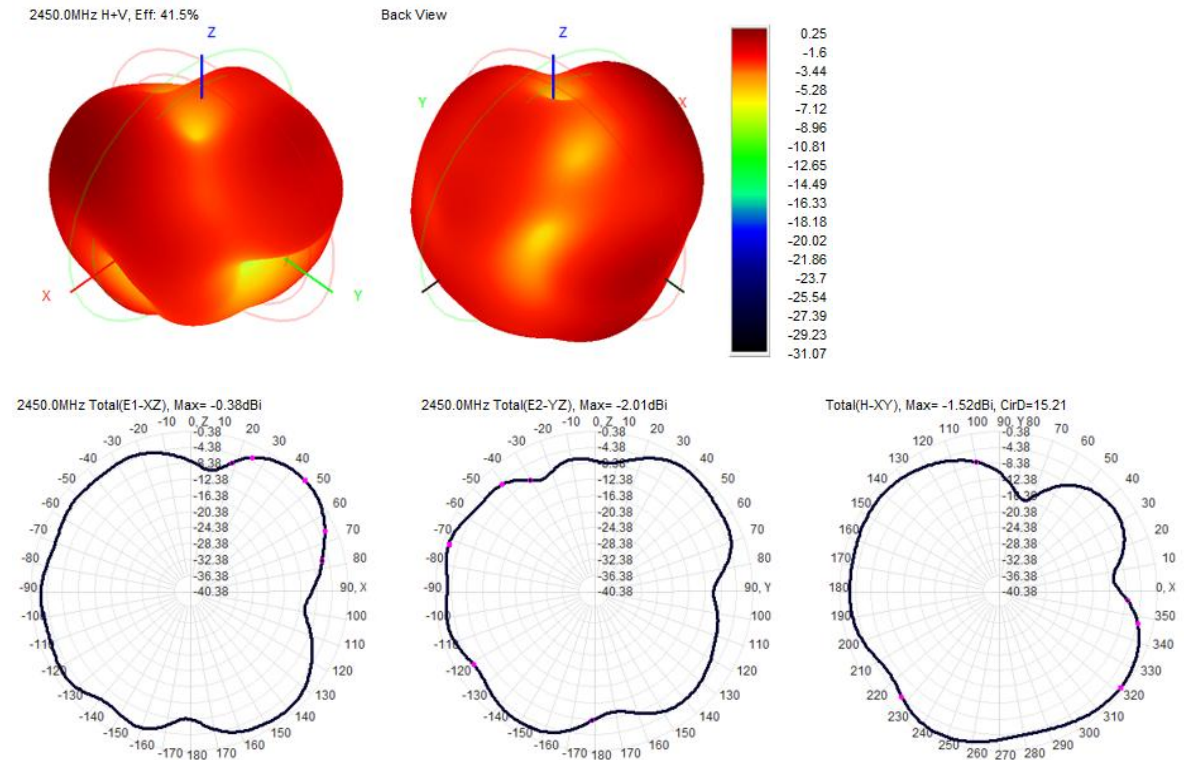
4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

频率 (MHz)	Gain (dBi)	Efficiency (%)
2400.0	1.09	39.6
2410.0	0.59	39.5
2420.0	0.03	39.5
2430.0	-0.35	38.9
2440.0	-0.04	40.5
2450.0	0.25	41.5
2460.0	0.63	41.9
2470.0	0.80	42.1
2480.0	0.90	41.1
2490.0	0.95	40.7
2500.0	0.81	39.8



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	2024/11/22
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2024/11/22	1.00	New Project