



Shenzhen Shuodian Electronic Technology Co.,Ltd
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SPECIFICATION

for

Onboard antenna

Customer No.

Product No.

Presence sensor

Author: XiaofengZeng Review: Liming

Release Date: 2025.2.5

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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 WOAN Onboard 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	Onboard antenna
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤2.0
4	Impedance	50 Ω
5	Antenna Type	IFA
6	Antenna composition	Onboard antenna



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

4.12 Apperance

Good appearance without scars 、dirts、protuberances, etc.

4.2 Electric Performance

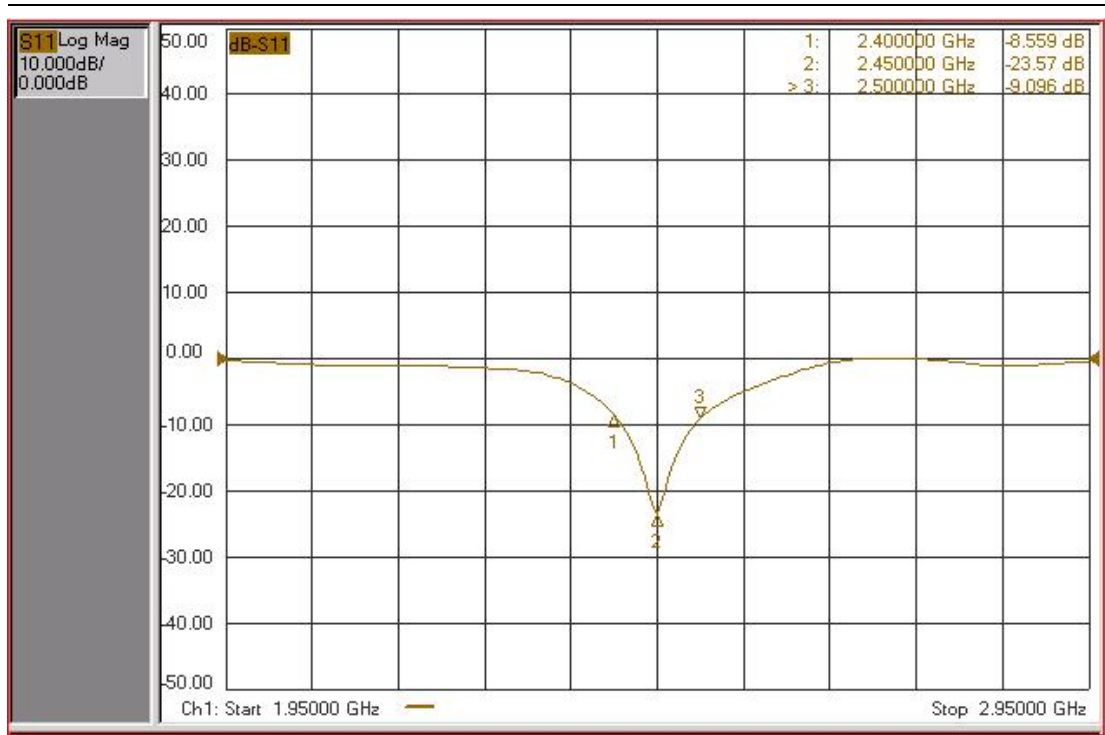
4.21 Test condition

Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer: Agilent E8358A
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	-8.55	-23.57	-9.09
VSWR	2.2	1.12	2.09



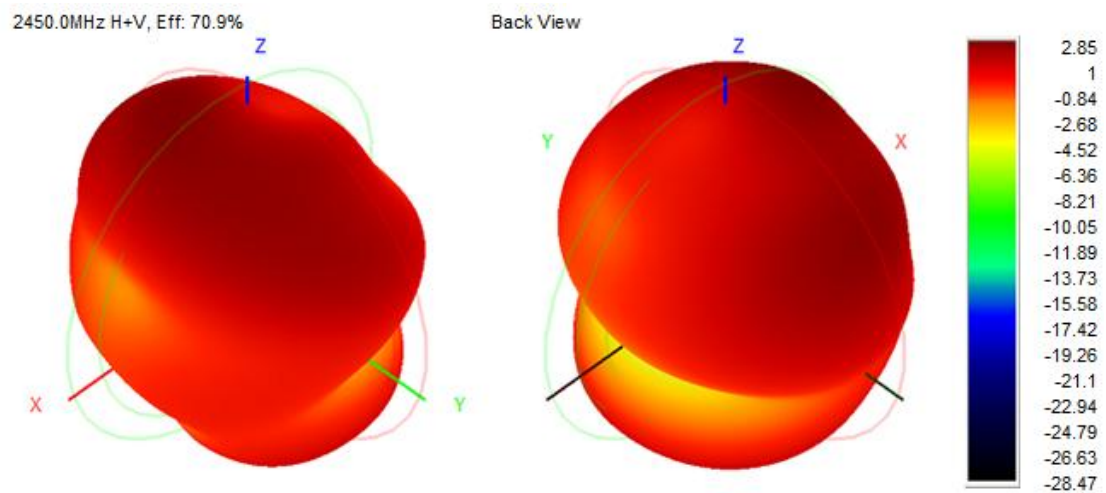


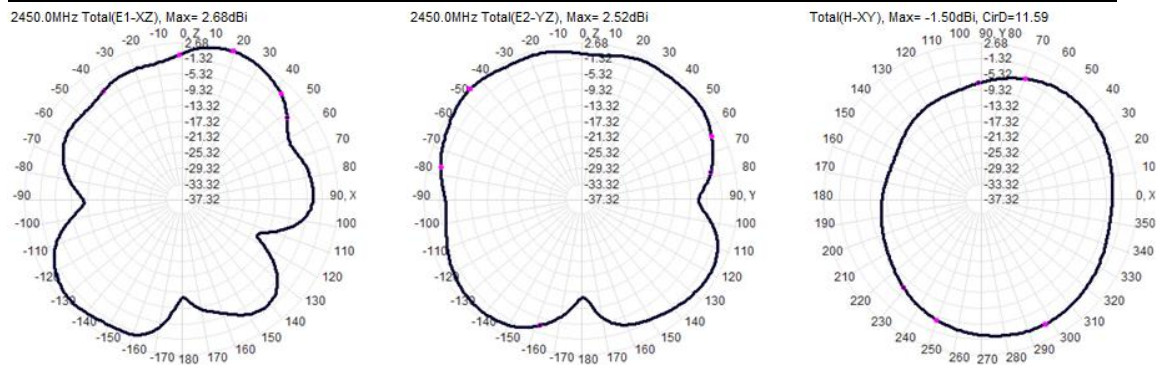
4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	2.13	62.6
2410.0	2.11	65.1
2420.0	2.24	67.3
2430.0	2.43	68.3
2440.0	2.71	69.7
2450.0	2.85	70.2
2460.0	2.64	69.0
2470.0	2.18	64.8
2480.0	1.98	60.4
2490.0	1.66	55.7
2500.0	1.33	52.2

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	2025/2/5
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2025/2/5	1.00	New Project