



Quectel Antenna Datasheet

Product OC: YHL01A0DA

Version: 1.0

Date: 2024-01-08

Status: Preliminary

Product Name: WIFI Antenna

Key Features:

Frequency Band: 2400-2500MHz, 5150-5850MHz, 5925-7125MHz

Dimensions: 28.9 * 11.0 mm

Efficiency: Up to 58%

RoHS Compliant

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1 Specification

Test Condition: Free space

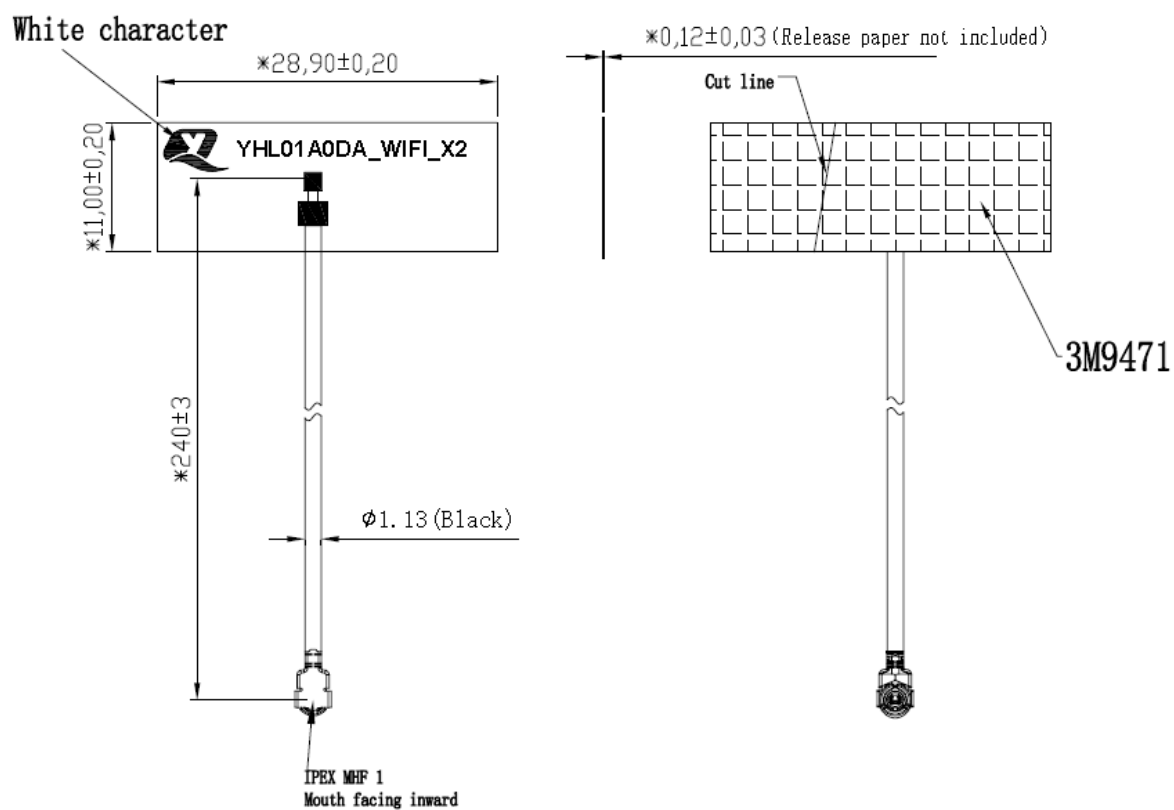
1.1. Electrical

Electrical	
Frequency Range	2400-2500MHz, 5150-5850MHz, 5925-7125MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 7.2
Peak Gain	2.0 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	28.9 * 11.0 mm
Material & Color	FPC & Black
Cable Type & Color & Length	Φ 1.13 & Black & 240 mm
Connector Type	IPEX MHF 1
Mounting Type	Adhesive
Weight	Typ. 0.88 g
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS Compliant	Yes

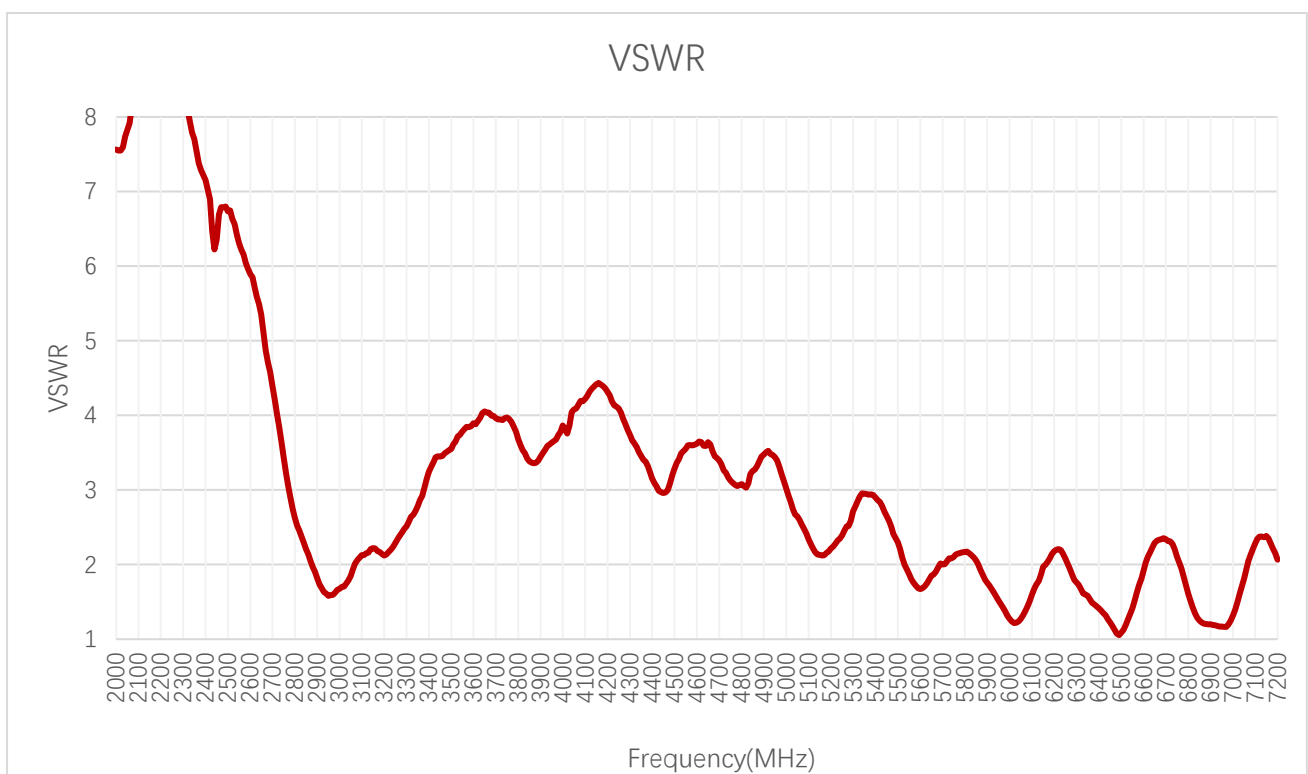
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

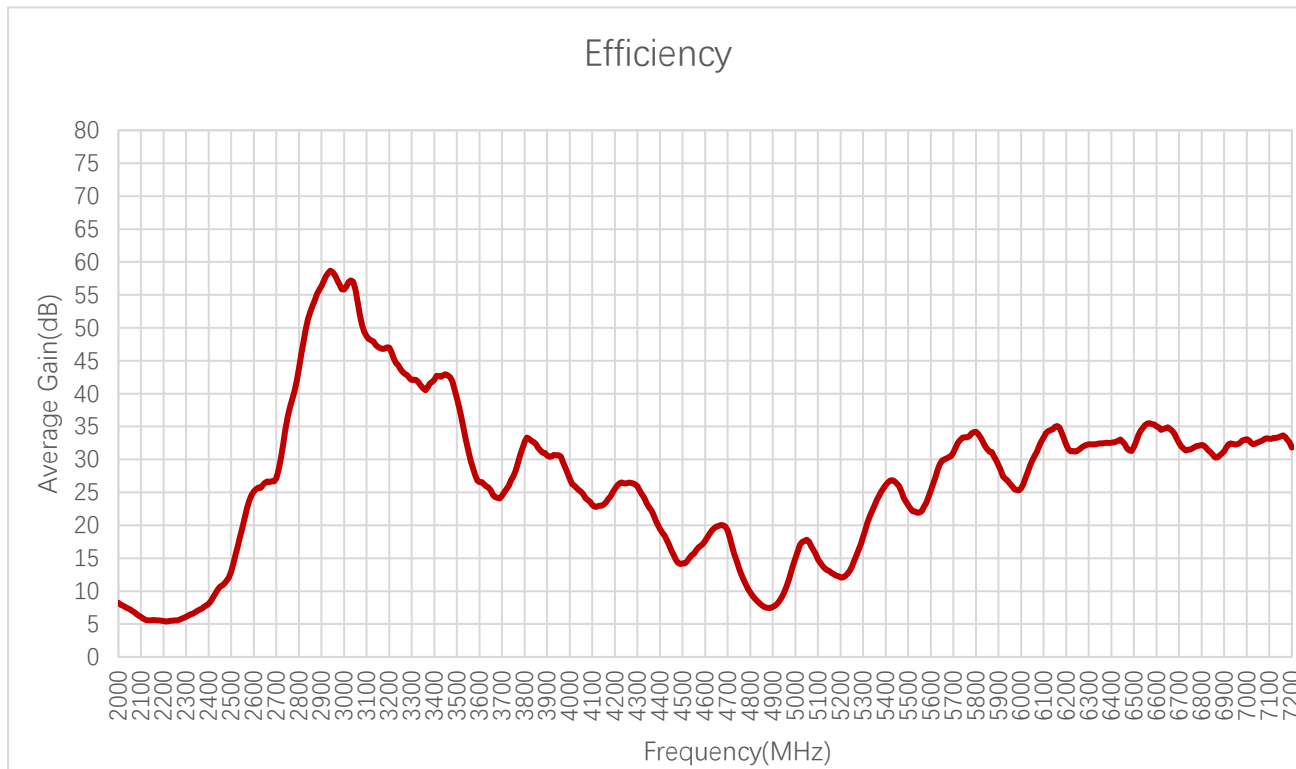


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5920	6325	6520	7120
VSWR	7.2	6.4	6.7	2.1	2.3	2.1	1.7	-	1.2	2.4

3.2. Radiation Performance Test

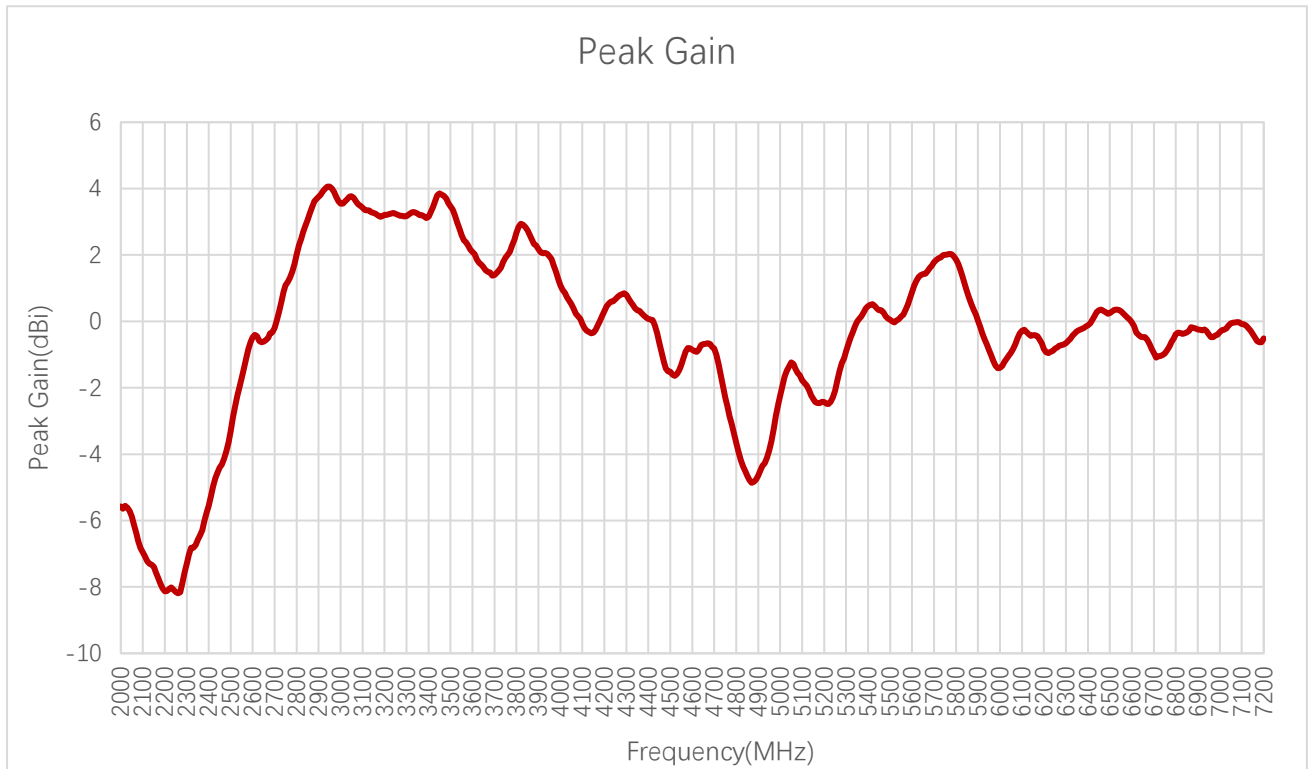
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5920	6325	6520	7120
Efficiency (%)	8.1	10.7	12.9	13.1	23.1	31.6	27.4	-	33.7	33.3

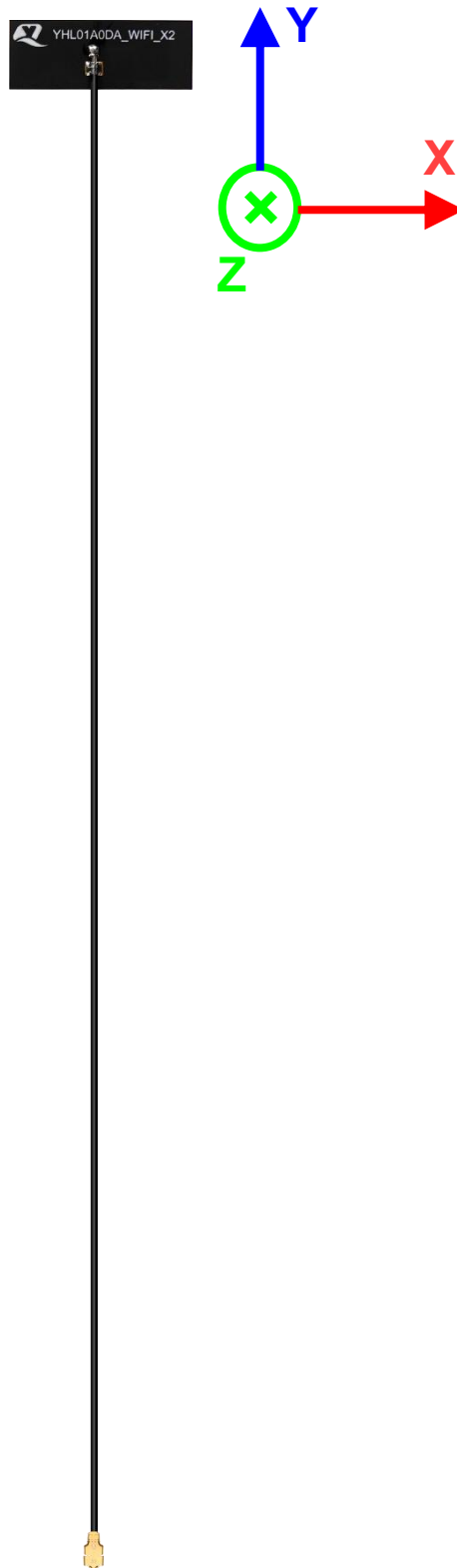
3.2.2. Peak Gain



Peak Gain (dBi)										
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5920	6325	6520	7120
Peak Gain (dBi)	-5.6	-4.4	-3.3	-2.3	0.1	0.9	-0.4	-	0.4	-0.1

3.2.3. 2D Radiation Pattern

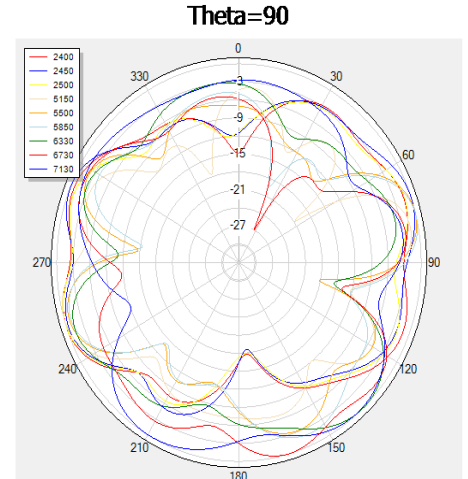
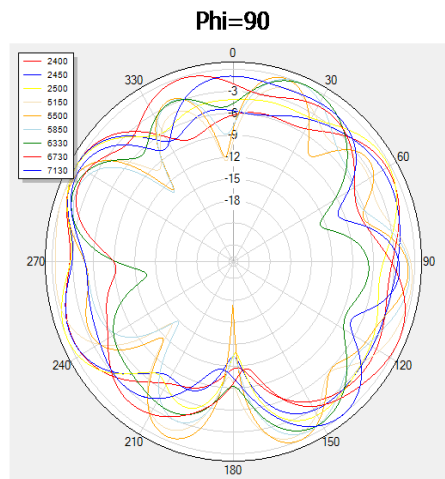
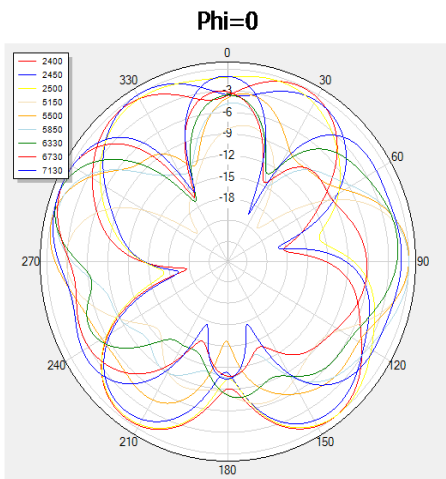
- Test Condition: Free space
- Test Chamber: HF-S-1



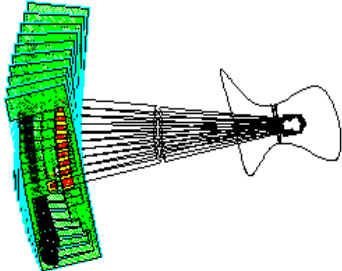
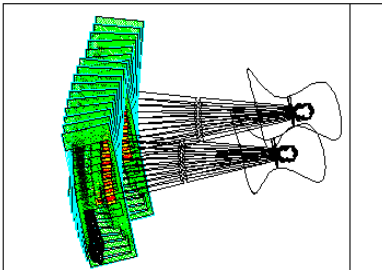
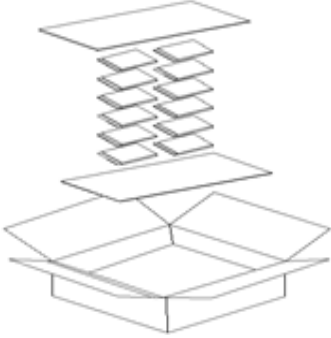
E1 – XOZ Plane (Phi 0 deg)

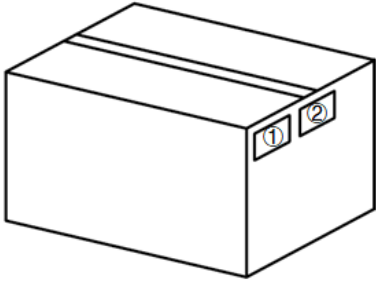
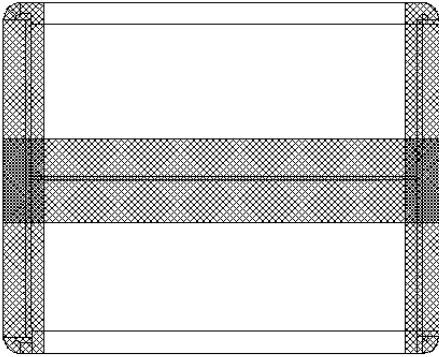
E2 – YOZ Plane (Phi 90 deg)

H – XOY Plane(Theta 90 deg)



4 Packaging

Step	Packaging picture / 2D picture	Description
1		25 products in a bundle
2		50 pcs Antenna products in a PE bags; 50 pcs Antenna / Per PE Bag ;
3		50 PE Bag / Per Carton Box (2500 pcs Antenna / Per Carton Box) Estimated quantity Products that are not full will be packaged in suitable cardboard boxes <u>Carton Size:L*W*H=275*275*185mm</u>

4		<p>Position for Attaching Labels---</p> <p>① Carton Label</p> <p>② Quality Label</p>
5		<p>Sealing Cartons---</p> <p>“I” type sealing cartons</p>
6	<p>The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.</p>	

Contact US

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Or our local offices. For more information, please visit:

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Revision History

Version	Date	Author	Note
-	2024-01-08	Edison LIU/ Blake XIANG/ David LIU/ Rainey LIAO	Creation of the document
1.0	2024-01-08	Edison LIU/ Blake XIANG/ David LIU/ Rainey LIAO	First official release



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