



Antenna Datasheet

Product OC: Y0SKA0CA0AA

Version: 1.0

Date: 2025-12-19

Product Name: WIFI & NL Antenna

Key Features:

Frequency Range: 2400–2500 MHz, 5150–5850 MHz

Dimensions: 35.26 mm × 16.28 mm × 1.5 mm

Efficiency: Up to 52.9 %

RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

1.1. Electrical

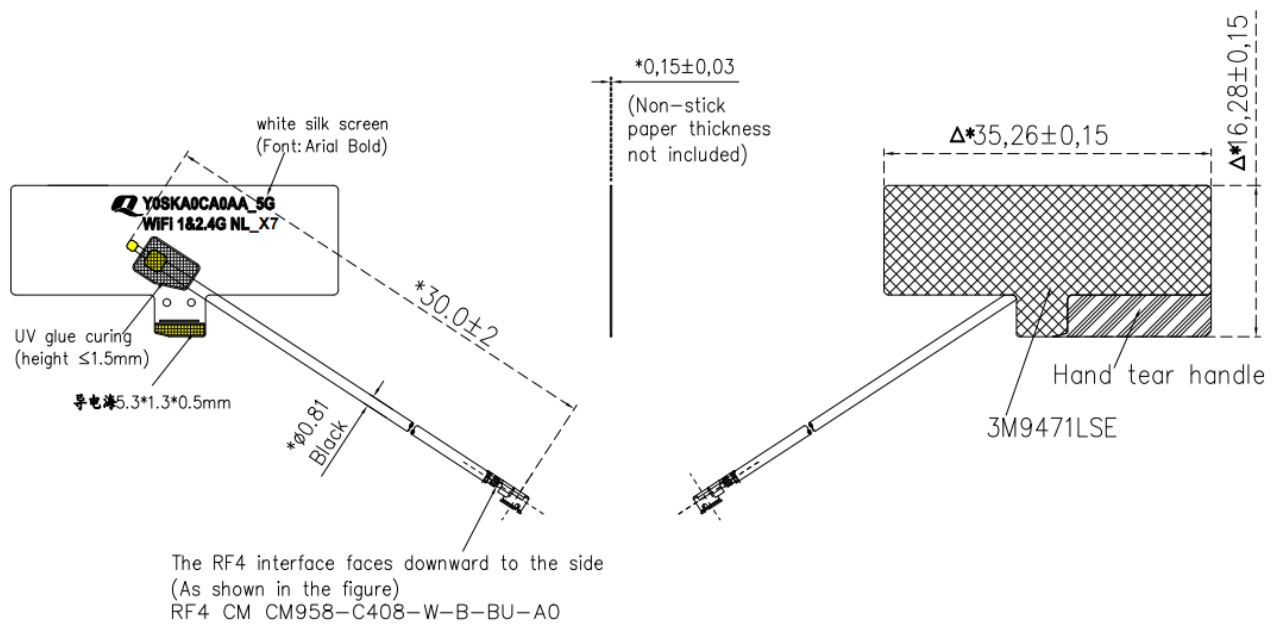
Electrical	
Frequency Range	2400–2500 MHz, 5150–5850 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 2.4
Peak Gain	4.2 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	35.26 mm × 16.28 mm × 1.5 mm
Material & Color	FPC & Black
Mounting Type	Φ 0.81 & Black & 30.0 mm
Weight	RF 4
Mounting Type	Adhesive
Weight	Typ. 0.17 g
Environmental	
Operation Temperature	-40 °C to +85 °C

Storage Temperature	-40 °C to +85 °C
RoHS Compliant	Yes

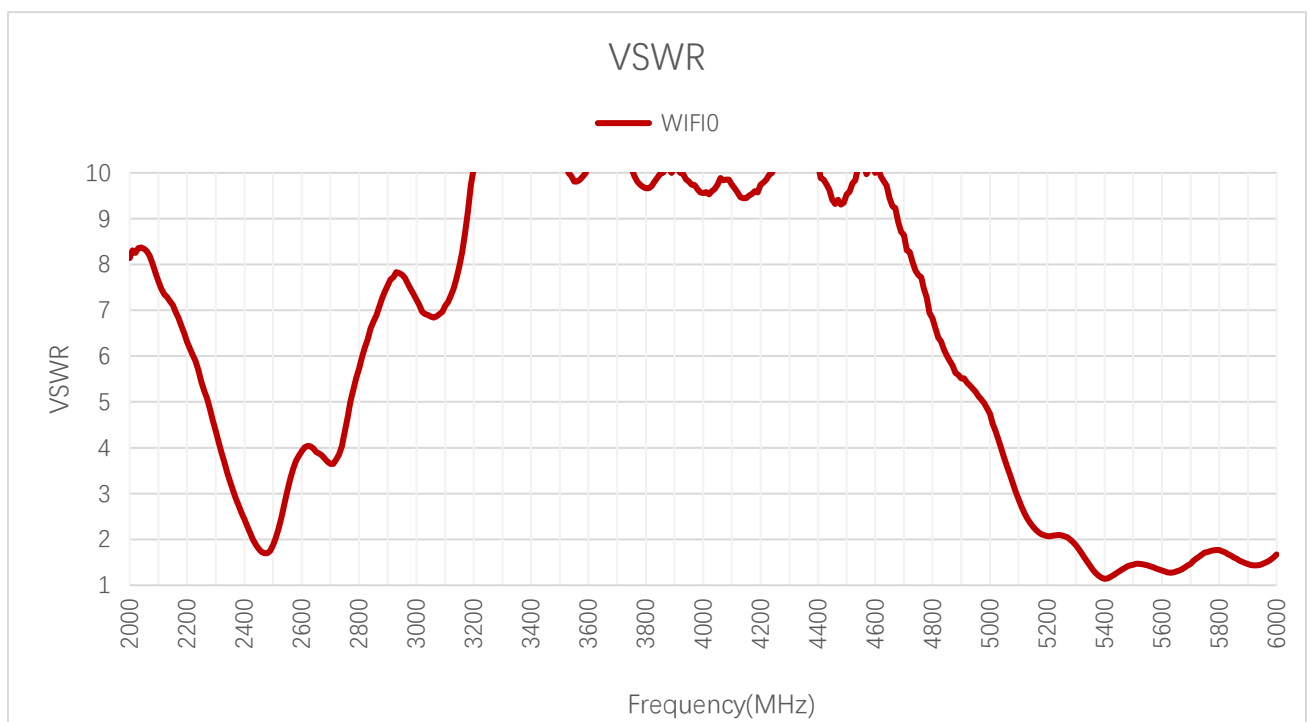
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

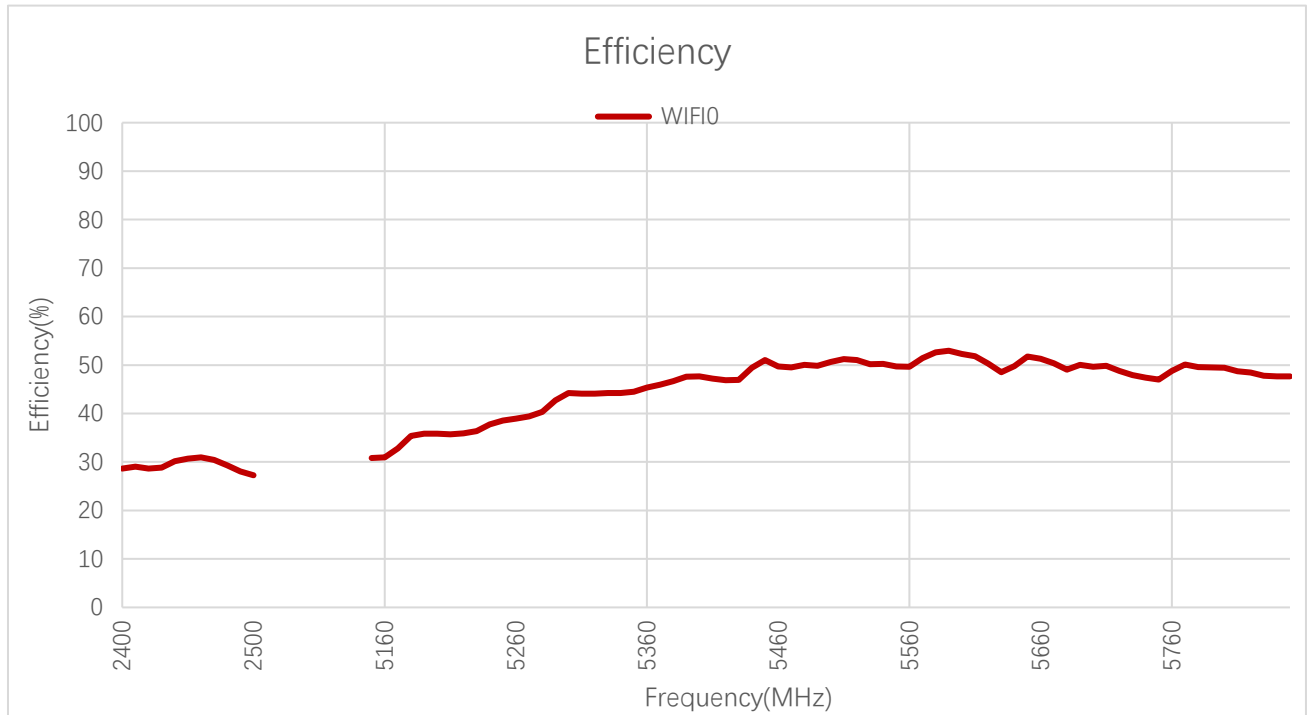


VSWR

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490
VSWR	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.7	1.7	1.8
Frequency (MHz)	2500	5150	5160	5170	5180	5190	5200	5210	5220	5230
VSWR	1.9	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1
Frequency (MHz)	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330
VSWR	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.8	1.7	1.6
Frequency (MHz)	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430
VSWR	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.2	1.2	1.2
Frequency (MHz)	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530
VSWR	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.5
Frequency (MHz)	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630
VSWR	1.5	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
Frequency (MHz)	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730
VSWR	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6
Frequency (MHz)	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830
Frequency (MHz)	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.7
Frequency (MHz)	5840	5850	-	-	-	-	-	-	-	-
Frequency (MHz)	1.7	1.6	-	-	-	-	-	-	-	-

3.2. Radiation Performance Test

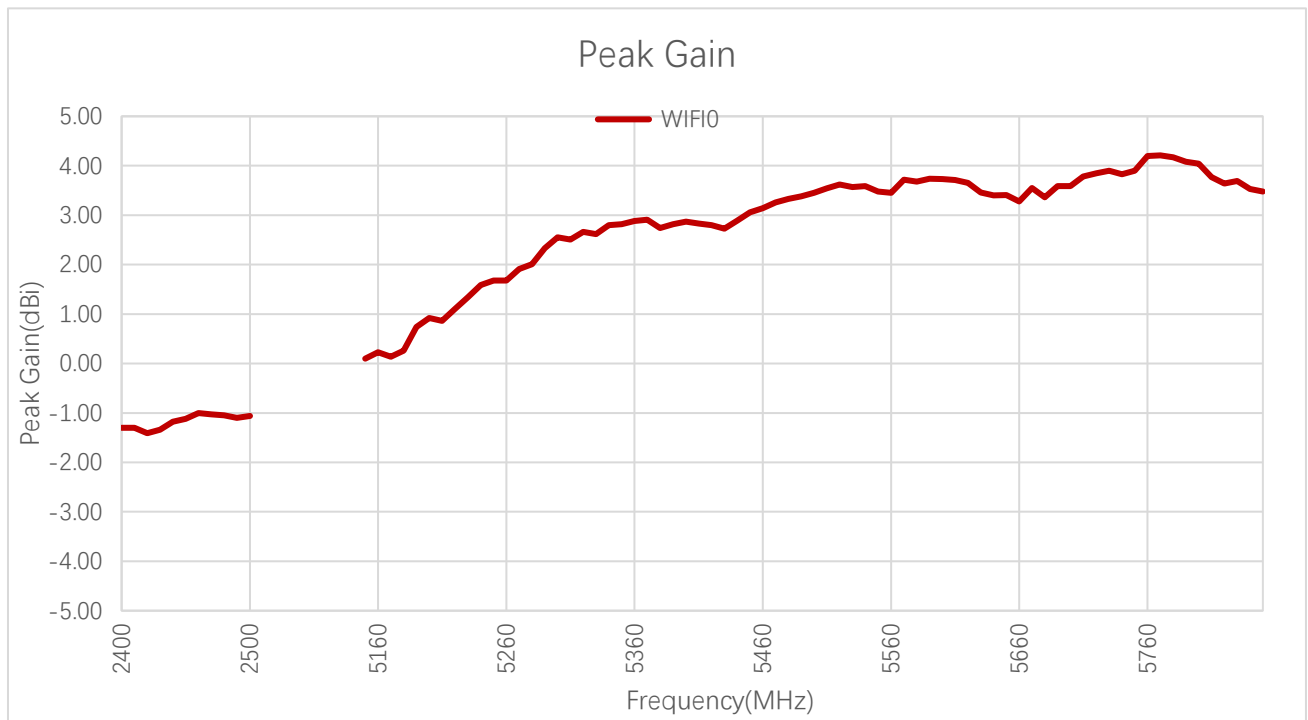
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490
Efficiency (%)	28.7	29.1	28.7	28.8	30.2	30.7	31.0	30.4	29.3	28.0
Frequency (MHz)	2500	5150	5160	5170	5180	5190	5200	5210	5220	5230
Efficiency (%)	27.3	30.8	30.9	32.8	35.4	35.9	35.9	35.7	35.9	36.4
Frequency (MHz)	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330
Efficiency (%)	37.7	38.6	38.9	39.4	40.3	42.7	44.3	44.1	44.1	44.2
Frequency (MHz)	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430
Efficiency (%)	44.2	44.5	45.4	46.0	46.7	47.6	47.7	47.2	46.9	46.9
Frequency (MHz)	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530
Efficiency (%)	49.5	51.0	49.7	49.5	50.1	49.9	50.6	51.3	51.0	50.2
Frequency (MHz)	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630
Efficiency (%)	50.2	49.7	49.6	51.4	52.6	53.0	52.3	51.8	50.3	48.5
Frequency (MHz)	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730
Efficiency (%)	49.8	51.8	51.3	50.4	49.1	50.1	49.6	49.8	48.8	47.9
Frequency (MHz)	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830
Efficiency (%)	47.4	47.0	48.8	50.1	49.6	49.5	49.5	48.7	48.5	47.8
Frequency (MHz)	5840	5850	-	-	-	-	-	-	-	-
Efficiency (%)	47.7	47.7	-	-	-	-	-	-	-	-

3.2.2. Peak Gain

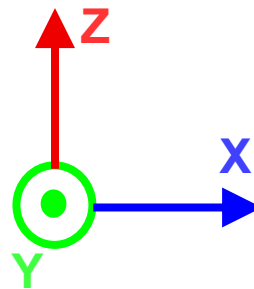


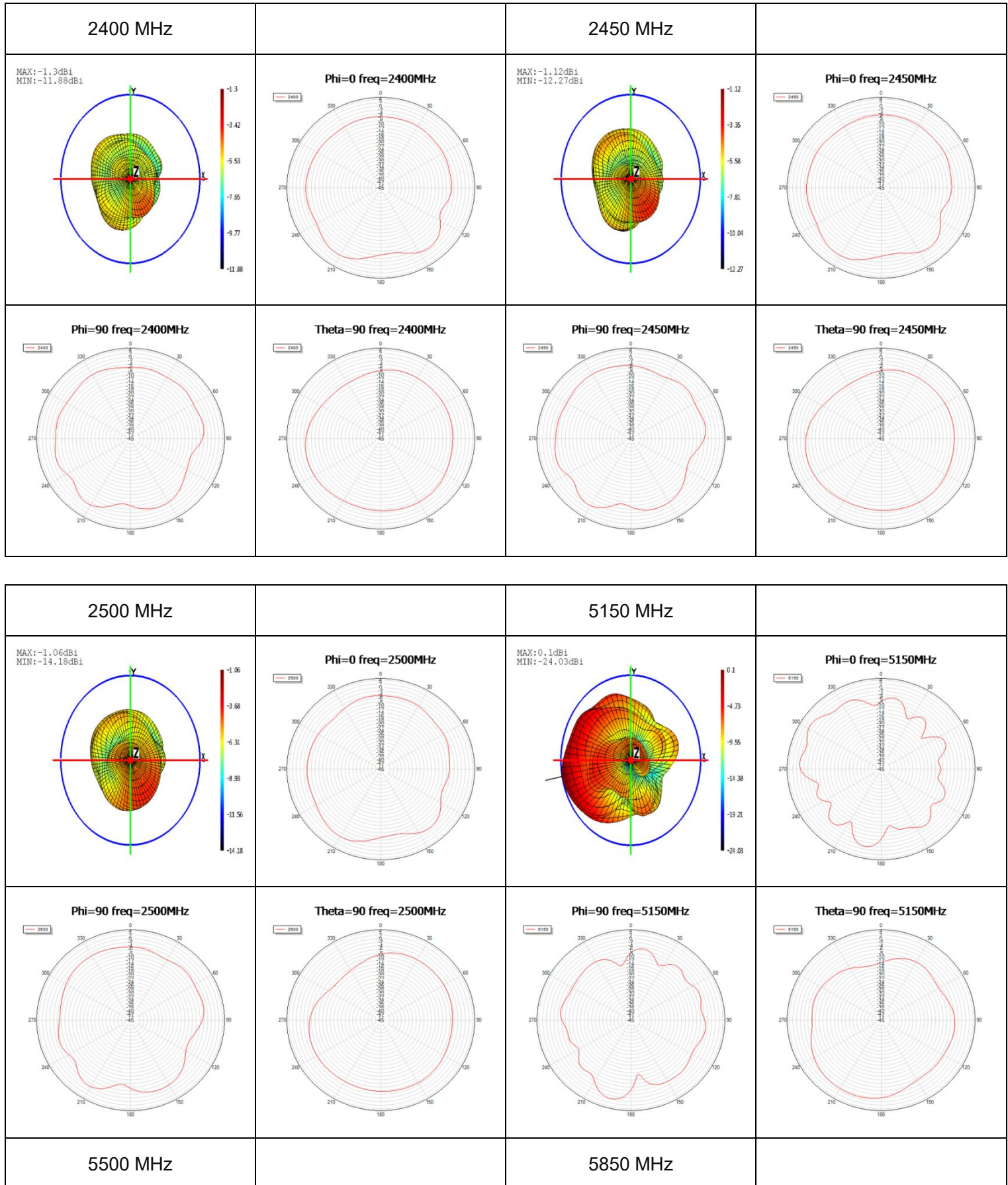
Peak Gain (dBi)

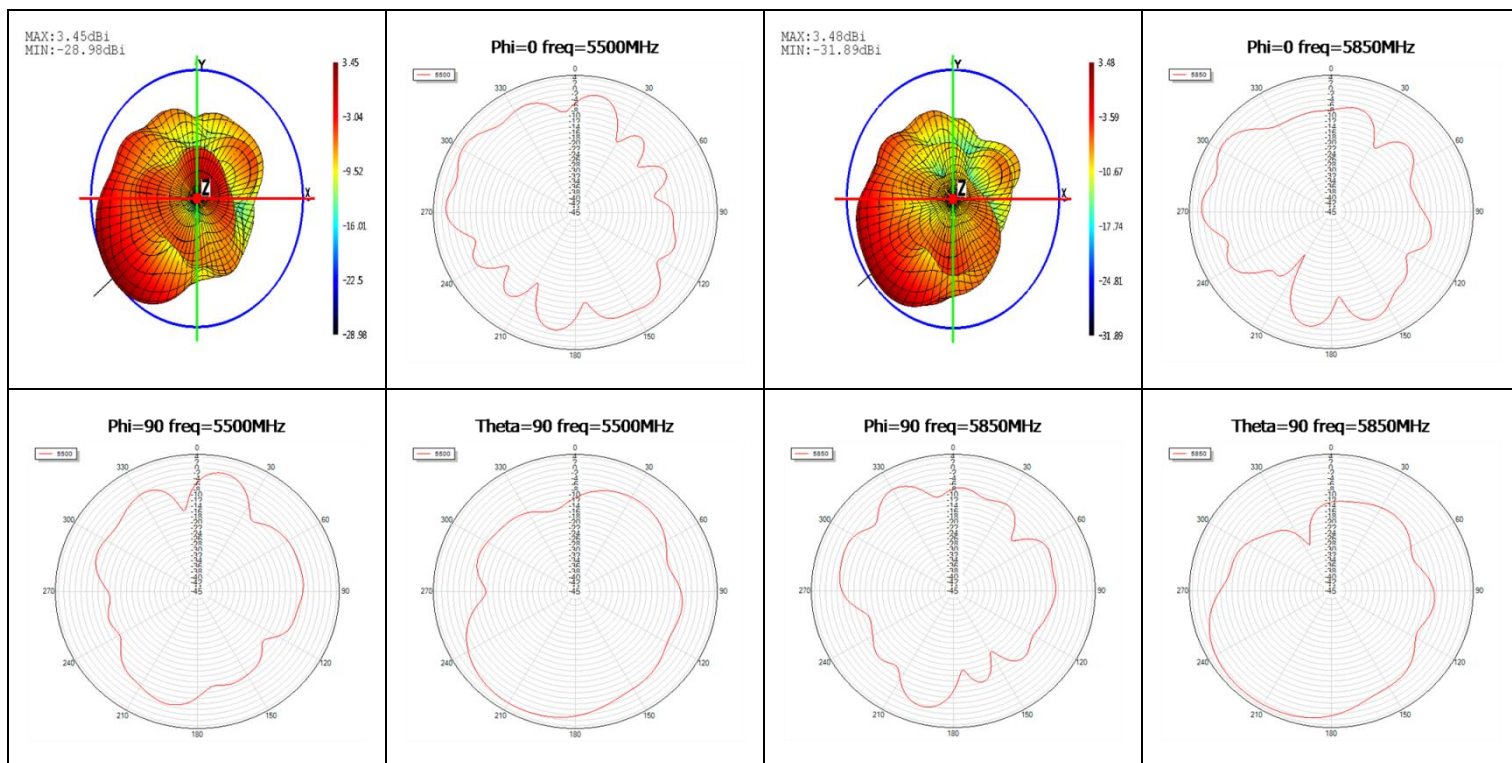
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490
Peak Gain (dBi)	-1.3	-1.3	-1.4	-1.3	-1.2	-1.1	-1.0	-1.0	-1.1	-1.1
Frequency (MHz)	2500	5150	5160	5170	5180	5190	5200	5210	5220	5230
Peak Gain (dBi)	-1.1	0.1	0.2	0.1	0.3	0.7	0.9	0.9	1.1	1.3
Frequency (MHz)	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330
Peak Gain (dBi)	1.6	1.7	1.7	1.9	2.0	2.3	2.6	2.5	2.7	2.6
Frequency (MHz)	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430
Peak Gain (dBi)	2.8	2.8	2.9	2.9	2.7	2.8	2.9	2.8	2.8	2.7
Frequency (MHz)	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530
Peak Gain (dBi)	2.9	3.1	3.1	3.3	3.3	3.4	3.5	3.5	3.6	3.6
Frequency (MHz)	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630
Peak Gain (dBi)	3.6	3.5	3.5	3.7	3.7	3.7	3.7	3.7	3.7	3.5
Frequency (MHz)	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730
Peak Gain (dBi)	3.4	3.4	3.3	3.6	3.4	3.6	3.6	3.8	3.9	3.9
Frequency (MHz)	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830
Peak Gain (dBi)	3.8	3.9	4.2	4.2	4.2	4.1	4.0	3.8	3.6	3.7
Frequency (MHz)	5840	5850	-	-	-	-	-	-	-	-
Peak Gain (dBi)	3.5	3.5	-	-	-	-	-	-	-	-

3.2.3. 2D Radiation Pattern

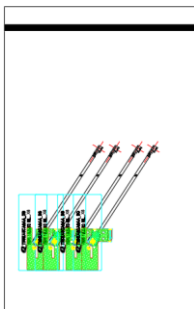
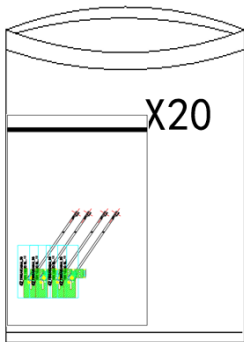
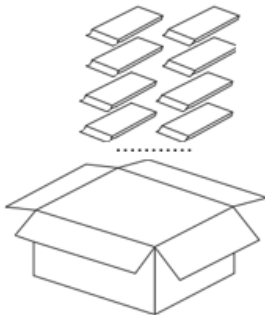
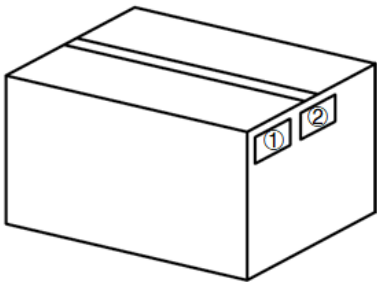
- Test Condition: Assembled in test device
- Test Chamber: SZ-S-1

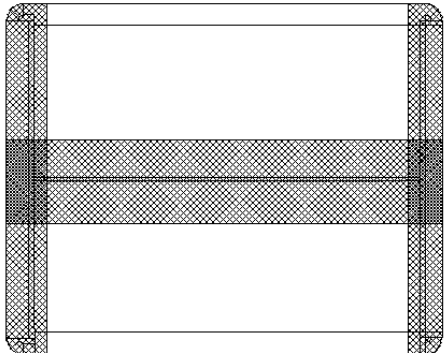






4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		100 antenna products in a small PE bag. (100 Antennas / Small PE Bag)
2		2000 antenna products in a big PE bag. (2000 Antennas / Big PE Bag)
3		(5 PE Bags / Carton Box) (10000 Antennas / Carton Box) Estimated quantity Products that cannot fill the entire carton box are packed in a suitable size carton box. <u>Carton Size:</u> <u>L × W × H = 325 × 325 × 200 mm</u>
4		Position for Attaching Labels ① Carton Label ② Quality Label

5		Sealing Cartons H-shaped sealing cartons
Note	The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.	

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
-	2025-12-19	Jialin Chen/ Shea Li/ Riva Ren/ Aria Chu	Creation of the document
1.0	2025-12-19	Jialin Chen/ Shea Li/ Riva Ren/ Aria Chu	First official release



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