



Antenna Datasheet

Product OC: Y0SGA0CA0AA

Version: 1.0

Date: 2026-06-12

Product Name: 4G FPC Antenna

Key Features:

Frequency Band: 698–960 MHz, 1710–2690 MHz

Dimensions: 27.73 mm × 27.39 mm

Efficiency: Up to 59.93 %

RoHS and REACH Compliant

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1 Specification

Test Condition: Assembled in test device

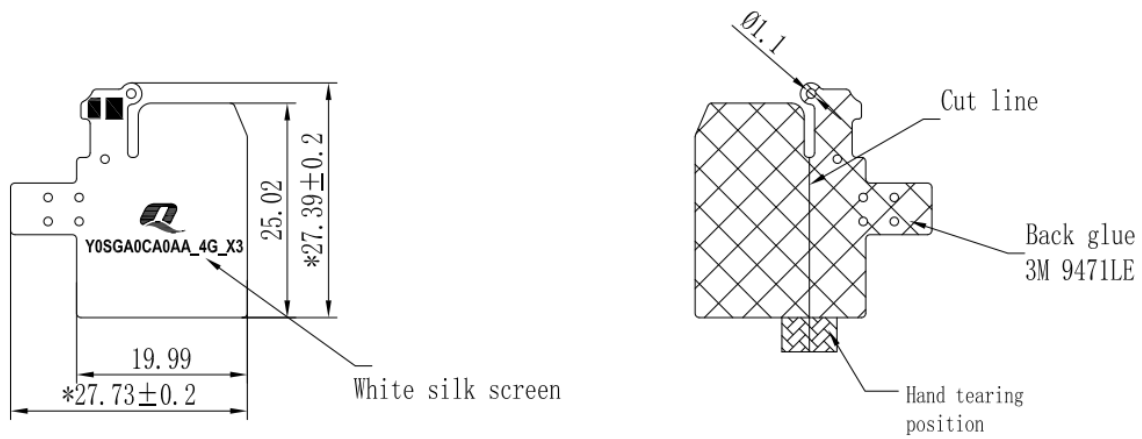
1.1. Electrical

Electrical	
Frequency Range	698–960 MHz, 1710–2690 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 42.1
Peak Gain	1.5 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	27.73 mm × 27.39 mm
Material & Color	FPC & Black
Weight	Typ. 0.05 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

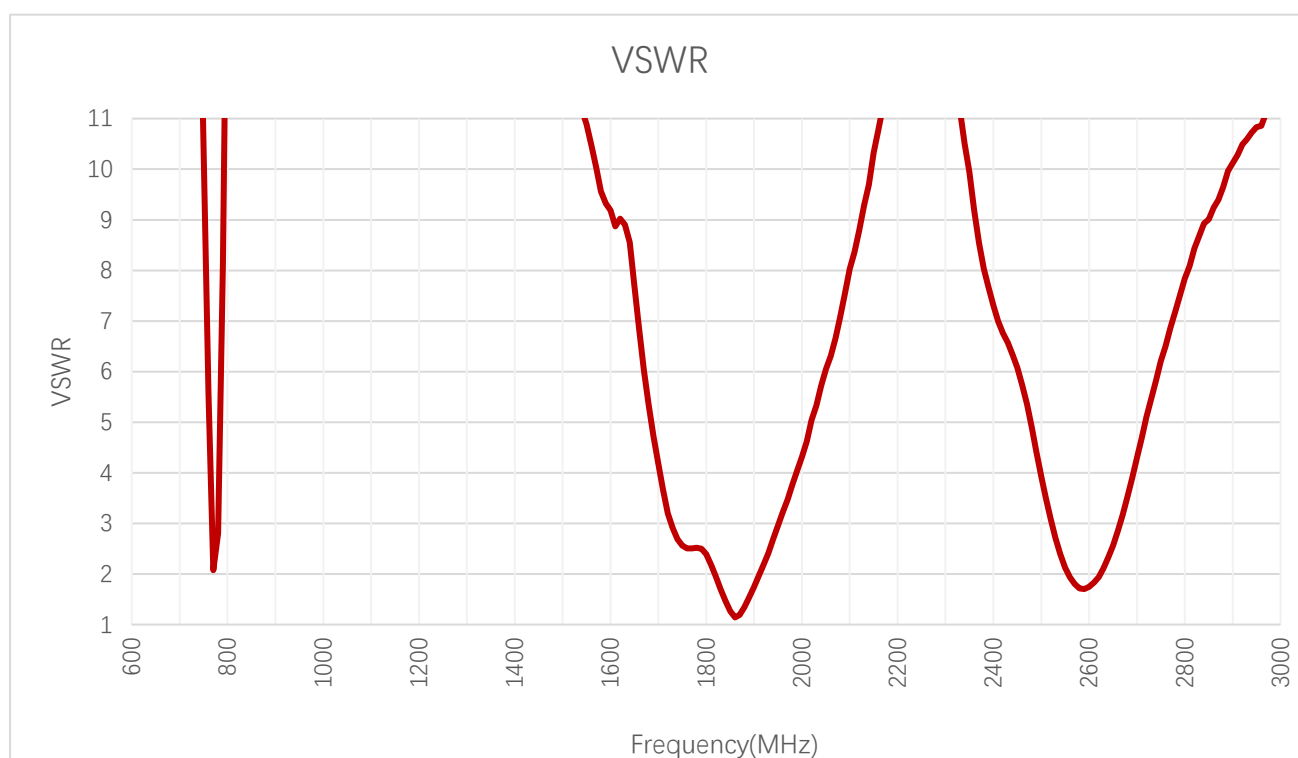
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

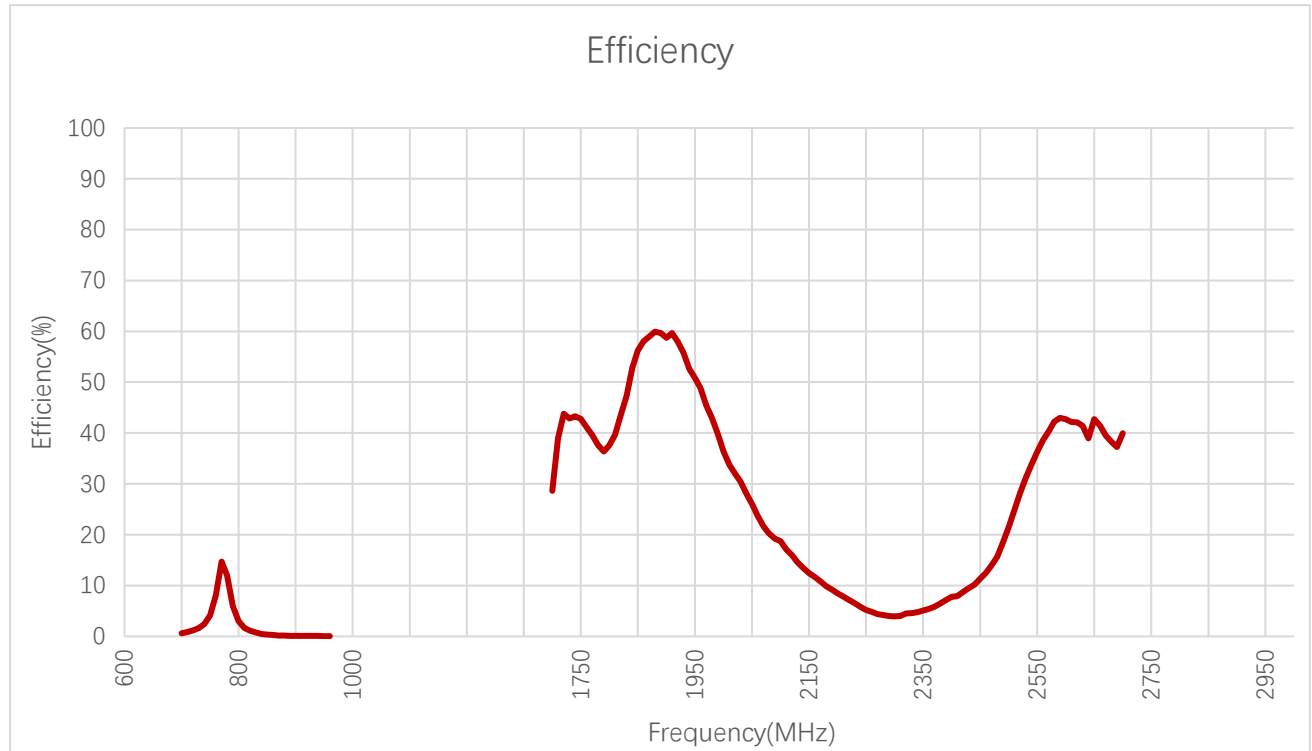


VSWR

Frequency (MHz)	600	630	710	830	900	960	1520	1710	1740	1880
VSWR	-	-	25.3	34.4	39.7	40.9	-	3.7	2.7	1.3
Frequency (MHz)	1950	2140	2350	2450	2600	2690	4700	5000	5500	6000
VSWR	3.0	9.7	9.9	6.1	1.7	3.9	-	-	-	-

3.2. Radiation Performance Test

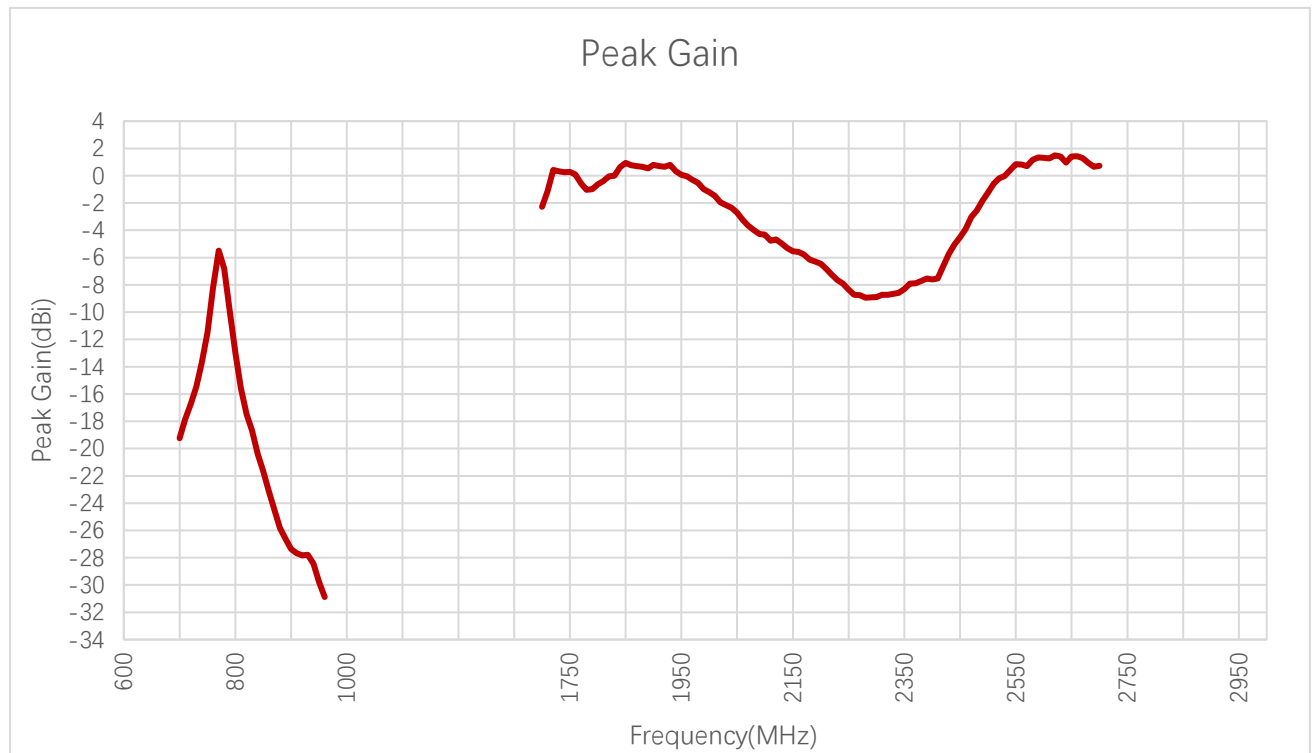
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	600	630	710	830	900	960	1520	1710	1740	1880
Efficiency (%)	-	-	0.9	0.8	0.1	0.1	-	39.0	43.3	59.9
Frequency (MHz)	1950	2140	2350	2450	2600	2690	4700	5000	5500	6000
Efficiency (%)	50.8	13.5	5.1	11.4	42.7	37.3	-	-	-	-

3.2.2. Peak Gain

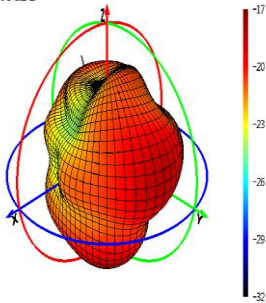


Peak Gain (dBi)

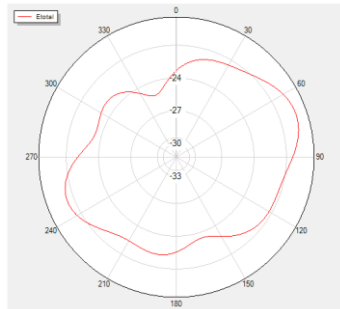
Frequency (MHz)	600	630	710	830	900	960	1520	1710	1740	1880
Peak Gain (dBi)	-	-	-17.9	-18.7	-27.4	-30.9	-	-1.2	0.3	0.7
Frequency (MHz)	1950	2140	2350	2450	2600	2690	4700	5000	5500	6000
Peak Gain (dBi)	0.1	-5.3	-8.3	-4.5	1.3	0.7	-	-	-	-

710 MHz

MAX:-17.85dBi
MIN:-33.48dBi

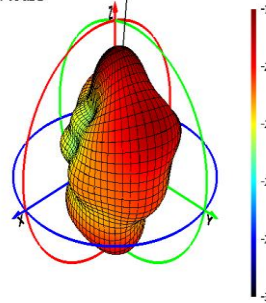


Theta=90 Freq=710MHz

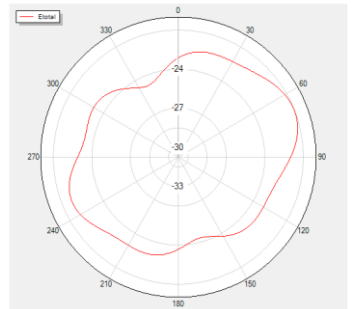


830 MHz

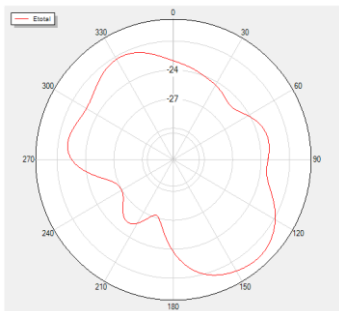
MAX:-18.68dBi
MIN:-32.43dBi



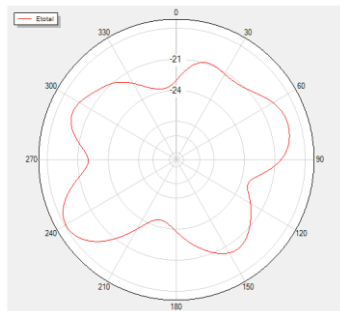
Theta=90 Freq=830MHz



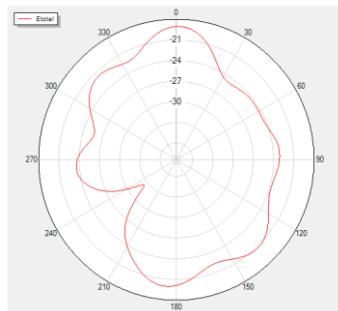
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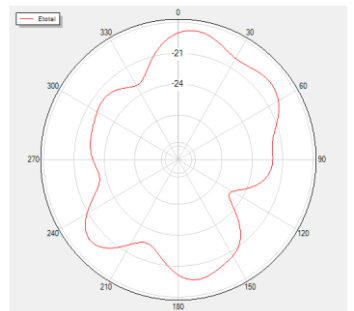
Phi=90 Freq=710MHz



Phi=0 Freq=830MHz

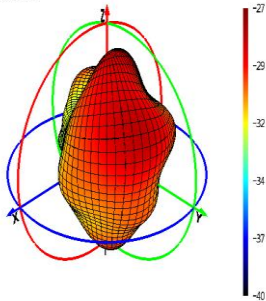


Phi=90 Freq=830MHz

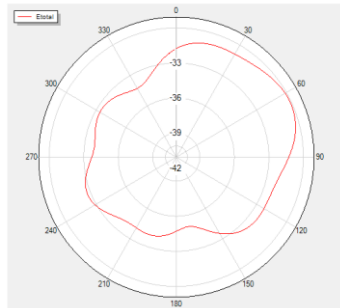


900 MHz

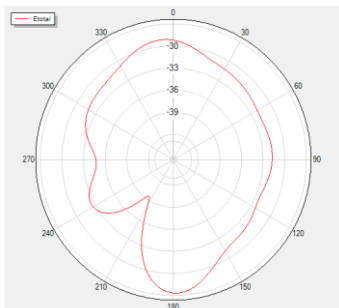
MAX:-27.36dBi
MIN:-40.51dBi



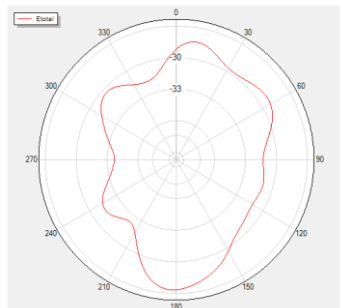
Theta=90 Freq=900MHz

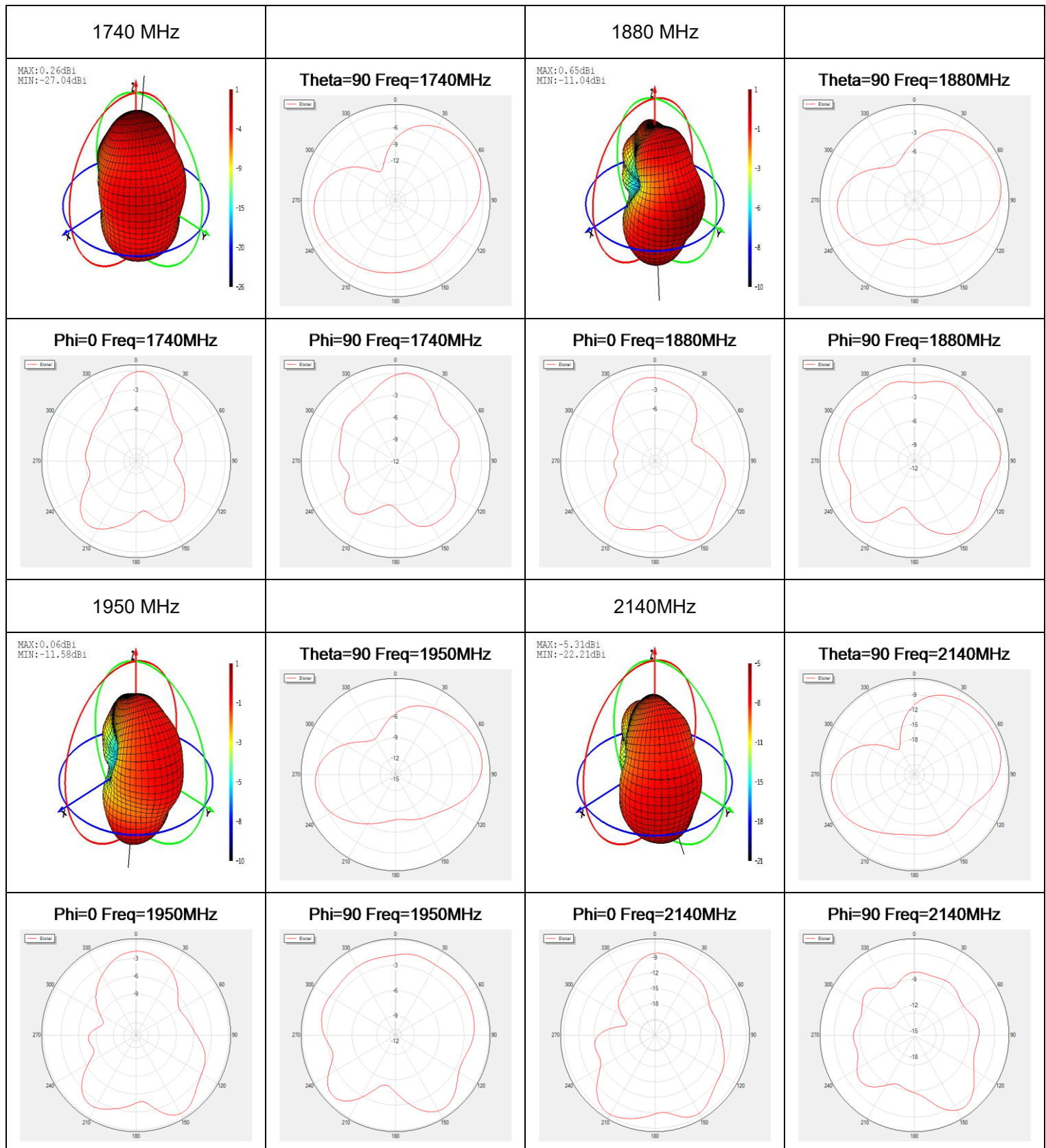


Phi=0 Freq=900MHz

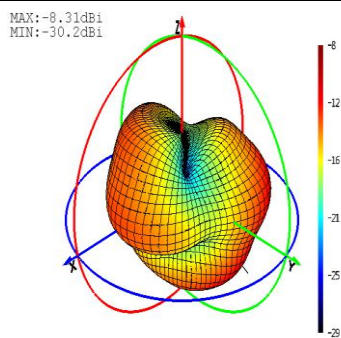


Phi=90 Freq=900MHz

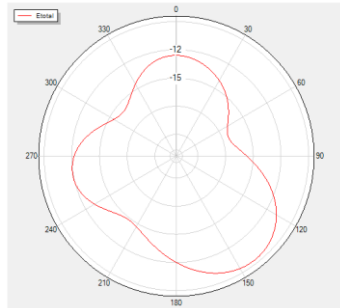




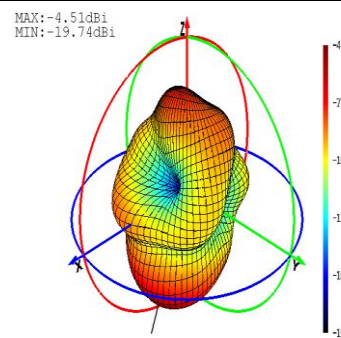
2350 MHz



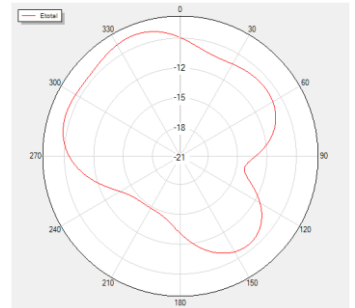
Theta=90 Freq=2350MHz



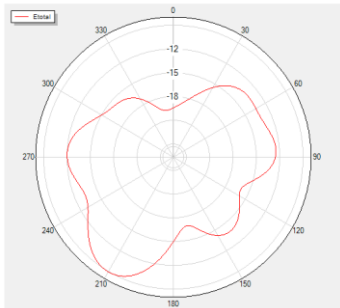
2450 MHz



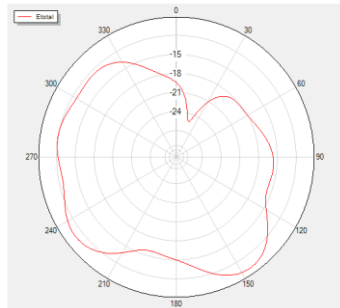
Theta=90 Freq=2450MHz



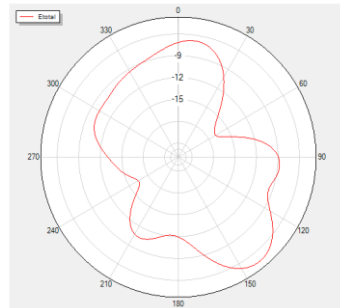
Phi=0 Freq=2350MHz



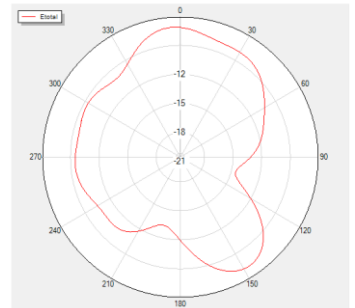
Phi=90 Freq=2350MHz



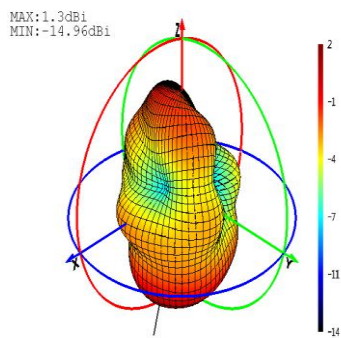
Phi=0 Freq=2450MHz



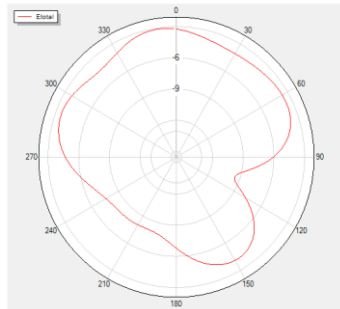
Phi=90 Freq=2450MHz



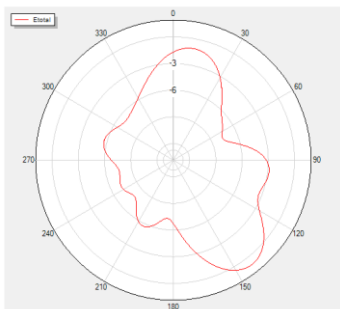
2600 MHz



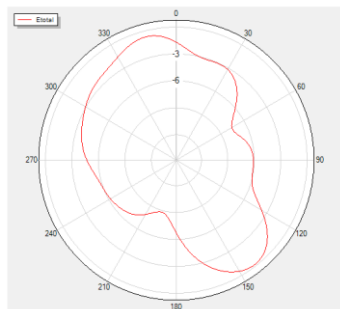
Theta=90 Freq=2600MHz



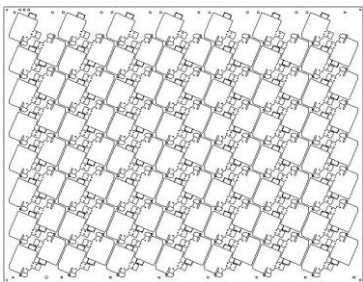
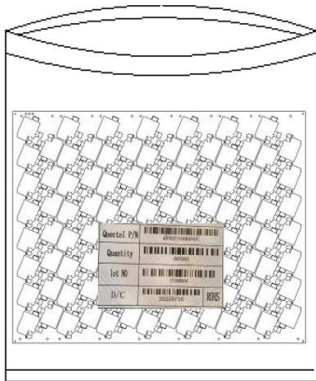
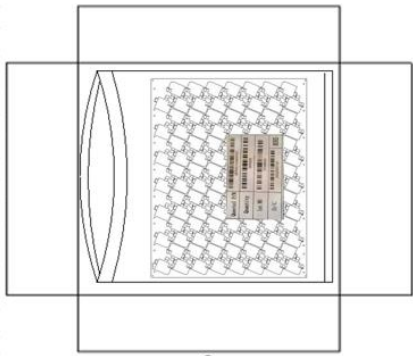
Phi=0 Freq=2600MHz

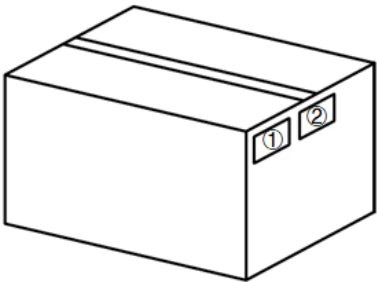
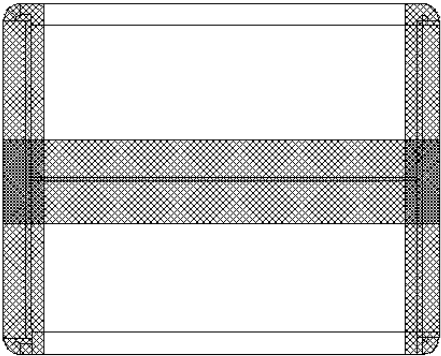


Phi=90 Freq=2600MHz



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		Micro-film packaging 105 antennas in a film.
2		20 films in a PE bag. (2100 Antennas / PE Bag)
3		(15 PE Bags / Carton Box) (31500 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 = 310 × 270 × 140 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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Email: info@quectel.com

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

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Revision History

Version	Date	Author	Note
-	2026-06-12	Owen Deng/ Lucky Feng/ Riva Ren/ Rainey Liao	Creation of the document
1.0	2026-06-12	Owen Deng/ Lucky Feng/ Riva Ren/ Rainey Liao	First official release



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