



Antenna Datasheet

Product OC: NP0QUE00ABCA

Version: 1.0

Date: 2026-01-19

Status: Preliminary

Product Name: 5G PCB Antenna

Key Features:

Frequency band: 2305–2360 MHz, 3400–3980 MHz

Peak efficiency: 52.54 %

Dimensions: 44.2 mm × 27.2 mm × 1 mm

RoHS and REACH Compliant

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1 Specification

Test Condition: Free Space

1.1. Electrical

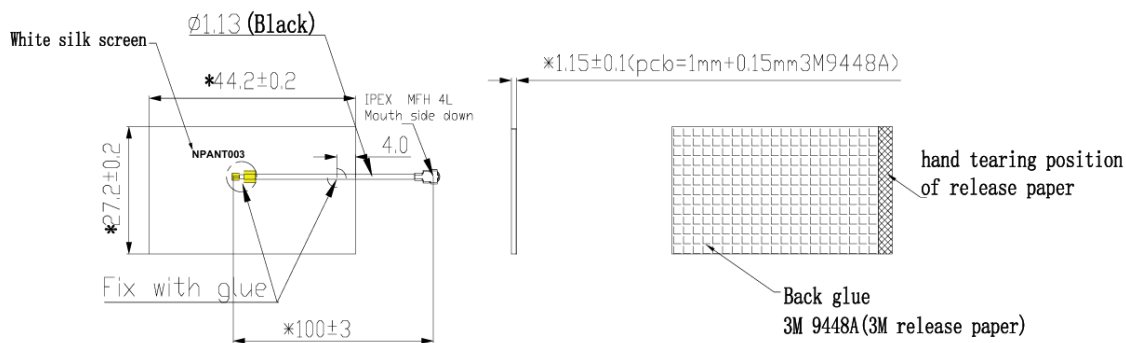
Electrical	
Frequency Range	2305–2360 MHz, 3400–3980 MHz Peak efficiency: 52.54 %
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
Antenna Type	PIFA

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	44.2 mm × 27.2 mm × 1 mm
Material & Color	PCB & Green
Cable Type & Color & Length	Φ 1.13 & Black & 100 mm
Connector Type	IPEX MHF 4L
Mounting Type	Adhesive
Weight	Typ:3.4g
Environmental	
Operation Temperature	-40 °C to +85 °C
RoHS and REACH Compliant	Yes

Frequency Specification	2305–2360 MHz	3400–3550MHz	3550–3700 MHz	3700–3800MHz	3800-3980MHz
Max. VSWR	3.4	5.3	4.2	4.2	4.5
AVG Eff. (%)	50.7	25.9	29.6	36.3	33.7
AVG AVG Gain (dB)	-2.9	-5.9	-5.3	-4.4	-4.7
Max. Peak Gain (dBi)	0.98	0.08	1.00	1.26	1.1
VSWR	≤ 4.5				
Peak Gain	≤ 1.26 dBi				

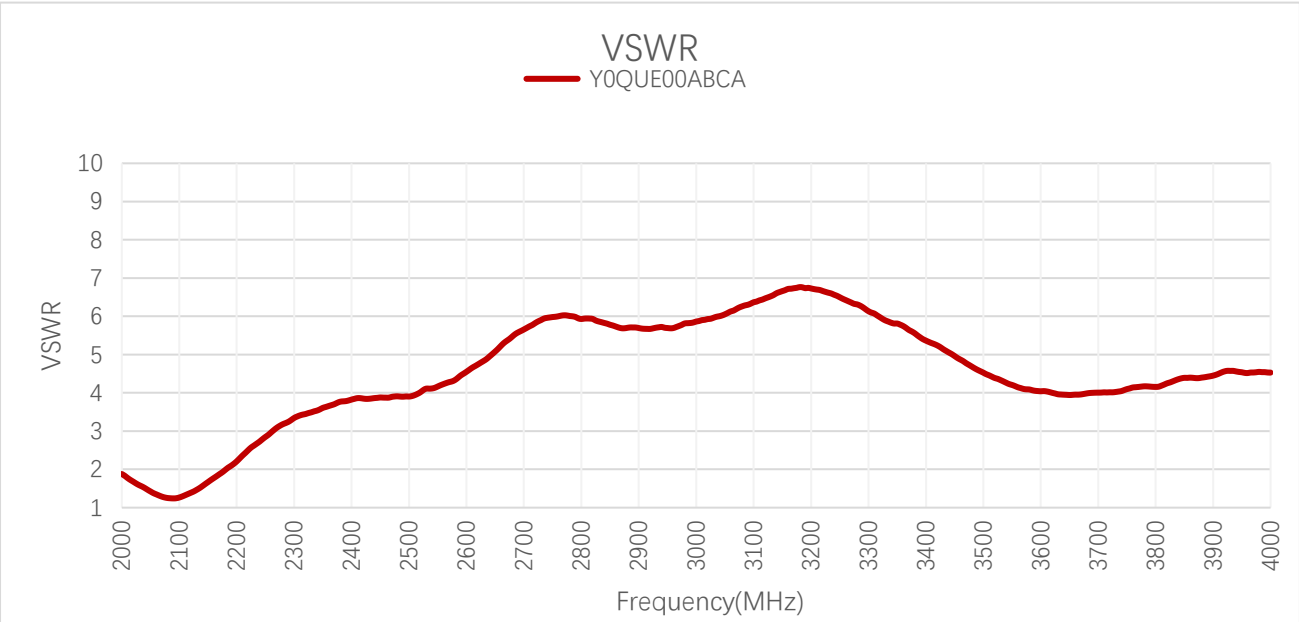
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

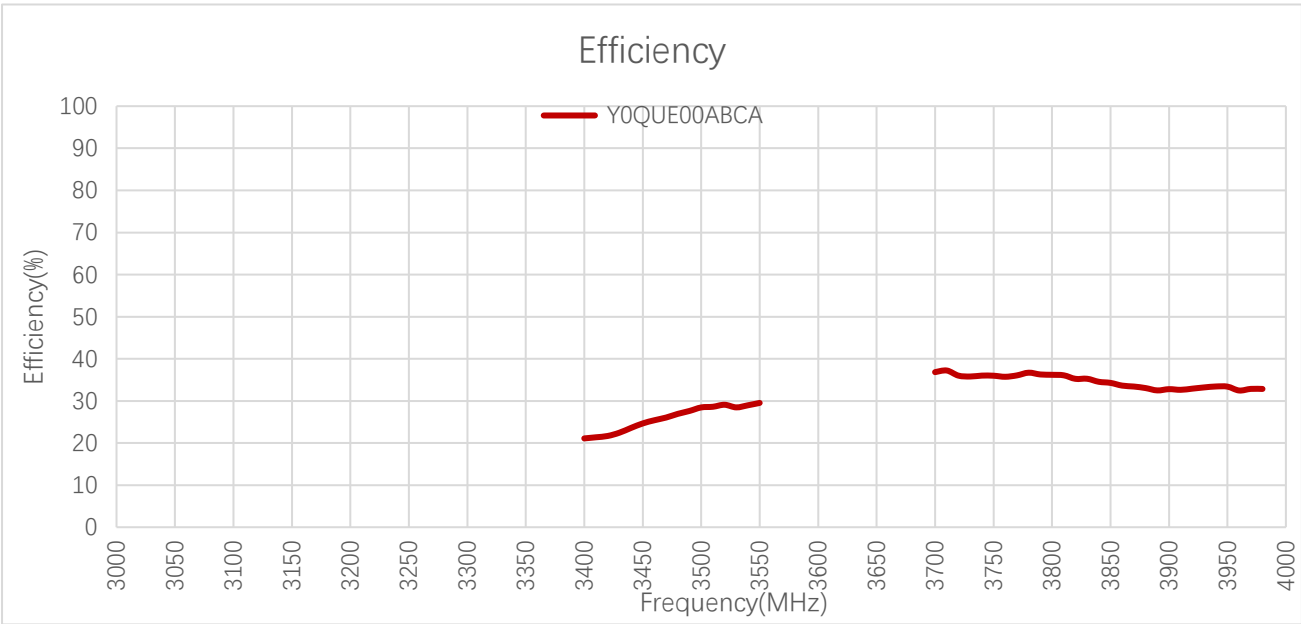
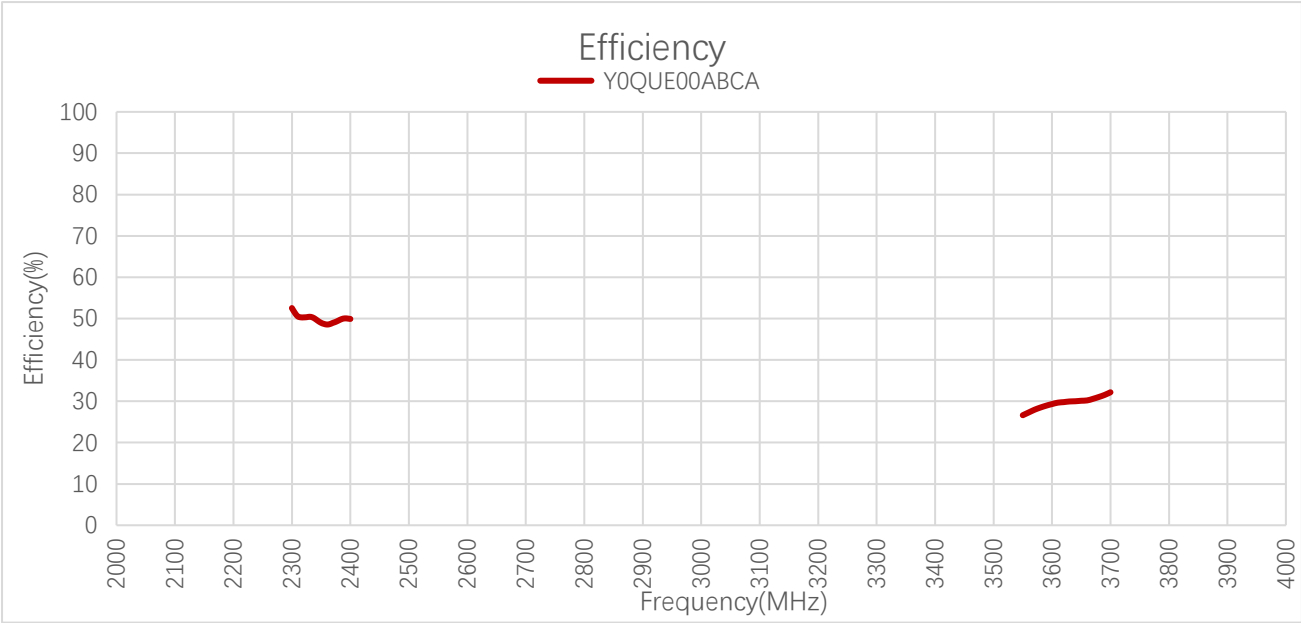


VSWR

Frequency (MHz)	2305	2310	2315	3400	3550	3630	3700	3800	3980
VSWR	3.4	3.4	3.4	5.3	4.2	4.0	4.0	4.2	4.5

3.2. Radiation Performance Test

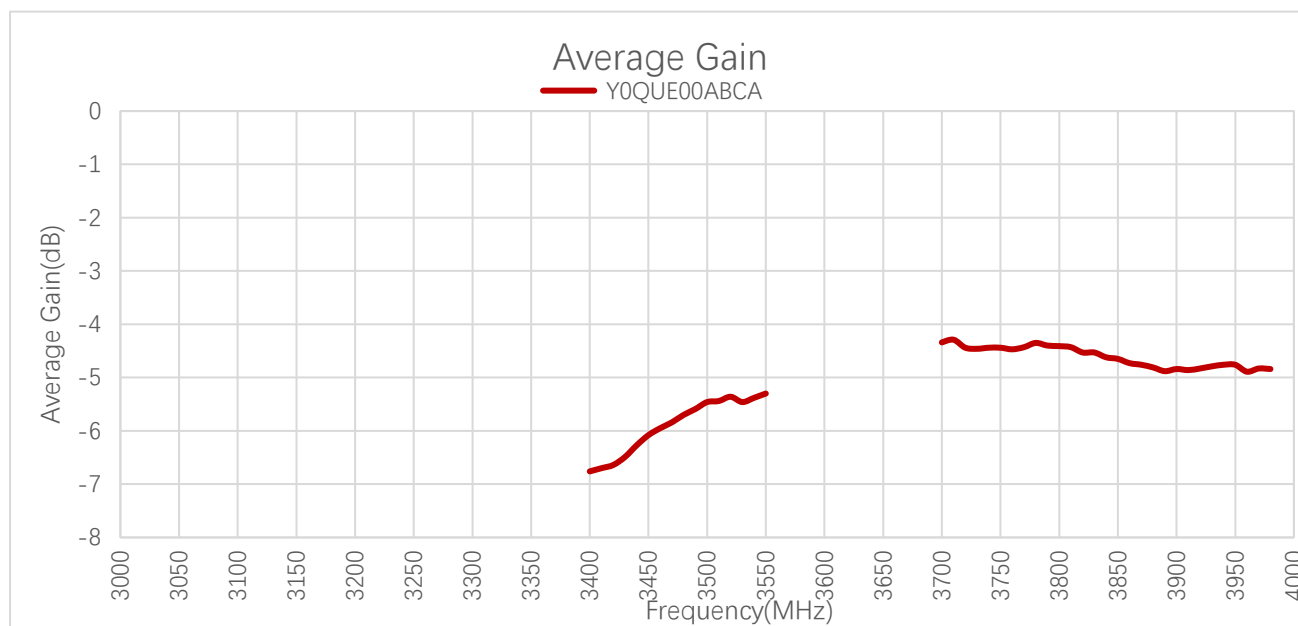
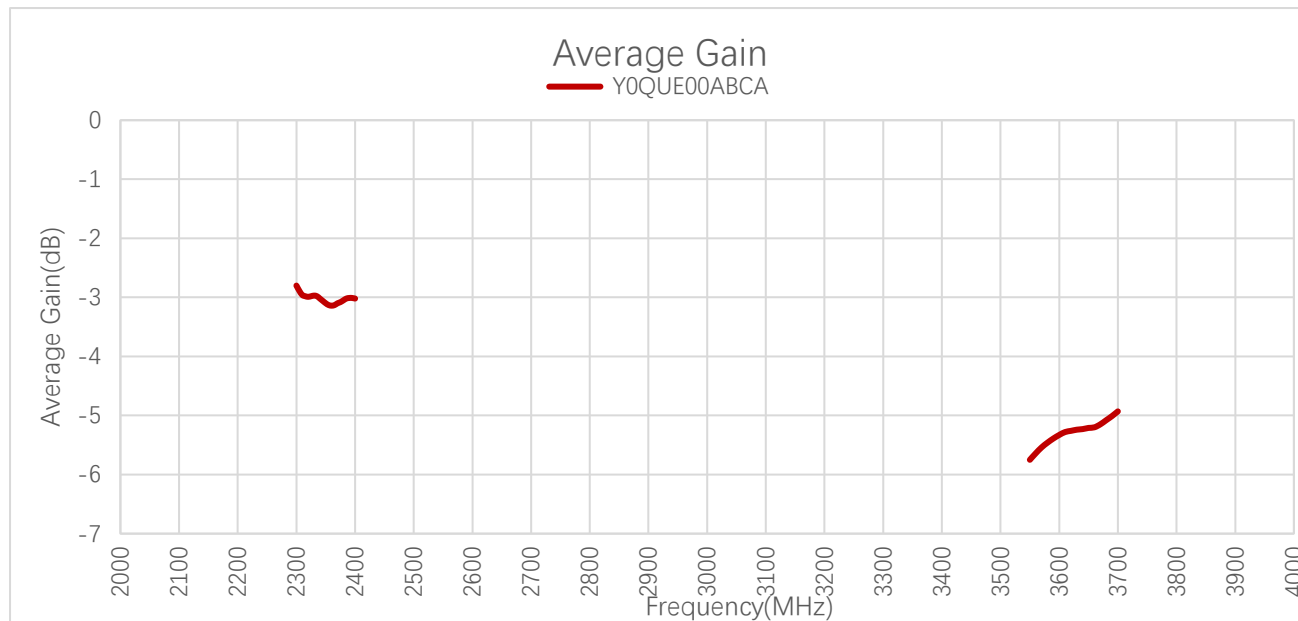
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2305	2310	2315	3400	3550	3630	3700	3800	3980
Efficiency (%)	51.4	50.5	50.3	21.1	26.6	30.0	32.2	36.2	32.8

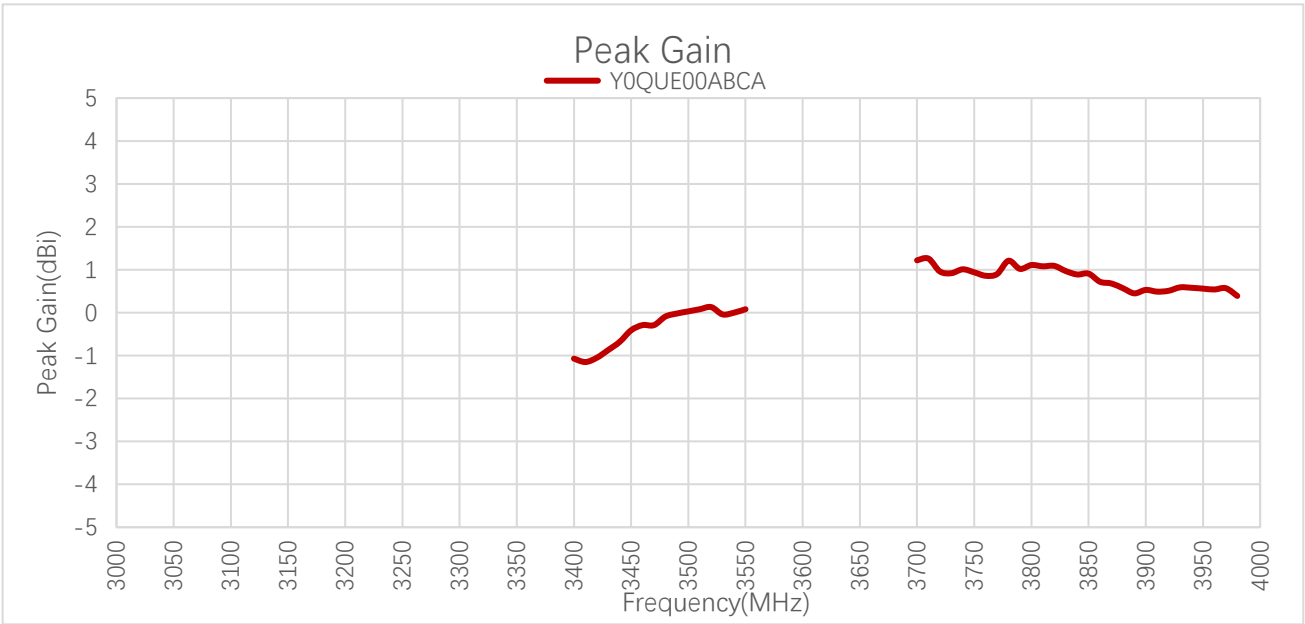
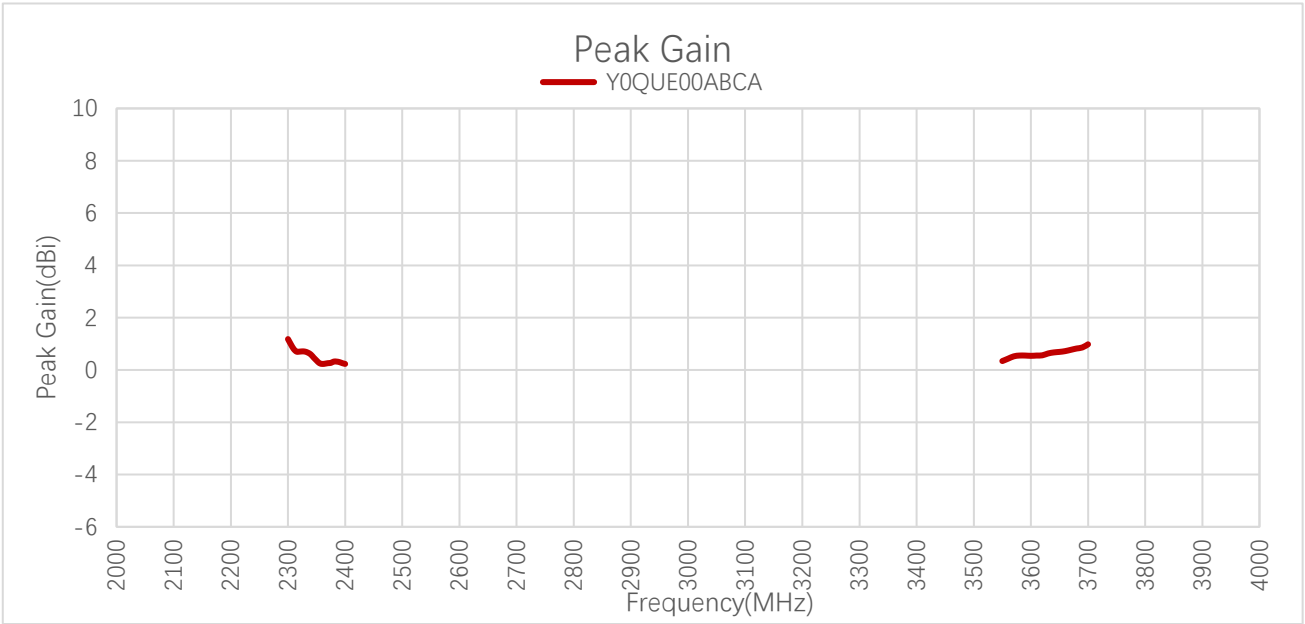
3.2.2. Average Gain



Average Gain (dB)

Frequency (MHz)	2305	2310	2315	3400	3550	3630	3700	3800	3980
Average Gain (dB)	-2.9	-3.0	-3.0	-6.8	-5.8	-5.2	-4.9	-4.4	-4.8

3.2.3. Peak Gain



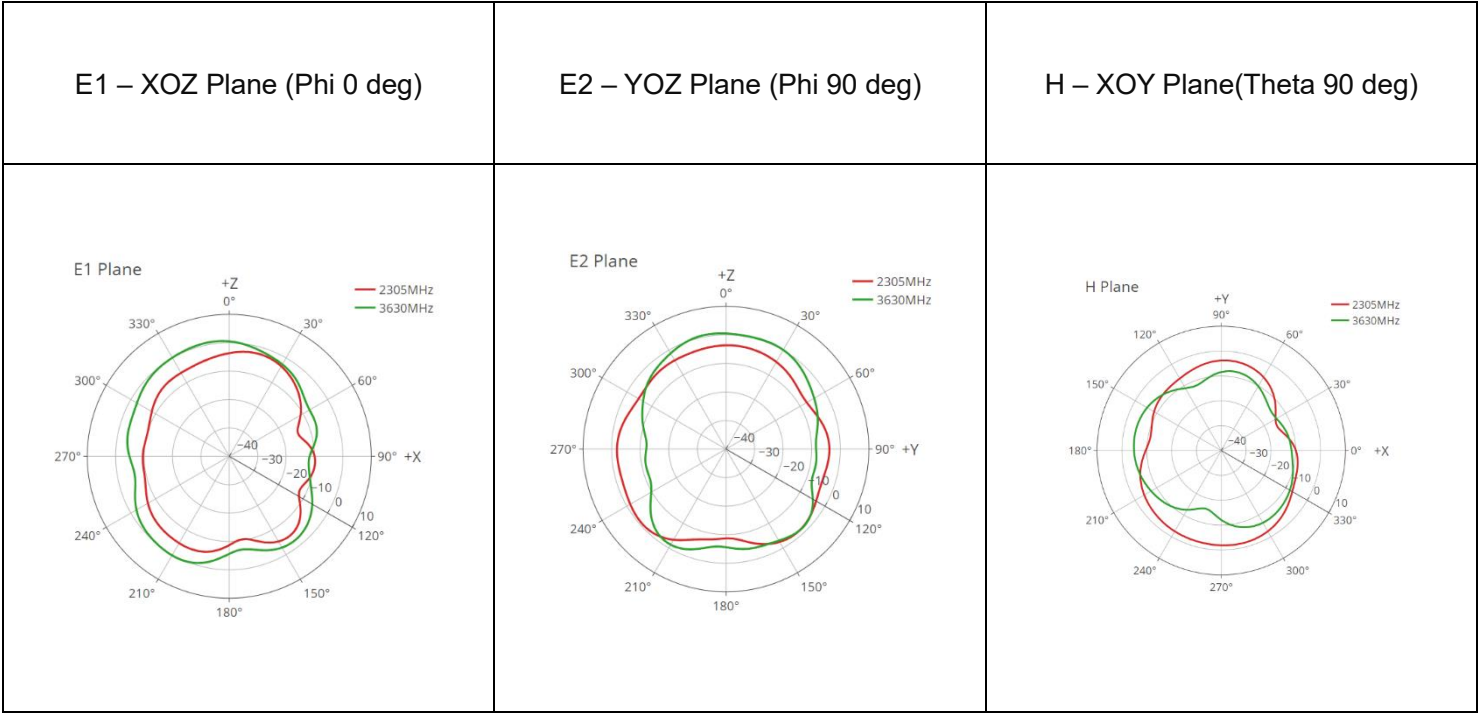
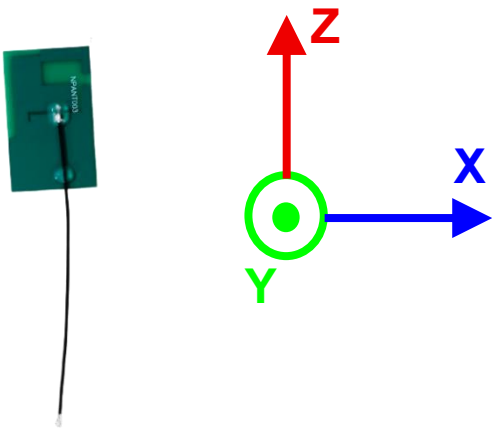
Peak Gain (dBi)

Frequency (MHz)	2305	2310	2315	3400	3550	3630	3700	3800	3980
Peak Gain (dBi)	0.98	0.80	0.70	-1.1	0.34	0.63	1.0	1.1	0.4

3.2.4. 3D & 2D Radiation Pattern

3.2.4.1. Test Condition: Free Space

- Test Chamber: GL-S-1



Revision History

Version	Date	Author	Note
-	2026-01-19	Edison Liu/ Lucky Feng/ Aria Chu	Creation of the document
1.0	2026-01-19	Edison Liu/ Lucky Feng/ Aria Chu	First official release