



Antenna Datasheet

Product OC: Y0REB0CC2AA

Version: 1.0

Date: 2025-02-18

Product Name: GPS & WIFI FPC Antenna

Key Features:

Frequency Band: 1575.42 MHz, 2400–2500 MHz

Dimensions: 28.91 mm × 14.85 mm × 0.13 mm

Efficiency: Up to 43.46%

RoHS and REACH Compliant

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1 Specification

Test Condition: Assembled in test device

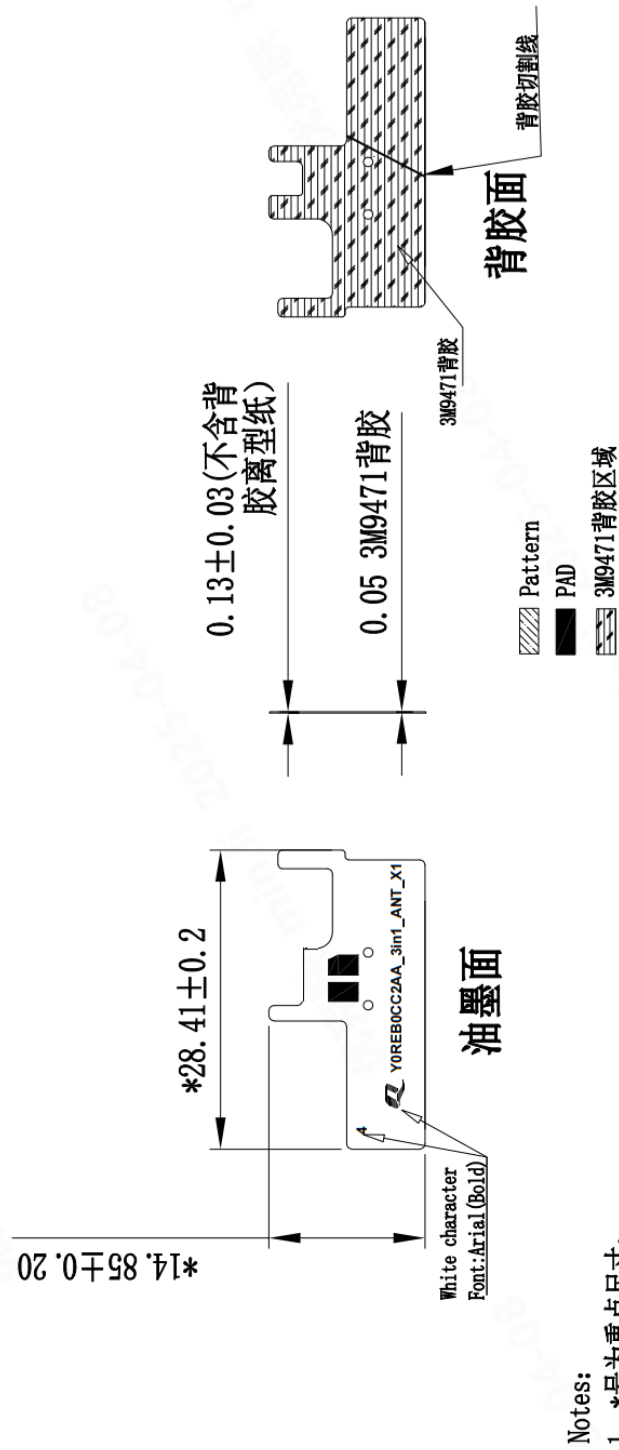
1.1. Electrical

Electrical	
Frequency Range	1575.42 MHz, 2400–2500 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 3.2
Peak Gain	1.7 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	28.91 mm × 14.85 mm × 0.13 mm
Material & Color	FPC & Black
Weight	Typ. 0.2 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

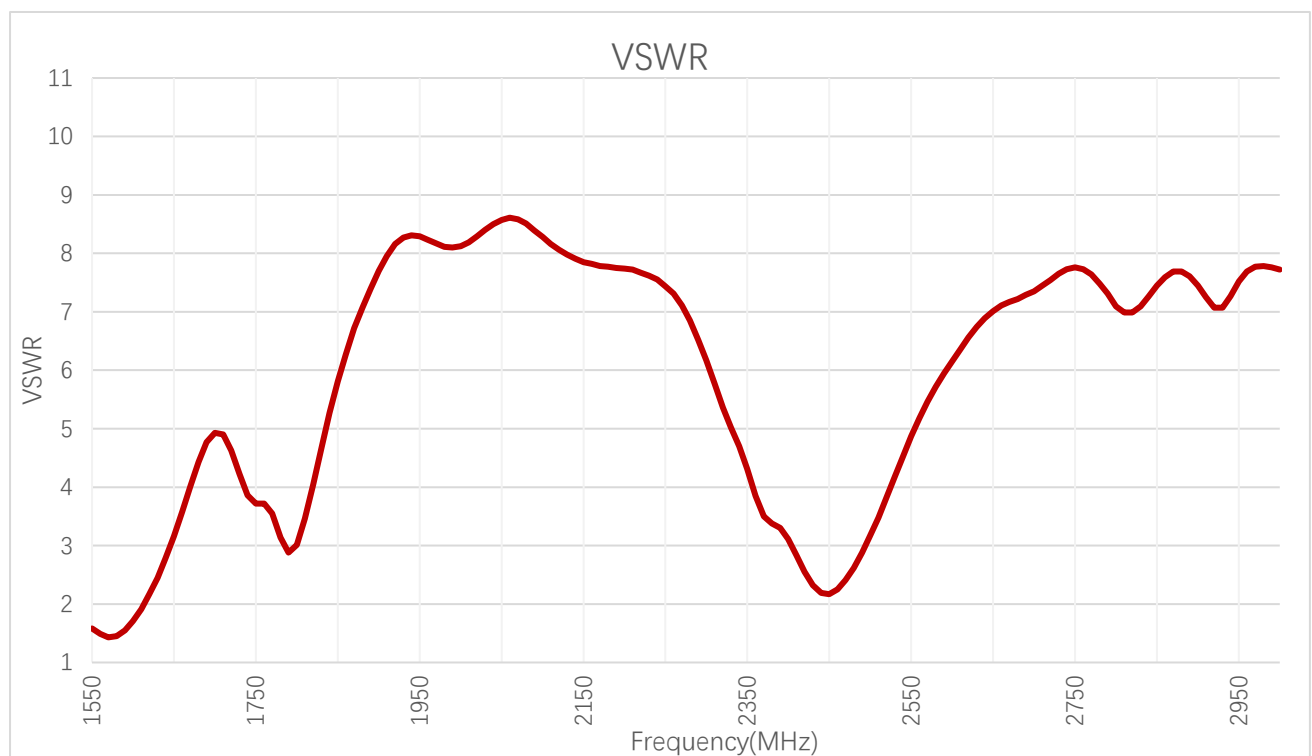
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR



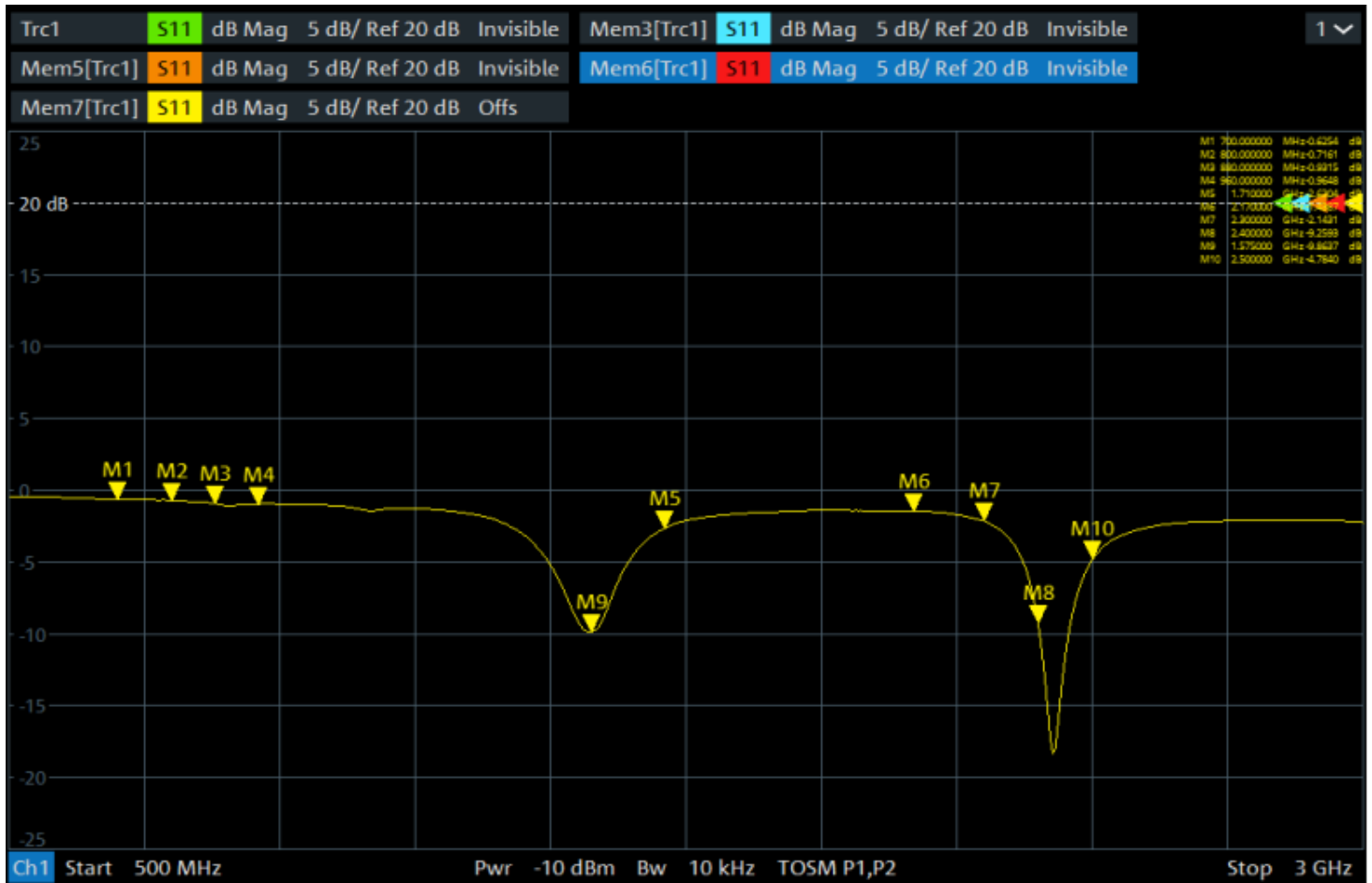
VSWR

Frequency (MHz)	1550	1570	1600	2400	2450	2500
VSWR	1.6	1.4	1.7	3.1	2.2	3.2

3.2. Radiation Performance Test

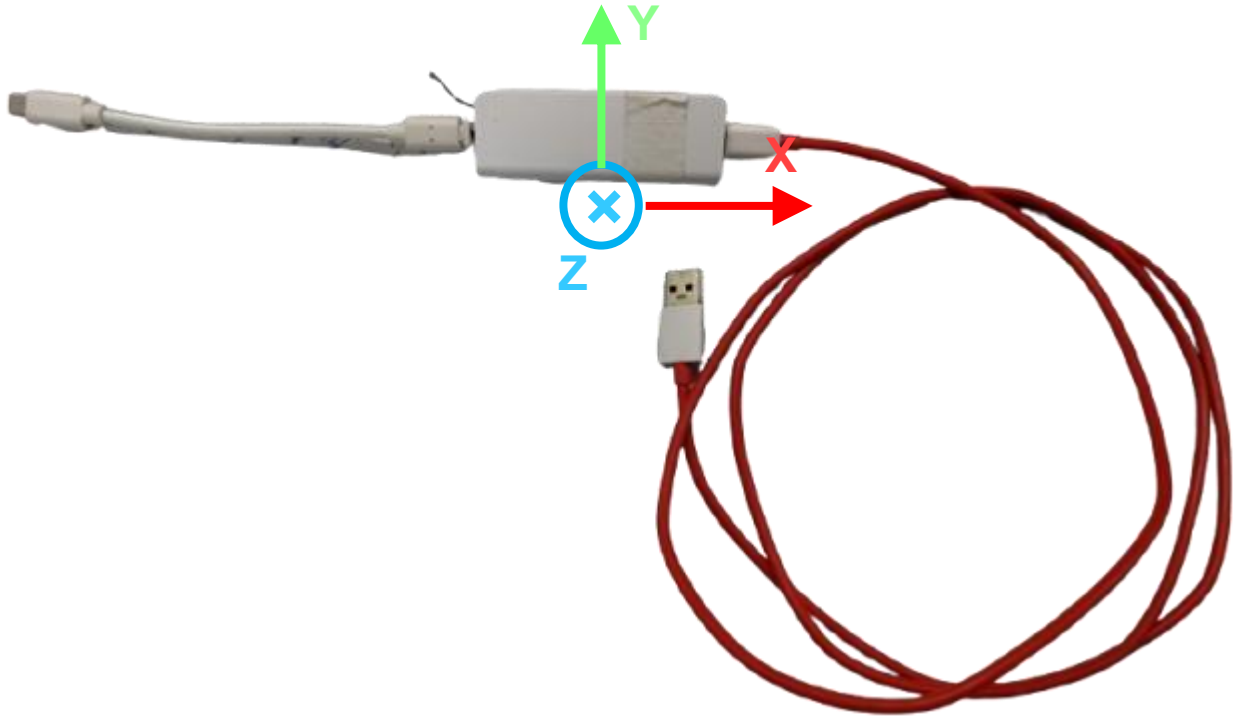
3.2.1. Efficiency and Gain

GPS&WIFI			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
1550	0.7	-5.0	31.9
1555	0.8	-4.9	32.4
1560	0.7	-4.9	32.7
1565	0.6	-4.9	32.4
1570	0.7	-5.0	31.9
1575	0.7	-4.9	32.4
1580	0.6	-4.9	32.8
1585	0.6	-4.9	32.1
1590	0.4	-5.1	30.8
1595	0.1	-5.4	29.0
1600	0.0	-5.6	27.6
2400	-1.0	-6.3	23.6
2410	-0.3	-5.8	26.6
2420	0.3	-5.3	29.4
2430	0.6	-5.1	30.8
2440	0.8	-5.0	31.5
2450	0.8	-5.0	31.6
2460	0.4	-5.3	29.2
2470	0.1	-5.8	26.4
2480	-0.2	-6.2	24.2
2490	-0.6	-6.5	22.4
2500	-1.1	-7.1	19.5

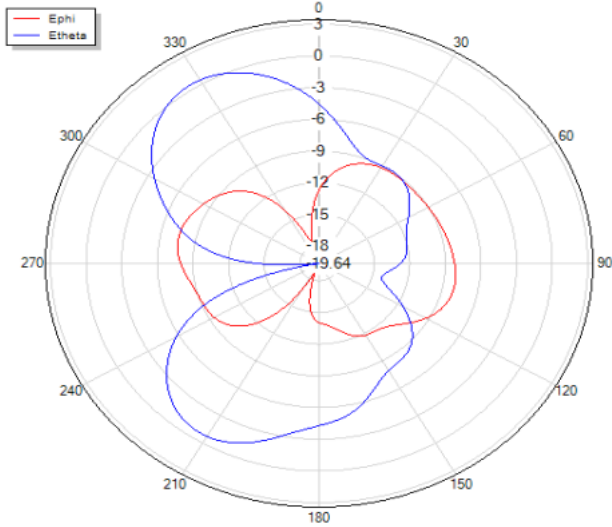


3.2.2. 2D Radiation Pattern

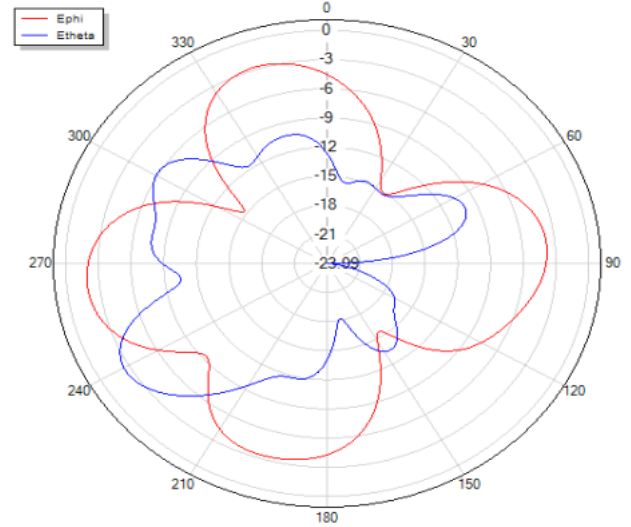
- Test Condition: Assembled in test device
- Test Chamber: FS-S-1



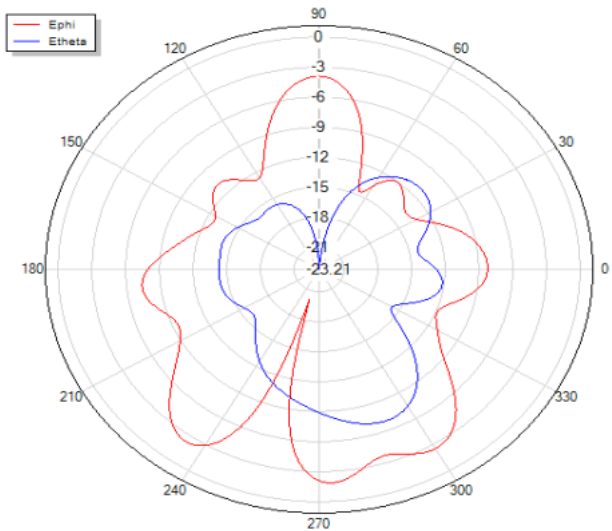
Phi=0 freq=1575MHz



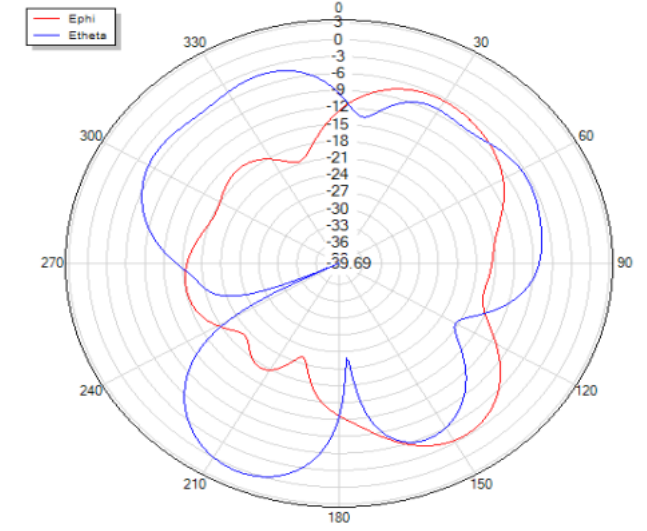
Phi=90 freq=1575MHz



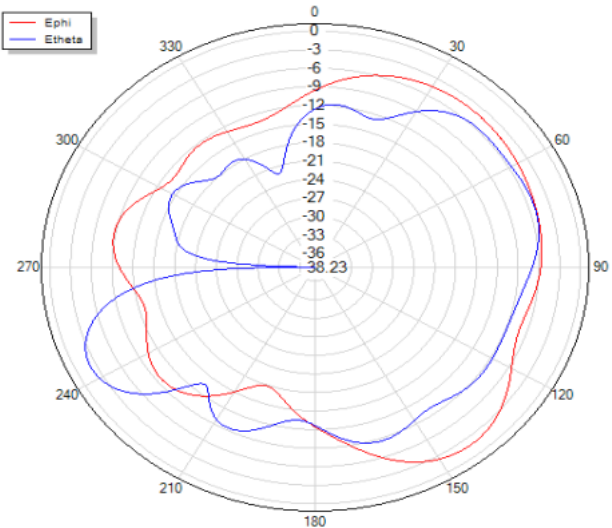
Theta=90 freq=1575MHz



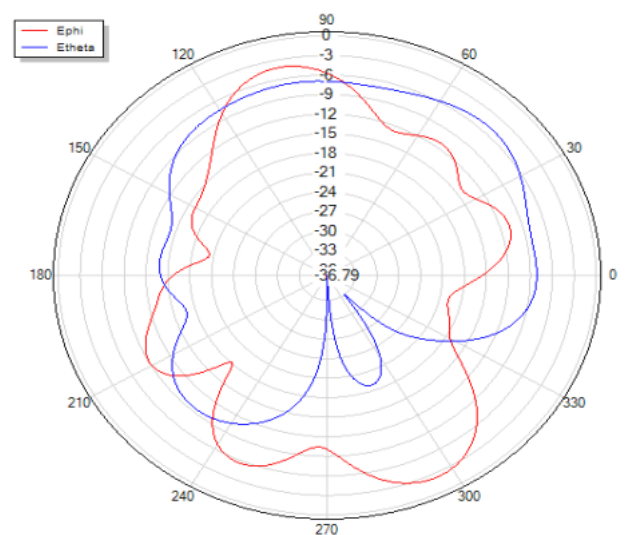
Phi=0 freq=2450MHz



Phi=90 freq=2450MHz



Theta=90 freq=2450MHz



Contact US

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Revision History

Version	Date	Author	Note
-	2025-02-18	Owen DENG/ Mike GUO/ Rainey LIAO	Creation of the document
1.0	2025-02-18	Owen DENG/ Mike GUO/ Rainey LIAO	First official release



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