



Antenna

Product Item:Y2BBW2MA0DA

Version: 1.0

Date :2025-06-10

Product Name: WIFI Antenna

Main Features of:

Frequency range: 2400~2500 MHz, 5150~5850 MHz

23.50mm × 10.18mm × 0.11mm

Efficiency: 41.7 percent maximum

RoHS compliant

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1 specifications

Test status: complete machine test

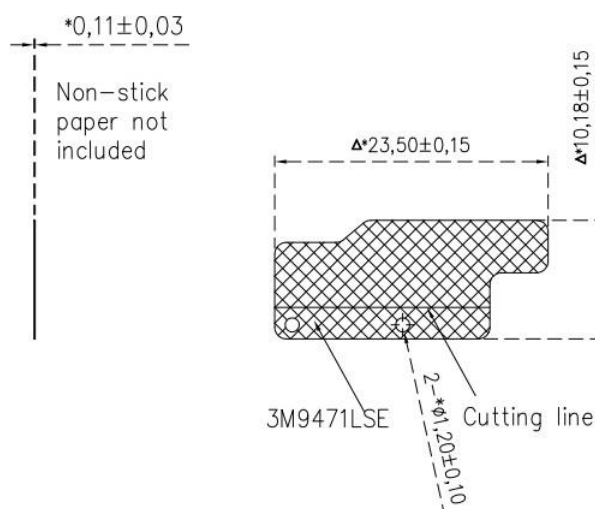
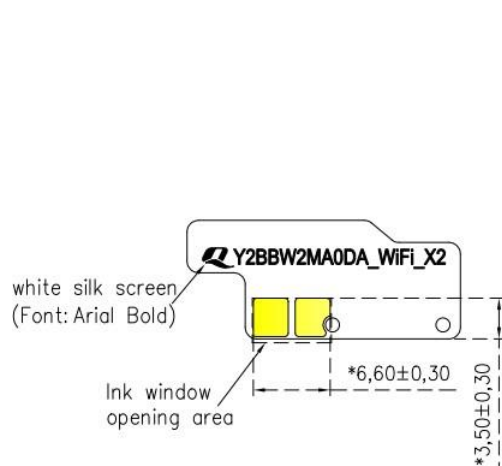
1.1. Electrical Performance

Electrical Specifications	
Frequency range	2400~2500 MHz, 5150~5850 MHz
Impedance	50 Ω ;
polarization mode	linear polarization
radiation field type	Omni-directional
voltage standing wave ratio	$\leq$ 2.5
Peak Gain	3.2 dBi

1.2. Mechanical and environmental characteristics

Mechanical	
Antenna size	23.50mm $\times$ 10.18mm $\times$ 0.11mm
Material & Color	FPC & Black
Weight	0.13g typical
Installation Type	Adhesive paste
Environment	
Working temperature	-40° C to +85° C
Storage temperature	-40° C to +85° C
Compliant with environmental standards	RoHS

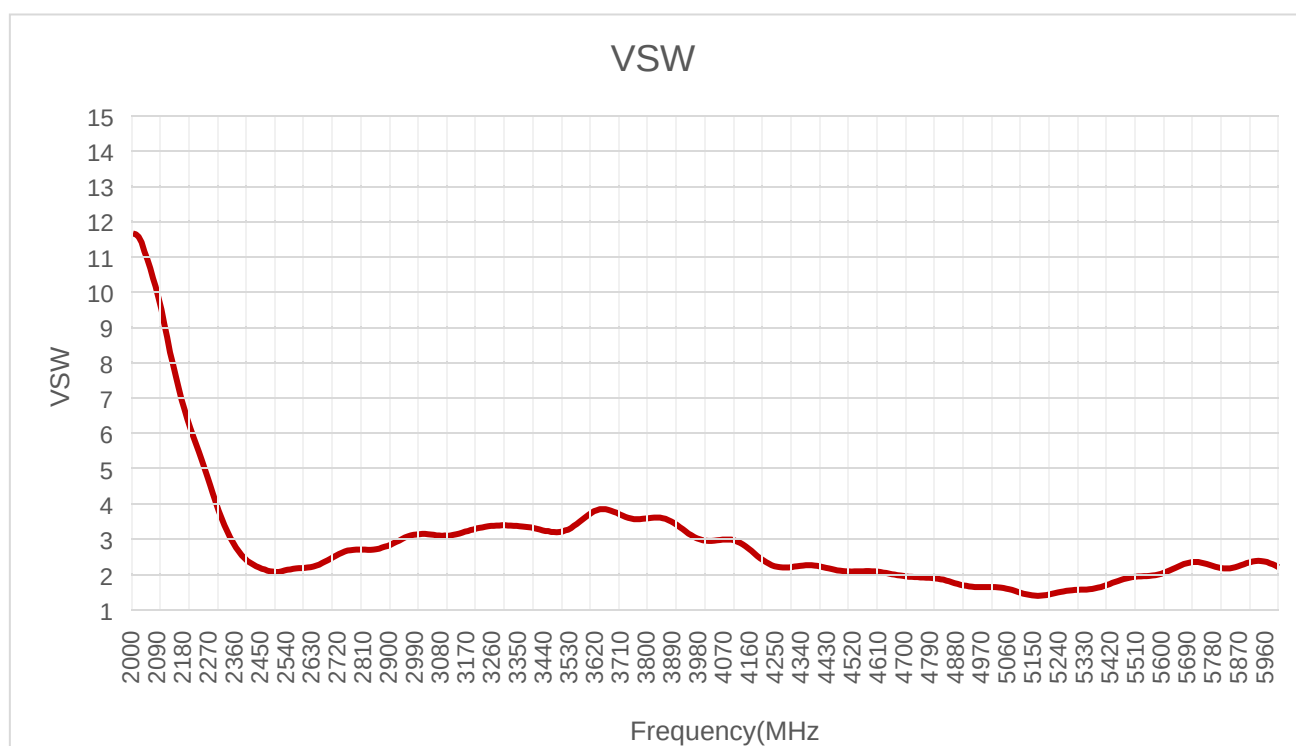
2 Drawings



3 detailed performance

3.1. S-parameter test

3.1.1. voltage standing wave ratio



Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
voltage standing wave ratio	2.5	2.2	2.2	1.5	2.0	2.3	-	-	-

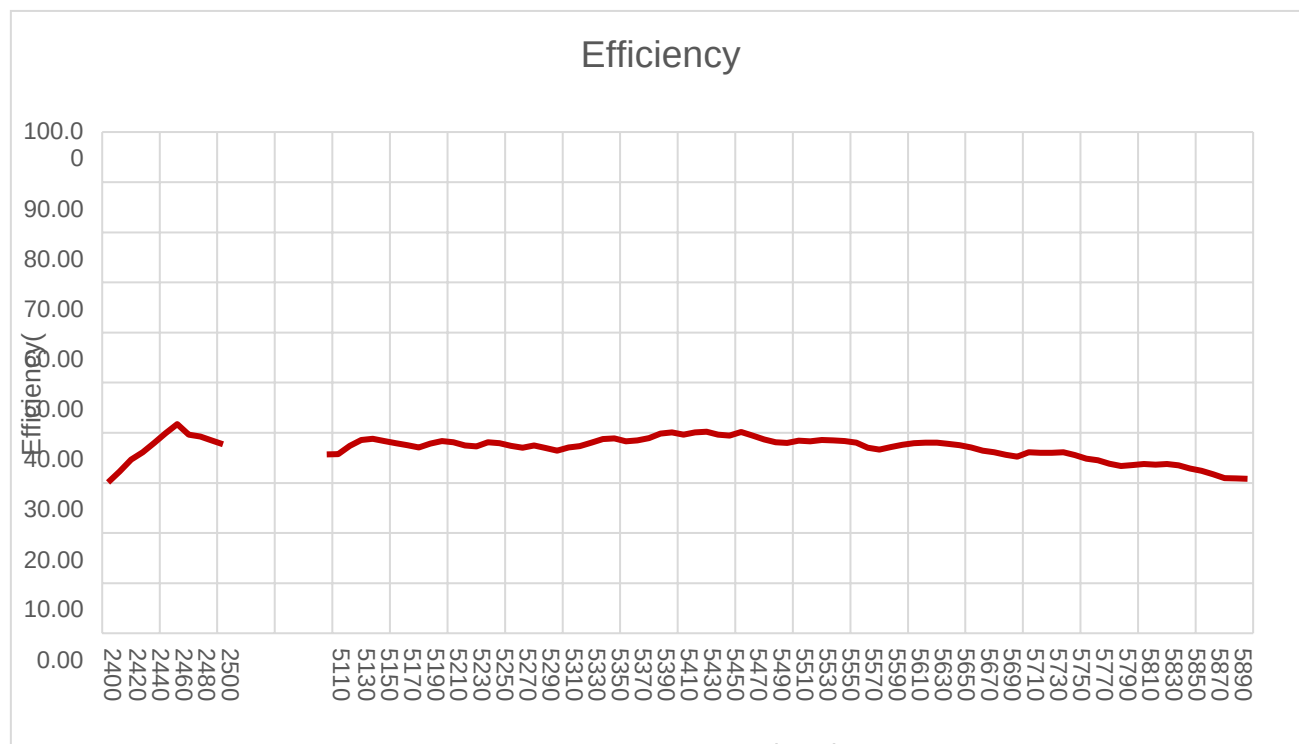
3.2. Active OTA testing

- Test status: complete machine test

Band		Channel	TRP (dBm)	TIS (dBm)
WIFI	WIFI_A54M	36	13.25	-63.76
		149	11.65	-62.93
		165	12.14	-63.83
	WIFI_B11M	1	10.75	-74.41
		6	10.7	-75.91
		11	10.03	-74.97
	WIFI_G54M	1	12.69	-62.4
		6	11.04	-63.11
		11	10.49	-62.96
	WIFI_NMCS7	1	10.69	-61.4
		6	10.24	-62.11
		11	10.59	-61.96
	WIFI_NMCS7	36	12.21	-57.76
		149	12.19	-57.93
		165	12.63	-58.83

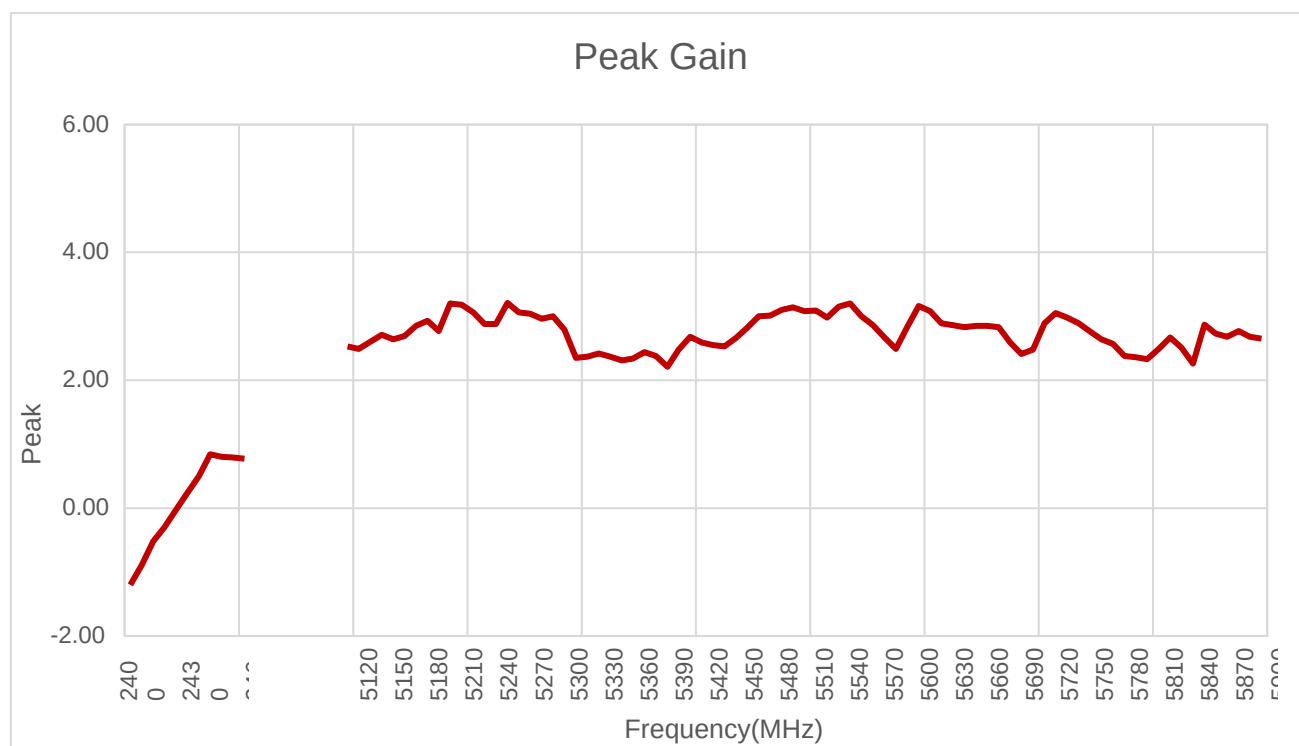
3.3. radiation performance test

3.3.1. efficiency



Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency (%)	30.1	39.9	37.7	38.3	38.0	32.8	-	-	-

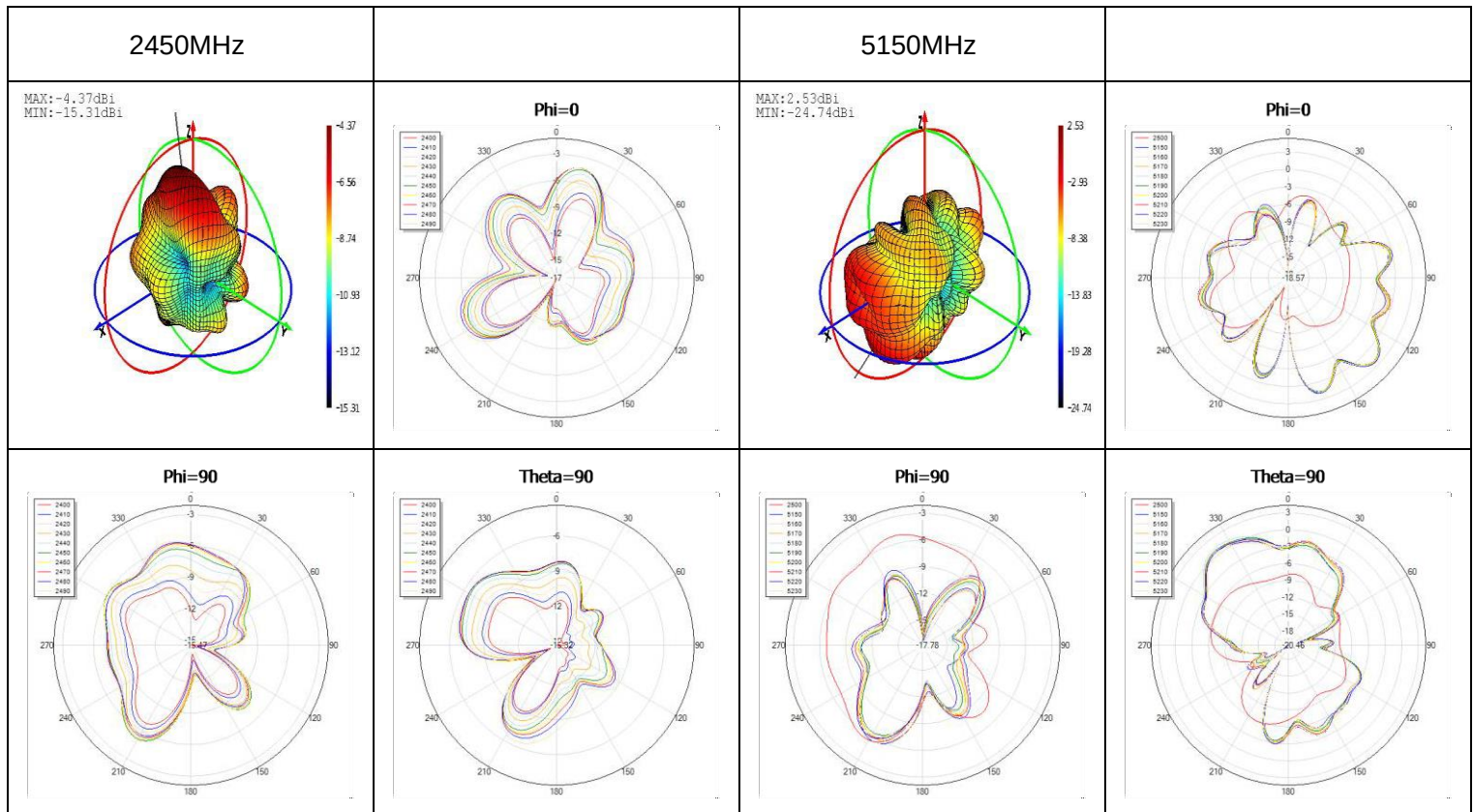
3.3.2. peak gain

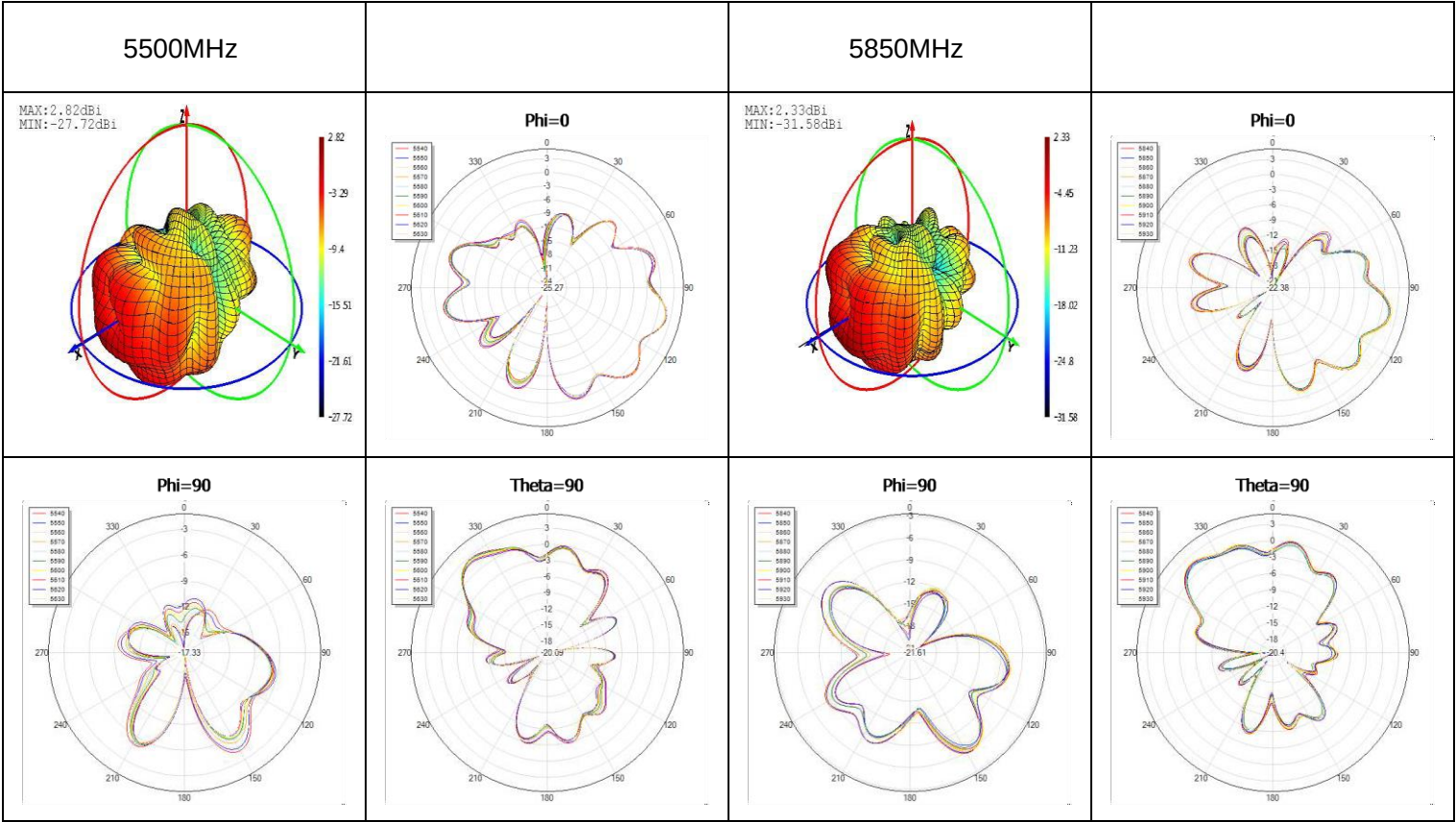


Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain (dBi)	-1.2	0.2	0.8	2.7	3.1	2.9	-	-	-

3.3.3. 2D radiation field pattern map

- Test status: complete machine test
- Test Lab: SZ-S-1





Contact Us

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Document History

Revision Record

Version	Date	Author	Change Expression
-	2025-06-10	Qinming PENG/ Shea LI/ Rainey LIAO	Document Creation
1.0	2025-06-10	Qinming PENG/ Shea LI/ Rainey LIAO	Controlled version

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