Product specification

Quick Reference Date

Feature	Description	
WLAN Standard	IEEE 802.11 b/g/n/ax Wi-Fi compliant	
Frequency Range	2.400GHz ~ 2.497GHz (2.4GHz ISM Band)	
Number of Channels	2.4GHz: Ch1 ~ Ch14	
Test Items	**Typical Value**	**EVM**
Output Power[1]	802.11b /11Mbps : 18dBm ± 2 dB	EVM ≤ -10dB
	802.11g /54Mbps : 15dBm ± 2 dB	EVM ≤ -25dB
	802.11n /MCS7 : 15dBm ± 2 dB	EVM ≤ -28dB
	802.11ax HE20 MCS11: 13dBm ± 2 dB	EVM ≤ -35dB
	802.11ax HE40 MCS11: 13dBm ± 2 dB	EVM ≤ -35dB
Spectrum Mask	Meet with IEEE standard	
Freq. Tolerance	±20ppm	
SISO Receive Sensitivity (11b,20MHz) @8% PER	- 1Mbps PER @ -94dBm	≤ -83
	- 11Mbps PER @ -85dBm	≤ -76
SISO Receive Sensitivity (11g,20MHz) @10% PER	- 6Mbps PER @ -90dBm	≤ -85
	- 54Mbps PER @ -71dBm	≤ -68
SISO Receive Sensitivity (11n,20MHz) @10% PER	- MCS=0 PER @ -90dBm	≤ -85
	- MCS=7 PER @ -69dBm	≤ -67
SISO Receive Sensitivity (11n,40MHz) @10% PER	- MCS=0 PER @ -87dBm	≤ -82
	- MCS=7 PER @ -66dBm	≤ -64
SISO Receive Sensitivity (11ax,20MHz) @10% PER	- MCS=0 PER @ -90dBm	≤ -74
	- MCS= 11 PER @ -60dBm	≤ -52
SISO Receive Sensitivity (11ax ,40MHz) @10% PER	- MCS=0 PER @ -87dBm	≤ -71
	- MCS= 11 PER @ -57dBm	≤ -49
Maximum Input Level	802.11b : - 10dBm	
	802.11g/n : -20dBm	

All the technical data and information contained herein are subject to change without prior notice.
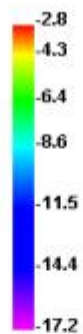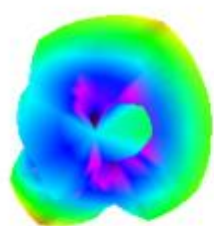
Antenna Layout & mod ule on the system boar
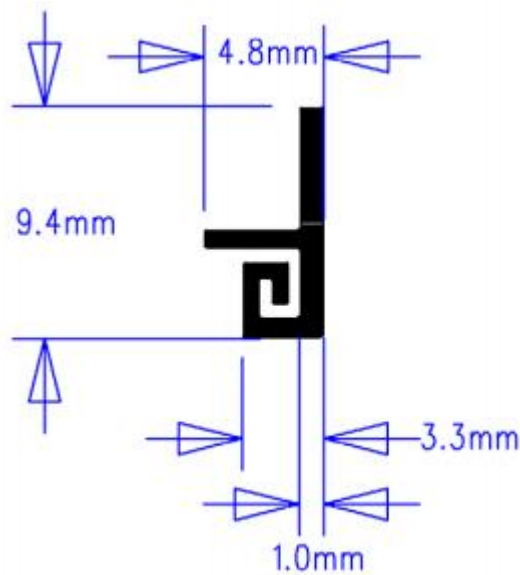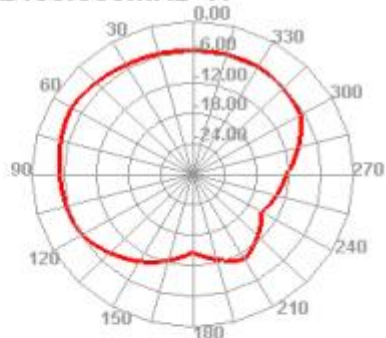

Antenna Gain

Gain Table

Passive Test For 2.4G			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	14.48	-8.39	-3.62
2410	14.05	-8.52	-3.84
2420	13.92	-8.56	-3.58
2430	13.98	-8.55	-2.9
2440	14.27	-8.46	-2.99
2450	13.97	-8.55	-2.84
2460	15.01	-8.24	-2.69
2470	15.66	-8.05	-2.55
2480	17.37	-7.6	-2.39
2490	19.71	-7.05	-1.92
2500	21.83	-6.61	-1.78

3D Gain Pattern @ 2450 MHz (unit: dBi)
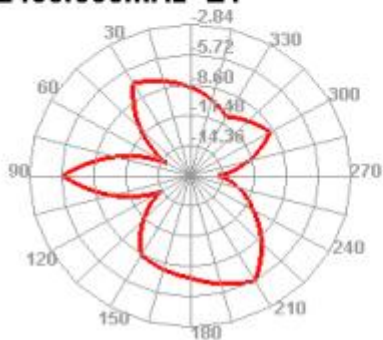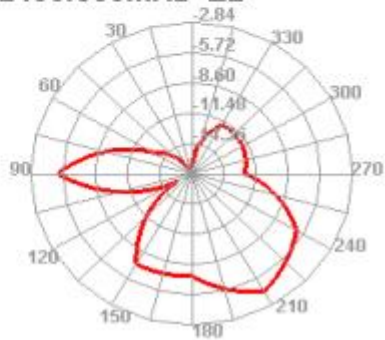
The Environment of Antenna Radiation Pattern

测试条件 Test Conditions	常温环境下温度：21℃，湿度：50%RH Humidity: 50%,Temperature: 21℃,
测试设备 Test Equipment	SATIMO-OTA实验室；CMW500；MT8000；E5071C等 SATIMO-OTA Lab,
测试环境 Test Ambient	温度(Temperature):____25___℃　　　湿度(Humidity):____40____RH