

# WIFI Antenna Test Report

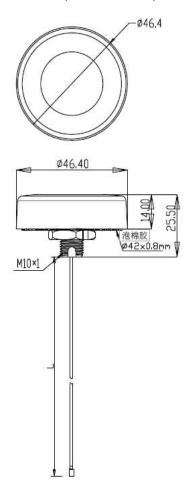
Product Description: WIFI Antenna

Product Name: WIFI\_PM2458YSO\_SD270MM

#### 1, Test content

This report presents the test results for the standing wave ratio, gain, and efficiency of the WIFI antenna.

# 2, Structure (unit: mm) $L=270\pm10$ mm



 $\langle 20\text{mm} \text{ tolerance } \pm 0.5\text{mm}, \geq 20\text{mm} \text{ tolerance } \pm 1\text{mm}$ 

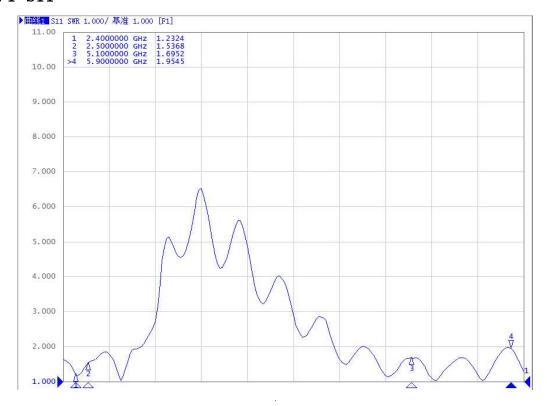
## 3, Performance Test of WIFI Antenna

Instrument and Equipment:

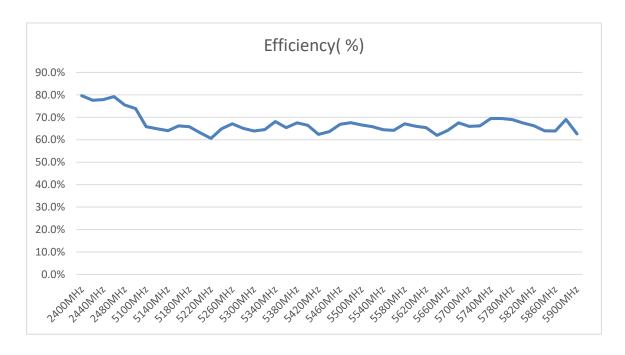
Network Analyzer 5071C,

SATIMO SG24

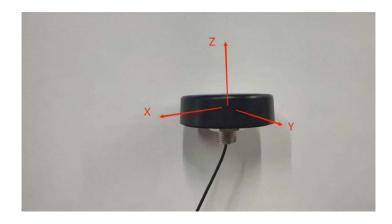
#### 3.1 S11



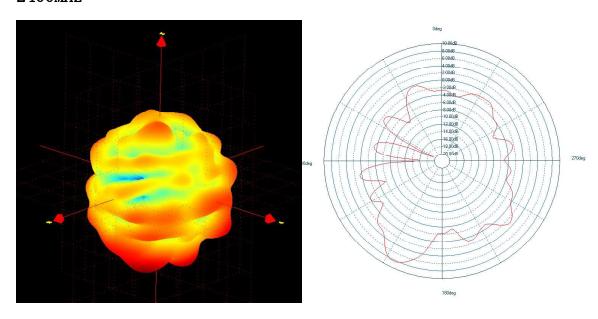
#### 3.2 Efficiency



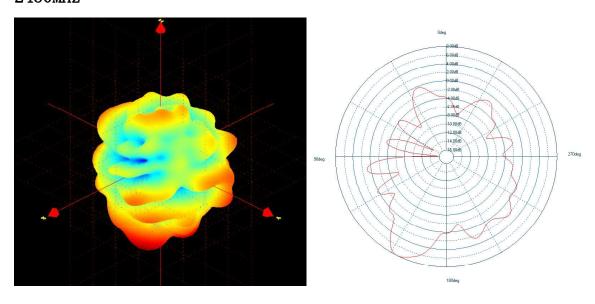
#### 3.3 Pattern



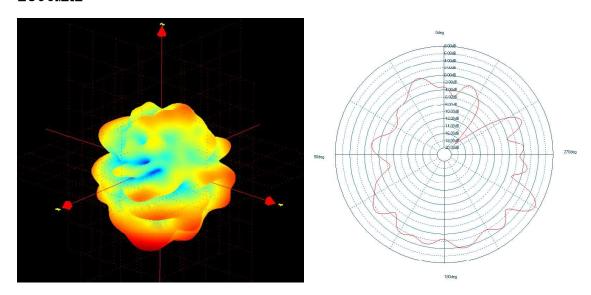
## 2400MHz



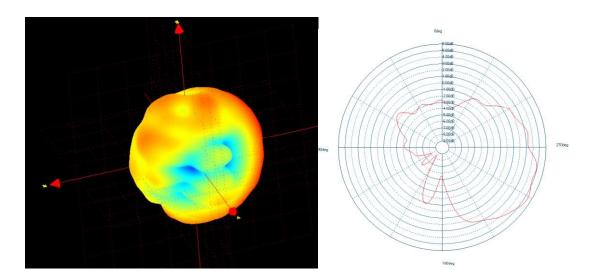
## 2450 MHz



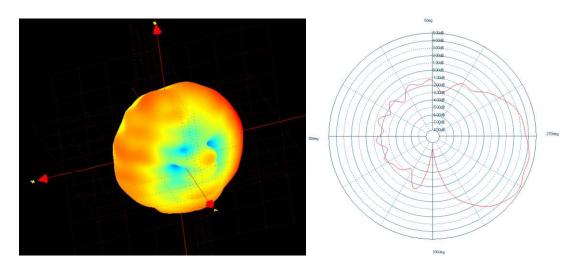
# 2500MHz



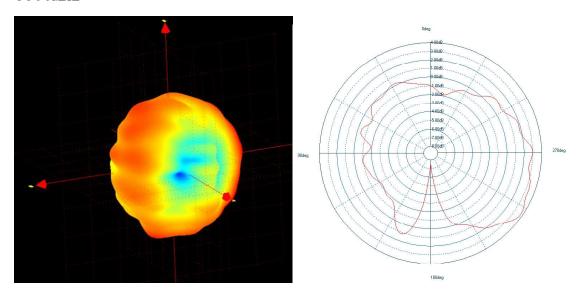
## 5100MHz



## 5450MHz



## 5800MHz



## 4, Summary of WIFI Antenna Test Results

#### 4.1 Test results of efficiency and gain

	1	2	3	4	5	6
Frequency(MHz)	2400	2420	2440	2460	2480	2500
Efficiency(%)	79.6	77.6	77.9	79.3	75.5	73.9
Gain(dBi)	8.2	8.2	7.94	7.83	7.30	6.89
Peak Gain Position(Thete)	154	154	154	154	152	-120
Peak Gain Position(Phi)	20	20	20	20	22	78

	7	8	9	10	11	12
Frequency(MHz)	5100	5140	5180	5220	5260	5300
Efficiency(%)	65.8	64.1	65.8	60.6	67.1	63.9
Gain(dBi)	5.41	5.39	5.64	5.25	5.69	5.33
Peak Gain Position(Thete)	-122	-122	-122	-122	-122	-120
Peak Gain Position(Phi)	28	26	26	24	24	24

	13	14	15	16	17	18
Frequency(MHz)	5340	5380	5420	5460	5500	5540
Efficiency(%)	68.2	67.5	62.4	66.9	66.6	64.2
Gain(dBi)	5.51	5.60	4.94	5.17	5.00	4.44
Peak Gain Position(Thete)	-122	-120	-122	-124	-122	-122
Peak Gain Position(Phi)	24	24	22	22	22	22

	19	20	21	22	23	24
Frequency(MHz)	5580	5620	5660	5700	5740	5780
Efficiency(%)	67.1	65.4	64.1	66.0	69.5	69.0
Gain(dBi)	4.49	4.32	3.80	3.97	4.10	3.67
Peak Gain Position(Thete)	-126	-124	-122	-124	-124	-124
Peak Gain Position(Phi)	22	20	18	20	20	18

	25	26	27		
Frequency(MHz)	5820	5860	5900		
Efficiency(%)	66.3	63.9	62.6		
Gain(dBi)	3.36	3.70	3.07		
Peak Gain Position(Thete)	-124	-124	-124		
Peak Gain Position(Phi)	18	18	20		