

Antenna Measurement Report for CSM92F25

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Contents

- Antenna Introduction
- Specification
- Test equipment
- S-parameter test results
- testing environment
- Measurement setting
- Gain & Patterns test results 3D patterns
- Antenna test data
- Antenna Matching
- Antenna change

Antenna Introduction

Part Number	XM100
Frequency	2.4GHz~2.483GHz
Dimensions	10.5*16 (mm)
Manufacturer	XinMiaoLink



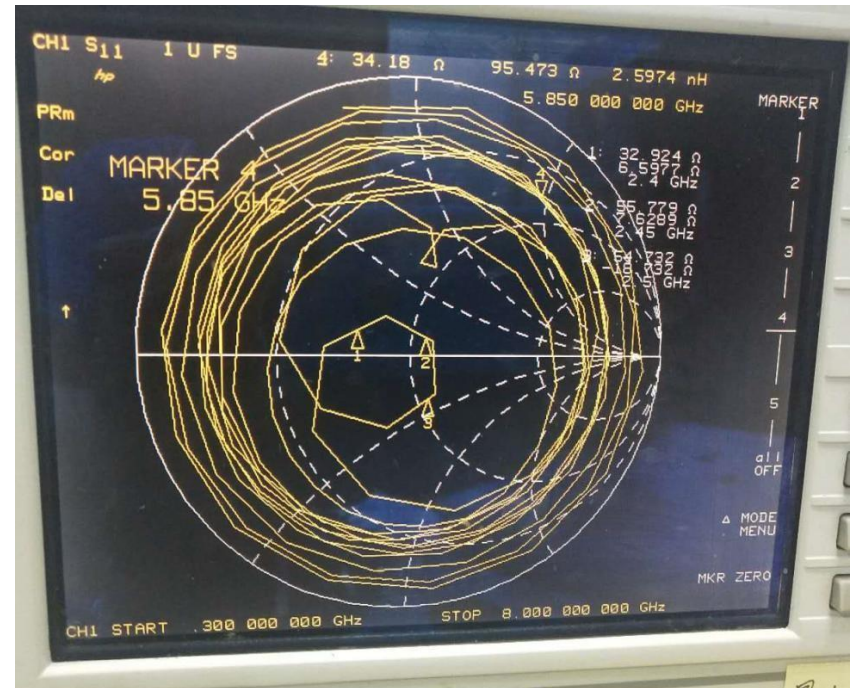
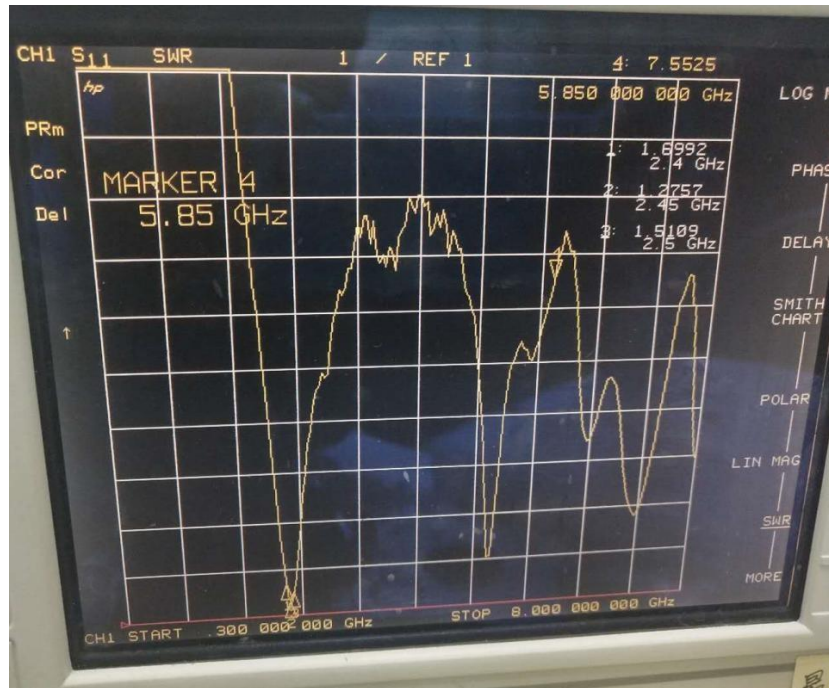
Specification

Rough description	2.4~2.483GHz 2.5dBi antenna	Dimensions	L13.4*W5.8*T0.9mm
Impedance	50Ω	Test environment	None
Application	ble	Freq. Range	2.4~2.483GHz
Gain	Peak gain 2.4dBi	VSWR	1.92: 1
Radiation		Polarization	linear
HPBW / H	None	HPBW / E	None
Efficiency	50±10%	Downtilt	None
Connector type	None	Cable type	None
Isolation	None	Special request	None

Test equipment

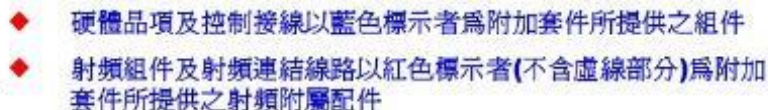
Test Item	VSWR (Voltage Standing Wave Ratio)
Test environment and equipment	VNA 

S-parameter test results Radiation test results



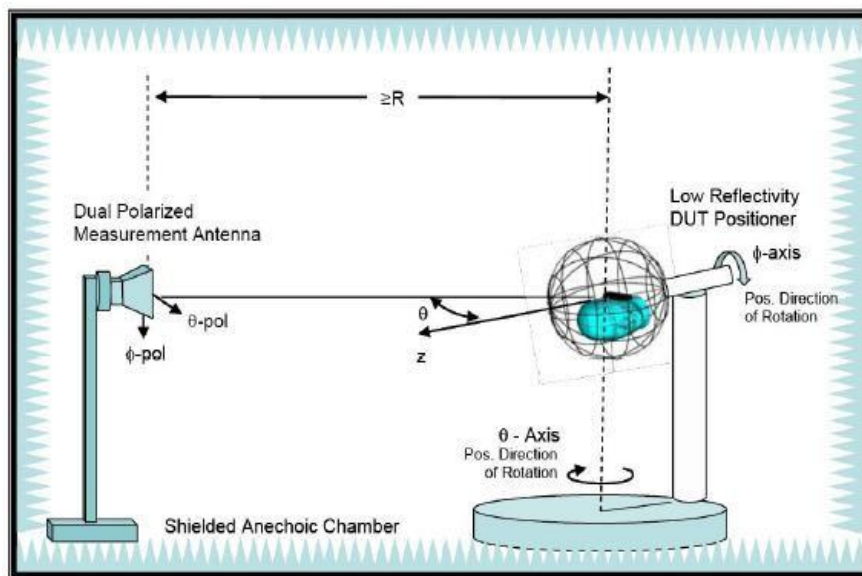
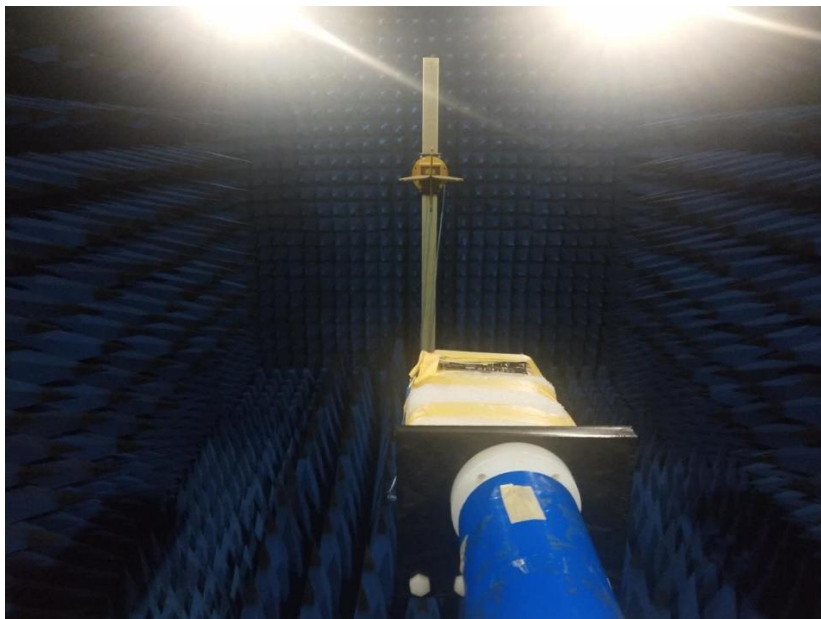
Test Item	Device Under Test	Standard	Frequency Range (GHz)		
			2.4	2.45	2.483
VSWR	ble	≥ 1.92	1.69	1.27	1.51

testing environment



Gain & Patterns test results

Measurement setting

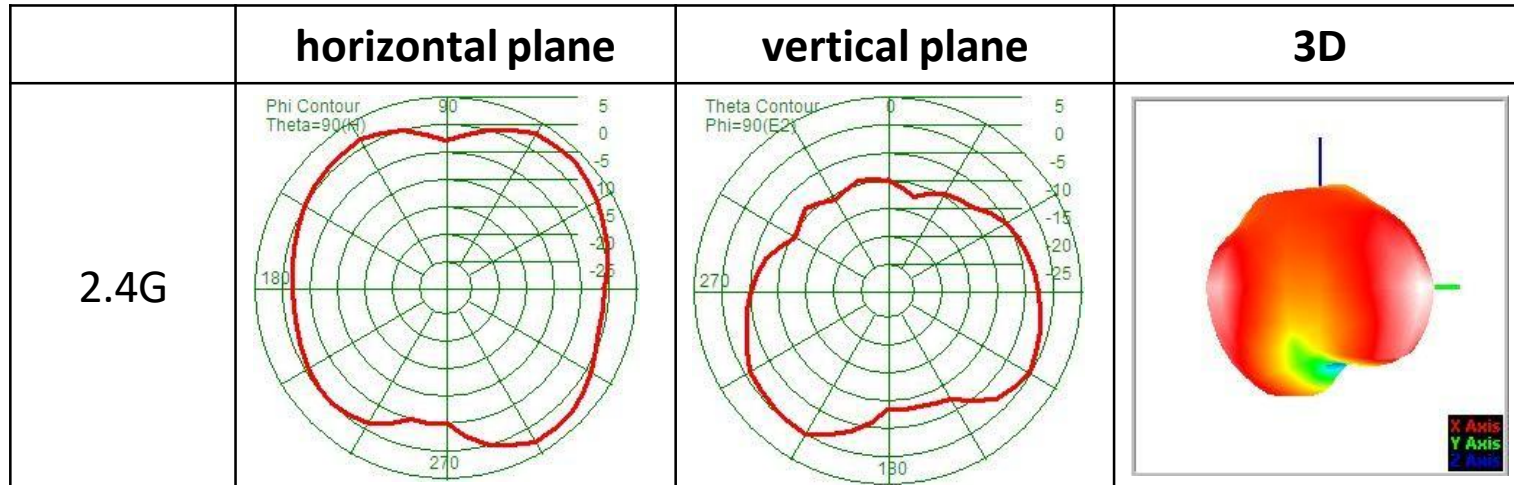


antenna gain Efficiency

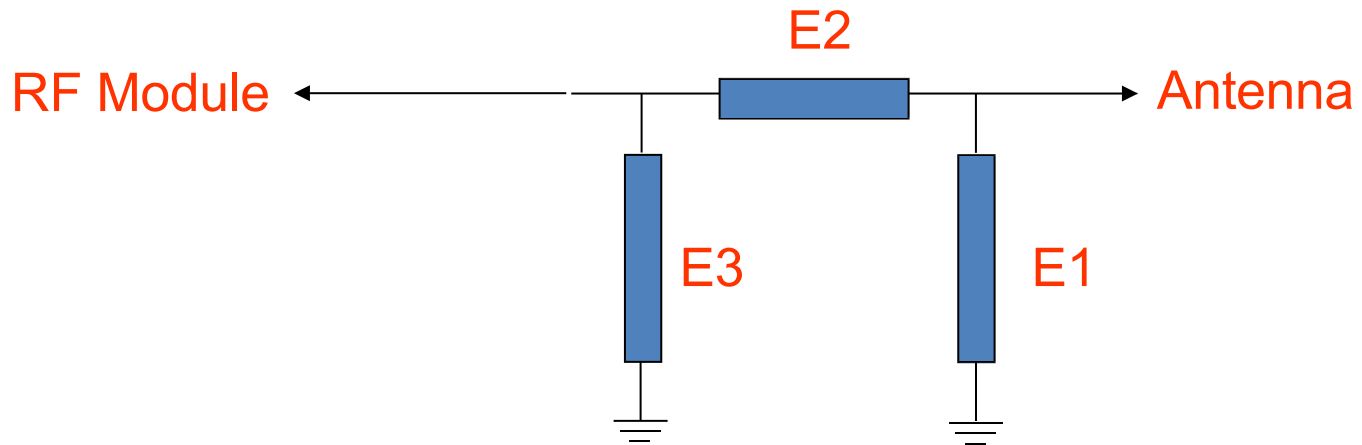
Test Point ID	Freq. (MHz)	Gain (dBi)	Efficiency (%)
<u>1</u>	2400.0	2.40	53.1%
<u>2</u>	2410.0	2.40	55.5%
<u>3</u>	2420.0	2.40	58.9%
<u>4</u>	2430.0	2.40	58.8%
<u>5</u>	2440.0	2.40	61.0%
<u>6</u>	2450.0	2.40	60.4%
<u>7</u>	2460.0	2.40	61.7%
<u>8</u>	2470.0	2.40	59.2%
<u>9</u>	2480.0	2.40	59.9%
<u>10</u>	2490.0	2.40	54.8%
<u>11</u>	2500.0	2.40	55.7%

Gain & Patterns test results

3D patterns



Antenna Matching



Element	Value
E1(0402)	NC
E2(0402)	0R
E3(0402)	1.2PF