# **SPECIFICATION**

Customer Name:	
Product Model:	NMM-PFB-W2
Customer P/N:	
XINHENGYANG P/N:	
SPECIFFCATIONS:	2400-2500MHz
Production date:	2023. 04. 26
Sample Version:	V1. 0



#### Index

<b>Cover</b> 1
Index2
Change history3
The basic parameters 4
TestEquipment & Conditions5
Test Report6—8
RoHS/Rill of materials9



### Change history

Number	Effective date	Change record
V1.0	2023.04.26	Initial release



## The basic parameters

A. Electrical Characteristics					
Frequency	2400MHZ~2500MHZ				
NOWD					
VSWR	< 2 >31%				
Avg Efficiency					
Impedance	$50 \pm 15 \mathrm{Ohm}$				
Polarization	Linear				
Peak Gain	2.4G:1.10dBi				
B. Material & Mechanical Characteristics	B. Material & Mechanical Characteristics				
Material of Radiator	onboard black				
Cable Type	/				
Connector Type	/				
Dimension	/				
C. Environmental					
Operation Temperature	- 20 °C ~ + 60 °C				
Storage Temperature	- 30 °C ~ + 70 °C				



#### Introduction:

Microwave darkroom and no reflection chamber, absorbing short wave darkroom dark room. Microwave darkroom by electromagnetic shielding room, filtering and isolation, grounding device, the ventilation duct, indoor distribution system, monitoring system, ceiling wave material part. It is based on the wave absorbing material as the lining of the shield room, it can absorb the most of the electromagnetic energy into the six wall is a better simulation of the free space conditions.

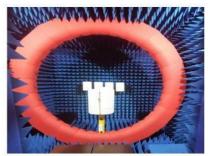
The main working principle of microwave anechoic chamber is according to the electromagnetic wave in the medium from the low magnetic guide magnetic direction of propagation rules, absorbing materials to guide the electromagnetic wave using high permeability, through resonance, a substantial absorption of electromagnetic wave radiation energy, by coupling the electromagnetic energy into heat energy.

#### main performance

Frequency range: $400 MHz \sim 6 GHz$  ceiling reflected wave loss materials:  $400 MHz \sim 6 GHz$  is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)







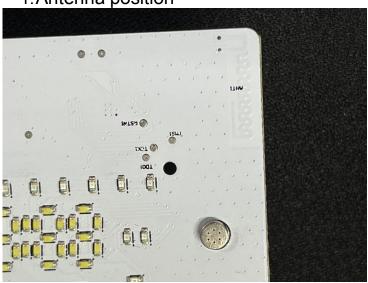


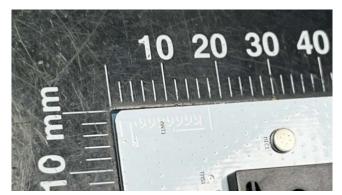


#### Test Report

Those specifications were specially defined for NMM-PFB-W2 model.

1. Antenna position





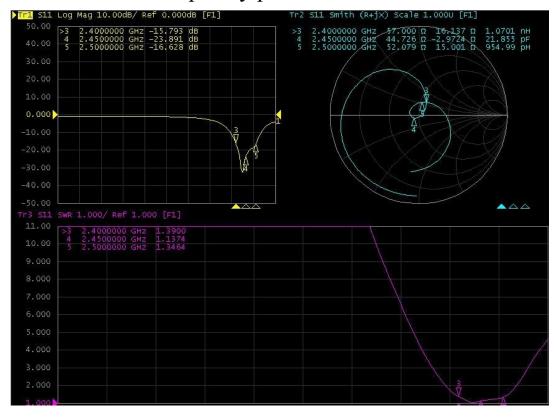
#### **VSWR**

## 2. Measuring Method

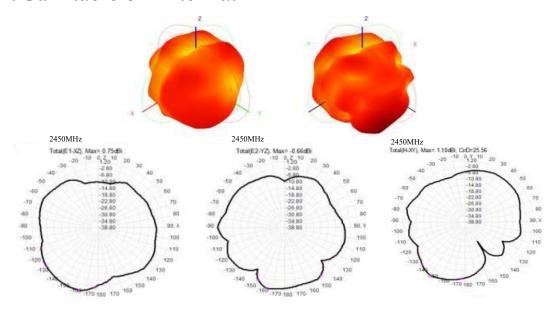
- $1.A~50\Omega$ coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR
- 2. Keeping this jig away from metal at least 20cm



# 3. Measurement frequency points and VSWR value



### 4. Gain table of Antenna:





Freq (MHz)	2400MH	2400MHZ-2500MHZ		
	Effi(%)	Gain (dBi)		
2400	36.54	0.75		
2410	36.72	0.56		
2420	36.53	0.63		
2430	37.45	0.72		
2440	37.27	0.89		
2450	37.11	1.10		
2460	36.40	0.69		
2470	35.12	0.53		
2480	34.27	0.41		
2490	33.55	0.26		
2500	32.07	-0.07		

RoHS/Bill of materials

1.RoHS							
Antenna	_meets	RoHS	requirements	See	electronic	file	for
details.							