SPECIFICATION

Customer Name: Shenzhen Limpet Technology Co., Ltd.

Product Model: Wali

Customer P/N :

XINHENGYANG P/N: ZJ.03.0271-X1

SPECIFFCATIONS: 2400-2500MHz

Production date: 2025-03

Sample Version: V1.0

XINHENGYANG		
FICTION	DQE	R&D
Customer		
PUR	QC	R&D

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Change history

Number	Effective date	Change record
V1.0	2025-03	Initial release

The basic parameters

A. Electrical Characteristics	
Frequency	**2400MHZ~2500MHZ**
VSWR	**< 2**
Avg Efficiency	**>41%**
Impedance	**50 ± 15 Ohm**
Polarization	**Linear**
Peak Gain	**2.4G:1.85dBi**
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**

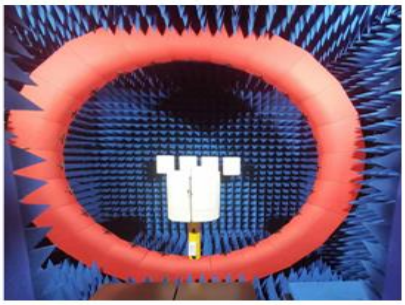
Introduction:

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 ：

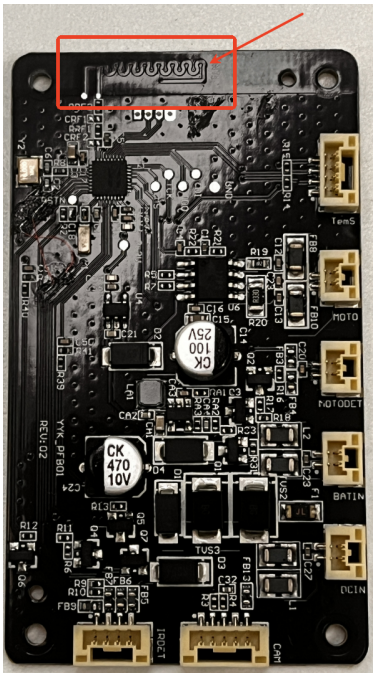
Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)

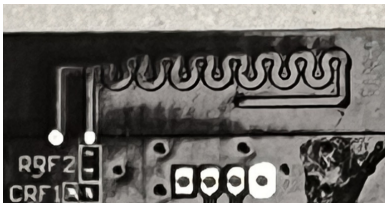


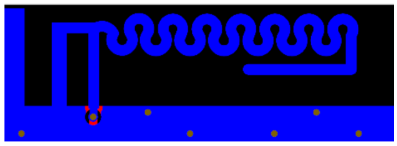
Test Report

Those specifications were specially defined for Small 0 model.

1.Antenna position







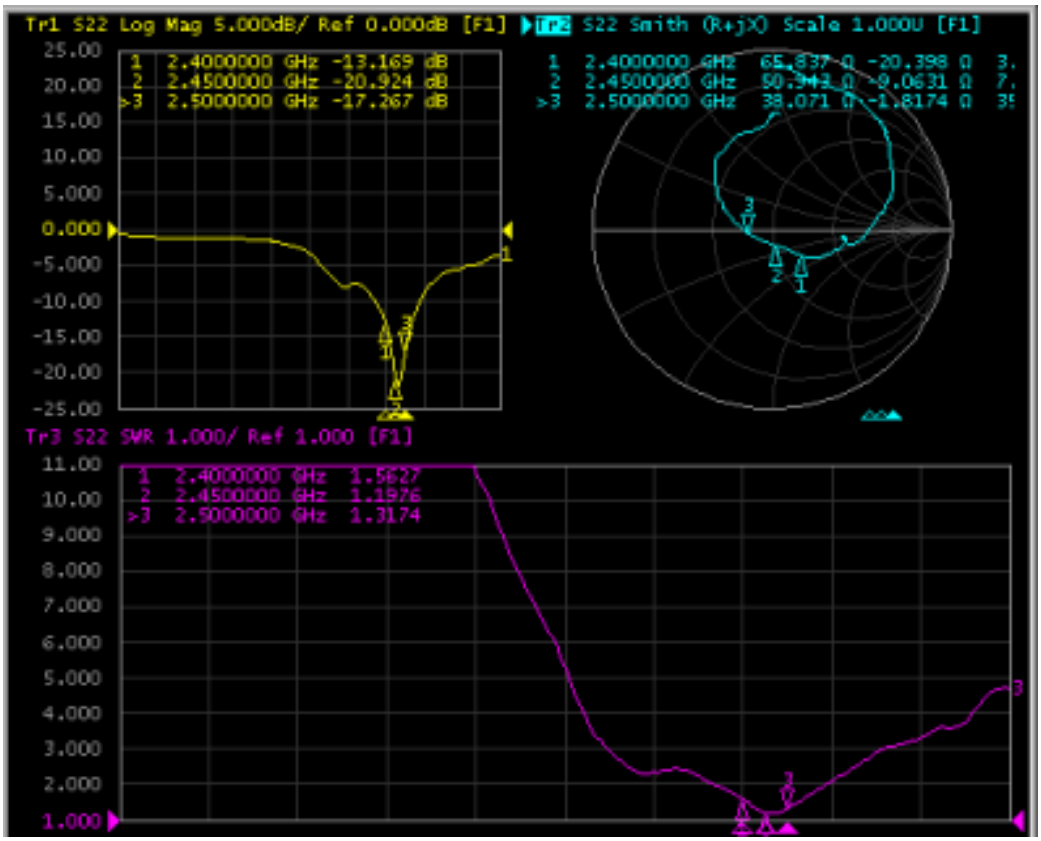
VSWR

2.Measuring Method

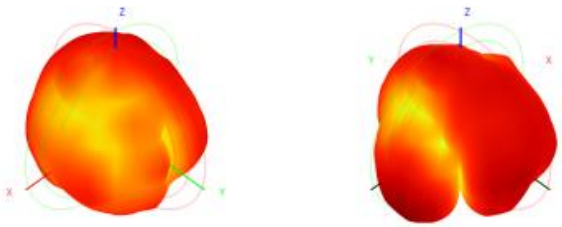
1.A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR

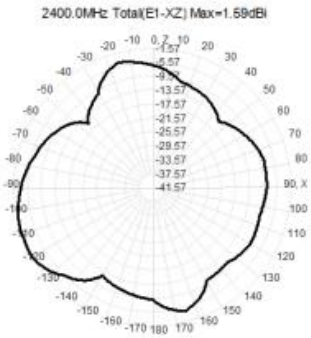
2.Keeping this jig away from metal at least 20cm

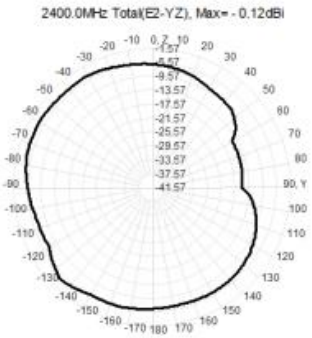
3.Measurement frequency points and VSWR value

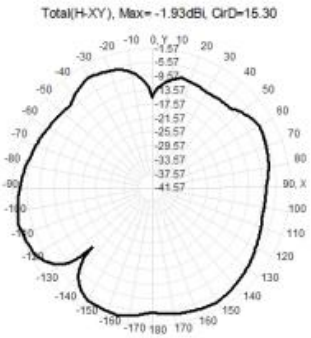


4.Gain table of Antenna:









Freq (MHz)	Effi (%)	Gain (dBi)
2400	42.51	1.59
2410	43.66	1.61
2420	45.75	1.77
2430	46.54	1.85
2440	44.19	1.64
2450	42.65	1.53
2460	43.57	1.59
2470	43.89	1.51
2480	45.12	1.69
2490	45.16	1.67
2500	44.89	1.42
5100	43.97	1.47
5150	43.98	1.44

RoHS/Bill of materials

1.RoHS

Antenna ZJ. 03. 0271-X1 meets RoHS requirements See electronic file for details.

**********END**********