



LETTER OF ACCEPTANCE

SPECIFICATION FOR APPROVAL

Customer Name: Shenzhen Sunmore Technology Co., LTD

Product Model: MWA C29

Customer P/N : _____

X INHENGYANG P/N: CP. 04. A00360001

SPEC IFFICATIONS: W I F I FPC antenna black +1.13 coaxial line black L=90mm

Production date: 2024/7/25

Sample Version: V1.0

SUNMORE		
FICTION	Structure	R&D
Customer		
PUR	QC	R&D

Manufacturer: Shenzhen Sunmore Technology Co., LTD

Address: 1901, 1914, Floor 19, Building A, Xincheng Business Center,
No. 19, Sanlian Chuangye Road, Sanlian Community, Longhua Street,
Longhua District, Shenzhen

Street, Tel: 0755-23498381 Fax: 0755- 23498380

Network address: <http://www.sunmore-etc.com>



Number	Effective date	Change record
V1.0	2024/7/25	Initial release



1、 Basic parameter

A. Electrical Characteristics	
Frequency	2400MHZ-2500MHZ
VSWR	< 2.0
Avg Efficiency	>60%
Impedance	50 ± 25 Ohm
Polarization	Linear
Peak Gain	antenna1 -2.4G: 4.78dBi antenna2 -2.4G: 5.00dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC black
Cable Type	Φ 1.13mm L=90±3MM black
Connector Type	generation
Dimension	42.15±0.2mm*13.45±0.2mm
C. Environmental	
Operation Temperature	- 20 °C ~ + 60 °C
Storage Temperature	- 30 °C ~ + 70 °C

2、Electrical Specification

Those specifications were specially defined for MWA C29 model.

3、VSWR

1 Measuring Method

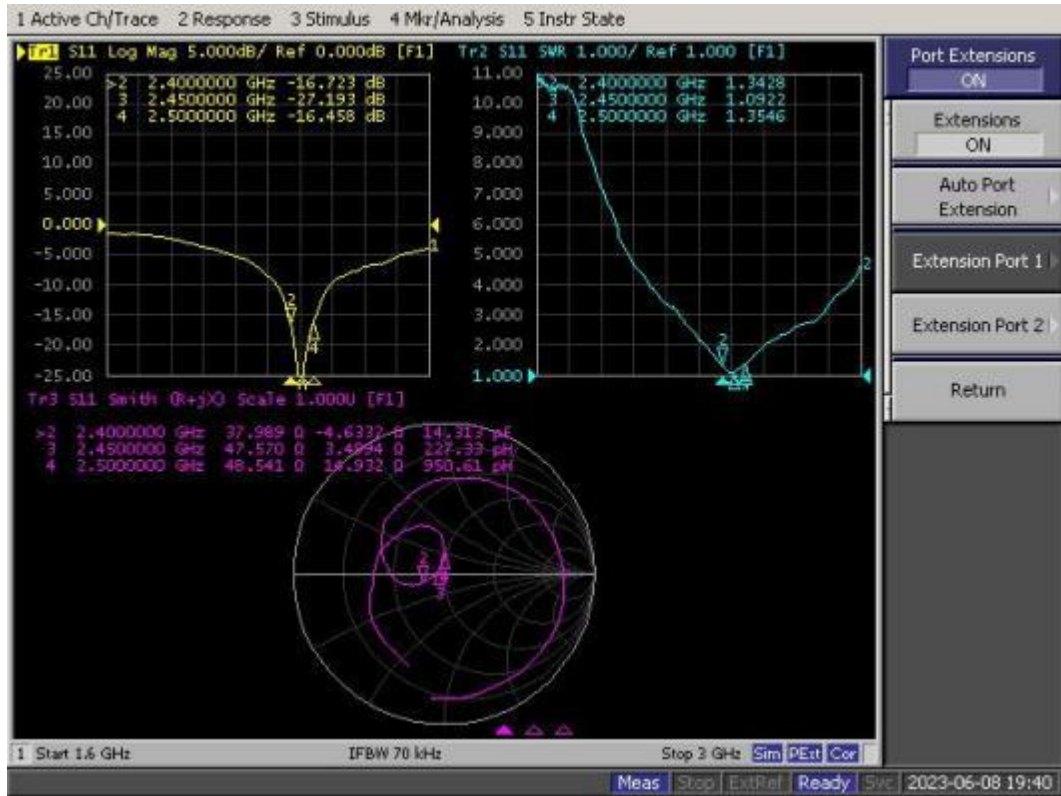
1. A $50\ \Omega$ coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR
2. Keeping this jig away from metal at least 20cm

2 Measurement frequency points and VSWR value

antenna 1



antenna2



4、 Anechoic chamber

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)



5、Antenna performance

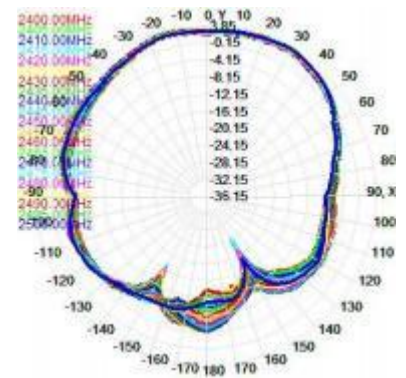
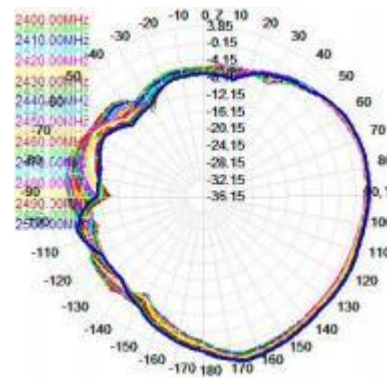
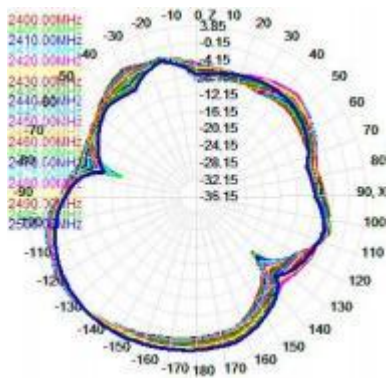
Passive field pattern -2400MHZ-2500MHZ- Antenna 1



E1(XZ)

E2 (YZ)

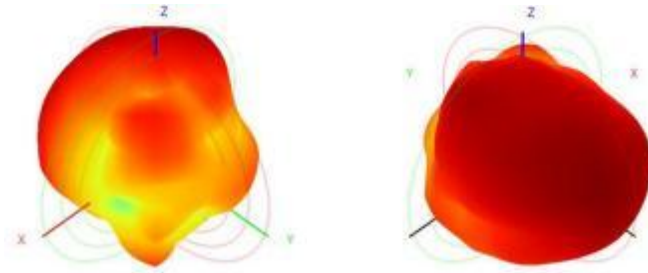
H (XY)



Passive efficiency gain

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	63.15	4.70	2455	68.00	4.63
2405	63.20	4.60	2460	67.87	4.61
2410	62.85	4.43	2465	67.69	4.56
2415	63.38	4.39	2470	67.45	4.56
2420	64.69	4.52	2475	67.12	4.55
2425	65.63	4.61	2480	64.98	4.33
2430	65.55	4.60	2485	64.35	4.29
2435	66.05	4.66	2490	67.02	4.49
2440	67.92	4.78	2495	68.61	4.52
2445	68.38	4.77	2500	69.12	4.44
2450	68.04	4.69			

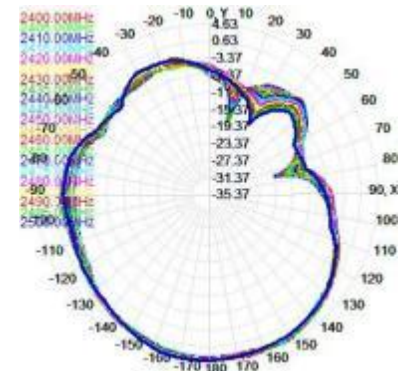
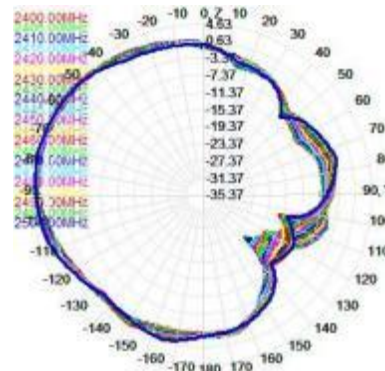
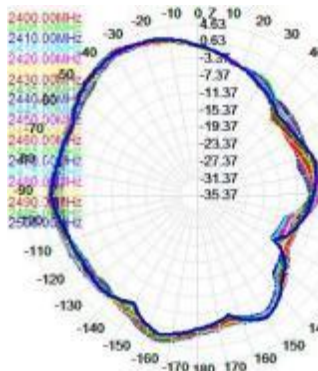
Passive field pattern -2400MHZ-2500MHZ- Antenna 2



E1(xz)

E2(yz)

H(xy)



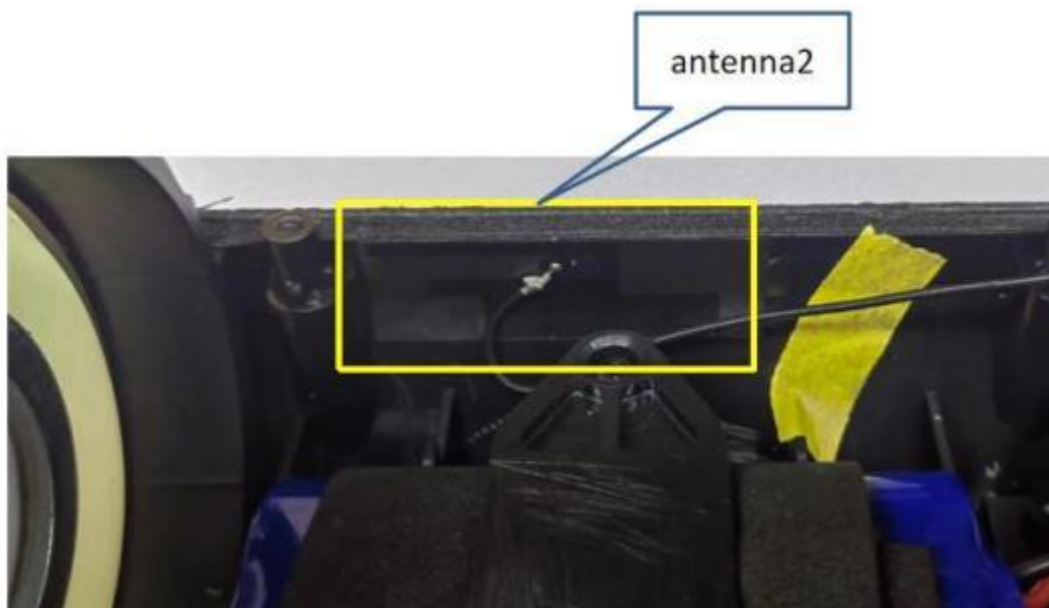
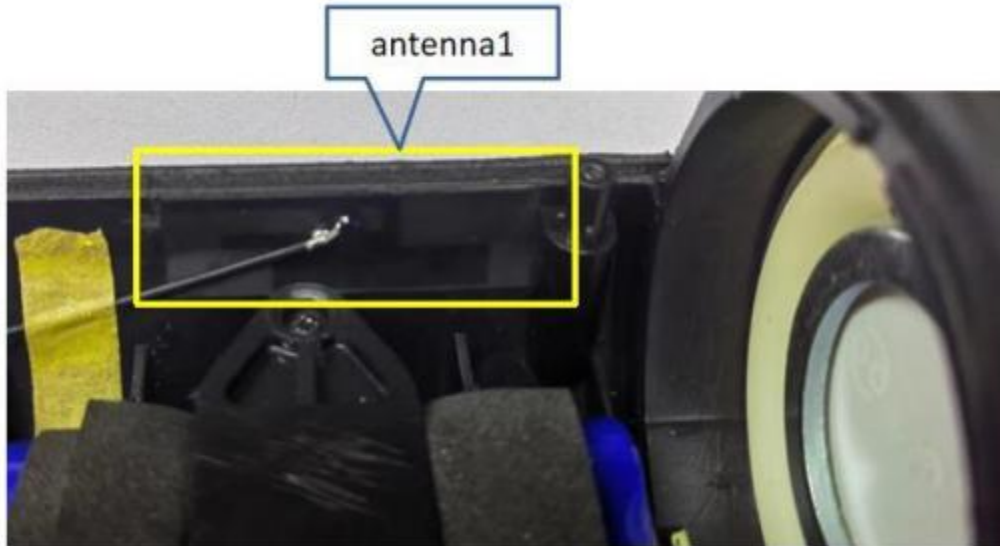
Passive efficiency gain

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	67.25	4.49	2455	68.66	4.58
2405	67.05	4.58	2460	67.83	4.36
2410	66.81	4.71	2465	66.17	4.05
2415	66.93	4.86	2470	66.12	4.00
2420	67.88	4.99	2475	67.25	4.12
2425	68.64	5.00	2480	67.30	4.19
2430	68.59	4.99	2485	67.73	4.34
2435	68.63	4.98	2490	69.00	4.40
2440	69.45	4.91	2495	69.52	4.39
2445	69.74	4.82	2500	69.37	4.43
2450	69.11	4.70			

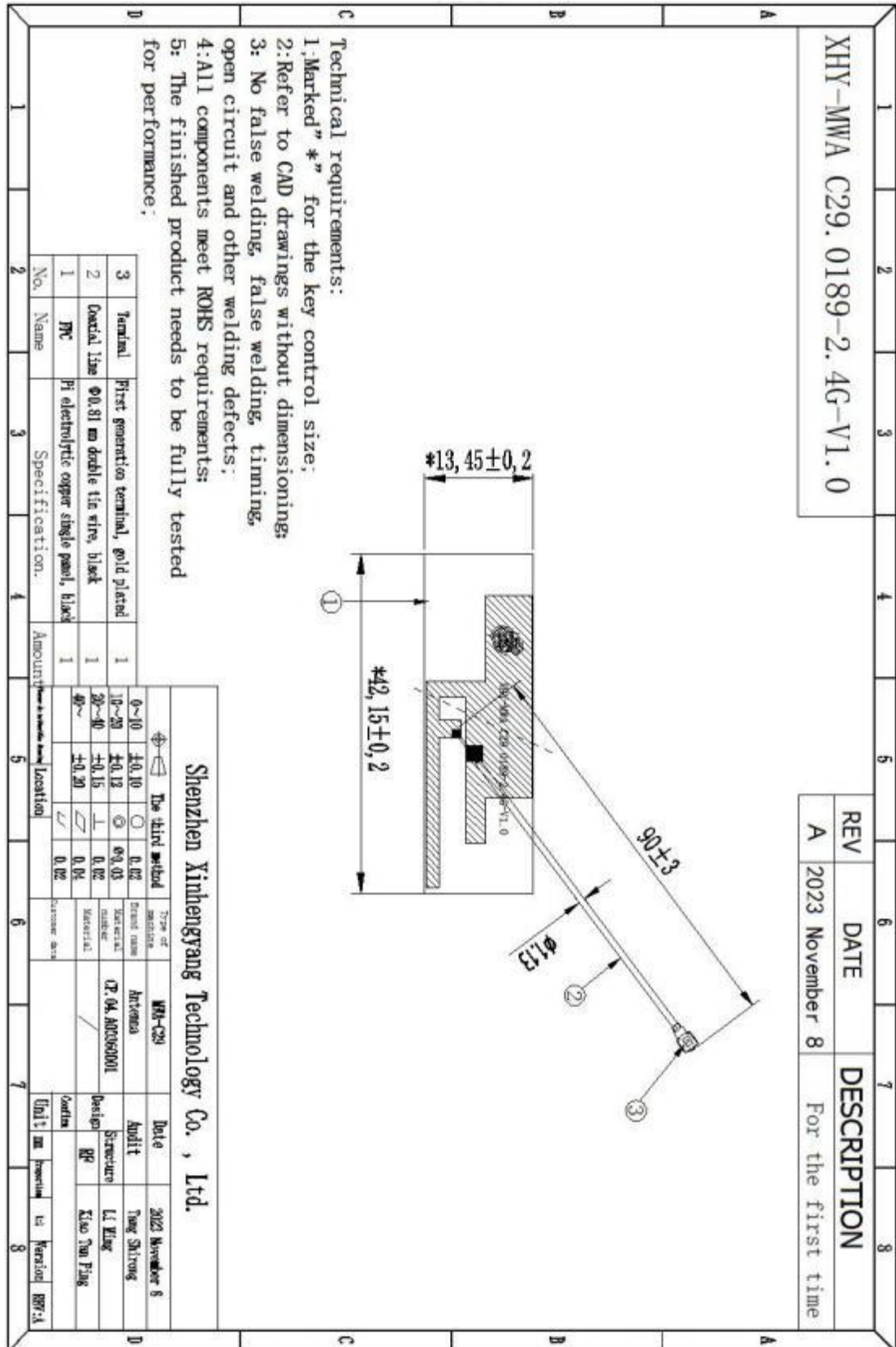
6、Machine picture



7、 Antenna assembly drawing



8、Antenna drawing size





9、ROHS

Antenna CP. 04. A00360001 meets RoHS requirements.

十、 Product packing instructions

A. packing should meet the moistureproof, vibration, pressure and mildew proof, etc.

B. the smallest packing unit logo must have the manufacturer trademarks, product model, name, code and quantity.

C. in the attached packing list, certificate of approval, and the factory inspection report.

*****END*****