

SPECIFICATION FOR APPROVAL

Customer Name: _____

Product Model: _____ R2U _____

Customer P/N : _____

X INHENGYANG P/N: _____ CP. 04. A00920008 _____

SPEC IFFCATIONS: _____ WIFI _____

Production date: _____ 2023. 12. 29 _____

Samp le Version: _____ V1 _____

(X INHENGYANG)		
(FICTION)	(SE)	(R&D)
(Customer)		
(PUR)	(QC)	(R&D)

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(Change history)

Number	Effective date	Change record
V1	2023.12.29	Initial release

(The basic parameters)

A. Electrical Characteristics	
Frequency	2400MHZ~2500MHZ 5150MHZ~5850MHZ
VSWR	<2.00
Avg Efficiency	2.4G > 55% 5.8G > 45%
Impedance	50 ± 15 Ohm
Polarization	Linear
Peak Gain	2.4G:3.93 dBi 5.8G:3.92 dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC black
Cable Type	Φ 1.13MM*150MM±2MM 30.30MM*13.20MM
Connector Type	Generation
Dimension	31.50MM*14.40MM*0.60MM±0.2MM
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)

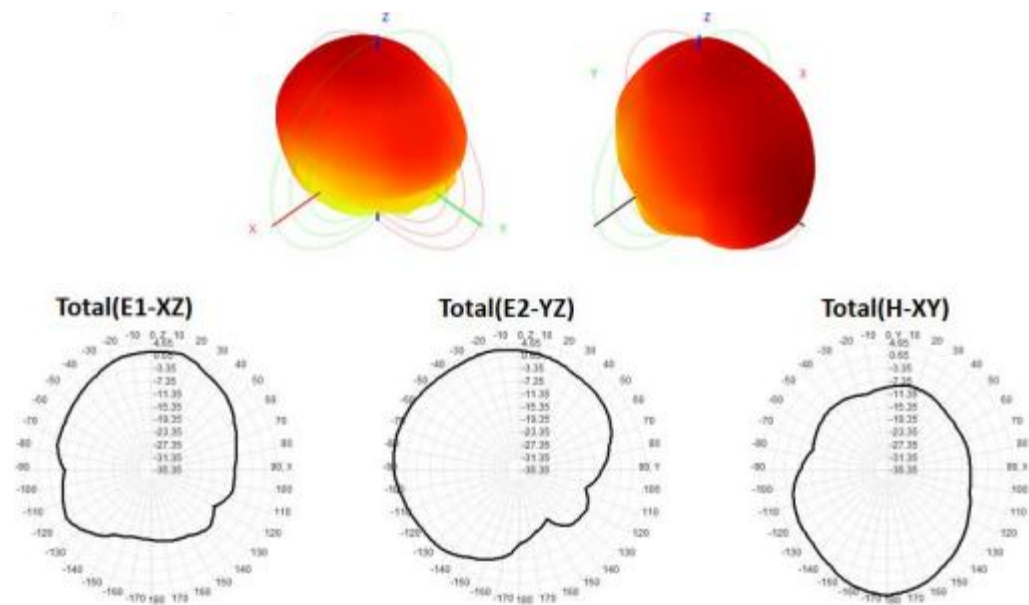
Those specifications were specially defined for R2U model.

1. Antenna position:

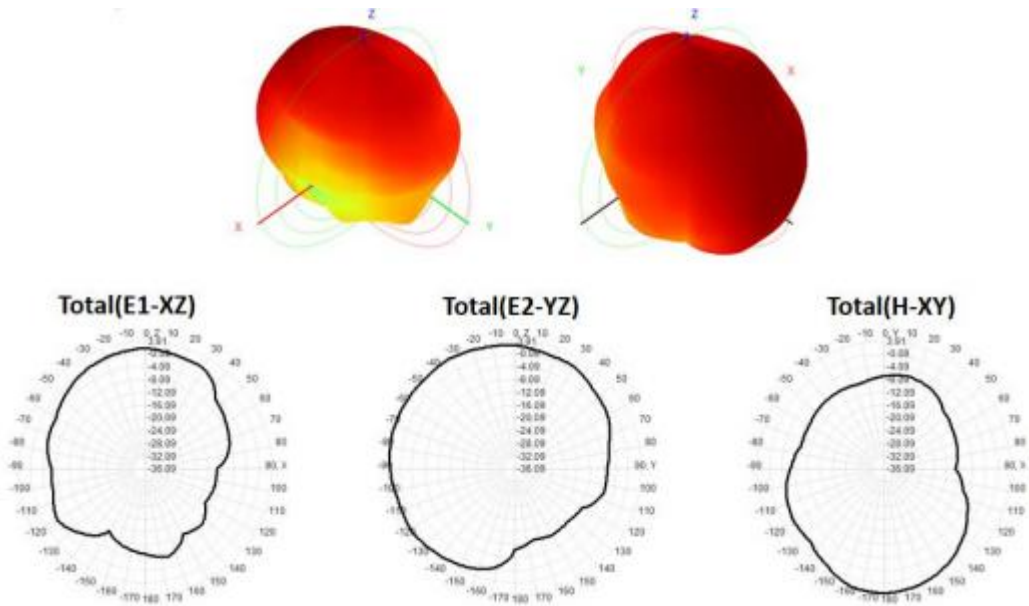
2. Antenna passive field pattern and passive efficiency gain
table :

WIFI-2. 4G:

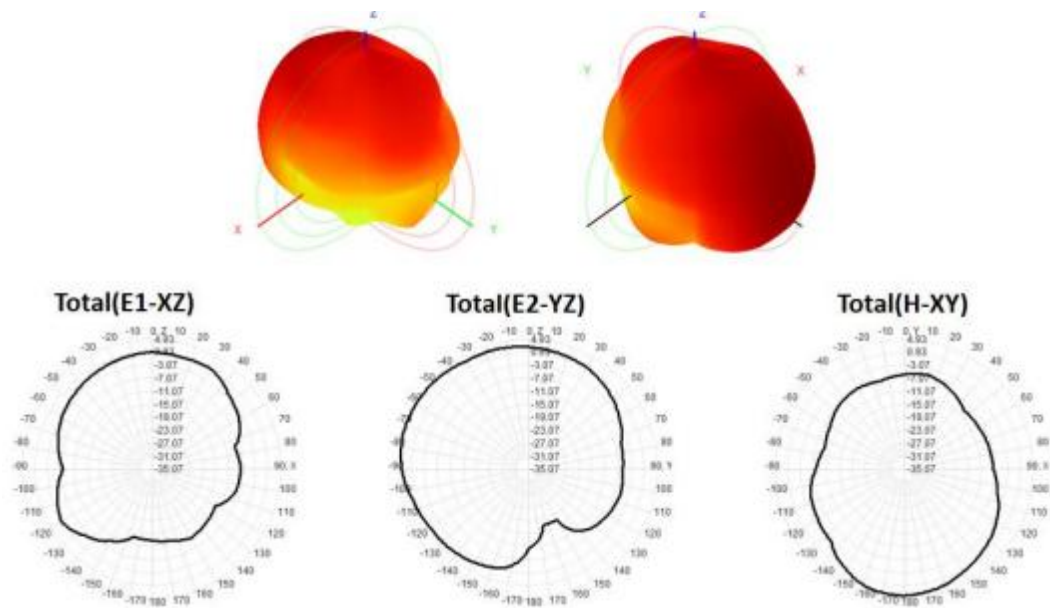
Radiation Patterns (2400MHz)



Radiation Patterns (2450MHz)



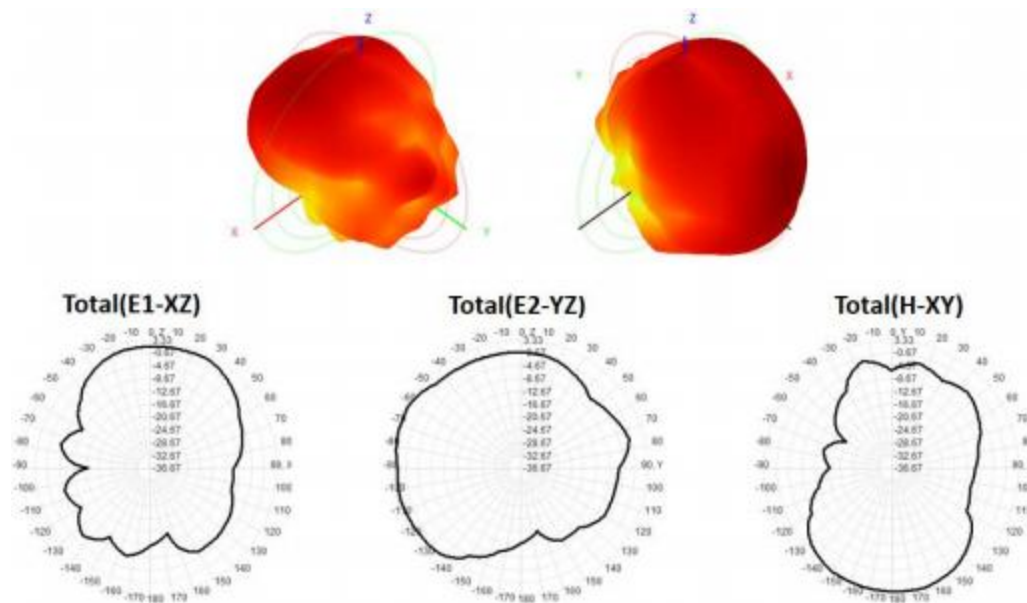
Radiation Patterns (2500MHz)



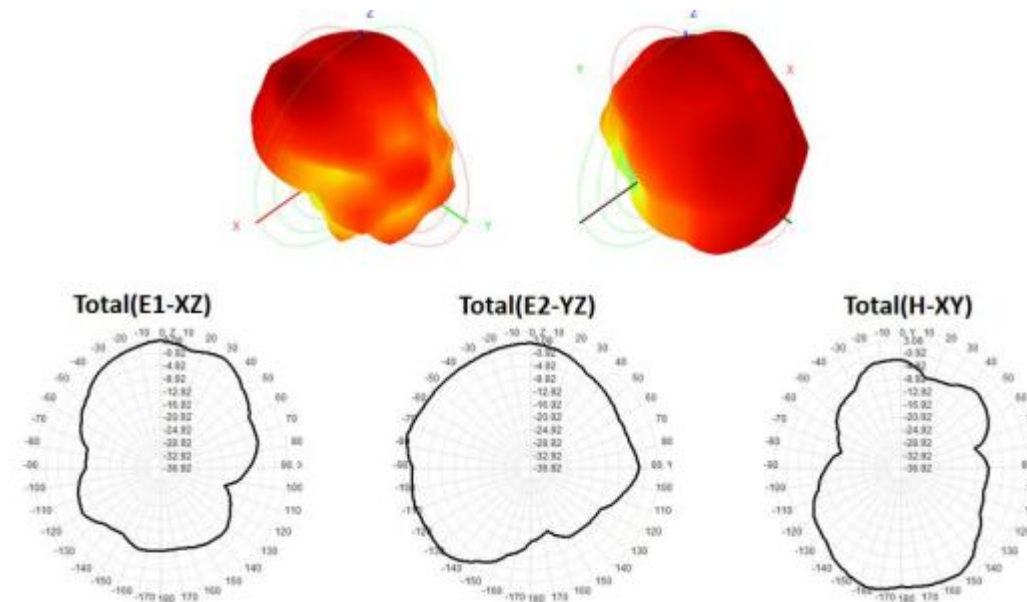
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
2400.0	57.07	-2.44	3.65
2410.0	56.35	-2.49	3.34
2420.0	56.81	-2.46	3.17
2430.0	56.45	-2.48	2.91
2440.0	58.47	-2.33	2.83
2450.0	59.35	-2.27	2.91
2460.0	59.75	-2.24	2.94
2470.0	60.66	-2.17	3.06
2480.0	62.53	-2.04	3.26
2490.0	63.80	-1.95	3.58
2500.0	65.17	-1.86	3.93

WIFI-5.8G:

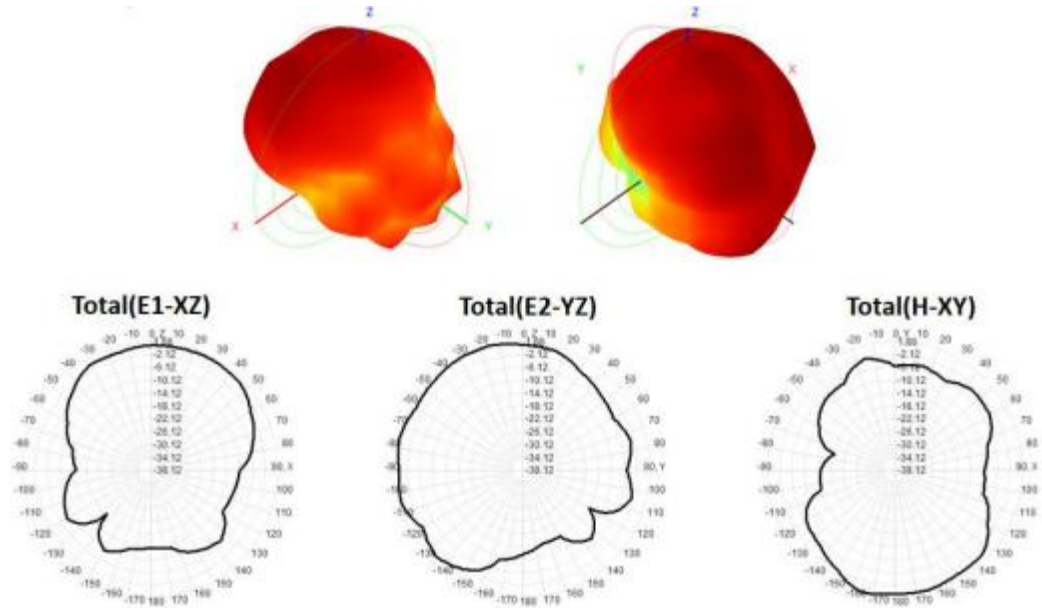
Radiation Patterns (5150MHz)



Radiation Patterns (5500MHz)



Radiation Patterns (5850MHz)

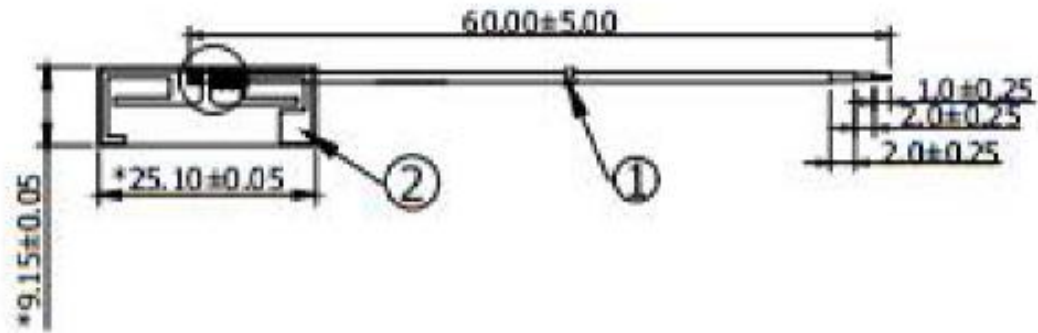


Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
5150	50.21	-2.99	3.33
5200	48.20	-3.17	2.94
5250	60.27	-2.20	3.52
5300	61.48	-2.11	3.82
5350	46.44	-3.33	3.06
5400	55.44	-2.56	3.32
5450	64.69	-1.89	3.92
5500	49.75	-3.03	3.55
5550	50.79	-2.94	3.67
5600	57.30	-2.42	3.07
5650	52.83	-2.77	2.86
5700	50.41	-2.97	3.34
5750	52.79	-2.77	3.16
5800	48.26	-3.16	2.64
5850	48.50	-3.14	2.76

3. OTA:

Test Condition		Free Space	
band	Channel	TRP (dBm)	TIS (dBm)
802.11A 54Mbps	149	14.54	-74.45
	157	15.07	-74.38
	165	14.06	-73.22
802.11B 11Mbps	1	12.31	-85.89
	6	12.21	-85.99
	11	13.77	-86.74
802.11G 54Mbps	1	12.00	-75.23
	6	12.00	-75.07
	11	11.99	-75.41
802.11N MCS7	1	11.38	-73.19
	6	11.19	-74.90
	11	11.69	-73.21
802.11AC 40M MCS Index7	36	11.52	-63.70
	149	12.21	-65.01
802.11AX 40M MCS Index7	36	12.53	-64.35
	149	14.46	-65.37

(Product Drawing)



ROHS

Antenna XHY-JT079H-A03P. A0092 WIFI-V1.0 meets ROHS requirements.

Product packaging instructions

A. packing should meet the moisture proof, 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*****