

## SPECIFICATION FOR APPROVAL

DESCRIBE: Anker Innovations Co., LTD (T8160C)

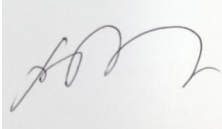
Customer NO: \_\_\_\_\_

PART NO: ATC1433-HY071B04RA

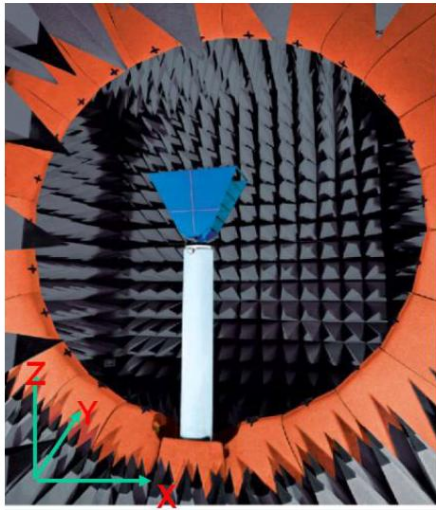
Antenna type: 2.4 WIFI-Ant FPC (Black)

DATE: 2024. 05. 22

PROVIDER: AT&C TECHNOLOGIES(SHENZHEN) CO. LTD

Customer Admit	confirm	ID Department	Test department	Structure section	Quality department
Supplier Admit	confirm	confirm	Proofreading	To examine	Approval
		ziyehui	mo zhenwen	Xuliying	

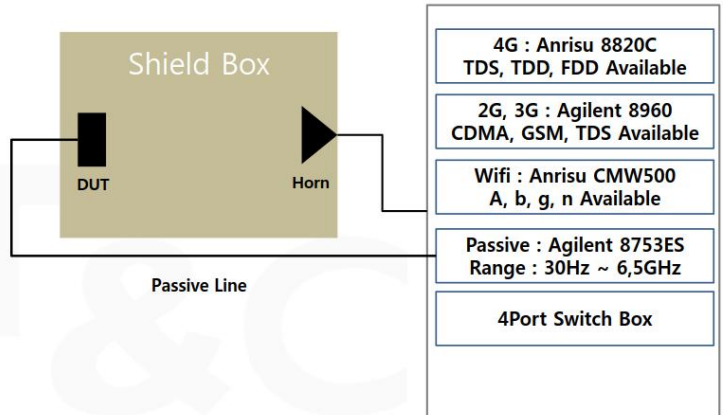
● Chamber System : Satimo 24L



[Fig.] Shield Box

● Measure System Diagram & Equipments

Confidential





# BOM

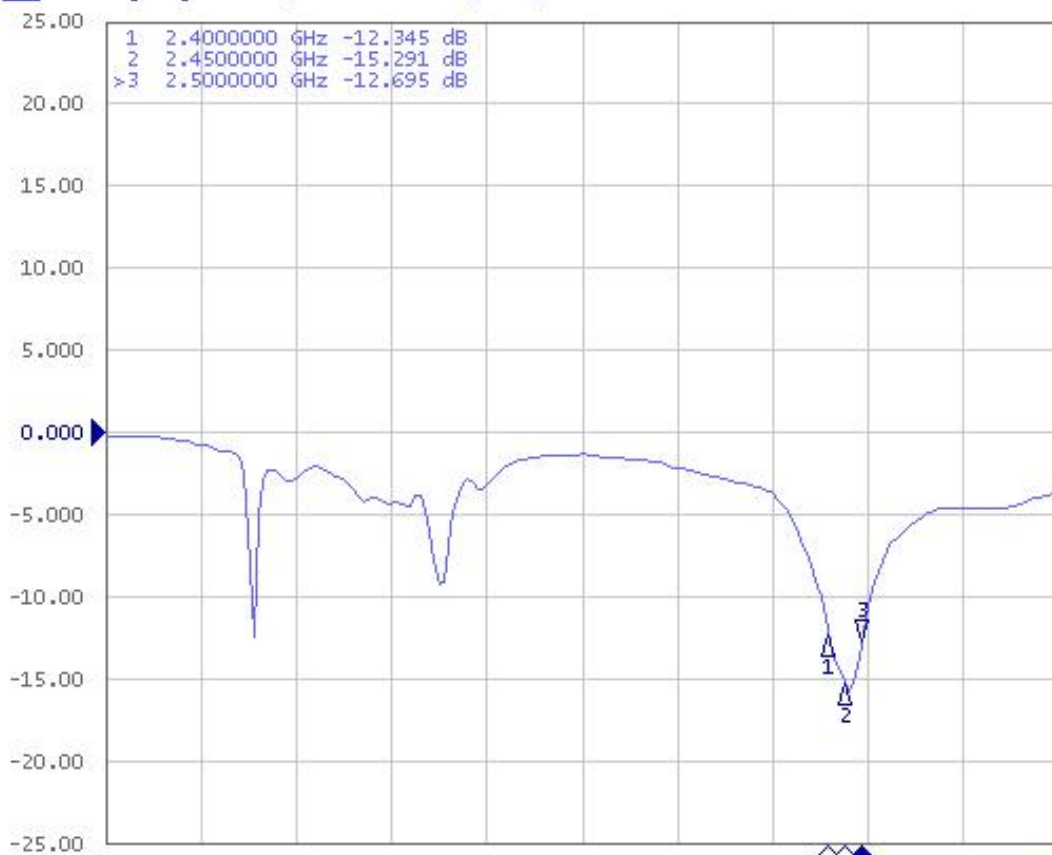
Customer	Anker	Written By	ZYH	Orig. Date	2024.05.22
part Number	ATC1433-HY071B04RA	Revised By	SHIN	Revised Date	2024.05.22
Description	WIFI-ANT	Approved By	HJ	Approved Date	2024.05.22

Customer number	ATC number	Part name
	ATC1433-HY071B04RA	pi+cu, 37. 68*21. 97, Black

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1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

▶ Tr1 S11 Log Mag 5.000dB/ Ref 0.000dB [F1 M]



1 Start 200 MHz

IFBW 70 kHz

Stop 3.1 GHz C?

Display

Allocate Channels

Num of Traces  
3

Allocate Traces

Display Mem

Data -> Mem

Data Math  
OFF

Equation Editor...

Equation  
OFF

Edit Title Label

# Antenna \*Efficiency

Customer	Anker	Written By	ZYH	Orig. Date	2024.05.22
part Number	ATC1433-HY071B04RA	Revised By	SHIN	Revised Date	2024.05.22
Description	WIFI-ANT	Approved By	HJ	Approved Date	2024.05.22

## (2.4G) Passive Test Results

Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Max Gain (dBi)
2400	57.65%	-2.39	1.94
2410	57.93%	-2.37	2.01
2420	56.64%	-2.47	1.95
2430	54.49%	-2.64	1.98
2440	53.23%	-2.74	2.06
2450	54.29%	-2.65	2.36
2460	55.75%	-2.54	2.62
2470	57.20%	-2.43	2.93
2480	57.51%	-2.40	3.03
2490	58.51%	-2.33	3.03
2500	58.12%	-2.36	2.99
AVG:	56.48%	-2.48	2.45

# 2D Radiation Pattern

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Description	WIFI-ANT	Approved By	HJ	Approved Date	2024.05.22

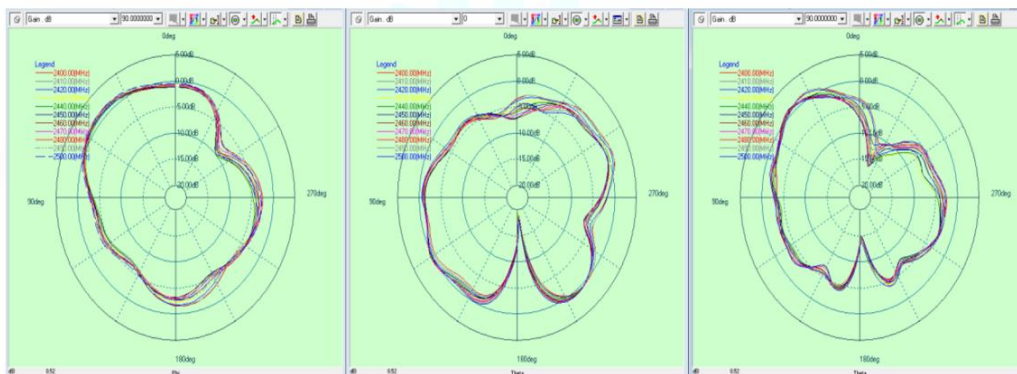
1. Azimuth Pattern H-Plane : "H", X-Y plane
2. Elevation Pattern E1, E2-Plane) : "E1", "E2", X-Z plane(E1), Y-Z plane(E2)
3. It is a structure that supplements the distortion of the horizontal plane in the vertical plane and has a gentle sphere shape in three dimensions.



**H**

**E1**

**E2**



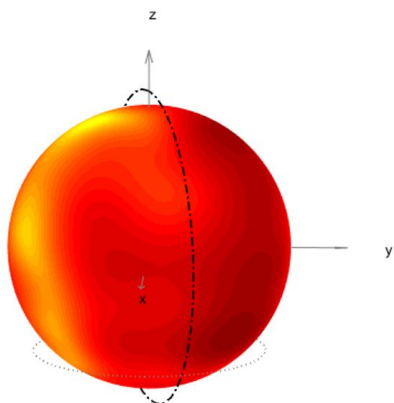
# 3D Radiation Pattern

Customer	Anker	Written By	ZYH	Orig. Date	2024.05.22
part Number	ATC1433-HY071B04RA	Revised By	SHIN	Revised Date	2024.05.22
Description	WIFI-ANT	Approved By	HJ	Approved Date	2024.05.22

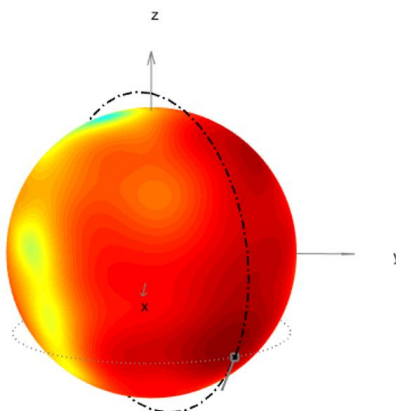
1. This 3D Radiation Pattern shows the response of each angle antenna gain on the sphere.
2. The objects corresponding to the X-Y-Z axes are shown in the left picture.



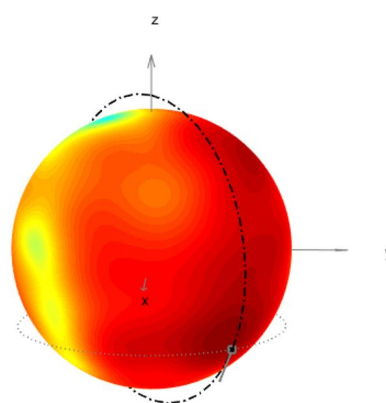
2400MHz



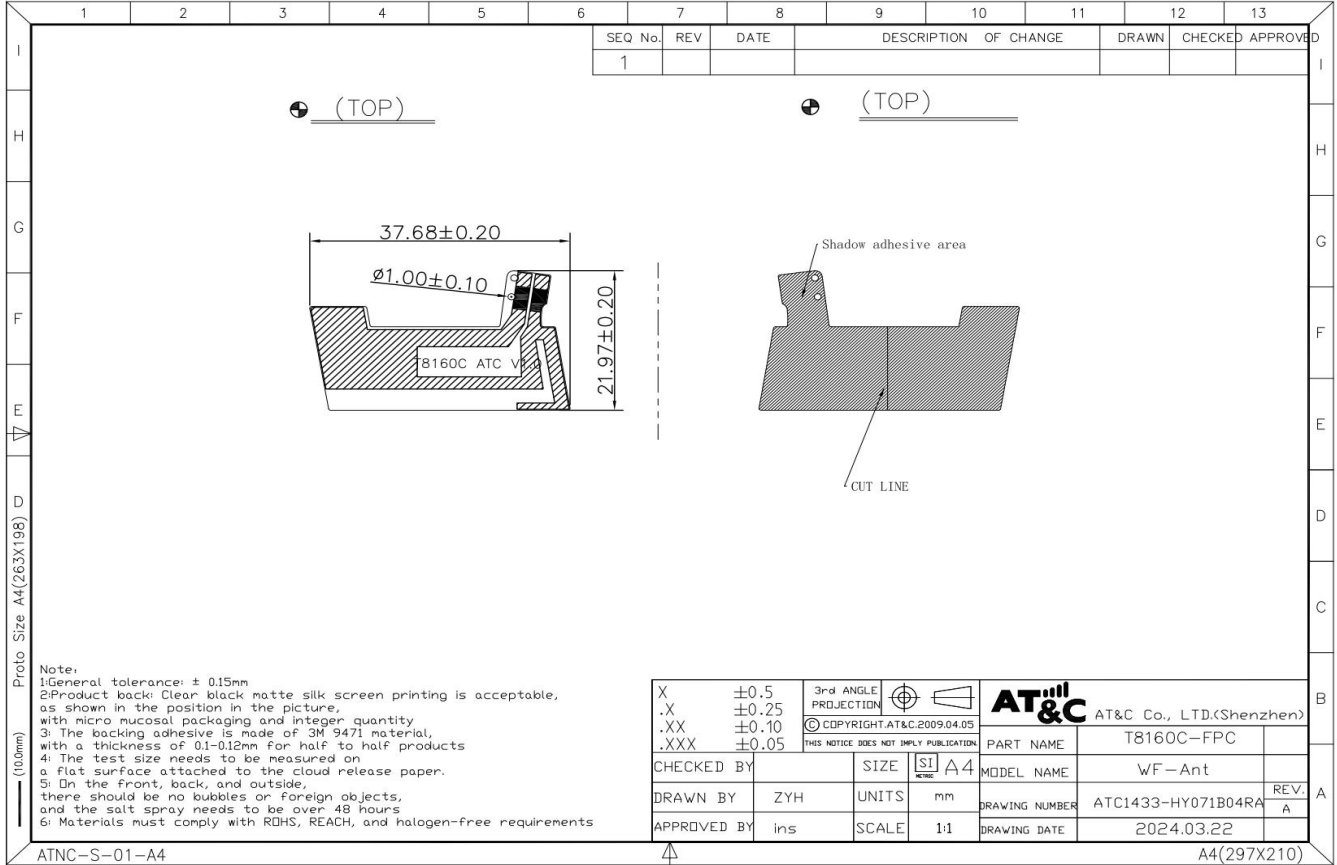
2450MHz



2500MHz



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Size information					Measuring sample			% Tolerance		Handling opinions			
num ber	Dime nsion prop erty	Dimen sion	Lower tol erance	Upper t oleranc e	1	2	3	Upper	Lower	determi ne	Supplier review c omment s	Custome r review commen ts	Measuring tool
1	key p oint	37.68	-0.20	0.20	37.65	37.69	37.66			PASS			PJ
2	key p oint	21.97	-0.20	0.20	21.95	21.96	21.98			PASS			PJ
3	key p oint	1.00	-0.10	0.10	0.99	1.01	1.02			PASS			PJ





## Salt spray test report

Customer Name:	Anker T8160C	Specification and model:	ATC1433-HY071B04RA
Sample situation	Sample quantity: 5PCS		
	base material: Pi 1/2	Coating: Gold plating $\geq 0.5 \mu$	
Test start and end time	From 10:00 on April 9th, 2024 to 10:00 on April 11th, 2024, a total of 48 hours		
Test type:	<input checked="" type="checkbox"/> NSS	<input type="checkbox"/> ASS	<input type="checkbox"/> CASS
Test conditions	Salt solution ratio: 5% $\pm$ 1% : 5% $\pm$ 1%		PH:6.5~7.2
	Temperature inside the box : 35°C		relative humidity : 85% $\pm$ 2%
	Spray mode : <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent		Compressed air pressure: 1kg/cm <sup>2</sup>
	Spray volume: 1.0 ~ 2.0ML/80CM2/H		Test object placement angle: 30 degrees+/-10 degrees
	Test cycle: _1_ cycles		Spray time: 48 h Placement time: 2 hours
Judgment criteria:	Appearance: intact and undamaged, with no significant changes. Coating: No oxidation, rust, discoloration, or corrosion spots. Screen printing: No shedding or bubbles.		
test result	Appearance after test: The appearance is intact and undamaged, with no significant changes.		
	Coating: No peeling or rusting		
	Surface spraying and screen printing: no peeling or bubbles.		
Explanation: 1. The salt spray test operation standard shall be executed in accordance with the national standard GB/T2423.17-2008 of the People's Republic of China 2. The criteria for determining test specimen results shall be in accordance with the national standard GB/T6461-02 of the People's Republic of China			
Testers: Zhang LuoAuditing : Liang Houbo			

# Packaging method

PE bag packaging, product emission neat, uniform quantity



Picture: Outer box "I" seal, QC PASS seal on the left side of the outer box, sealed without exposure.



## PART LIST

The packing drawing is schematic diagram, which does not mean that the picture is the actual product and the actual shipment is the standard.

NO	DESCRIPTION	Q'TY	MATERIAL	REMARKS	REV.
1	ANTENNA	1/1000		N/A	A
2	PAD OUT	1/4	SW A골 5T	N/A	A
4	CARTOON BOX	-	SW A골 5T	N/A	A
5	PACKING TAPE	-	PP	N/A	A