



ANT Communication Technology (Shenzhen) Co., Ltd.

Antenna Specification

Client: ORBBEC INC.

Project Name: OB2502

Version: RA

Material specifications: Antenna B

Specifications	Clinet Part No.	ANT Part No.
OB2502 Antenna B	230000100	ANT192501B58-02

ANT Countersign				
R&D	ME: Yuming Cheng	Review: He Chen	Data: 2025.05.09	Approve: Shihai Yan
	RF: Hu Lin			
Client Countersign				
EE	PM	ME	QE	

ANT Communication Technology(Shenzhen)Co., Ltd.

Adress: 15 Ke Yuan Road, Zhongqu, Nanshan District, Yu Hai Street, Shenzhen City,
Guangdong Province, China

1、Product Specifications Technical Parameters:

Electronic parameters	
Frenquency	5150–5850MHZ
Peak Gain	1.5dBi
Efficiency	>30%
Polarization	horizontal
Radiation	Omnidirectional
Antenna Size	Monopole
Mechanical parameters	
Antenna Dimension	36.44*16.5*11.92MM
Antenna Structure	Support+FPC+CABLE
Connector	I –PLUG
Salt Spray Test	48H
Environmental Parameters	
Working Temperature	–45℃--+85℃

2、Testing Equipment

1. Network Analyzer

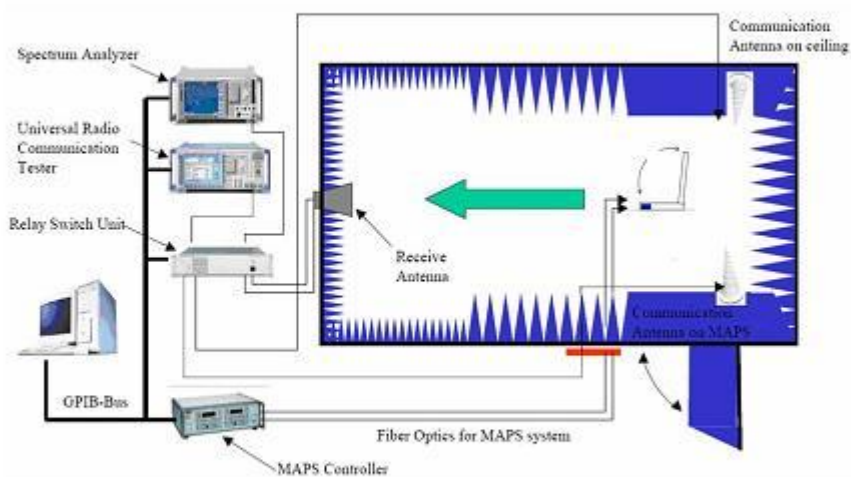
Agilent E5071C

2. Comprehensive Tester

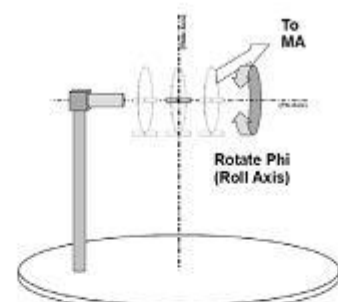
CMW500 Agilent 8960

3. 3D Chamber Testing System

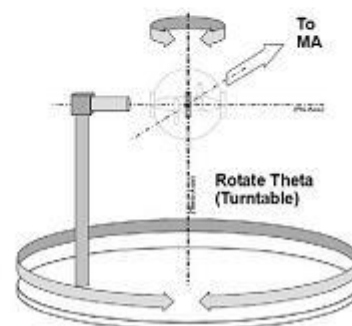
SATIMO-16 XH-24



(Testing by 3D anechoic chamber)



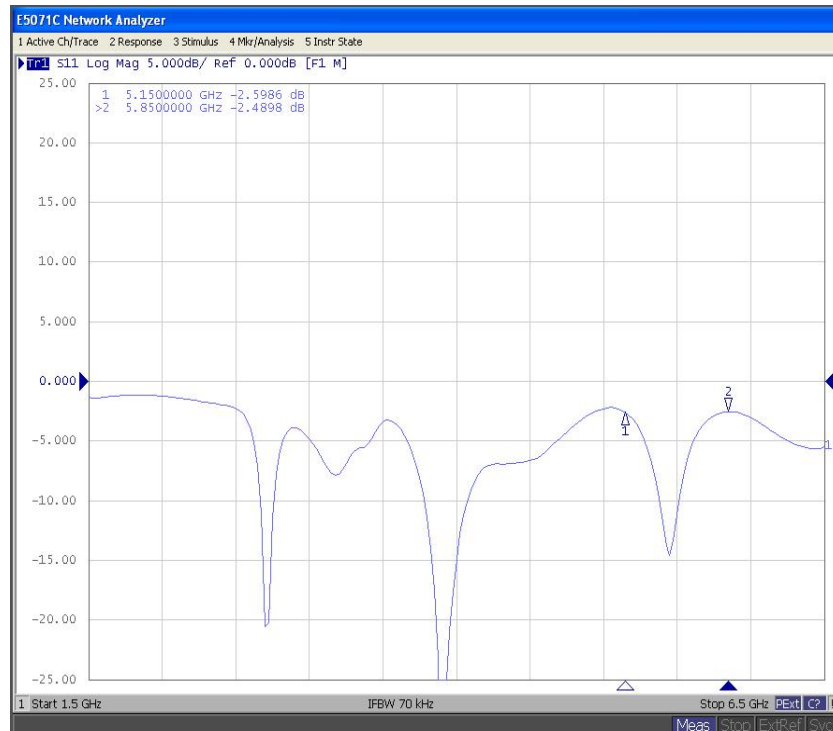
Phi axis test



Theta axis test

3、Antenna Test Parameters

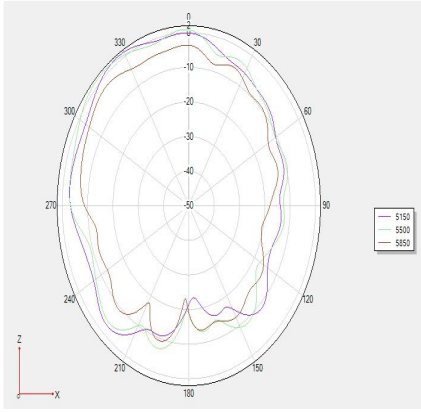
S11



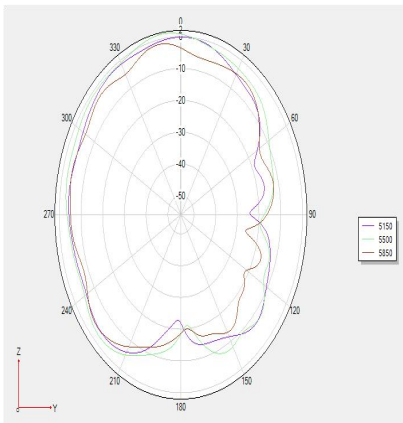
Frequency/Mhz	Efficiency/%	MaxGain/dBi
5150	31.55	1.23
5200	34.59	1.07
5250	33.11	0.19
5300	35.81	0.35
5350	31.05	-0.36
5400	30.62	1.03
5450	29.72	1.33
5500	35.08	0.27
5550	30.83	1.06
5600	33.11	1.5
5650	31.7	0.85
5700	32.21	0.89
5750	33.11	1.34
5800	34.12	1.13
5850	32.58	1.3

2D-Etotal (830/2200Mhz)

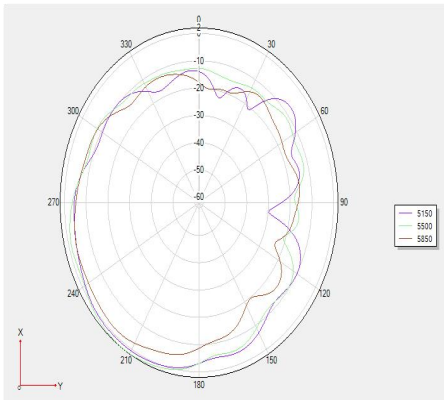
Phi 0 2D



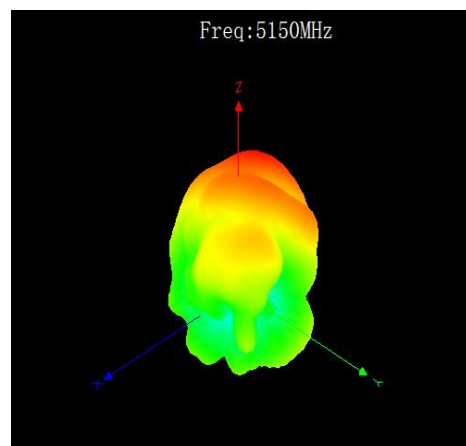
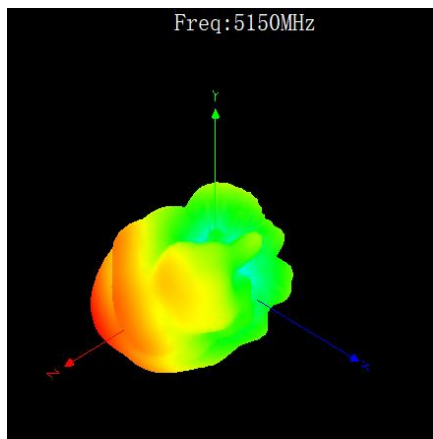
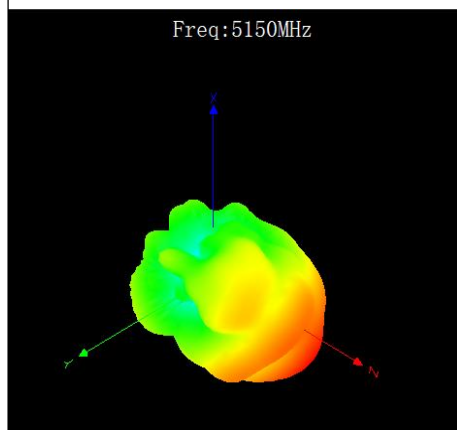
Phi 90 2D



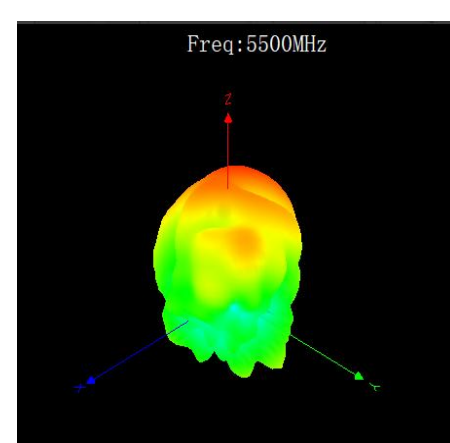
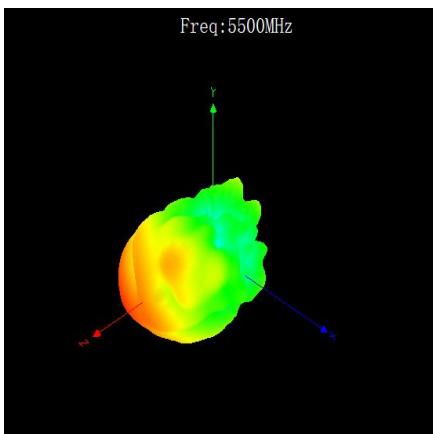
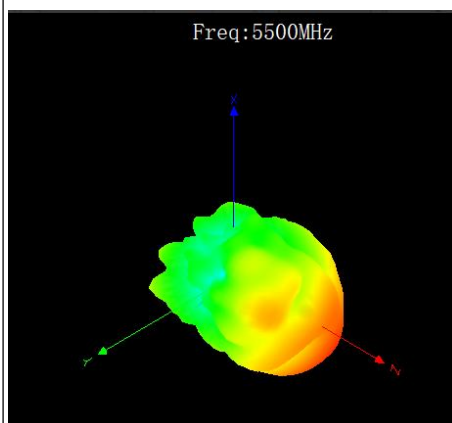
Theta 90 2D



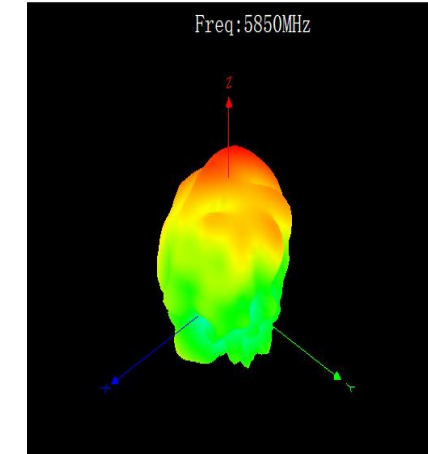
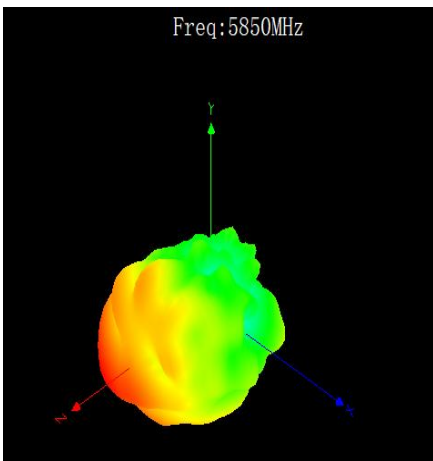
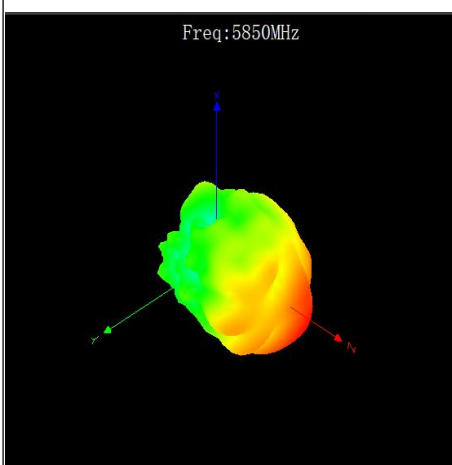
3D-Etotal (5150Mhz)



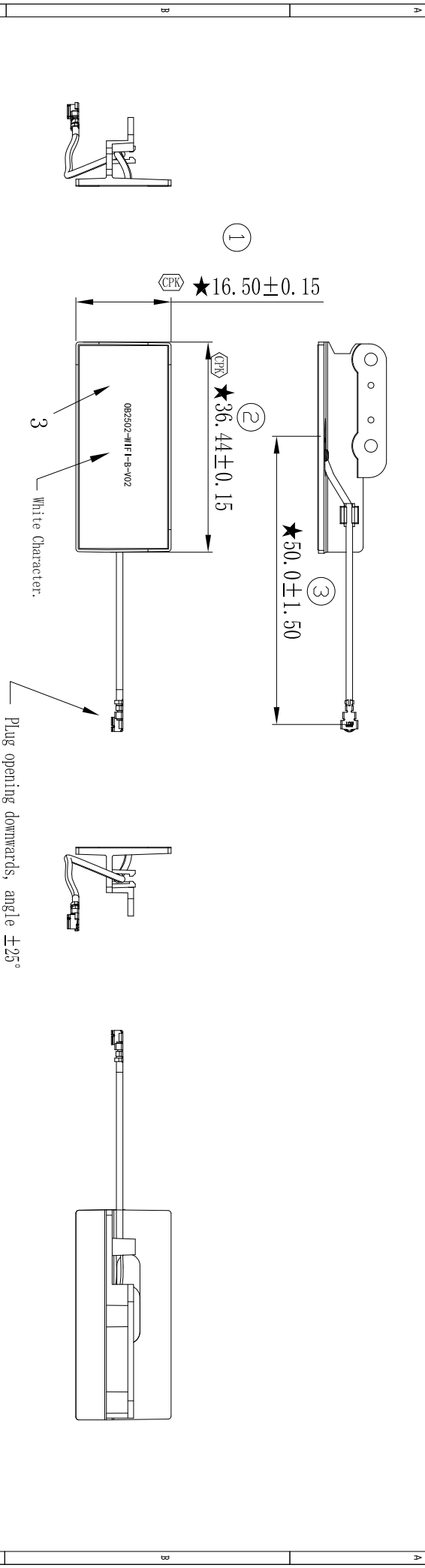
3D-Etotal (5550Mhz)



3D-Etotal (5850Mhz)



Version	Mark	Modify the content	Modifier	Data
T02		Expand the wire hole of the support	CJM	25.04.26



3	WIFI-B-FPC	ANT192501IB04-02	PI+ED, 1/0.5 oz, Black, 3M467	1
2	WIFI-B Cable	ANT962406IB28-02	L=50MM, PLUG:ECT 818000089, φ1.13, Black	1
1	WIFI-B Support	ANT192501IB02-02	PC+ABS	1
No.	Name	Part No.	Description	Quantity

Technical Requirements:

- ★ is the key size, (CPK) is the CPK size, () is the actual size
- △ is design change
- Unmarked Dimensions Reference 3D Drawing :
- PVC pasted flat, no lifting, no misalignment;
- The pasting of the accessories does not affect the use and appearance, the adhesion is good, and there is no phenomenon of lifting;
- The weld is smooth without burrs, cold solder, excess solder, short circuits, etc;
- The size of the single piece shall be inspected according to the single piece incoming inspection;

Project	ANT192501	Design	Yuning Cheng	Data	2025.04.26
Name	ANTENNA-B	R F	He Chen		
Part No.	ANT192501IB58-02	Audit	Shihai Yang		

Version	T02	Fig	A4		
Proportion	FIT				
Unit	MM				

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