



ANT Communication Technology (Shenzhen) Co., Ltd.

Antenna Specification

Client: ORBBEC INC.

Project Name: OB2502

Version: RA

Material specifications: Antenna A

Specifications	Clinet Part No.	ANT Part No.
OB2502 Antenna A	230000101	ANT192501IB58-01

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	1.3dBi
Efficiency	>40%
Polarization	horizontal
Radiation	Omnidirectional
Antenna Size	Monopole
Mechanical parameters	
Antenna Dimension	31*15*22.97MM
Antenna Structure	Support+FPC+CABLE
Connector	I –PLUG
Salt Spray Test	48H
Environmental Parameters	
Working Temperature	–45℃--+85℃

2、Testing Equipment

1. Network Analyzer

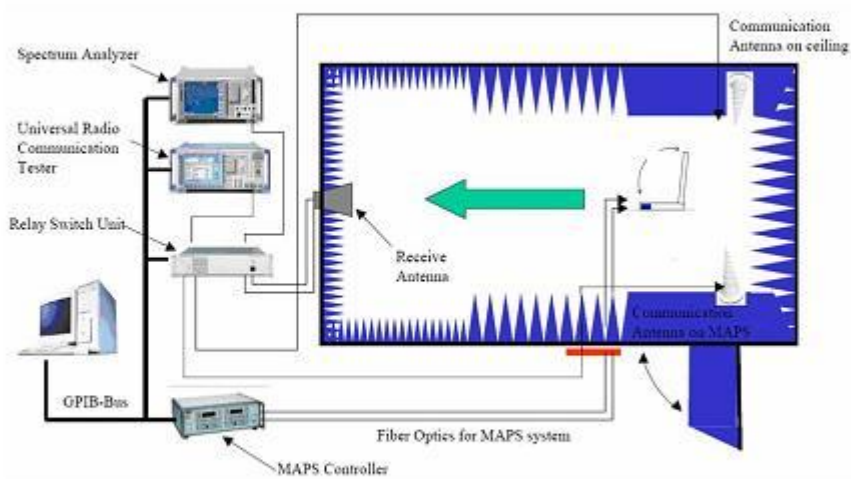
Agilent E5071C

2. Comprehensive Tester

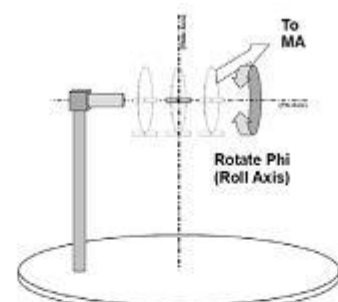
CMW500 Agilent 8960

3. 3D Chamber Testing System

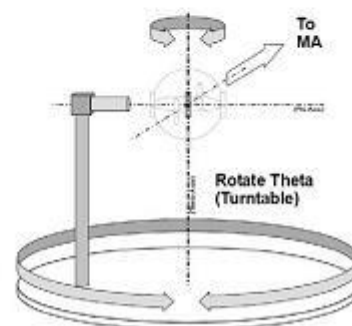
SATIMO-16 XH-24



(Testing by 3D anechoic chamber)



Phi axis test



Theta axis test

3、Antenna Test Parameters

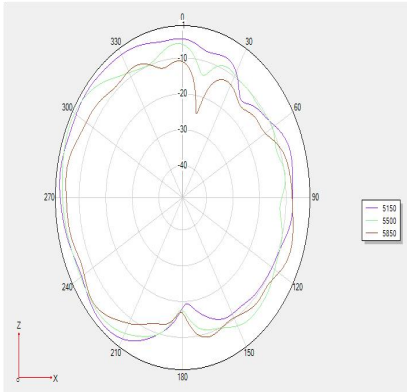
S11



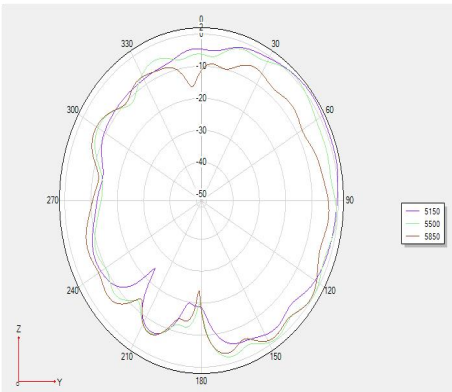
Frequency/Mhz	Efficiency/%	MaxGain/dBi
5150	41.02	1.61
5200	42.85	0.94
5250	41.69	1.28
5300	40.64	1.3
5350	44.06	1.23
5400	41.59	1.19
5450	43.45	1.1
5500	42.27	1.06
5550	40.27	0.4
5600	40.46	0.47
5650	41.78	0.84
5700	41.59	1.08
5750	41.78	0.63
5800	42.76	0.02
5850	41.88	-0.28

2D-Etotal (830/2200Mhz)

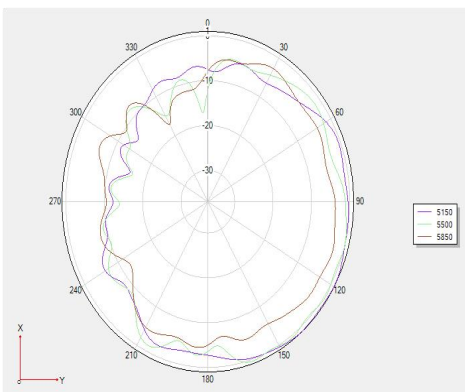
Phi 0 2D



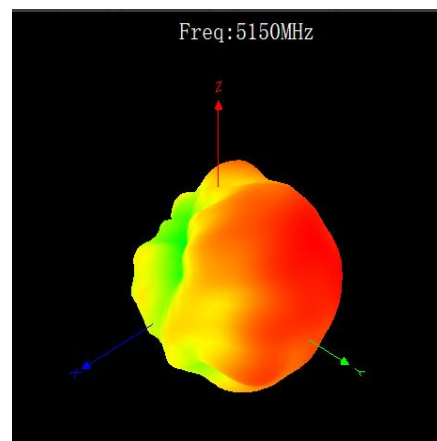
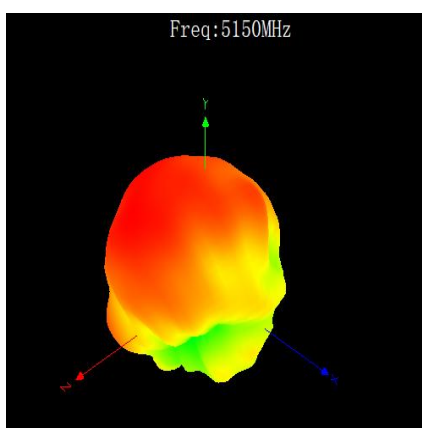
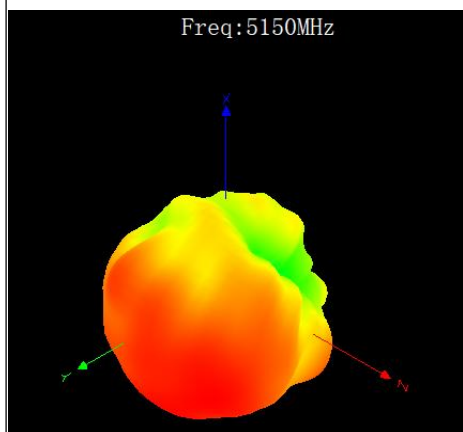
Phi 90 2D



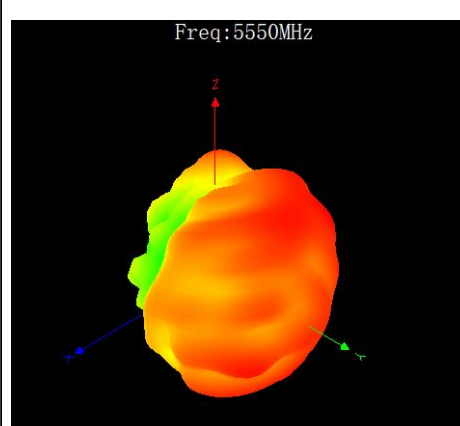
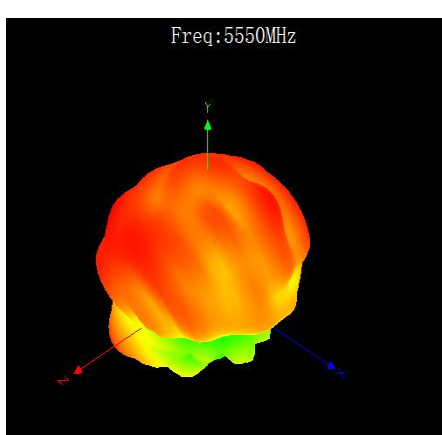
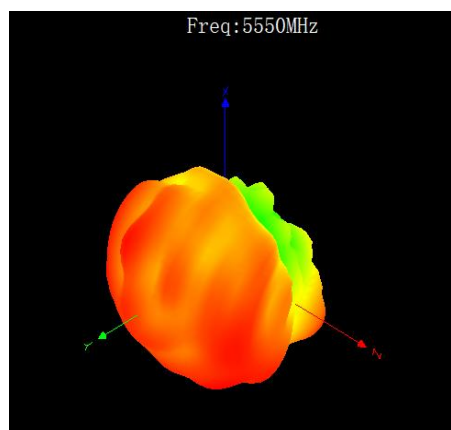
Theta 90 2D



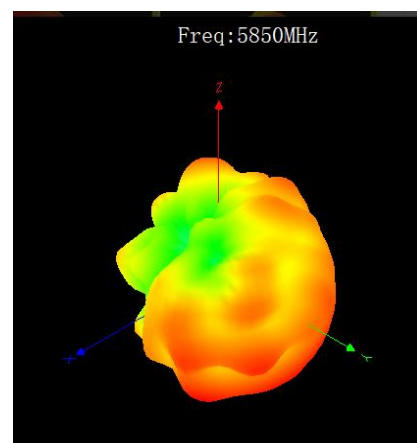
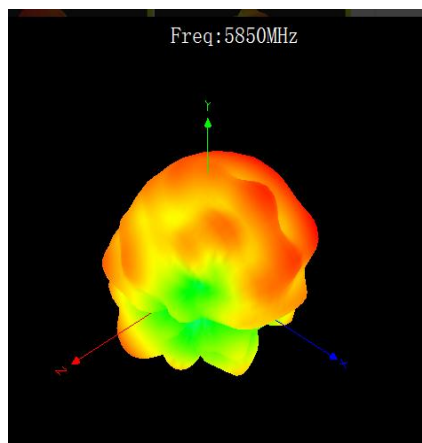
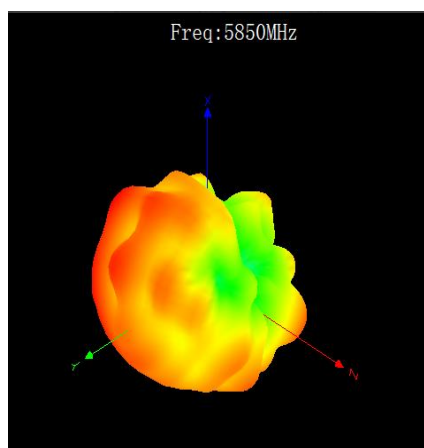
3D-Etotal (5150Mhz)



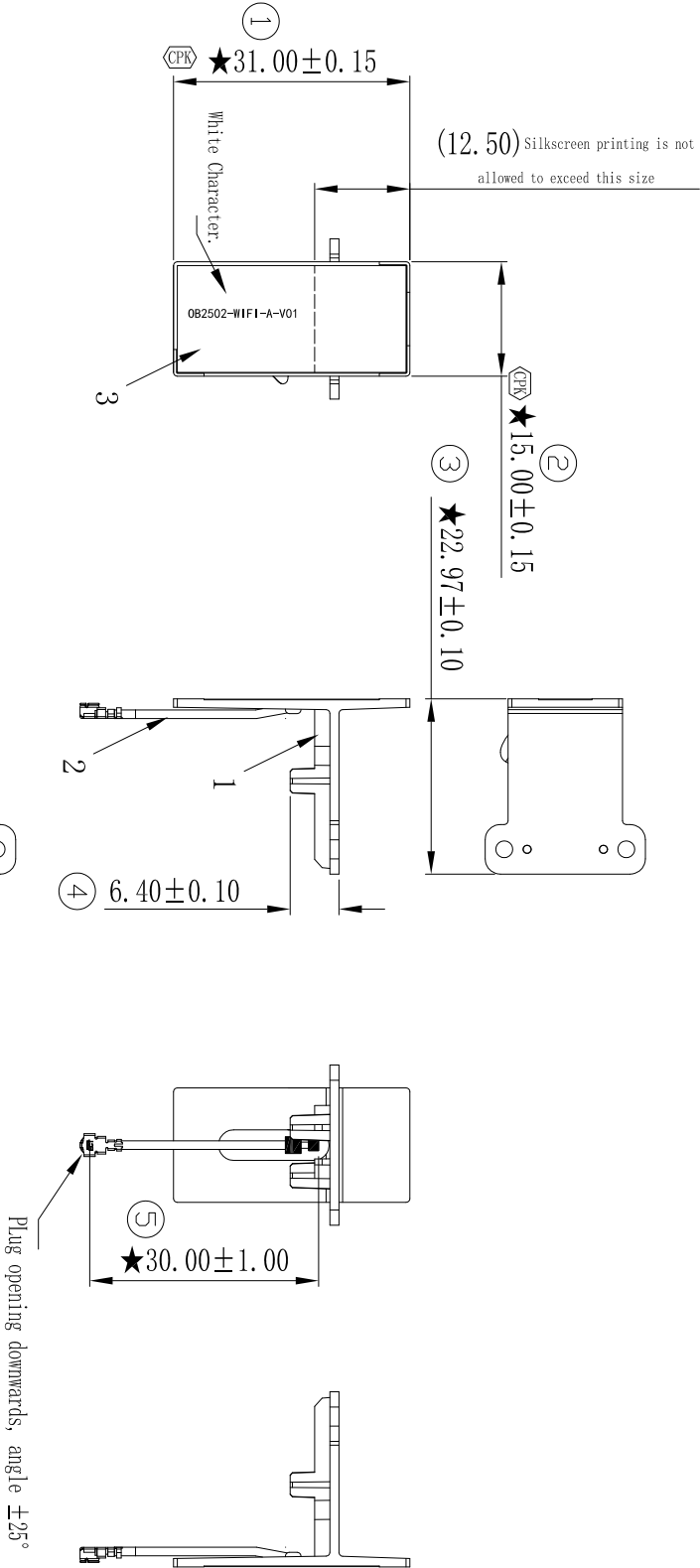
3D-Etotal (5550Mhz)



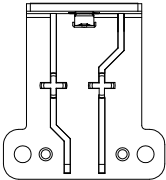
3D-Etotal (5850Mhz)



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



3	WIFI-A FPC	ANT192501IB04-01	PI+ED, 1/0.5 oz, Black, 3M467	1
2	WIFI-A Cable	ANT962406IB28-01	L=30MM, PLUG:ECT 818000089, ϕ 1.13, Black	1
1	WIFI-A Support	ANT192501IB02-01	PC+ABS	1
No.	Name	Part No.	Description	Quantity



Technical Requirements:

1. $\star$ is the key size, ϕ is the CPK size, () is the actual size
2. Δ is design change
3. FPC pasted flat, no lifting, no misalignment
4. The pasting of the accessories does not affect the use and appearance, the adhesion is good, and there is no phenomenon of lifting
5. The weld is smooth without burrs, cold solder, excess solder, short circuits, etc.
6. 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-A	R F	He Chen		
Part No.	ANT192501IB58-01	Audit	Shihai Yang		
Version	T02	Fig	A4		
Froportion	FIT				
Unit	MM				

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