



Shenzhen Jiangyuan Technology (Group) Co., Ltd.

Shenzhen Joyar Technology(Group) Co., Ltd

WIFI Antenna Test Report

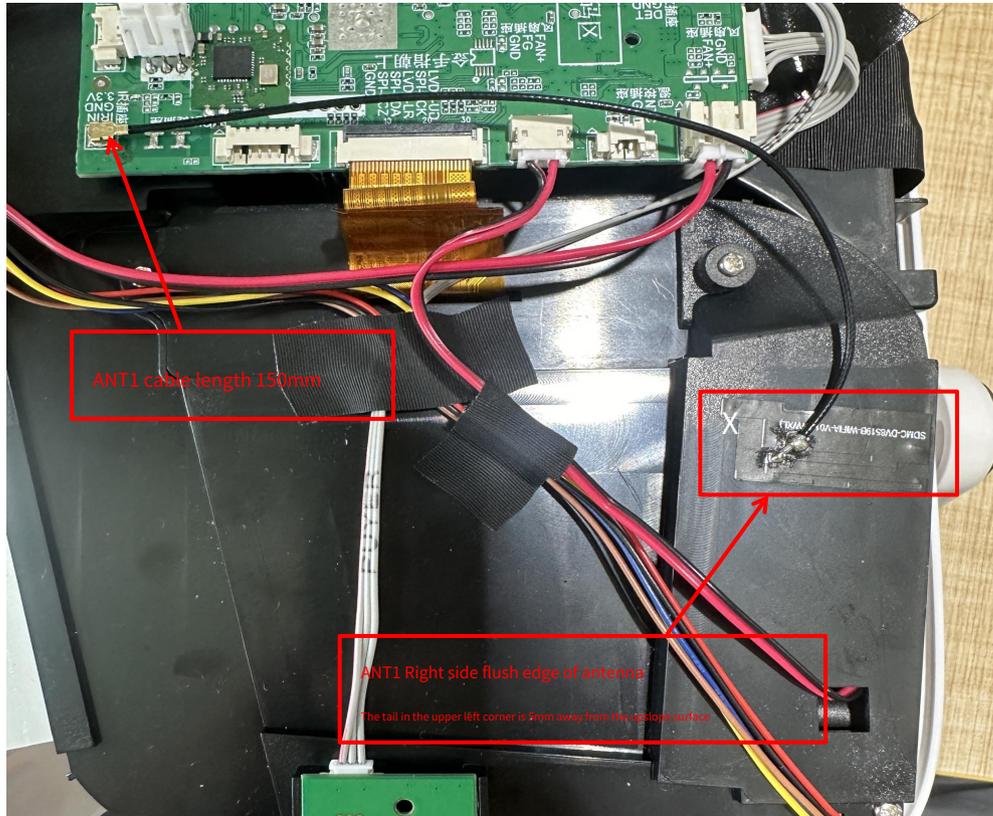
Project name: JY3000-6H118 (PTZ S3)

mold Group: 8731 Single Antenna

kind Type: WIFI 2.4G & 5G

Approved by Joyar		
Author/Date	Rechecked by/Date	Approved by/Date
刘杨	陈鹏 控文件章	陈鹏

1. Antenna length and position



2. TRP&TIS

TRP: Total Radiated Power TIS:

Total Isotropic Sensitivity

Test mode	802.11b 11Mbps BW 20M			802.11a 54Mbps BW 20M		
BAND	2.4G			5G		
CHANNEL	1	6	11	36	100	165
TRP(dBm)	13.05	13	13.68	14.48	14.31	13.32
CHANNEL	1	6	11	36	100	165
TIS(dBm)	-81.39	-80.36	-80.12	-72.31	-72.62	-73.98

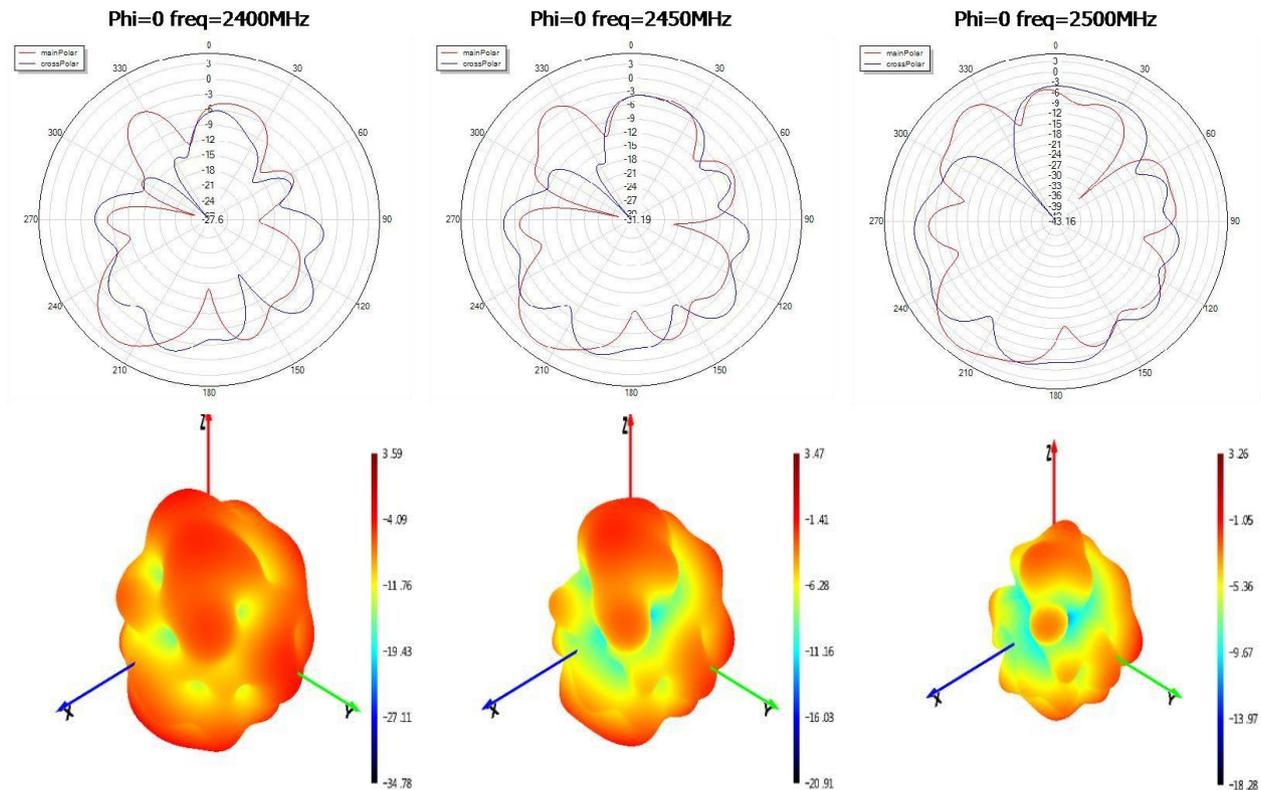
3. No chance of efficiency

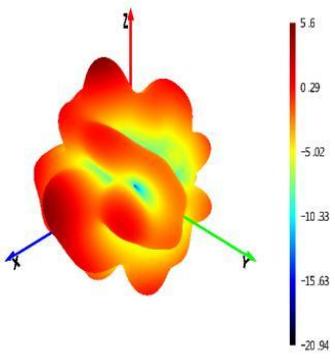
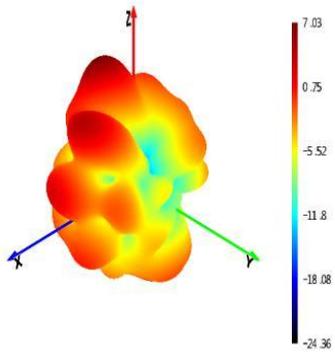
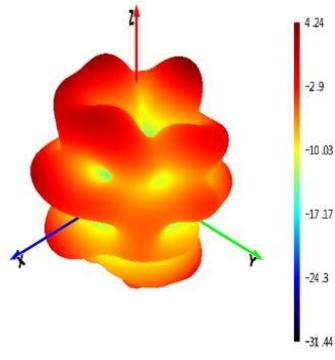
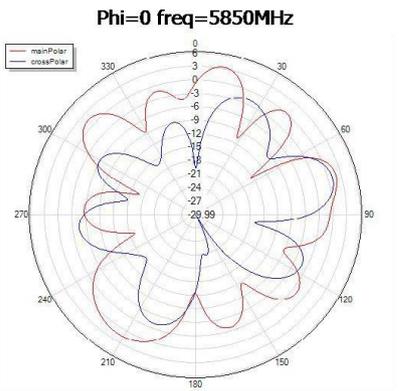
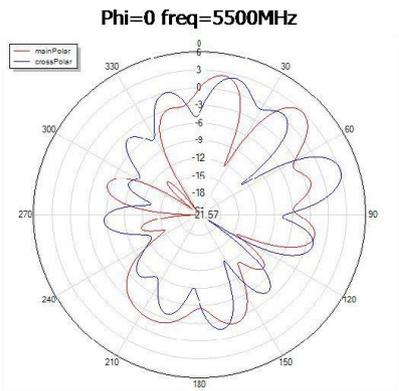
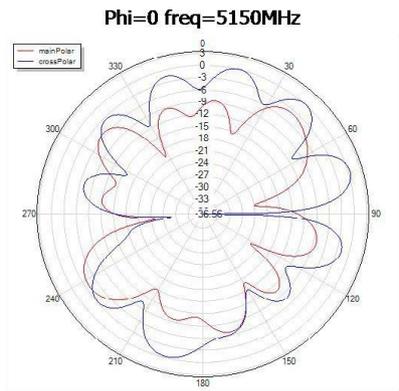
Gain & Efficiency						
Gain and efficiency						
frequency Frequency (MHz)	gain Gain(dBi)	mingain Minimum gain (dBi)	CO Gain Main polarization maximum gain (dBi)	CP Gain Cross polarization maximum Gain(dBi)	efficiency Efficiency(dB)	efficiency efficiency(%)
2400	3.59	- 34.78	3.59	0.47	- 4.15	38.43
2410	3.43	- 37.91	2.33	0.61	- 4.03	39.54
2420	3.83	- 44.47	2.81	0.73	- 3.52	44.5
2430	3.08	- 31.46	2.15	0.77	- 3.63	43.32
2440	3.42	- 26.07	2.51	1.03	- 3.4	45.74
2450	3.47	- 20.91	3.47	1.65	- 3.06	49.4
2460	3.02	- 18.54	2.24	1.34	- 3.52	44.47
2470	3.1	- 18.06	2.28	1.74	- 3.19	47.95
2480	3.56	- 17.53	2.77	2.11	- 2.9	51.29
2490	3.49	- 19.01	2.67	1.72	- 3.09	49.14
2500	3.26	- 18.28	3.26	1.59	- 3.24	47.39

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frequency Frequency (MHz)	gain Gain(dBi)	mingain Minimum gain (dBi)	CO Gain Main polarization maximum gain (dBi)	CP Gain Cross polarization maximum Gain(dBi)	efficiency Efficiency(dB)	efficiency efficiency(%)
5150	4.24	- 31.44	2.52	2.19	- 2.66	54.21
5200	3.48	- 29.12	2.48	1.68	- 2.75	53.12
5250	3.97	- 35.35	3.26	2.3	- 2.58	55.21
5300	4.3	- 31.47	3.35	2.15	- 3.08	49.2
5350	4.35	- 28.81	3.65	2.64	- 3.4	45.66

5400	5.31	- 29.62	3.67	2.98	- 3.51	44.54
5450	6.31	- 34.31	4.12	2.96	- 3.24	47.47
5500	7.03	- 24.36	4.41	4.15	- 3.21	47.78
5550	6.38	- 28.33	4.43	2.74	- 3.53	44.34
5600	5.86	- 25.58	4.49	1.83	- 3.79	41.82
5650	6.29	- 25.67	5.31	3.05	- 2.91	51.2
5700	5.99	- 21.12	5.31	3.33	- 2.77	52.83
5750	6.47	- 24.49	5.89	3.54	- 2.78	52.77
5800	5.66	- 24.15	5.06	3.49	- 3.17	48.23
5850	5.6	- 20.94	5.01	2.63	- 3.39	45.78

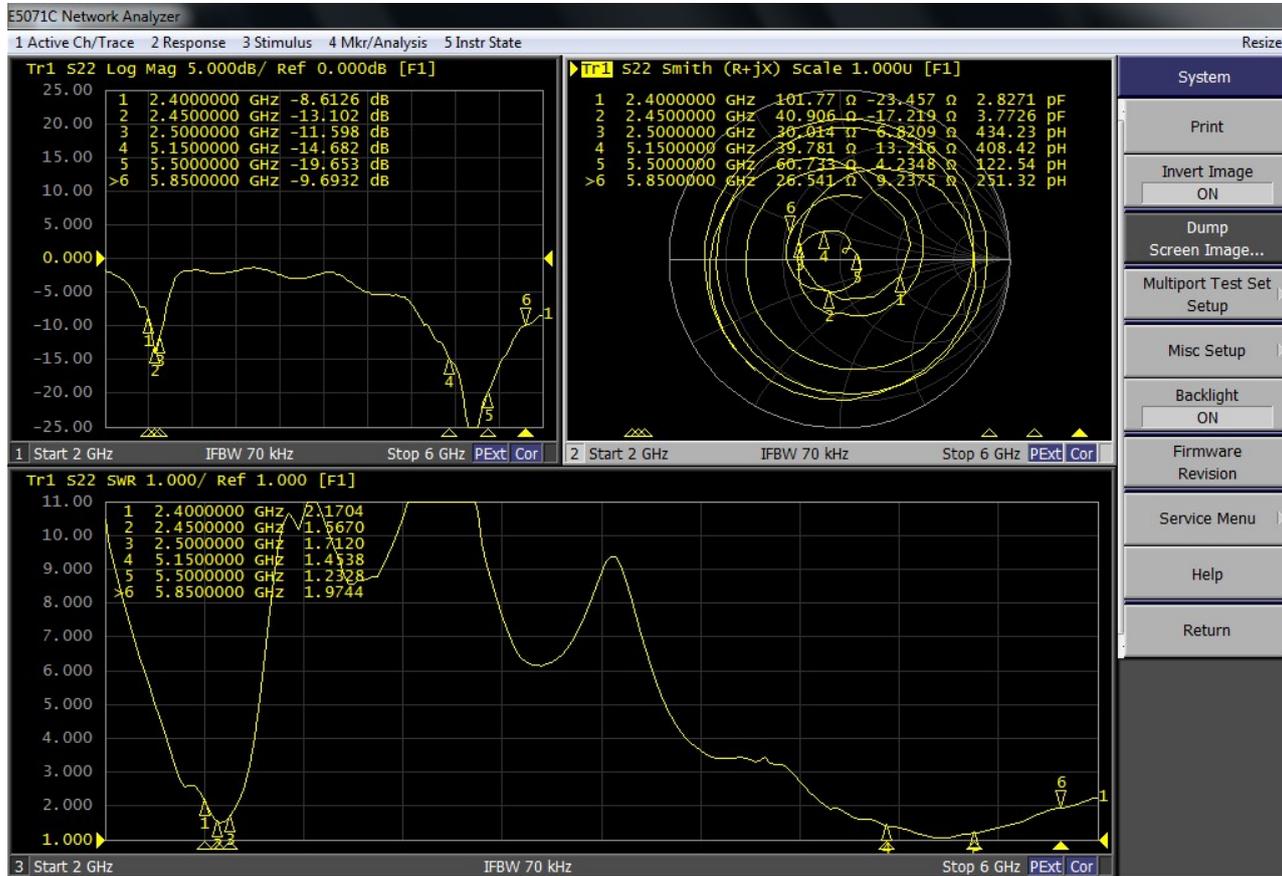
4. 2D3D Direction Map





4. Antenna passive parameters:

1.VSWR Diagram:

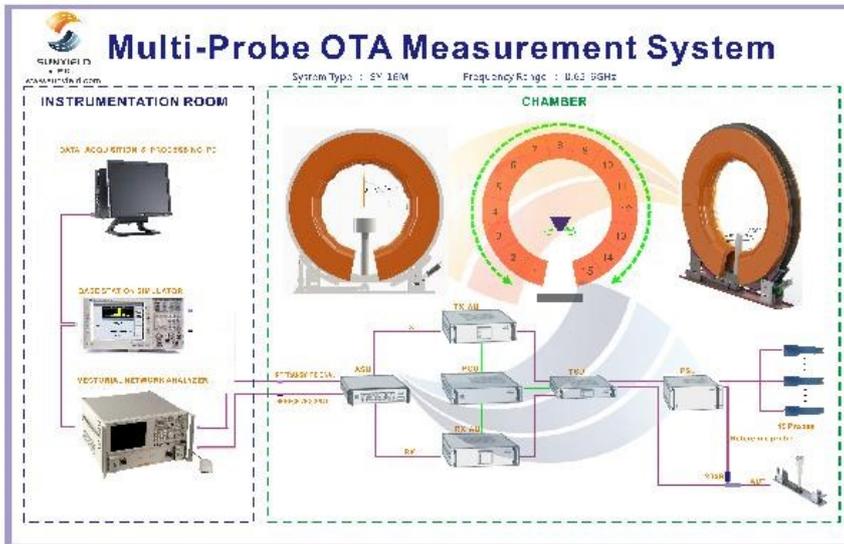
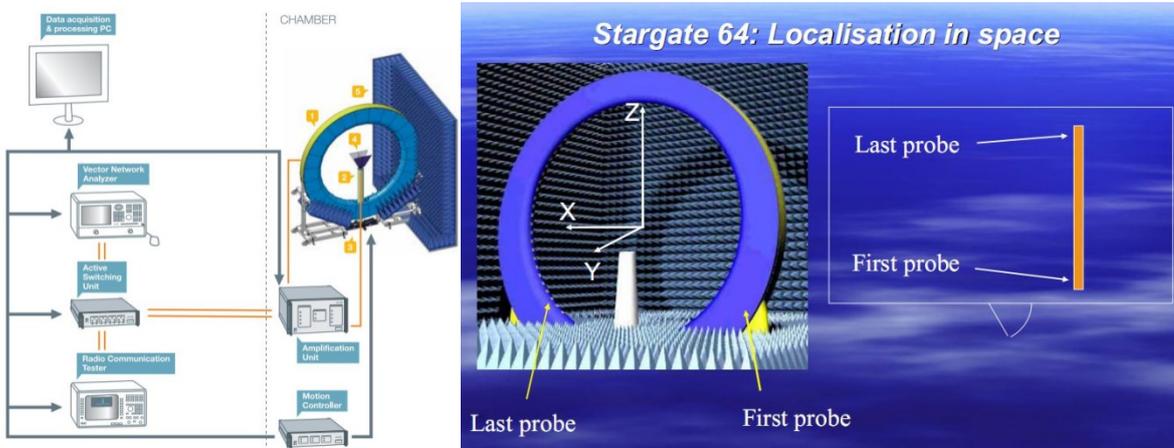


5. Product Features

1. Choose high-quality FPC and RF cables with low self-attenuation;
2. Stable performance and long service life;
3. The standing wave is good within the frequency band.

Shenzhen Everything Connected Communications Co., Ltd. / Everything Connected Communications Xiangyang Co., Ltd. Address:
Room 1101, Building 4, Fangdacheng, No. 2, Longzhu 4th Road, Taoyuan Street, Nanshan District, Shenzhen
Address: Northwest Hubei Renewable Resources Trading Center, Gucheng County, Xiangyang City, Hubei Province

3. Antenna Test Environment



Test system:	SY-16M Antenna Measurement System
Test environment:	temperature twenty two °C ± 3 °C, humidity 50% ± 15%
Test equipment:	Agilent 5071C Agilent 8960 Comprehensive tester Agilent CMW500 4G Comprehensive tester

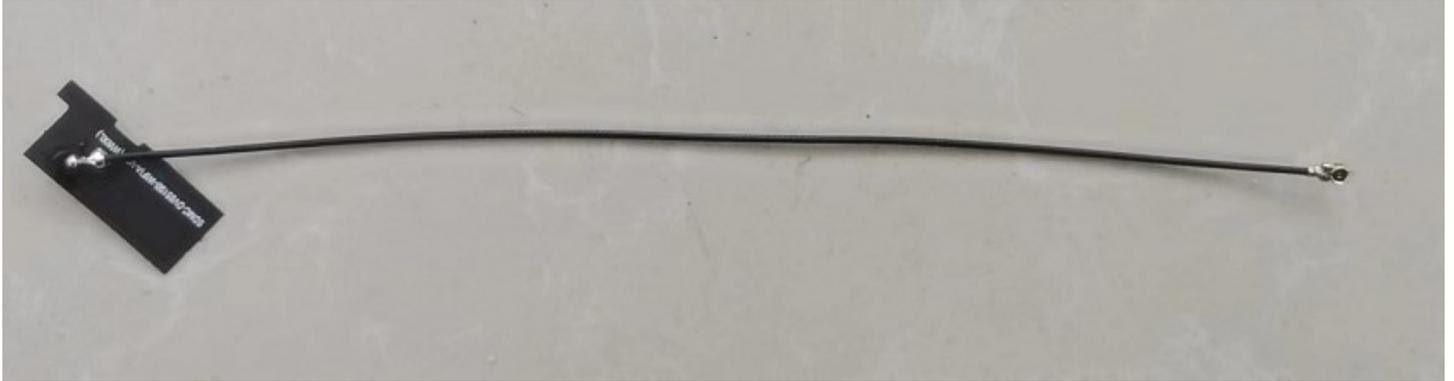
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Antenna Specifications

1. Product finished product picture



2. Product test parameters

Product NameName	Internal antenna (WWXL6009002)	modelModelType	
Electrical parametersELECTRICAL SPECTFICATIONS		Mechanical parametersMECHANICAL SPECTFICATIONS	
Frequency rangeFrenquencyRange	2400-2500/5150-5850MHz	sizeDimensions	27.5*12*0.2
Input ImpedanceImpedance	50Ω	Connector ModelConnector	IPEX
VSWRVSWR	≤3.5	Line length linelength	1.13black150±3mm
GainGain	0.79/5.68dBi	Operating temperatureWorkingTemperature	- 45°C - +85°C
PolarizationPolarization	Linear polarization	Storage temperatureLimit Temperature	- 45°C - +85°C
Radiation directionRadiation	Omnidirectional		

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6. Product structure diagram

