



规格承认书

SPECIFICATION FOR APPROVAL

日期 Date	2025/09/25
编号 File No	25092502
版本 Revision	1.0

客户
CUSTOMER: 道通 Autel Robotics Co., Ltd.

客户料号
CUSTOMER NO: 501009162

品名
PART NAME: RF Antenna

供方料号
SUPPLIER NO: YJI01.005.116.302A

送样日期Date:

送样数量Q'TY:

客户确认CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

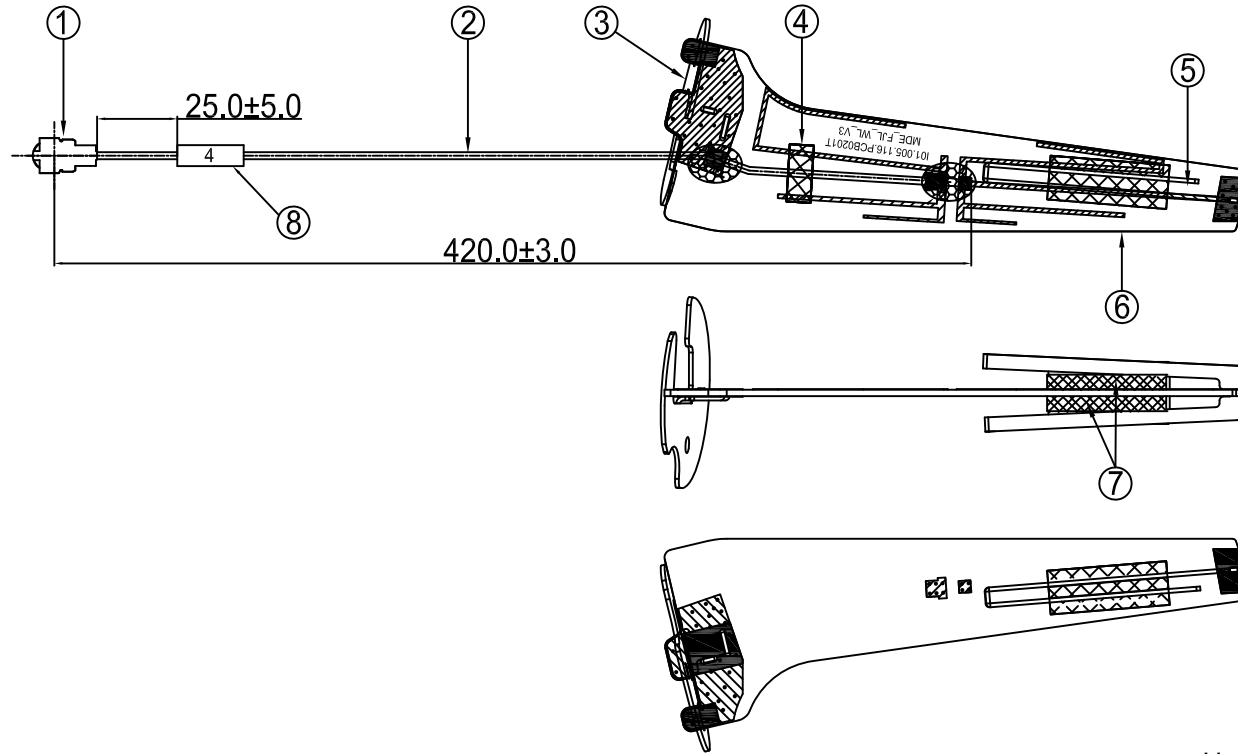
供方确认 SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A



RoHS
Compatible

CUSTOMER
PART NO



Unit: mm

8	Shrink Tube	L10.0*Ø2.0MM Black	EVA	I01.005.116.TUB0201T	1
7	Paste+EVA	15.0*5.5*3.5MM	EVA	I01.005.116.EVA0101T	2
6	PCB	70.2*23.7*0.8MM	PCB	I01.005.116.PCB0201T	1
5	Metal	32.3*9.8*0.5MM	SUS304	I01.005.116.MET0102T	1
4	Paste+EVA	7.5*2.5*2.0MM	Paste+EVA	EVA10391A.P01	1
3	Metal	24.0*24.0*0.5MM	SUS304	I01.005.116.MET0201T	1
2	Coaxial Cable	O.D 1.37 Red low loss	O.D 1.37	COA10015A.R01	1
1	Mini Connector	Au Plated 1代	Cu	TER10008A.P01	1
NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY



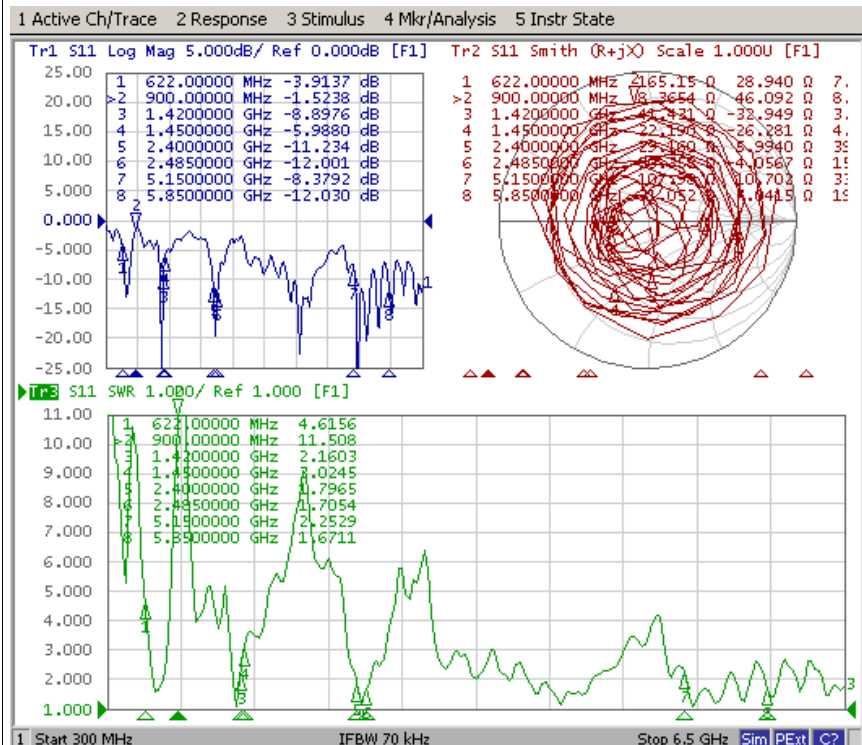
天线规格 Antenna Specification

Electrical Properties	
Frequency	550-690MHz 1420-1510MHz 2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	11.5 Max@550-690MHz 3.0 Max@1420-1510MHz 2.0 Max@2.4-2.5GHz 2.5 Max@5.15-5.85GHz
Gain	2.1 dBi@550-690MHz 0.6 dBi@1420-1510MHz 2.8 dBi@2.4-2.5GHz 2.4 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	1代IPEX
Cable Type	O.D.1.37mm Low loss
Cable Length	420mm
Cable Color	Red
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%



Antenna Performance Test

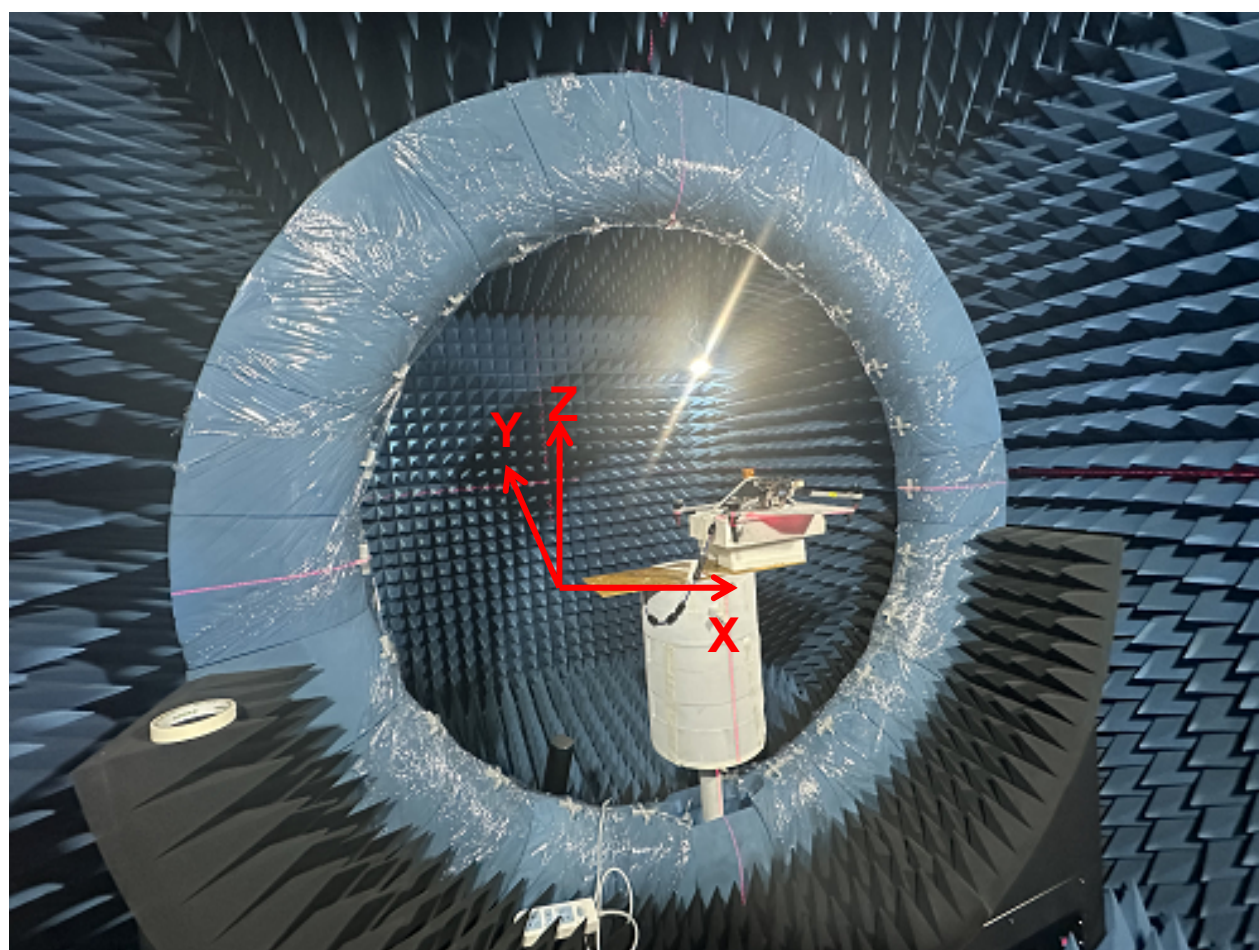
*Agilent
E5071C
S
Parameter
Test //
FJL
Antenna*





东莞市一佳电子通讯科技有限公司
DONGGUAN YIJIA ELECTRONICS COMMUNICATION TECHNOLOGY CO., LTD

Antenna Passive Test





Passive Test For FJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
550	4.6	-13.4	-6.4
560	4.6	-13.3	-6.7
570	7.2	-11.4	-5.5
580	9.6	-10.2	-5.3
590	16.2	-7.9	-3.6
600	24.7	-6.1	-1.6
610	33.3	-4.8	-0.6
620	43.9	-3.6	0.2
630	45.9	-3.4	0.4
640	41.3	-3.8	0.4
650	40.1	-4.0	1.7
660	37.3	-4.3	2.1
670	40.7	-3.9	2.1
680	38.9	-4.1	1.2
690	38.8	-4.1	1.9



Passive Test For FJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1430	47.2	-3.3	0.6
1438	47.1	-3.3	0.6
1446	45.5	-3.4	0.5
1454	45.8	-3.4	0.6
1462	43.3	-3.6	0.4
1470	39.5	-4.0	0.0
1478	38.2	-4.2	-0.3
1486	37.5	-4.3	-0.4
1494	37.2	-4.3	-0.3
1502	40.0	-4.0	0.0
1510	39.3	-4.1	-0.2



Passive Test For FJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	56.4	-2.5	1.3
2410	59.8	-2.2	1.8
2420	62.7	-2.0	2.2
2430	62.7	-2.0	2.4
2440	61.1	-2.1	2.4
2450	62.4	-2.1	2.5
2460	62.7	-2.0	2.5
2470	64.9	-1.9	2.8
2480	60.5	-2.2	2.5
2490	55.7	-2.5	2.2
2500	52.1	-2.8	1.9

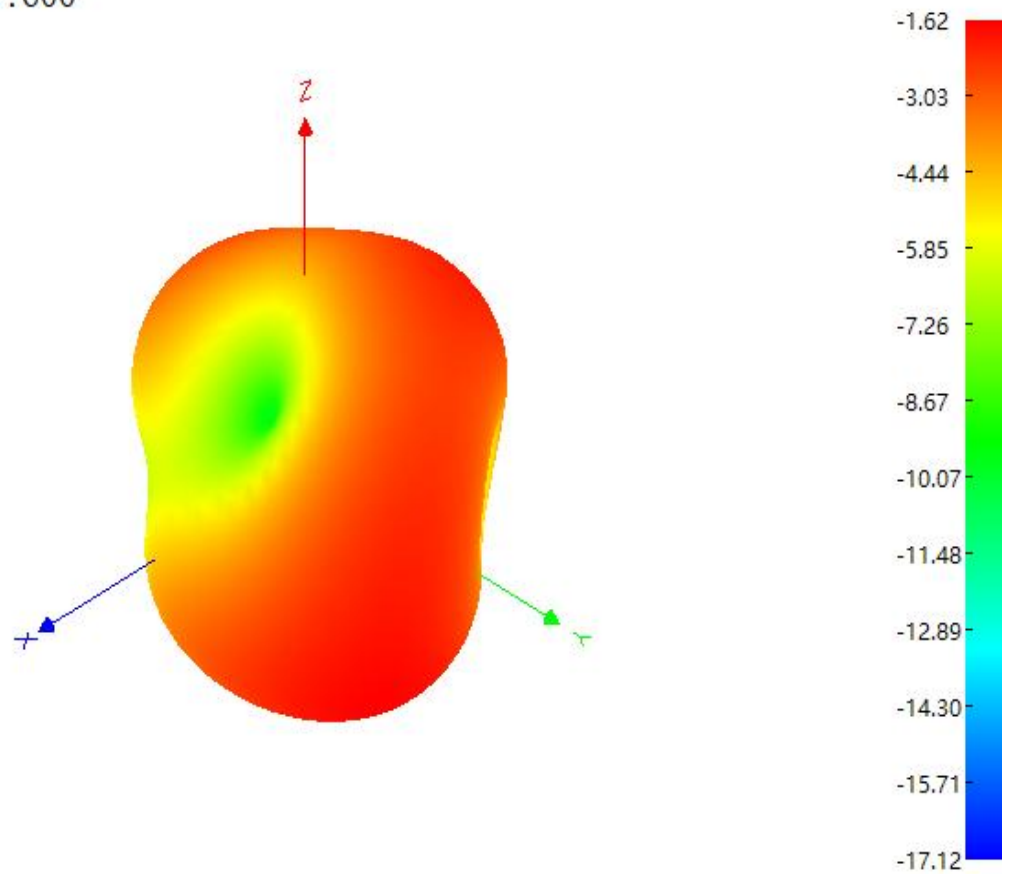


Passive Test For FJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	27.9	-5.6	-0.1
5200	38.2	-4.2	1.1
5250	44.5	-3.5	1.6
5300	41.0	-3.9	1.0
5350	42.3	-3.7	0.9
5400	42.2	-3.8	1.7
5450	42.6	-3.7	2.4
5500	39.1	-4.1	2.2
5550	36.6	-4.4	1.8
5600	35.9	-4.5	1.6
5650	40.6	-3.9	2.4
5700	39.2	-4.1	1.7
5750	34.7	-4.6	0.5
5800	35.9	-4.5	1.5
5850	39.8	-4.0	1.2



Radiation Pattern For FJL Antenna (600MHz)

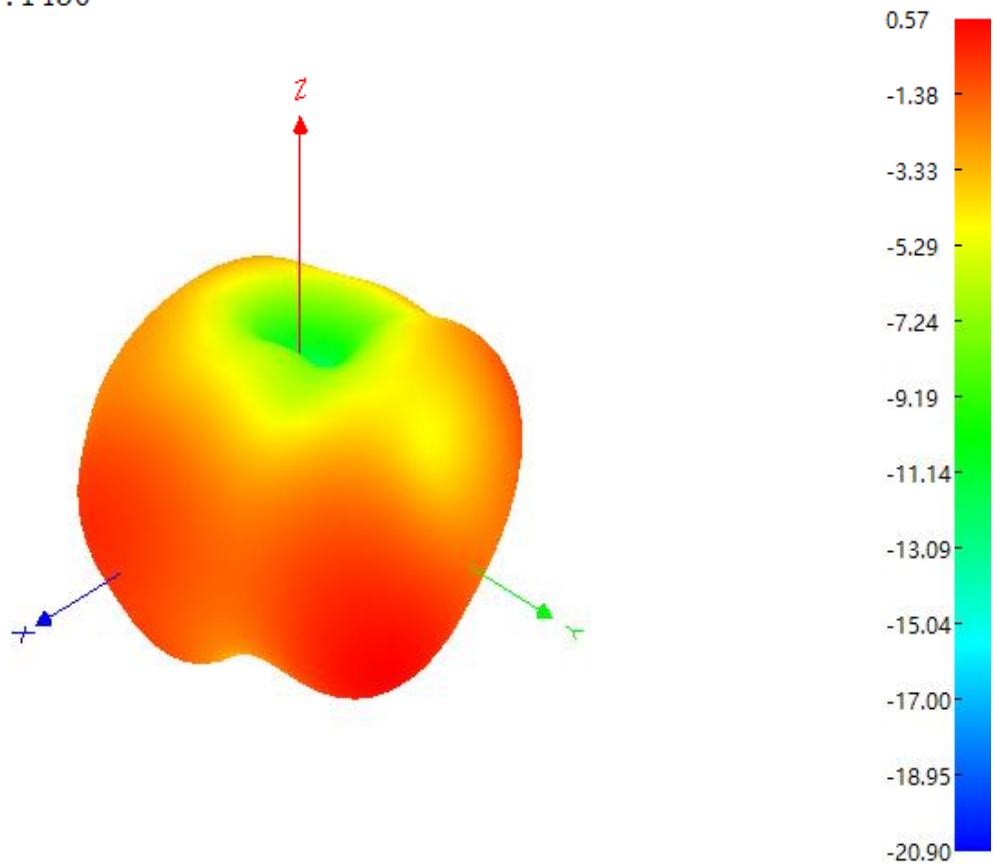
Frequency (MHz) : 600





Radiation Pattern For FJL Antenna (1430MHz)

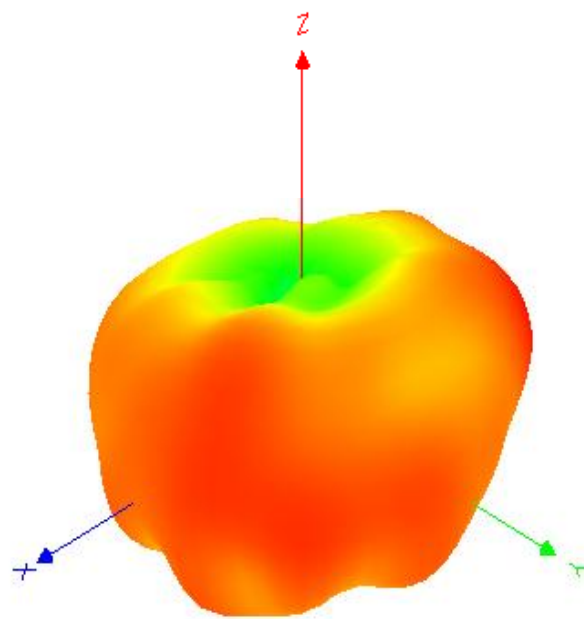
Frequency (MHz) : 1430





Radiation Pattern For FJL Antenna (2450MHz)

Frequency (MHz) : 2450





Radiation Pattern For FJL Antenna (5500MHz)

Frequency (MHz) : 5500

