



规格承认书

SPECIFICATION FOR APPROVAL

日期 Date	2025/09/25
编号 File No	25092504
版本 Revision	1.0

客 户
CUSTOMER:

道通 Autel Robotics Co., Ltd.

客户料号
CUSTOMER NO:

501009164

品 名
PART NAME:

RF Antenna

供方料号
SUPPLIER NO:

YJI01.005.116.304A

送样日期Date:

送样数量Q'TY:

客户确认CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

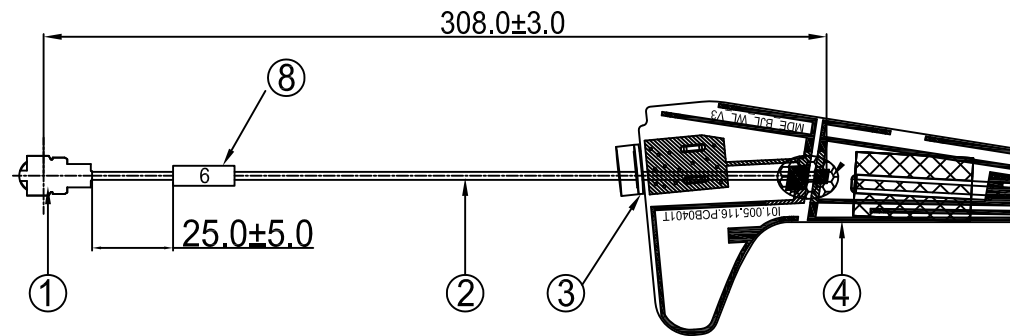
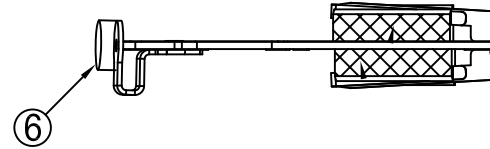
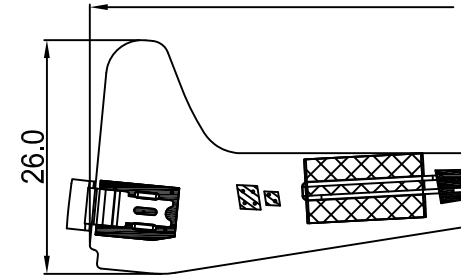
供方确认 SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A



RoHS
Compatible

CUSTOMER
PART NO



Unit: mm

8	Shrink Tube	L10.0*Ø2.0MM Black	EVA	I01.005.116.TUB0401T	1
7	Paste+EVA	13.0*7.1*4.0MM	EVA	I01.005.116.EVA0301T	1
6	EMI Gasket	Ø5.5*2.0MM	EVA	EVA10528A.P01	1
5	Metal	32.0*10.9*0.5MM	SUS304	I01.005.116.MET0302T	1
4	PCB	42.4*26.0*0.8MM	PCB	I01.005.116.PCB0401T	1
3	Metal	9.5*5.5*0.5MM	SUS304	I01.005.116.MET0301T	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

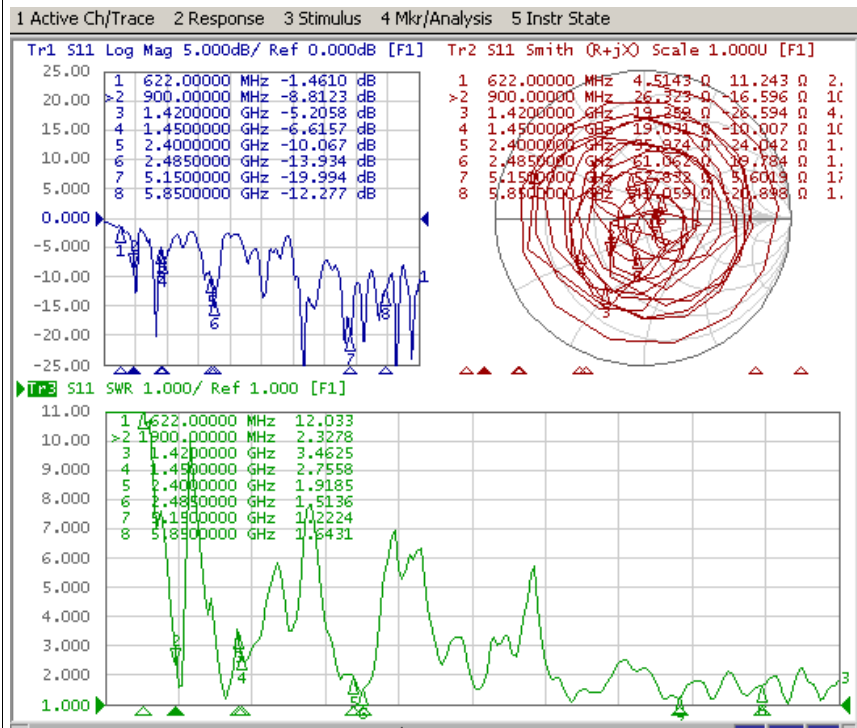
Electrical Properties	
Frequency	860-928MHz 1420-1510MHz 2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	12.0 Max@860-928MHz 3.5 Max@1420-1510MHz 2.0 Max@2.4-2.5GHz 2.5 Max@5.15-5.85GHz
Gain	0.3 dBi@860-928MHz 1.6 dBi@1420-1510MHz 1.2 dBi@2.4-2.5GHz 4.6 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	IPEX
Cable Type	O.D.1.37mm Low loss
Cable Length	308mm
Cable Color	Red
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%



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

Antenna Performance Test

*Agilent
E5071C
S
Parameter
Test //
BJL
Antenna*





Passive Test For BJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	16.0	-8.0	-2.7
830	15.0	-8.2	-3.1
840	17.5	-7.6	-3.0
850	19.6	-7.1	-2.3
860	21.7	-6.6	-1.9
870	25.4	-6.0	-1.6
880	26.4	-5.8	-1.5
890	27.7	-5.6	-0.9
900	29.7	-5.3	-0.6
910	31.6	-5.0	-0.2
920	35.8	-4.5	0.3
930	35.7	-4.5	0.1
940	35.8	-4.5	-0.4
950	33.6	-4.7	-0.9
960	26.6	-5.8	-1.7



Passive Test For BJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1430	20.4	-6.9	-3.1
1438	16.2	-7.9	-3.0
1446	25.4	-6.0	-1.3
1454	35.9	-4.5	0.1
1462	38.6	-4.1	0.6
1470	38.2	-4.2	0.8
1478	38.6	-4.1	0.8
1486	41.1	-3.9	0.6
1494	47.1	-3.3	1.4
1502	50.1	-3.0	1.5
1510	50.0	-3.0	1.6



Passive Test For BJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	49.8	-3.0	0.9
2410	50.1	-3.0	1.0
2420	49.2	-3.1	1.0
2430	48.2	-3.2	0.9
2440	46.3	-3.3	0.8
2450	43.3	-3.6	0.5
2460	41.0	-3.9	0.5
2470	41.9	-3.8	0.8
2480	43.7	-3.6	1.0
2490	46.6	-3.3	1.2
2500	46.5	-3.3	1.2

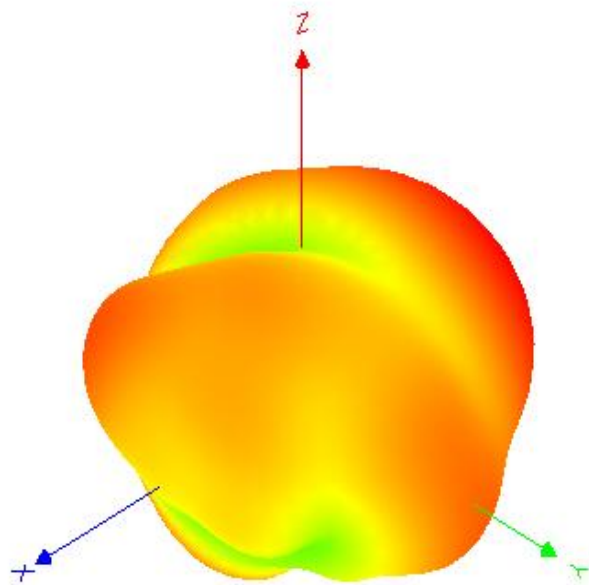


Passive Test For BJL Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	31.6	-5.0	2.1
5200	33.0	-4.8	2.1
5250	36.1	-4.4	1.5
5300	36.1	-4.4	1.8
5350	39.7	-4.0	2.6
5400	39.5	-4.0	2.1
5450	39.9	-4.0	2.8
5500	39.4	-4.1	3.2
5550	36.4	-4.4	3.4
5600	33.4	-4.8	3.1
5650	34.0	-4.7	3.2
5700	37.8	-4.2	4.1
5750	40.3	-4.0	4.6
5800	42.2	-3.8	4.6
5850	40.4	-3.9	4.2



Radiation Pattern For BJL Antenna (900MHz)

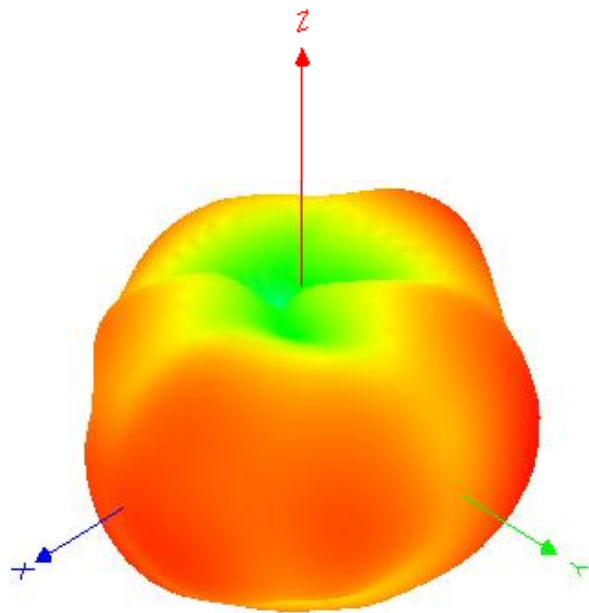
Frequency (MHz) : 900





Radiation Pattern For BJL Antenna (1430MHz)

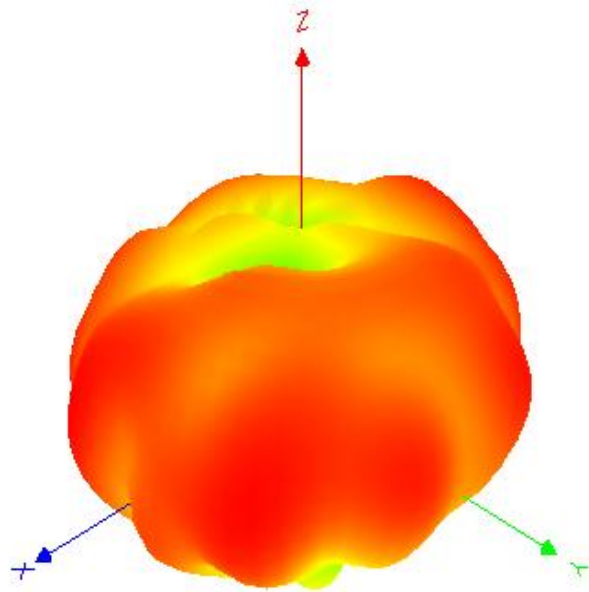
Frequency (MHz) : 1430





Radiation Pattern For BJL Antenna (2450MHz)

Frequency (MHz) : 2450





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Radiation Pattern For BJL Antenna (5500MHz)

Frequency (MHz) : 5500

