



东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd.

规格承认书

SPECIFICATION FOR APPROVAL

日期 Date	2022/10/24
编号 File No	22102404
版本 Revision	1.0

客户
CUSTOMER: Autel Robotics Co., Ltd.

客户料号
CUSTOMER NO: 501006476

品名
PART NAME: 机臂左 BL Antenna

供方料号
SUPPLIER NO: YJI01.005.070.304A

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

add: 东莞市长安镇沙头社区木鱼路59号元富工业区 Tel:0769-82586086 Fax:0769-82586086
Yuanfu Industrial Zone, 59 Muyu Road, Shatou Community, Changan Town, Dongguan City

RoHS

Compatible

CUSTOMER

PART NO

REV.

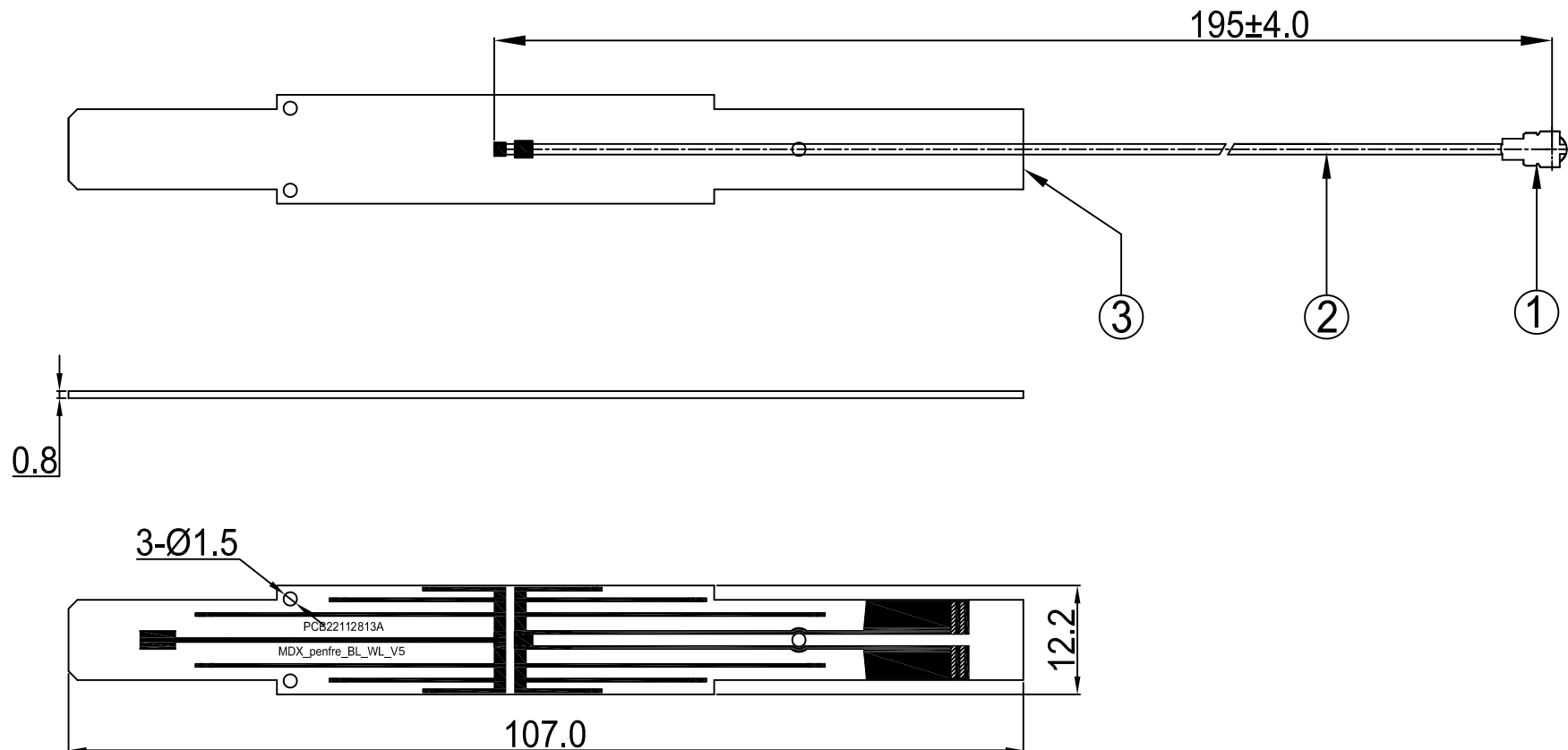
DESCRIPTION

DATE



首次发行

2022-10-24



东莞市一佳电子通讯科技有限公司

Tel :0769-85535057

Dongguan YiJia Electronics Communication Technology Co.,Ltd. Fax:0769-81664308

PART NAME: RF Antenna

PART NO.: YJI01.005.070.304A

DATE: 2022-10-24

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance

殷涛

黄志林

陈兴易

UNITS: mm

SCALE: 1/1

REVISION: A

X.X ±0.50

X.XX±0.15

X° ±3°

3	PCB	107.0*12.2*0.8MM	PCB	PCB1050XA.P01	1
2	Coaxial Cable	O.D 1.37 Gray Low Loss	O.D 1.37	COA1001XA.P01	1
1	Mini Connector	Au Plated 1代 原厂	Cu	TER1000XA.P02	1
NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY



天线规格

Antenna Specification

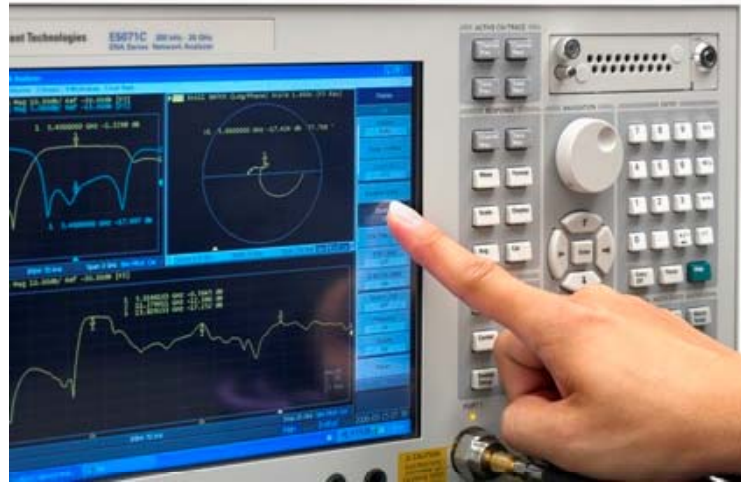
Electrical Properties	
Frequency	830-930MHz 1440MHz 2.4-2.5GHz 5.150-5.850GHz
Impedance	50 Ohm Nominal
V.S.W.R	2.0 Max@830-930MHz 2.0 Max@1440MHz 2.0 Max@2.4-2.5GHz 2.0 Max@5.7-5.8GHz
Gain	1.1 dBi@830-930MHz 4.0 dBi@1440MHz 1.5 dBi@2.4-2.5GHz 4.7dBi@ 5.150-5.850GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	1代原厂IPEX
Cable Type	O.D.1.37mm低损耗
Cable Length	195mm
Cable Color	Gray
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%

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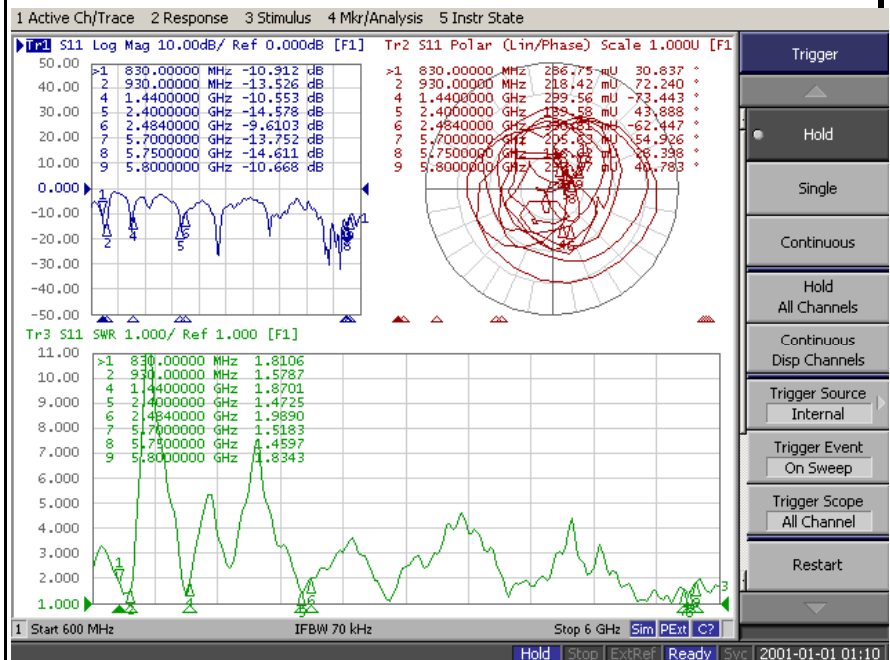


Antenna Performance Test

**Agilent
E5071B**

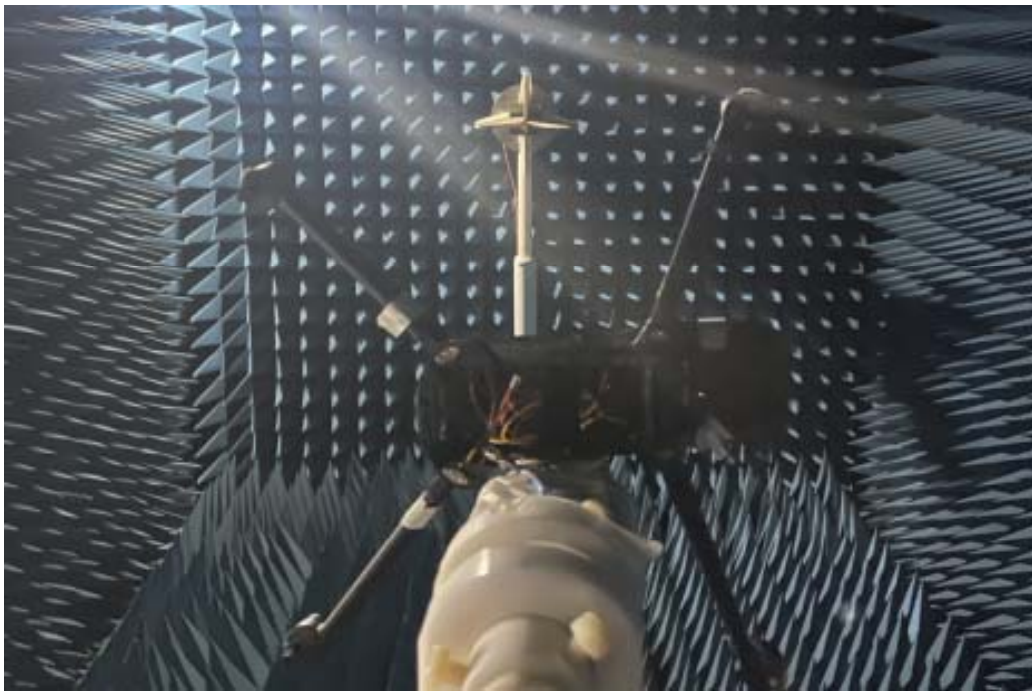


**S
Parameter
Test //机臂左 BL
Antenna**





Antenna Passive Test



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Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	24.8	-6.1	-2.2
830	31.6	-5.0	-0.7
840	33.5	-4.8	-0.6
850	32.1	-4.9	-0.4
860	31.2	-5.1	-0.2
870	32.3	-4.9	0.1
880	33.6	-4.7	0.4
890	35.1	-4.6	0.2
900	44.8	-3.5	0.9
910	44.1	-3.6	0.2
920	52.3	-2.8	0.8
930	52.7	-2.8	1.1
940	50.6	-3.0	0.8
950	43.7	-3.6	0.2
960	38.3	-4.2	-0.5

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Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1430	52.6	-2.8	2.2
1438	63.9	-1.9	3.6
1446	67.1	-1.7	4.0
1454	66.9	-1.7	4.0
1462	64.4	-1.9	3.8
1470	60.4	-2.2	3.6
1478	52.5	-2.8	2.9
1486	47.9	-3.2	2.5
1494	49.9	-3.0	2.4
1502	55.7	-2.5	2.5
1510	53.1	-2.8	2.0

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Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	42.0	-3.8	0.7
2410	44.7	-3.5	0.9
2420	46.2	-3.4	1.1
2430	45.3	-3.4	1.0
2440	44.6	-3.5	1.2
2450	46.7	-3.3	1.5
2460	46.1	-3.4	1.5
2470	46.4	-3.3	1.5
2480	44.0	-3.6	1.1
2490	43.4	-3.6	1.2
2500	45.0	-3.5	1.4



Passive Test For Antenna

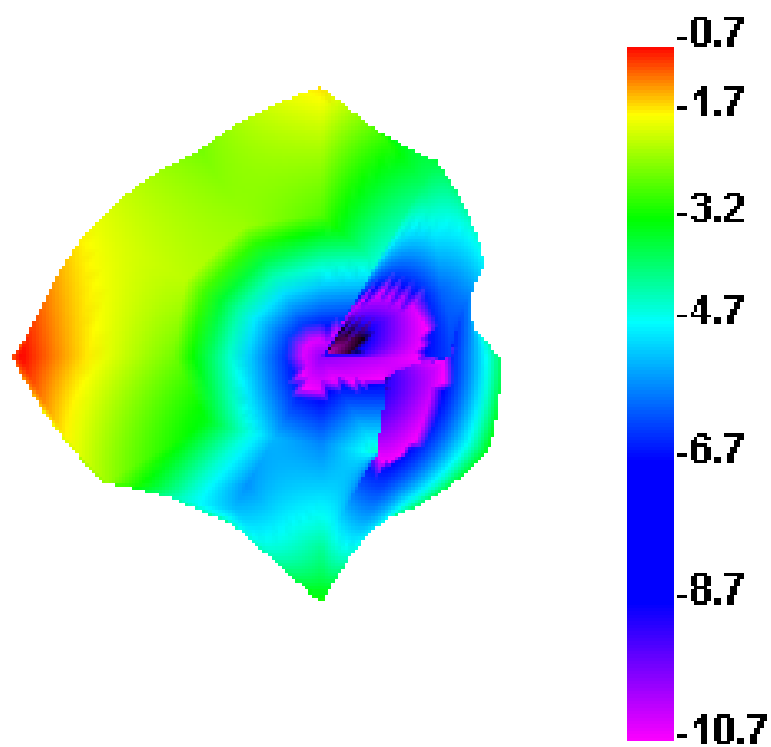
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	35.4	-4.5	0.7
5200	49.4	-3.1	3.2
5250	52.7	-2.8	4.2
5300	56.2	-2.5	4.7
5350	57.9	-2.4	4.4
5400	53.7	-2.7	3.6
5450	49.9	-3.0	3.2
5500	54.9	-2.6	3.3
5550	53.3	-2.7	3.0
5600	47.4	-3.2	2.6
5650	58.3	-2.3	3.5
5700	52.6	-2.8	2.7
5750	54.0	-2.7	2.7
5800	50.3	-3.0	2.9
5850	51.5	-2.9	3.3

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Radiation Patten For830MHz

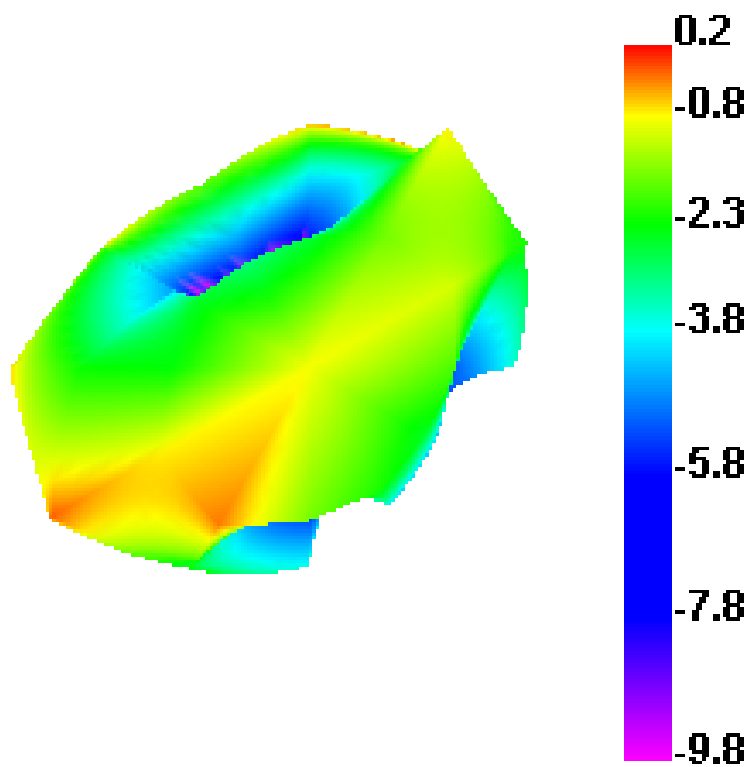
830.000MHz





Radiation Patten For 910MHz

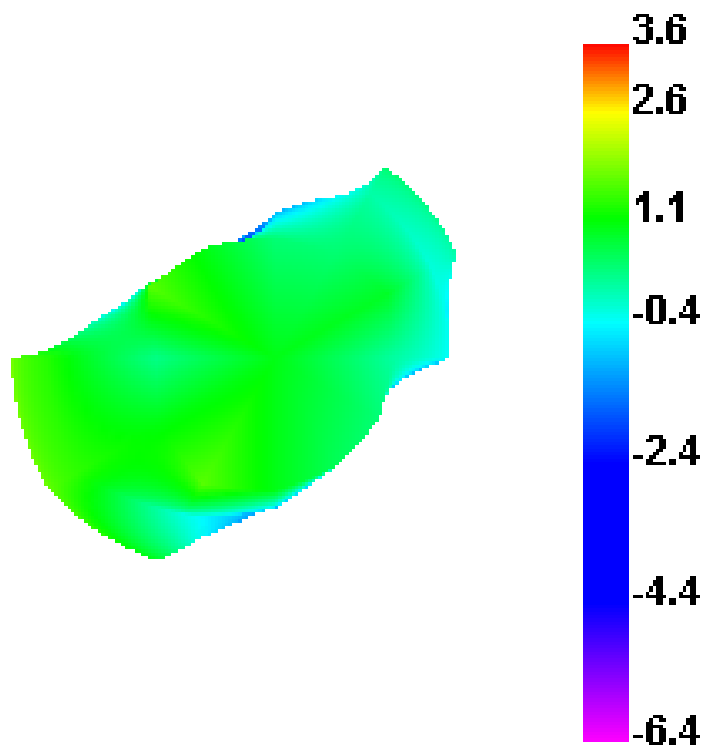
910.000MHz





Radiation Patten For 1438MHz

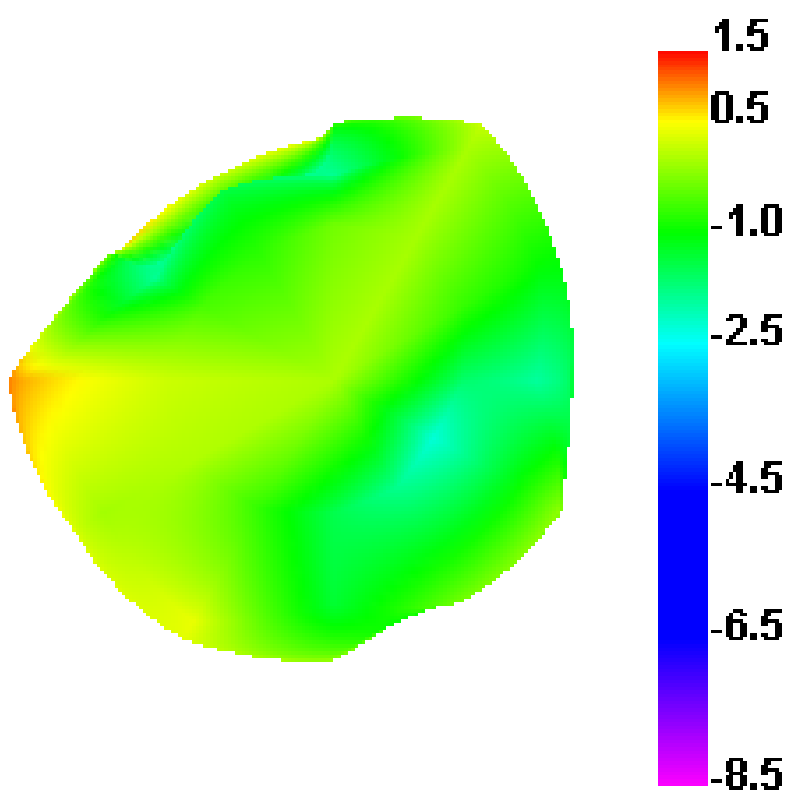
1438.000MHz





Radiation Patten For 2450MHz

2450.000MHz





Radiation Patten For 5750MHz

5750.000MHz

