



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	22102403
版本 Revision	1.0

客户
CUSTOMER: Autel Robotics Co., Ltd.

客户料号
CUSTOMER NO: 501006477

品名
PART NAME: 机臂右 BR Antenna

供方料号
SUPPLIER NO: YJI01.005.070.303A

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

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RoHS
Compatible

CUSTOMER
PART NO

REV.

DESCRIPTION

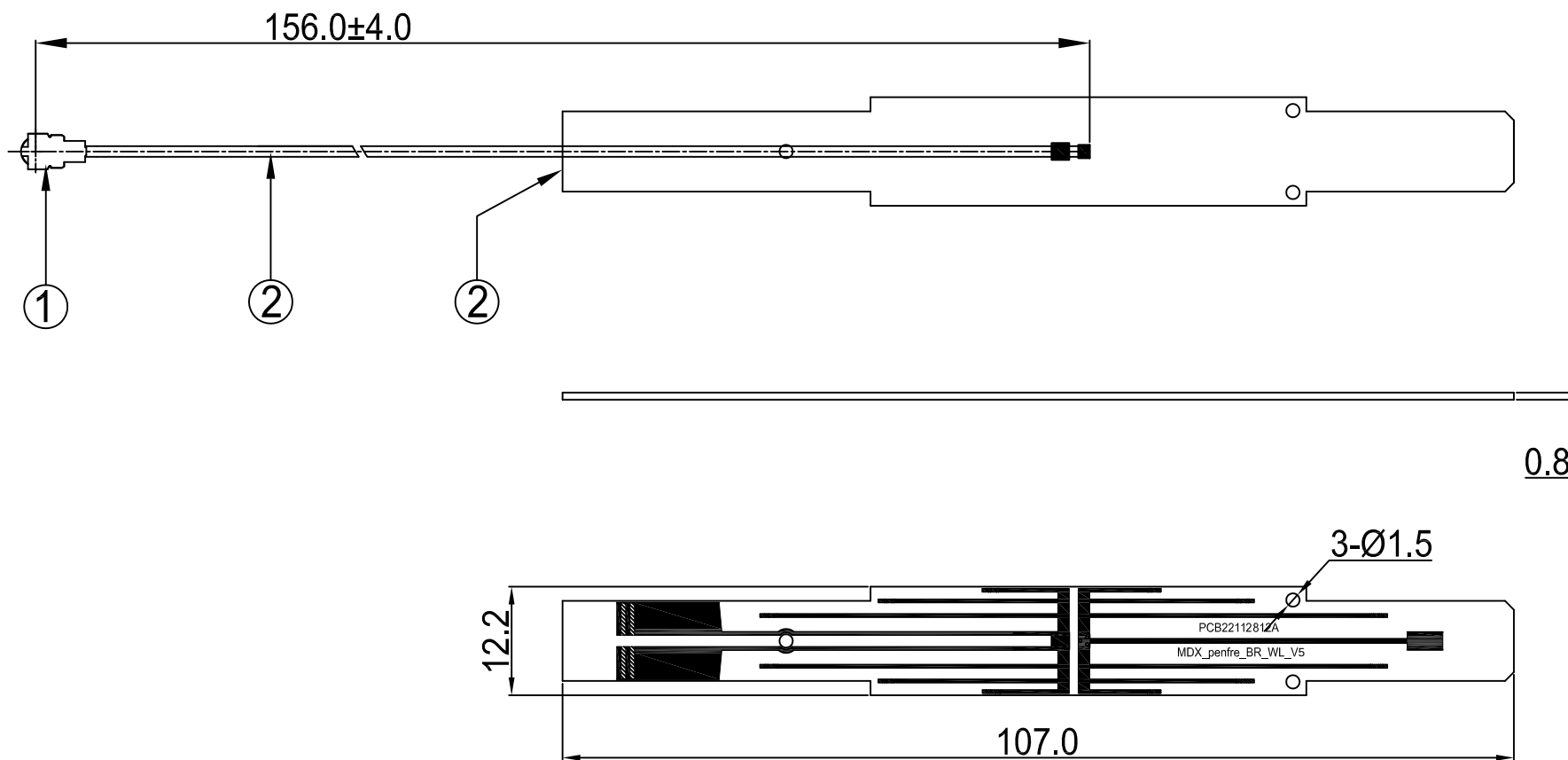
DATE

A

首次发行

2022-10-24

B



东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd. Tel:0769-85535057 Fax:0769-81664308

PART NAME: RF Antenna

PART NO.: YJI01.005.070.303A

DATE: 2022-10-24

APPROVED BY

CHECKED BY

DESIGNED BY

UNITS: mm

Tolerance

殷涛

黄志林

陈兴易

SCALE: 1/1

X.X ±0.50

REVISION: A

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 Black Low Loss	O.D 1.37	COA1001XA.P01	1
1	Mini Connector	Au Plated 1代 原厂	Cu	TER10008A.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	3.0 Max@830-930MHz 2.0 Max@1440MHz 2.0 Max@2.4-2.5GHz 2.0 Max@5.7-5.8GHz
Gain	1.8 dBi@830-930MHz 2.4 dBi@1440MHz 1.3 dBi@2.4-2.5GHz 3.9dBi@ 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	156mm
Cable Color	Black
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%

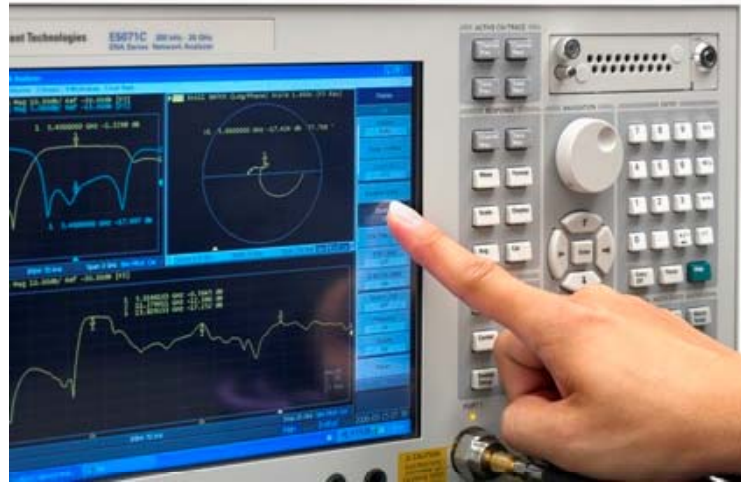
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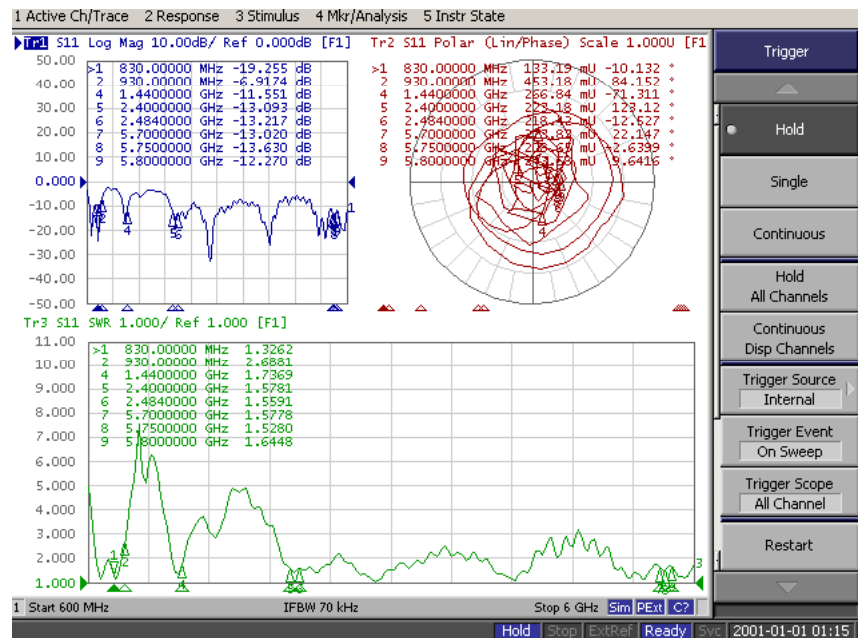


Antenna Performance Test

**Agilent
E5071B**



**S
Parameter
Test //**
**机臂右 BR
Antenna**

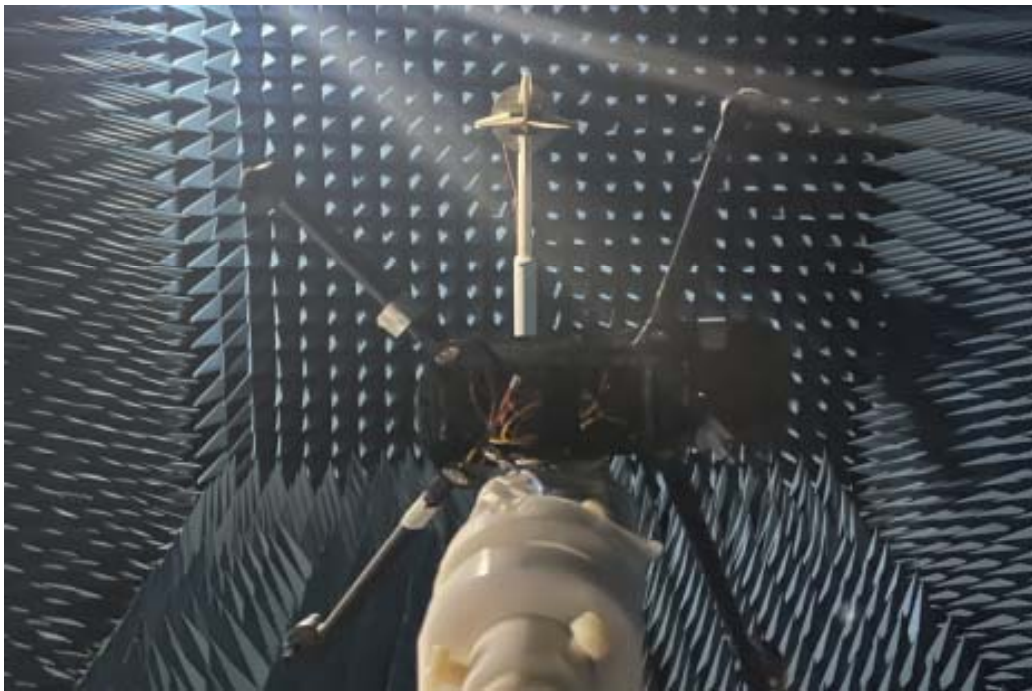


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Antenna Passive Test



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Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	45.9	-3.4	1.4
830	47.3	-3.3	1.5
840	38.6	-4.1	0.7
850	29.0	-5.4	-0.9
860	26.4	-5.8	-0.5
870	31.8	-5.0	0.3
880	40.6	-3.9	0.8
890	49.5	-3.1	1.0
900	63.6	-2.0	1.8
910	55.3	-2.6	1.2
920	56.9	-2.5	1.5
930	51.4	-2.9	0.9
940	46.5	-3.3	0.5
950	38.8	-4.1	-0.5
960	34.9	-4.6	-0.9

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Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1430	63.1	-2.0	2.3
1438	65.0	-1.9	2.4
1446	64.2	-1.9	2.1
1454	63.9	-2.0	2.0
1462	62.2	-2.1	1.6
1470	58.9	-2.3	1.3
1478	52.0	-2.8	0.5
1486	47.8	-3.2	0.3
1494	50.2	-3.0	0.9
1502	56.7	-2.5	1.9
1510	55.4	-2.6	2.1

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Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	42.2	-3.7	-0.1
2410	43.1	-3.7	0.2
2420	43.8	-3.6	0.3
2430	42.4	-3.7	0.4
2440	41.4	-3.8	0.6
2450	43.3	-3.6	1.1
2460	42.6	-3.7	1.1
2470	43.2	-3.7	1.2
2480	41.5	-3.8	1.0
2490	41.6	-3.8	1.1
2500	43.9	-3.6	1.3

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Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	34.1	-4.7	1.0
5200	45.1	-3.5	2.5
5250	45.0	-3.5	3.0
5300	45.8	-3.4	2.7
5350	45.5	-3.4	2.2
5400	42.6	-3.7	0.6
5450	39.8	-4.0	0.2
5500	44.0	-3.6	1.2
5550	44.0	-3.6	1.3
5600	41.7	-3.8	1.0
5650	55.0	-2.6	2.3
5700	49.2	-3.1	2.3
5750	53.1	-2.8	3.9
5800	52.2	-2.8	3.9
5850	48.2	-3.2	3.1

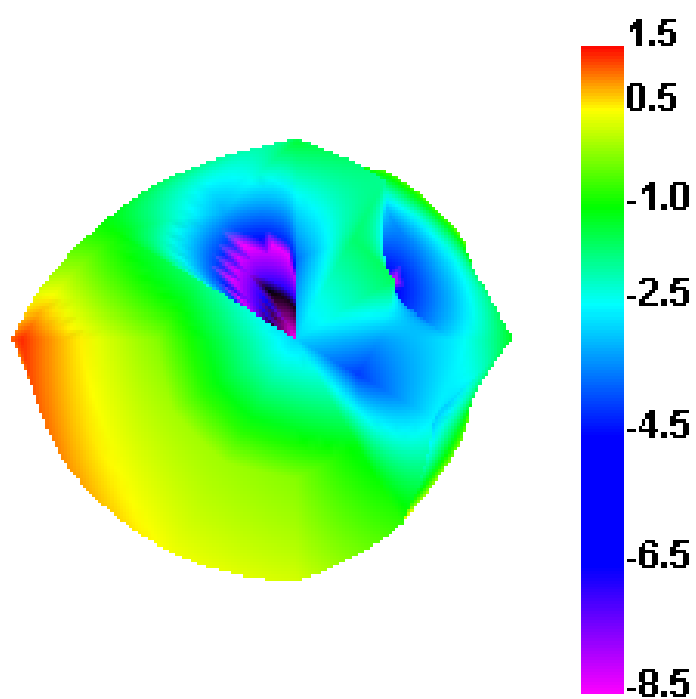
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Radiation Patten For830MHz

830.000MHz



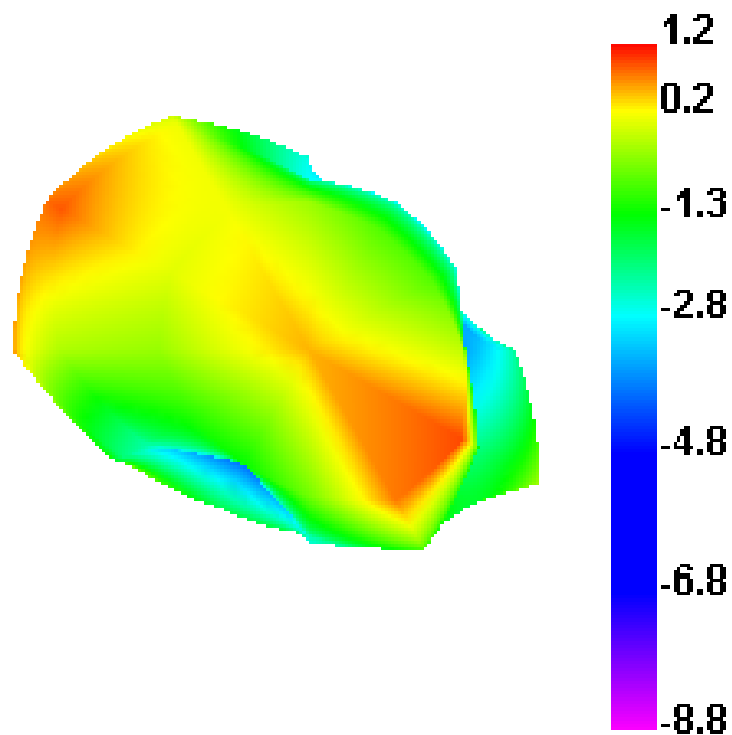
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Radiation Patten For 910MHz

910.000MHz



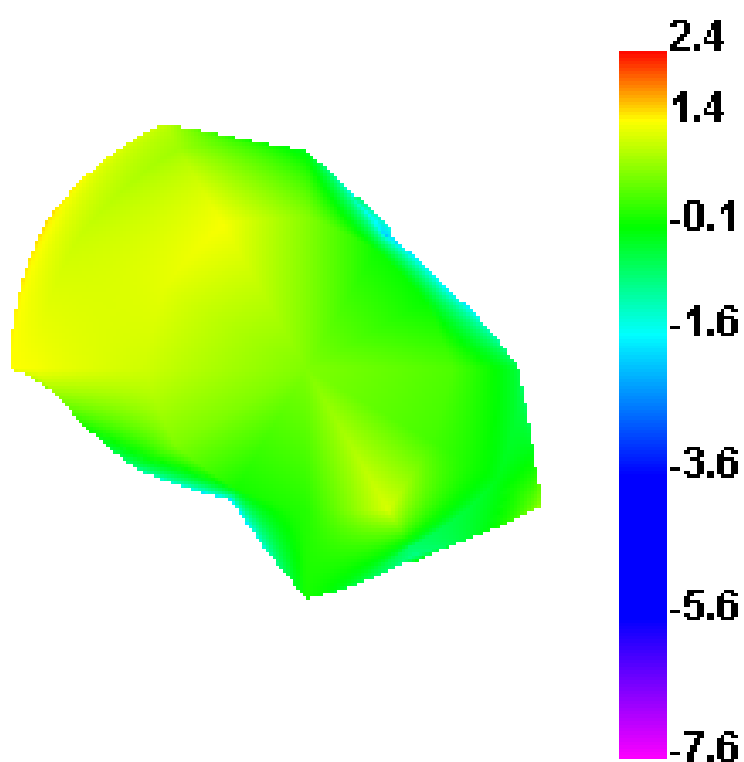
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Radiation Patten For 1438MHz

1438.000MHz



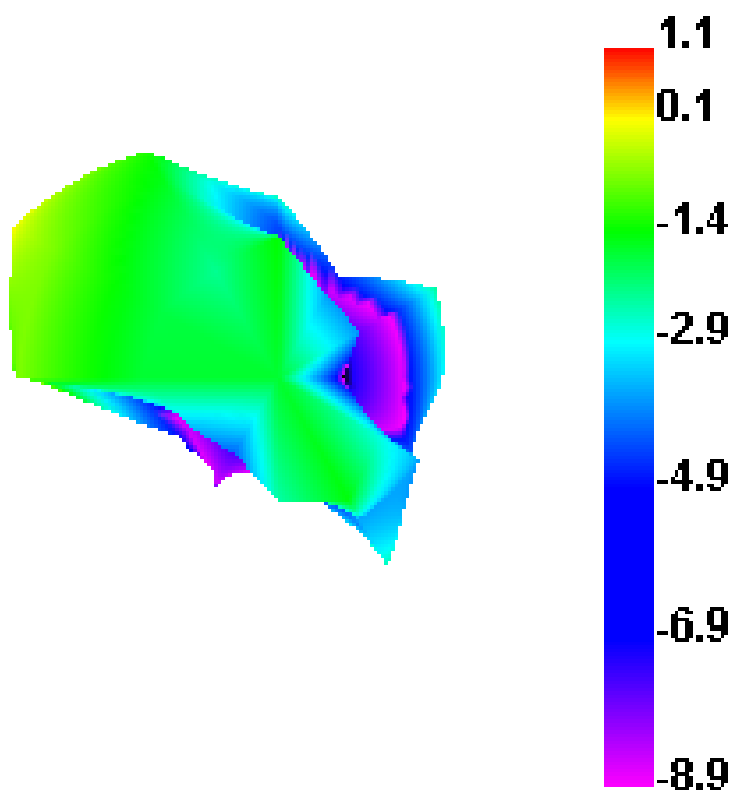
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Radiation Patten For 2450MHz

2450.000MHz



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

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Radiation Patten For 5750MHz

5750.000MHz

