



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	2023/02/17
编号 File No	23021701
版本 Revision	1.0

客户
CUSTOMER: Autel Robotics Co.,Ltd.

客户料号
CUSTOMER NO: 501006474

品名
PART NAME: FL Antenna

供方料号
SUPPLIER NO: YJI01.005.070.301A

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

REV.

DESCRIPTION

DATE

A

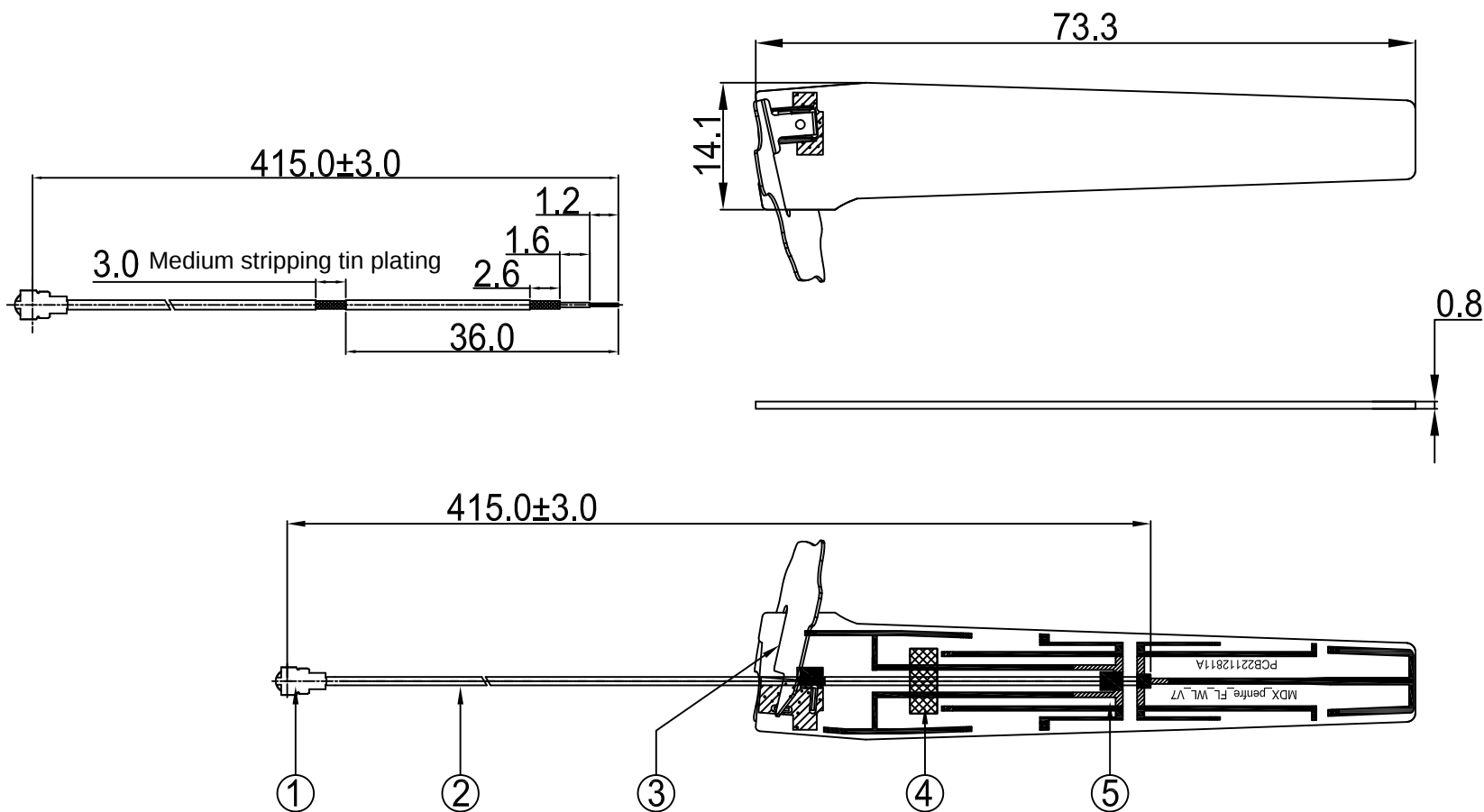
2022-11-29

B

2023-01-31

C

2023-02-17



5	PCB	73.3*14.1*0.8MM	PCB	PCB1050XA.P01	1
4	Paste+EVA	7.5*2.5*2.0MM	Paste+EVA	EVA10391A.P01	1
3	Metal	24.0*21.4*0.3MM	SUS304	MET1028XA.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



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.: YJI01.005.070.301A

DATE: 2022-11-29

APPROVED BY

CHECKED BY

DESIGNED BY

UNITS: mm

CALE: 1/1

EVISION: A

Tolerance

X.X ±0.50

X.XX±0.15

X° ±3°



天线规格

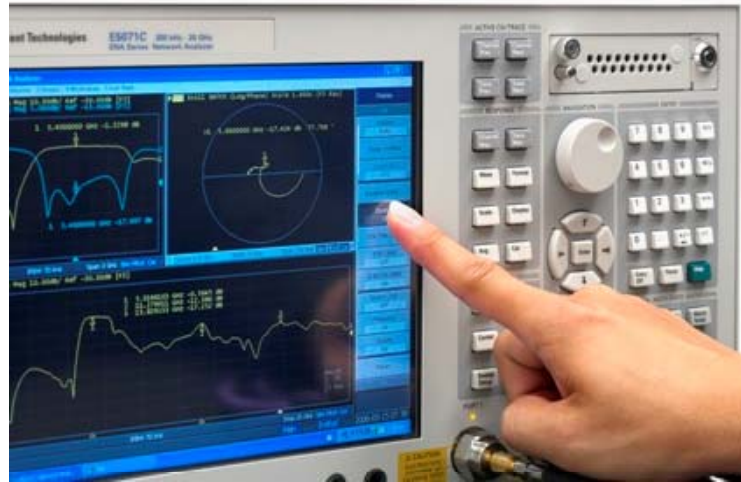
Antenna Specification

Electrical Properties	
Frequency	830-930MHz 1440MHz 2.4-2.5GHz 5.7-5.8GHz
Impedance	50 Ohm Nominal
V.S.W.R	4.0 Max@830-930MHz 2.0 Max@1440MHz 2.0 Max@2.4-2.5GHz 2.0 Max@5.7-5.8GHz
Gain	0.6 dBi@830-930MHz 1.4 dBi@1440MHz 1.9 dBi@2.4-2.5GHz 2.1 dBi@5.7-5.8GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	1 IPEX
Cable Type	O.D.1.37mm
Cable Length	415mm
Cable Color	Gray
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%

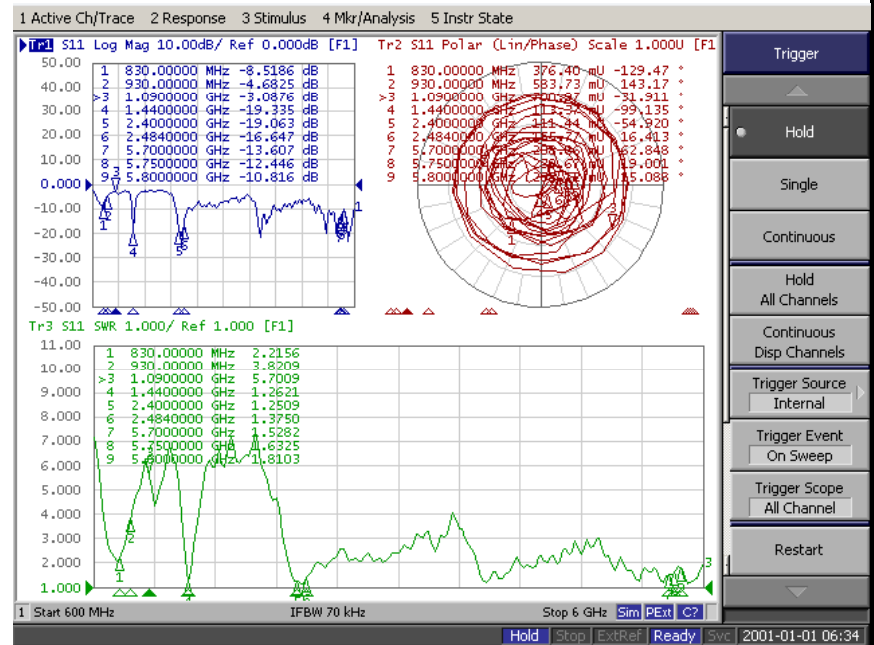


Antenna Performance Test

**Agilent
E5071B**

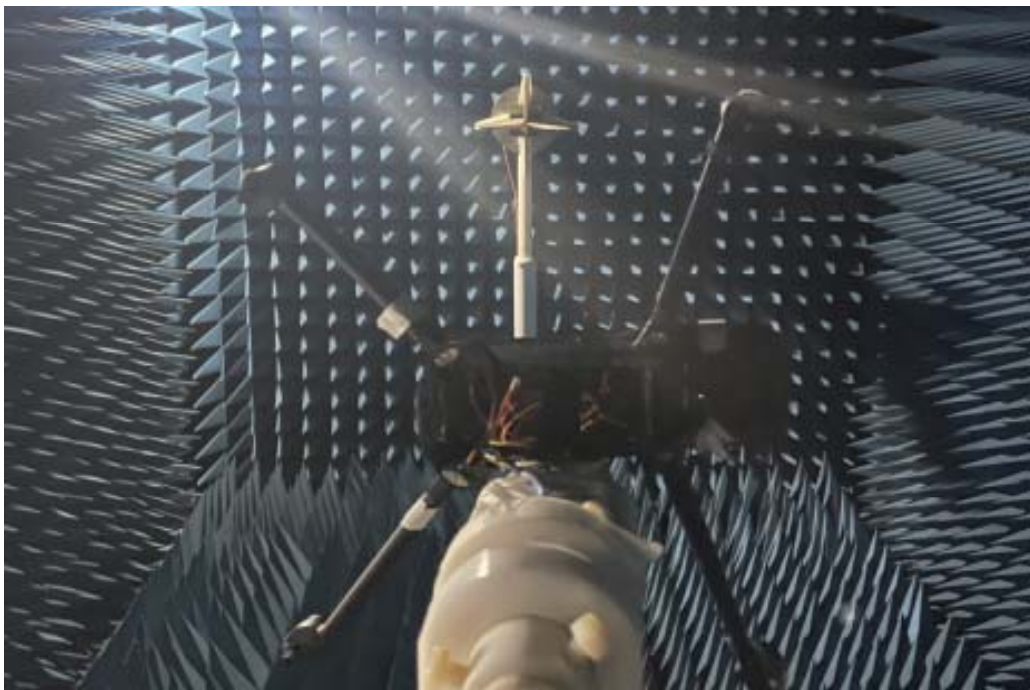


**S
Parameter
Test //
FL
Antenna**





Antenna Passive Test





Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	45.2	-3.5	0.3
830	51.6	-2.9	0.5
840	49.9	-3.0	0.6
850	47.5	-3.2	0.1
860	45.8	-3.4	0.2
870	42.7	-3.7	0.1
880	38.5	-4.2	-0.4
890	35.7	-4.5	-0.9
900	36.4	-4.4	-0.8
910	28.6	-5.4	-2.0
920	28.8	-5.4	-2.0
930	28.7	-5.4	-1.9
940	29.4	-5.3	-1.9
950	27.5	-5.6	-2.1
960	27.1	-5.7	-2.1



Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1430	45.7	-3.4	0.4
1438	52.2	-2.8	1.0
1446	57.3	-2.4	1.3
1454	59.4	-2.3	1.4
1462	59.6	-2.3	1.2
1470	57.1	-2.4	0.7
1478	52.2	-2.8	0.4
1486	46.9	-3.3	0.0
1494	46.3	-3.4	0.0
1502	48.4	-3.2	0.1
1510	44.0	-3.6	-0.2



Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	55.5	-2.6	1.8
2410	56.3	-2.5	1.9
2420	56.1	-2.5	1.8
2430	54.1	-2.7	1.5
2440	52.8	-2.8	1.2
2450	54.7	-2.6	1.2
2460	54.0	-2.7	0.9
2470	54.5	-2.6	0.9
2480	53.6	-2.7	0.8
2490	52.4	-2.8	0.7
2500	51.8	-2.9	0.6



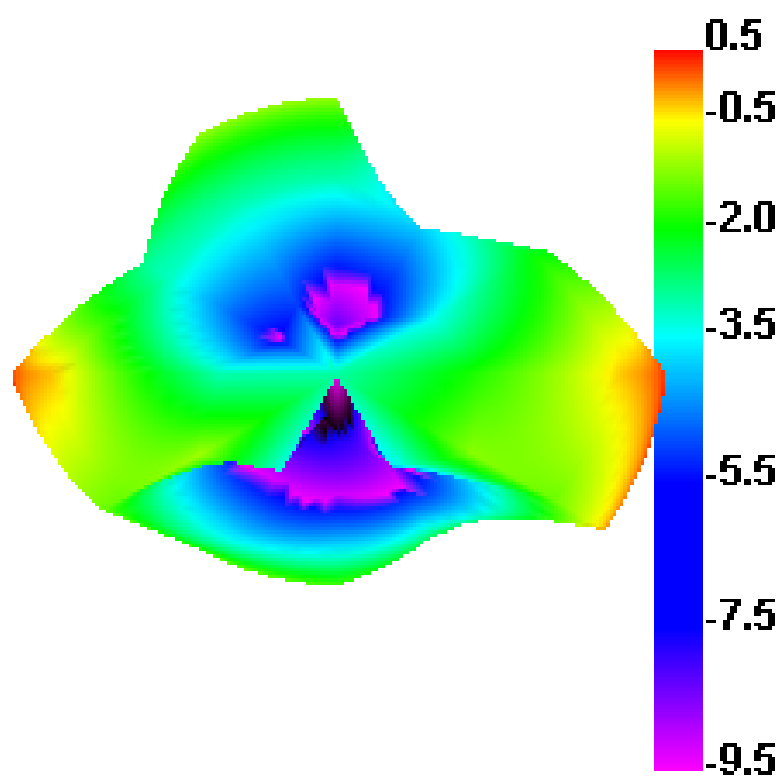
Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	18.2	-7.4	-0.4
5200	27.6	-5.6	0.7
5250	24.6	-6.1	-0.3
5300	28.4	-5.5	0.7
5350	33.1	-4.8	0.7
5400	40.0	-4.0	0.5
5450	38.6	-4.1	-0.2
5500	32.1	-4.9	-1.1
5550	32.6	-4.9	-1.0
5600	42.8	-3.7	0.3
5650	60.9	-2.2	2.1
5700	57.1	-2.4	1.7
5750	51.3	-2.9	0.9
5800	45.5	-3.4	0.4
5850	47.1	-3.3	0.6



Radiation Patten For 830MHz

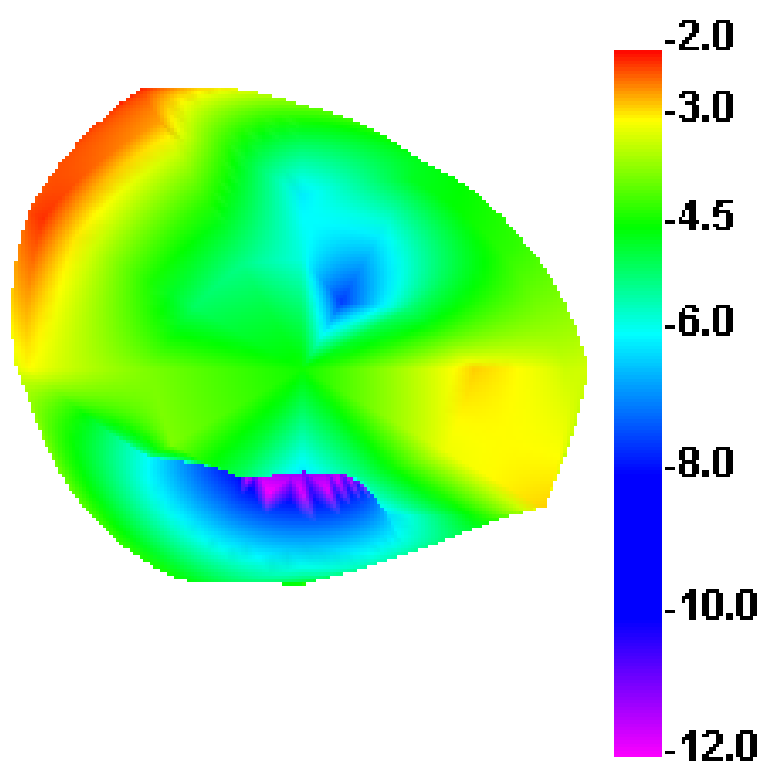
830.000MHz





Radiation Patten For 910MHz

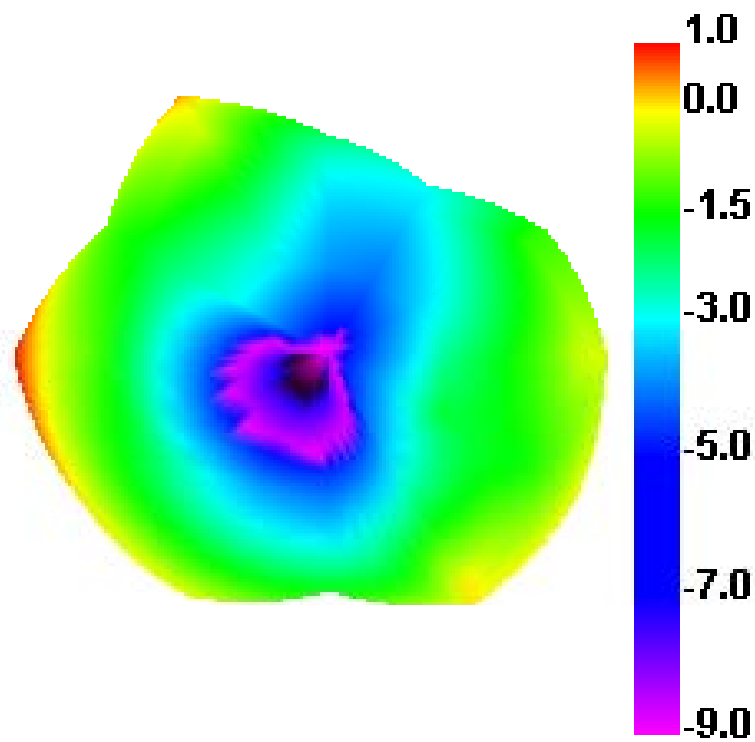
910.000MHz





Radiation Patten For 1438MHz

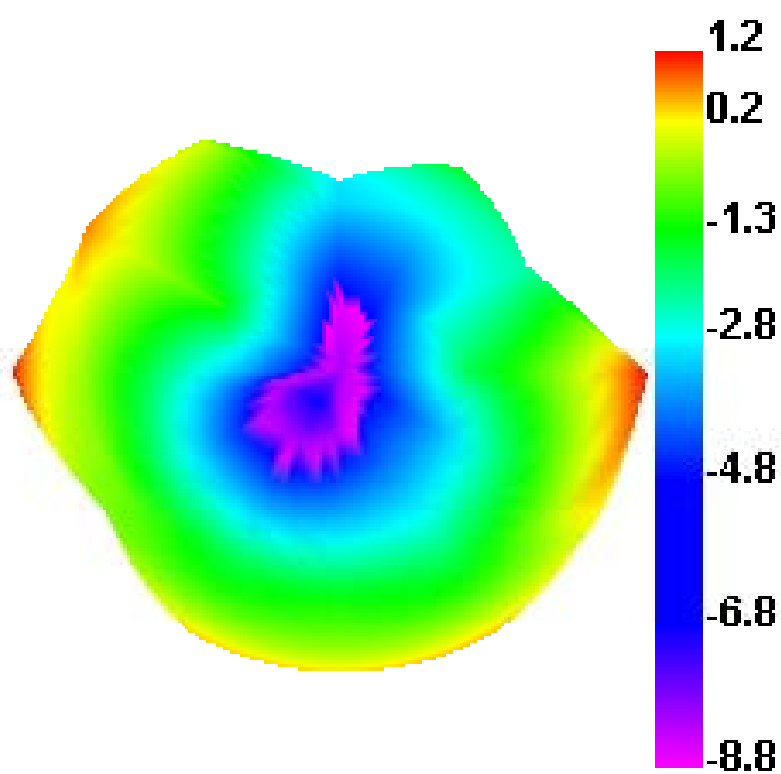
1438.000MHz





Radiation Patten For 2450MHz

2450.000MHz





Radiation Patten For 5750MHz

5750.000MHz

