



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	22102402
版本 Revision	1.0

客户
CUSTOMER: Autel Robotics Co., Ltd.

客户料号
CUSTOMER NO: 501006475

品名
PART NAME: 脚架右 FR Antenna

供方料号
SUPPLIER NO: YJI01.005.070.302A

送样日期Date: 送样数量Q “TY:

客户确认CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

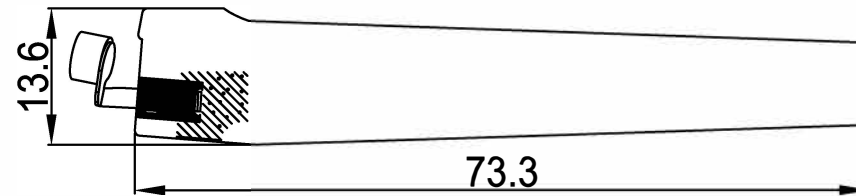
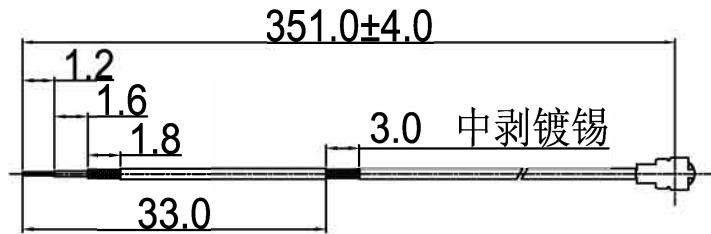
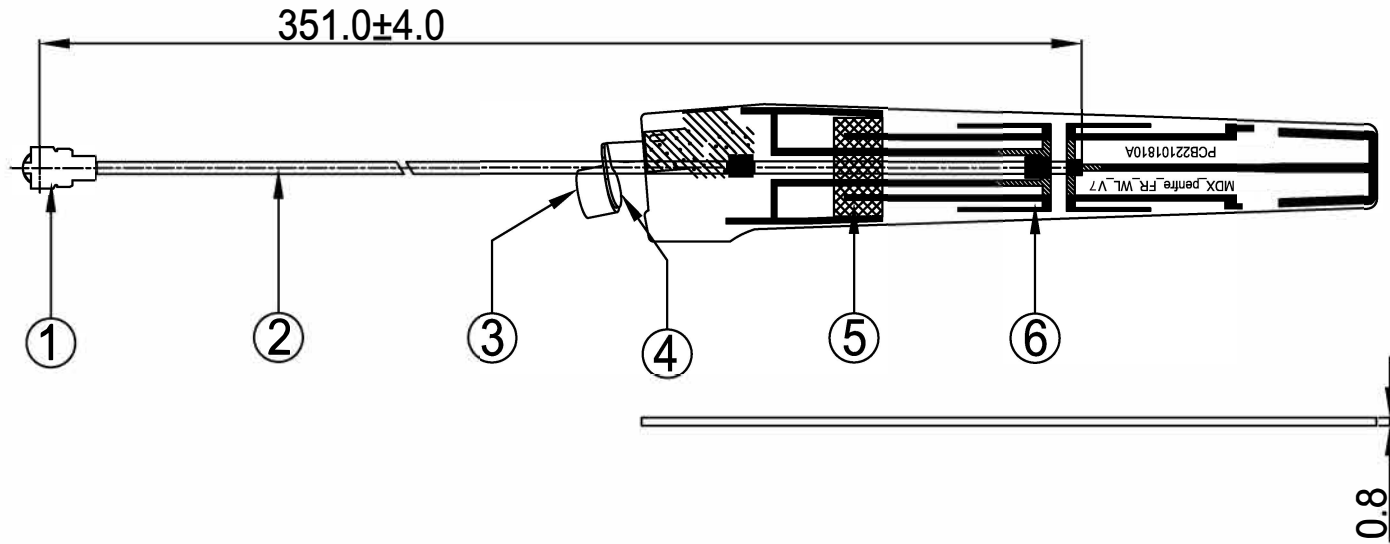
供方确认 SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A

RoHS
Compatible

CUSTOMER	
PART NO	

REV.	DESCRIPTION	DATE
△	首次发行	2022-09-08
△		



6	PCB	73.3*13.6*0.8MM	PCB	PCB1050XA.P01	1
5	Paste+EVA	7.5*2.5*2.0MM	Paste+EVA	EVA10391A.P01	1
4	Metal	4.6*5.4*0.3MM	C7521	MET1018XA.P01	1
3	EMI Gasket	Ø4.8*3.0MM	Ø4.8*3.0MM	EVA10288A.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	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.: YJI01.005.070.302A		DATE: 2022-09-08	
APPROVED BY	CHECKED BY	DESIGNED BY	 Tolerance X.X ±0.50 X.XX±0.15 X° ±3°
殷涛	向志蓉	陈兴易	
UNITS: mm SCALE: 1/1 REVISION: A			



天线规格

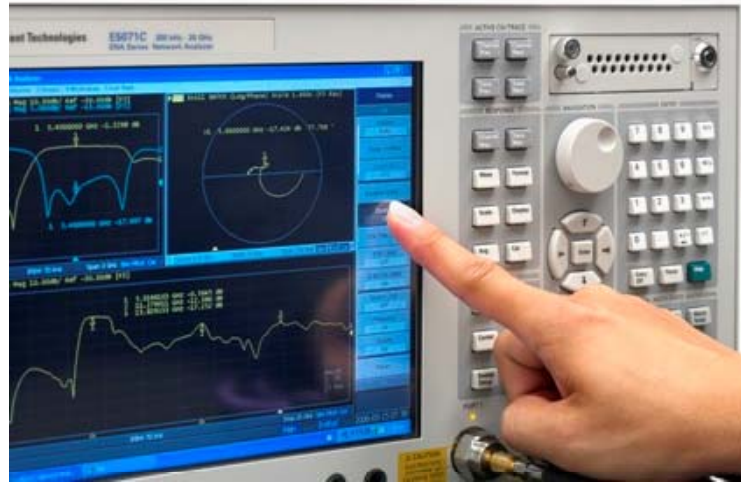
Antenna Specification

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	0.3 dBi@830-930MHz 2.5 dBi@1440MHz 1.7 dBi@2.4-2.5GHz 1.9 dBi@5.7-5.8GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	1代原厂IPEX
Cable Type	O.D.1.37mm低损耗
Cable Length	315mm
Cable Color	Black
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%

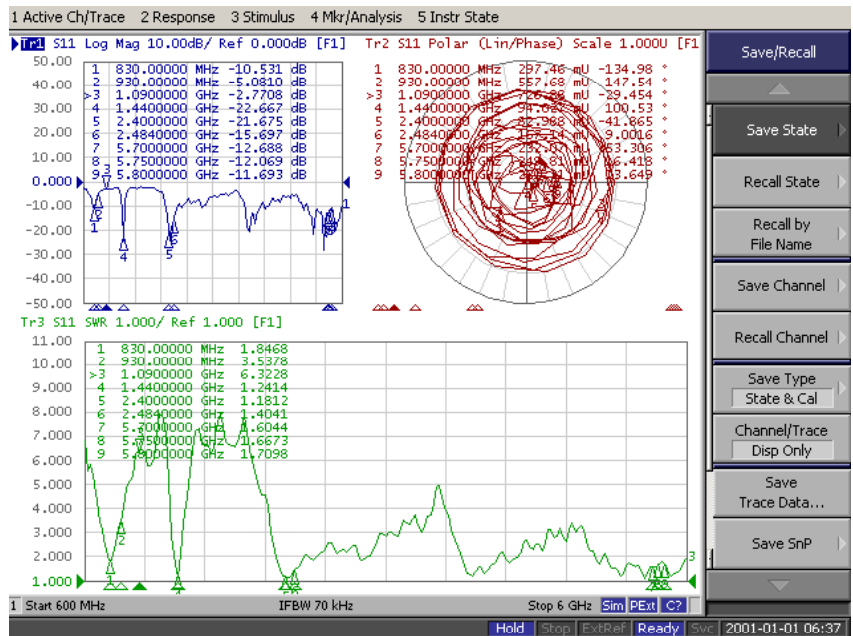


Antenna Performance Test

**Agilent
E5071B**

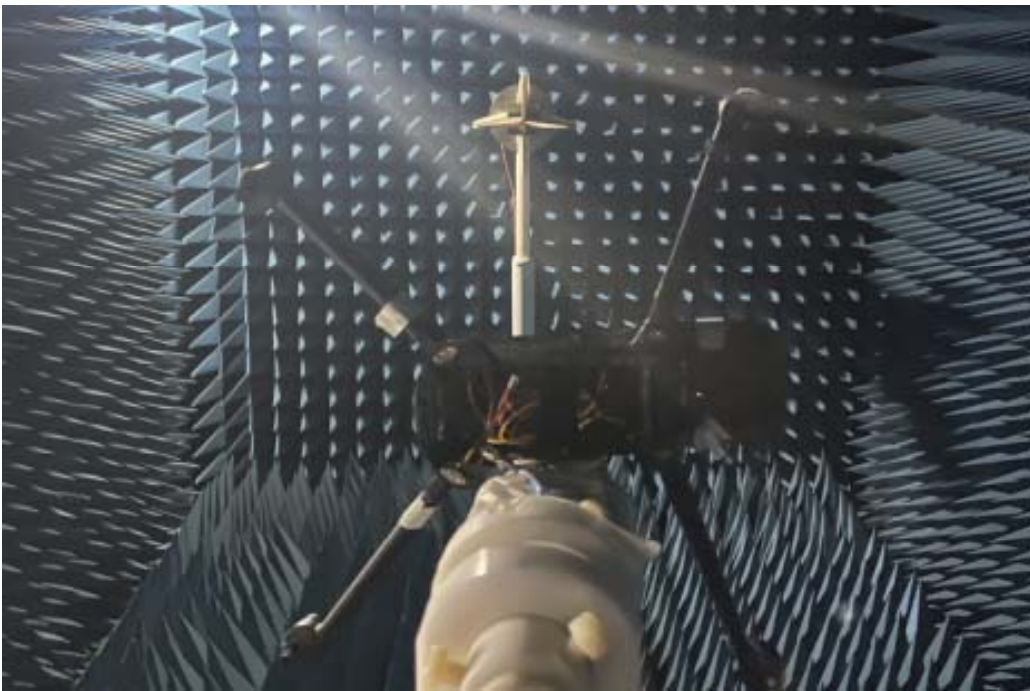


**S
Parameter
Test //
脚架右FR
Antenna**





Antenna Passive Test





Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	41.1	-3.9	-0.8
830	44.9	-3.5	-0.3
840	41.1	-3.9	-0.5
850	37.1	-4.3	-1.0
860	37.2	-4.3	-1.2
870	38.8	-4.1	-1.2
880	40.0	-4.0	-0.7
890	41.0	-3.9	-0.4
900	43.3	-3.6	0.3
910	34.0	-4.7	-0.6
920	33.9	-4.7	-0.6
930	32.4	-4.9	-1.3
940	31.1	-5.1	-1.4
950	27.6	-5.6	-2.3
960	25.6	-5.9	-2.5



Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1430	50.1	-3.0	1.5
1438	58.3	-2.3	2.1
1446	63.5	-2.0	2.5
1454	64.0	-1.9	2.4
1462	62.0	-2.1	2.2
1470	57.2	-2.4	1.6
1478	50.1	-3.0	0.7
1486	43.6	-3.6	0.0
1494	41.8	-3.8	-0.1
1502	43.1	-3.7	0.2
1510	38.9	-4.1	-0.2



Passive Test For Antenna			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	55.5	-2.6	1.6
2410	55.8	-2.5	1.7
2420	55.2	-2.6	1.7
2430	52.7	-2.8	1.4
2440	51.6	-2.9	1.3
2450	52.6	-2.8	1.3
2460	50.9	-2.9	1.1
2470	51.7	-2.9	1.1
2480	53.3	-2.7	1.1
2490	54.2	-2.7	1.0
2500	54.6	-2.6	0.8



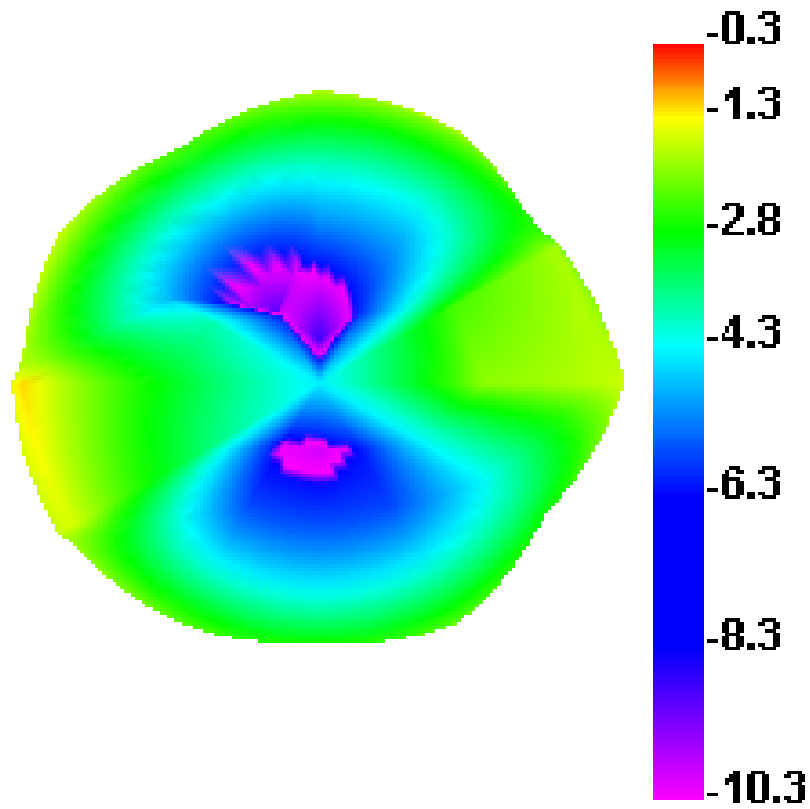
Passive Test For Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	18.2	-7.4	-1.6
5200	23.4	-6.3	-1.9
5250	23.9	-6.2	-2.2
5300	32.4	-4.9	-0.9
5350	38.8	-4.1	0.0
5400	41.4	-3.8	0.6
5450	40.2	-4.0	0.2
5500	35.5	-4.5	-0.6
5550	38.7	-4.1	-0.4
5600	52.0	-2.8	0.9
5650	67.0	-1.7	1.9
5700	60.7	-2.2	1.6
5750	53.3	-2.7	0.8
5800	47.8	-3.2	0.3
5850	47.1	-3.3	0.5



Radiation Patten For 830MHz

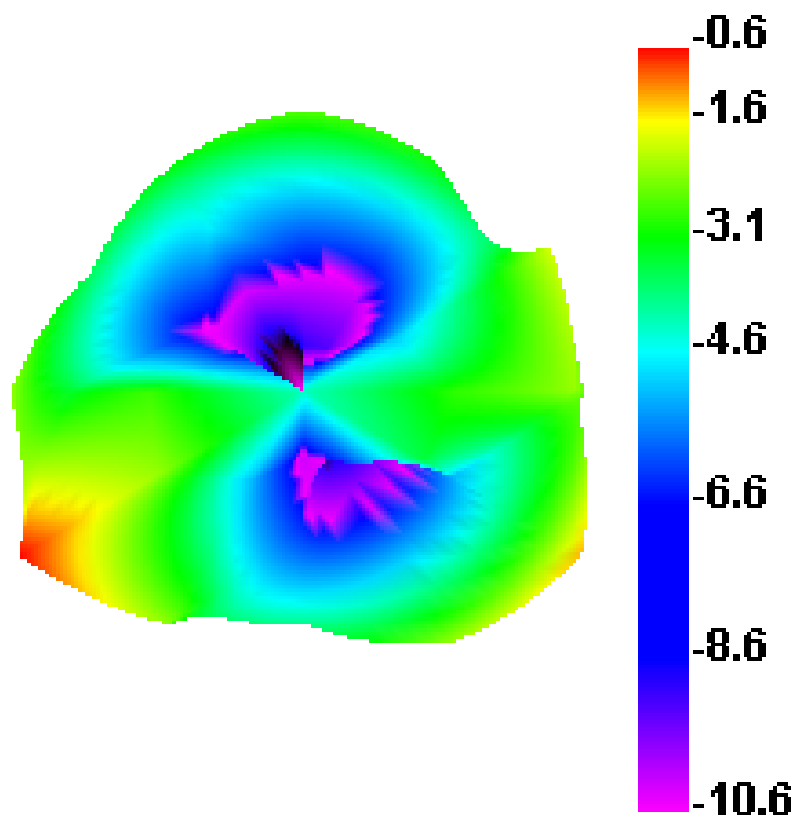
830.000MHz





Radiation Patten For 910MHz

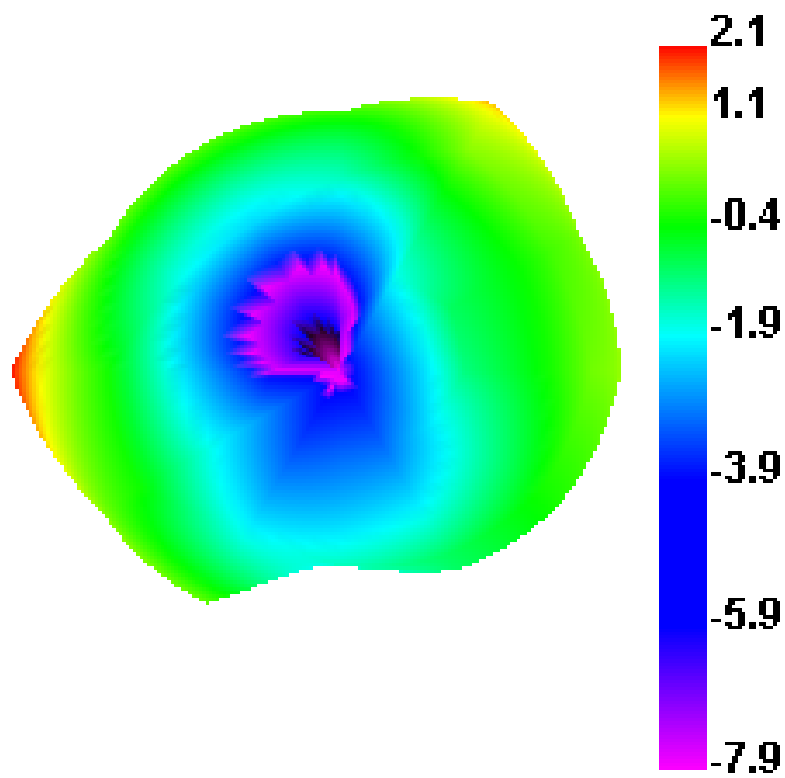
910.000MHz





Radiation Patten For 1438MHz

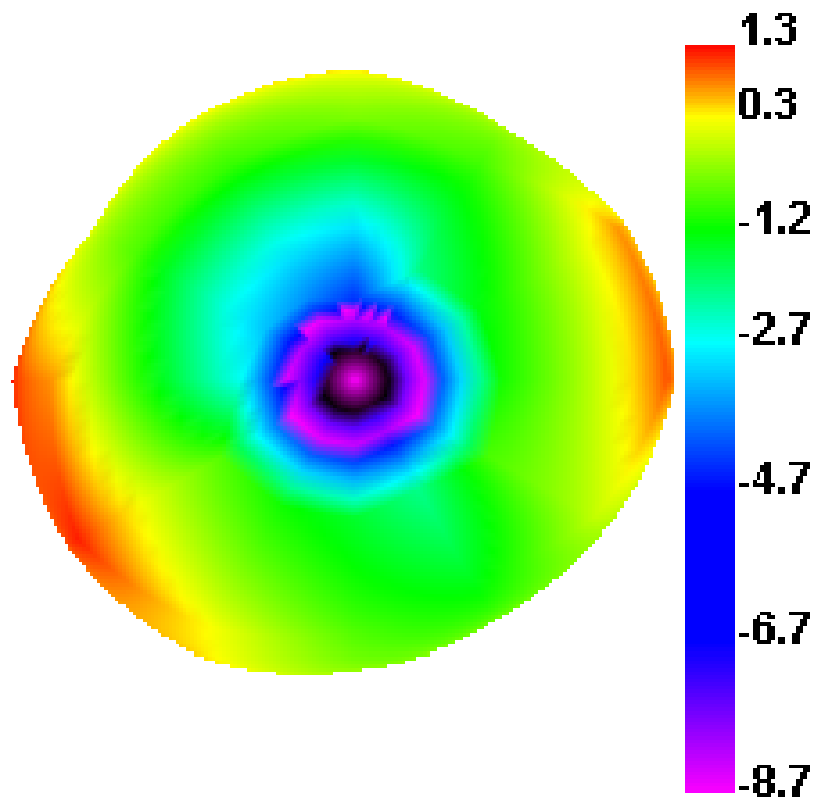
1438.000MHz





Radiation Patten For 2450MHz

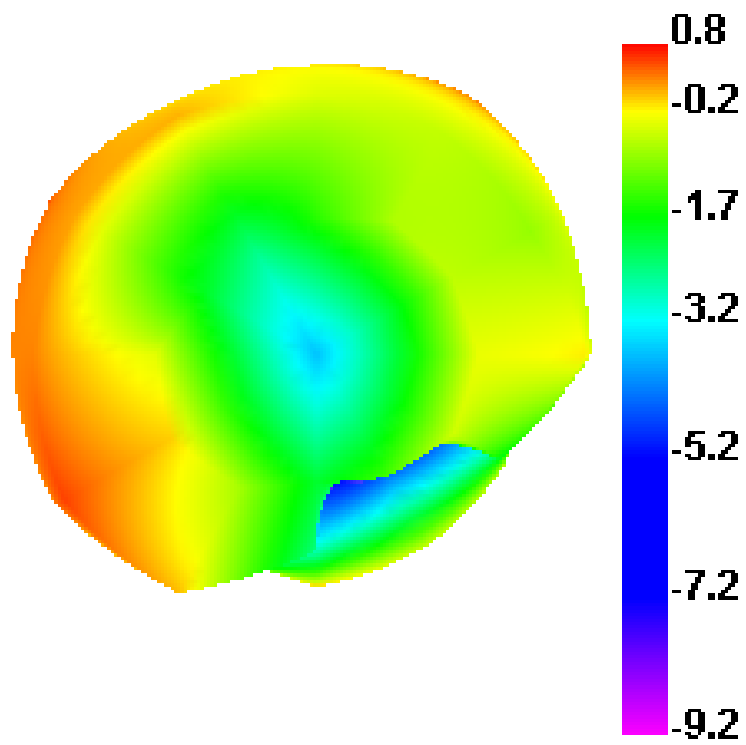
2450.000MHz





Radiation Patten For 5750MHz

5750.000MHz





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

22102401

版本
Revision

1.0

客户
CUSTOMER:

Autel Robotics Co., Ltd.

客户料号
CUSTOMER NO:

501006474

品名
PART NAME:

脚架左 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

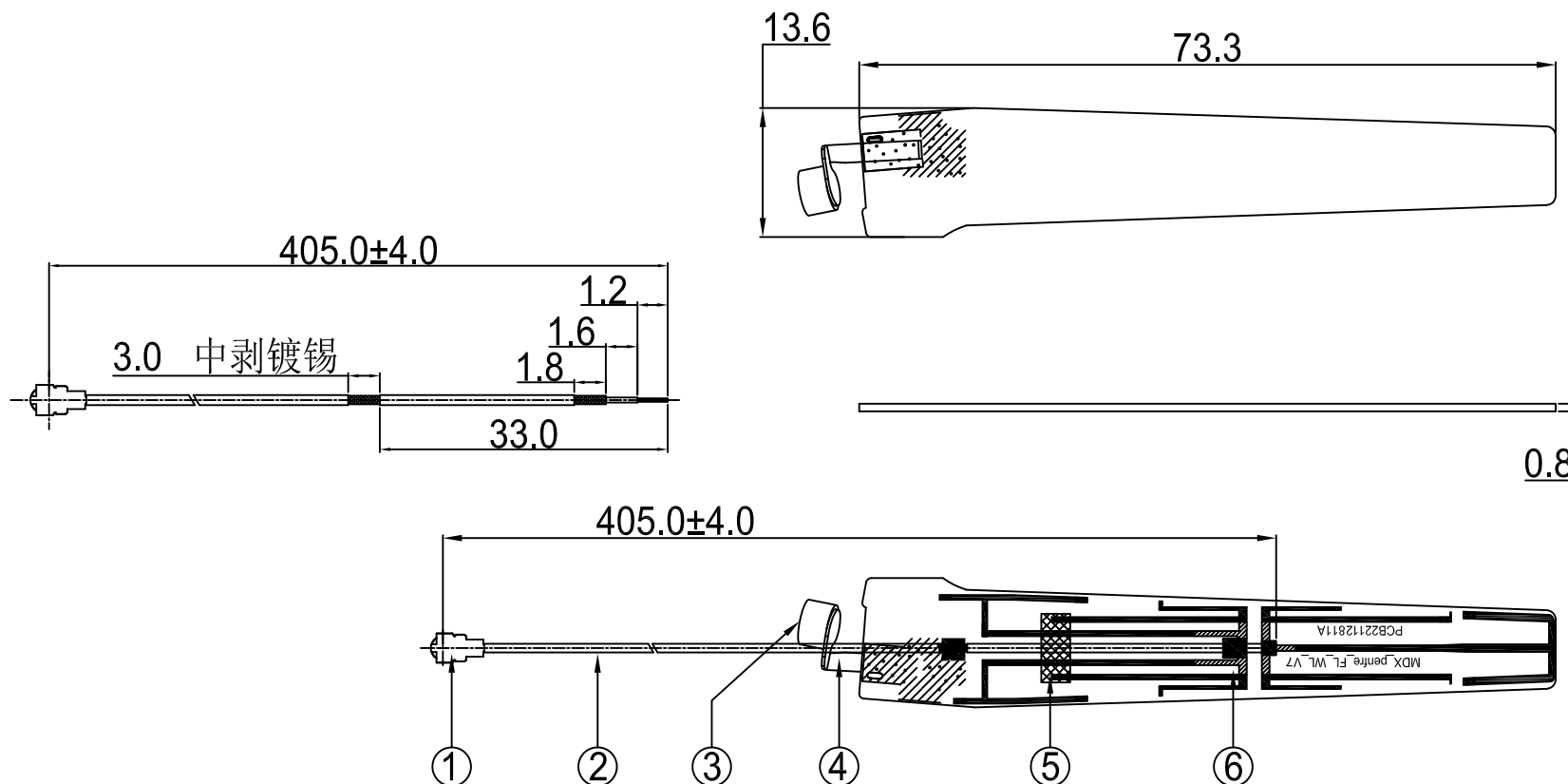
YJ-RD-F04-A

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

RoHS
Compatible

CUSTOMER	
PART NO	

REV.	DESCRIPTION	DATE
△	首次发行	2022-10-24
△		



6	PCB	73.3*13.6*0.8MM	PCB	PCB1050XA.P01	1
5	Paste+EVA	7.5*2.5*2.0MM	Paste+EVA	EVA10391A.P01	1
4	Metal	4.6*5.4*0.3MM	C7521	MET1018XA.P01	1
3	EMI Gasket	Ø4.8*3.0MM	Ø4.8*3.0MM	EVA10288A.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			DATE: 2022-10-24	
PART NO.: YJ101.005.070.301A				
APPROVED BY	CHECKED BY	DESIGNED BY	 UNITS: mm SCALE: 1/1 REVISION: A	Tolerance X.X ±0.50 X.XX±0.15 X° ±3°
殷涛	黄志林	陈兴易		



天线规格

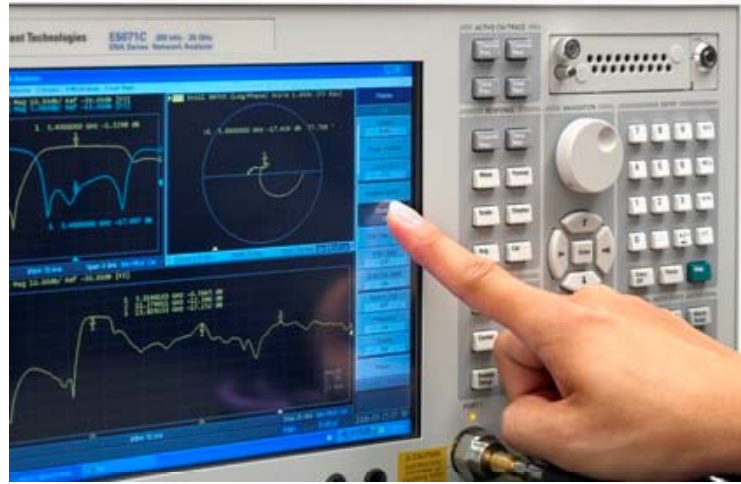
Antenna Specification

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代原厂IPEX
Cable Type	O.D.1.37mm低损耗
Cable Length	405mm
Cable Color	Gray
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%

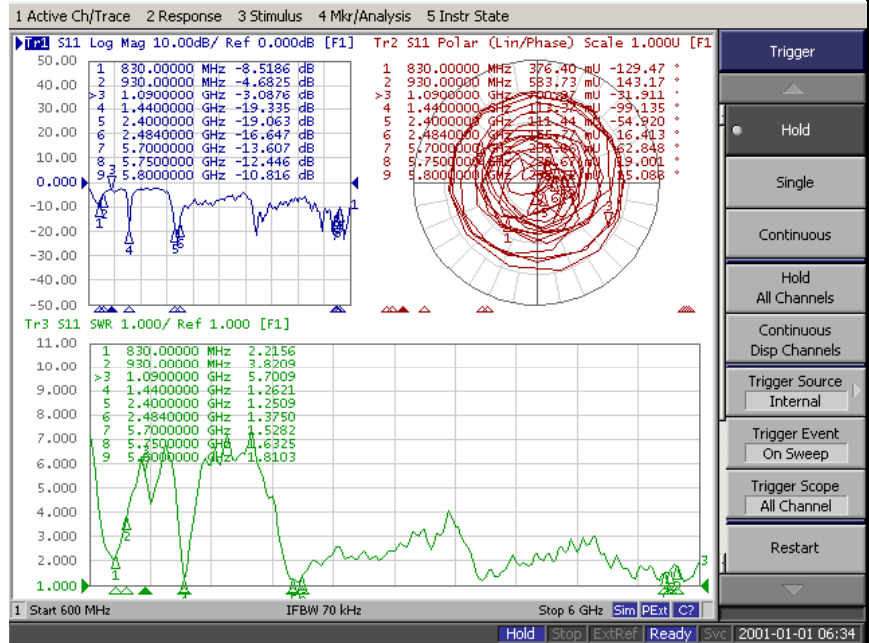


Antenna Performance Test

**Agilent
E5071B**

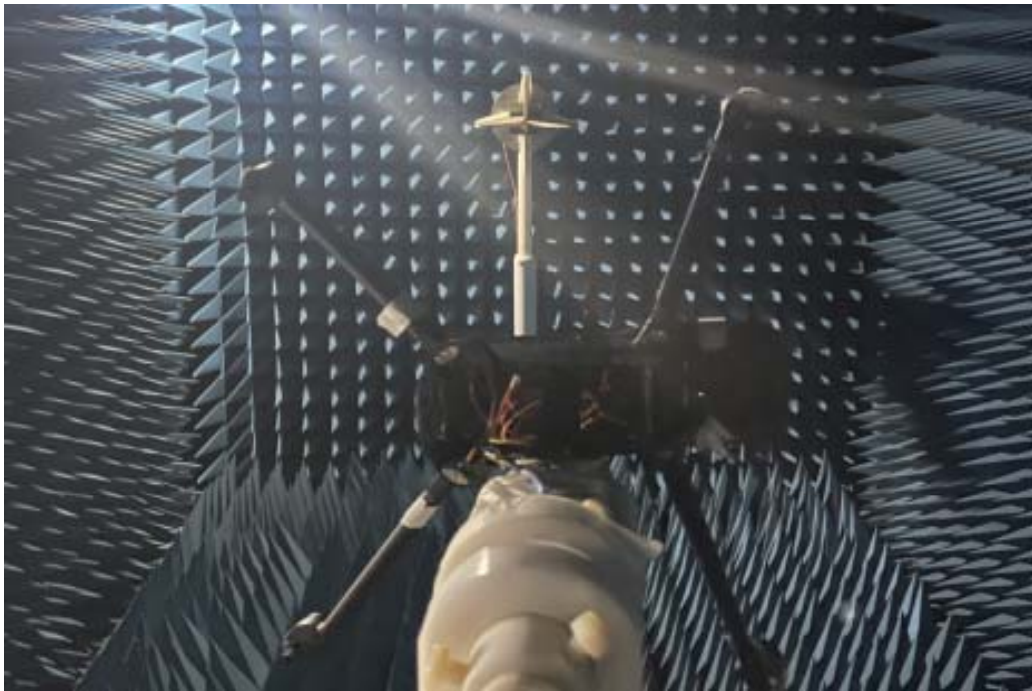


**S
Parameter
Test //
脚架左 FL
Antenna**





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



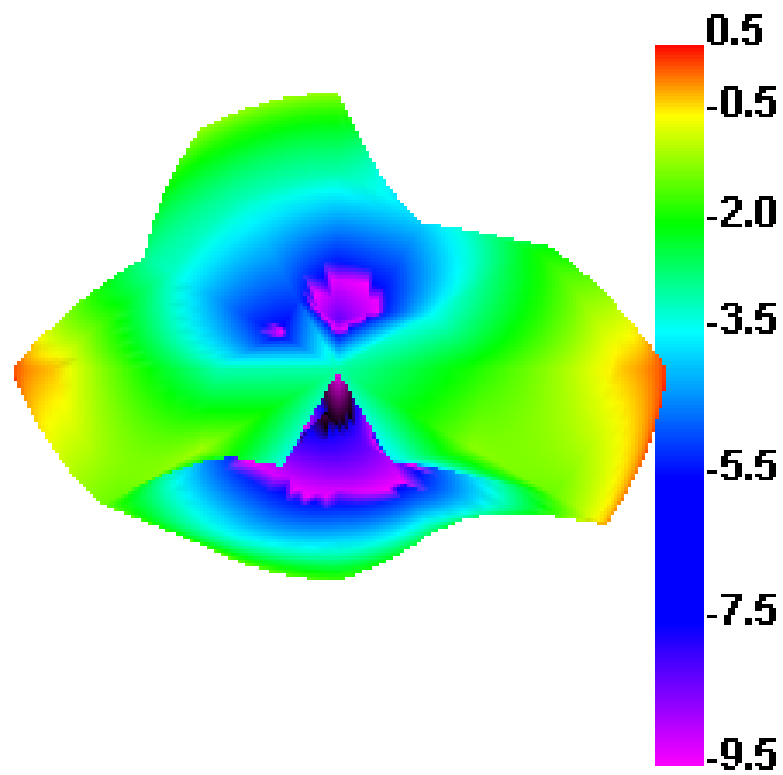
Passive Test For Antenna

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

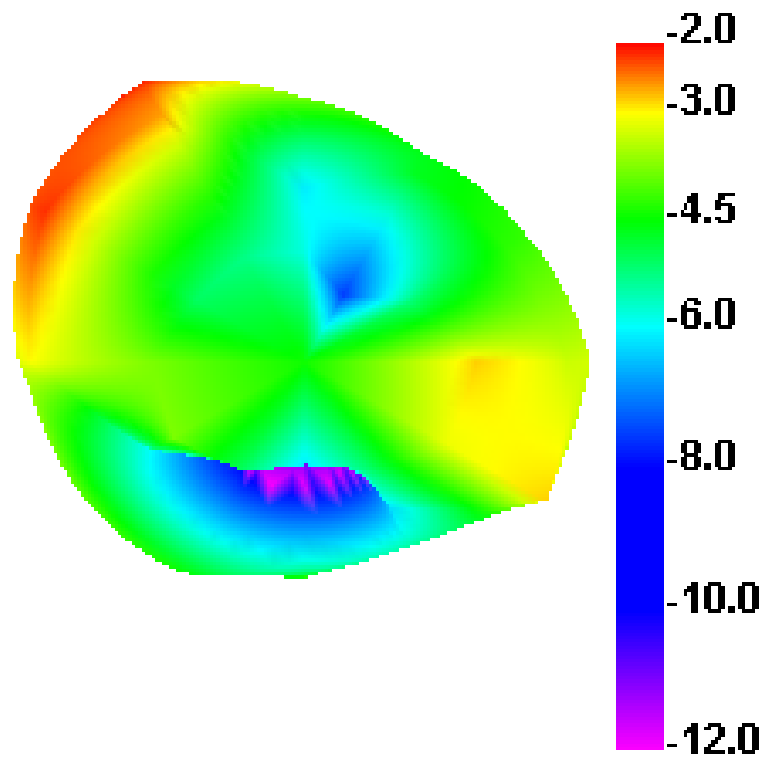
830.000MHz





Radiation Patten For 910MHz

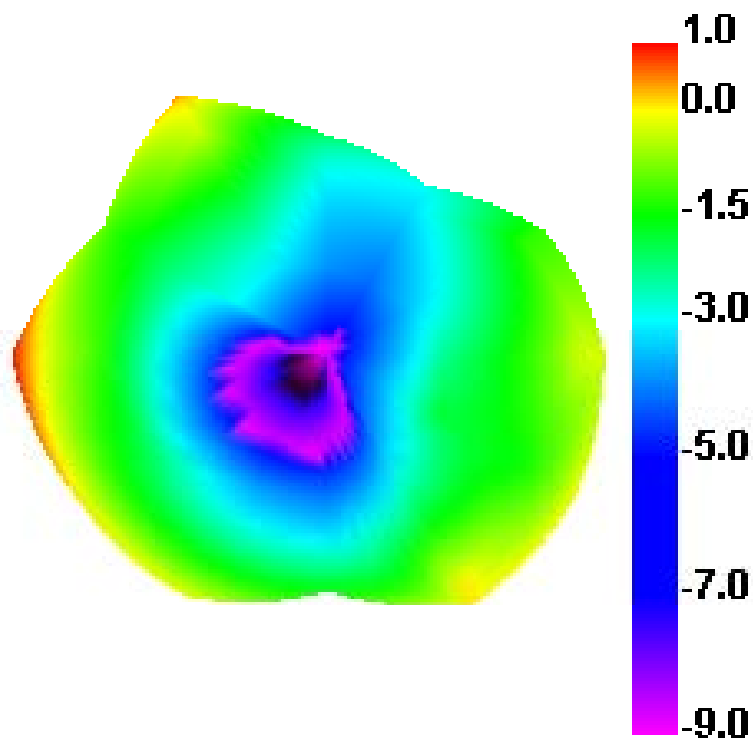
910.000MHz





Radiation Patten For 1438MHz

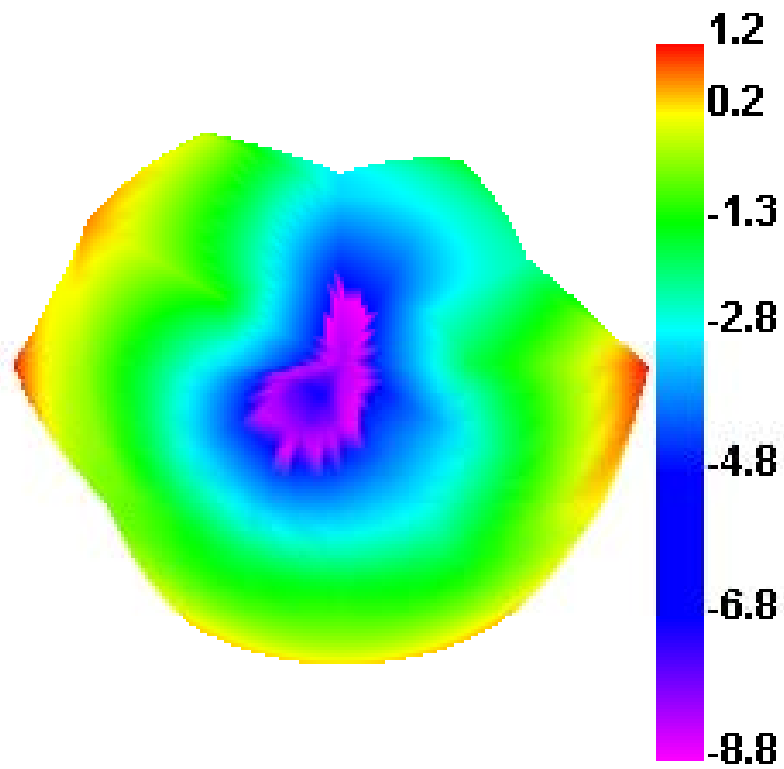
1438.000MHz





Radiation Patten For 2450MHz

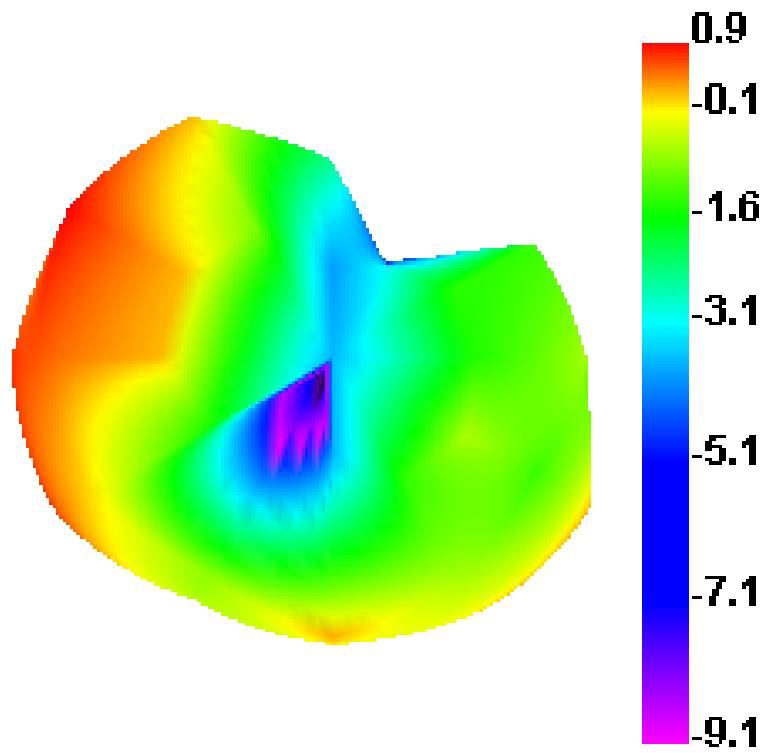
2450.000MHz





Radiation Patten For 5750MHz

5750.000MHz





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

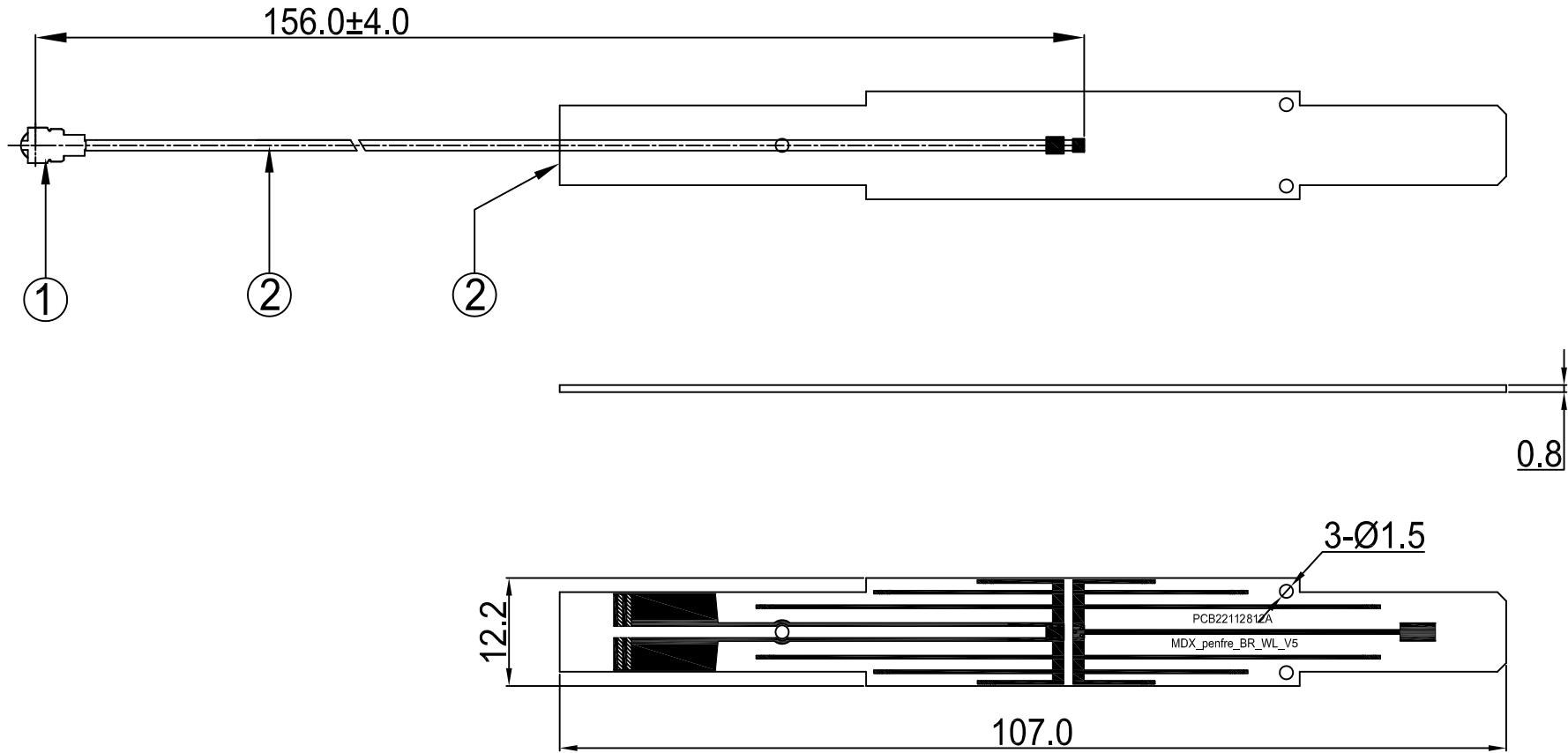
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A

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

PART NAME: RF Antenna			DATE: 2022-10-24	
PART NO.: YJ101.005.070.303A				
APPROVED BY	CHECKED BY	DESIGNED BY	 UNITS: mm SCALE: 1/1 REVISION: A	Tolerance X.X ±0.50 X.XX±0.15 X° ±3°
殷涛	黄志林	陈兴易		

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

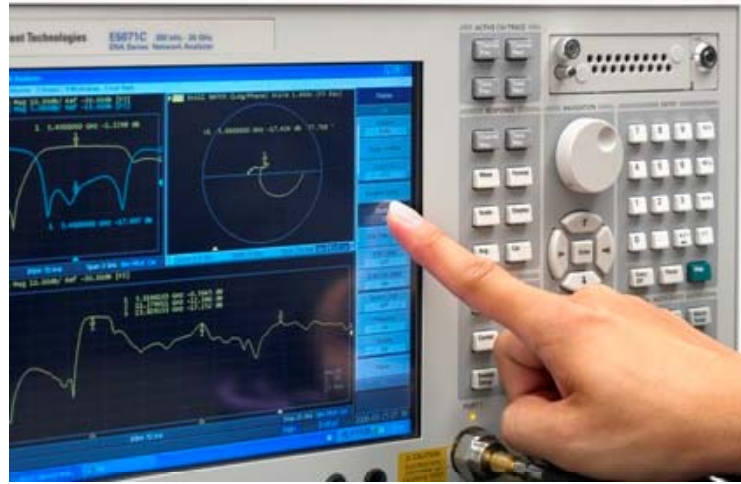
Antenna Specification

Electrical Properties	
Frequency	830-930MHz 1440MHz 2.4-2.5GHz 5.7-5.8GHz
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 3.9 dBi@5.7-5.8GHz
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%

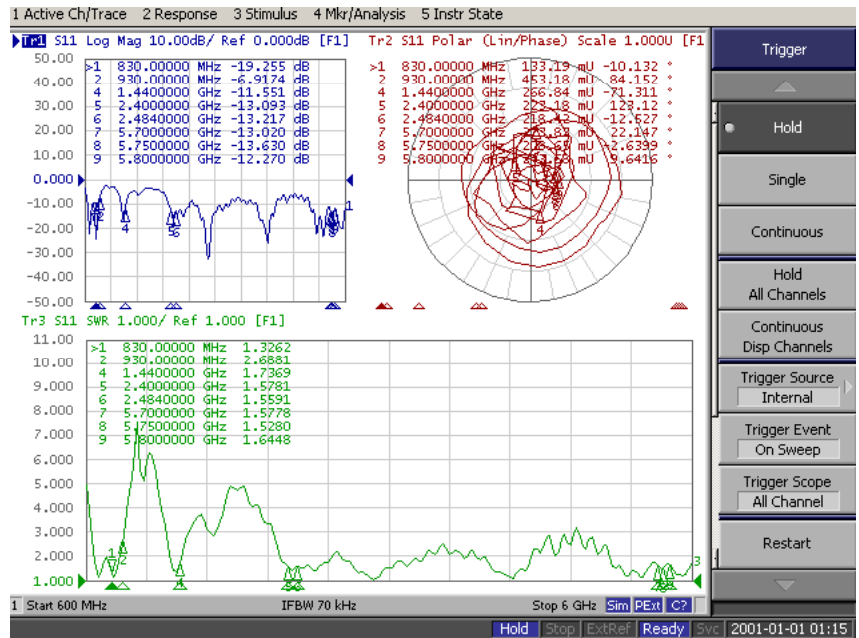


Antenna Performance Test

**Agilent
E5071B**

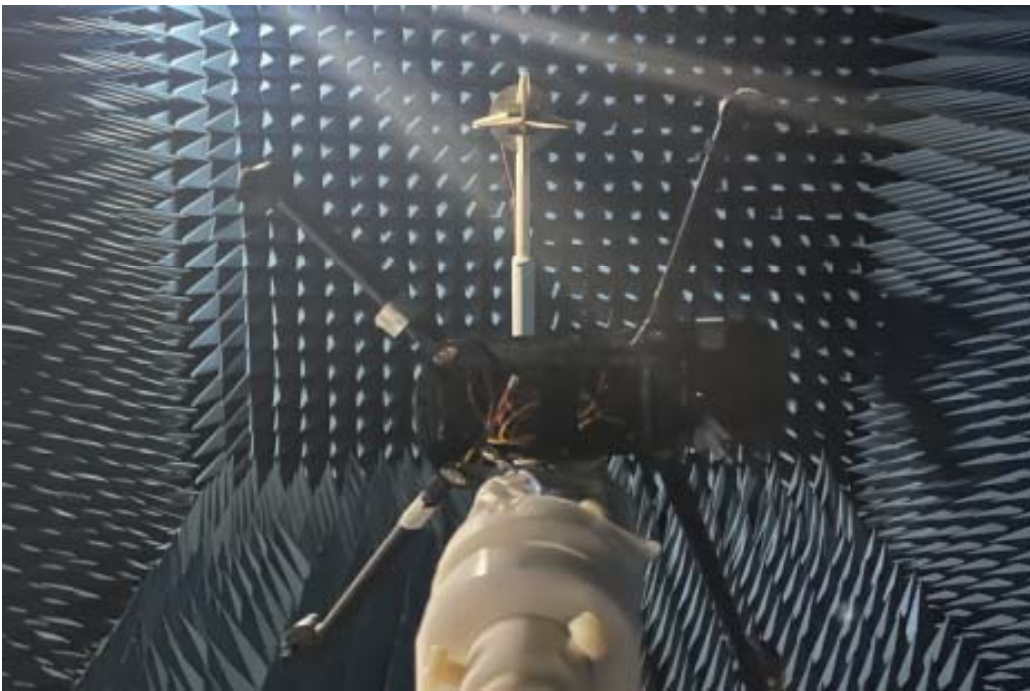


**S
Parameter
Test //
机臂右 BR
Antenna**





Antenna Passive Test





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



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



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



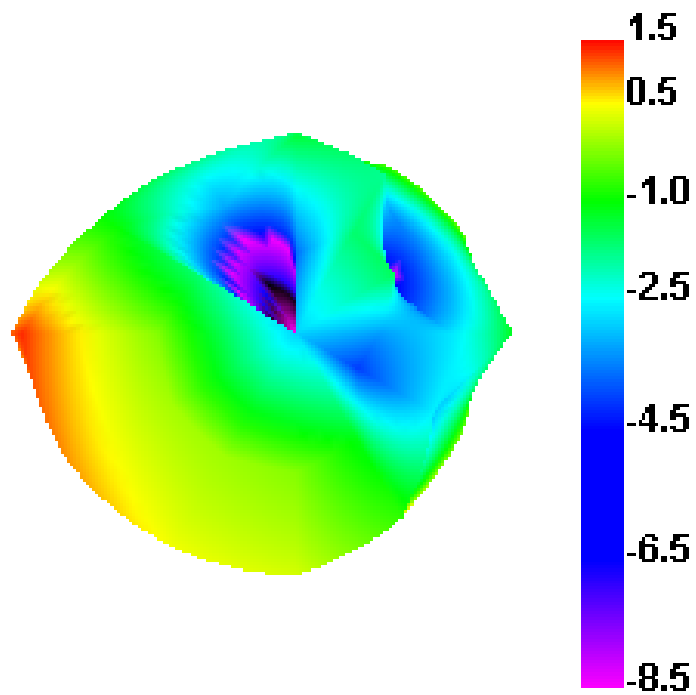
Passive Test For Antenna

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



Radiation Patten For830MHz

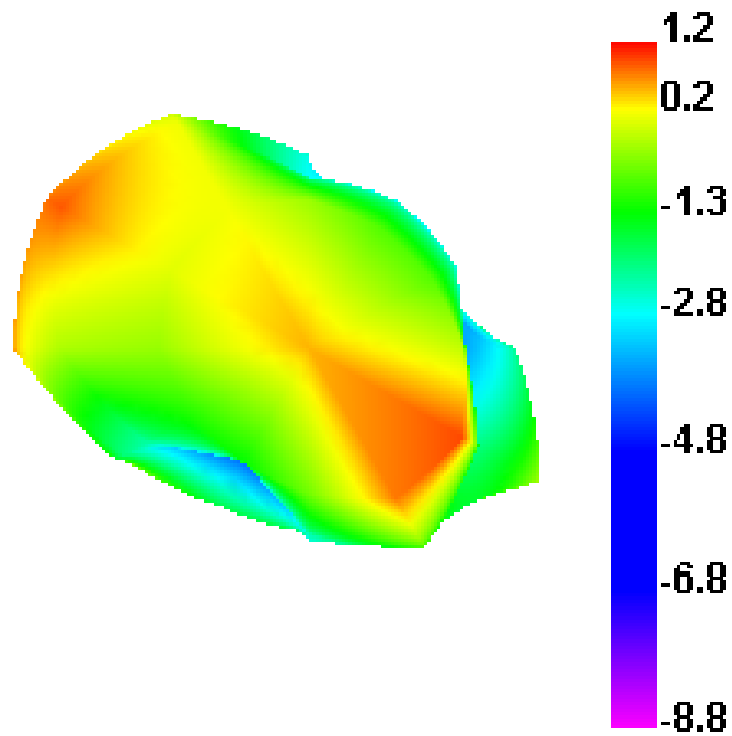
830.000MHz





Radiation Patten For 910MHz

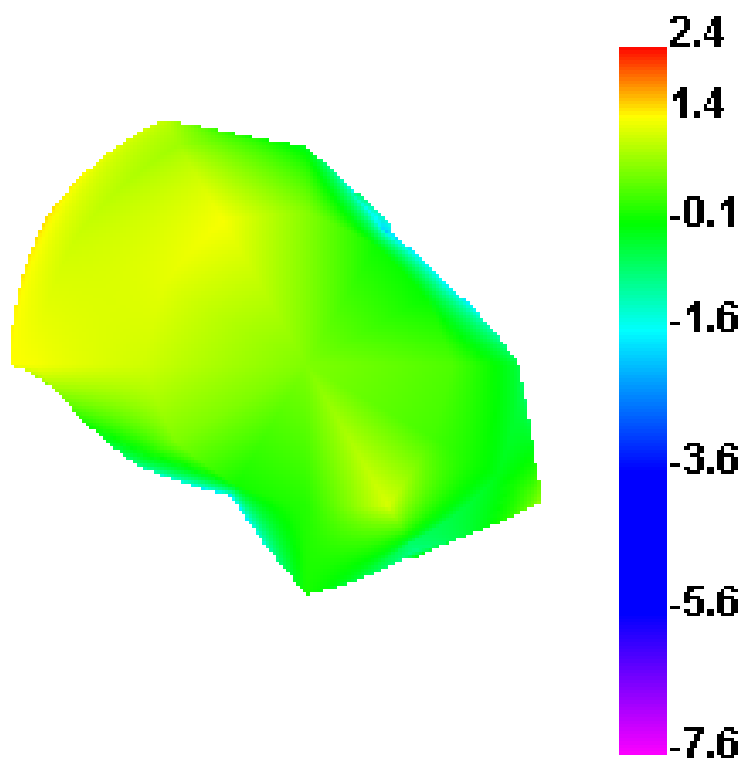
910.000MHz





Radiation Patten For 1438MHz

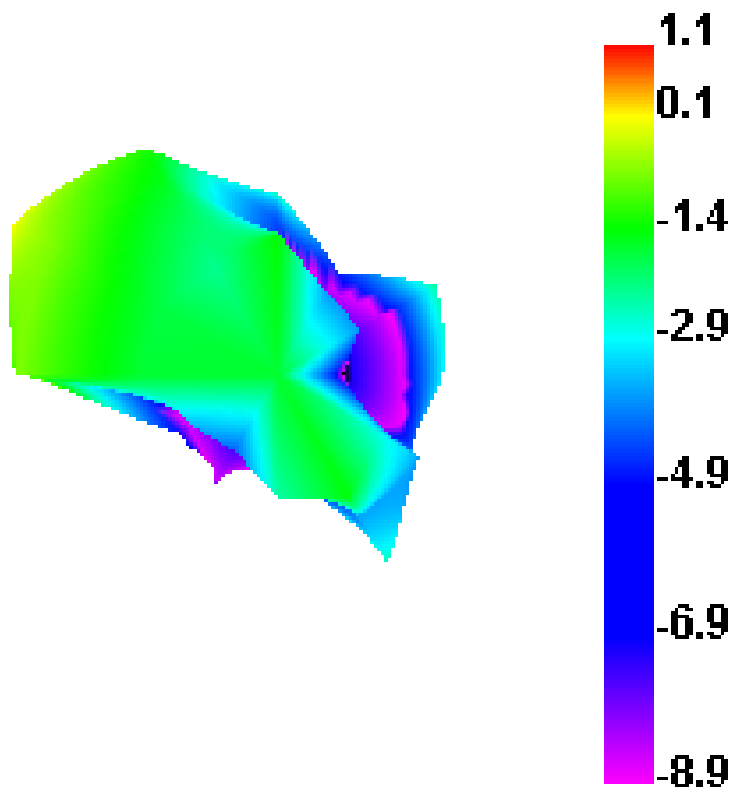
1438.000MHz





Radiation Patten For 2450MHz

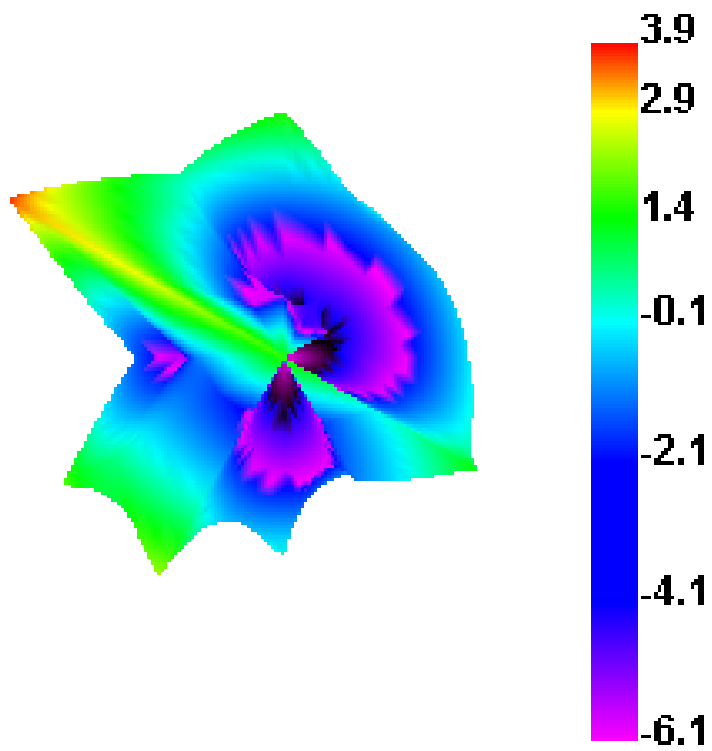
2450.000MHz





Radiation Patten For 5750MHz

5750.000MHz





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

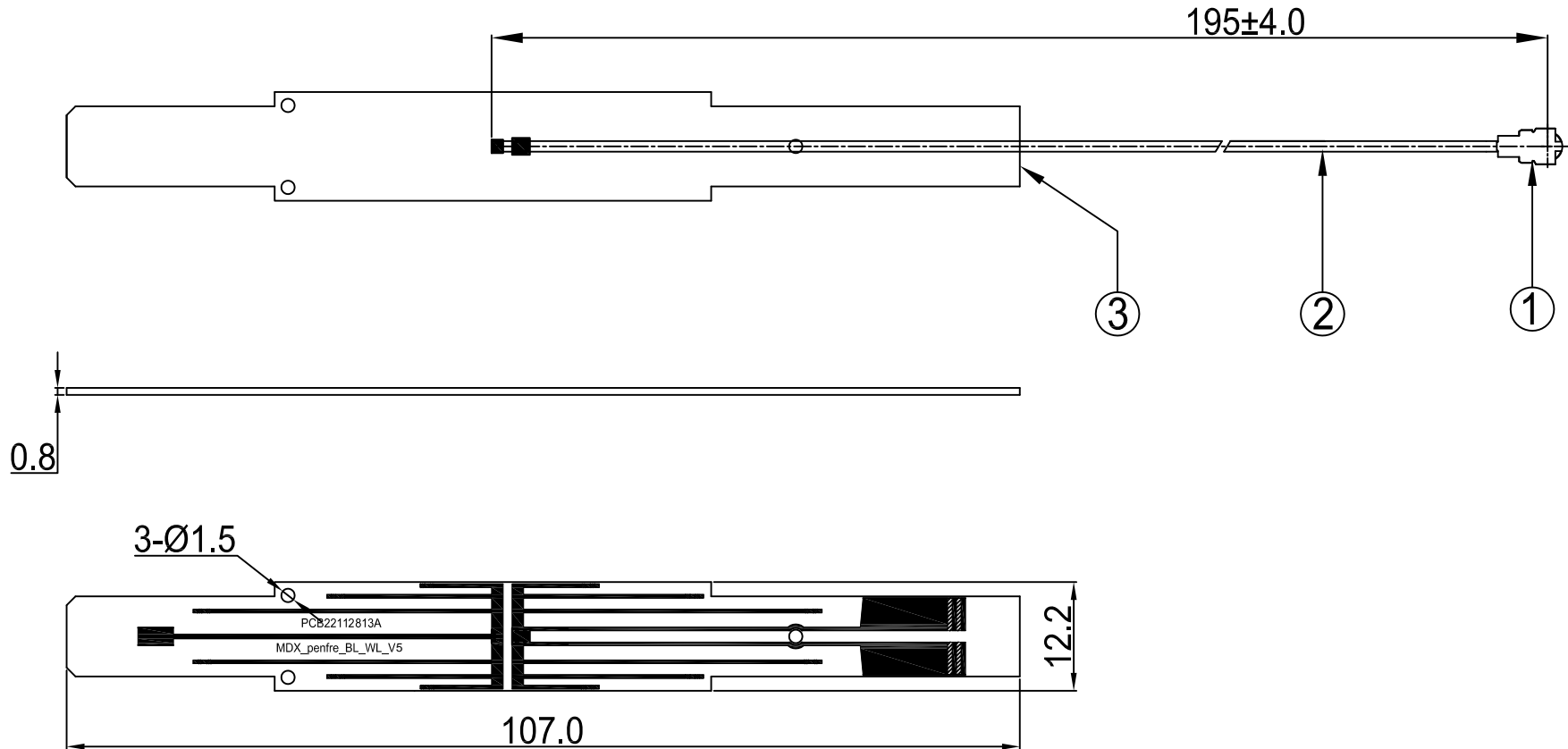
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A


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

PART NAME: RF Antenna			DATE: 2022-10-24	
PART NO.: YJ101.005.070.304A				
APPROVED BY	CHECKED BY	DESIGNED BY	 Tolerance X.X ±0.50 X.XX±0.15 X° ±3°	
殷涛	黄志林	陈兴易		
UNITS: mm SCALE: 1/1 REVISION: A				

NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY
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



天线规格

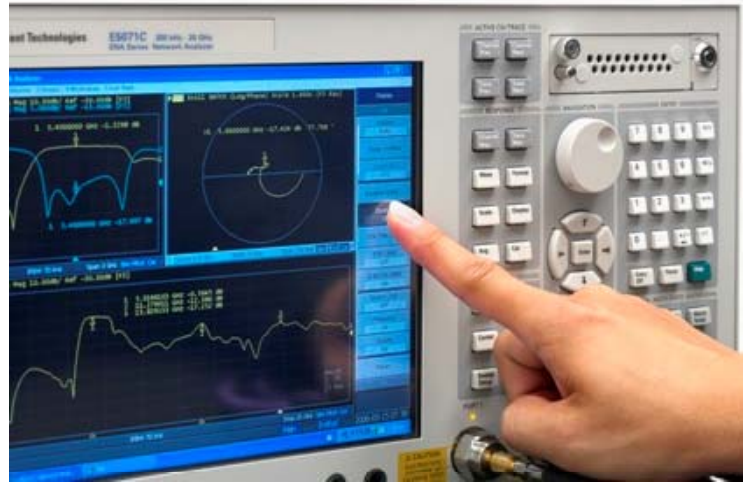
Antenna Specification

Electrical Properties	
Frequency	830-930MHz 1440MHz 2.4-2.5GHz 5.7-5.8GHz
Impedance	50 Ohm Nominal
V.S.W.R	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 4.7 dBi@5.7-5.8GHz
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%

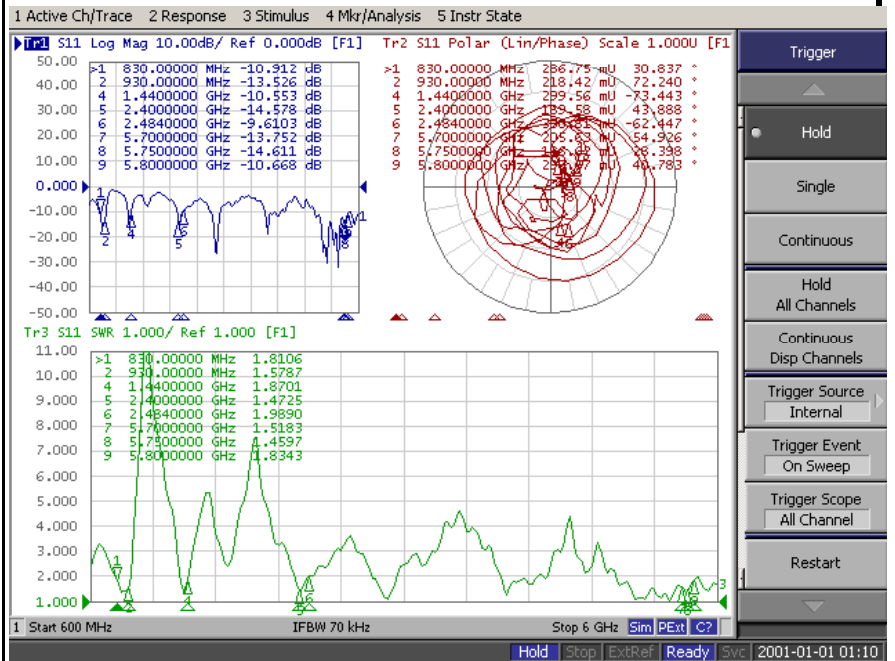


Antenna Performance Test

**Agilent
E5071B**

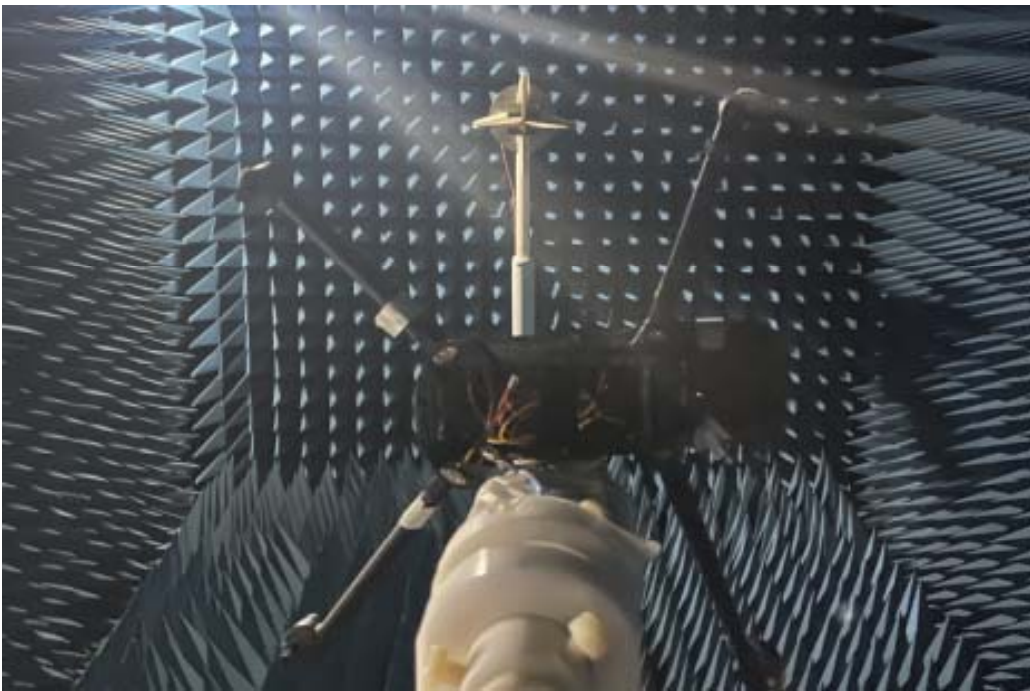


**S
Parameter
Test //
机臂左 BL
Antenna**





Antenna Passive Test





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



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



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



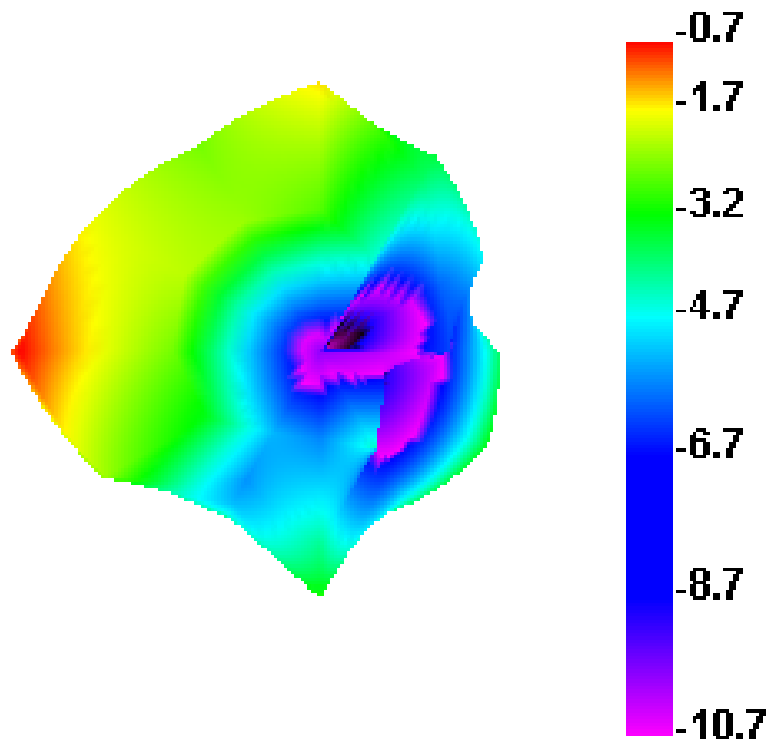
Passive Test For Antenna

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



Radiation Patten For830MHz

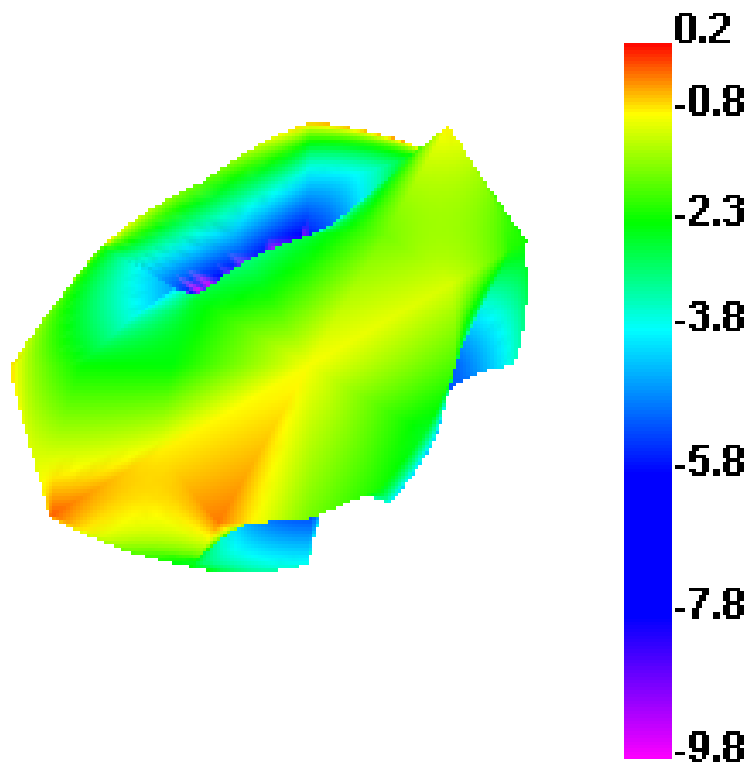
830.000MHz





Radiation Patten For 910MHz

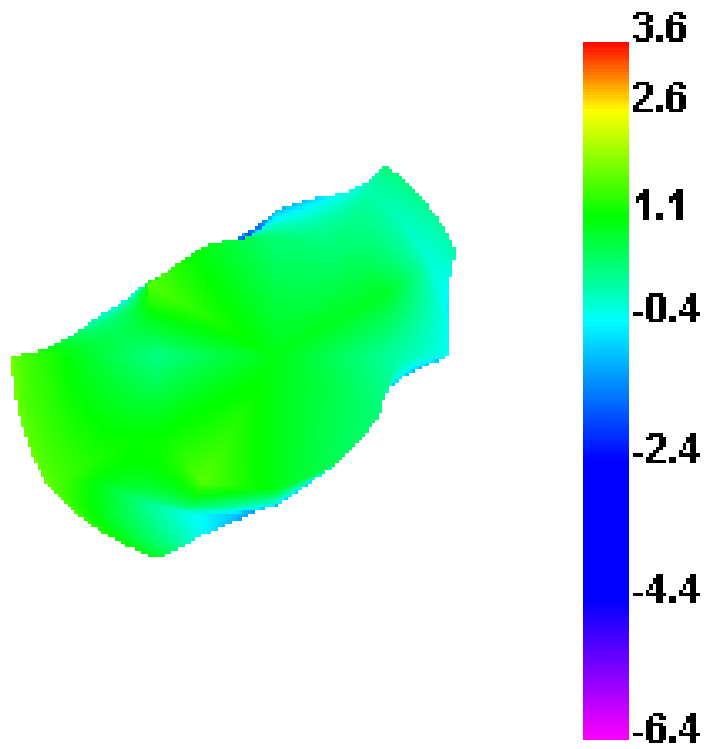
910.000MHz





Radiation Patten For 1438MHz

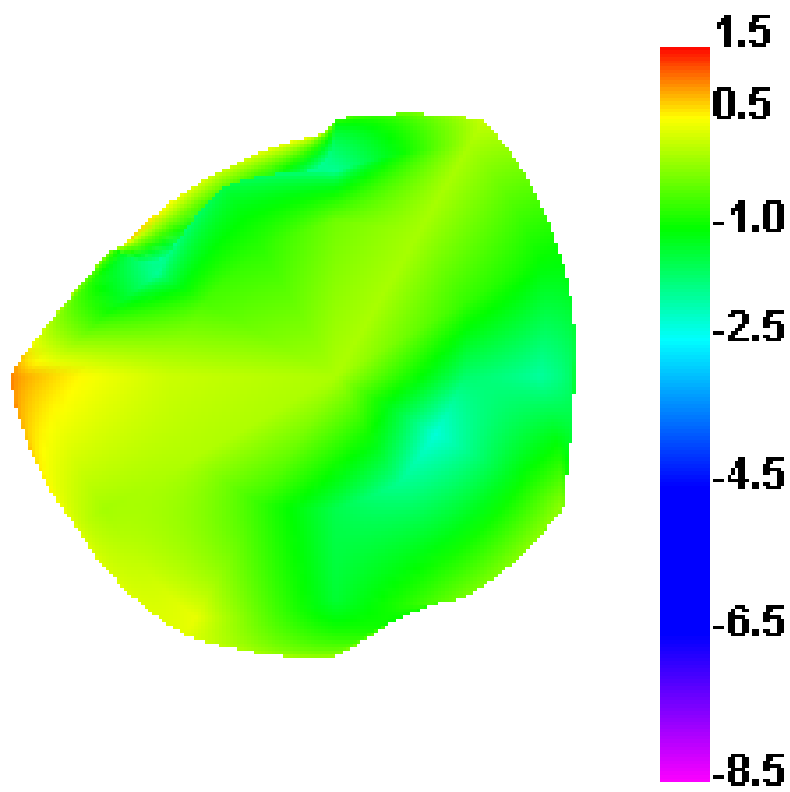
1438.000MHz





Radiation Patten For 2450MHz

2450.000MHz





Radiation Patten For 5750MHz

5750.000MHz

