

零件承認書

Approval Sheet

客戶名称: SYKJ

产品料号: Y.24.07.0063

产品名称: 5.55GHz RogersAntenna

SMA 内螺内孔, L=154MM

天线供应商	翊龙电子科技	
审核	制作人	日期
張禮波	楊興凱	2021.04.05

客戶簽署		
品保	工程	采购

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Manufacturer: Dongguan Yilong Electronic Technology Co., Ltd
Address: Room 1808, Building 6, No. 36 Fuxing Road, Chang'an Town,
Dongguan City, Guangdong Province

1. Revision History

Revision	Date	Change Notification	Description
1.0	2021.04.05	初版	

2. Specification

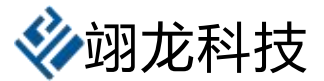
Sample Photo	
	
A. Electrical Characteristics	
Frequency	5150 ~ 5850 MHz
S.W.R.	5.55GHz ≤ 1.5
Antenna Gain	5.94dB
Efficiency(%)	75 % @ 5.550 GHz
Radiation Pattern	Omni- Directional
Max Input Power	≥ 2 W
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	PCB (Rogers)
Connector Type	SMA MALE (反极性 SMA 内螺内孔)
Material of Plastic	Body1: ABS Body2: ABS Body3: POM
Cable Type	RG-178 双银线
Pull Test of SMA	≥3kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

3. Characteristics and Reliability Test

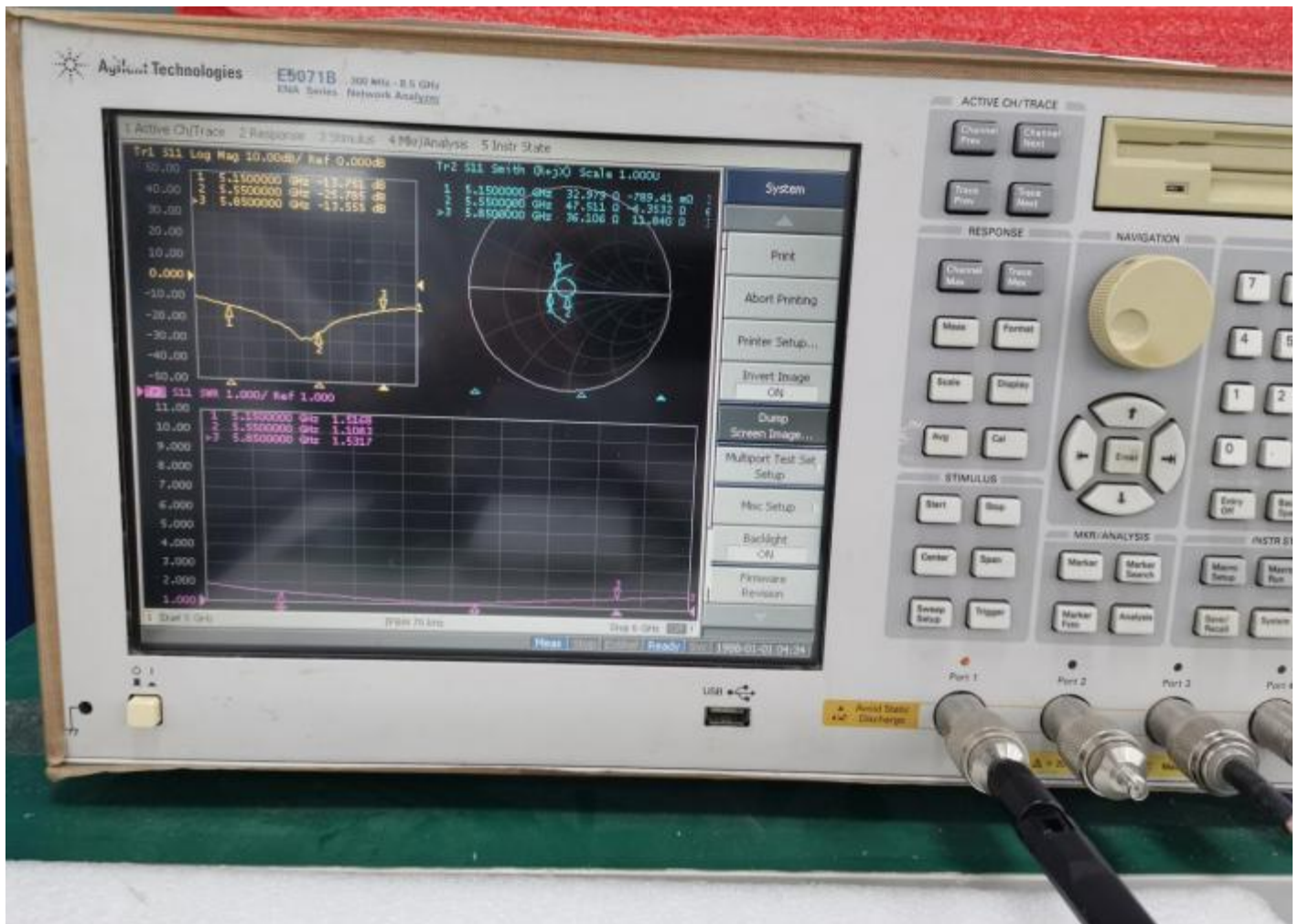
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2011/65/EU
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

Product Number: YL-AN5550-15S01BRS

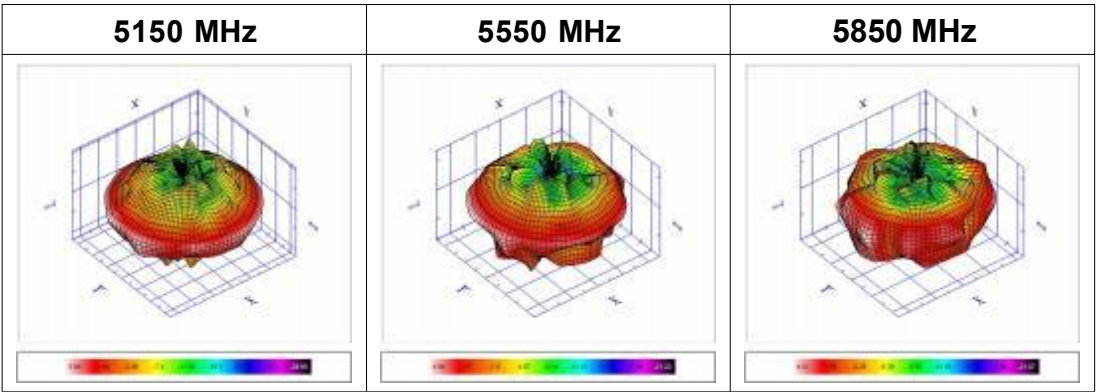
Product Name: 5.55G Antenna



4. Antenna - S Parameter Test Data



5. Antenna - Radiation Pattern Test Data



Frequency	5150	5250	5350	5400	5500	5550	5650	5700	5800	5850
TRP (dBn)	-1.64	-1.5	-1.41	-1.62	-1.47	-1.61	-1.64	-1.84	-0.88	-1.55
Peak EIRP (dBn)	5.94	5.73	5.31	4.65	5.23	4.94	4.36	4.64	4.91	4.01
NHPRP +/- 45 (degree)	-1.76	-1.63	-1.55	-1.78	-1.66	-1.82	-1.9	-2.15	-1.21	-1.9
NHPRP +/- 30 (degree)	-2.09	-1.99	-1.9	-2.15	-2.07	-2.27	-2.39	-2.61	-1.61	-2.36
E-Theta Peak Gain (dBi)	-7.07	-8.2	-8.5	-7.95	-6.38	-7.58	-5.31	-6.53	-5.6	-5.56
E-Phi Peak Gain (dBi)	5.94	5.72	5.29	4.63	5.23	4.83	4.32	4.54	4.9	3.94
E-Total Peak Gain (dBi)	5.94	5.73	5.31	4.65	5.23	4.94	4.36	4.64	4.91	4.01
Directivity (dBi)	7.58	7.23	6.72	6.27	6.7	6.54	6	6.47	5.78	5.56
Efficiency (%)	68.54	70.78	72.3	68.82	71.24	69.08	68.54	65.52	81.71	70.04

RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

電氣特性

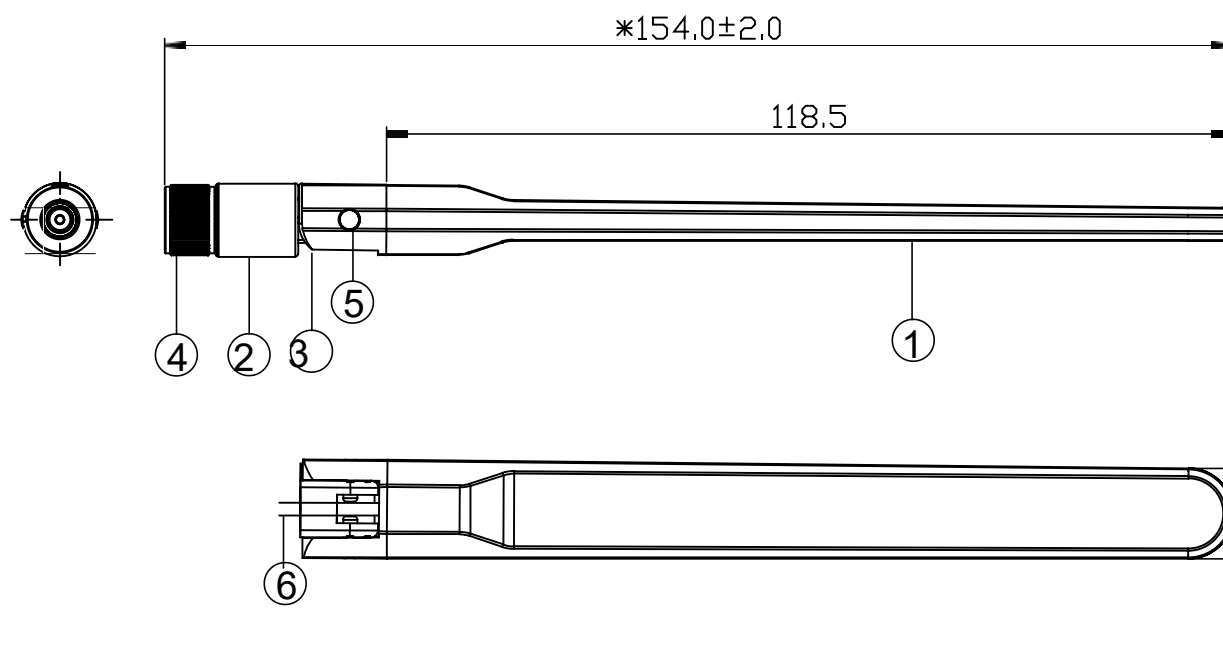
頻率範圍	5150~5850MHz
V.S.W.R	5.55GHz±1.5
最大增益	5dBi

機構特性

拉力	全3Kgf
扭力	300~800gf.cm
防水	N/A

環境測試

鹽霧測試	溫度:35. C; 濕度:95%; 鹽水濃度:5%; 時間:24H
恒溫恒濕測試	80. C/12H;40. C/12H; 濕度:90%; 時間:24H
冷熱衝擊測試	-40. C/30' to +80. C/30'; 過期:24
老化測試	80. C; 時間:24H



Note:

1. Take " * " is the important dimension.
2. Tolerance: Unmarked tolerance refer to the standard tolerance please.

6	R-RG178	CVBLE	双银线	L=45MM, 透明红	1
5	Body-4	转轴	POM	黑色	2
4	RP-SMA -J	SMA内螺内孔	CU	电着黑色	1
3	Body-3	连接筒	ABS	黑色	1
2	Body-2	连接头	ABS	黑色	1
1	Body-1	天线塑胶本体	ABS	黑色	1
No.	Part Number	Description	Material	Finished	Q'ty

东莫市翅龙电子科技有限公司

TITLE: 5.55GHz Antenna

PART NO.: YL-AN5550- 15S01BRS

CUSTOMER P/N: /

APP BY	CHK BY	RF BY	DES BY		Tolerance
			ZLB	UNITS: mm	X.X ±0.3
			2021.04.05	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X. ±1

产品包装规范

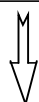
PACKING CRITERION

Date: 2021.04.05

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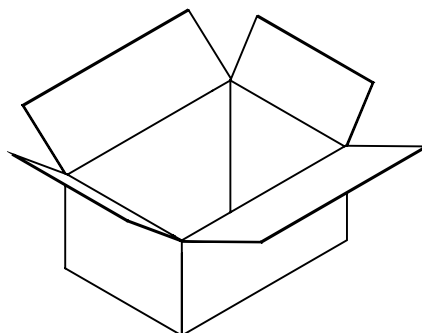
Part Number : YL-AN5550- 15S01BRS	Revision : A
Name: 5.55GHz Antenna	Customer : ALL

1.Enter the PE Bag 。



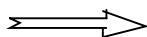
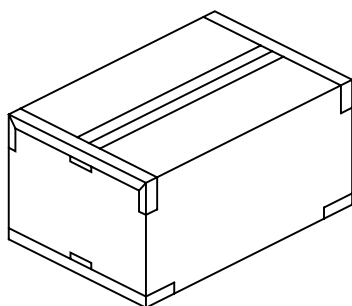
50/PE Bag

2.PACKING 。

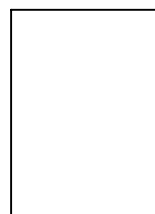


600PCS/BOX

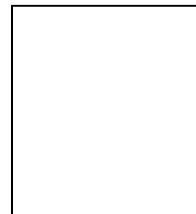
3. SEALING 0



SIDE



FRONT



APPROVED BY : _____ CHECKED BY : _____ DESIGNED BY : ZLB