

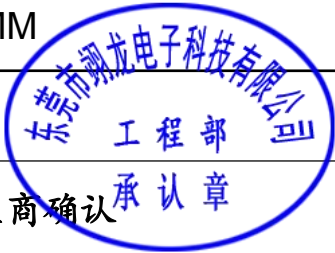
零件承認書
Approval Sheet

客戶名称 Customer Name: **SYKJ**

产品料号 Product part number: **Y.24.07.0128**

产品名称 Product name: **5GHz Directional Antenna 定向天线**

MMCX Plug, L=135MM



供应商确认		
审核	制作人	日期
張禮波	楊興凱	2024.12.25

客戶簽署		
品保	工程	采购

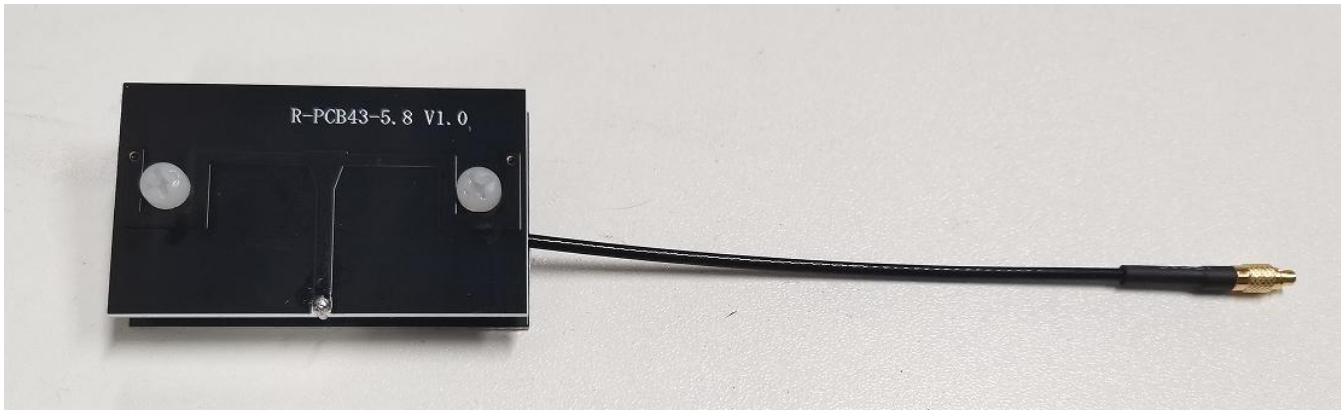
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1. Revision History

Revision	Date	Change Notification	Description
1.0	2024.12.25	First edition	Origin Version(初版)

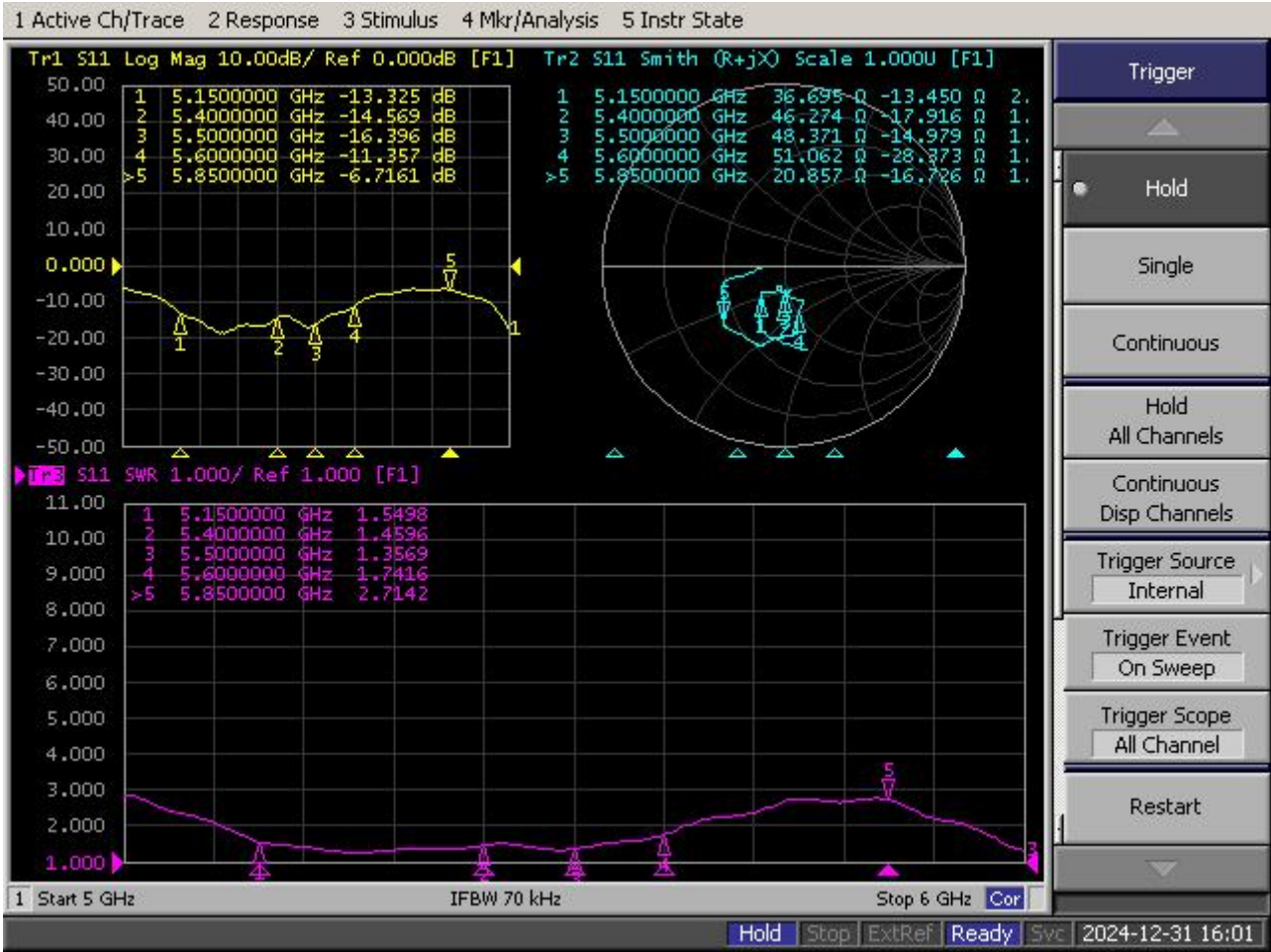
2. Specification

Sample Photo 样品图片	
	
A. Electrical Characteristics 电气特性	
Frequency 频率	5150 ~ 5850 MHz
S.W.R. 驻波比	5.55GHz ≤ 2.0
Antenna Gain 增益	6.0 +/- 0.5 dBi @ 5.550 GHz
Efficiency(%) 效率	68.0% @ 5.550 GHz
Radiation Pattern 辐射方向	Directional
Max Input Power 最大输入功率	≥ 2 W
Polarization 极化	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics 材料和机械特性	
Material of Radiator 材料	PCB
Connector Type 连接器类型	MMCX PLUG
Material of Plastic 塑料材质	Support: ABS NUT: Nylon
Cable Type 线材类型	RG-178 Black
Pull Test of MMCX 连接器拉力	≥1.5kg
C. Environmental 环境	
Operation Temperature 使用温度	- 40 °C ~ + 65 °C
Storage Temperature 储存温度	- 40 °C ~ + 80 °C
Antenna Color Storage life 天线颜色寿命	< 2 year

3. Characteristics and Reliability Test

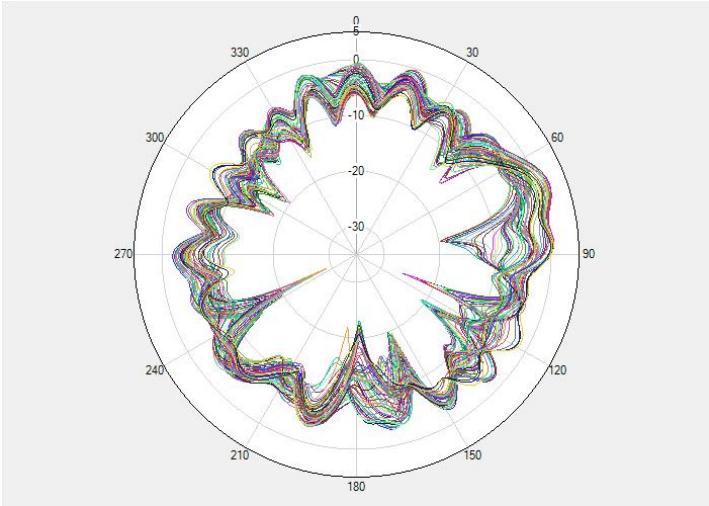
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 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

4. Antenna - S Parameter Test Data

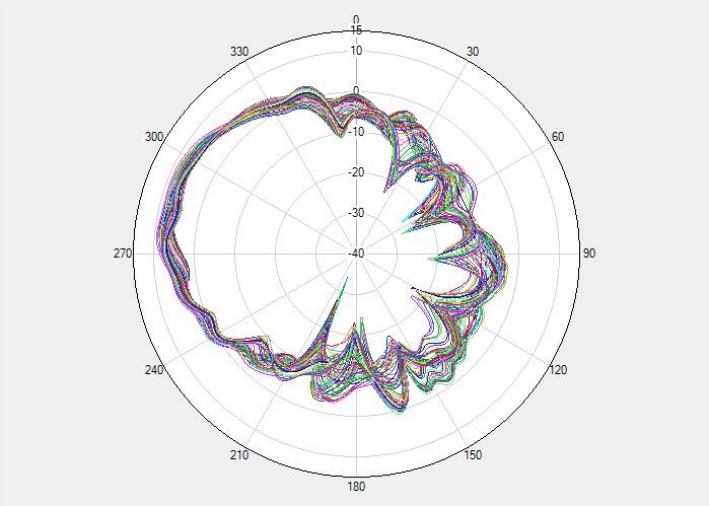


5. Antenna - Radiation Pattern Test Data

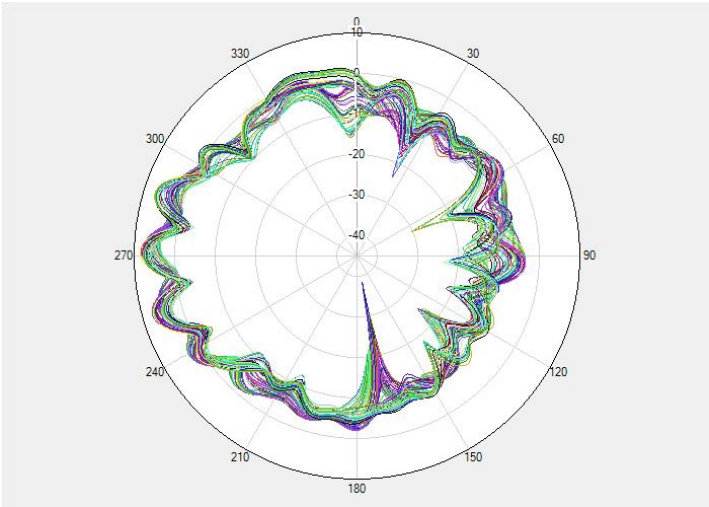
2D



Phi 0 Etotal dB

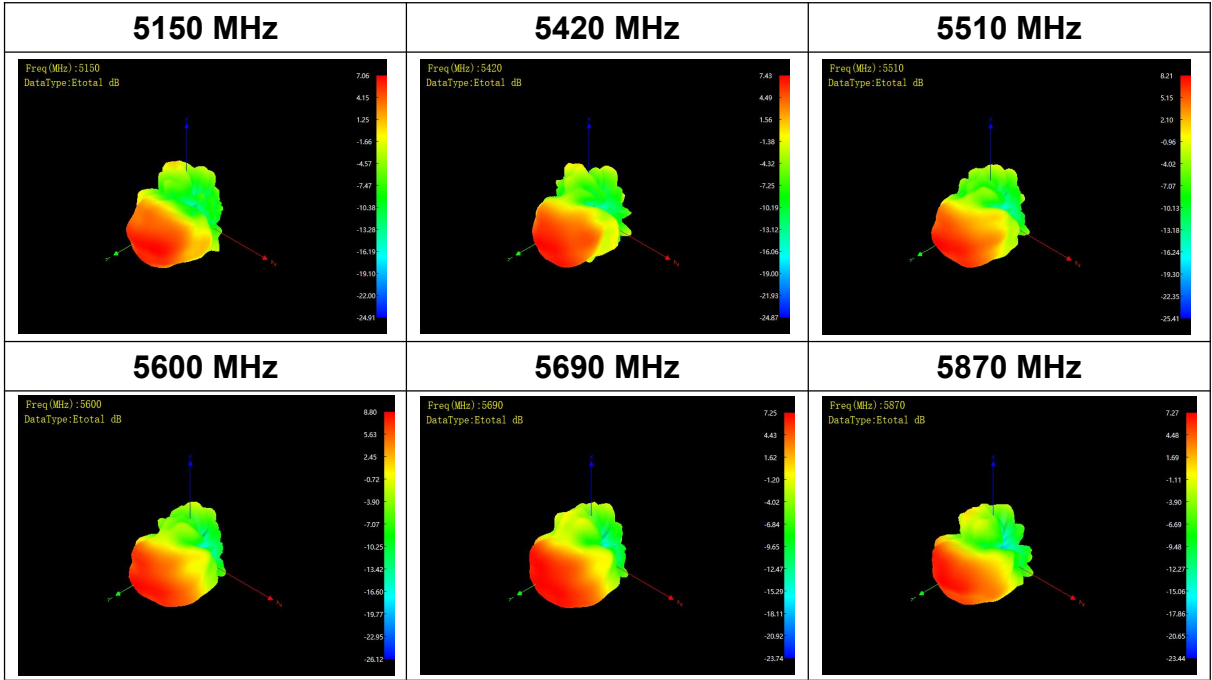


Phi 90 Etotal dB



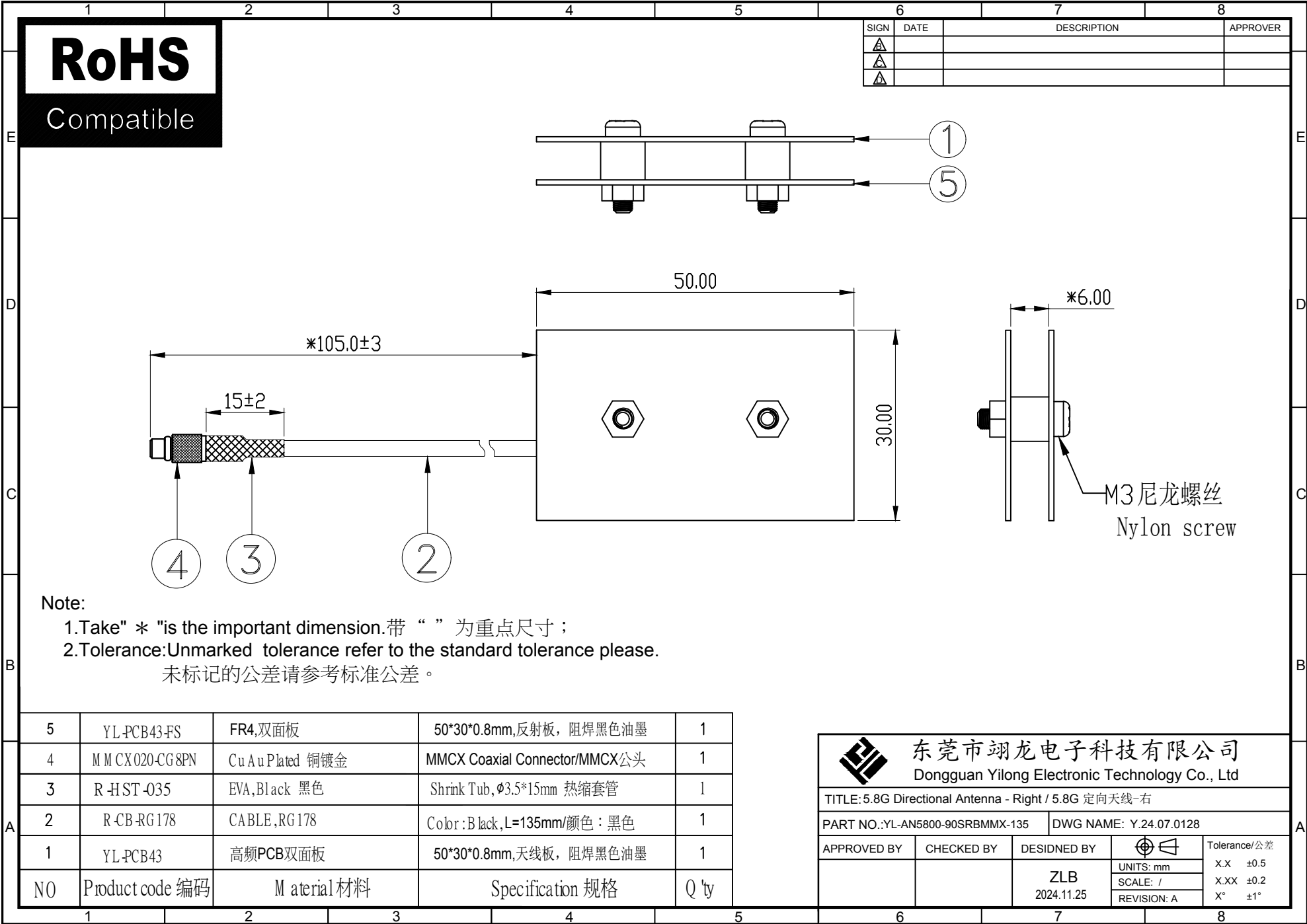
Theta 90 Etotal dB

3D



Gain & Efficiency

Frequency(MHz)(频率)	5150	5240	5330	5420	5510	5600	5690	5780	5870
Gain(dBi)(最大增益)	6.85	6.74	6.94	7.15	7.32	7.16	7.20	6.98	7.10
Efficiency(%) (效率%)	59.57	57.28	59.02	60.12	65.37	68.54	60.38	54.67	52.61



RoHS
Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

Note:

- 1.Take " * "is the important dimension.带 “ ” 为重点尺寸；
2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
未标记的公差请参考标准公差。

5	YL-PCB43-FS	FR4,双面板	50*30*0.8mm,反射板,阻焊黑色油墨	1
4	M M CX020-CG8PN	Cu Au Plated 铜镀金	MMCX Coaxial Connector/MMCX公头	1
3	R -HST -035	EVA,Black 黑色	Shrink Tub,Φ3.5*15mm 热缩套管	1
2	R -CB -RG178	CABLE,RG178	Color :Black,L=135mm/颜色：黑色	1
1	YL-PCB43	高频PCB双面板	50*30*0.8mm,天线板,阻焊黑色油墨	1
NO	Product code 编码	M aterial 材料	Specification 规格	Q 'ty

东莞市翊龙电子科技有限公司 Dongguan Yilong Electronic Technology Co., Ltd				
TITLE: 5.8G Directional Antenna - Right / 5.8G 定向天线-右				
PART NO.: YL-AN5800-90SRBMMX-135			DWG NAME: Y.24.07.0128	
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance/公差
		ZLB	UNITS: mm	X.X ±0.5
		2024.11.25	SCALE: /	X.XX ±0.2
			REVISION: A	X° ±1°