

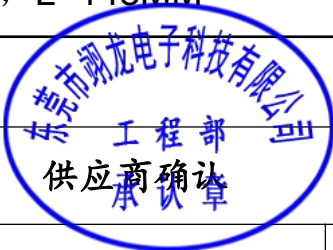
零件承認書
Approval Sheet

客戶名称 Customer Name: SYKJ

产品料号 Product part number: Y.24.07.0123

产品名称 Product name: FPC Antenna

WIFI Antenna, L=148MM



审核	制作人	日期
張禮波	楊興凱	2024.12.26

客戶簽署		
品保	工程	采购

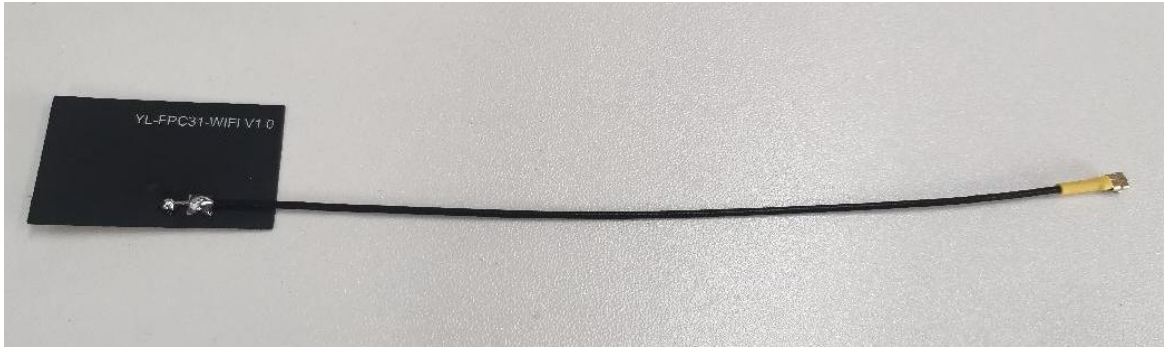
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1. Revision History

Revision	Date	Change Notification	Description
1.0	2024.09.24	First edition	Origin Version(初版)

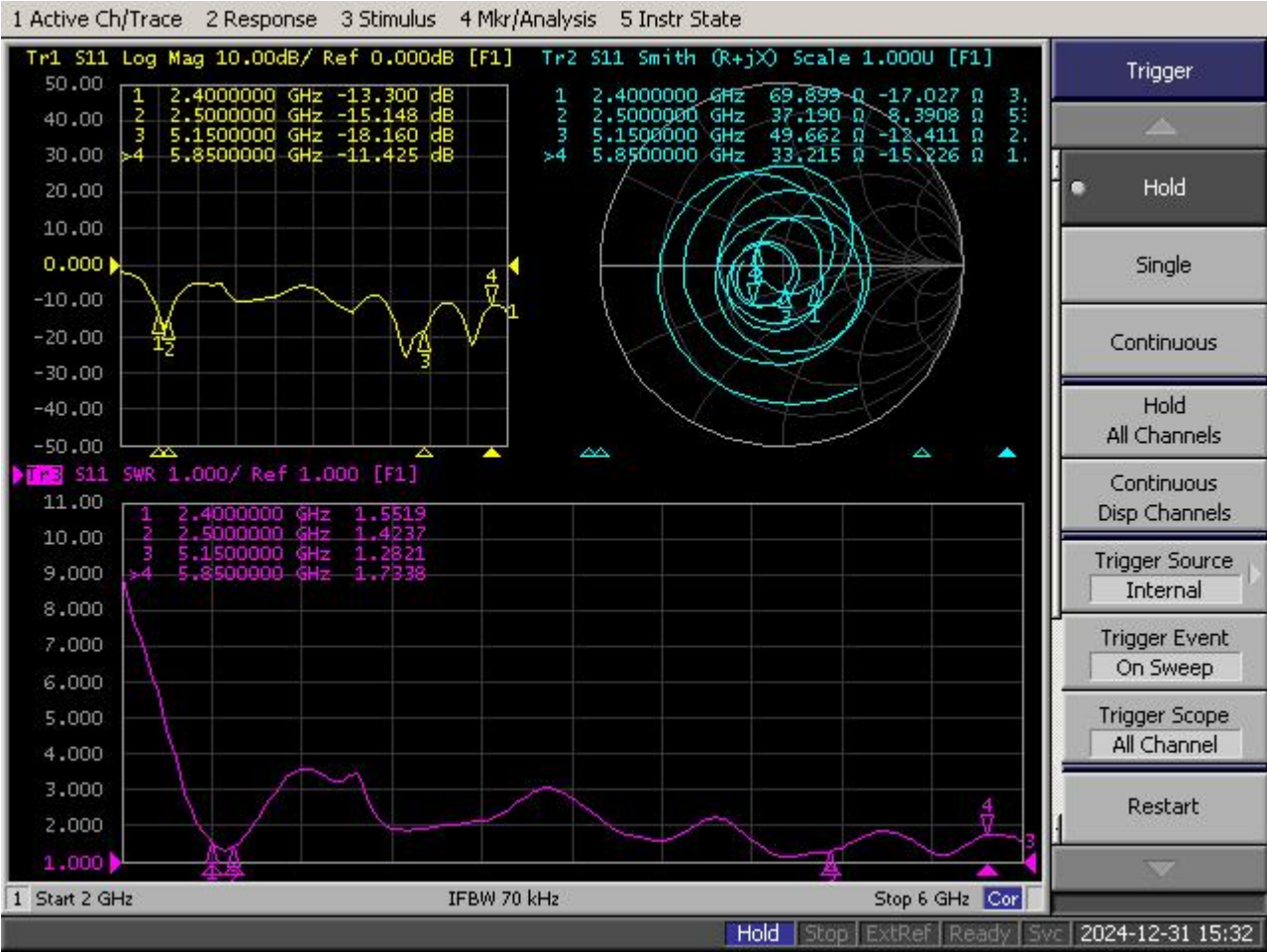
2. Specification

Sample Photo 样品图片	
	
A. Electrical Characteristics 电气特性	
Frequency 频率	2400~2500MHz; 5150~5850MHz
S.W.R. 驻波比	2450MHz<= 2.0(整机测试)
Antenna Gain 增益	3.0±0.5 dBi @
Efficiency(%) 效率	55.0±5 % @
Radiation Pattern 辐射方向图	Omni 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	FPC
Connector Type 连接器类型	MINI CONN I-PEX
Material of Plastic 塑料材质	/
Cable Type 线材类型	RG-113 Black 黑色低损线
Pull Test of I-PEX 连接器拉力	>=1kg
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

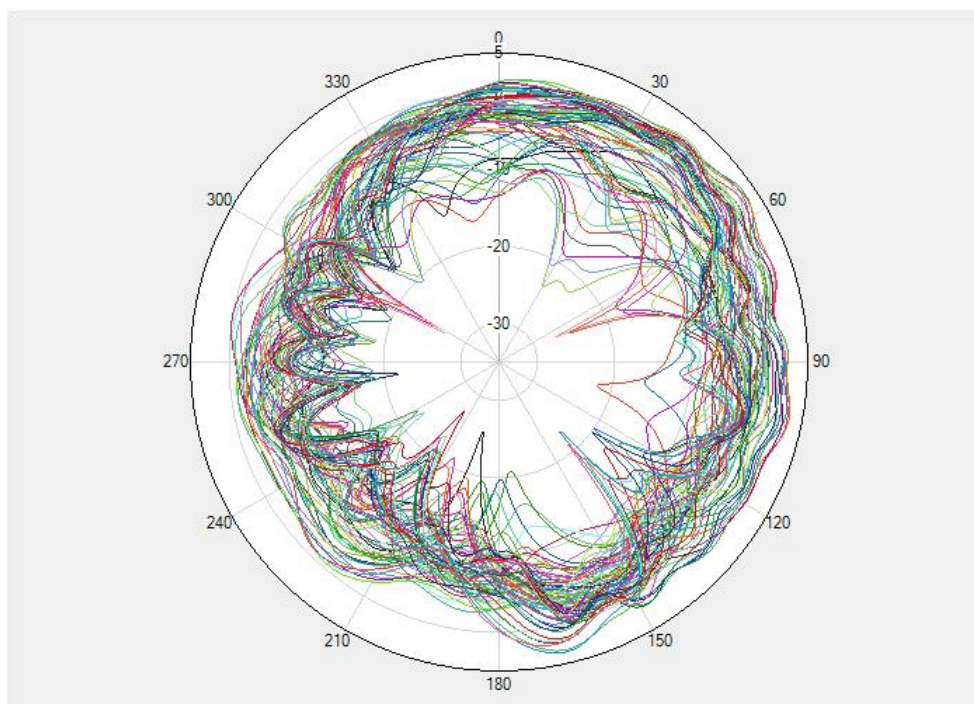
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: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

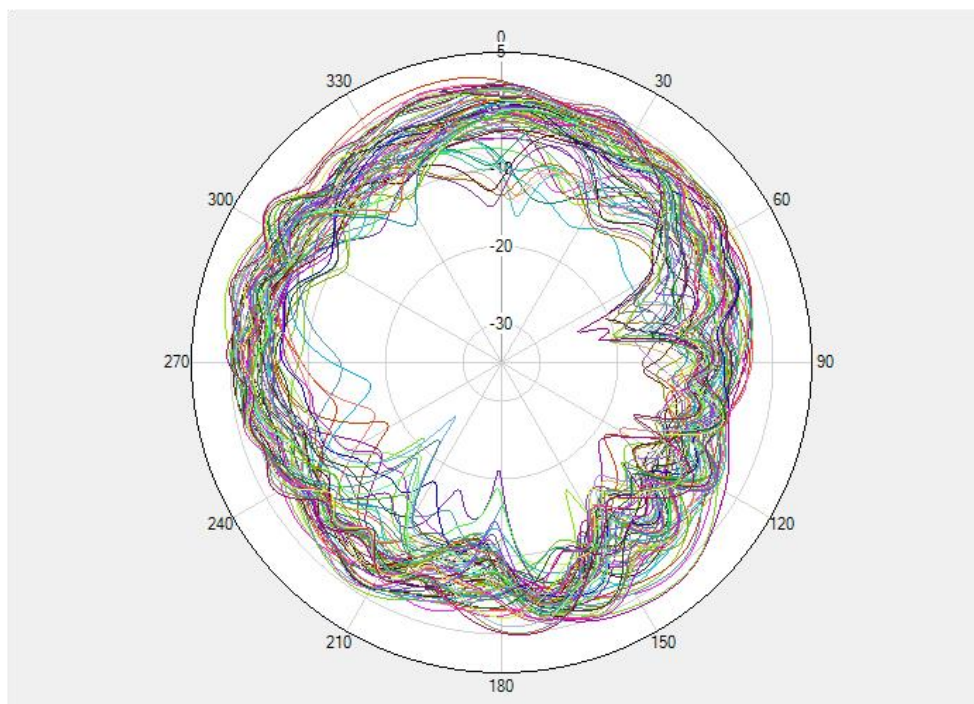


5. Antenna - Radiation Pattern Test Data

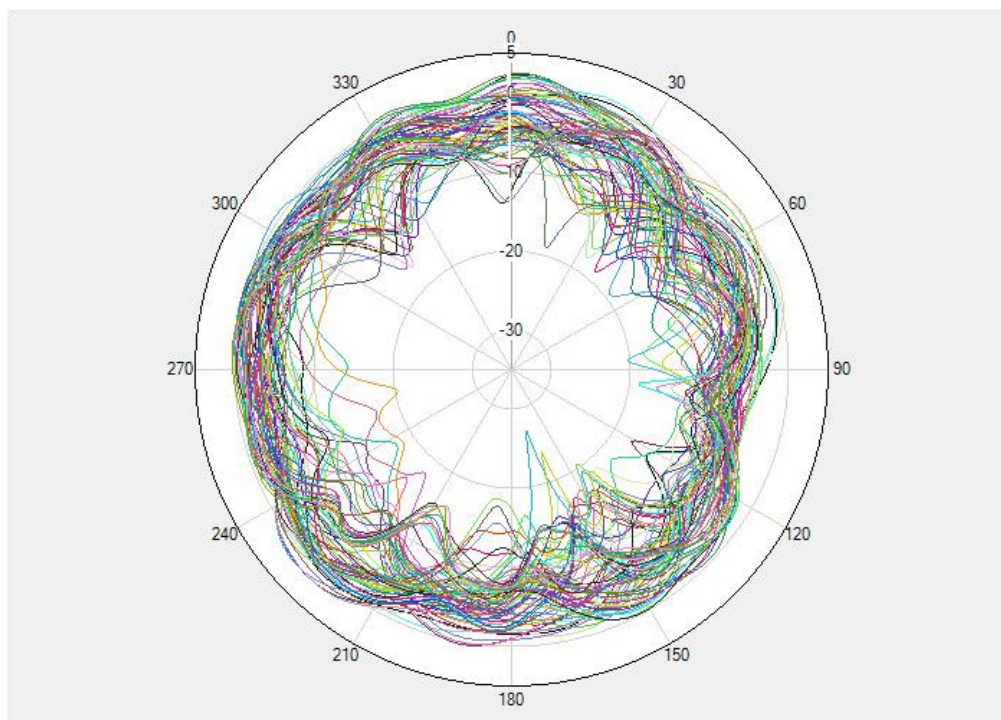
2D



Phi 0 Etot dB

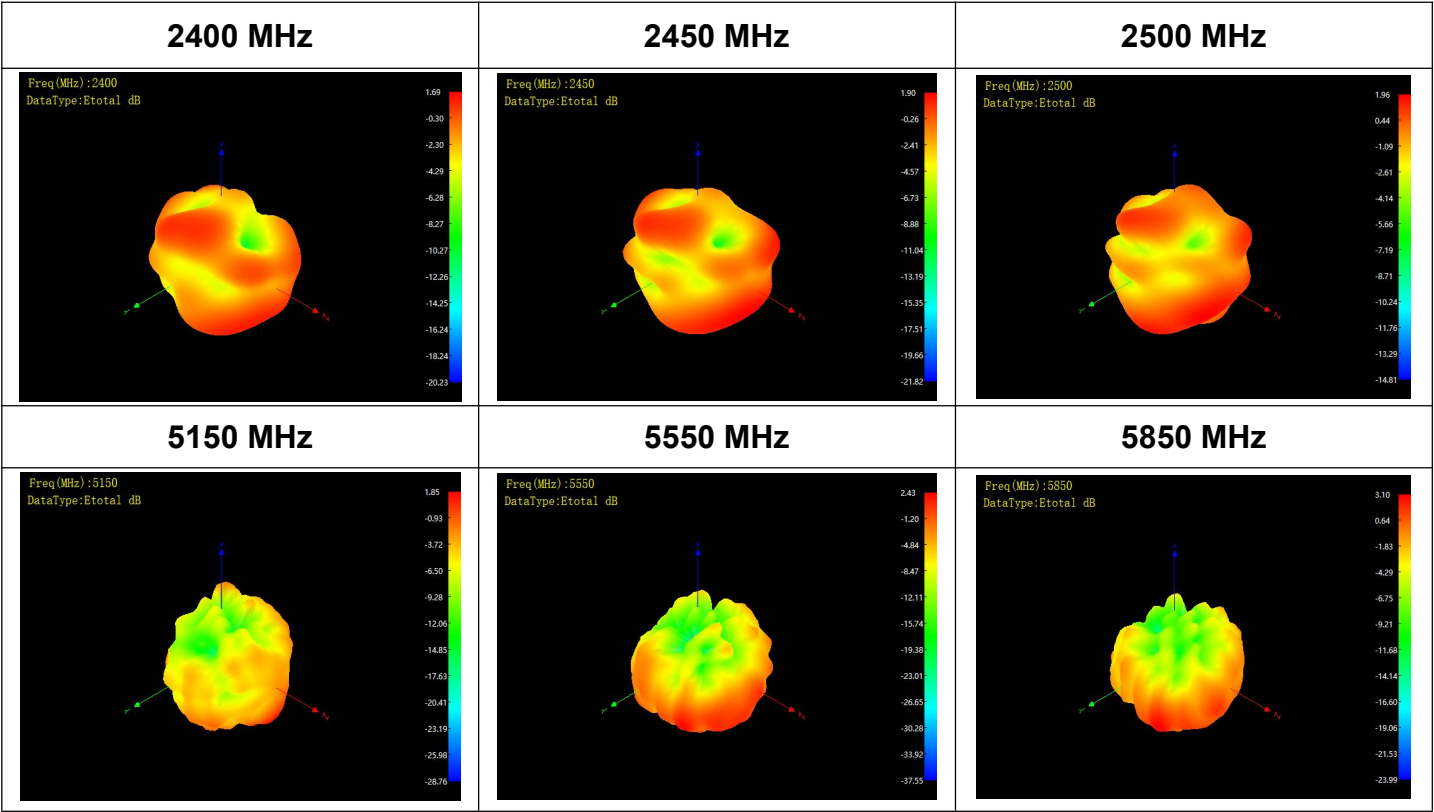


Phi 90 Etot dB



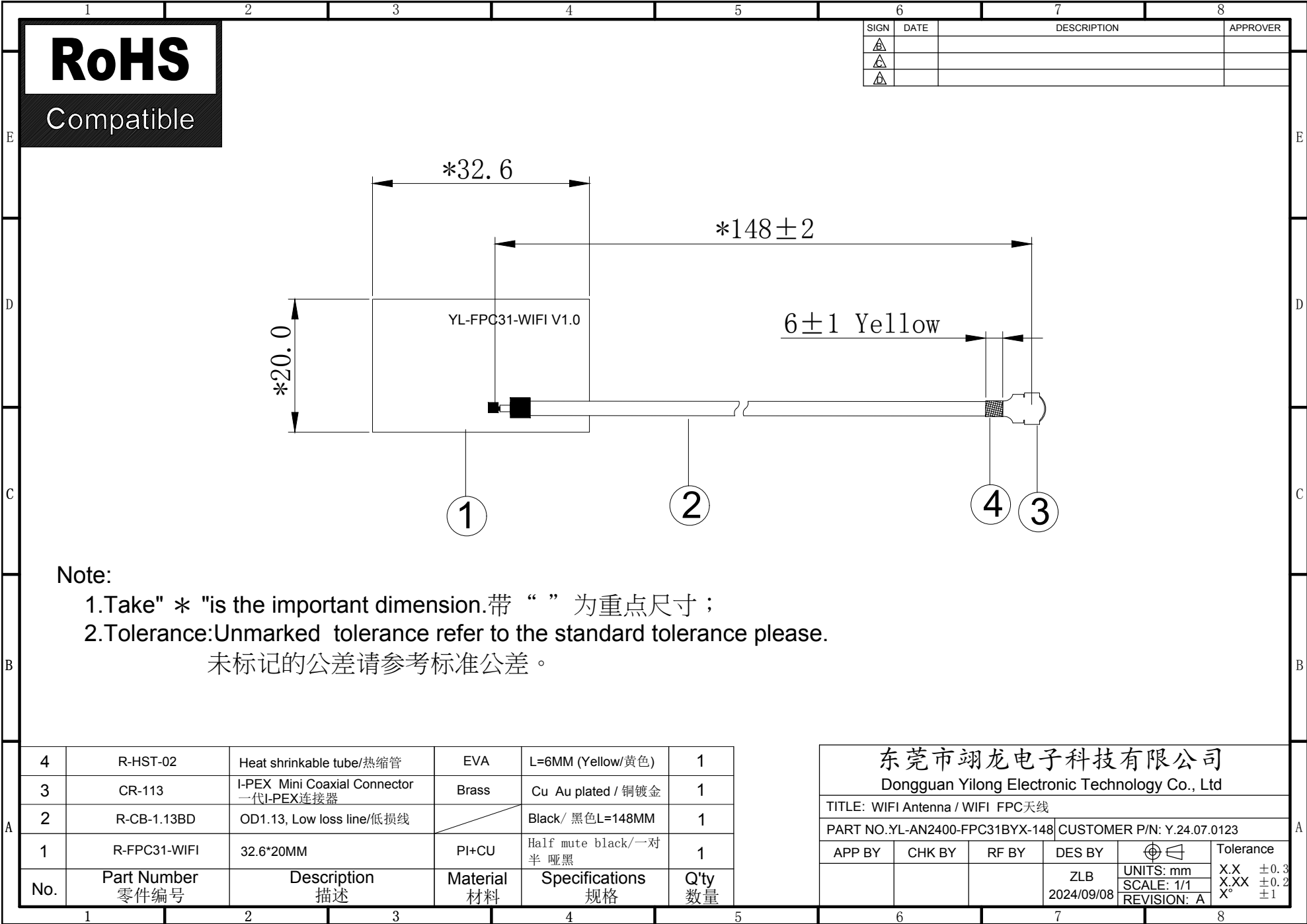
Theta 90 Etot dB

3D



Gain & Efficiency

Frequency(MHz)(频率)	2400	2450	2500	5150	5550	5850
Gain(dBi)(最大增益)	2.34	2.68	2.56	2.52	3.54	3.42
Efficiency(%)(效率%)	52.10	55.49	52.66	48.60	52.15	51.80



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。

4	R-HST-02	Heat shrinkable tube/热缩管	EVA	L=6MM (Yellow/黄色)	1
3	CR-113	I-PEX Mini Coaxial Connector 一代I-PEX连接器	Brass	Cu Au plated / 铜镀金	1
2	R-CB-1.13BD	OD1.13, Low loss line/低损线		Black/ 黑色L=148MM	1
1	R-FPC31-WIFI	32.6*20MM	PI+CU	Half mute black/一对半 哑黑	1
No.	Part Number 零件编号	Description 描述	Material 材料	Specifications 规格	Q'ty 数量

东莞市翊龙电子科技有限公司 Dongguan Yilong Electronic Technology Co., Ltd					
TITLE: WIFI Antenna / WIFI FPC天线					
PART NO.:YL-AN2400-FPC31BYX-148 CUSTOMER P/N: Y.24.07.0123					
APP BY	CHK BY	RF BY	DES BY	⊕	Tolerance
			ZLB 2024/09/08	UNITS: mm SCALE: 1/1 REVISION: A	X.X ±0.3 X.XX ±0.2 X° ±1