



# 东莞市皇捷通讯科技有限公司

DONGGUAD HUANG JIE COMMUNI CAT ION TECHNOLOGY CO.,LTD.

3N0401BK-027

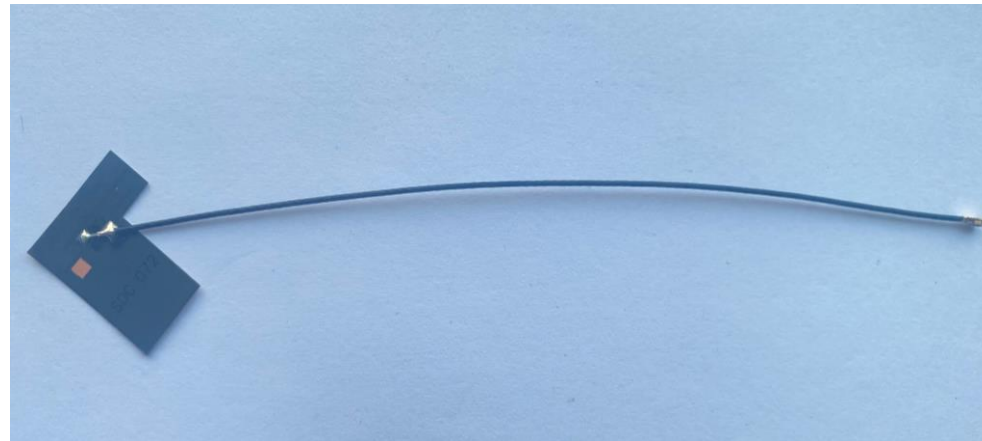
2.4GHz ISM Flexible Polymer

## Key Features

2.4 GHz ISM  
2400-2500 MHz

Embedded Antenna  
Wifi Antenna  
High Performance  
Ground Plane Independent  
Self-Adhesive

Dimensions 22.0 x 18.0mm  
ustomizable Cable and Connecto



## Description

3N0401BK-027 antenna is flexible high efficiency embedded solution covering 2.4 GHz. Antenna can be easily mounted in most devices due to self-adhesive layer and small size. 3N0401BK-027 is omnidirectional, ground plane independent antenna. Cable and connector is upon request.

东莞市皇捷通讯科技有限公司  
地址:广东省东莞市寮步镇泉塘大岷地工业区  
网址:www.iphone-line.com  
电话:0769-83328111      FAX:83327688





## Antenna and electrical specifications

Parameters	2.4GHz ISM Flexible Polymer
Standards	WiFi
Band (MHz)	2.4GHz
Frequency (MHz)	2400-2500 MHz
Return Loss (dB)	-15.6
VSWR	<2.0
Efficiency (%)	40-60
Peak Gain (dBi)	2
Impedance (Ohm)	50
Polarisation	Linear
Radiation Pattern	Omni-Directional
Max. Input Power (W)	25
Connector Type	Most RF Connectors (U.FL Standard)
Cable Length	Any Cable Length (135mm Standard)
Cable Type	Other Cables Available (0.81mm Standard)

### Antenna Measurement Conditions:

Mounted 40x10x0.3 Cm ABS Plastic Plate

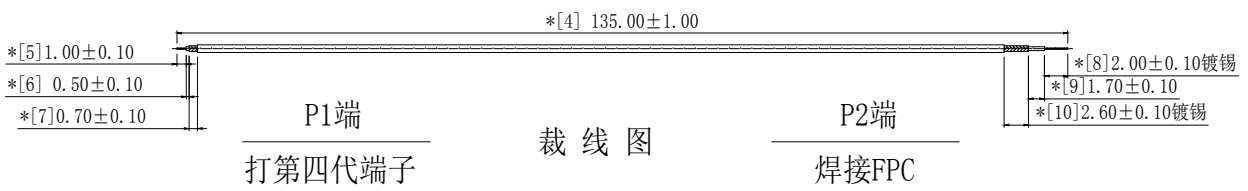
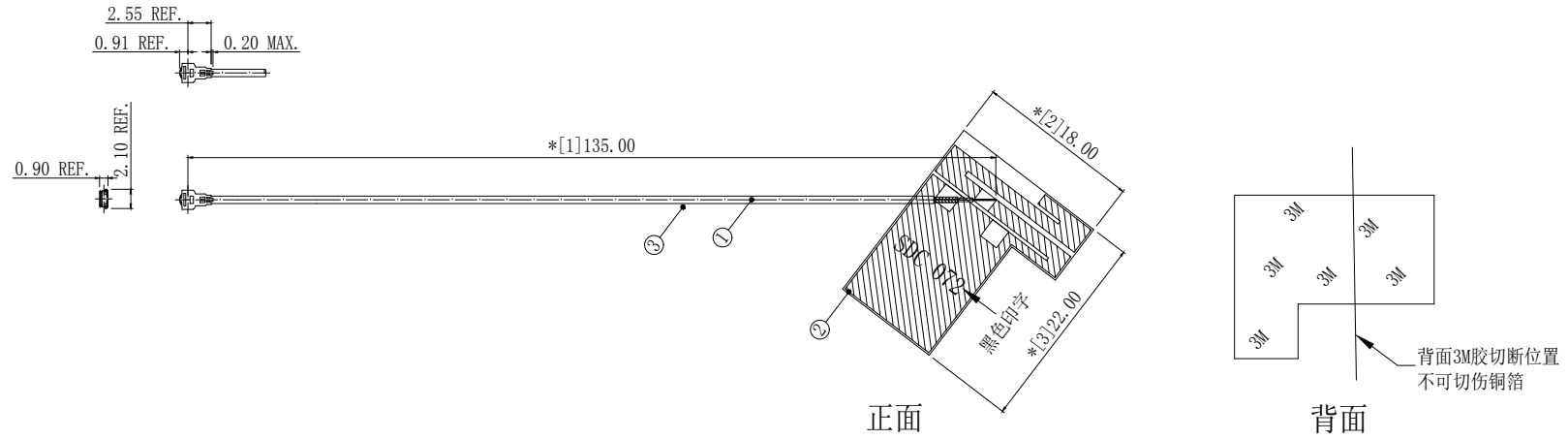
Measured in Certified CTIA 3DAnechoic Chamber



## Mechanical and environmental specifications

Specifications	3N0401BK-027
Mounting Type	Self-Adhesive
Dimensions (mm)	22.0 x 18.0mm
Adhesive Type	3M
Material	Flexible Polymer
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS

6	7	8
REVISION	DESCRIPTION	DATE
A0	首次发行	20. 09. 15
		DRAFTER
		S. He



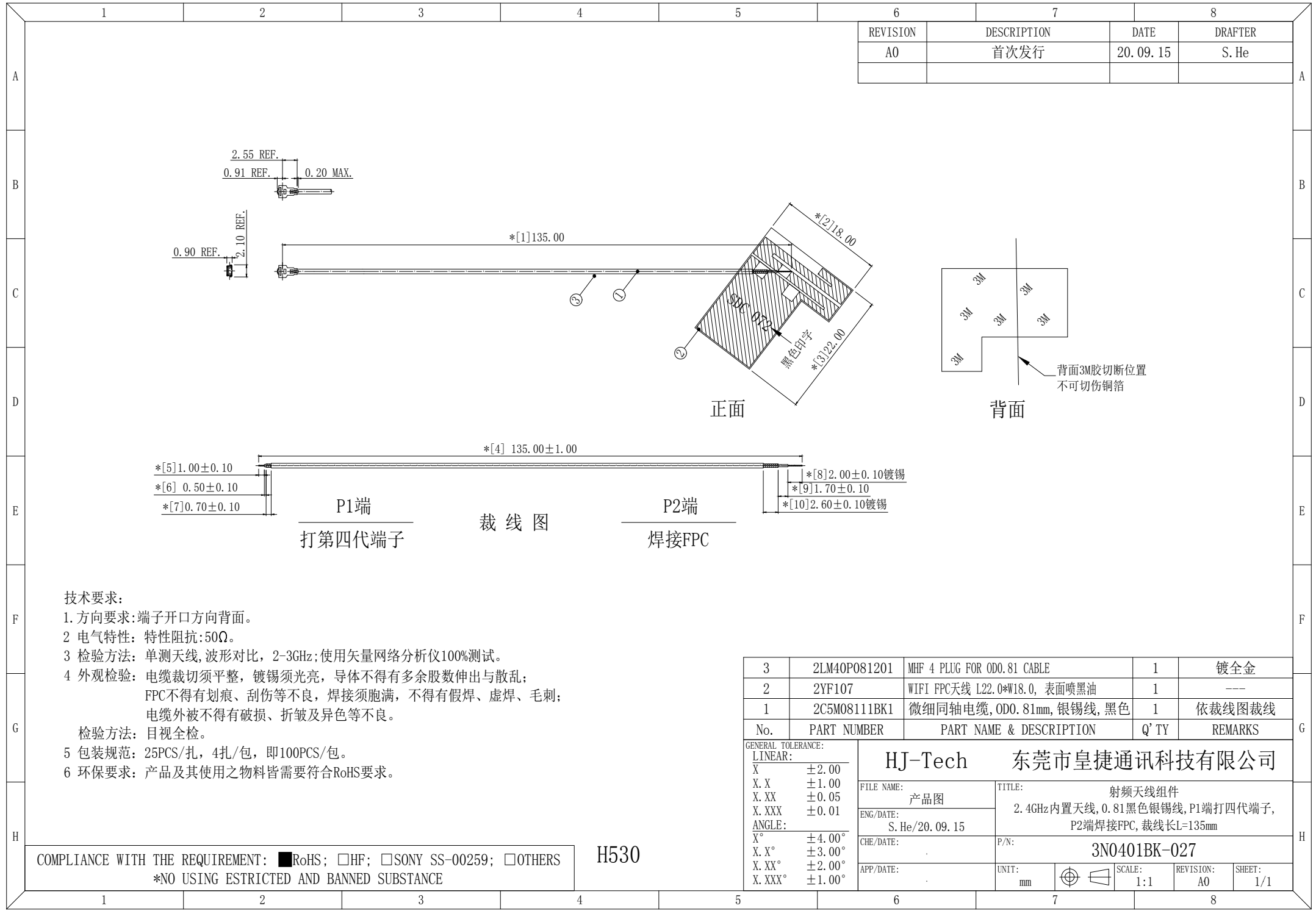
**技术要求:**

1. 方向要求: 端子开口方向背面。
2. 电气特性: 特性阻抗: 50Ω。
3. 检验方法: 单测天线, 波形对比, 2-3GHz; 使用矢量网络分析仪100%测试。
4. 外观检验: 电缆裁切须平整, 镀锡须光亮, 导体不得有多余股数伸出与散乱; FPC不得有划痕、刮伤等不良, 焊接须饱满, 不得有假焊、虚焊、毛刺; 电缆外被不得有破损、折皱及异色等不良。  
检验方法: 目视全检。
5. 包装规范: 25PCS/扎, 4扎/包, 即100PCS/包。
6. 环保要求: 产品及其使用之物料皆需要符合RoHS要求。

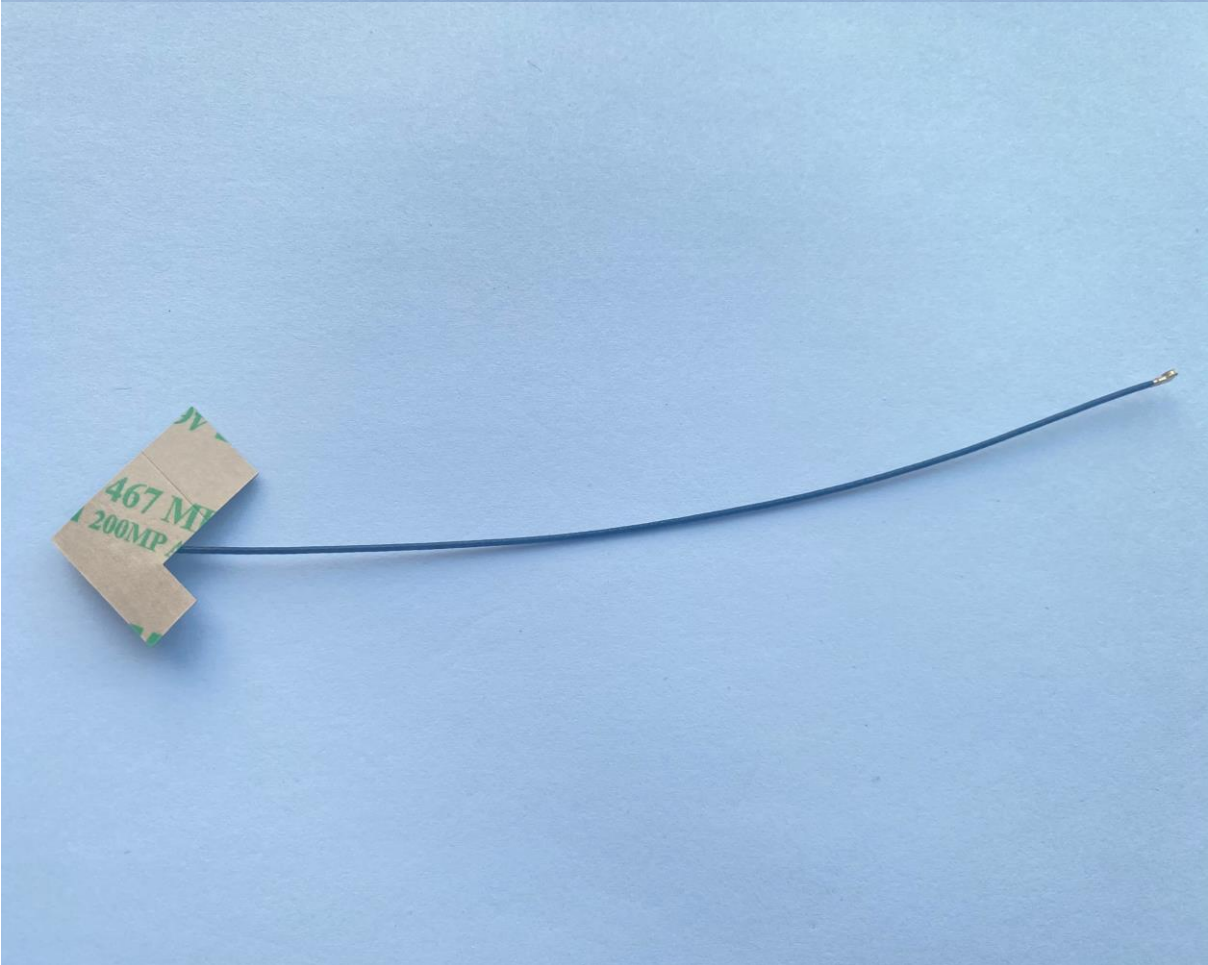
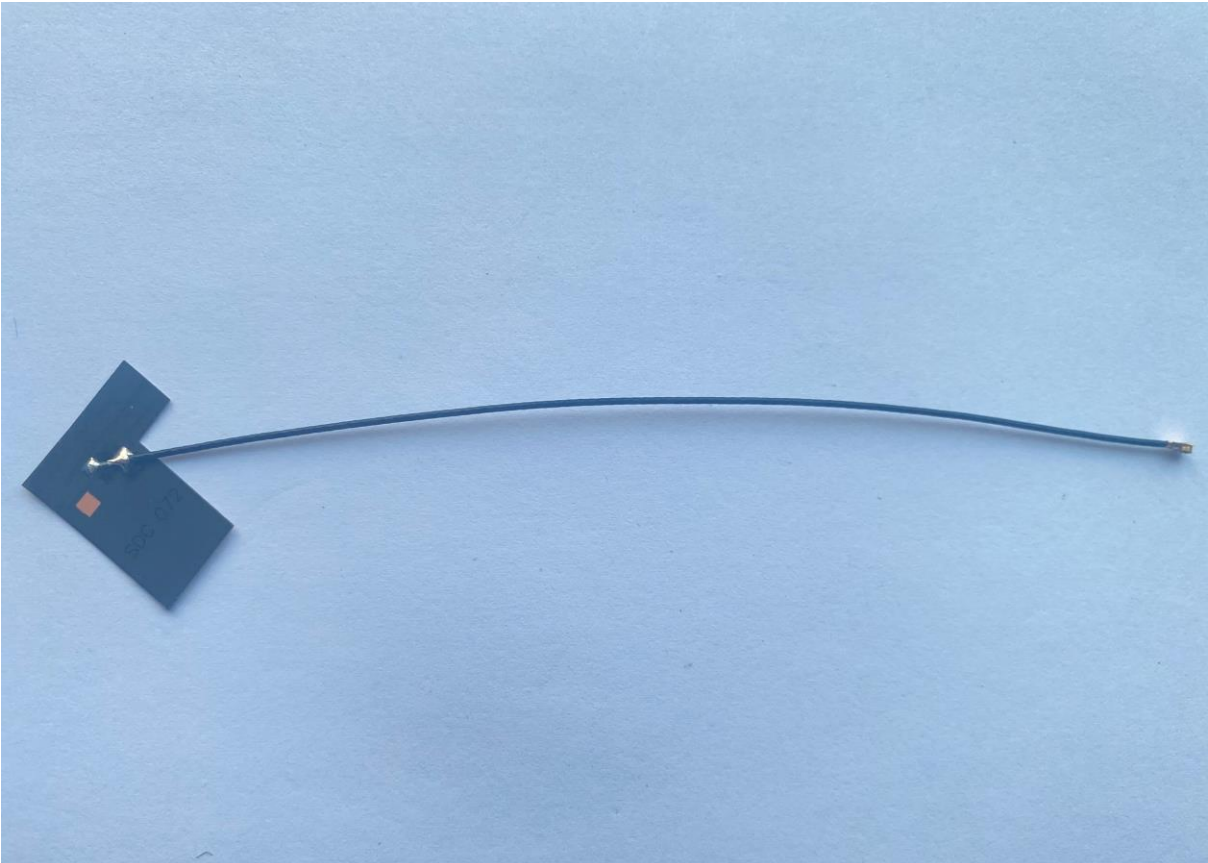
3	2LM40P081201	MHF 4 PLUG FOR ODO.81 CABLE	1	镀全金
2	2YF107	WIFI FPC天线 L22.0*W18.0, 表面喷黑油	1	---
1	2C5M08111BK1	微细同轴电缆, ODO.81mm, 银锡线, 黑色	1	依裁线图裁线
No.	PART NUMBER	PART NAME & DESCRIPTION	Q' TY	REMARKS
GENERAL TOLERANCE:				
LINEAR:				
X	±2.00	HJ-Tech 东莞市皇捷通讯科技有限公司		
X.X	±1.00			
X.XX	±0.05			
X.XXX	±0.01			
ANGLE:				
X°	±4.00°	FILE NAME:	产品图	
X.X°	±3.00°	ENG/DATE:	S. He/20.09.15	
X.XX°	±2.00°	CHE/DATE:	P/N: 3N0401BK-027	
X.XXX°	±1.00°	APP/DATE:	UNIT: mm	SCALE: 1:1
				REVISION: AO
				SHEET: 1/1

COMPLIANCE WITH THE REQUIREMENT: RoHS; HF; SONY SS-00259; OTHERS  
\*NO USING ESTRICED AND BANNED SUBSTANCE

H530



# 实物照片



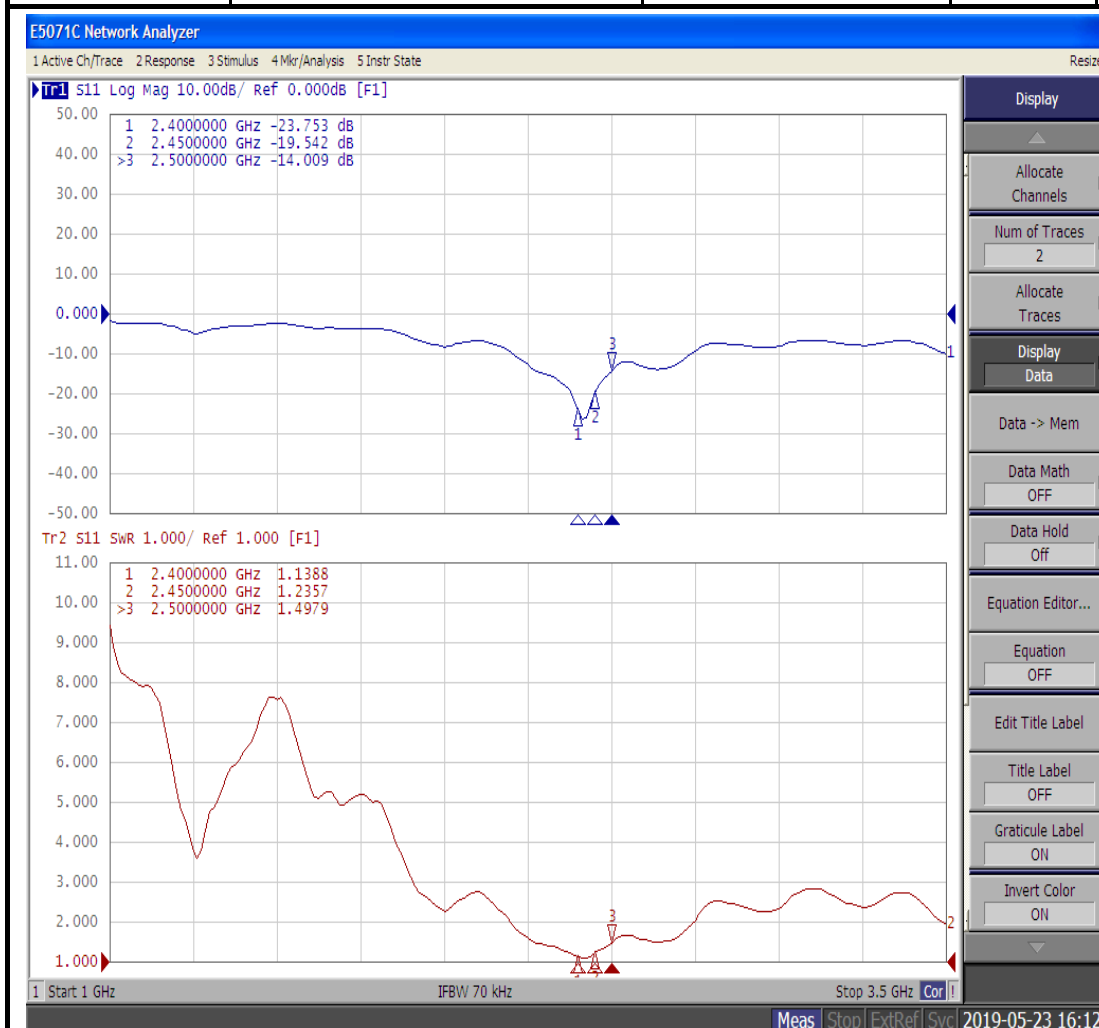


# 天线电气特性测试报告

## Antenna Electrical Characteristic Test Report

文件编号:HJ-QR-Q-22 Rev:A0

产品料号 Part Number:	3N0401BK-027	测试项目 Item	规格 Spec	结果判定 Judge
产品名称 Part Name:	2.4G内置天线	VSWR 驻波比	≤2.0	pass
测试设备 Test Equipment	网络分析仪/微波暗室	Characteristic impedance 特征阻抗	50Ω	pass
数量 Quantity	5pcs	Gain 增益	2dBi	pass
测试日期 Test Date	2019/5/23			



Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-2.96	-3.04	-2.96	-2.66	-2.60	-2.53	-2.44	-2.23	-2.35	-2.38	-2.33
Peak EIRP (dBm)	0.96	0.75	0.96	1.52	1.52	1.29	1.30	1.68	1.59	1.82	1.79
Directivity (dBi)	3.92	3.79	3.92	4.18	4.12	3.82	3.74	3.91	3.94	4.20	4.12
Efficiency (dB)	-2.96	-3.04	-2.96	-2.66	-2.60	-2.53	-2.44	-2.23	-2.35	-2.38	-2.33
Efficiency (%)	50.60	49.60	50.60	54.20	54.90	55.90	57.00	59.90	58.20	57.80	58.50
Gain (dBi)	0.96	0.75	0.96	1.52	1.52	1.29	1.30	1.68	1.59	1.82	1.79

审核Checker: 王俊

测试者Tester: Mark

产品料号

3N0401BK-027

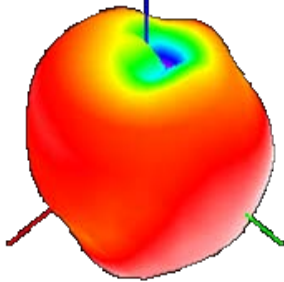
产品名称

2.4GHz 天线

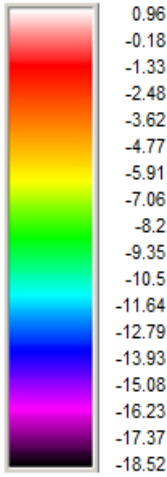
### Radiation

2400.00MHz@T45P45

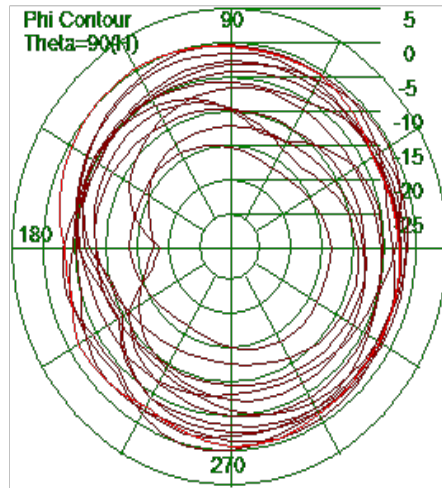
2400 MHz



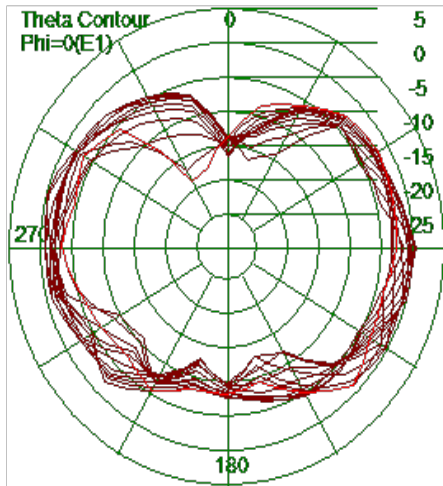
X Axis  
Y Axis  
Z Axis



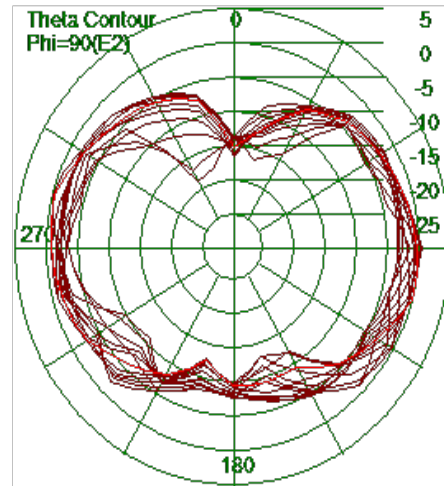
2400 MHz H



2400 MHz E1



2400 MHz E2



审核Checker: 王俊

测试者Tester: Mark



产品料号

3N0401BK-027

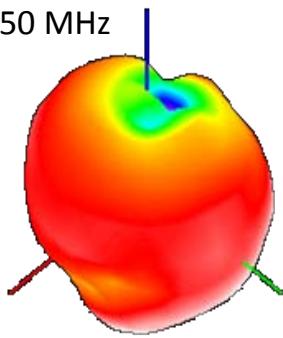
产品名称

2.4GHz 天线

### Radiation

2450.00MHz@T45P45

2450 MHz

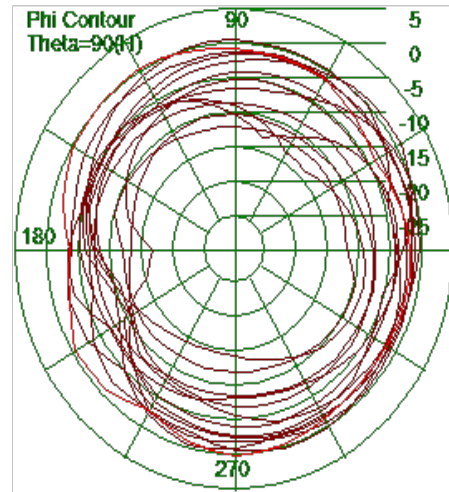


X Axis  
Y Axis  
Z Axis

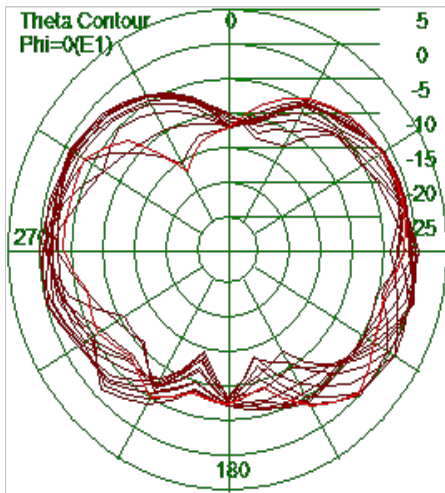


1.29  
0.22  
-0.84  
-1.91  
-2.97  
-4.04  
-5.11  
-6.17  
-7.24  
-8.3  
-9.37  
-10.44  
-11.5  
-12.57  
-13.63  
-14.7  
-15.77  
-16.83

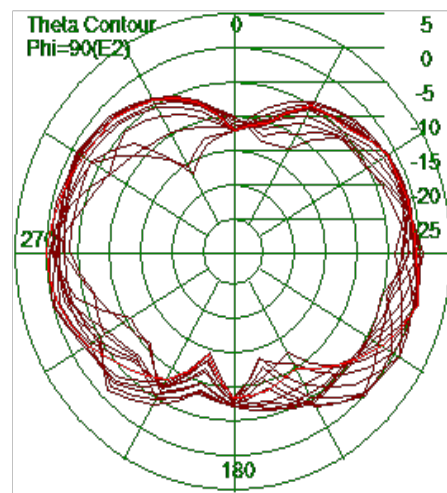
2450 MHz H



2450 MHz E1



2450 MHz E2



审核Checker: 王俊

测试者Tester: Mark



产品料号

3N0401BK-027

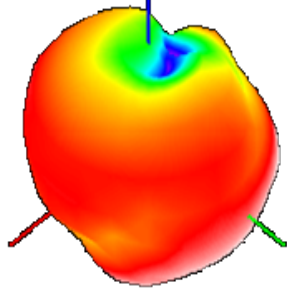
产品名称

2.4GHz 天线

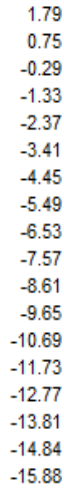
### Radiation

2500.00MHz@T45P45

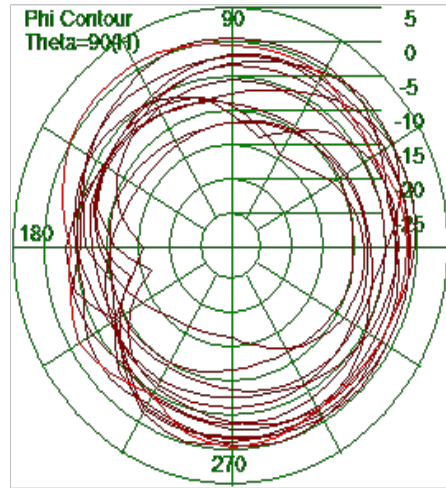
2500 MHz



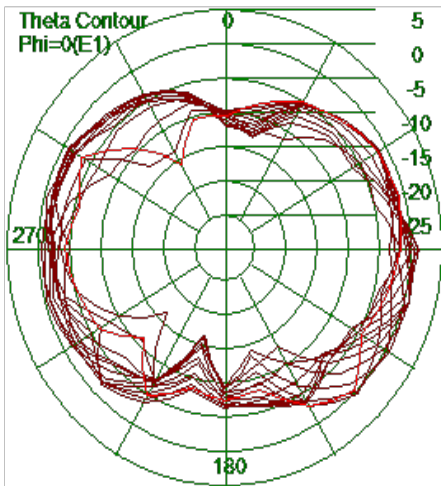
X Axis  
Y Axis  
Z Axis



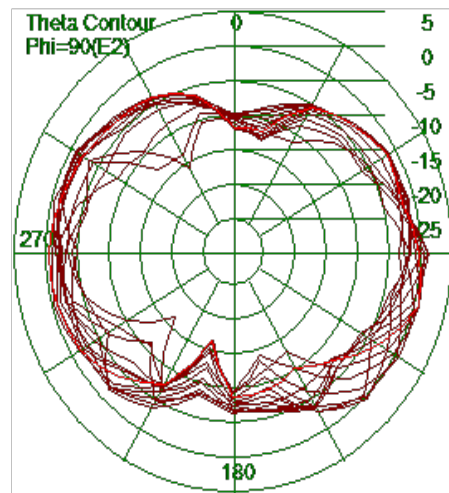
2500 MHz H



2500 MHz E1



2500 MHz E2



审核Checker: 王 俊

测试者Tester: Mark