

# 承认书

## APPROVAL

版本: A1

客 户  
CUSTOMER:

品 名 规 格  
DESCRIPTION:

2.4G 内置 PCB 天线 L70mm

料 号  
PART NO.:

YS030-0018

客 户 料 号  
CUS PART NO.:

日 期  
D A T E:

2019-10-29

呈样签章:

工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	业 务 SALES DEPARTMENT

客户承认签章 :

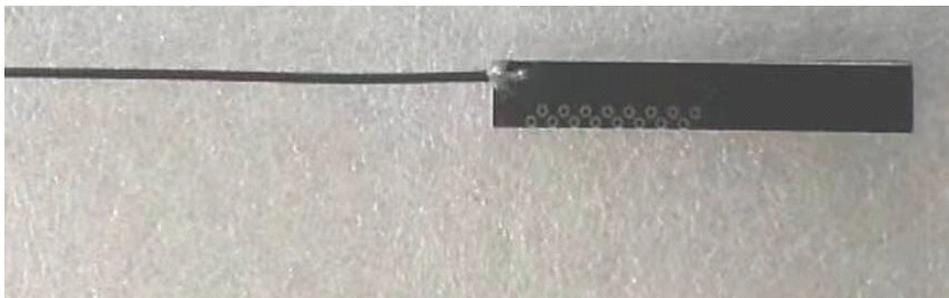
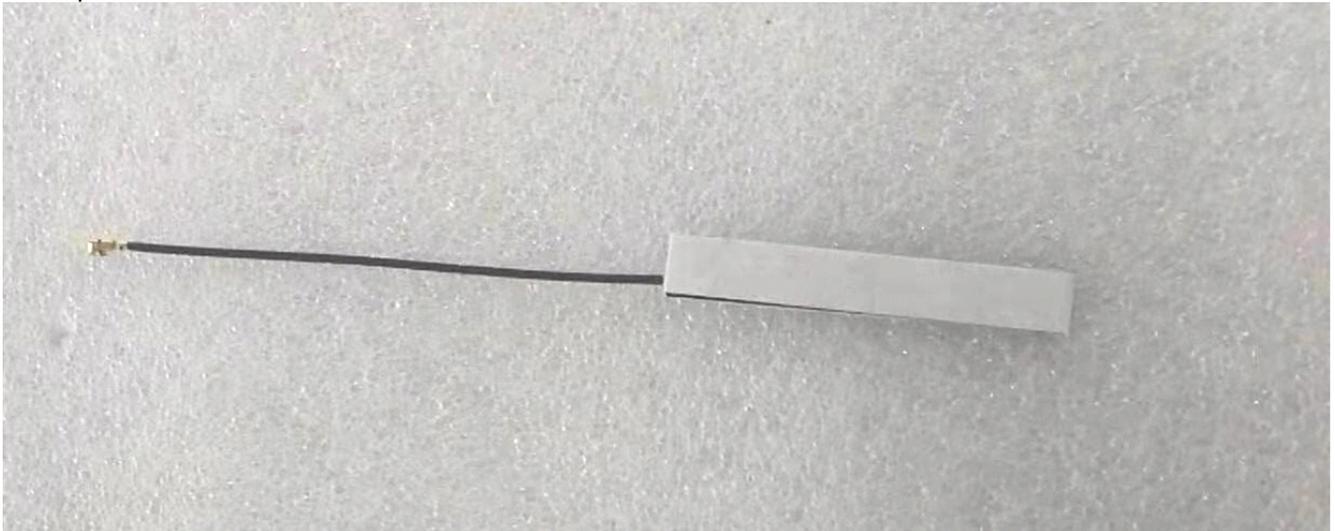
工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	采 购 PURCHASING DEPARTMENT

※ 客户确认样品附意栏:

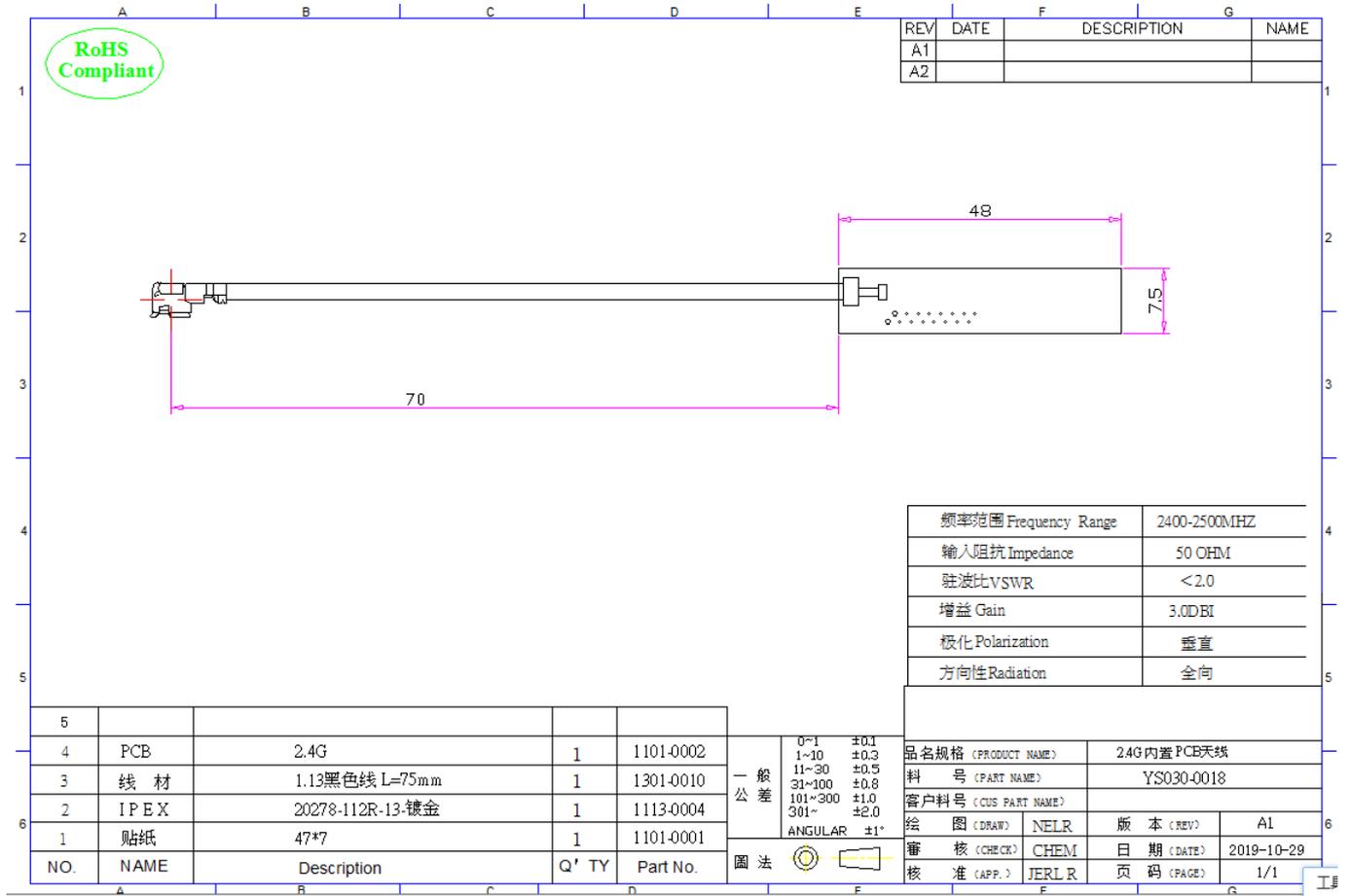
# 电器技术参数

电性能指标		Electrical Specifications	
频率范围	2400-2500MHZ	Frequency Range	2400-2500MHZ
电压驻波比	≤2.0	VSWR	≤2.0
增益	0dBi	GAIN	0dBi
输入阻抗	50 Ω	Input Impedance	50 Ω
机械指标		Mechanical Specifications	
线材颜色	黑色	CABLE Color	BLACK
接口形式	IPEX	Input connector	IPEX
工作温度	-40℃ ~+85℃	Working Temperature	-40℃ ~+85℃
工作湿度	20~80%	Working Humidity	20~80%

产品图片:  
product picture



规格图:

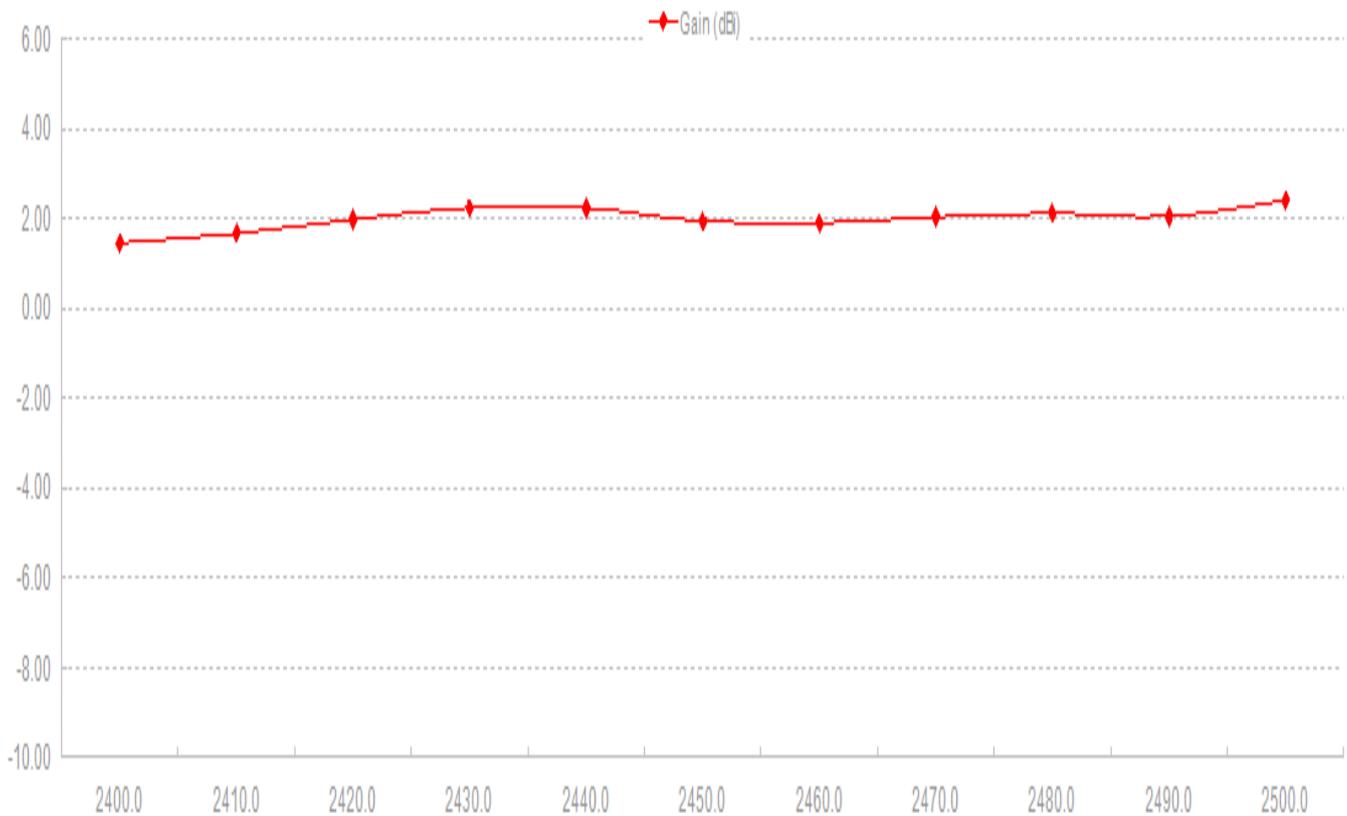


**环境性能测试:**

Environmental performance test:

项目 Item	测试条件 Test condition	规格 Specification
储存环境 Storage environment	Test temperature, humidity, and air pressure without specifying the following: 1. The temperature ranges from -30°C to +80°C 2. Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical properties are normal
高低温试验 High and low temperature test	Five cycles were performed between 70 ° C and 40 ° C, and then under normal conditions 1 to 2 hours, check the appearance quality.	The dimensions shall meet the requirements and shall meet the mechanical and electrical properties
耐恒定湿热 试验 Resistance to constant damp heat test	Relative humidity 95±3%, test temperature: 40. After 2H continuous action, The electrical properties were measured within 5 minutes after the sample was taken out, and the sample was in the normal bar. After 1 to 2 hours, check the appearance quality	The dimensions shall meet the requirements and shall meet the mechanical and electrical properties
振动试验 Vibration test	Vibration frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, frequency sweep cycle: 30 times	Electrical and mechanical properties are normal
跌落试验 Drop test	Free fall 3 times at 1M altitude in the direction of perpendicular axes	Electrical and mechanical properties are normal

## 样品测试:



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)	-2.69	-2.52	-2.23	-2.04	-1.95	-2.28	-2.44	-2.49	-2.60	-2.83	-2.45
Peak EIRP (dBm)	-1.46	-1.67	-1.98	-2.24	-2.24	0	-1.91	-2.04	-2.12	-2.05	-1.94
Directivity (dBi)	4.15	4.19	4.21	4.28	4.19	4.22	4.36	4.52	4.72	4.87	4.86
Efficiency (dB)	-2.69	-2.52	-2.23	-2.04	-1.95	-2.28	-2.44	-2.49	-2.60	-2.83	-2.45
Efficiency (%)	53.80	56.00	59.80	62.50	63.80	59.20	57.00	56.40	55.00	52.20	56.90
Gain (dBi)	-1.46	-1.67	-1.98	-2.24	-2.24	0	-1.91	-2.04	-2.12	-2.05	-1.94
NHPRP $\pm\pi/4$ (dBm)	-3.69	-3.36	-2.92	-2.52	-2.55	-2.92	-3.24	-3.47	-3.56	-3.59	-2.96
NHPRP $\pm\pi/6$ (dBm)	-4.35	-4.03	-3.59	-3.20	-3.23	-3.60	-3.92	-4.14	-4.22	-4.26	-3.65
NHPRP $\pm\pi/8$ (dBm)	-4.96	-4.64	-4.21	-3.82	-3.85	-4.21	-4.53	-4.75	-4.83	-4.88	-4.29
Upper Hem. PRP (dBm)	-5.17	-4.93	-4.58	-4.35	-4.22	-4.52	-4.66	-4.67	-4.76	-4.96	-4.55
Lower Hem. PRP (dBm)	-6.30	-6.22	-6.01	-5.89	-5.85	-6.22	-6.43	-6.51	-6.65	-6.93	-6.61
Upper Hem. PRP (%)	30.38	32.14	34.79	36.77	37.80	35.31	34.18	34.09	33.41	31.88	35.06
Lower Hem. PRP (%)	23.45	23.85	25.03	25.78	26.03	23.90	22.78	22.33	21.60	20.29	21.82