

# 承认书

## SPECIFICATION FOR APPROVAL

客户名称

CUSTOMER NAME: 深圳市和天创科技股份有限公司

产品名称

PRODUCT NAME: 2.4G/5G 内置 PCB 天线

客户料号

CUSTOMER

诚连料号

Cheng Lian P/N: CL111V1

REV:A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	程良日	
APPROVED BY:	张国勤	
DATE:	2023-4-15	

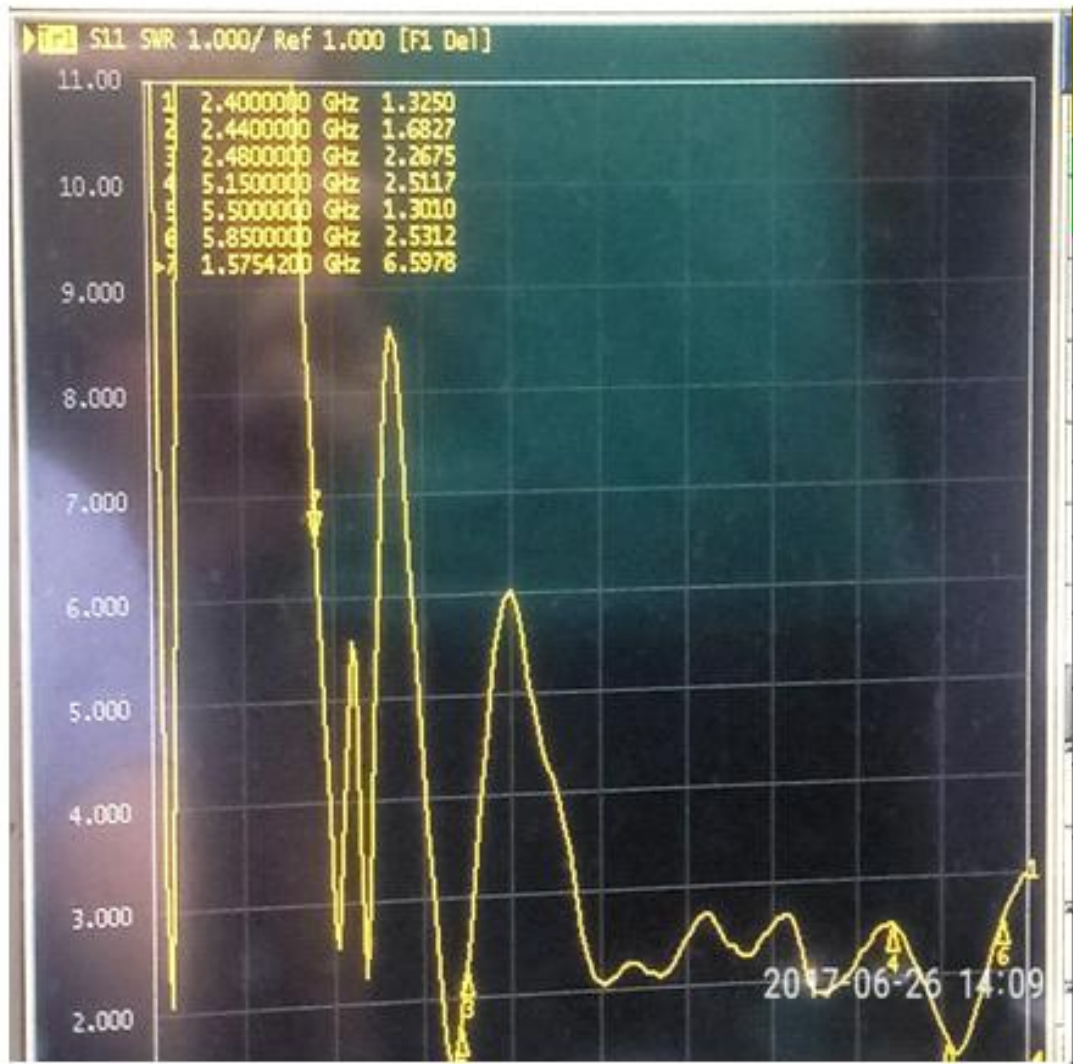
### 1.规格表:

产品主要技术参数

主要技术指标		Main technical specifications	
频率范围 (MHZ)	2.4G /5G	Frequency Range (MHZ)	2400-2500 / 5000-6000
中心频率 特性阻抗( $\Omega$ )	50 $\pm$ 10	center frequency Impedance( $\Omega$ )	50 $\pm$ 10
增益(dBi)	2 $\pm$ 0.5	Peak Gain(dBi)	2 $\pm$ 0.5
输出电压 驻波比	<2.0	VSWR	<2.0
最大功率	10W	Admitted Power	10W
极化方式	垂直极化	Polarization	Linear,Vertical
方向性	全向性	Radiation	Omni-directional
连接方式	Cable	Connector Type	Cable
物理性能		Physical Properties	
天线本体材料	PCB	Antenna Base	PCB
天线走线材料	Copper	Antenna cover	Copper
工作温度	-20 $^{\circ}$ C~+60 $^{\circ}$ C	Operating Temp	-20 $^{\circ}$ C~+60 $^{\circ}$ C
保存温度	-20 $^{\circ}$ C~+70 $^{\circ}$ C	Storage Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C

## 2. 测试设备及数据

驻波



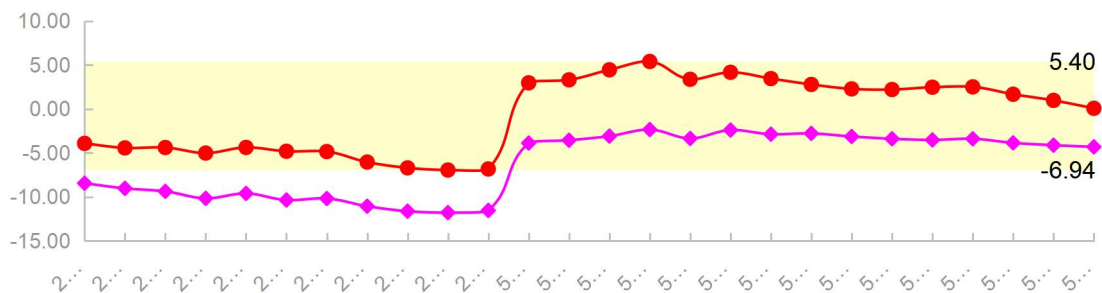
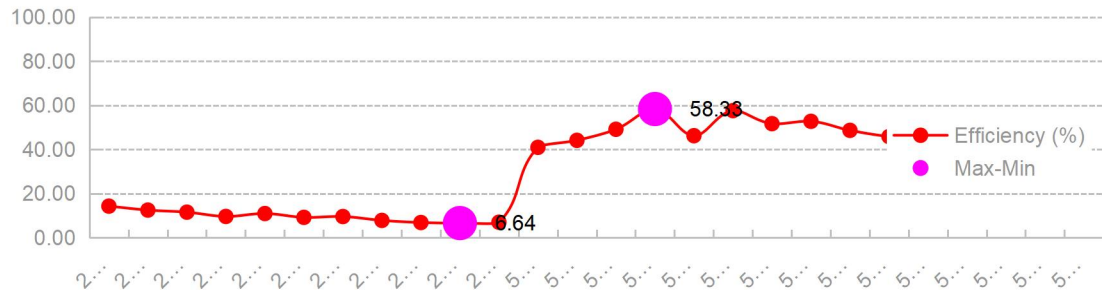
WIFI 无源效率测试数据

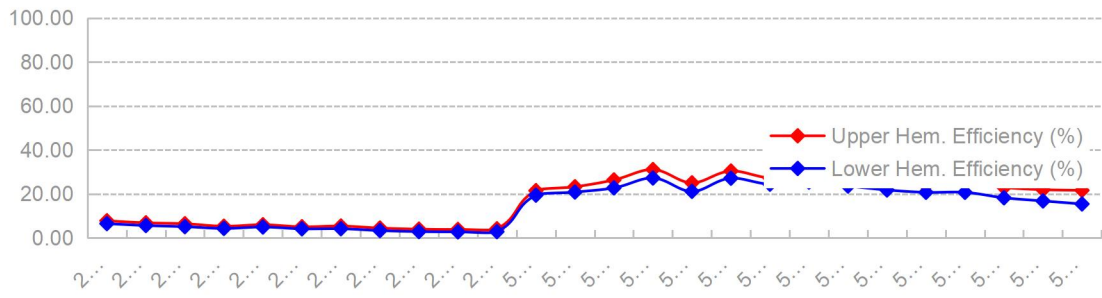
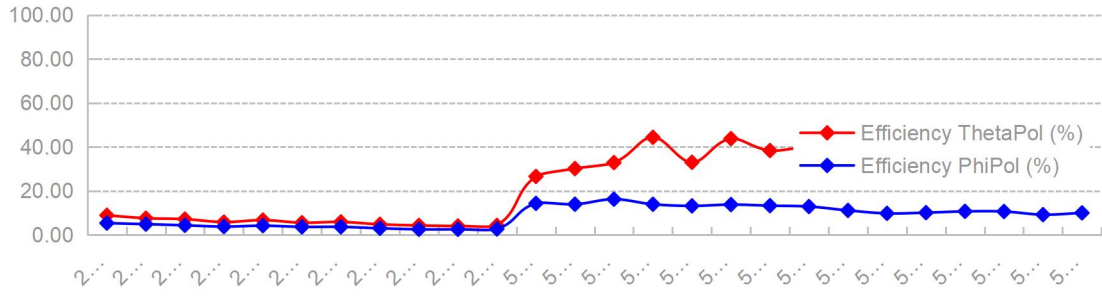
# WIFI (3) S11

Gain&Efficiency 增益和效率				Gain&Efficiency 增益和效率			
frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率	frequency 频率(Hz)	gain 增益(dB)	efficiency 效率(dB)	efficiency 效率
2400M	4.30	-2.55	52%	5150M	5.20	-2.97	52%
2410M	4.32	-2.53	54%	5200M	5.31	-2.54	54%
2420M	4.33	-2.48	56%	5250M	5.32	-2.49	55%
2430M	4.41	-2.46	57%	5300M	5.34	-2.50	55%
2440M	4.60	-2.37	59%	5350M	5.39	-2.49	56%
2450M	4.59	-2.22	61%	5400M	5.42	-2.47	57%
2460M	4.62	-2.35	60%	5450M	5.56	-2.41	57%
2470M	4.59	-2.43	60%	5500M	5.59	-2.42	58%
2480M	4.47	-2.44	57%	5550M	5.54	-2.49	55%
2490M	4.44	-2.47	55%	5600M	5.51	-2.50	53%
2500M	4.41	-2.50	53%	5650M	5.37	-2.98	52%
				5700M	5.36	-2.53	51%
				5750M	5.24	-2.50	53%
				5800M	5.33	-2.52	53%
				5850M	5.36	-2.53	54%

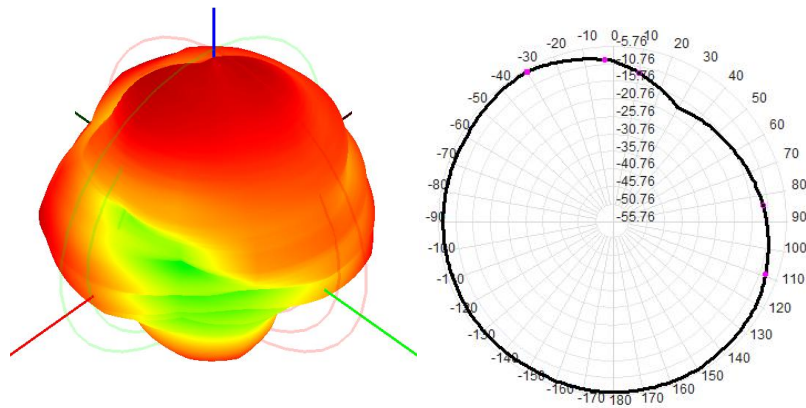
(备注：其中天线增益 2.4G 蓝牙同 2.4Gwifi)

## RF 天线测试数据

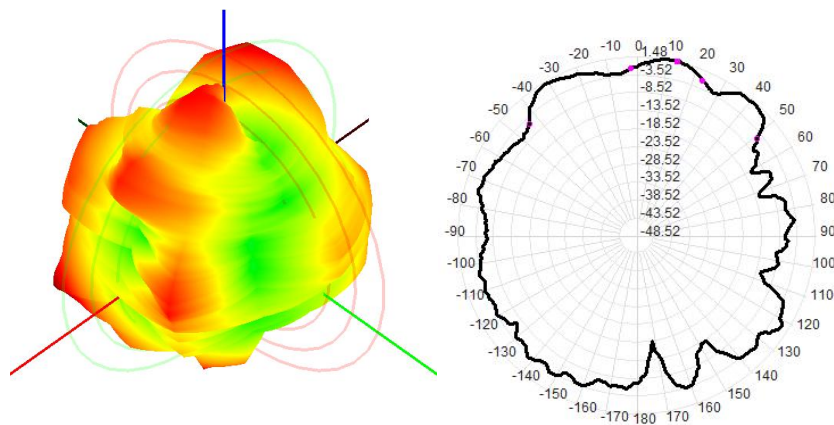




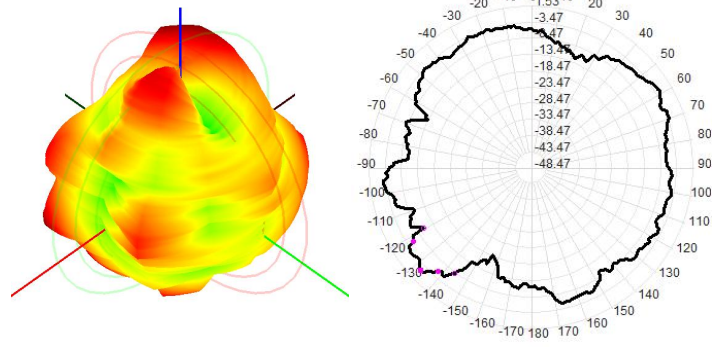
2440MHz (BT&2.4Gwifi)



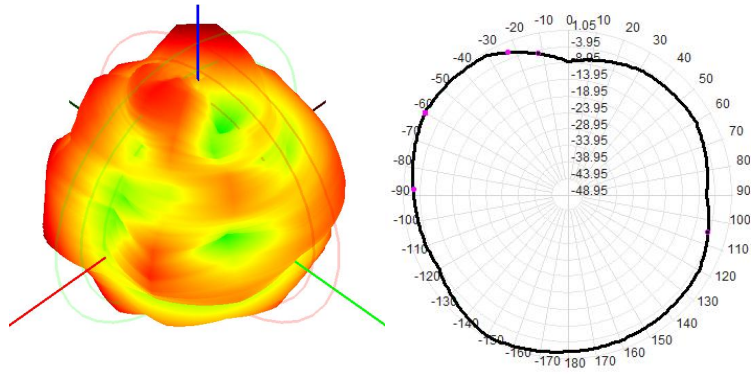
5250MHz



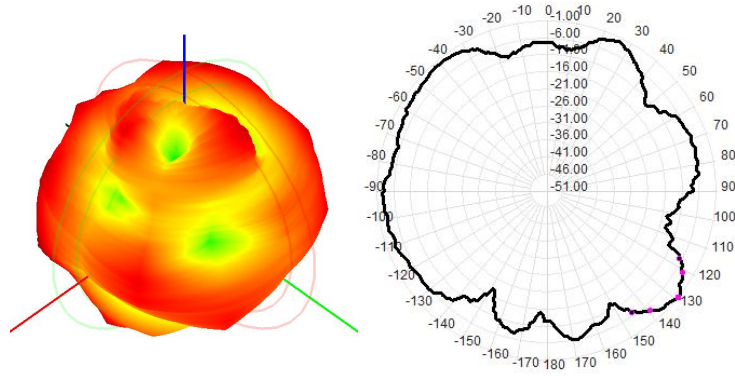
5350MHz



5550MHz



5850MHz

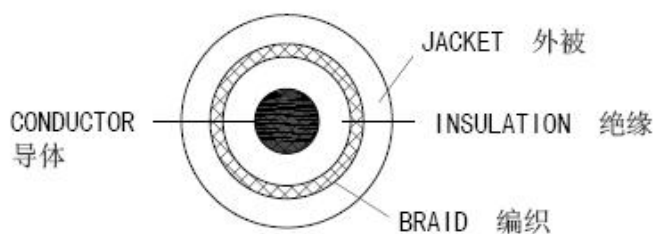


### 3. Cable 规格:

结构/Construction:

单位/Unit:mm

	项目/Item	详细资料/Details
导体/Conductor	材料/Material	镀银铜线/Silver-coated Copper Wire
	构成(根/mm) Composition(No./mm)	7/0.080
	标称直径/NOM. O. D	0.24±0.03
绝缘层/Insulation	材料/Material	聚全氟乙丙烯(自然色)/FEP(Natural)
	标称绝缘厚度/Nom. Thick. (mm)	0.23
	标称外径/NOM. O. D	0.70±0.03
屏蔽层/Shield	材料/Material	镀锡铜线/Tinned annealed copper wire
	构成/Composition	16*4/0.05
	编织密度/Coverage (%)	90±5
护套/Jacket	材料/Material	聚全氟乙丙烯/FEP
	标称护套厚度/ Nom. Thick (mm)	0.10
	标称外径/Nom. O. D (mm)	1.13±0.05
	颜色/Color	按与客户确认的颜色/According to corresponding have approved by the suppliers and customers



#### 4.实物图:

