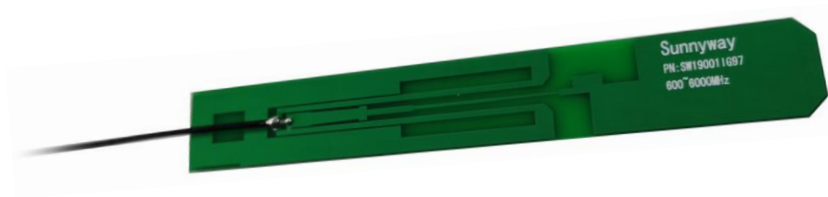




**SUNNYWAY**

# **SWP001**

**PN: SW19001IG97**



**Sunnyway Technology**

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Tel: +86-021-6484 2326 Fax: +86-021-6484 2328  
Email: sales@sunny-way.com Web: www.sunny-way.com



## 1. Electrical Specifications

Standards	5G/4G/3G/2G
Frequency range (MHz)	600~6000MHz
Peak Gain (dBi)	-3.0~4.5dBi
Average Gain (dB)	-5.2~-0.5dB
VSWR	<3.5
Return Loss	<-5.8
Efficiency (%)	30~90%
Polarization mode	Linear
Radiation pattern	Omni-Directional
Output impedance ( $\Omega$ )	50
Max. Input Power(W)	25

## 2. Mechanical and Environmental Specification

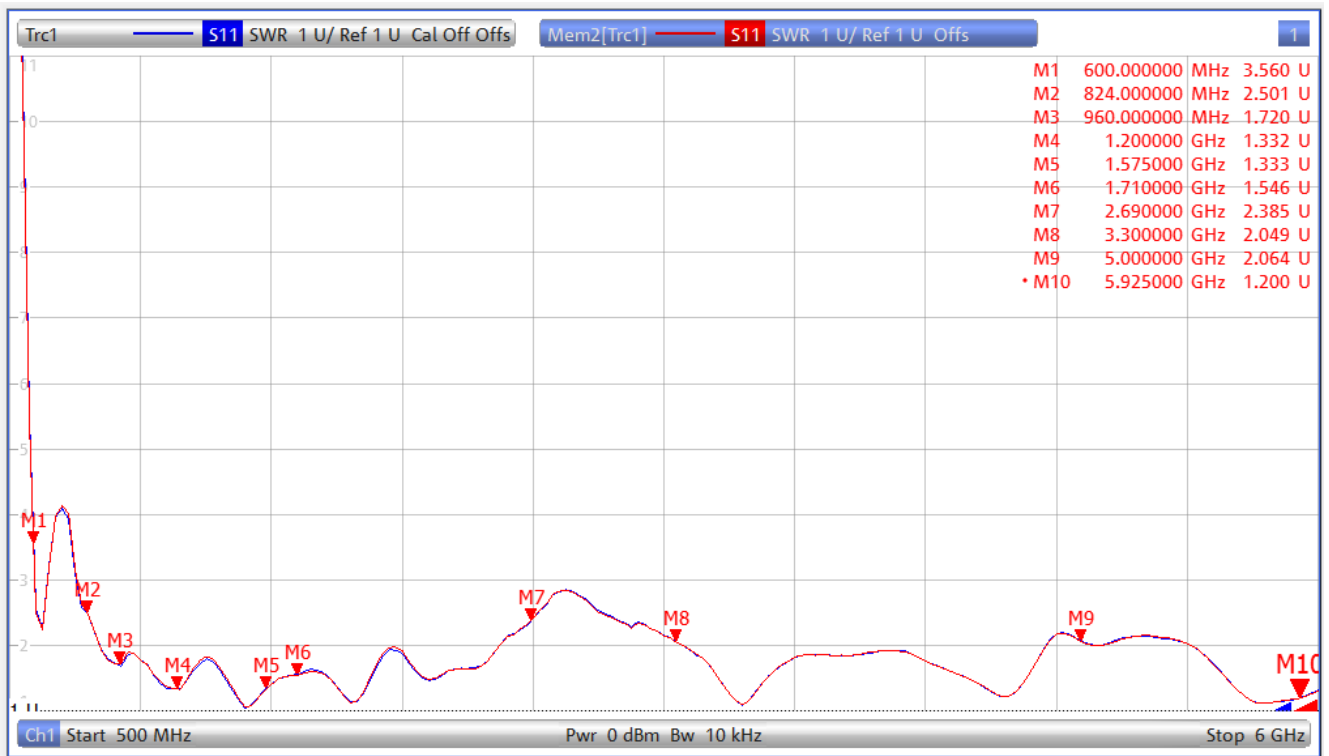
Mounting Type	Adhesive
Adhesive Type	3M9448A
Connector Type	U.FL Standard
Antenna size(mm)	112.5mm (L) x 16.2mm (W) x 0.8mm (H)
Material	PCB
Cable length(mm)	101mm



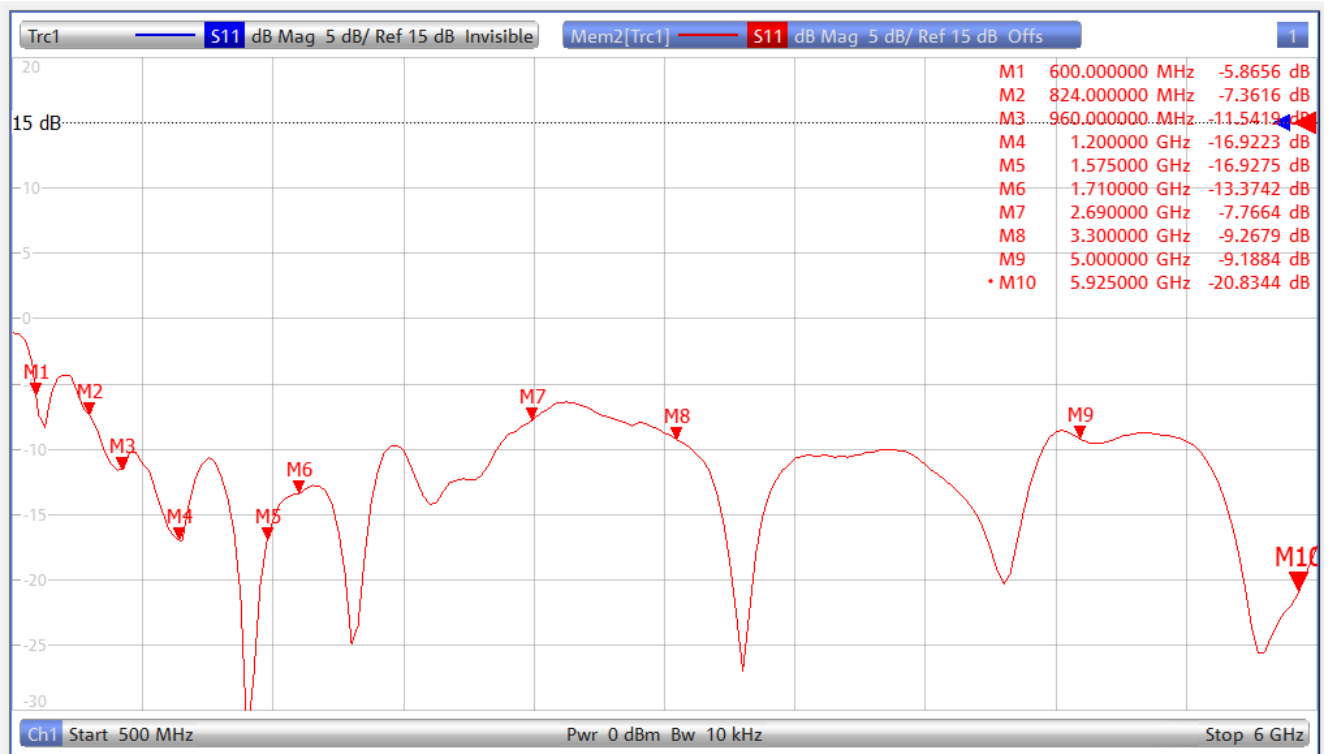
Operating Temperature (°C)	- 40 °C ~ + 85 °C
Storage Temperature(°C)	-40°C ~ +85 °C

### 3. Antenna parameters

FRE (MHz)	600	824	960	1200	1575	1710	2690	3300	5000	5925
<b>VSWR</b>	3.56	2.50	1.72	1.33	1.33	1.54	2.38	2.04	2.06	1.20
<b>Return Loss</b>	-5.86	-7.36	-11.54	-16.92	-16.92	-13.37	-7.76	-9.26	-9.18	-20.83
<b>UEff(%)</b>	39.4	33.9	33.2	59.7	75.0	53.7	57.9	48.8	47.2	57.4
<b>Average Gain(dB)</b>	-4.0	-4.7	-4.8	-2.2	-1.2	-2.7	-2.4	-3.1	-3.3	-2.4



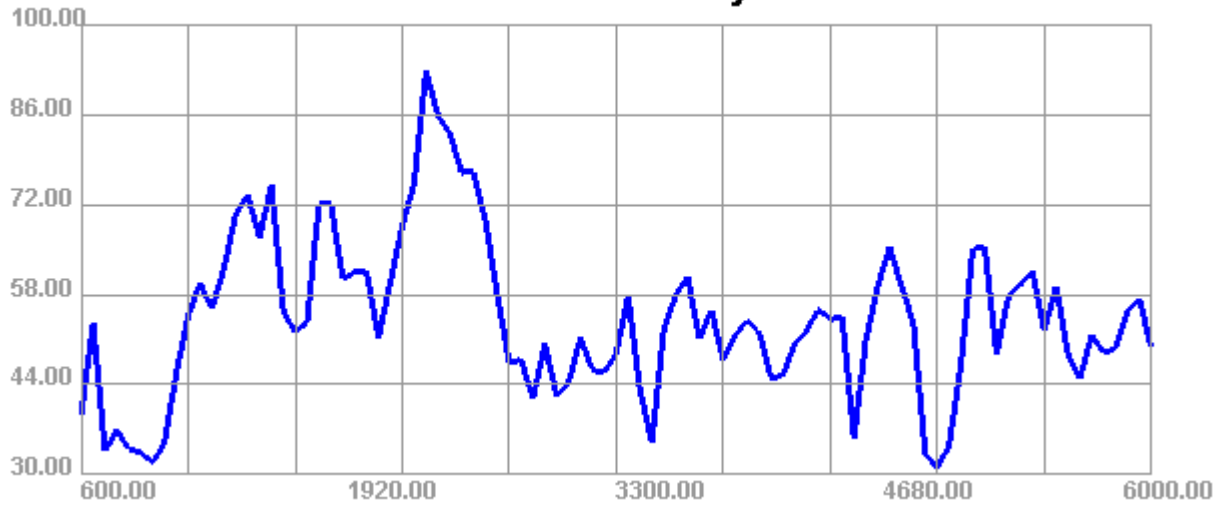
# VSWR



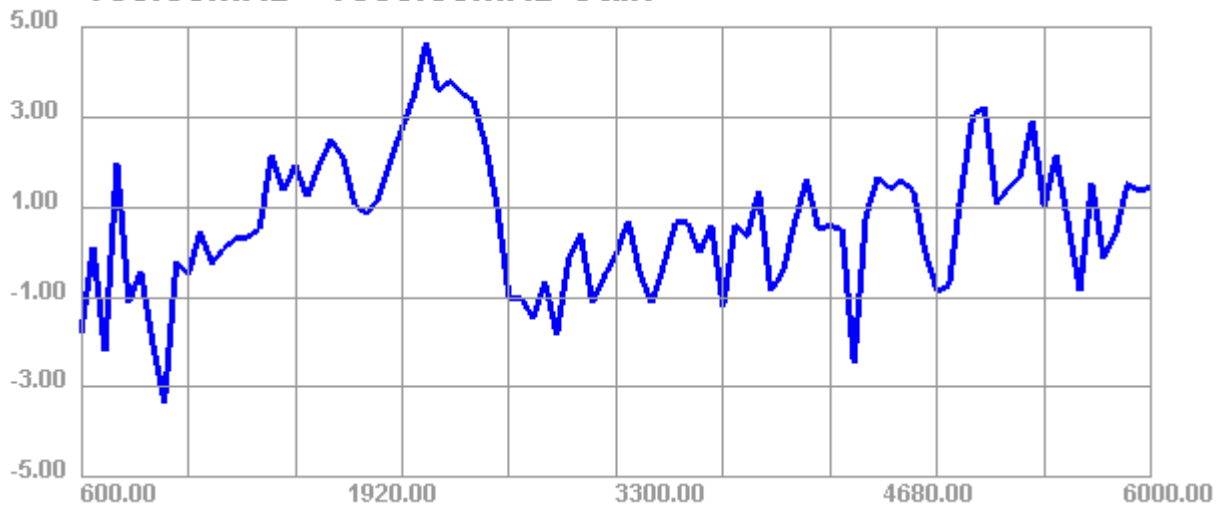
# Return Loss



### 600.00MHz - 6000.00MHz Efficiency

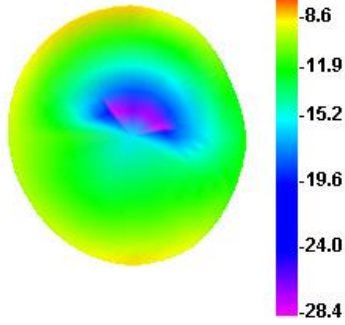


### 600.00MHz - 6000.00MHz Gain

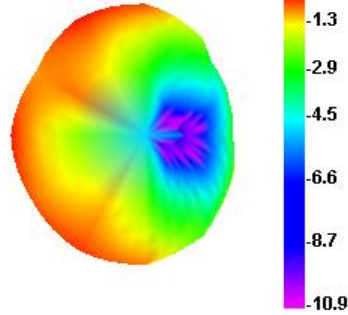


# Directional pattern

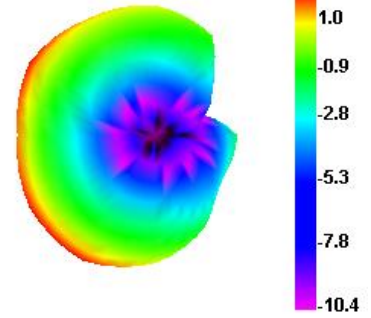
**600.000MHz**



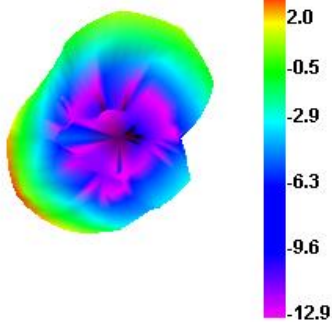
**960.000MHz**



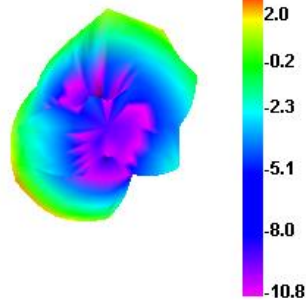
**1200.000MHz**



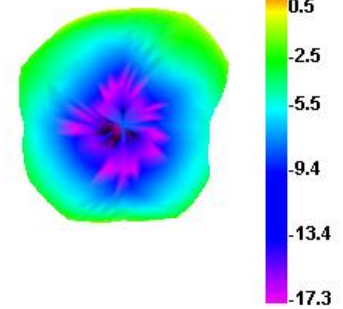
**1740.000MHz**



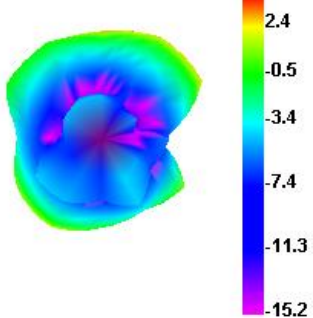
**1800.000MHz**



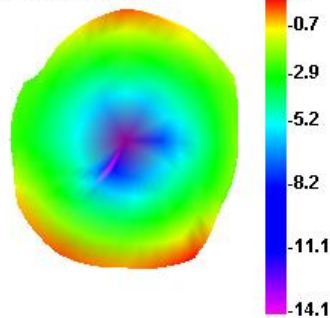
**2160.000MHz**



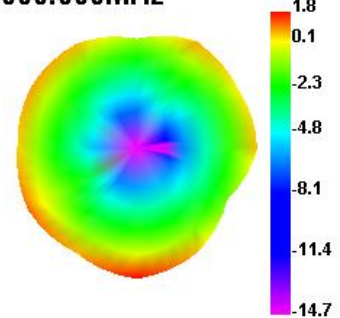
**2400.000MHz**



**3300.000MHz**

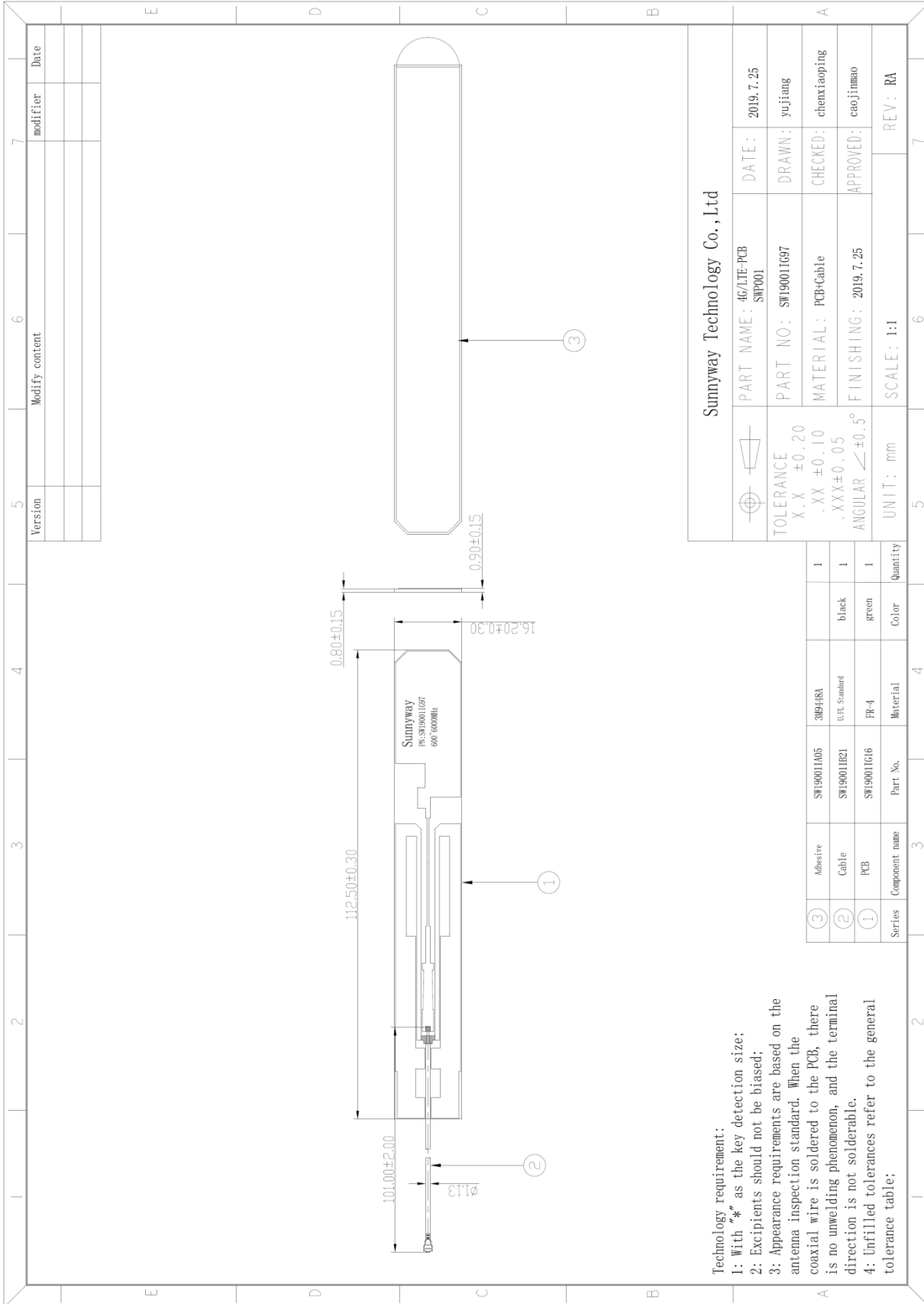


**6000.000MHz**





# 4. Antenna Drawings



Sunnyway Technology Co., Ltd	
	PART NAME: 4G/LTE-PCB SWP001
	DATE: 2019.7.25
TOLERANCE	DRAWN: yujiang
X.X ±0.20	CHECKED: chenxiaoping
.XX ±0.10	APPROVED: caojinmao
.XXX ±0.05	
ANGULAR $\leq \pm 0.5^\circ$	
UNIT: mm	SCALE: 1:1
	REV: RA