



尚远科技（中国）有限公司

Sunnyway Technology (China) Co. Ltd.

Antenna SPEC

Project Name: 5G ant

Working Band: 600~7000mhz

Sunnyway BOM:

| SPEC-Type | Sunnyway P/N |
|-----------|--------------|
| 5G | SH19280IB56 |
| | |

| | | | |
|-----|-----|-----|----------|
| R&D | ME: | PM: | Confirm: |
| | RF: | | |

Shanghai Address: 3F, building 65, No. 421, Hong Cao Road, Xuhui District, Shanghai, PRC.

Shenzhen Address: Room 405, Jinke Building, No. 8 Qiongyu Road, Shenzhen, PRC.

Fuzhou Address: Room 205, Building 19, Zone A, Software Park, No. 89 Software Avenue, Gulou District, Fuzhou, PRC.

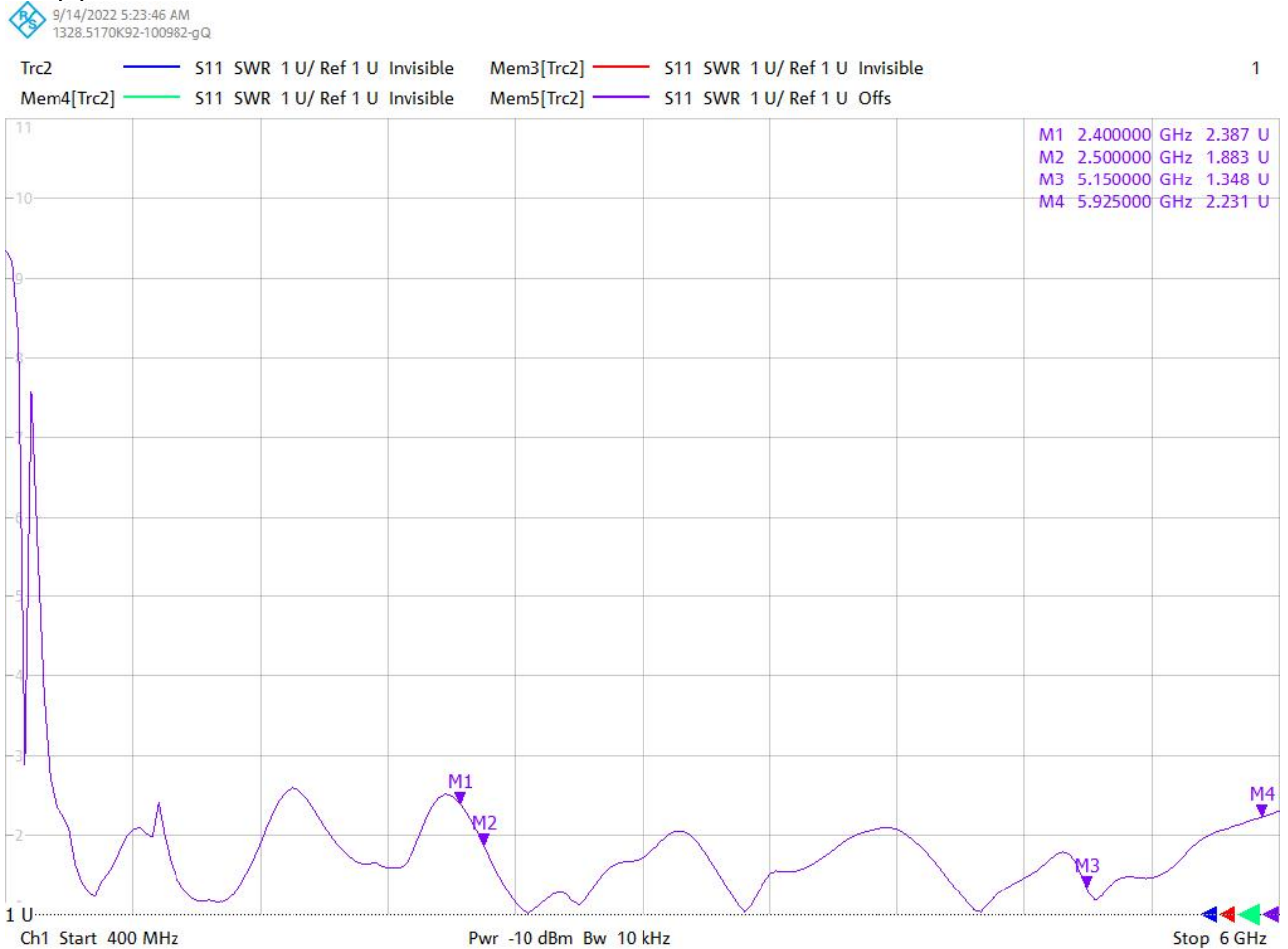
1. ELECTRICAL SPECIFICATIONS

1.1 S11 test

S11 test method instructions

Test equipment: LNA (HP 8753E)

Test method: With a 50 ohm CABLE ,CABLE export from instrument testing port , After the calibration with calibration Key, connected to the SMA connector, Records the return loss and VSWR of the related frequency points.



| Fre (MHz) | 2400 | 2500 | 5150 | 5925 |
|------------|------|------|------|------|
| VSWR | 2.9 | 1.8 | 1.6 | 2.2 |
| Eff (%) | 50.8 | 54.2 | 51.3 | 45.6 |
| Gain (dBi) | 2.6 | 1.3 | 3.1 | 4.8 |

1.2 CHAMBER TEST DATA

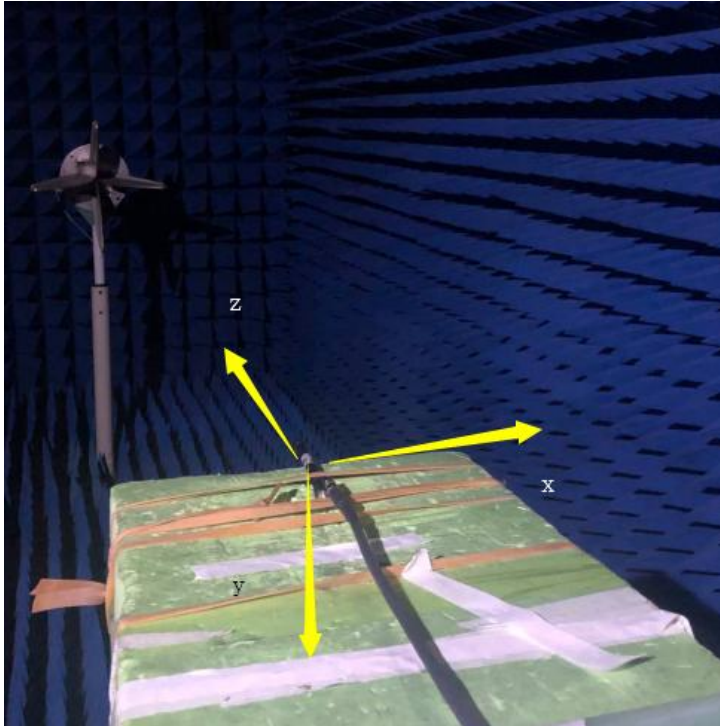
Test equipment

Test system: chamber

Test environment: the temperature of $22\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$, humidity of 50% plus or minus 15%

Test equipment: to test passive status , use LNA Agilent E5062C

to test active status, use CMW500



Eff %



GAIN dBi

Sunnyway Technology (china) Ltd. Company Antenna Specification



| Frequency (MHz) | Efficiency (%) | Efficiency (dB) | Peak Gain (dBi) |
|-----------------|----------------|-----------------|-----------------|
| 2412 | 50.93 | -2.93 | 2.66 |
| 2417 | 51.29 | -2.9 | 2.97 |
| 2422 | 51.17 | -2.91 | 2.45 |
| 2427 | 50.82 | -2.94 | 2.47 |
| 2432 | 51.52 | -2.88 | 2.87 |
| 2437 | 52.48 | -2.8 | 2.49 |
| 2442 | 51.29 | -2.9 | 2.36 |
| 2447 | 49.55 | -3.05 | 2.43 |
| 2452 | 52.12 | -2.83 | 2.25 |
| 2457 | 49.09 | -3.09 | 2.00 |
| 2462 | 49.43 | -3.06 | 2.31 |
| 2467 | 51.88 | -2.85 | 1.91 |
| 2472 | 51.64 | -2.87 | 1.87 |
| 2484 | 52.84 | -2.77 | 1.47 |

| Frequency (MHz) | Efficiency (%) | Efficiency (dB) | Peak Gain (dBi) |
|-----------------|----------------|-----------------|-----------------|
| 5180 | 48.08 | -3.18 | 3.06 |
| 5200 | 49.2 | -3.08 | 3.16 |
| 5220 | 49.32 | -3.07 | 3.47 |
| 5240 | 48.64 | -3.13 | 3.50 |
| 5260 | 47.86 | -3.2 | 3.47 |
| 5280 | 47.86 | -3.2 | 3.38 |
| 5300 | 48.64 | -3.13 | 3.47 |
| 5320 | 47.86 | -3.2 | 3.12 |

Sunnyway Technology (china) Ltd. Company Antenna Specification

| | | | |
|------|-------|-------|------|
| 5500 | 53.7 | -2.7 | 4.41 |
| 5520 | 52 | -2.84 | 4.44 |
| 5540 | 52 | -2.84 | 4.83 |
| 5560 | 52.6 | -2.79 | 4.94 |
| 5580 | 53.33 | -2.73 | 5.02 |
| 5600 | 53.46 | -2.72 | 5.02 |
| 5620 | 52.84 | -2.77 | 5.34 |
| 5640 | 51.05 | -2.92 | 4.91 |
| 5660 | 50.47 | -2.97 | 5.06 |
| 5680 | 48.31 | -3.16 | 5.06 |
| 5700 | 46.34 | -3.34 | 5.22 |
| 5720 | 46.45 | -3.33 | 5.20 |
| 5745 | 45.19 | -3.45 | 5.19 |
| 5765 | 44.98 | -3.47 | 5.11 |
| 5785 | 45.6 | -3.41 | 5.23 |
| 5805 | 43.25 | -3.64 | 5.04 |
| 5825 | 42.66 | -3.7 | 5.12 |
| 5845 | 44.16 | -3.55 | 5.52 |
| 5865 | 45.08 | -3.46 | 5.60 |
| 5885 | 44.06 | -3.56 | 5.14 |

| Frequency (MHz) | Efficiency (%) | Efficiency (dB) | Peak Gain (dBi) |
|-----------------|----------------|-----------------|-----------------|
| 5935 | -3.16 | 48.31 | 4.86 |
| 5955 | -2.88 | 51.52 | 5.13 |
| 5975 | -2.81 | 52.36 | 4.99 |
| 5995 | -2.84 | 52 | 4.82 |
| 6015 | -2.69 | 53.83 | 4.76 |
| 6035 | -2.67 | 54.08 | 4.74 |
| 6055 | -2.76 | 52.97 | 4.21 |
| 6075 | -2.71 | 53.58 | 4.32 |
| 6095 | -2.59 | 55.08 | 4.37 |
| 6115 | -2.87 | 51.64 | 4.32 |
| 6135 | -2.8 | 52.48 | 4.50 |
| 6155 | -2.66 | 54.2 | 4.85 |
| 6175 | -2.7 | 53.7 | 5.05 |
| 6195 | -2.68 | 53.95 | 5.05 |
| 6215 | -2.6 | 54.95 | 5.19 |
| 6235 | -2.64 | 54.45 | 5.26 |

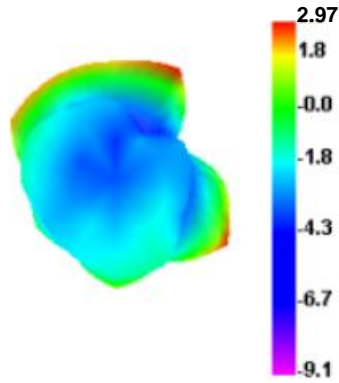
Sunnyway Technology (china) Ltd. Company Antenna Specification

| | | | |
|------|-------|-------|------|
| 6255 | -2.76 | 52.97 | 5.33 |
| 6275 | -2.6 | 54.95 | 5.57 |
| 6295 | -2.57 | 55.34 | 5.88 |
| 6315 | -2.61 | 54.83 | 5.82 |
| 6335 | -2.5 | 56.23 | 6.05 |
| 6355 | -2.55 | 55.59 | 6.14 |
| 6375 | -2.3 | 58.88 | 6.14 |
| 6395 | -2.18 | 60.53 | 6.24 |
| 6415 | -2.27 | 59.29 | 6.20 |
| 6435 | -2.43 | 57.15 | 6.23 |
| 6455 | -2.33 | 58.48 | 6.23 |
| 6475 | -2.42 | 57.28 | 6.29 |
| 6495 | -2.32 | 58.61 | 6.22 |
| 6515 | -2.47 | 56.62 | 6.04 |
| 6535 | -2.47 | 56.62 | 5.95 |
| 6555 | -2.49 | 56.36 | 6.02 |
| 6575 | -2.35 | 58.21 | 6.06 |
| 6595 | -2.65 | 54.33 | 5.76 |
| 6615 | -2.73 | 53.33 | 5.40 |
| 6635 | -2.73 | 53.33 | 5.27 |
| 6655 | -2.76 | 52.97 | 5.22 |
| 6675 | -2.79 | 52.6 | 5.24 |
| 6695 | -2.53 | 55.85 | 5.32 |
| 6715 | -2.49 | 56.36 | 5.26 |
| 6735 | -2.37 | 57.94 | 5.27 |
| 6755 | -2.12 | 61.38 | 5.46 |
| 6775 | -2.45 | 56.89 | 5.29 |
| 6795 | -2.61 | 54.83 | 5.03 |
| 6815 | -2.8 | 52.48 | 4.93 |
| 6835 | -2.62 | 54.7 | 4.94 |
| 6855 | -2.53 | 55.85 | 4.74 |
| 6875 | -2.53 | 55.85 | 4.32 |
| 6895 | -2.45 | 56.89 | 4.55 |
| 6915 | -2.76 | 52.97 | 3.82 |
| 6935 | -2.71 | 53.58 | 3.22 |
| 6955 | -3.07 | 49.32 | 2.48 |
| 6975 | -3.05 | 49.55 | 2.30 |
| 6995 | -3 | 50.12 | 2.56 |

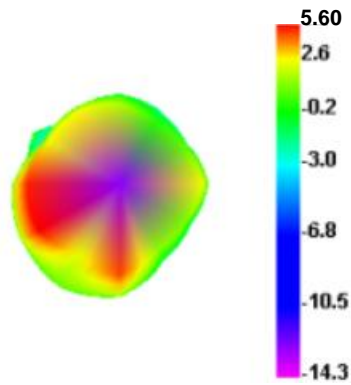
| | | | |
|------|-------|-------|------|
| 7015 | -2.98 | 50.35 | 2.48 |
| 7035 | -2.85 | 51.88 | 2.79 |
| 7055 | -2.81 | 52.36 | 2.86 |
| 7075 | -2.73 | 53.33 | 2.98 |
| 7095 | -2.9 | 51.29 | 2.75 |
| 7115 | -2.93 | 50.93 | 3.09 |

1.3 Antenna Pattern

2417MHz

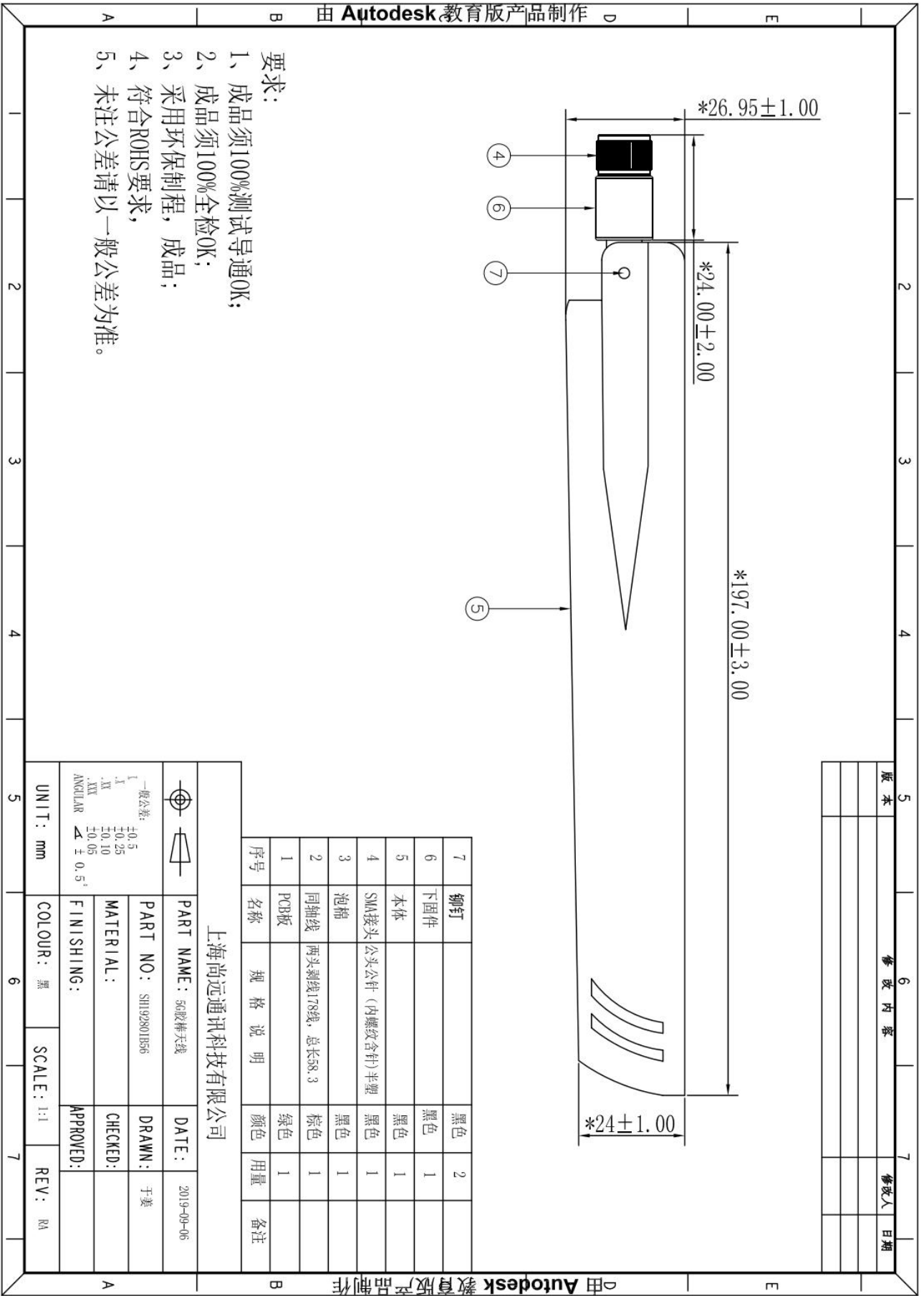


5865MHz



2, STRUCTURAL DRAWINGS





- 要求:
- 1、成品须100%测试导通OK;
 - 2、成品须100%全检OK;
 - 3、采用环保制程, 成品;
 - 4、符合ROHS要求;
 - 5、未注公差请以一般公差为准。

| | | | | | |
|---|---------|--|--|--|--|
| 5 | 原 本 | | | | |
| 6 | 修 改 内 容 | | | | |
| 7 | 修 改 人 | | | | |
| | 日 期 | | | | |

| | | | | | |
|----|--------------------|------------------|----|----|----|
| 7 | 铆钉 | | 黑色 | 2 | |
| 6 | 下固件 | | 黑色 | 1 | |
| 5 | 本体 | | 黑色 | 1 | |
| 4 | SMA接头公头公针(内螺纹含针)半塑 | | 黑色 | 1 | |
| 3 | 泡棉 | | 黑色 | 1 | |
| 2 | 同轴线 | 两头剥线178线, 总长58.3 | 棕色 | 1 | |
| 1 | PCB板 | | 绿色 | 1 | |
| 序号 | 名称 | 规格说明 | 颜色 | 用量 | 备注 |

上海尚远通讯科技有限公司

| | | | |
|--|--|---------------------------------------|--|
| | | | |
| 一般公差: L: ±0.5 .K: ±0.25 .M: ±0.10 .XX: ±0.05 ANGULAR: ±0.5° | | PART NAME: 5G胶棒天线 DATE: 2019-09-06 | |
| UNIT: mm | | DRAWN: 于姜 | |
| COLOUR: 黑 | | CHECKED: | |
| SCALE: 1:1 | | APPROVED: | |
| REV: RA | | SCALE: 1:1 | |