



# 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.

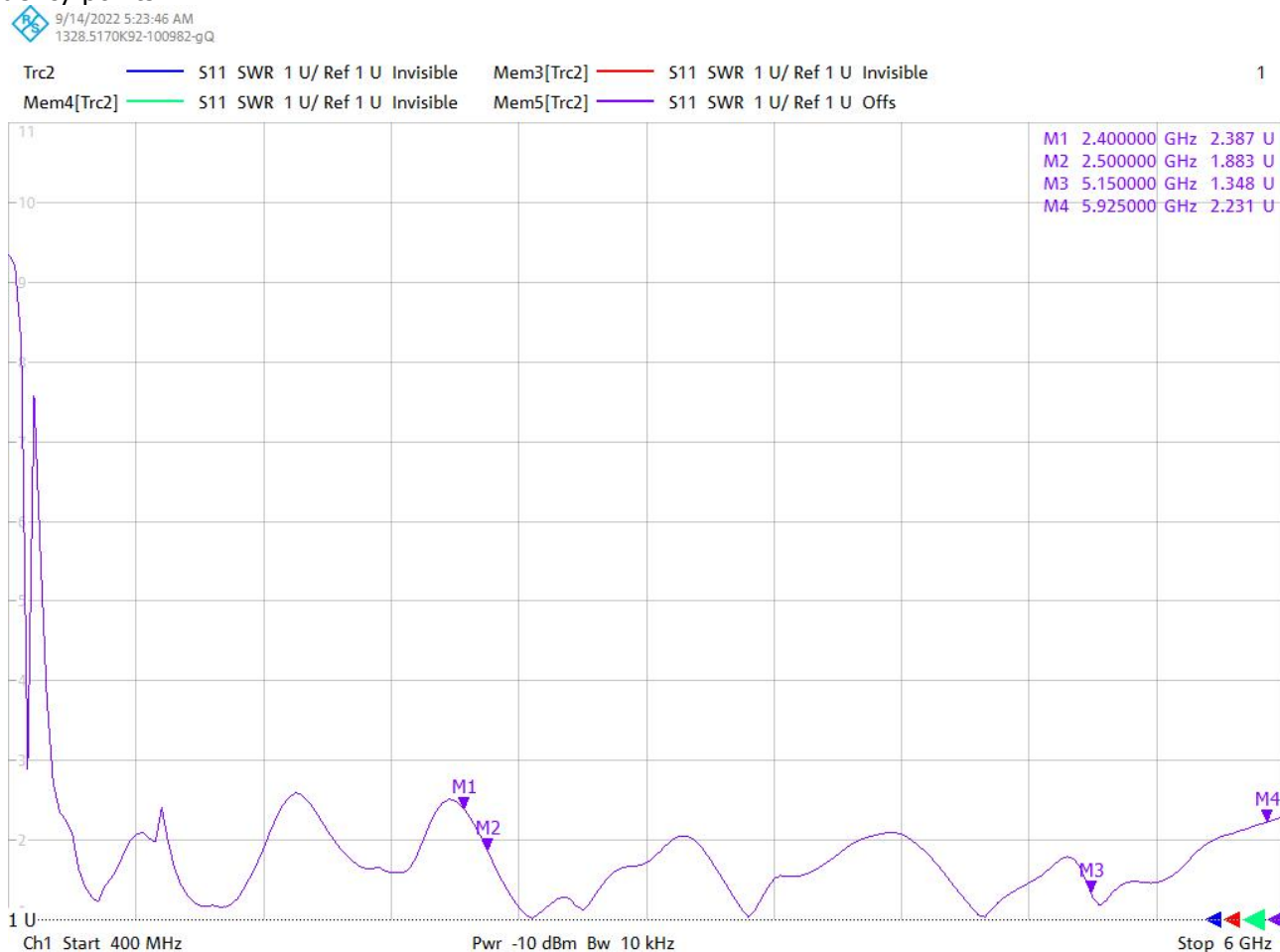
# 1. ELECTRICAL SPECIFICATIONS

## 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

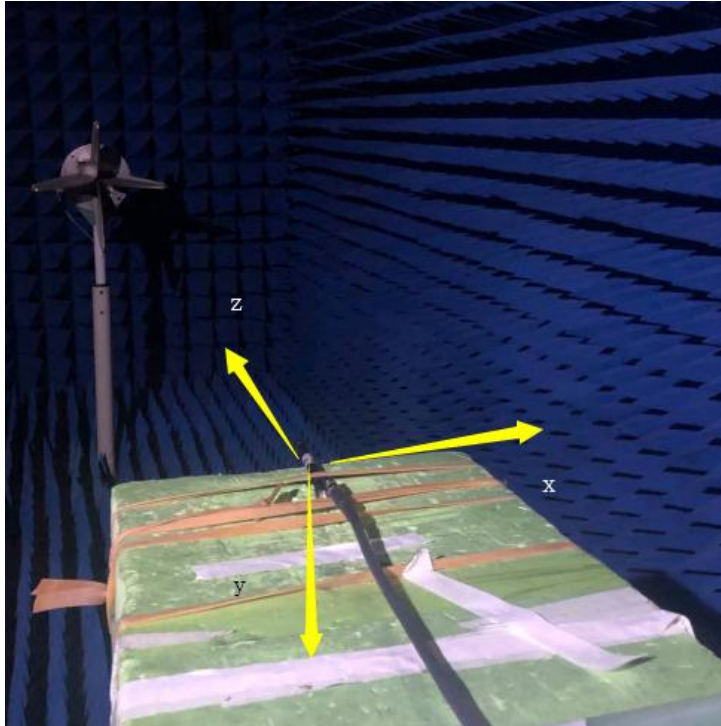
Test equipment

Test system: chamber

Test environment: the temperature of  $22\text{ }^{\circ}\text{C} + 3\text{ }^{\circ}\text{C}$ , 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            |

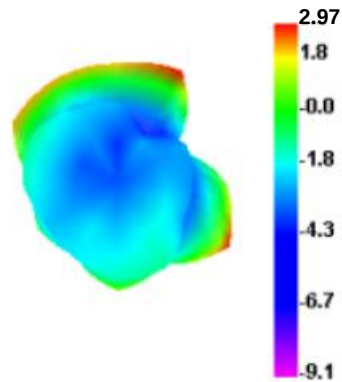
## Sunnyway Technology (china) ltd. Company Antenna Specification

|      |       |       |      |
|------|-------|-------|------|
| 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 |

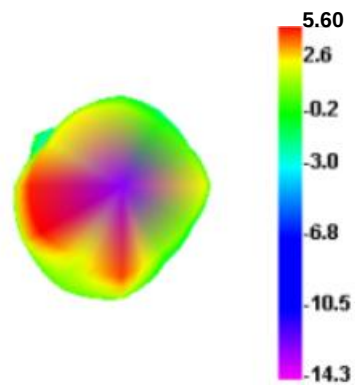
|      |       |       |      |
|------|-------|-------|------|
| 7015 | -2.98 | 50.35 | 2.48 |
| 7035 | -2.85 | 51.88 | 2.79 |
| 7055 | -2.81 | 52.36 | 2.86 |
| 7075 | -2.73 | 53.33 | 2.98 |
| 7095 | -2.9  | 51.29 | 2.75 |
| 7115 | -2.93 | 50.93 | 3.09 |

### 1.3 Antenna Pattern

2417MHz



5865MHz



## 2, STRUCTURAL DRAWINGS



