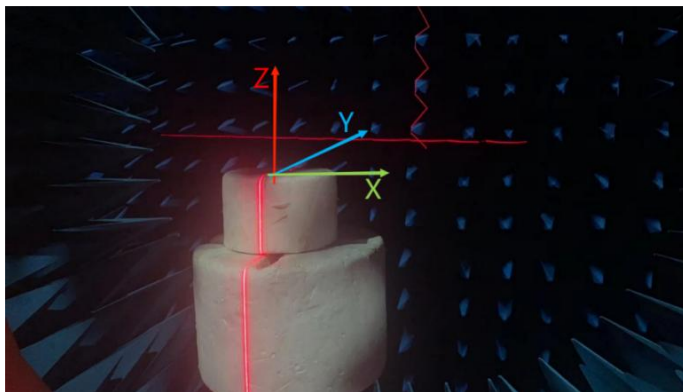
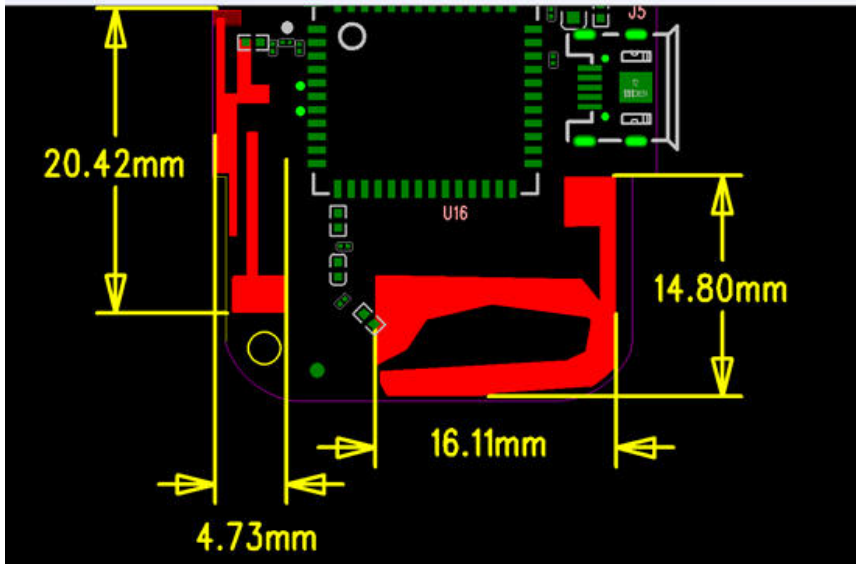


Antenna specification

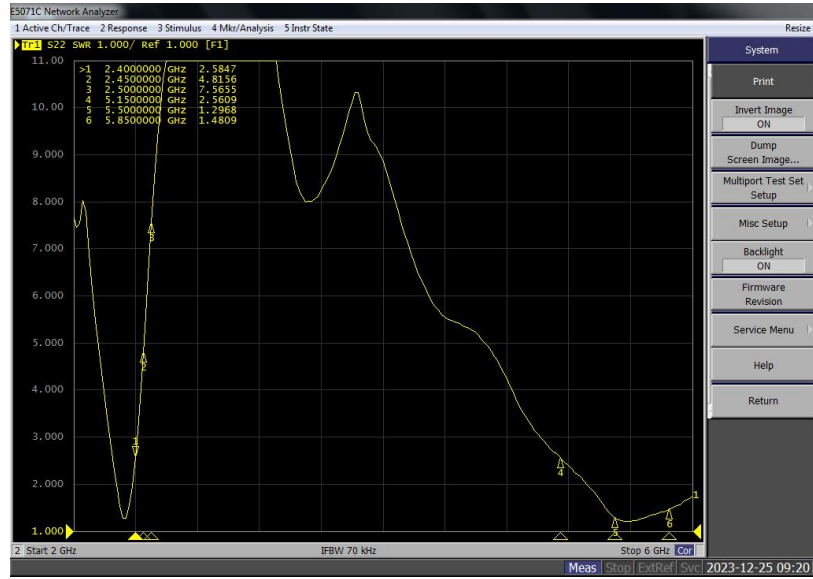
Model: JLPCBBANZAI308

1. Antenna size and Test environment diagram



2. antenna standing wave ratio

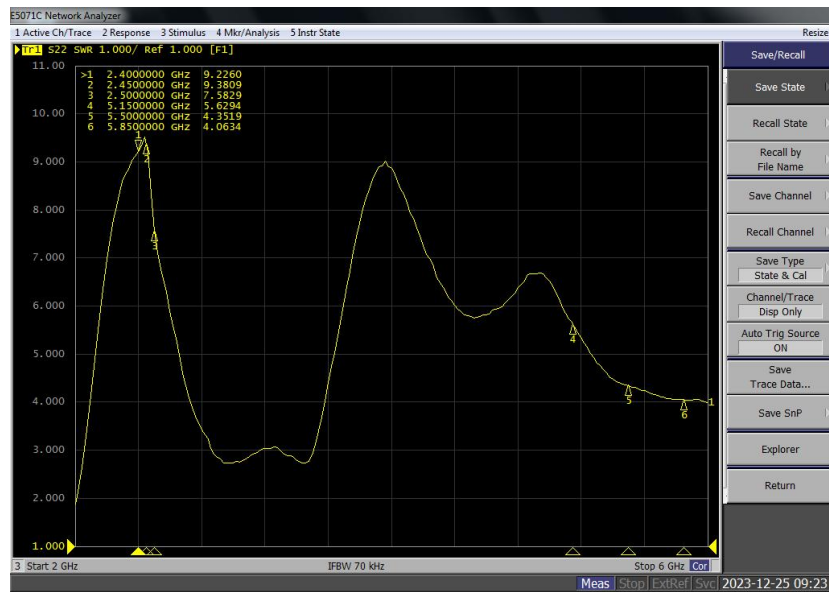
ANT1



V.S.W.R

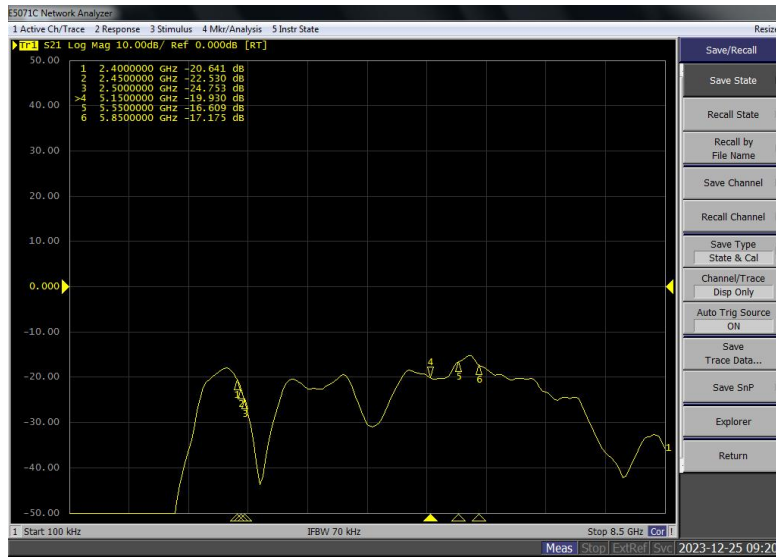
| Freq/GHz | 2.4 | 2.45 | 2.5 | 5.15 | 5.5 | 5.85 |
|----------|-----|------|-----|------|-----|------|
| VSWR | 2.5 | 4.8 | 7.5 | 2.5 | 1.2 | 1.4 |

ANT2



V.S.W.R

| Freq/GHz | 2.4 | 2.45 | 2.5 | 5.15 | 5.5 | 5.85 |
|----------|-----|------|-----|------|-----|------|
| VSWR | 9.2 | 9.3 | 7.5 | 5.6 | 4.3 | 4.0 |



隔离度

| Freq/GHz | 2.4 | 2.45 | 2.5 | 5.15 | 5.5 | 5.85 |
|----------|-------|-------|-------|-------|-------|-------|
| VSWR | -20.6 | -22.5 | -24.7 | -19.9 | -16.6 | -17.1 |

3. Passive efficiency

ANT1

| Gain&Efficiency 增益和效率 | | | | | | |
|--------------------------|-----------------|--------------------------|----------------------------------|---------------------------------|----------------------|---------------------|
| frequency 频率(MHz) | gain 增益(dBi) | mingain 最小增益 (dBi) | CP Gain 交叉极化 最大增益 (dBi) | CO Gain 主极化最 大增益 (dBi) | efficiency 效率(dB) | efficiency 效率(%) |
| 2400 | -2.2 | -20.74 | 0 | 0 | -5.44 | 28.55 |
| 2410 | -2.31 | -20.08 | 0 | 0 | -5.57 | 27.72 |
| 2420 | -2.67 | -19.64 | 0 | 0 | -5.85 | 25.99 |
| 2430 | -3 | -20.17 | 0 | 0 | -6.14 | 24.33 |
| 2440 | -3.28 | -19.07 | 0 | 0 | -6.32 | 23.32 |
| 2450 | -3.49 | -19.82 | 0 | 0 | -6.47 | 22.56 |
| 2460 | -3.67 | -20.99 | 0 | 0 | -6.59 | 21.91 |
| 2470 | -4.01 | -20.84 | 0 | 0 | -6.89 | 20.47 |
| 2480 | -4.35 | -22.49 | 0 | 0 | -7.21 | 19.02 |
| 2490 | -4.87 | -22.14 | 0 | 0 | -7.71 | 16.93 |

| 2500 | -5.57 | -23.38 | 0 | 0 | -8.48 | 14.19 |
|--------------------------|-----------------|--------------------------|----------------------------------|---------------------------------|----------------------|---------------------|
| Gain&Efficiency 增益和效率 | | | | | | |
| frequency 频率(MHz) | gain 增益(dBi) | mingain 最小增益 (dBi) | CP Gain 交叉极化 最大增益 (dBi) | CO Gain 主极化最 大增益 (dBi) | efficiency 效率(dB) | efficiency 效率(%) |
| 5150 | 0.12 | -26.45 | 0 | 0 | -3.03 | 49.76 |
| 5200 | -0.12 | -33.97 | 0 | 0 | -3.06 | 49.43 |
| 5250 | 0.08 | -32.31 | 0 | 0 | -2.88 | 51.48 |
| 5300 | 0.07 | -27.6 | 0 | 0 | -2.82 | 52.23 |
| 5350 | 0.12 | -28.03 | 0 | 0 | -2.77 | 52.88 |
| 5400 | 0.25 | -27.95 | 0 | 0 | -2.69 | 53.84 |
| 5450 | 0.28 | -31.56 | 0 | 0 | -2.69 | 53.8 |
| 5500 | 0.29 | -27.15 | 0 | 0 | -2.69 | 53.78 |
| 5550 | 0.29 | -27.58 | 0 | 0 | -2.76 | 52.97 |
| 5600 | 0.39 | -27.08 | 0 | 0 | -2.72 | 53.45 |
| 5650 | 0.57 | -27.72 | 0 | 0 | -2.68 | 53.99 |
| 5700 | 0.66 | -26.05 | 0 | 0 | -2.71 | 53.6 |
| 5750 | 0.72 | -28.01 | 0 | 0 | -2.80 | 52.45 |
| 5800 | 0.99 | -30.41 | 0 | 0 | -2.76 | 52.96 |
| 5850 | 0.73 | -28.14 | 0 | 0 | -3.13 | 48.6 |

ANT2

| Gain&Efficiency 增益和效率 | | | | | | |
|--------------------------|-----------------|--------------------------|----------------------------------|---------------------------------|----------------------|---------------------|
| frequency 频率(MHz) | gain 增益(dBi) | mingain 最小增益 (dBi) | CP Gain 交叉极化 最大增益 (dBi) | CO Gain 主极化最 大增益 (dBi) | efficiency 效率(dB) | efficiency 效率(%) |
| 2400 | -4.44 | -25.78 | 0 | 0 | -9.45 | 11.36 |
| 2410 | -3.75 | -25.92 | 0 | 0 | -8.75 | 13.35 |
| 2420 | -3.42 | -25.87 | 0 | 0 | -8.33 | 14.68 |
| 2430 | -3.07 | -27.33 | 0 | 0 | -7.95 | 16.03 |

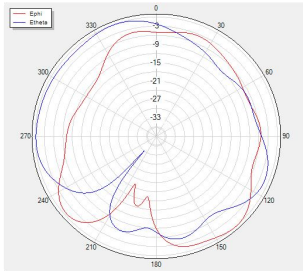
| | | | | | | |
|------|-------|--------|---|---|-------|-------|
| 2440 | -2.7 | -26.36 | 0 | 0 | -7.53 | 17.68 |
| 2450 | -2.3 | -28.13 | 0 | 0 | -7.09 | 19.54 |
| 2460 | -1.91 | -27.35 | 0 | 0 | -6.69 | 21.43 |
| 2470 | -1.72 | -27.79 | 0 | 0 | -6.46 | 22.58 |
| 2480 | -1.6 | -28.96 | 0 | 0 | -6.24 | 23.75 |
| 2490 | -1.68 | -27.73 | 0 | 0 | -6.24 | 23.76 |
| 2500 | -2.1 | -27.95 | 0 | 0 | -6.43 | 22.73 |

| Gain&Efficiency 增益和效率 | | | | | | |
|--------------------------|-----------------|--------------------------|----------------------------------|---------------------------------|----------------------|---------------------|
| frequency 频率(MHz) | gain 增益(dBi) | mingain 最小增益 (dBi) | CP Gain 交叉极化 最大增益 (dBi) | CO Gain 主极化最 大增益 (dBi) | efficiency 效率(dB) | efficiency 效率(%) |
| 5150 | -3.93 | -28.84 | 0 | 0 | -4.91 | 32.32 |
| 5200 | -3.86 | -30.28 | 0 | 0 | -4.83 | 32.91 |
| 5250 | -3.92 | -28.93 | 0 | 0 | -4.85 | 32.73 |
| 5300 | -3.78 | -31.57 | 0 | 0 | -4.78 | 33.27 |
| 5350 | -3.98 | -35.89 | 0 | 0 | -4.86 | 32.68 |
| 5400 | -4.11 | -36.02 | 0 | 0 | -4.87 | 32.55 |
| 5450 | -3.72 | -28.45 | 0 | 0 | -4.68 | 34.03 |
| 5500 | -3.65 | -25.79 | 0 | 0 | -4.64 | 34.33 |
| 5550 | -3.85 | -22.93 | 0 | 0 | -4.74 | 33.59 |
| 5600 | -3.55 | -25.36 | 0 | 0 | -4.62 | 34.5 |
| 5650 | -2.94 | -26.63 | 0 | 0 | -4.34 | 36.85 |
| 5700 | -2.96 | -23.99 | 0 | 0 | -4.35 | 36.75 |
| 5750 | -3.01 | -25.22 | 0 | 0 | -4.44 | 35.97 |
| 5800 | -2.53 | -33.09 | 0 | 0 | -4.22 | 37.84 |
| 5850 | -3.55 | -35.73 | 0 | 0 | -4.88 | 32.54 |

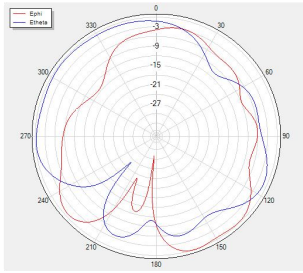
4. 2D3D directional diagram

ANT1

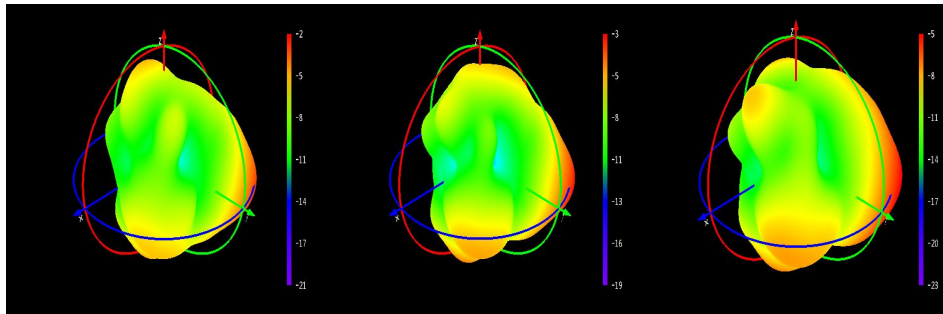
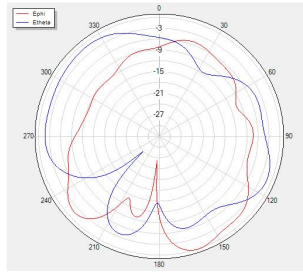
Phi=90 freq=2400MHz



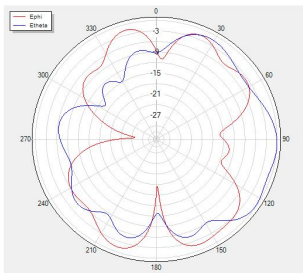
Phi=90 freq=2450MHz



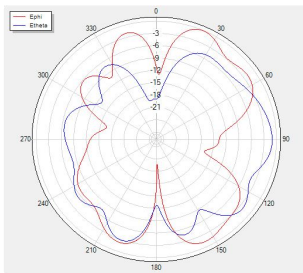
Phi=90 freq=2500MHz



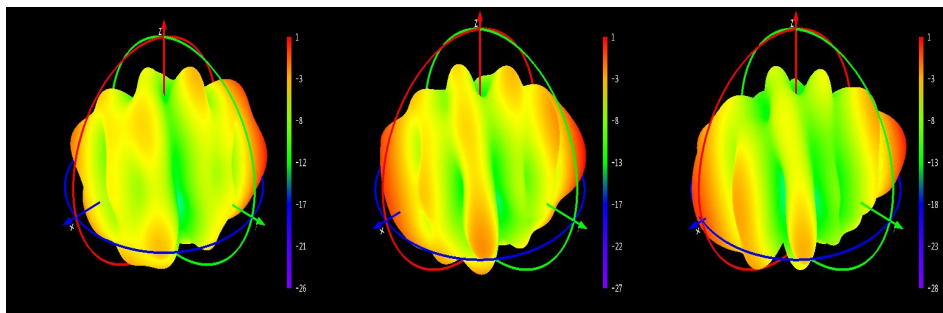
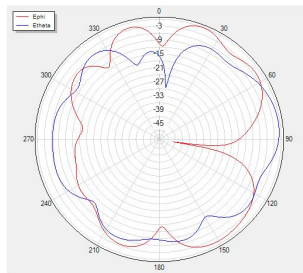
Phi=90 freq=5150MHz



Phi=90 freq=5500MHz

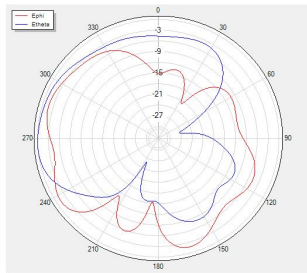


Phi=90 freq=5850MHz

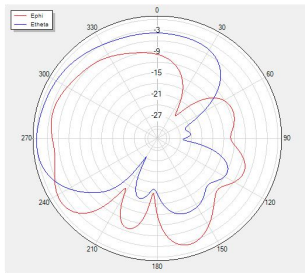


ANT2

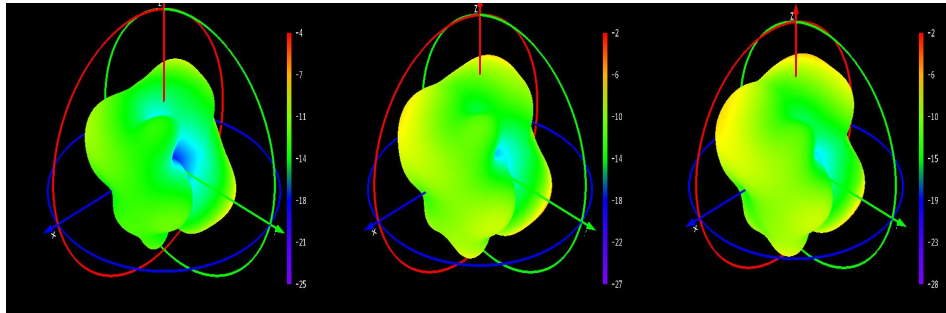
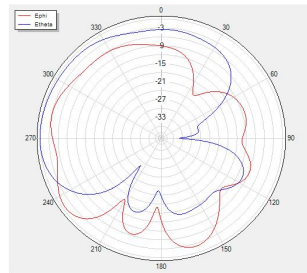
Phi=90 freq=2400MHz



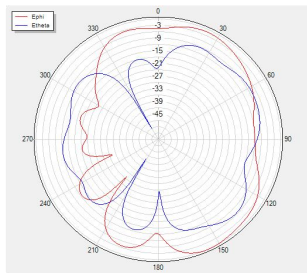
Phi=90 freq=2450MHz



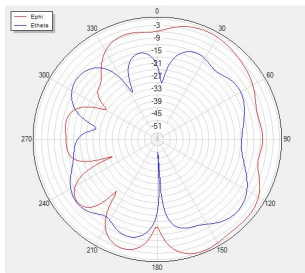
Phi=90 freq=2500MHz



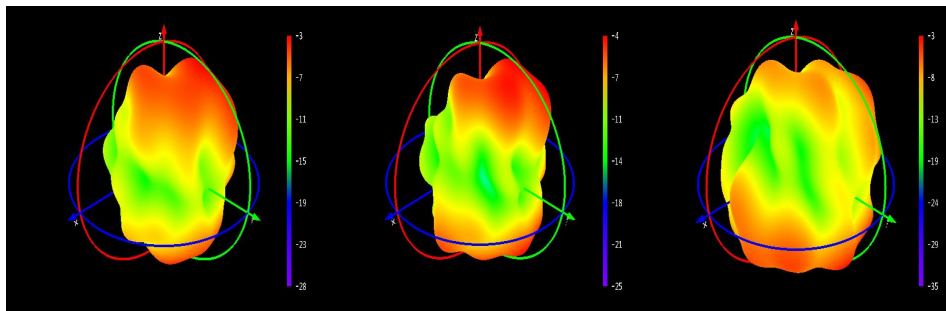
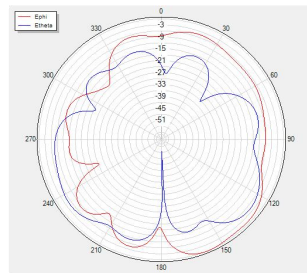
Phi=90 freq=5150MHz



Phi=90 freq=5500MHz



Phi=90 freq=5850MHz



5. Active data

| Test | Wifi 2G TRP | | | Test | Wifi 2G TIS | | |
|-----------------|-------------|------|------|-----------------|-------------|------|------|
| CH | 1 | 6 | 13 | CH | 1 | 6 | 13 |
| Frequency (MHz) | 2412 | 2437 | 2472 | Frequency (MHz) | 2412 | 2437 | 2472 |
| TRP(dBm) | 8.98 | 7.83 | 6.3 | TIS(dBm) | -79.22 | | |

Test mode: 802.11a 54Mbps BW 20M

| Test | Wifi 5G TRP | | | Test | Wifi 5G TIS | | |
|-----------------|-------------|-------|-------|-----------------|-------------|------|------|
| CH | 36 | 100 | 165 | CH | 36 | 100 | 165 |
| Frequency (MHz) | 5180 | 5500 | 5825 | Frequency (MHz) | 5180 | 5500 | 5825 |
| TRP(dBm) | 10.06 | 12.49 | 16.06 | TIS(dBm) | -77.75 | | |

深圳市万物相连通讯有限公司
Camelot Electronic Technology Co.,ltd

2023.12.25