

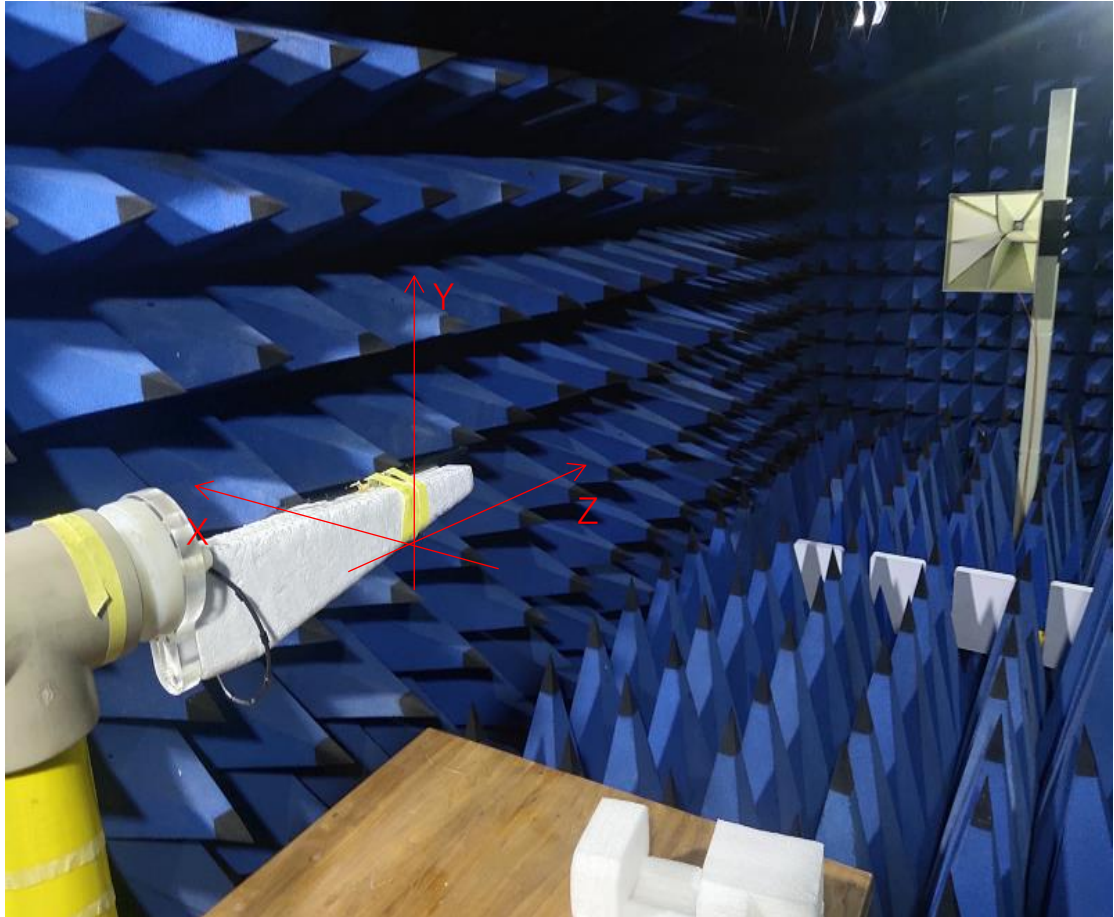
# 深圳市恒创科电子有限公司

HCK ELECTRONICS LIMITED

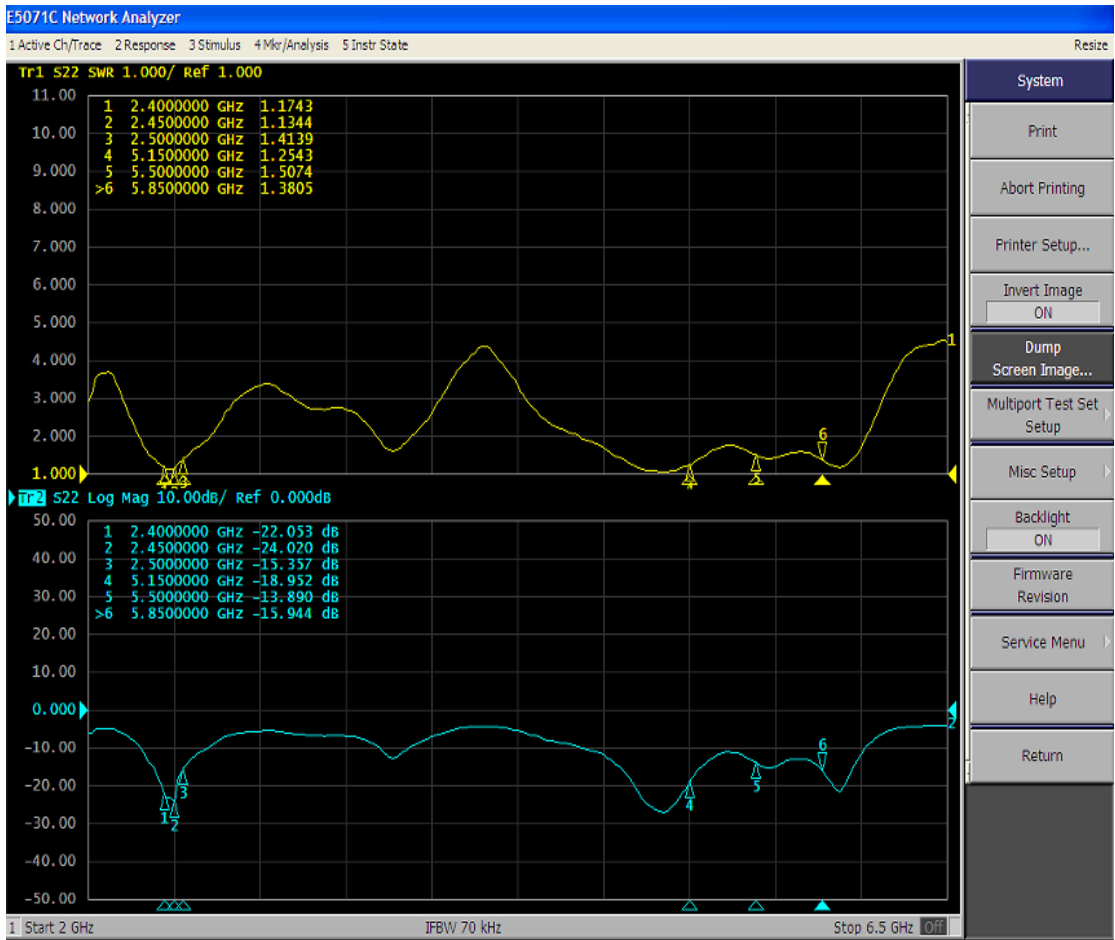
Black Plastic Rod Antenna at 2.4GHz (RPSMA)

Model: SR. 00514D. 010

1. Test setup photo:



2. VSWR testing



3. PeakGain(dBi)&Efficiency (%)

| Frequency ID    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | 25     | 26     |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 | 5150.0 | 5200.0 | 5250.0 | 5300.0 | 5350.0 | 5400.0 | 5450.0 | 5500.0 | 5550.0 | 5600.0 | 5650.0 | 5700.0 | 5750.0 | 5800.0 | 5850.0 |
| Gain (dBi)      | 3.06   | 3.10   | 3.23   | 3.29   | 3.48   | 3.52   | 3.30   | 3.06   | 2.79   | 2.67   | 2.57   | 2.20   | 2.69   | 2.81   | 2.40   | 2.89   | 2.88   | 2.90   | 2.41   | 2.29   | 2.48   | 2.46   | 1.75   | 2.60   | 2.88   | 2.58   |
| Efficiency (%)  | 61.68  | 62.18  | 65.28  | 67.76  | 71.52  | 72.98  | 72.24  | 70.56  | 69.03  | 68.41  | 66.57  | 69.29  | 71.25  | 72.34  | 62.68  | 66.17  | 66.32  | 65.39  | 60.02  | 61.38  | 63.29  | 66.78  | 57.35  | 64.00  | 67.83  | 64.57  |



## 4. 3D Radiation Pattern

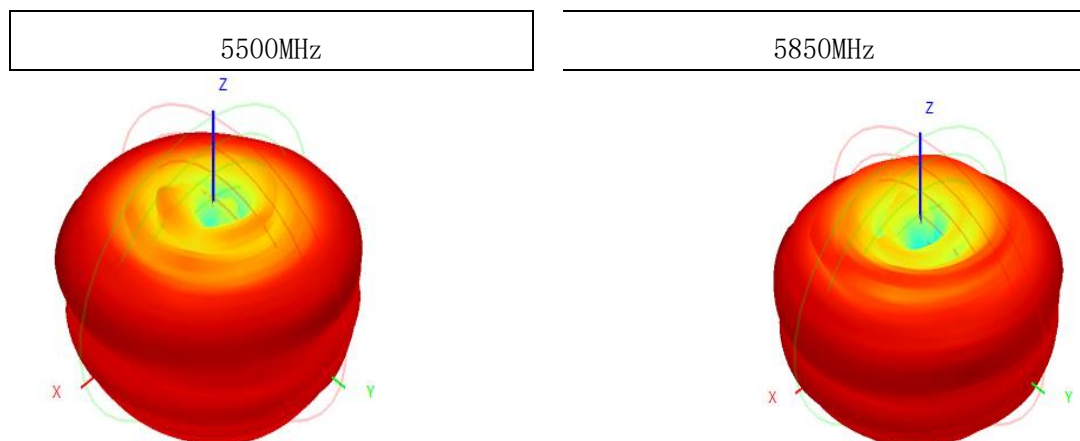
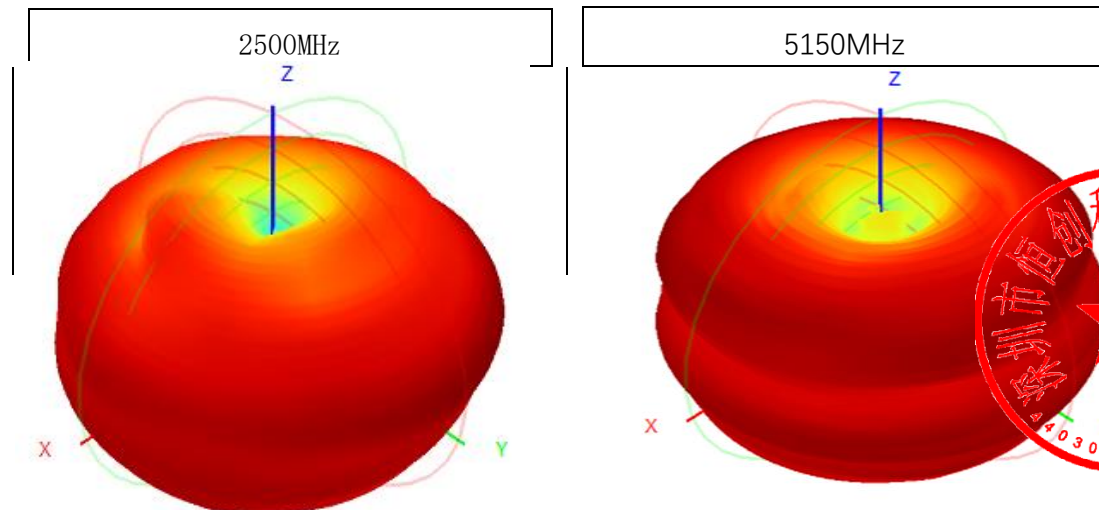
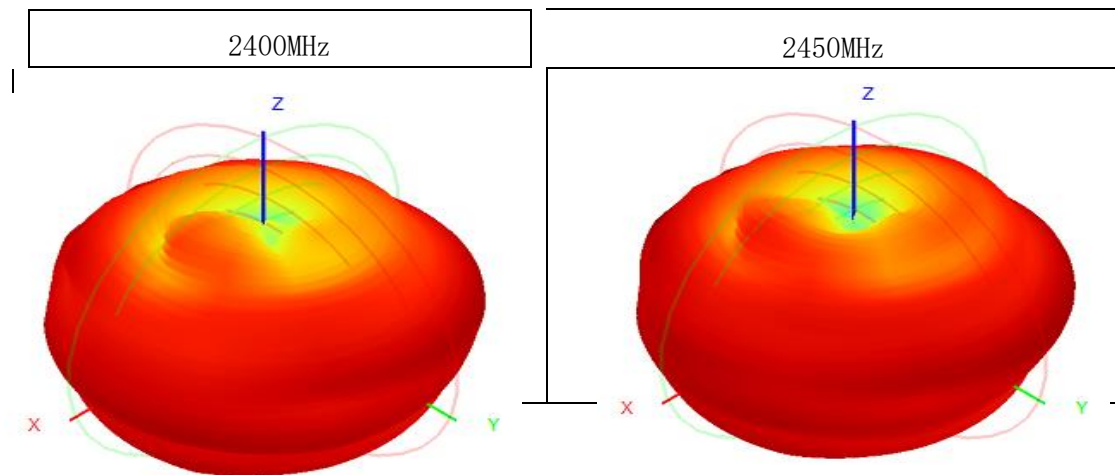
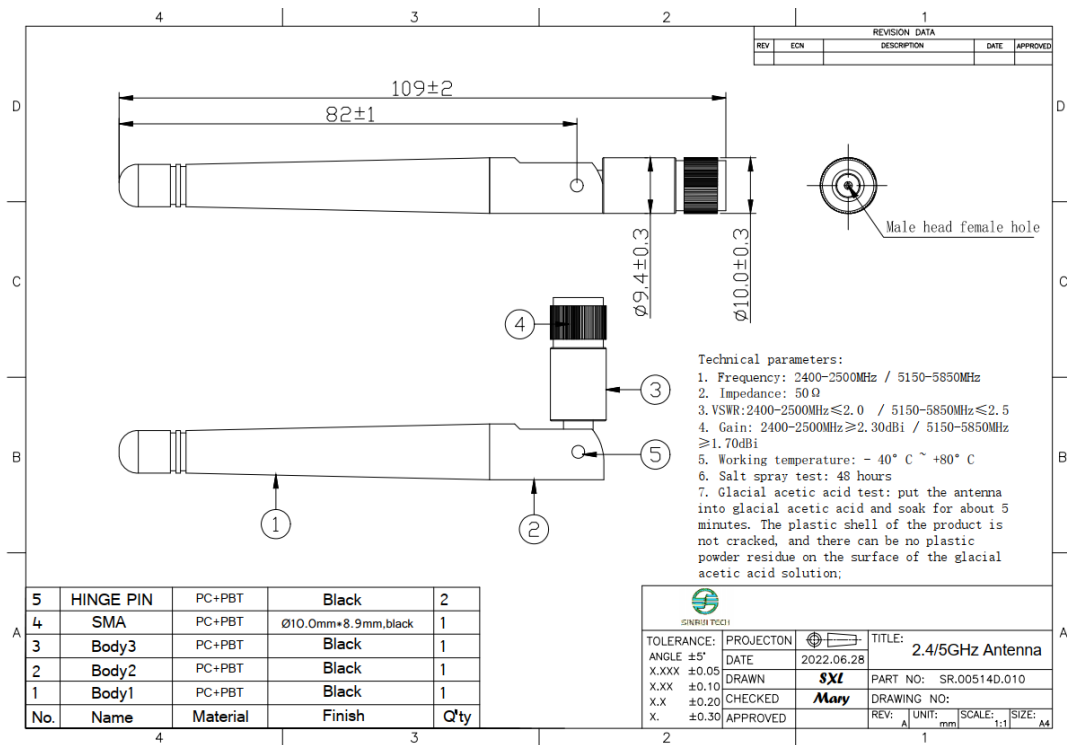


Figure 5 displays six polar plots showing the magnitude of the normalized electric field components for the 5G scenario. The plots are arranged in a 2x3 grid. The top row shows the XY Plane, XZ Plane, and YZ Plane for the 5G scenario. The bottom row shows the same planes for the 5G scenario. Each plot has a radial scale from 0 to 3.52 and an angular scale from -180 to 180 degrees. The XY Plane plots show a circular distribution with a maximum magnitude of 3.52. The XZ and YZ Plane plots show a more complex, irregular distribution with a maximum magnitude of 3.52. The 5G scenario shows a higher maximum magnitude compared to the 4G scenario.





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Manufacturer: SHENZHEN SINRUI TECHNOLOGY CO., LTD.

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