

| No. | Modification | modification date |
|-----|--------------|-------------------|
| 1   |              |                   |
| 2   |              |                   |

No:72000122B Waterproof Antenna

**Specification description**

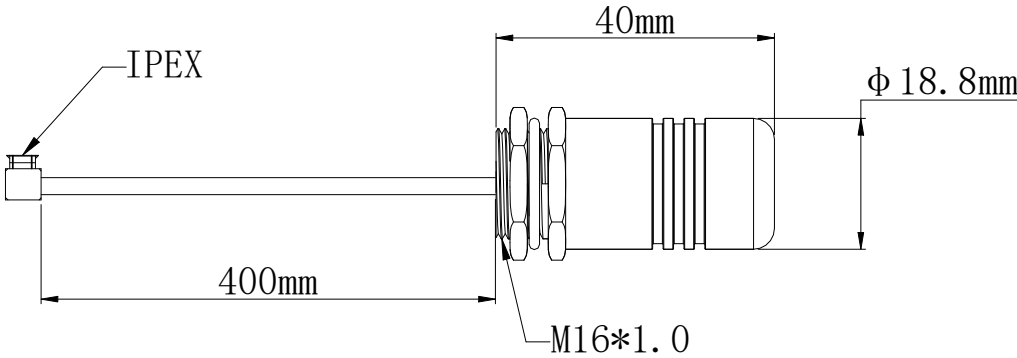
quantity

RF1.13 One gray wire with input impedance of 50 Ω, 400MM long connecting wire, one end with IPEX plug, and the other end with nut and gasket as shown in the figure, with nut and waterproof rubber gasket.

1

Electrical performance:

- 1. Frequency Range: 2400–2500MHz
- 2. Antenna Gain: Max 4.61dBi
- 3. Operating temperature: -40℃ to 85℃
- 4. Degree of protection: IP65



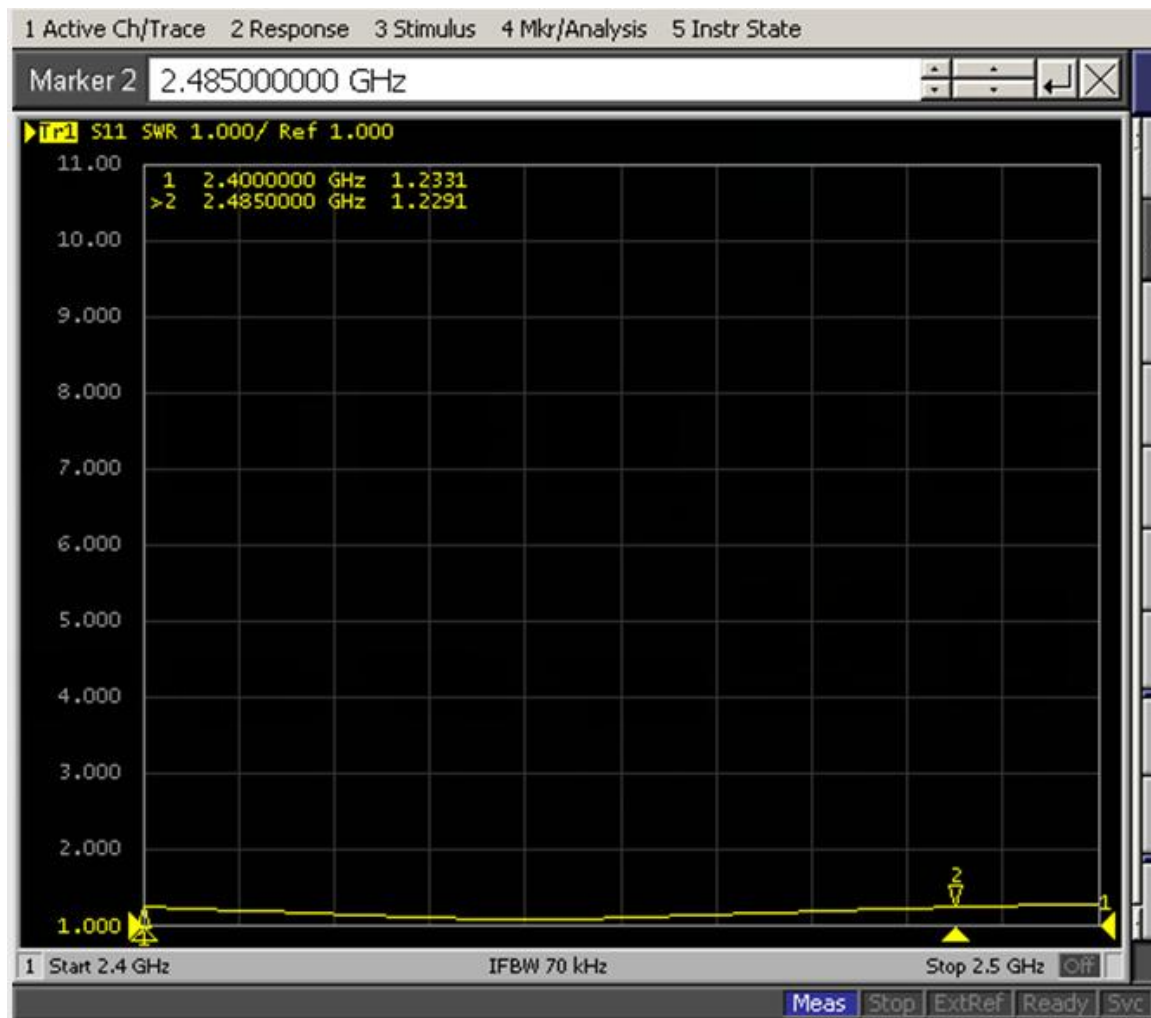
Controlled original/copy:

Company seal:

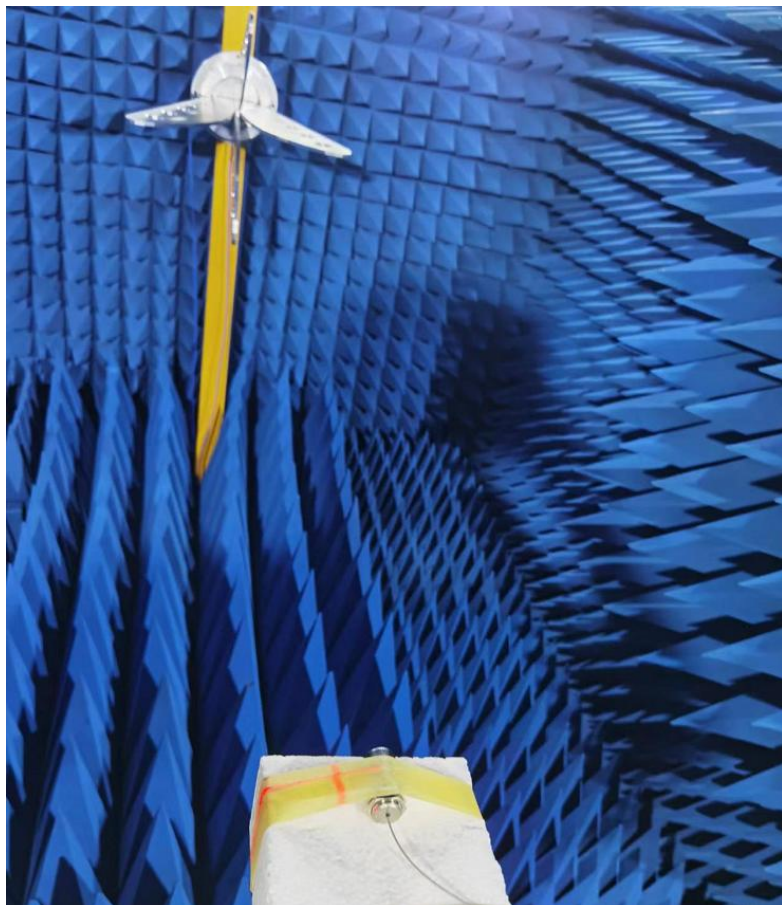
|          |     |            |          |    |
|----------|-----|------------|----------|----|
| approval |     |            | size     | MM |
| examine  | 黄集胜 | 22. 03. 04 | page     | 1  |
| author   | 张志朋 | 22. 03. 04 | Revision | B版 |

# 天线测试报告 Antenna test report

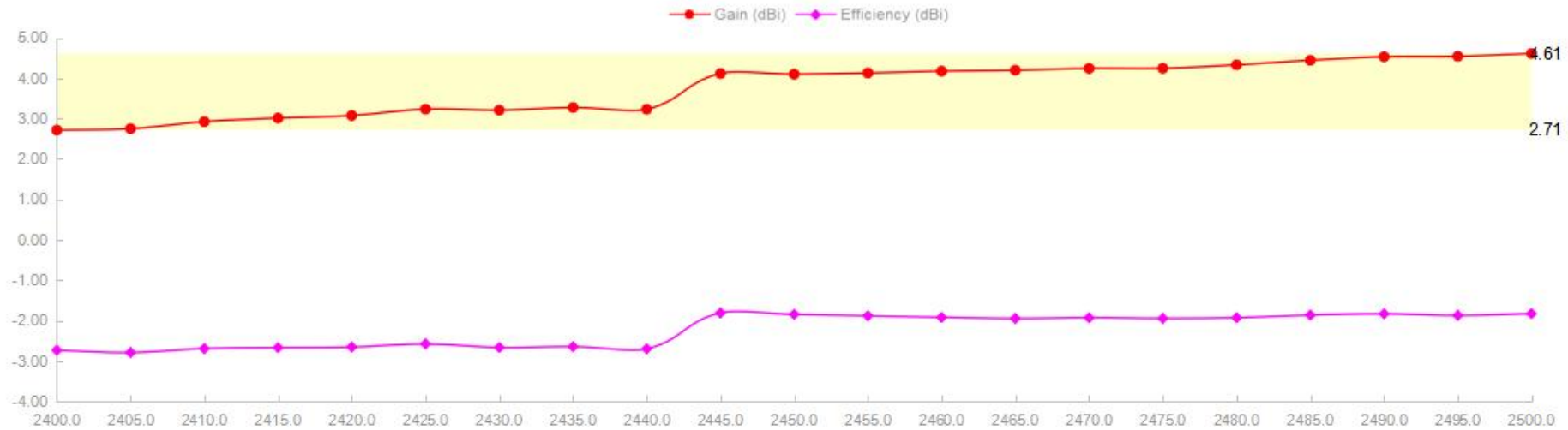
## 1. 天线驻波比测试 Antenna standing ratio test

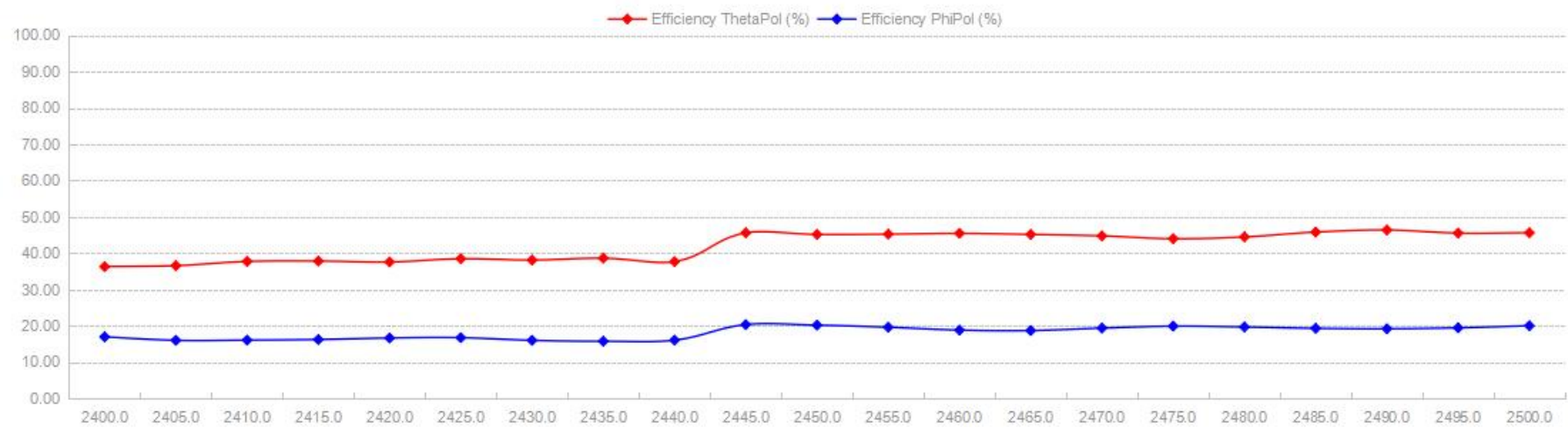


## 2. 天线暗室测试报告 Antenna dark chamber test report

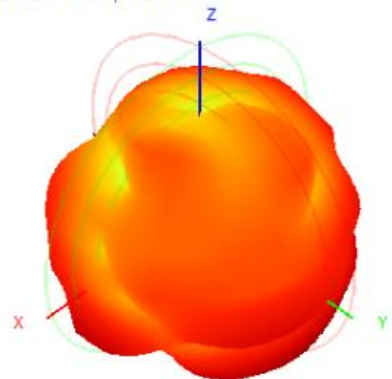


| Frequency ID               | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz)            | 2400.0 | 2405.0 | 2410.0 | 2415.0 | 2420.0 | 2425.0 | 2430.0 | 2435.0 | 2440.0 | 2445.0 | 2450.0 | 2455.0 | 2460.0 | 2465.0 | 2470.0 | 2475.0 | 2480.0 | 2485.0 | 2490.0 | 2495.0 | 2500.0 |
| Efficiency (dBi)           | -2.74  | -2.79  | -2.69  | -2.67  | -2.66  | -2.58  | -2.67  | -2.64  | -2.70  | -1.81  | -1.85  | -1.88  | -1.92  | -1.95  | -1.93  | -1.94  | -1.93  | -1.86  | -1.83  | -1.87  | -1.83  |
| Gain (dBi)                 | 2.71   | 2.75   | 2.92   | 3.01   | 3.08   | 3.23   | 3.21   | 3.27   | 3.23   | 4.12   | 4.10   | 4.13   | 4.17   | 4.20   | 4.24   | 4.24   | 4.33   | 4.44   | 4.53   | 4.54   | 4.61   |
| Efficiency (%)             | 53.26  | 52.58  | 53.79  | 54.08  | 54.25  | 55.22  | 54.12  | 54.39  | 53.73  | 65.94  | 65.36  | 64.86  | 64.29  | 63.87  | 64.15  | 63.90  | 64.16  | 65.13  | 65.58  | 64.99  | 65.65  |
| Directivity (dB)           | 5.45   | 5.54   | 5.62   | 5.68   | 5.73   | 5.81   | 5.88   | 5.92   | 5.93   | 5.93   | 5.95   | 6.01   | 6.09   | 6.14   | 6.17   | 6.19   | 6.26   | 6.30   | 6.36   | 6.41   | 6.44   |
| Peak Gain Position (Theta) | 120.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 | 135.00 |
| Peak Gain Position (Phi)   | 105.00 | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  |
| Efficiency ThetaPol (%)    | 36.30  | 36.57  | 37.73  | 37.84  | 37.59  | 38.47  | 38.11  | 38.63  | 37.67  | 45.61  | 45.17  | 45.24  | 45.46  | 45.17  | 44.76  | 43.99  | 44.47  | 45.82  | 46.38  | 45.53  | 45.62  |
| Efficiency PhiPol (%)      | 16.96  | 16.01  | 16.07  | 16.24  | 16.66  | 16.75  | 16.01  | 15.76  | 16.06  | 20.33  | 20.20  | 19.62  | 18.83  | 18.70  | 19.38  | 19.91  | 19.69  | 19.32  | 19.20  | 19.46  | 20.03  |
| Upper Hem. Efficiency (%)  | 16.18  | 15.99  | 16.44  | 16.62  | 16.71  | 17.06  | 16.80  | 16.98  | 16.82  | 20.70  | 20.55  | 20.36  | 20.14  | 20.05  | 20.16  | 20.05  | 20.13  | 20.47  | 20.59  | 20.35  | 20.51  |
| Lower Hem. Efficiency (%)  | 37.08  | 36.59  | 37.35  | 37.46  | 37.54  | 38.16  | 37.31  | 37.41  | 36.91  | 45.24  | 44.81  | 44.50  | 44.15  | 43.82  | 43.99  | 43.85  | 44.03  | 44.67  | 44.99  | 44.65  | 45.14  |

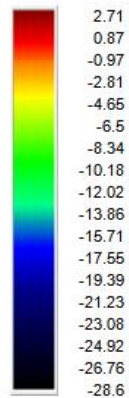
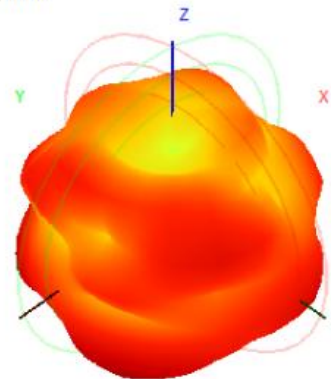




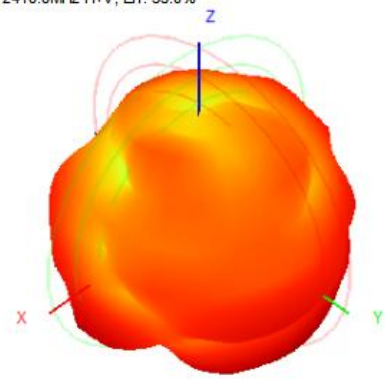
2400.0MHz H+V, Eff: 53.3%



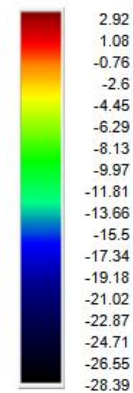
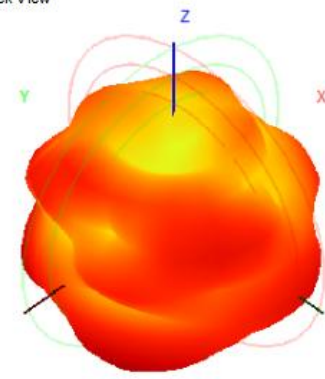
Back View



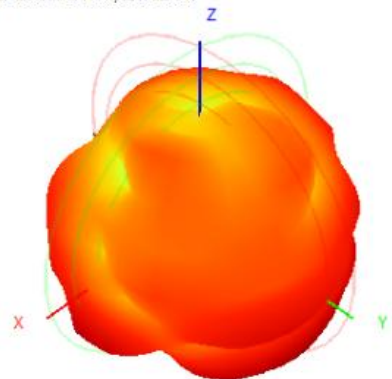
2410.0MHz H+V, Eff: 53.8%



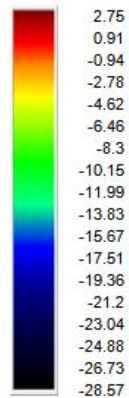
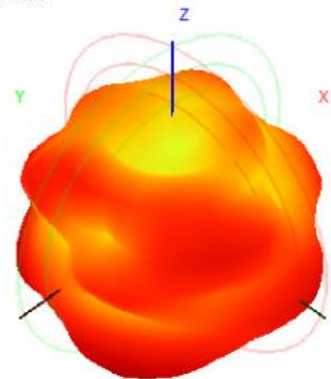
Back View



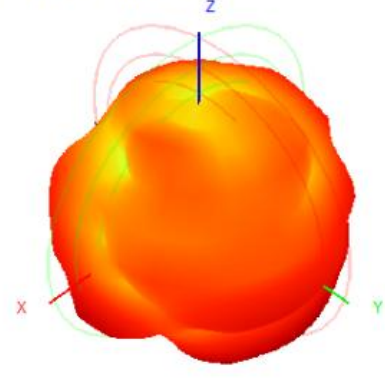
2405.0MHz H+V, Eff: 52.6%



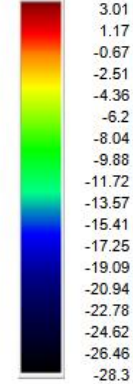
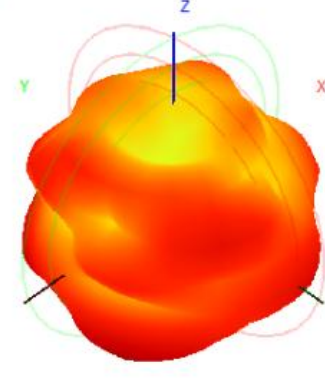
Back View



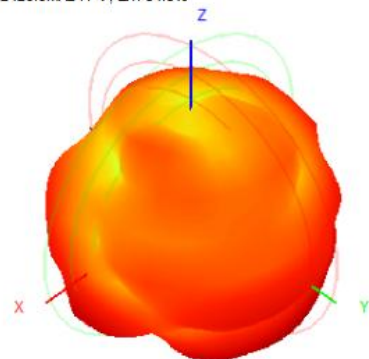
2415.0MHz H+V, Eff: 54.1%



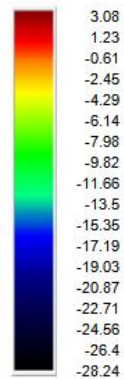
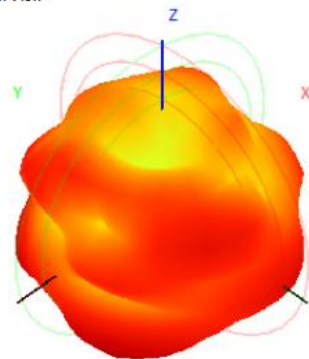
Back View



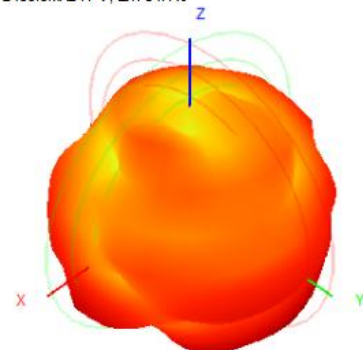
2420.0MHz H+V, Eff: 54.3%



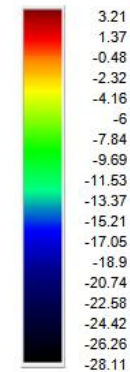
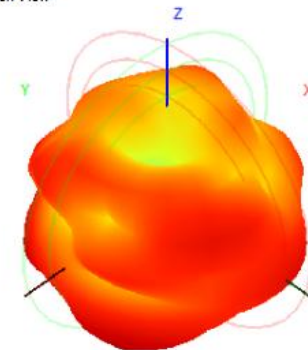
Back View



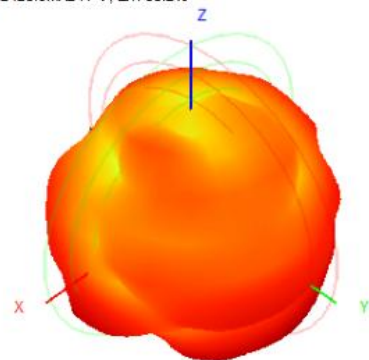
2430.0MHz H+V, Eff: 54.1%



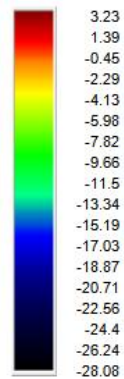
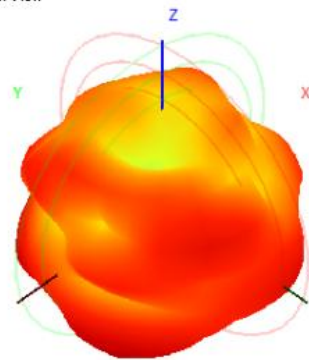
Back View



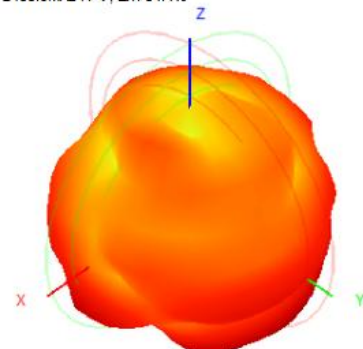
2425.0MHz H+V, Eff: 55.2%



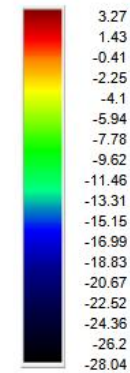
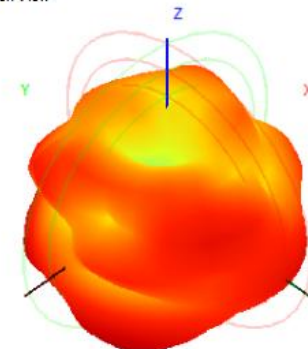
Back View



2435.0MHz H+V, Eff: 54.4%

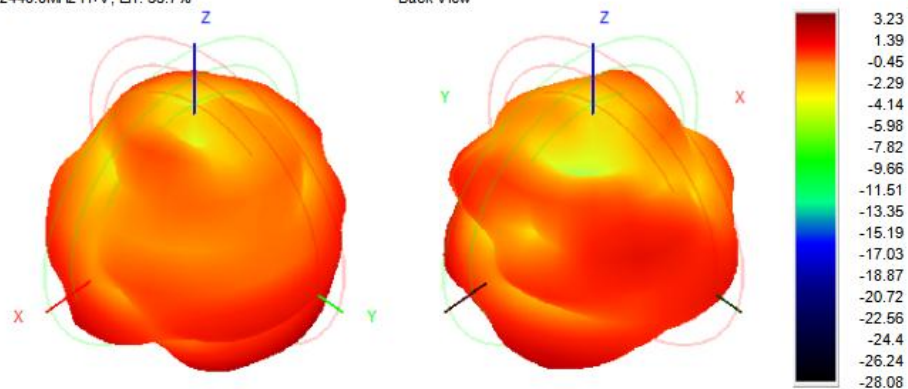


Back View



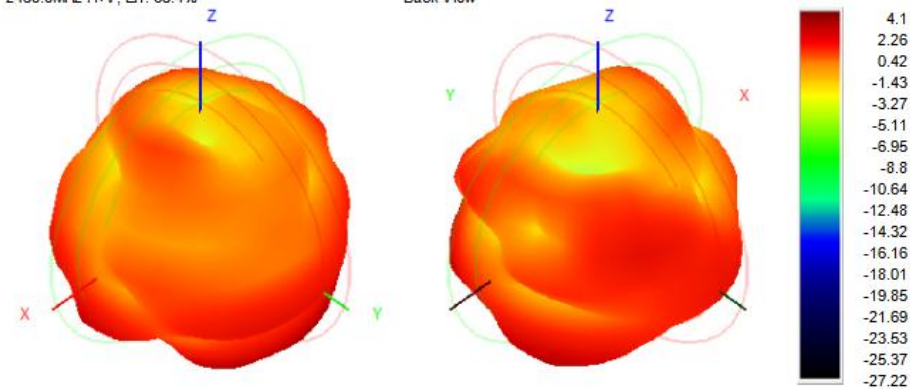
2440.0MHz H+V, Eff: 53.7%

Back View



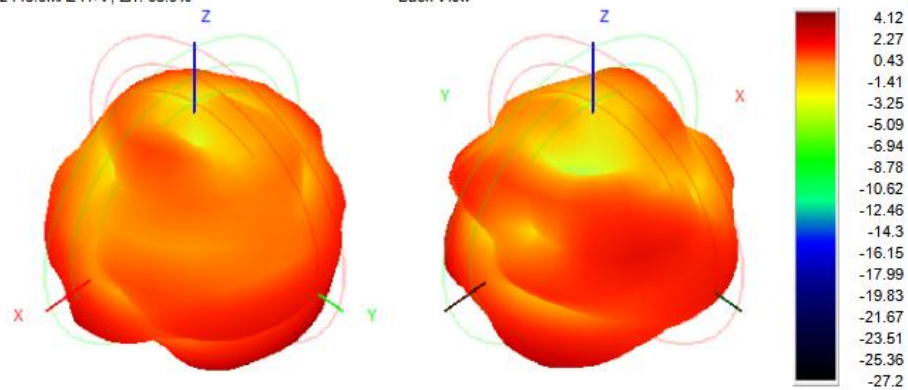
2450.0MHz H+V, Eff: 65.4%

Back View



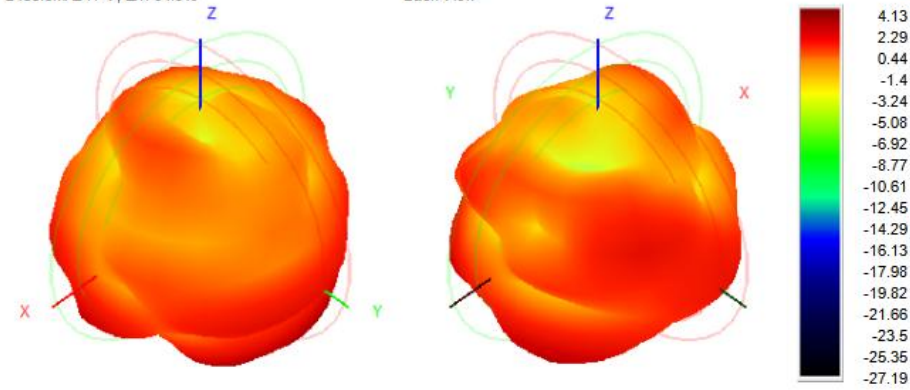
2445.0MHz H+V, Eff: 65.9%

Back View

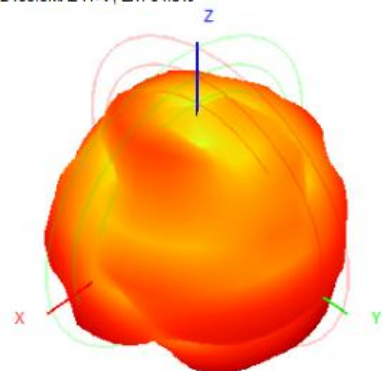


2455.0MHz H+V, Eff: 64.9%

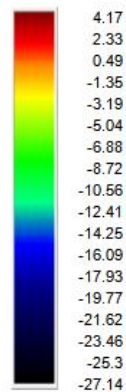
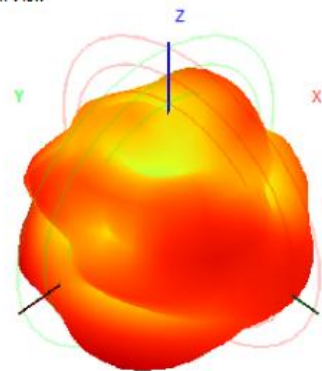
Back View



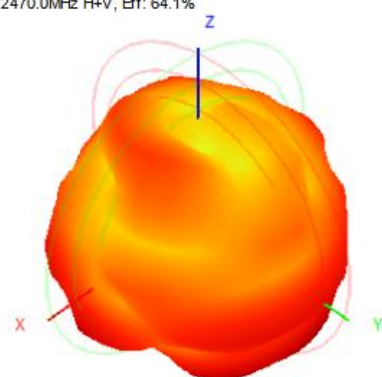
2460.0MHz H+V, Eff: 64.3%



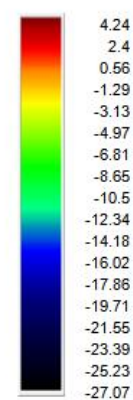
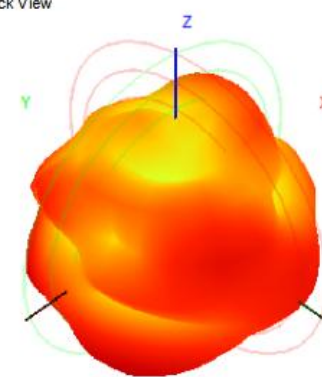
Back View



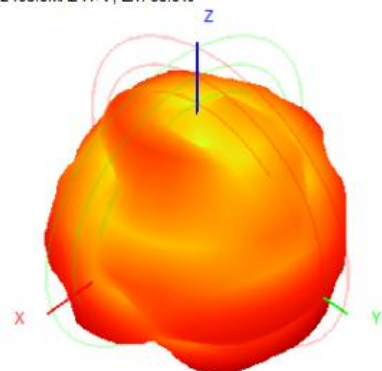
2470.0MHz H+V, Eff: 64.1%



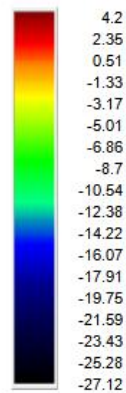
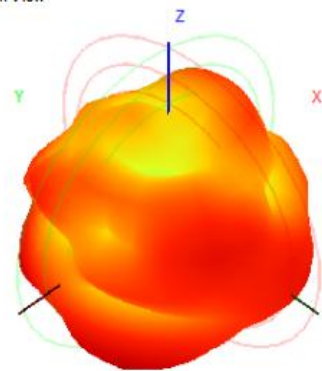
Back View



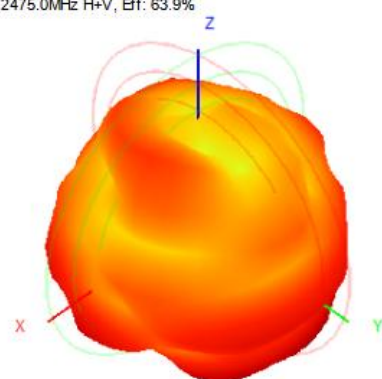
2465.0MHz H+V, Eff: 63.9%



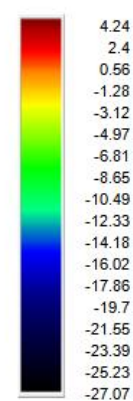
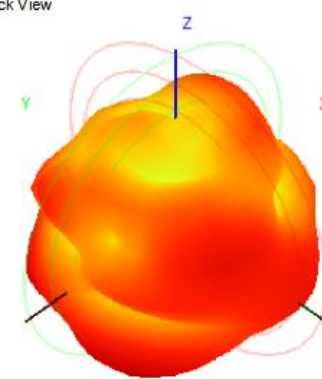
Back View



2475.0MHz H+V, Eff: 63.9%

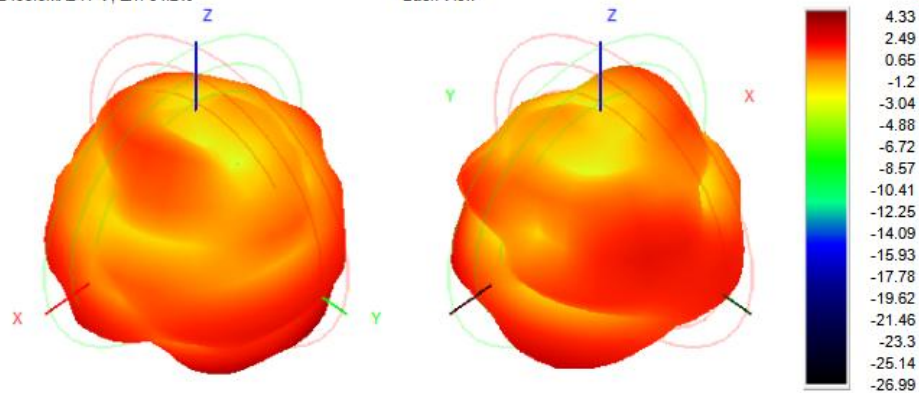


Back View



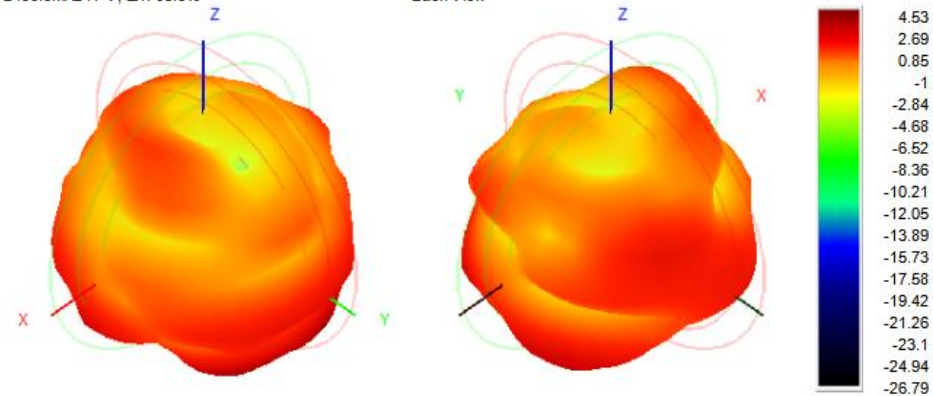
2480.0MHz H+V, Eff: 64.2%

Back View



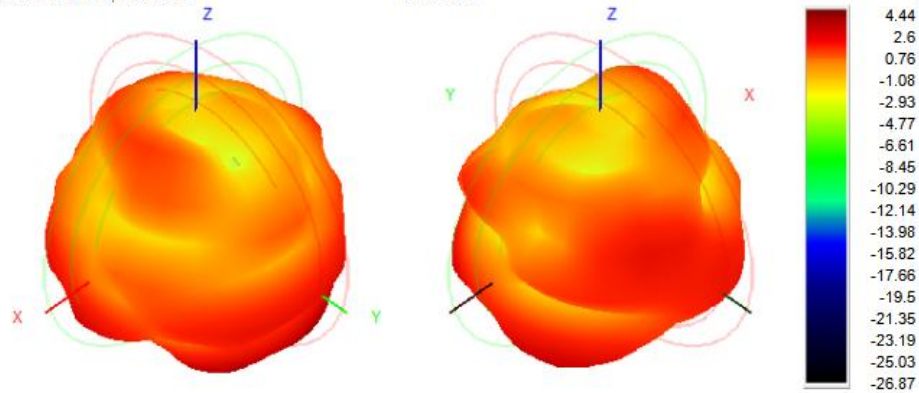
2490.0MHz H+V, Eff: 65.6%

Back View



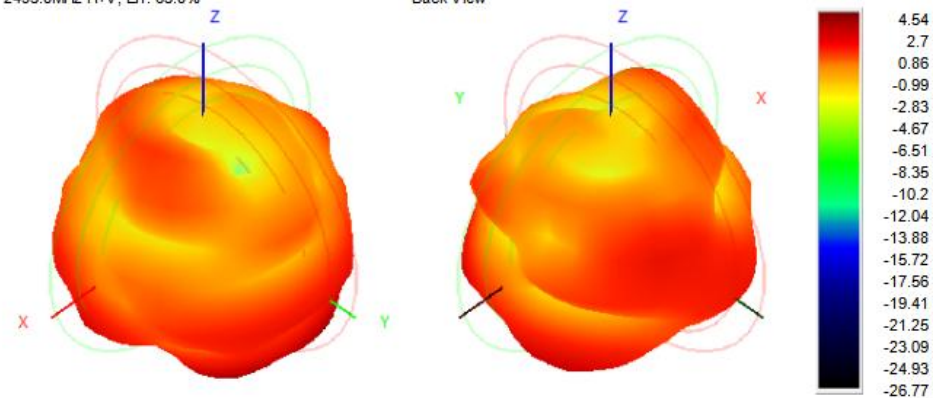
2485.0MHz H+V, Eff: 65.1%

Back View

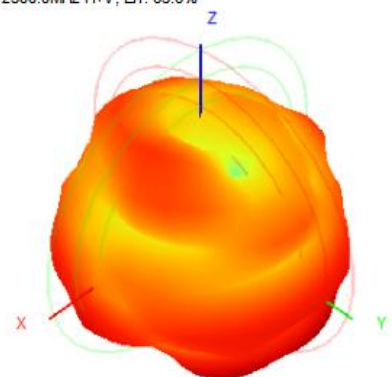


2495.0MHz H+V, Eff: 65.0%

Back View



2500.0MHz H+V, Eff: 65.6%



Back View

