

Antenna gain

1. Mode name: Wire antenna

2. Photo



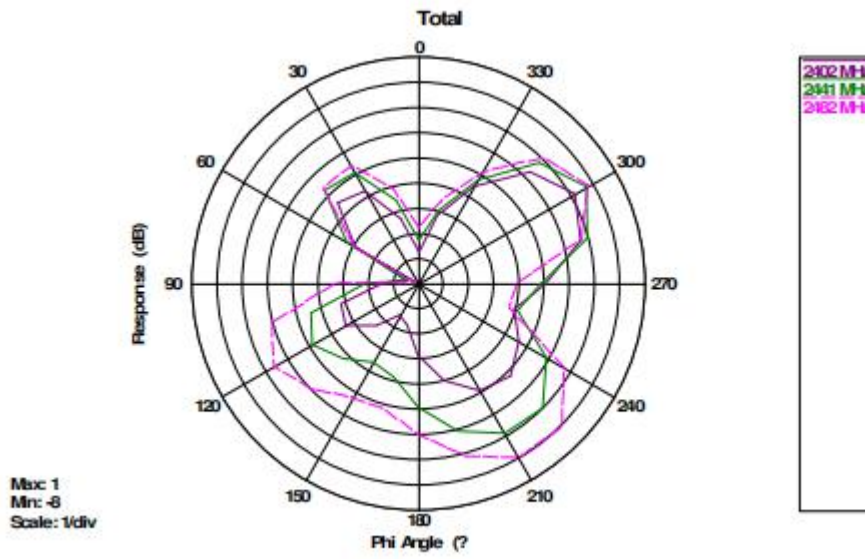
3. Size: Length 33mm, Diameter 1.6mm

4. Test results

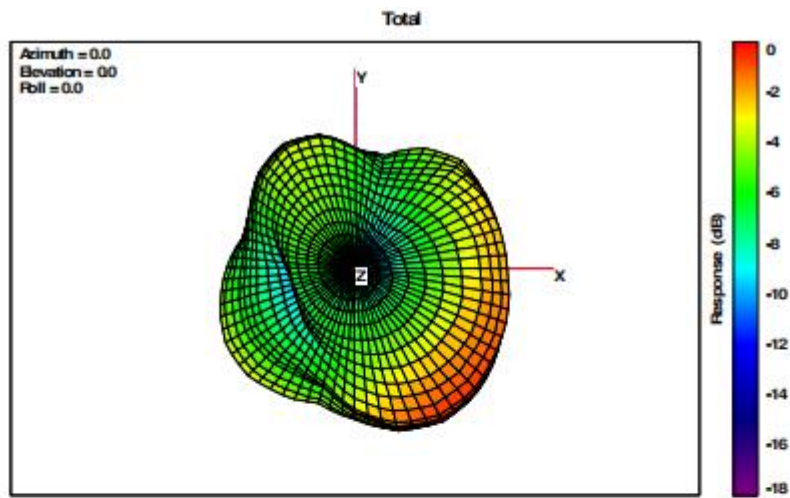
| 2.4GHz Antenna | | | |
|-----------------|-----------------|----------------|------------|
| Frequency (MHz) | Efficiency (dB) | Efficiency (%) | Gain (dBi) |
| 2400 | -5.00 | 31.59 | -0.47 |
| 2402 | -4.98 | 31.80 | -0.45 |
| 2412 | -4.75 | 33.46 | -0.28 |
| 2420 | -4.57 | 34.94 | -0.19 |
| 2430 | -4.27 | 37.41 | 0.09 |
| 2435 | -4.17 | 38.25 | 0.09 |
| 2437 | -4.10 | 38.87 | 0.16 |
| 2440 | -3.98 | 39.97 | 0.30 |
| 2441 | -3.95 | 40.30 | 0.33 |
| 2442 | -3.92 | 40.53 | 0.34 |
| 2445 | -3.86 | 41.07 | 0.32 |
| 2450 | -3.75 | 42.13 | 0.39 |
| 2455 | -3.60 | 43.68 | 0.52 |
| 2462 | -3.46 | 45.06 | 0.50 |
| 2465 | -3.40 | 45.71 | 0.56 |
| 2472 | -3.29 | 46.84 | 0.52 |
| 2475 | -3.26 | 47.20 | 0.50 |
| 2480 | -3.17 | 48.22 | 0.58 |
| 2482 | -3.12 | 48.72 | 0.58 |
| 2485 | -3.08 | 49.25 | 0.52 |

5. APPENDIX A S - Parameter & Antenna Radiation Patterns

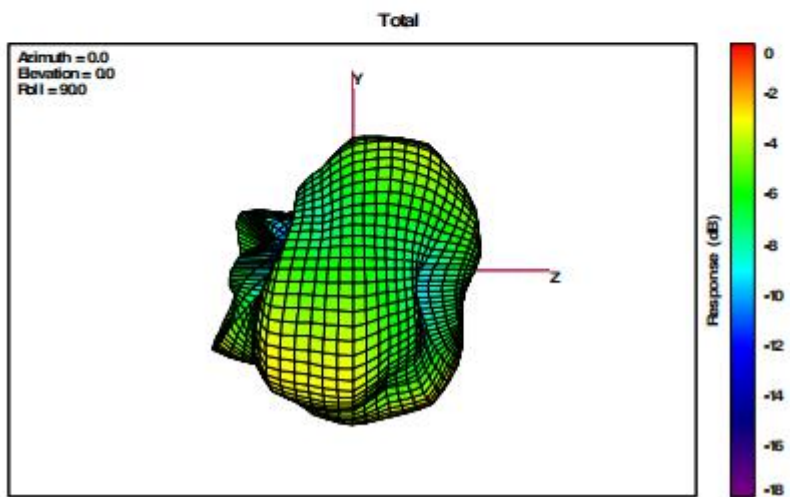
5.1. 2-D Antenna Pattern ($\Theta=90^\circ$)



5.2. 3-D Antenna Pattern



Front View



Side View