

Antenna specification

Antenna type: PCB

Antenna model: LCT550

Antenna manufacturer: Hubei Shiwei Communication Co., LTD

Address: No. 218, Xingguo Road, Xingguo Town, Yangxin County

—、 Antenna size

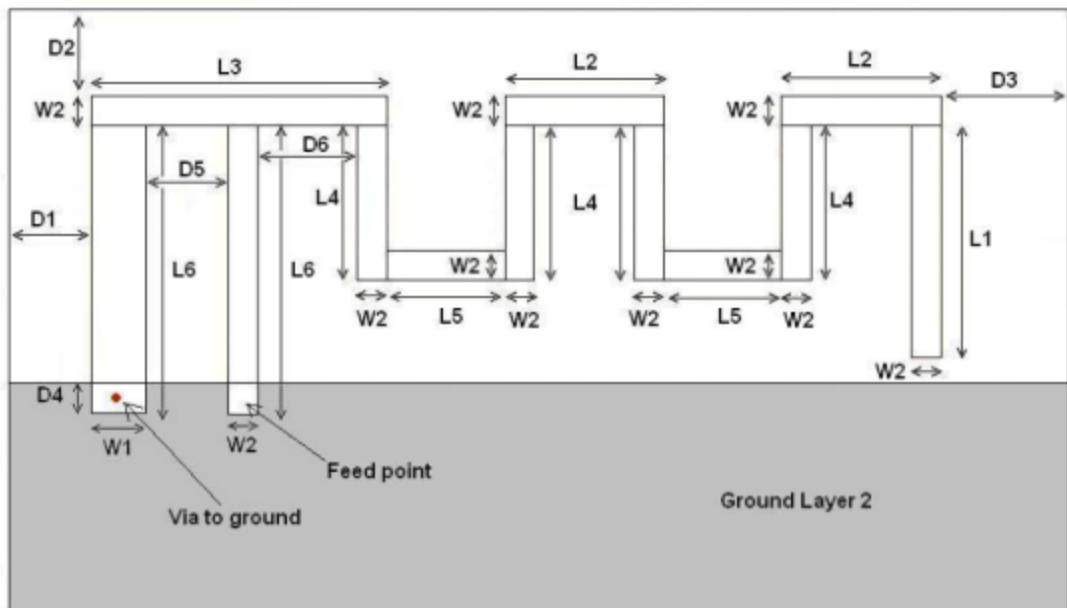
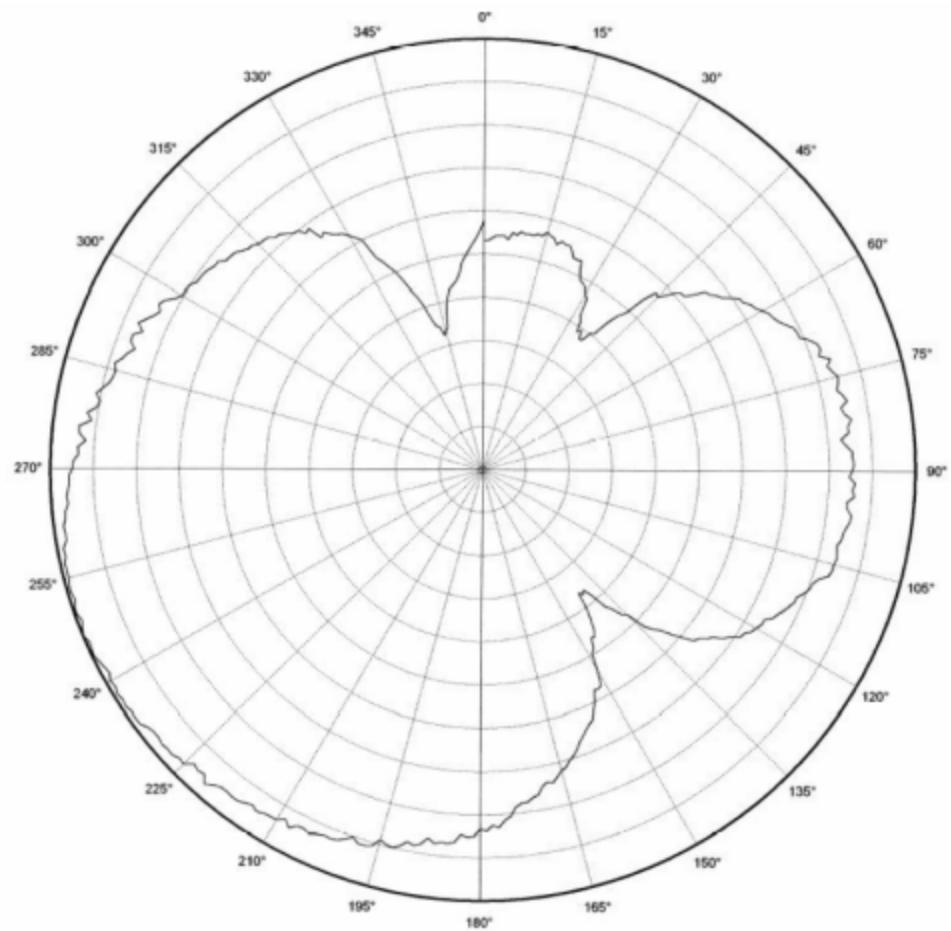


Figure 3: Antenna Dimensions

| | |
|----|---------|
| L1 | 3.94 mm |
| L2 | 2.70 mm |
| L3 | 5.00 mm |
| L4 | 2.64 mm |
| L5 | 2.00 mm |
| L6 | 4.90 mm |
| W1 | 0.90 mm |
| W2 | 0.50 mm |
| D1 | 0.50 mm |
| D2 | 0.30 mm |
| D3 | 0.30 mm |
| D4 | 0.50 mm |
| D5 | 1.40mm |
| D6 | 1.70 mm |

Table 1: Antenna Dimensions

—、 Gain pattern



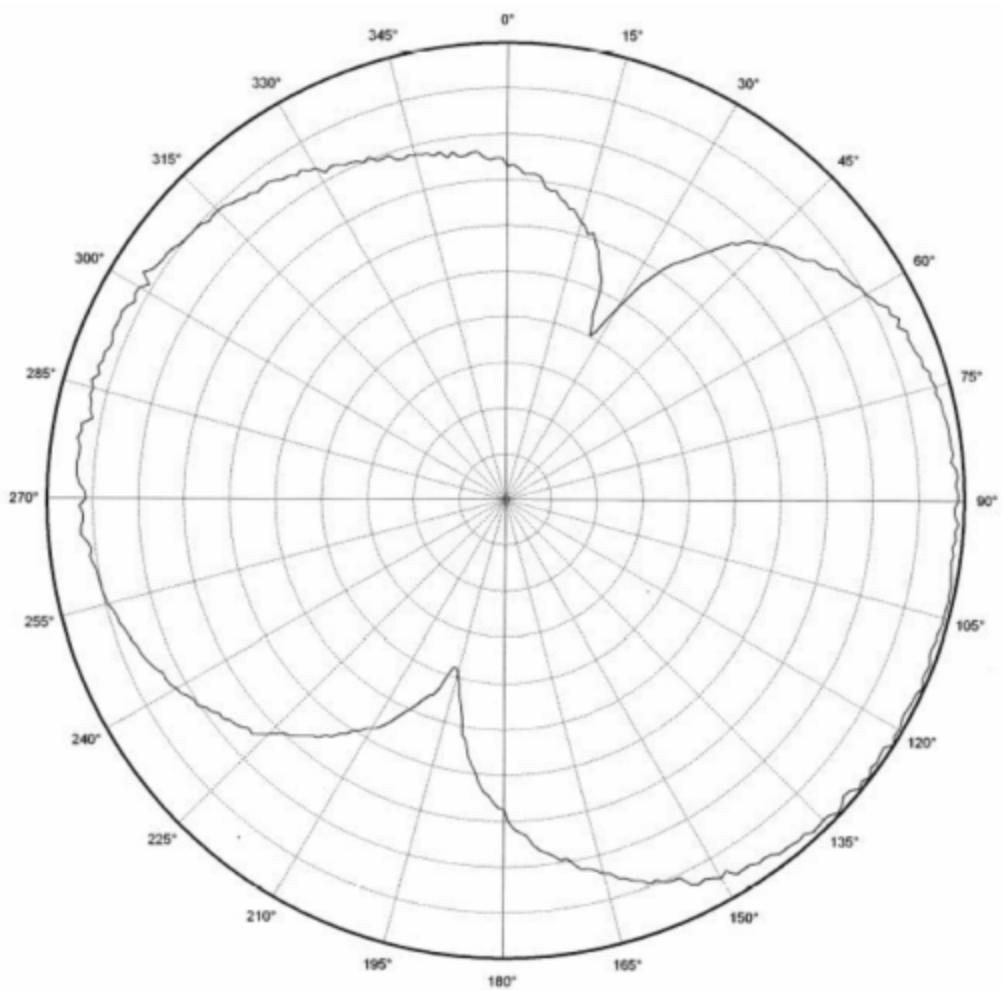
Vertical Polarization

usb XY

CF 2450.000 MHz

4 dB/ div

Ref Lev: -2.5 dBm



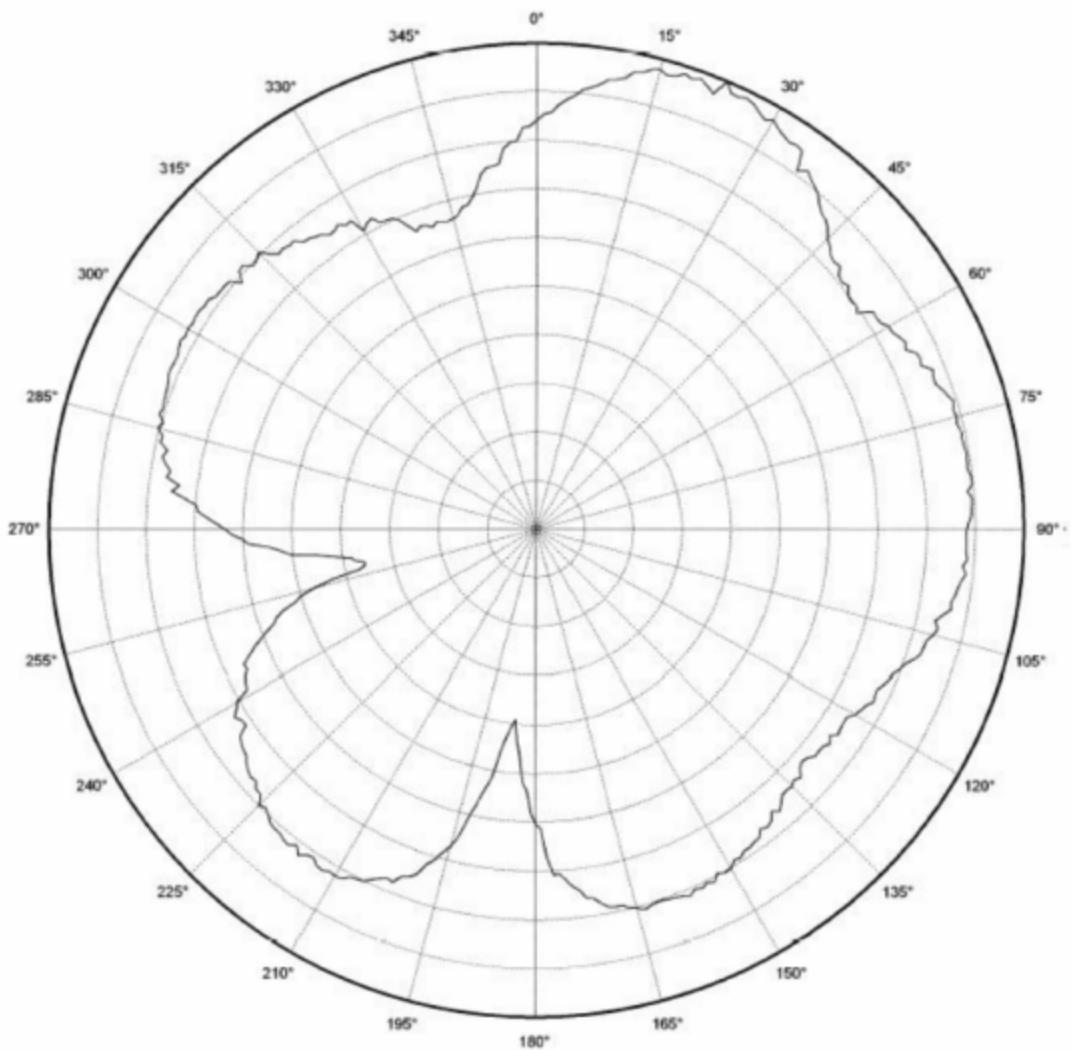
Horizontal Polarization

usb XY

CF 2450.000 MHz

5 dB/ div

Ref Lev: 45..... dBm



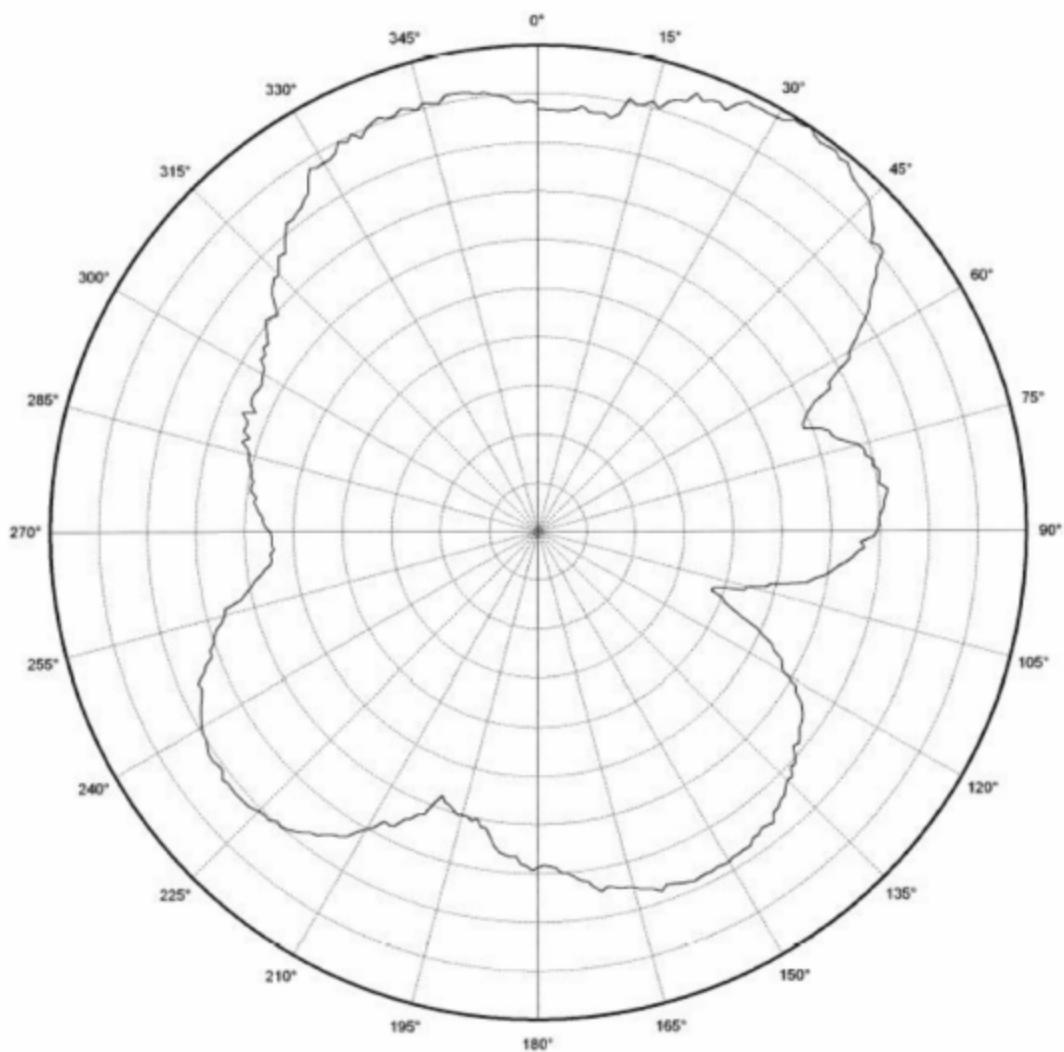
Vertical Polarization

usb XZ

CF 2450.000 MHz

4 dB/ div

Ref Lev: 2.2 dBm



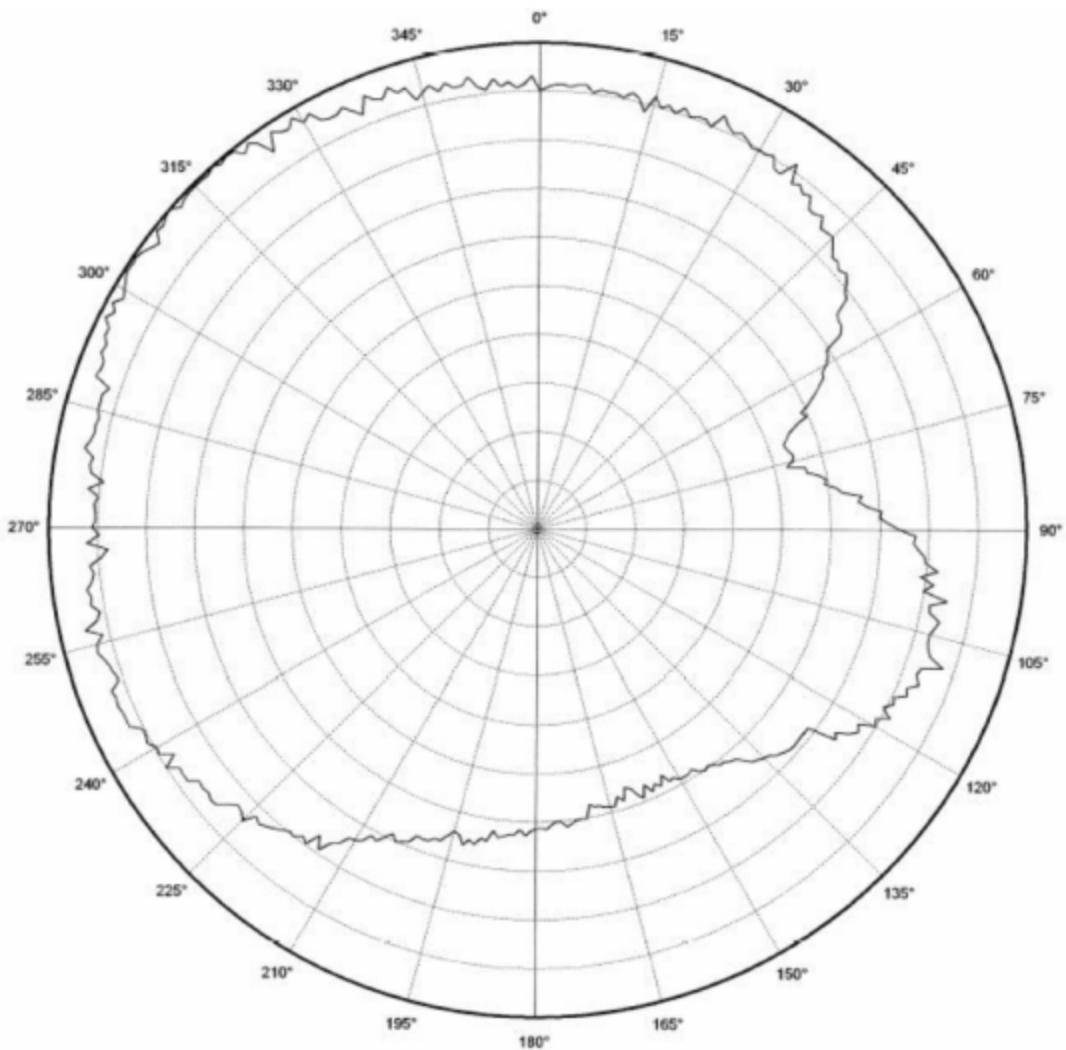
Horizontal Polarization

usb XZ

CF 2450.000 MHz

4 dB/ div

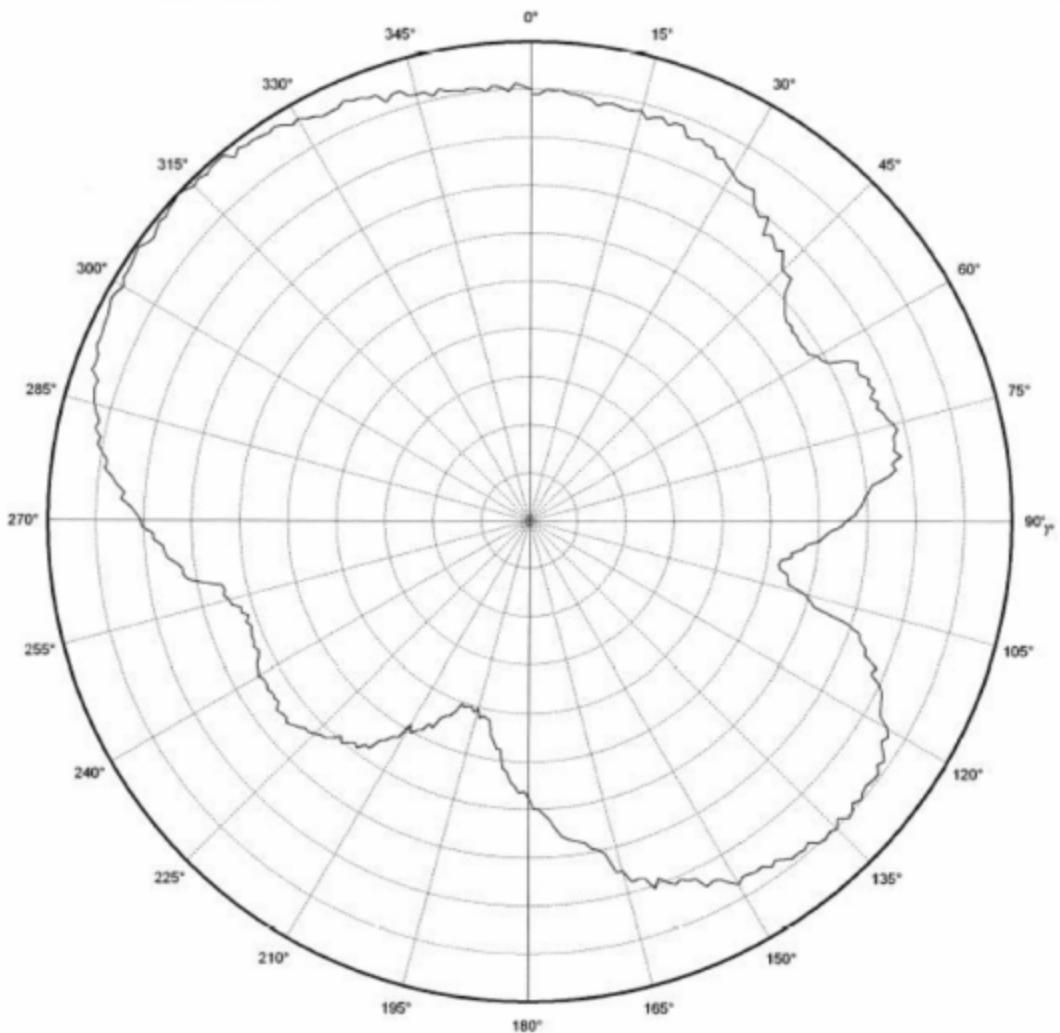
Ref Lev: 5.3 dBm



Vertical Polarization

usb YZ

CF 2450.000 MHz
2 dB/ div
Ref Lev: $+\sqrt{3}$ dBm



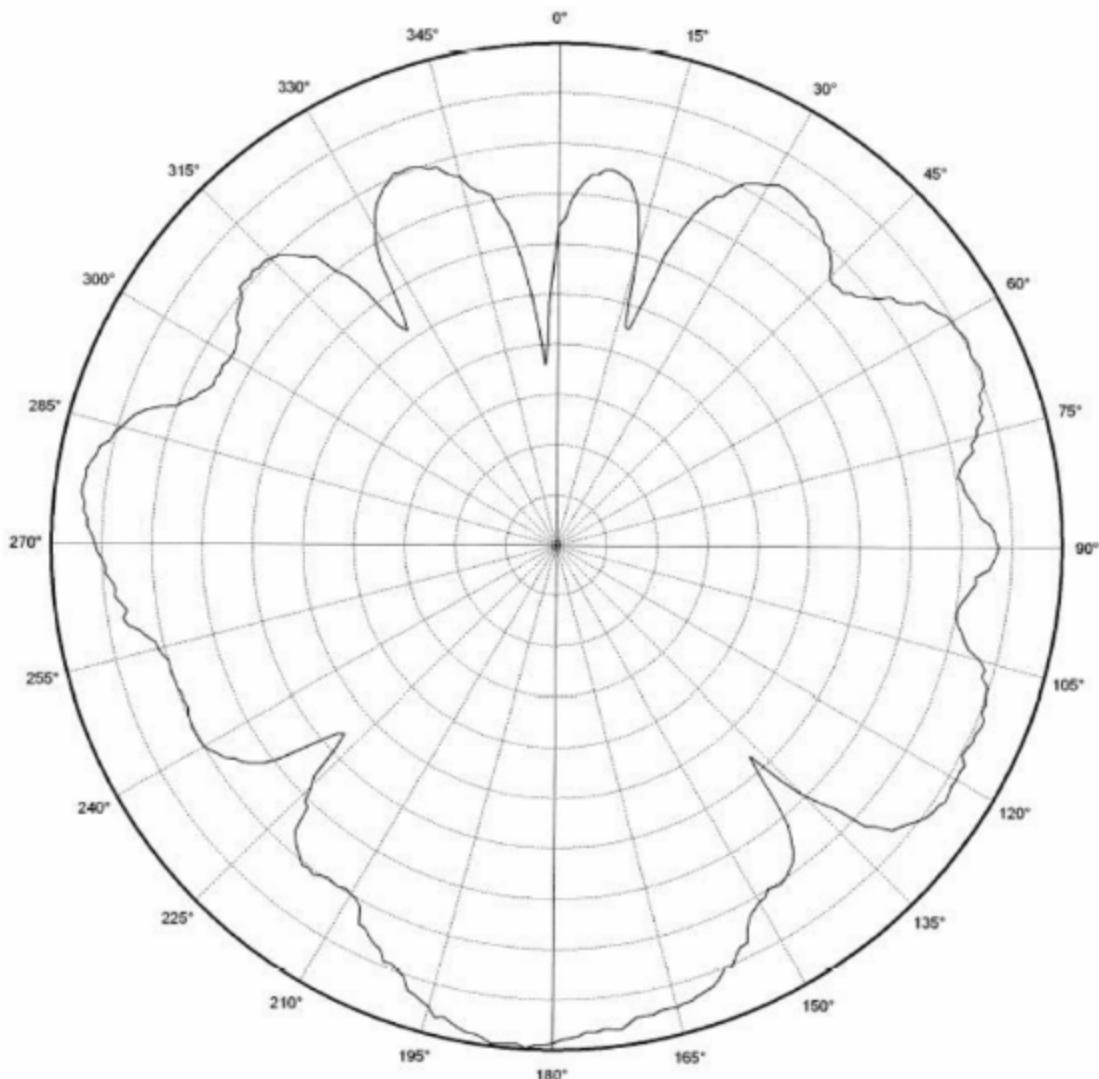
Horizontal Polarization

usb YZ

CF 2450.000 MHz

3 dB/ div

Ref Lev: dBm



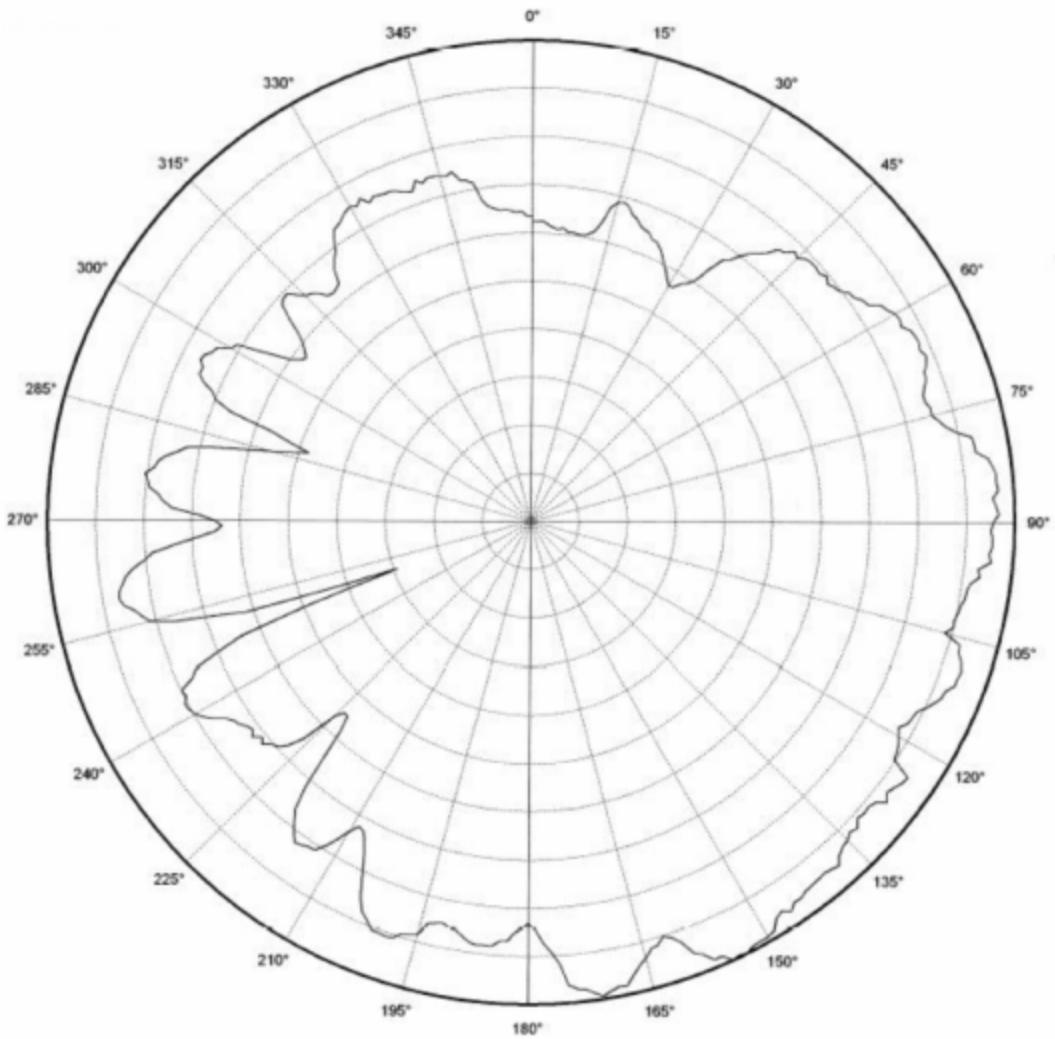
Vertical Polarization

aptop USB XY

CF 2450.000 MHz

5 dB/ div

Ref Lev: $-2^{\circ} 0$ dBm



Horizontal Polarization

Laptop USB XY

CF 2450.000 MHz

4 dB/ div

Ref Lev: 3.3 dBm

三、Efficiency&Gain

| Frequency ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Point Values | | | | | | | | | | | |
| Ant. Port Input Pwr. (dBm) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tot. Rad. Pwr. (dBm) | -13.13 | -13.46 | -13.76 | -13.62 | -13.64 | -13.91 | -13.93 | -13.97 | -14.17 | -13.86 | -13.96 |
| Peak EIRP (dBm) | -8.31 | -8.36 | -8.36 | -8.02 | -8.07 | -8.40 | -8.47 | -8.85 | -9.53 | -9.40 | -9.65 |
| Directivity (dBi) | 4.82 | 5.10 | 5.40 | 5.60 | 5.57 | 5.51 | 5.46 | 5.13 | 4.64 | 4.46 | 4.31 |
| Efficiency (dB) | -13.13 | -13.46 | -13.76 | -13.62 | -13.64 | -13.91 | -13.93 | -13.97 | -14.17 | -13.86 | -13.96 |
| Efficiency (%) | 4.90 | 4.50 | 4.20 | 4.30 | 4.30 | 4.10 | 4.00 | 4.00 | 3.80 | 4.10 | 4.00 |
| Gain (dBi) | -8.31 | -8.36 | -8.36 | -8.02 | -8.07 | -8.40 | -8.47 | -8.85 | -9.53 | -9.40 | -9.65 |
| NHPRP $\pm \frac{\pi}{4}$ (dBm) | -13.75 | -13.84 | -13.88 | -13.57 | -13.64 | -13.91 | -13.94 | -14.18 | -14.75 | -14.51 | -14.66 |
| NHPRP $\pm \frac{\pi}{6}$ (dBm) | -15.05 | -15.12 | -15.14 | -14.83 | -14.91 | -15.18 | -15.22 | -15.46 | -16.04 | -15.79 | -15.94 |
| NHPRP $\pm \frac{\pi}{8}$ (dBm) | -16.03 | -16.08 | -16.10 | -15.80 | -15.90 | -16.19 | -16.24 | -16.49 | -17.07 | -16.80 | -16.94 |
| Upper Hem. PRP (dBm) | -15.88 | -16.18 | -16.45 | -16.27 | -16.25 | -16.50 | -16.49 | -16.53 | -16.71 | -16.37 | -16.45 |
| Lower Hem. PRP (dBm) | -16.42 | -16.78 | -17.12 | -17.03 | -17.10 | -17.39 | -17.45 | -17.49 | -17.70 | -17.43 | -17.56 |
| Upper Hem. PRP (%) | 2.59 | 2.41 | 2.27 | 2.36 | 2.37 | 2.24 | 2.24 | 2.22 | 2.13 | 2.31 | 2.26 |
| Lower Hem. PRP (%) | 2.28 | 2.10 | 1.94 | 1.98 | 1.95 | 1.83 | 1.80 | 1.78 | 1.70 | 1.81 | 1.76 |

