Magnetic-based Fiberglass Antenna Manual

MODEL: WL-FA003

Antenna Installation

The antenna installation includes the following procedures:

- Tools and Equipment Required
- Installing the Antenna
- Connecting the Lighting Arrestor(optional)

Tools and Equipment Required

- Fiberglass Antenna
- Magnetic Mount
- 3 meters communication cable

Install the Antenna

- The Antenna provide with a mounting kit consisting of a magnetic mount.
- The Antenna is vertically polarized. Since the antenna has a vertical gain, it very important to mount the antenna in a vertical position for optimal performance.

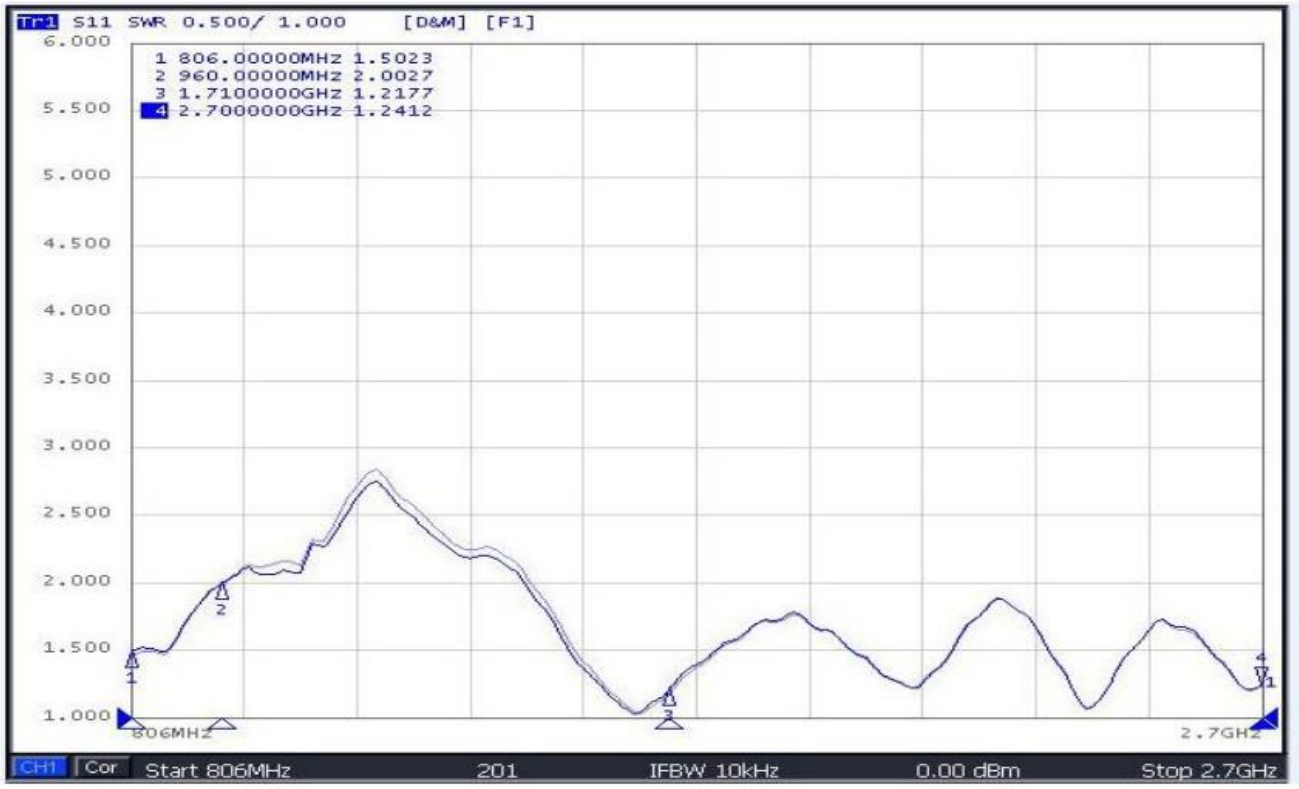
Connect the Lighting Arrestor (optional)

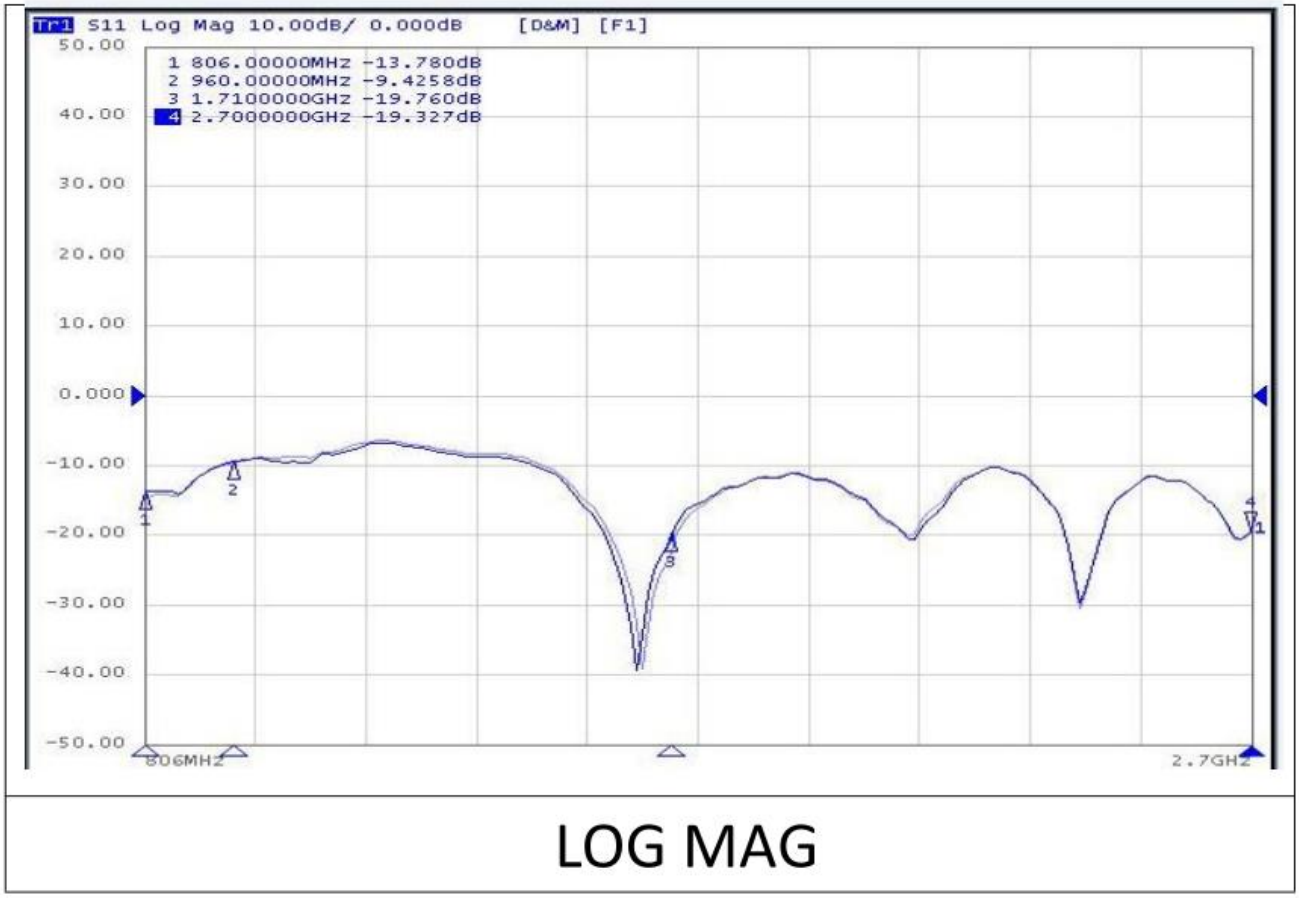
- See on WL-A25S70F 3.0 GHz Surge User manual

Technical Parameter

Frequency	698-960/1700-2700MHz 806-960/1700-2700MHz
Bandwidth	Customizable
Interface	SMA-M
Polarization	Vertical
Gain	3 dBi
Voltage Standing Wave Ratio	≤ 2.0
Maximum Input Power	50 W
Input Impedance	50 Ω
Feeder Length	3 M
Weight	0.8 Kg
Operating Temperature	-40℃ to +80℃
Material	Waterproof Fiberglass

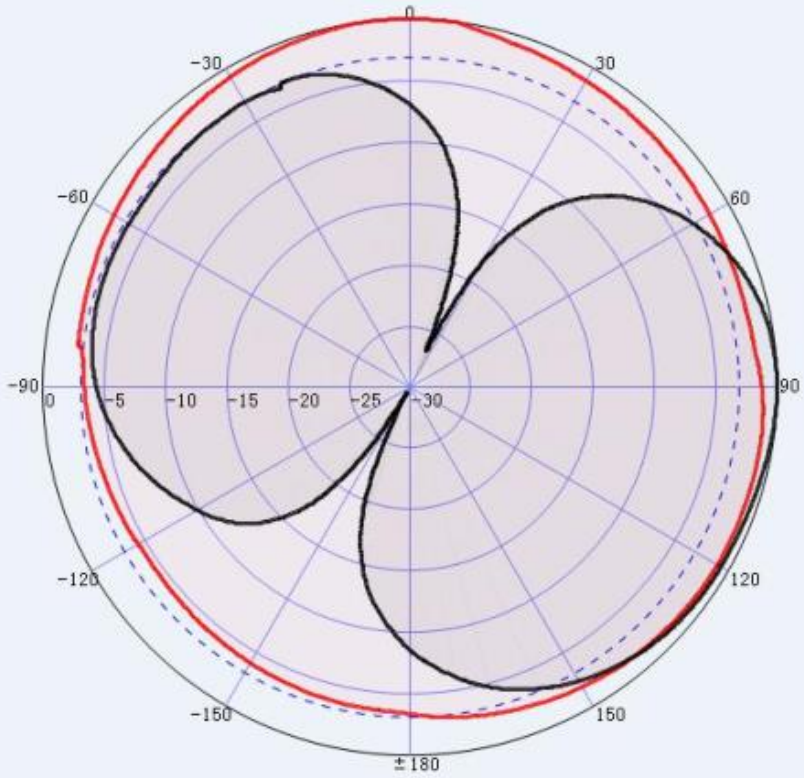
VSWR Test





LOG MAG

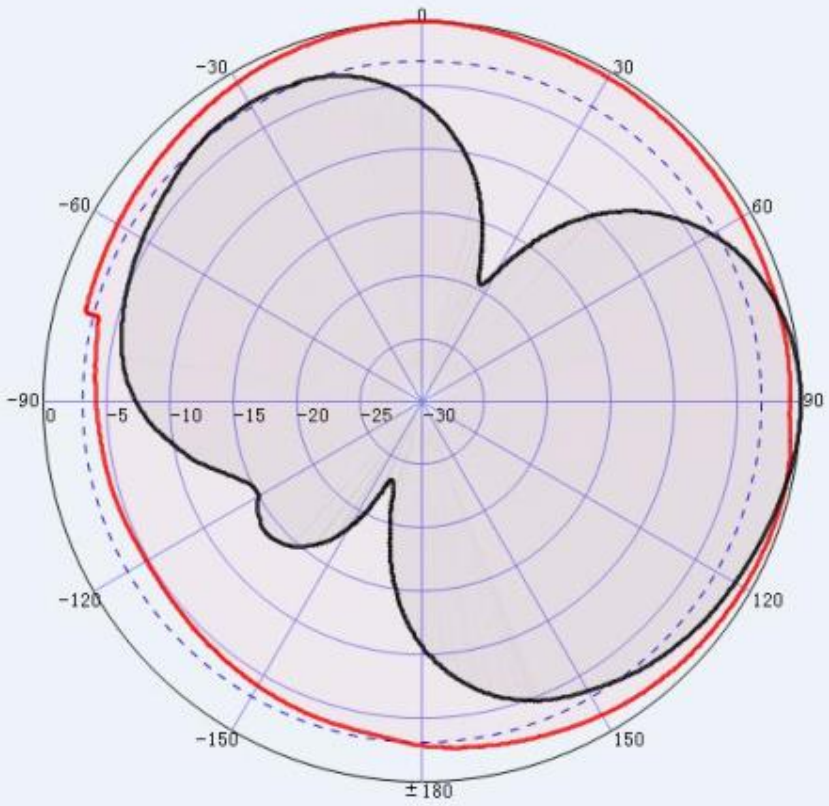
Direction Map Test Data



Test Frequency: 806 MHz
Polarization mode: Horizontal
Peak level: -37.41 dB
3 dB width: 258.31 degrees
Roundness of pattern: 2.39

Test Frequency: 806 MHz
Polarization mode: Vertical
Peak level: -37.94 dB
3 dB width: 93.58 degrees
Roundness of pattern: 24.66

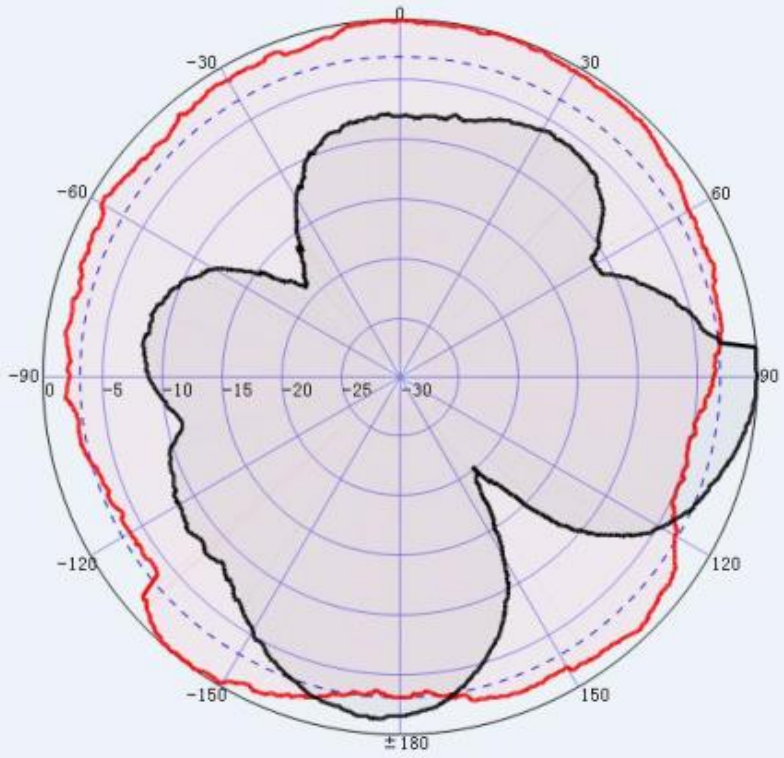
Gain: 2.77 dBi



Test Frequency: 824 MHz
Polarization mode: Horizontal
Peak level: -38.65 dB
3 dB width: 255.28 degrees
Roundness of pattern: 2.90

Test Frequency: 824 MHz
Polarization mode: Vertical
Peak level: -39.52 dB
3 dB width: 82.11 degrees
Roundness of pattern: 16.03

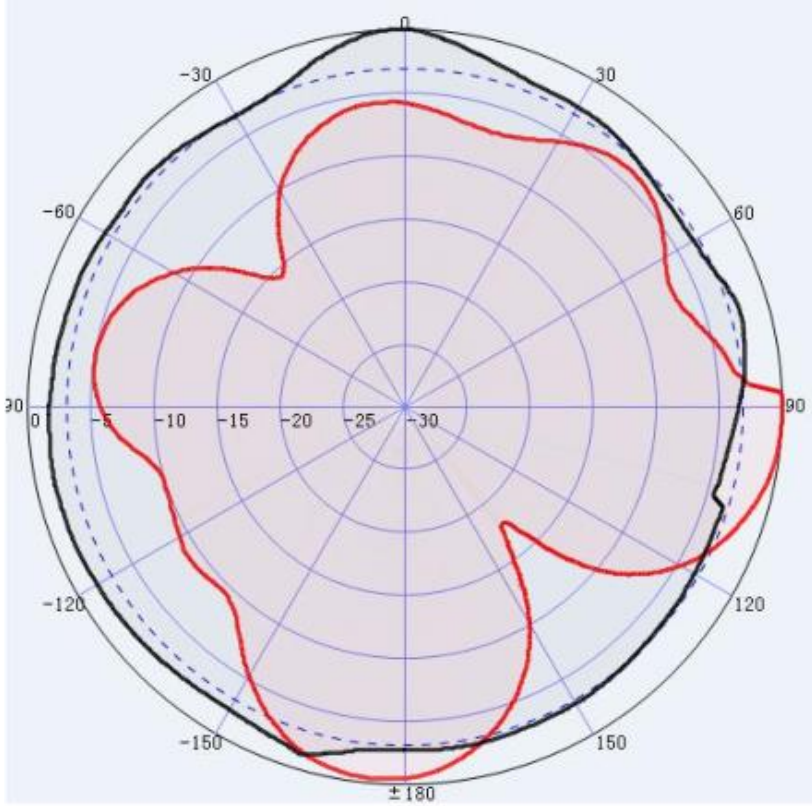
Gain: 3.05 dBi



Test Frequency: 940 MHz
Polarization mode: Horizontal
Peak level: -42.05 dB
3 dB width: 188.50 degrees
Roundness of pattern: 3.25

Test Frequency: 940 MHz
Polarization mode: Vertical
Peak level: -37.61 dB
3 dB width: 29.47 degrees
Roundness of pattern: 12.44

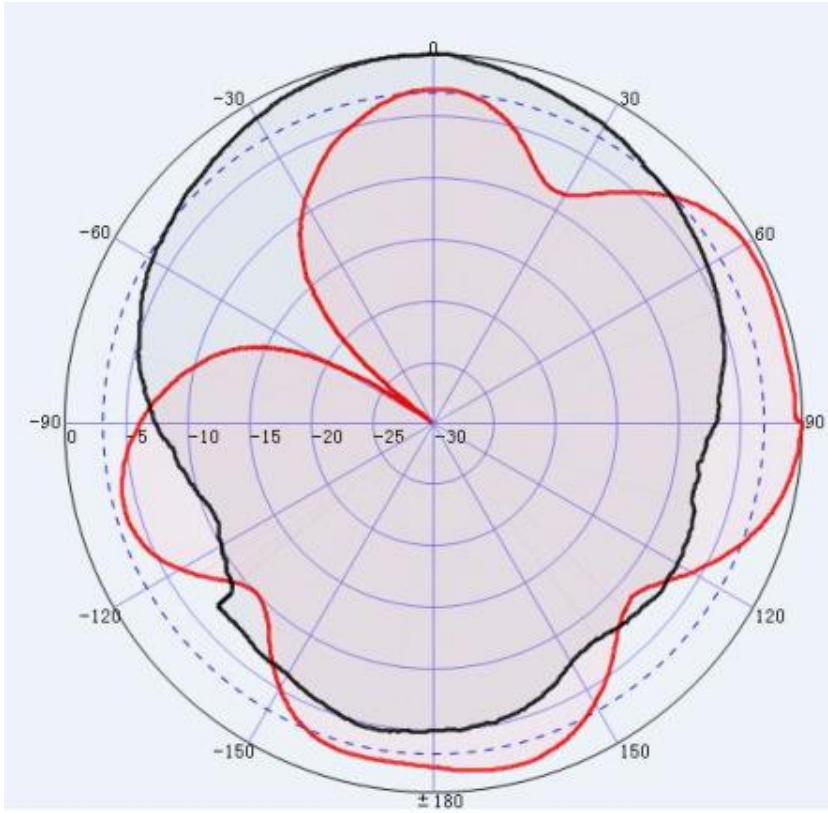
Gain: 3.61 dBi



Test Frequency: 960 MHz
Polarization mode: Horizontal
Peak level: -40.40 dB
3 dB width: 29.32 degrees
Roundness of pattern: 11.54

Test Frequency: 960 MHz
Polarization mode: Vertical
Peak level: -41.08 dB
3 dB width: 65.64 degrees
Roundness of pattern: 2.48

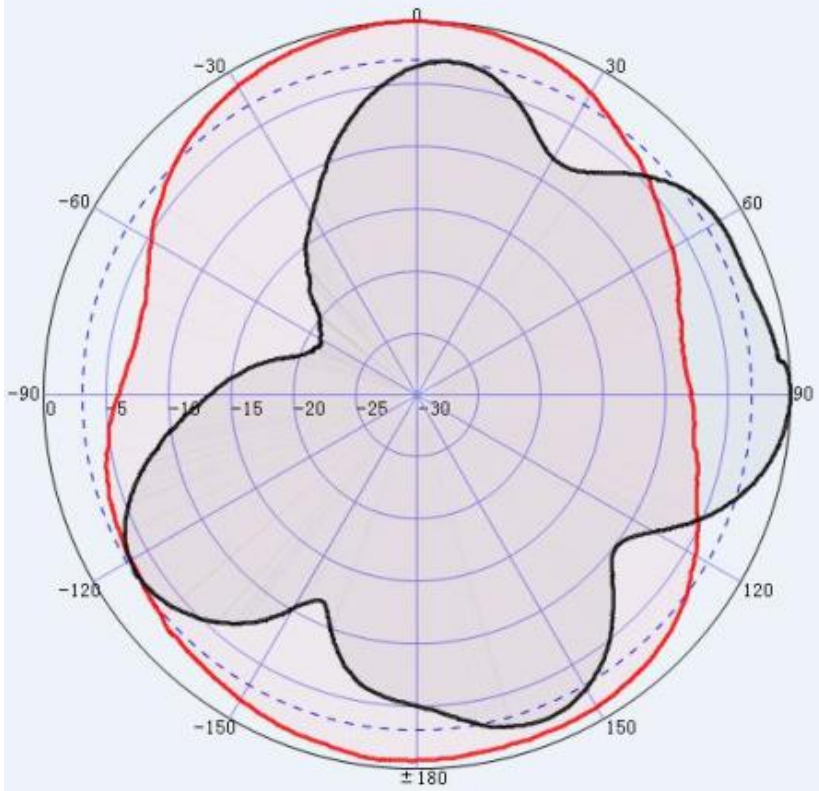
Gain: 3.51 dBi



Test Frequency: 1710 MHz
Polarization mode: Horizontal
Peak level: -45.52 dB
3 dB width: 63.84 degrees
Roundness of pattern: 24.94

Test Frequency: 1710 MHz
Polarization mode: Vertical
Peak level: -51.89 dB
3 dB width: 90.85 degrees
Roundness of pattern: 5.58

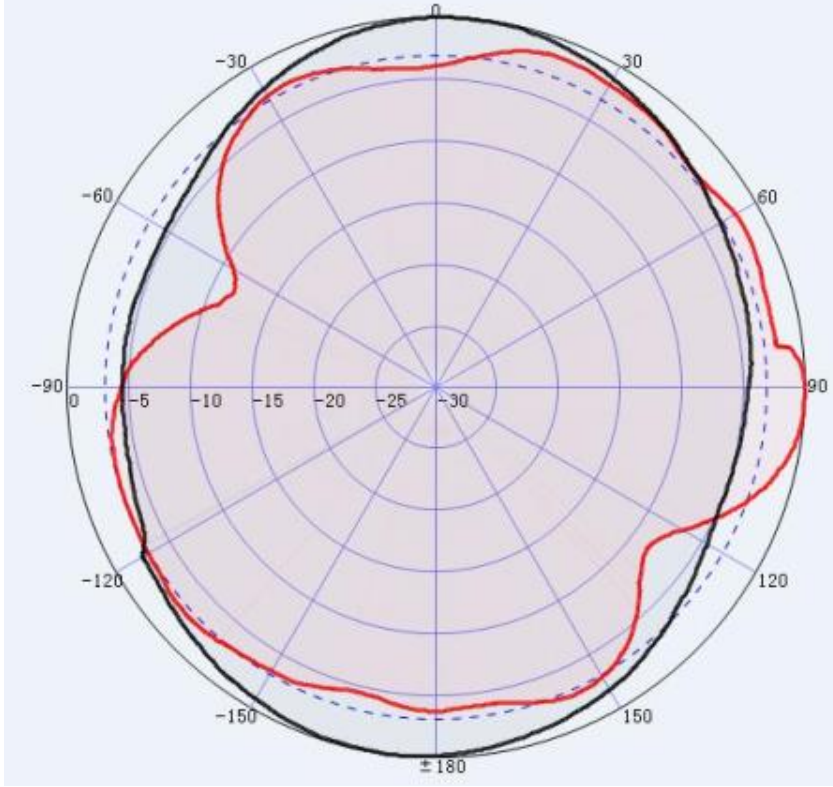
Gain: 3.88 dBi



Test Frequency: 1880 MHz
Polarization mode: Horizontal
Peak level: -53.56 dB
3 dB width: 81.10 degrees
Roundness of pattern: 5.01

Test Frequency: 1880 MHz
Polarization mode: Vertical
Peak level: -47.34 dB
3 dB width: 56.01 degrees
Roundness of pattern: 13.98

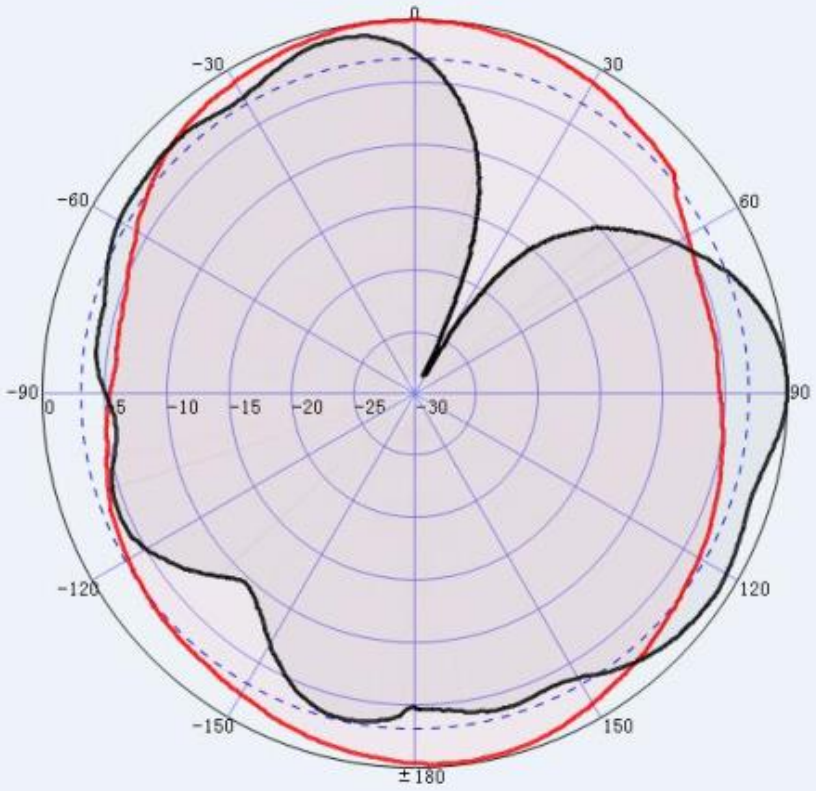
Gain: 3.31 dBi



Test Frequency: 2170 MHz
Polarization mode: Horizontal
Peak level: -49.82 dB
3 dB width: 102.23 degrees
Roundness of pattern: 8.16

Test Frequency: 2170 MHz
Polarization mode: Vertical
Peak level: -50.98 dB
3 dB width: 93.28 degrees
Roundness of pattern: 2.53

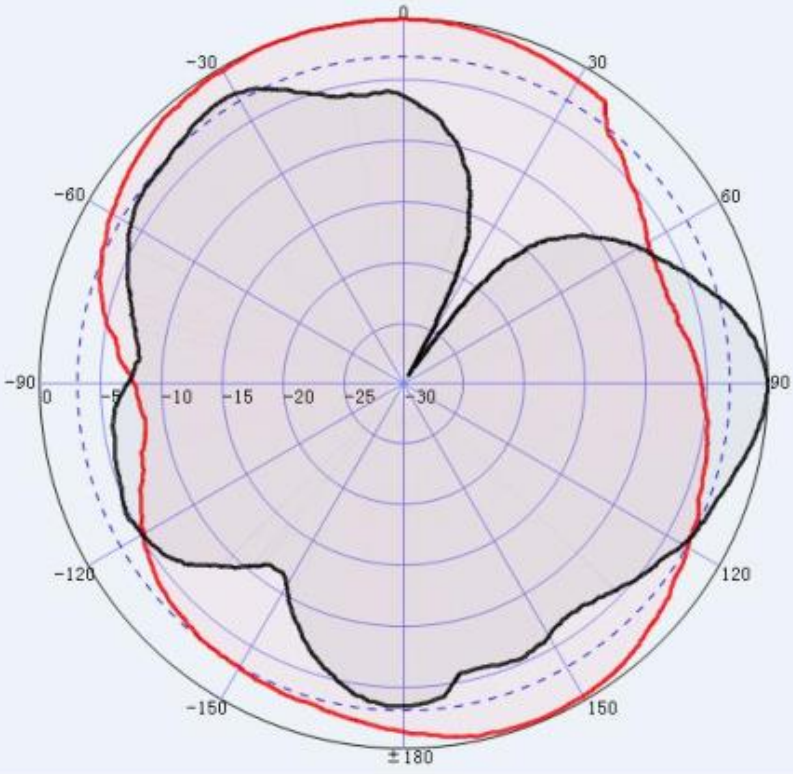
Gain: 2.23 dBi



Test Frequency: 2400 MHz
Polarization mode: Horizontal
Peak level: -52.83 dB
3 dB width: 102.73 degrees
Roundness of pattern: 3.12

Test Frequency: 2400 MHz
Polarization mode: Vertical
Peak level: -52.28 dB
3 dB width: 77.45 degrees
Roundness of pattern: 37.40

Gain: 2.14 dBi



Test Frequency: 2700 MHz
Polarization mode: Horizontal
Peak level: -54.52 dB
3 dB width: 105.48 degrees
Roundness of pattern: 5.50

Test Frequency: 2700 MHz
Polarization mode: Vertical
Peak level: -53.46 dB
3 dB width: 41.74 degrees
Roundness of pattern: 32.97

Gain: 2.90 dBi