

OPERATIONAL DESCRIPTION

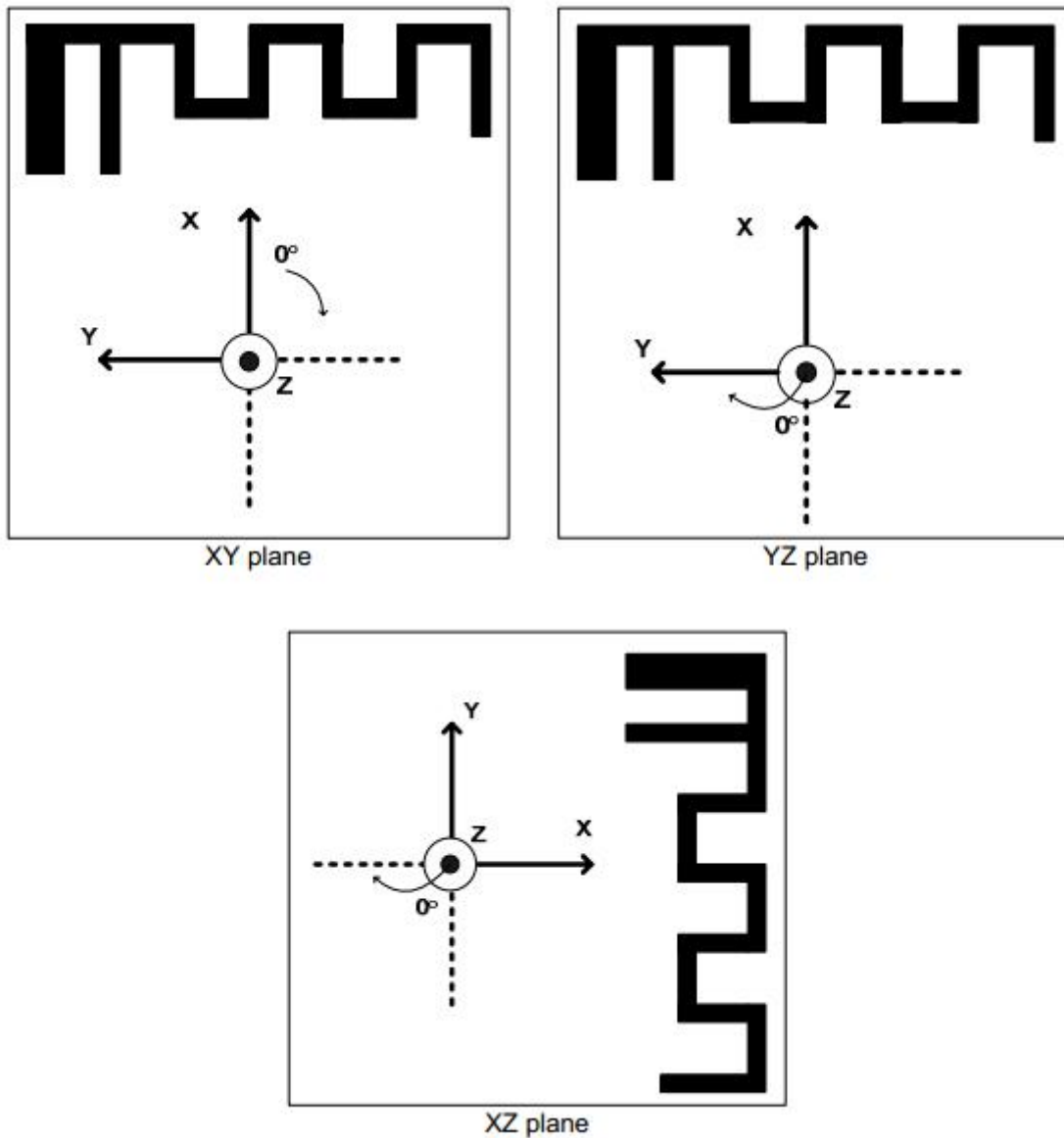
| | |
|-----------------------|--|
| Product Name: | AeroLab Smart Thermometer Hygrometer |
| Hardware Version: | Version :2.0 |
| Software Version: | Version:2.0 |
| Operation Frequency: | 2.4Ghz |
| Bluetooth Version: | Bluetooth 4.0 /5.0 |
| Modulation Technique: | GFSK |
| Modulation Type: | GFSK |
| Transfer Rate: | 250kbps |
| Number of Channel: | 40 |
| Hopping Channel Type: | AFH |
| Product Type: | <input type="checkbox"/> Mobile * <input type="checkbox"/> Portable <input type="checkbox"/> Fix Location |
| Test Software of EUT: | RF QuickSet |
| Antenna Type: | pcb antenna |
| Antenna Gain: | 3.5dBi |
| Power Supply: | AAA battery *3 4.5V |

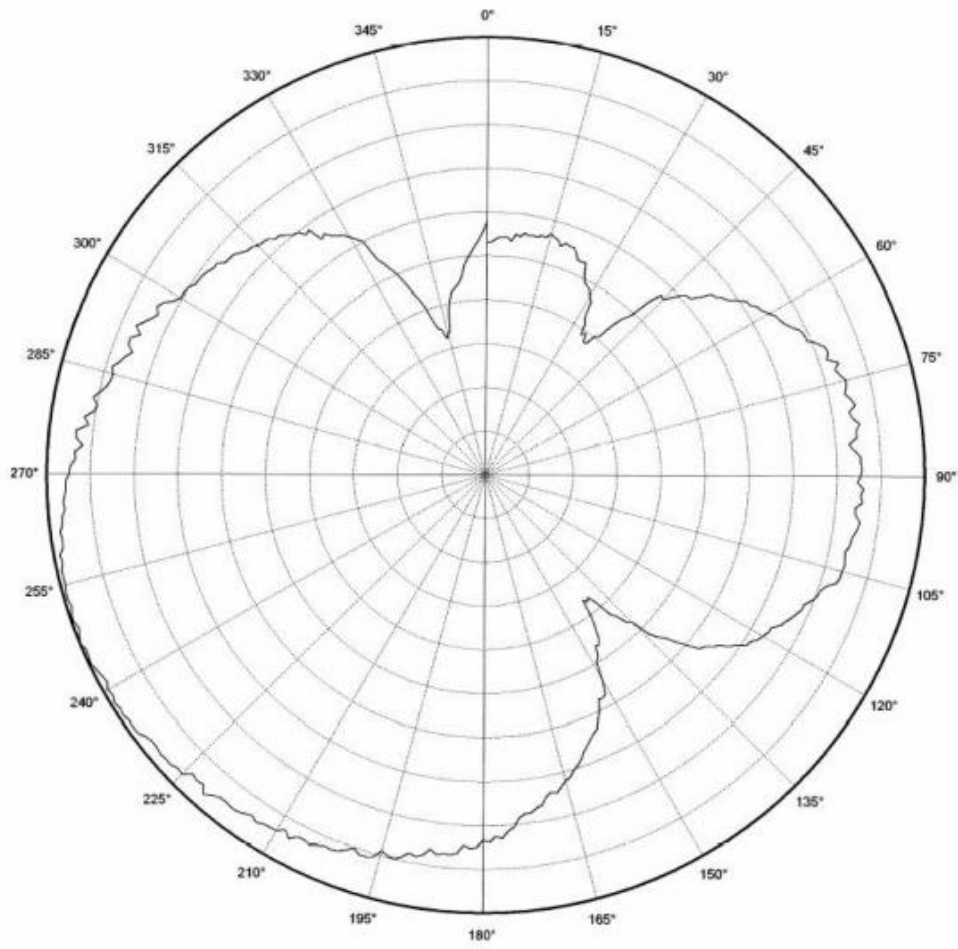
2. Radiation Pattern

The radiation pattern for the antenna implemented on the pcb board reference design has been measured in an anechoic chamber.

Figure shows radiation patterns for three planes, XY, XZ and YZ, measured with vertical and horizontal polarization.

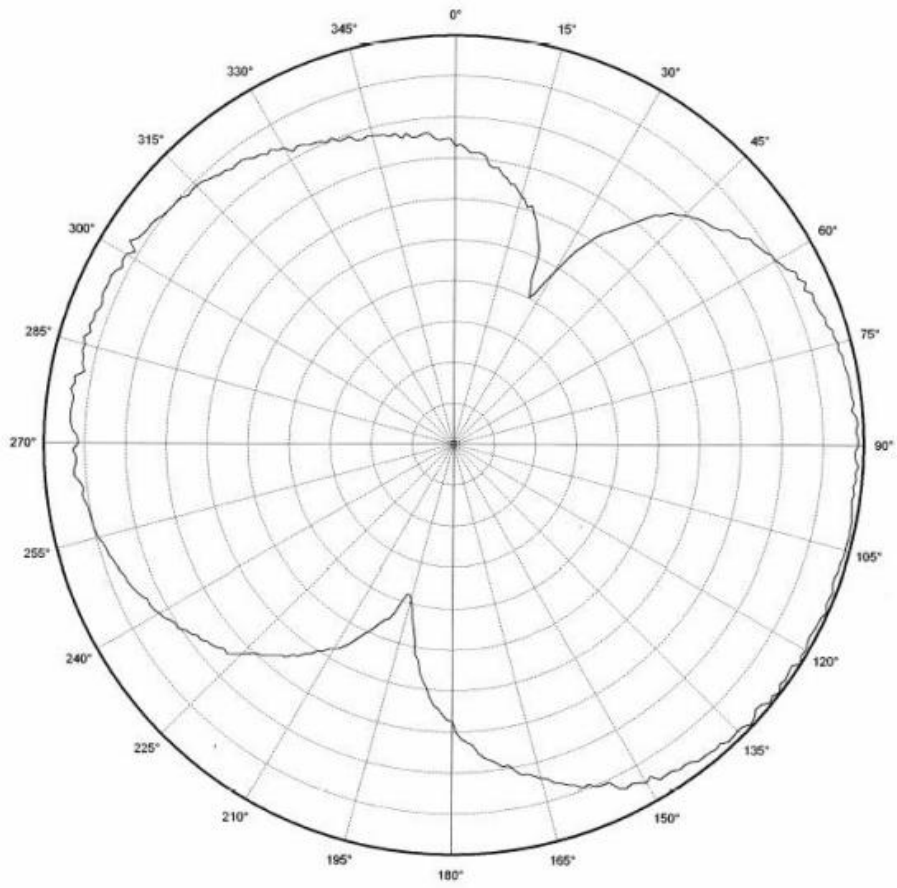
All measurements were performed with 0 dBm output power.





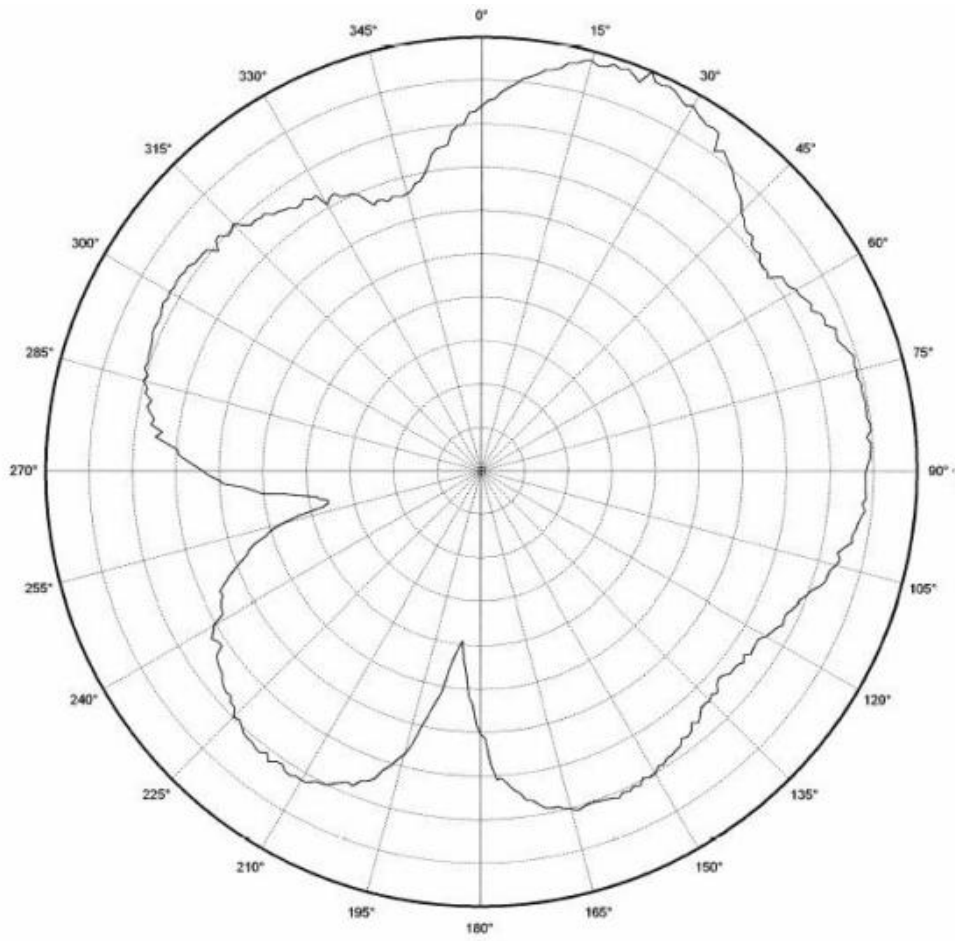
Vertical Polarization
usb XY

CF 2450.000 MHz
4 dB/ div
Ref Lev: *-2.5* dBm



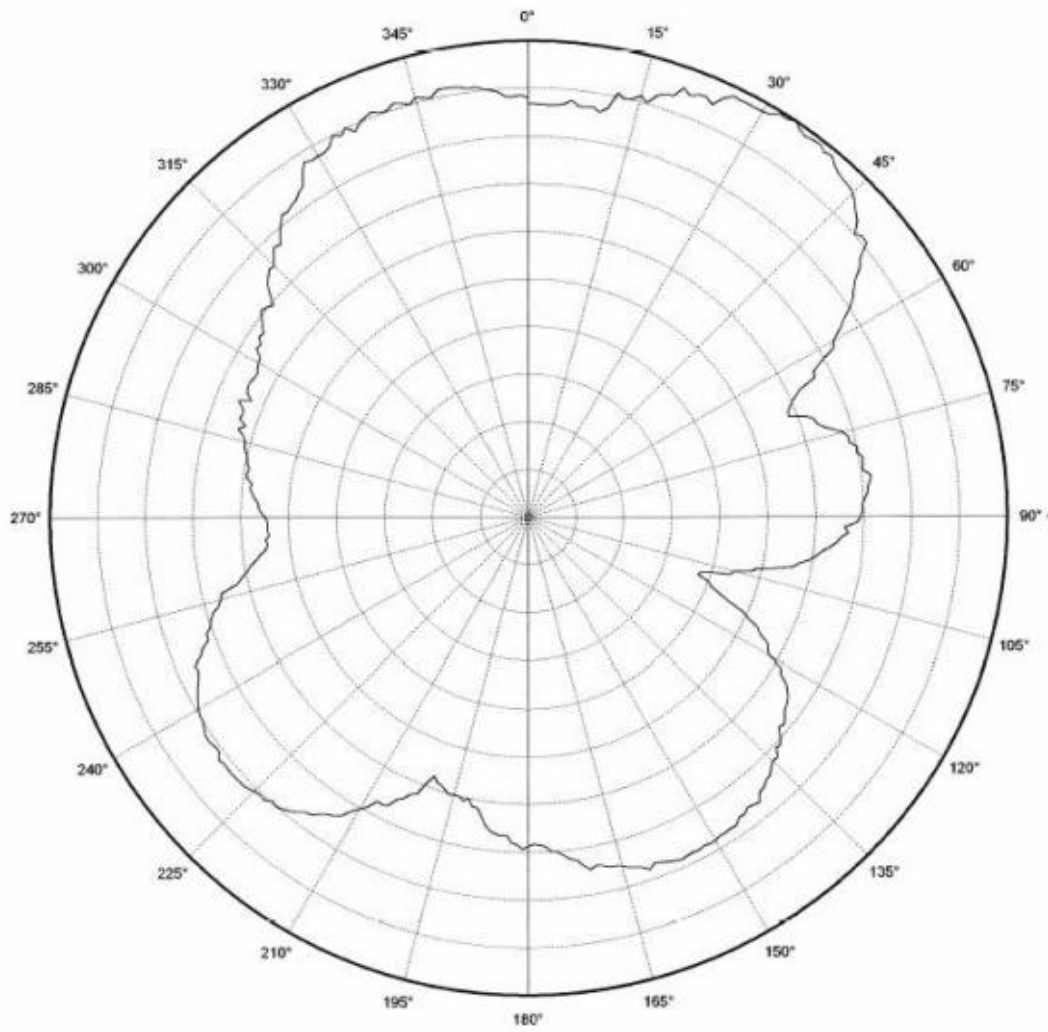
Horizontal Polarization
usb XY

CF 2450.000 MHz
5 dB/ div
Ref Lev: 4.5 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

| Cener Frequency | | Maximum Ant Gain |
|-----------------|---|------------------|
| 2402 MHz | H | 3 |
| | V | -2.5 |
| 2441 MHz | H | 2.6 |
| | V | -2.2 |
| 2480MHz | H | 3.5 |
| | V | -2.3 |