

# PCBWiFiAntenna

## Features

- ❖ Widebandwidth
- ❖ RoHScompliant

## Applications

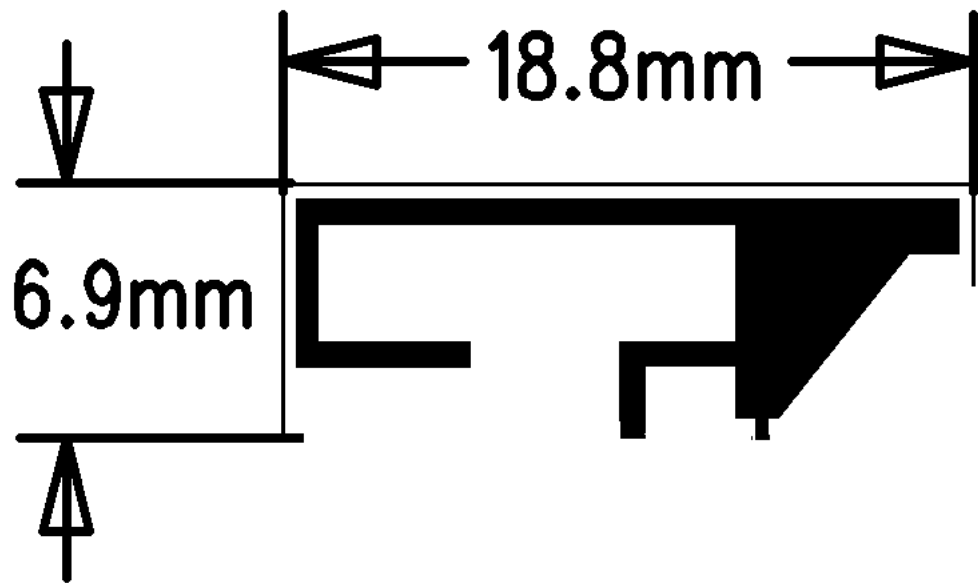
- ❖ Dual-band2.4/5.5GHzWLAN

## Specifications

| Type        | FrequencyRange (MHz) | PeakGain (dBityp.) | AverageGain (dBityp.) | VSWR    | Impedance |
|-------------|----------------------|--------------------|-----------------------|---------|-----------|
| PCB Antenna | 2400~2480            | 1.0(XZ-Total)      | -3.5(XZ-Total)        | 6.5max. | 50Ω       |
|             | 5150~5850            | 4.0(XZ-Total)      | -2.5(XZ-Total)        | 4.5max. | 50Ω       |

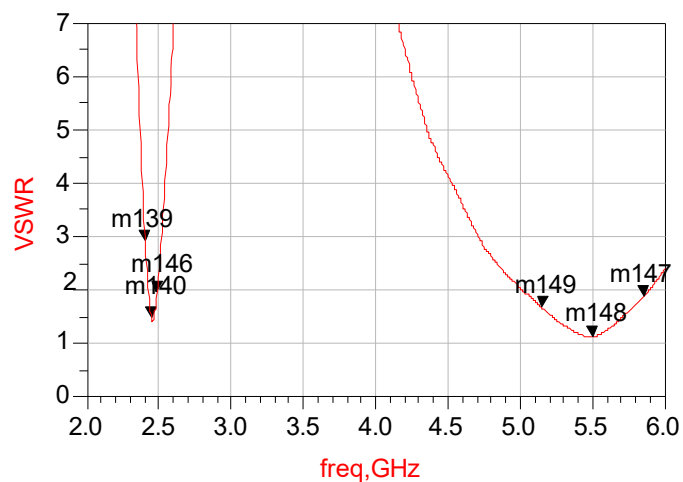
## Dimensions

Unit:mm

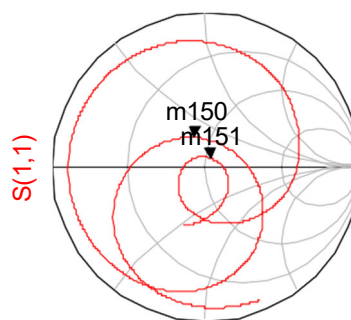


| Mark       | L         | W       | T      |
|------------|-----------|---------|--------|
| Dimensions | 18.8 ±0.1 | 6.9±0.1 | 0.8max |

❖ ReturnLoss(withmatching)



|                                     |                                     |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|
| m139<br>freq=2.400GHz<br>VSWR=2.919 | m140<br>freq=2.442GHz<br>VSWR=1.498 | m146<br>freq=2.484GHz<br>VSWR=1.944 |
| m149<br>freq=5.150GHz<br>VSWR=1.664 | m148<br>freq=5.500GHz<br>VSWR=1.124 | m147<br>freq=5.850GHz<br>VSWR=1.876 |

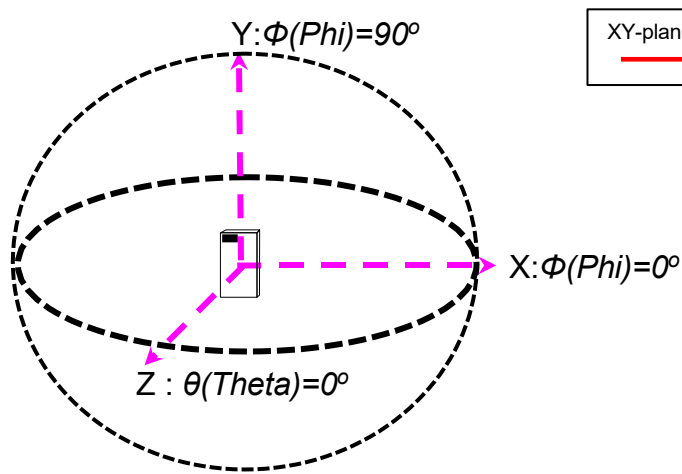


freq(2.000GHzto6.000GHz)

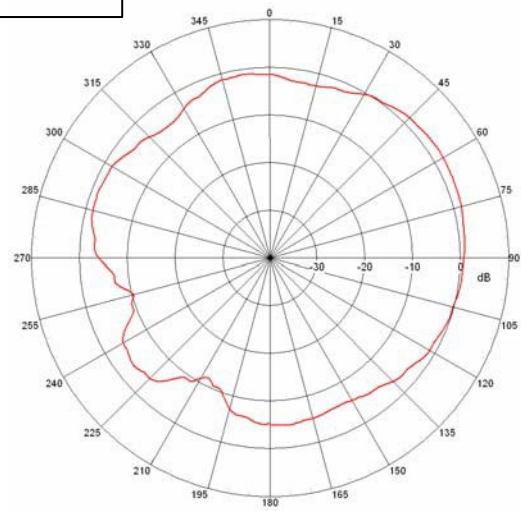
m150  
freq=2.442GHz  
S(1,1)=0.199 / 110.889  
impedance = 40.626 + j15.755

m151  
freq=5.500GHz  
S(1,1)=0.059 / 59.150  
impedance = 52.817 + j5.324

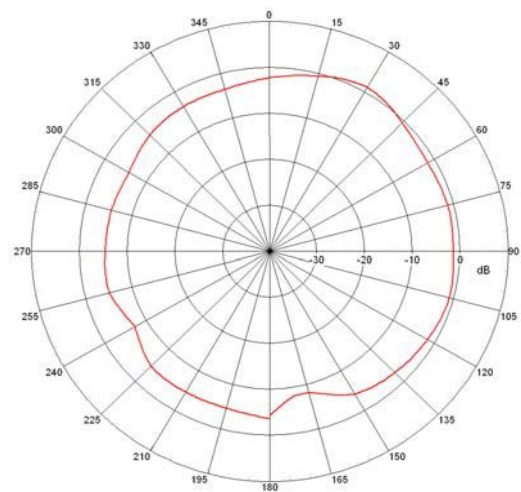
❖ RadiationPatterns@2.44GHz  
(AntennaEfficiency42%@2.4GHz;60%@2.44GHz;56%@2.48GHz)



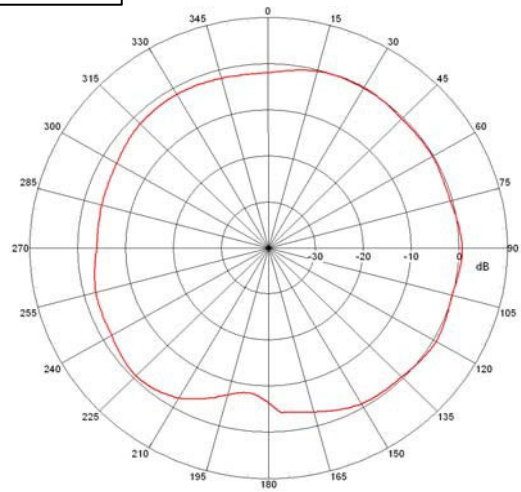
XY-plane @2440MHz  
— Total



XZ-plane @2440MHz  
— Total

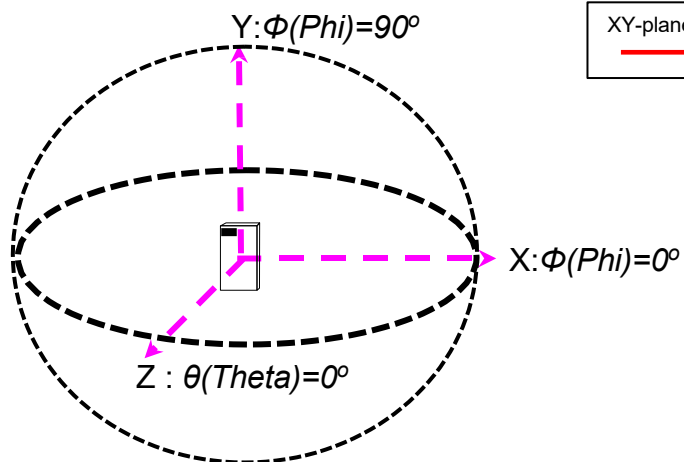


YZ-plane @2440MHz  
— Total

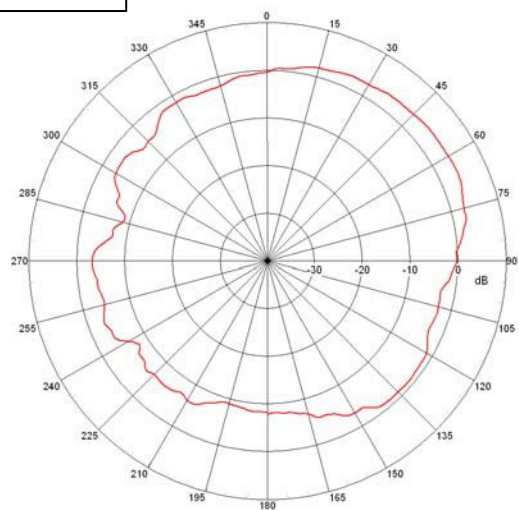


❖ RadiationPatterns@5.5GHz

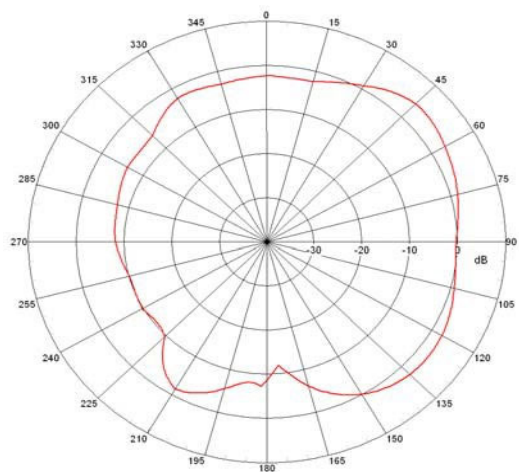
(AntennaEfficiency78%@5.15GHz;86%@5.5GHz;76%@5.85GHz)



XY-plane @5500MHz  
— Total



XZ-plane @5500MHz  
— Total



YZ-plane @5500MHz  
— Total

