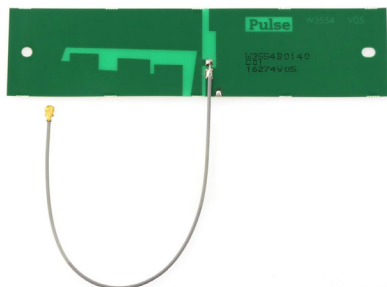


# Internal 5G/4G PCB Antenna with Cable Assembly

W3554xxxx - 698 to 6000 MHz



## Applications:

- ④ Coaxial cable feed
- ④ Multiple cable lengths and connector options (U-FL, SMA, MMCx and custom)
- ④ 2G/3G/4G/5G
- ④ GNSS
- ④ WiFi, Bluetooth, BLE, Zigbee
- ④ ISM 868, 915, 2400, 5000MHz

Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C<sup>1</sup>

Frequency Bands: 698-960/1400-1600/1710-2690/3300-3800/4900-6000 MHz

| Antenna Type       | Nominal Impedance | Return Loss   | Radiation Pattern | Polarization  | Power Withstanding |
|--------------------|-------------------|---------------|-------------------|---------------|--------------------|
| Monopole           | 50Ω               | per below     | Omni              | Linear        | 5W                 |
| Frequency          | 698-960 MHz       | 1400-1600 MHz | 1710-2690 MHz     | 3300-3800 MHz | 4900 - 6000 MHz    |
| Return Loss        | -4 dB             | -3 dB         | -6 dB             | -5 dB         | -4 dB              |
| Peak Gain          | 1.9 dBi           | 2.5 dBi       | 3.2 dBi           | 3.3 dBi       | 3.5 dBi            |
| Average Efficiency | 45%               | 53%           | 66%               | 57%           | 37%                |

## Mechanical Specifications

Orderable PN: W3554xxxx (per below cable and connector options)

| Size<br>(L x W x H) |                   | Color         | Weight                   |
|---------------------|-------------------|---------------|--------------------------|
| 30 x 120 x 0.2 mm   |                   | Green PCB     | 1.5 grms                 |
| Part Number         | Cable Length (mm) | Cable OD (mm) | Connector Type           |
| W3554B0140          | 143               | 1.13          | U.FL Compatible          |
| W3554B0140T         | 143               | 1.13          | U.FL Compatible with ADH |
| W3554B0170          | 170               | 1.13          | U.FL Compatible          |
| W3554B0293          | 293               | 1.13          | U.FL Compatible          |
| W3554E0193          | 193               | 1.13          | Right angle MMCX male    |
| W3554G0100          | 100               | 1.13          | SMA male                 |
| W3554G0254          | 254               | 1.13          | SMA male                 |
| W3554G0384          | 384               | 1.37          | SMA male                 |
| W3554G0457          | 457               | 1.13          | SMA male                 |
| W3554K0153          | 153               | 1.37          | Right angle SMA male     |

### Notes:

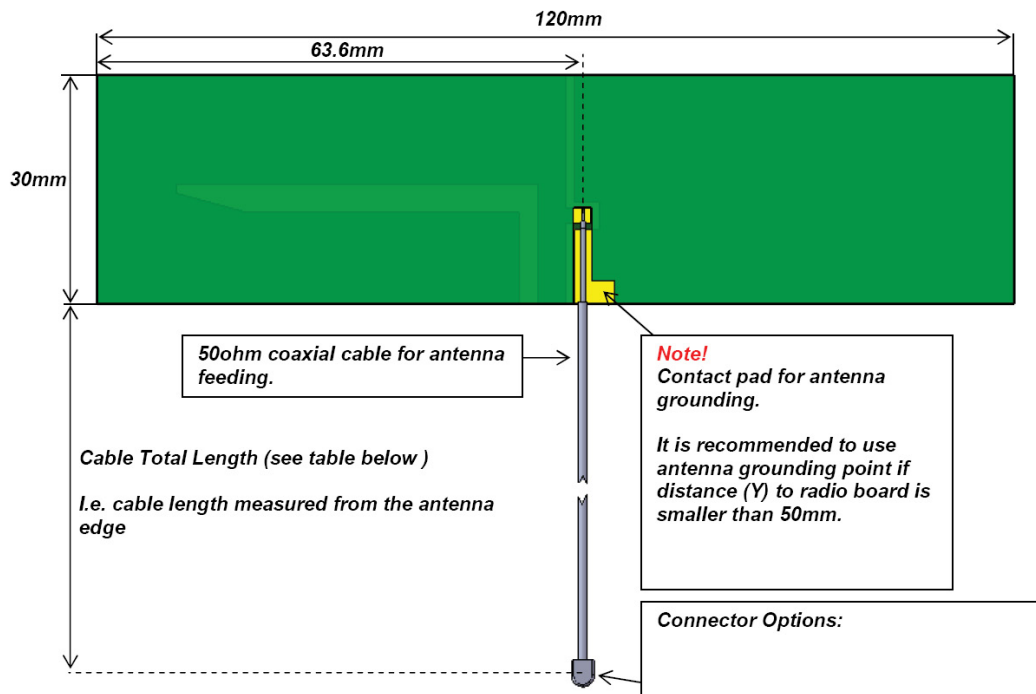
- Storage Temperature: -40°C to 85°C
- Other connector types and custom cable lengths are available upon request

# Internal 5G/4G PCB Antenna with Cable Assembly

W3554xxxxx - 698 to 6000 MHz

## Mechanical

W3554xxxxx



### Packaging Info:

5PCS/PE bag  
20PCS PE bag/Foam bag  
10PCS foam bag/Carton box  
Total: 1000PCS/Carton box



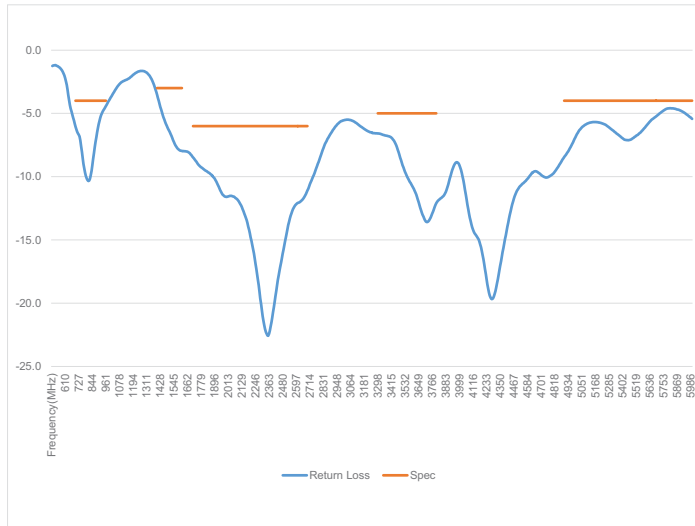
# Internal 5G/4G PCB Antenna with Cable Assembly

W3554xxxxx - 698 to 6000 MHz

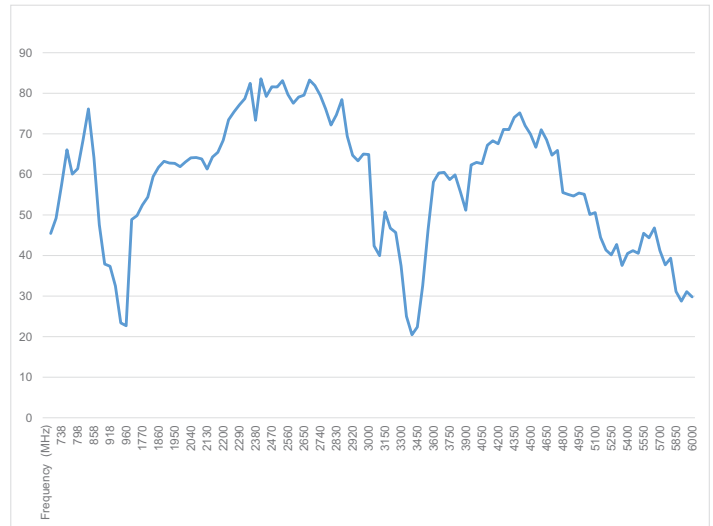
## Charts

W3554xxxxx

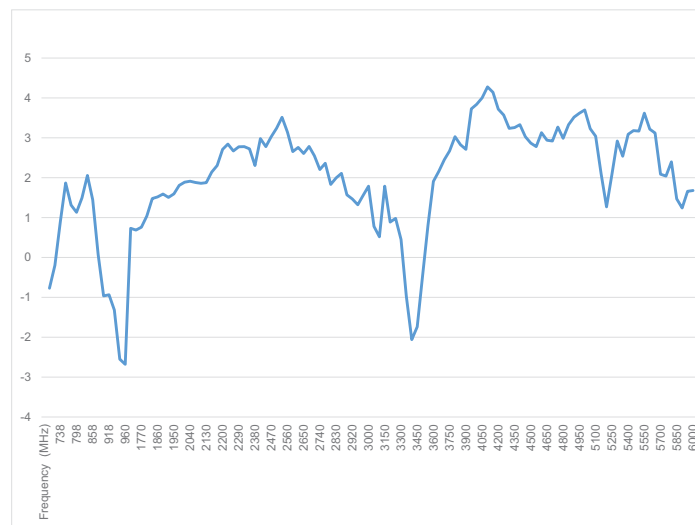
Return Loss



Efficiency (%)



Peak Gain (dBi)

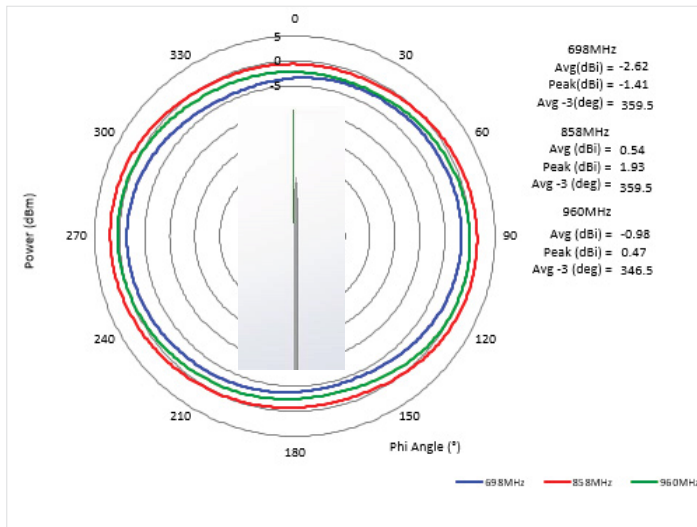


## Charts

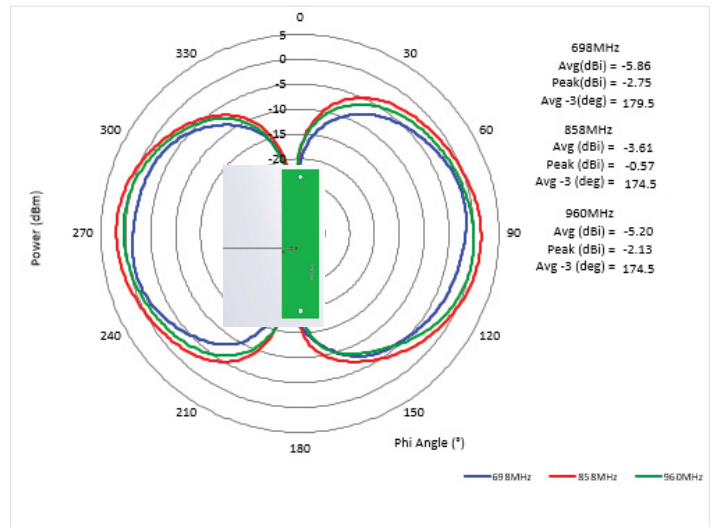
### 698MHz - 960MHz

#### Free Space Radiation Pattern

##### Horizontal Plane



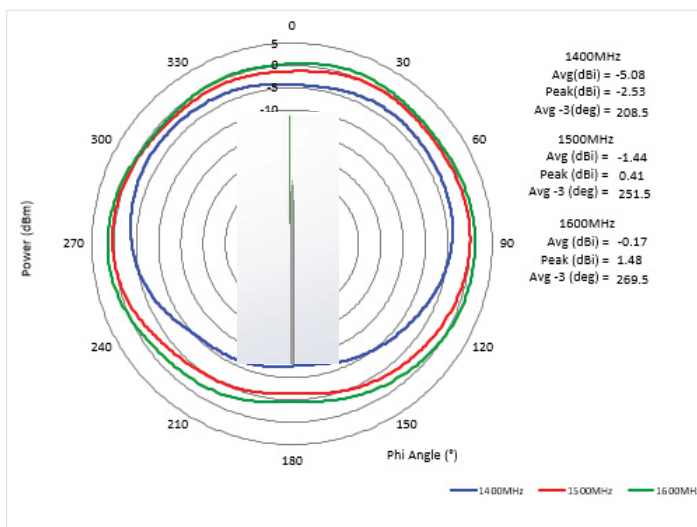
##### Elevation Plane



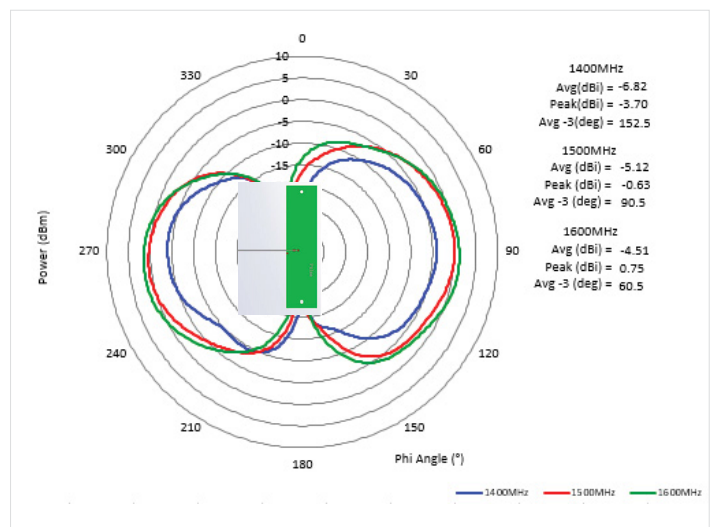
### 1400MHz - 1600MHz

#### Free Space Radiation Pattern

##### Horizontal Plane



##### Elevation Plane

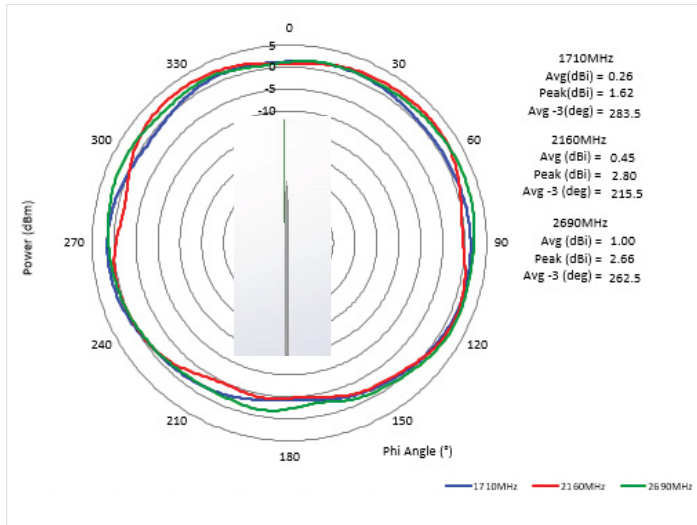


## Charts

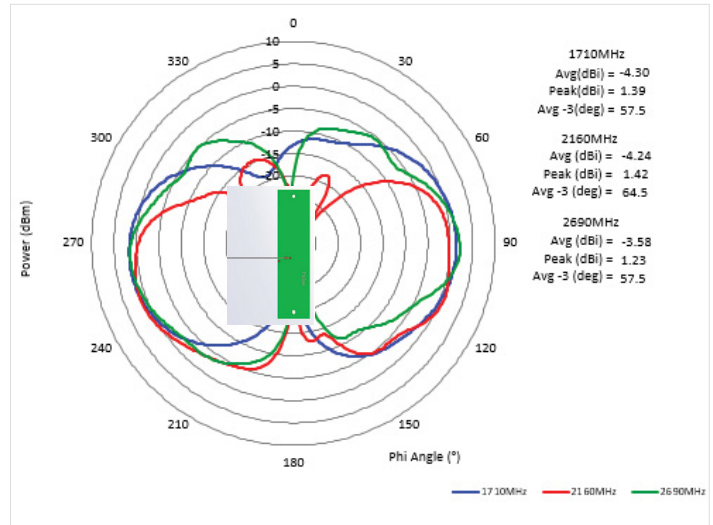
1710MHz - 2690MHz

### Free Space Radiation Pattern

Horizontal Plane



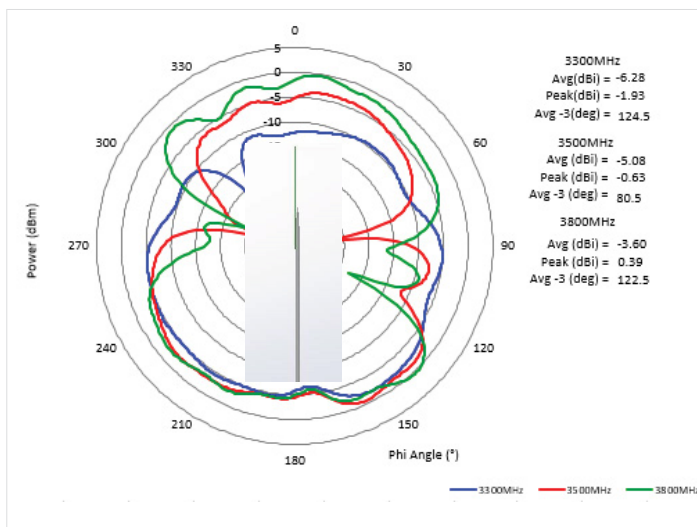
Elevation Plane



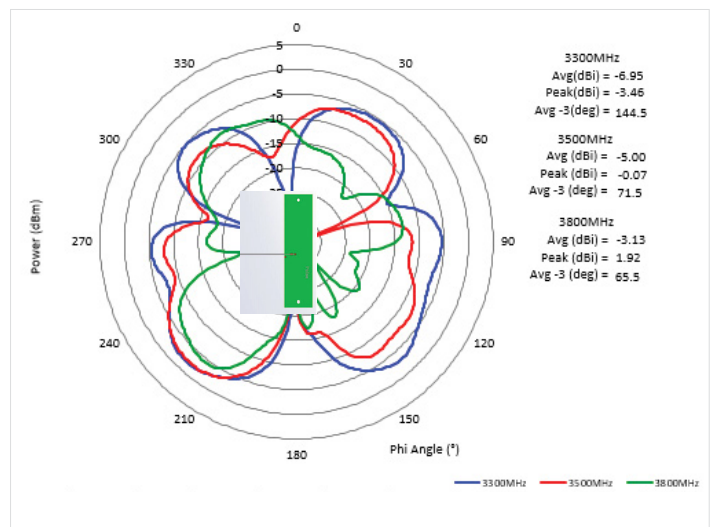
3300MHz - 3800MHz

### Free Space Radiation Pattern

Horizontal Plane



Elevation Plane



# Internal 5G/4G PCB Antenna with Cable Assembly

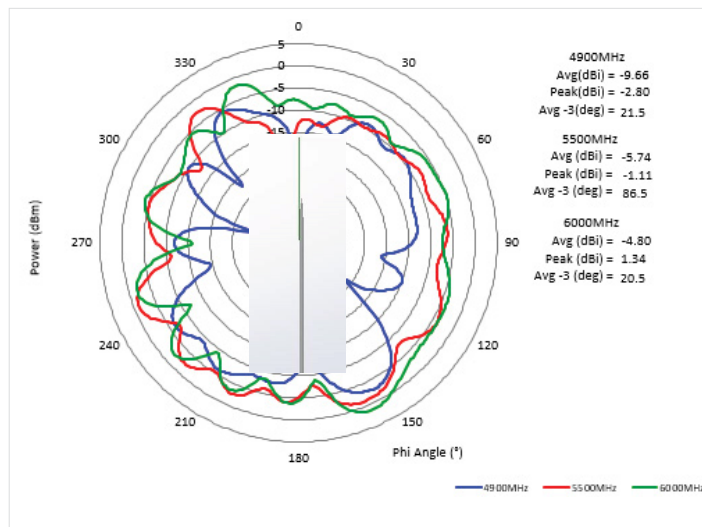
W3554xxxxx - 698 to 6000 MHz

## Charts

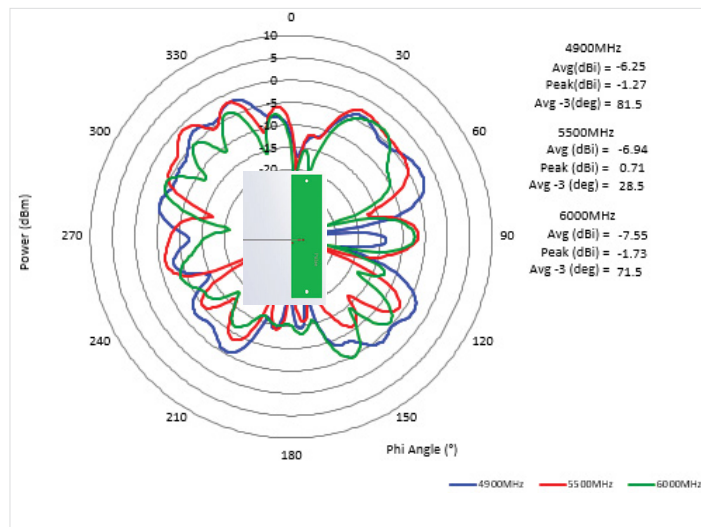
4900MHz - 6000MHz

### Free Space Radiation Pattern

Horizontal Plane



Elevation Plane



### For More Information:

Americas - [antennas.us@pulseelectronics.com](mailto:antennas.us@pulseelectronics.com) | Europe - [antennas.eu@pulseelectronics.com](mailto:antennas.eu@pulseelectronics.com) | Asia - [antennas.as@pulseelectronics.com](mailto:antennas.as@pulseelectronics.com) | Questions? +1-800-ANTENNA

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