

# 2.4GHz Helical WIFI SMD Antenna

Pulse Part Number CW3108



## Features

- Low profile (5.5mm)
- Compact size WxLxH (5.0 x 2.5 x 5.5 mm)
- Low weight (140 mg)
- Lead Free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

## Applications

- IEEE 802.11b/g
- Bluetooth
- WiFi
- 2.4 GHz WLAN
- 2.4 GHz ISM Band Systems
- ZigBee IEEE 802.15.4

## Electrical specifications @ +25 °C

*Note: Electrical characteristics depend on test board (GP) size and antenna positioning on GP and Ground Clearance area size.*

*Typical performance (test board size 100x40 mm, PWB ground clearance area 7.5 x 5.5 mm), values below are measured inside typical mobile phone chassis including all mechanics.*

Frequency Range [MHz]	Max Gain [dBi]	Return loss min. [dB]	Efficiency [%]/[dB]	Impedance [ $\Omega$ ]	Operating Temperature [ $^{\circ}$ C]
2400 – 2483.5	1.5	-8	50/-3	50	-40 to +85

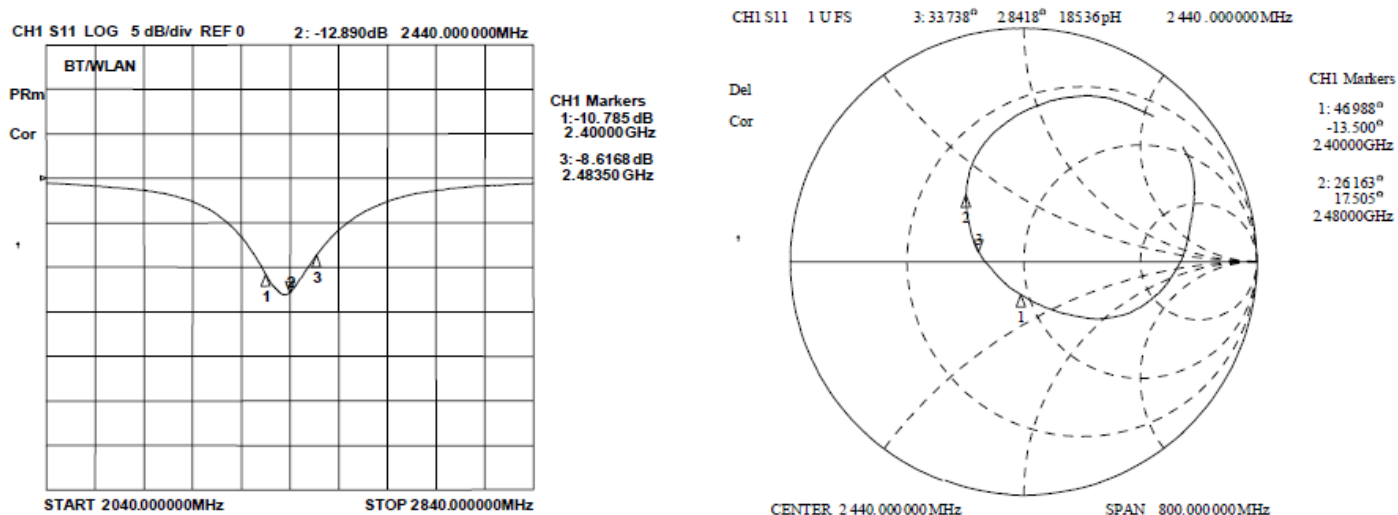
# 2.4GHz Helical WIFI SMD Antenna

Pulse Part Number CW3108

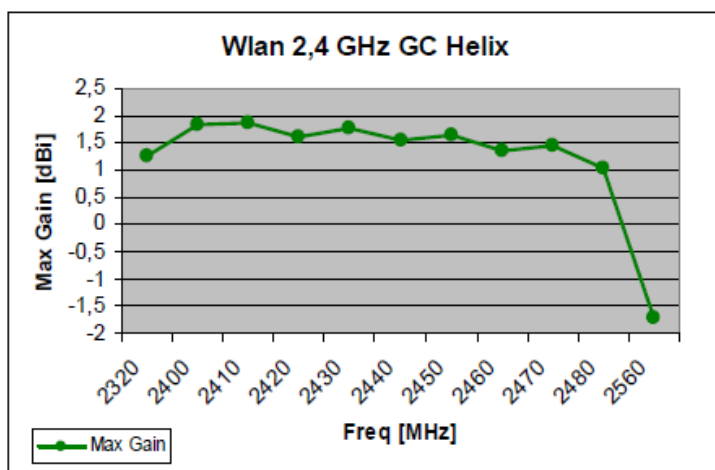
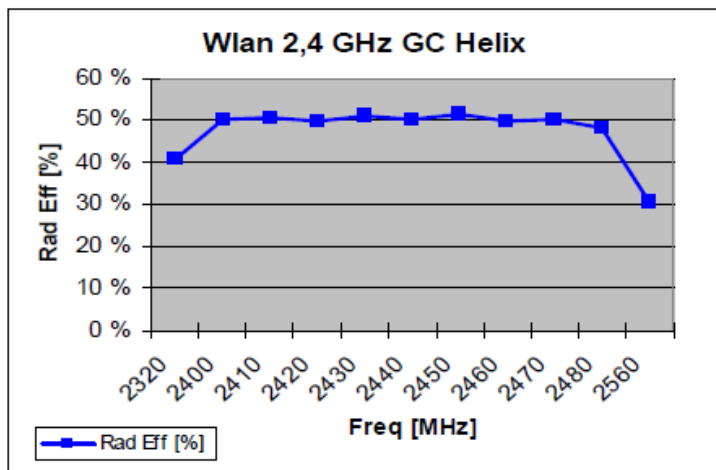
## Typical Electrical Characteristics (T=25 ° C)

Measured on basic chassis including PWB, display, battery and plastic covers. Chassis size abt. 17x40x100mm.

### Typical Return Loss S11/ impedance



### Free space efficiency and maximum gain

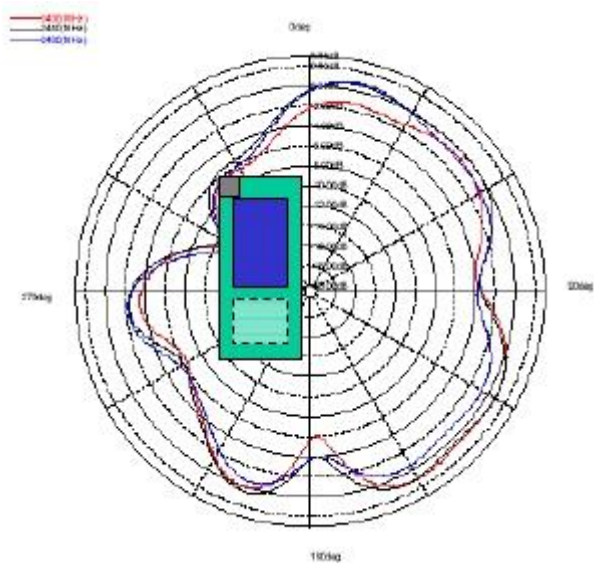


# 2.4GHz Helical WIFI SMD Antenna

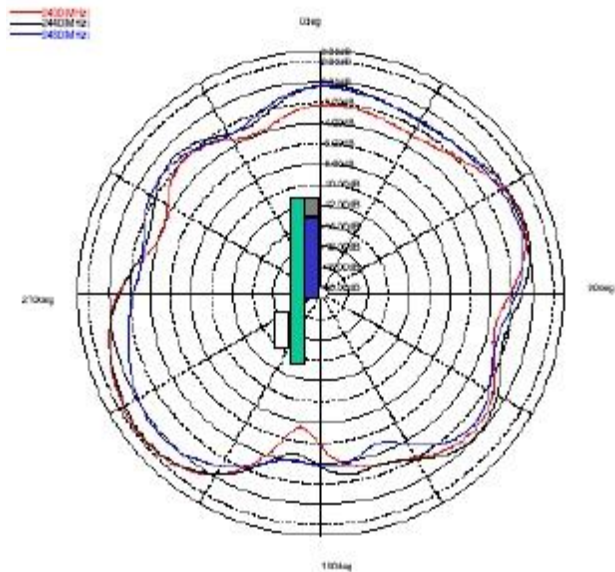
Pulse Part Number CW3108

## Typical Free space Radiation Patterns

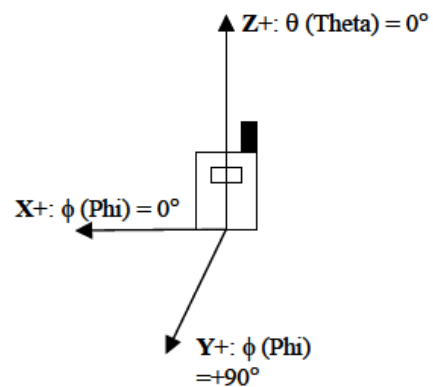
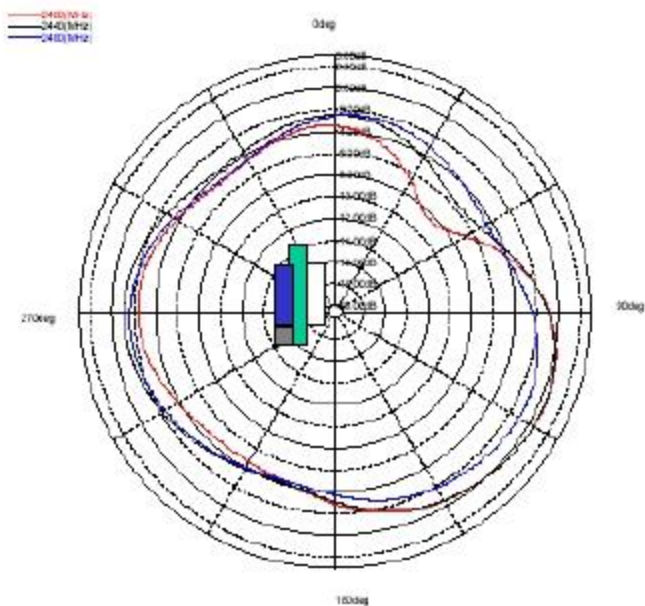
XZ-PLANE



ZY-PLANE



XY-PLANE



Contact: [mobiledeviceantenna.sales@pulseelectronics.com](mailto:mobiledeviceantenna.sales@pulseelectronics.com)

# 2.4GHz Helical WIFI SMD Antenna

Pulse Part Number CW3108

## Recommended pad layout and guard distances

Feed line should be designed to match 50 Ω characteristic impedance, depending on PWB material and thickness.

