

#### **TECHNICAL DATA SHEET**

**Description**: Wireless External Antenna for

2.4 GHz Applications

**PART NUMBER: W1038x** 



## Features:

- · High gain performance, 3.8dBi
- For WLAN devices using WiFi (802.11b/g), Bluetooth® and ZigBeeTM
- Omni-directional radiation pattern provides broad 360° coverage
- One-quarter wavelength dipole configuration, length 196.2mm
- Connection and color options easily integrate with OEM designs
- W1038 Black; W1038W White;
  W1038G Gray

## **Applications:**

 Omni-directional antennas provide a uniform, donut-shaped, 360° radiation pattern. The omni-directional pattern is suitable for point-to-multipoint broadcasting in all directions. The antenna is primarily used for WLAN applications. However, it can also be used for a variety of other applications within the specified frequency range. When used as an access point, the antenna is ideally located at the center of the coverage

Issue: 1821

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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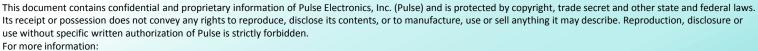
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## This document covers all product variants of the following product family

Antennas	Color	Connector
W1038	Black	
W1038W	White	RP-SMA Male
W1038G	Gray	

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### **ELECTRICAL SPECIFICATIONS**

Frequency 2400-2500MHz

 $\begin{array}{ccc} \text{Nominal Impedance} & & 50 \ \Omega \\ \text{Return Loss} & & -10 \text{dB} \\ \text{Radiation Pattern} & & \text{Omni} \end{array}$ 

Peak Gain 3.8dBi@straight, 4.7dBi@90°bent

Efficiency 74%@straight, 81%@90°bent

Polarization Vertical Power Withstanding 5W

### **MECHANICAL SPECIFICATIONS**

Overall Length 7.72"/196.2mm

Weight 25.1g

Antenna Color Black P/N: W1038

White P/N: W1038W Gray P/N: W1038G

Cover material TPE

Connector type RP-SMA Male

## **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature -20~+65° C

Storage Temperature -30~+75° C

RoHS Compliant Yes



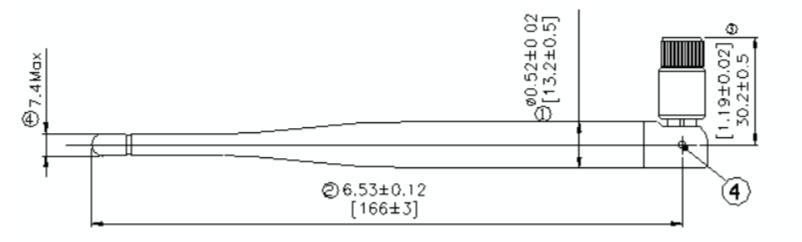
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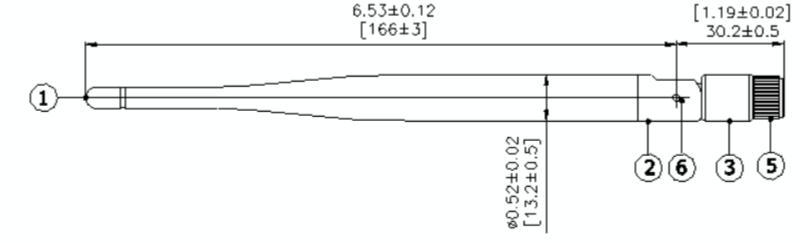
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## **MECHANICAL DRAWING**







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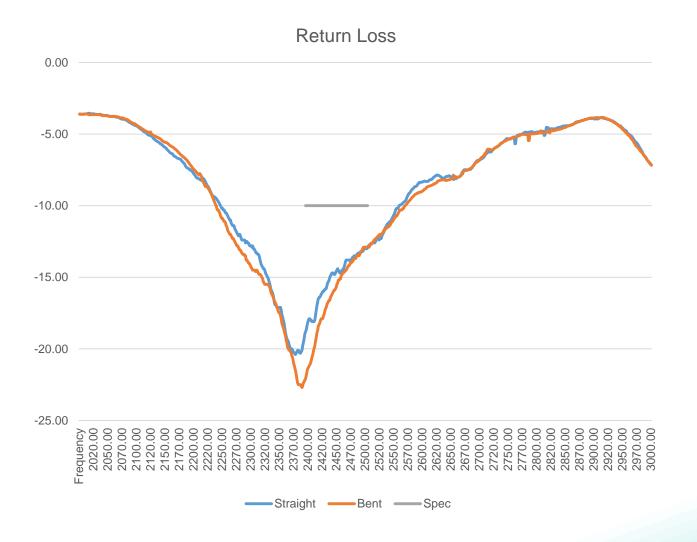
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### **CHARTS**

## Return Loss







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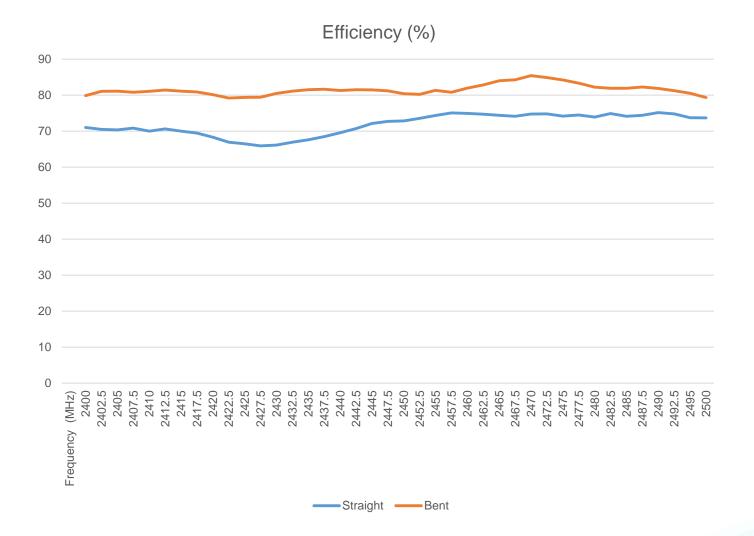
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### **CHARTS**

# Efficiency(%)







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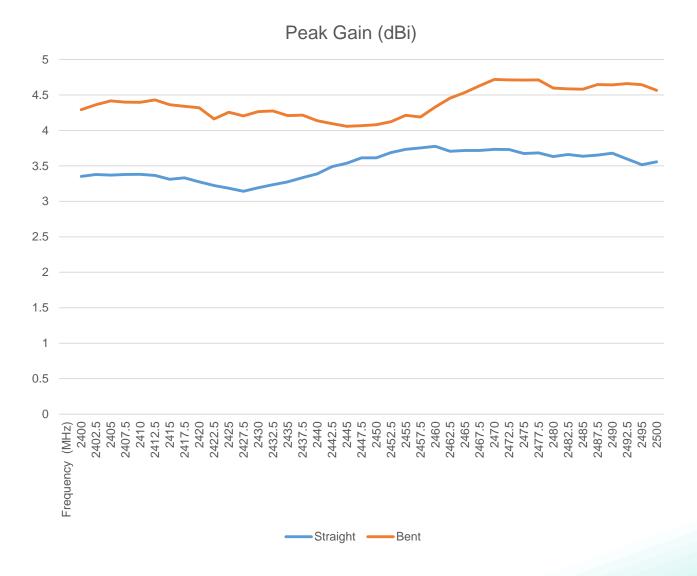
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### **CHARTS**

# Peak Gain (dBi)









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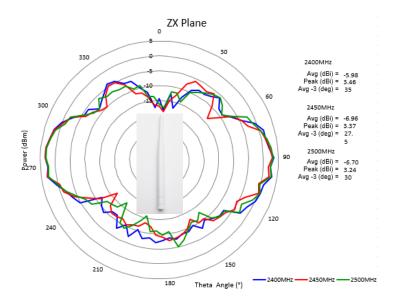
### **CHARTS**

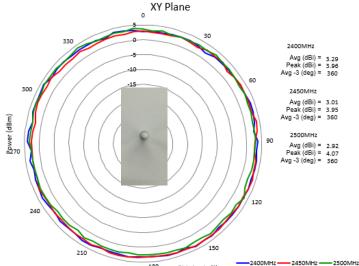
# Free Space Radiation Pattern

## Straight

## **Elevation Plane**

## Horizontal Plane







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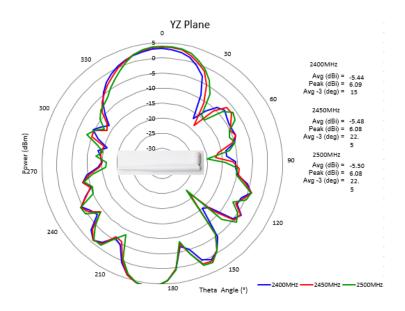
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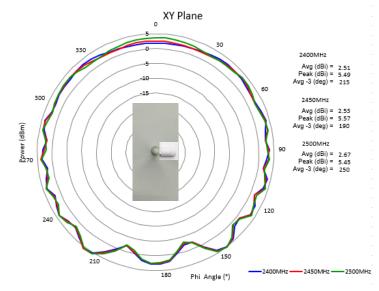
# Free Space Radiation Pattern

## **Bent**

## **Elevation Plane**

## Horizontal Plane







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### **PACKAGING**

Pack 20pcs antenna in one PE bag 25pcs PE bag (500pcs Antenna) in one carton

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**Authorized Distributor** 

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W1038 W1038W