



### Features:

- High gain performance, 3.8dBi
- For WLAN devices using WiFi (802.11b/g), Bluetooth® and ZigBee™
- 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

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

For more information:

Pulse Worldwide Headquarters  
15255 Innovation Drive #100  
San Diego, CA 92128  
USA  
Tel: 1-858-674-8100

Pulse/Larsen Antennas  
18110 SE 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
USA  
Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.  
99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

This document covers all product variants of the following product family

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

Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

For more information:

Pulse Worldwide Headquarters  
15255 Innovation Drive #100  
San Diego, CA 92128  
USA  
Tel: 1-858-674-8100

Pulse/Larsen Antennas  
18110 SE 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
USA  
Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.  
99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



**Description:** Wireless External Antenna for  
2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

### ELECTRICAL SPECIFICATIONS

Frequency	2400-2500MHz
Nominal Impedance	50 Ω
Return Loss	-10dB
Radiation Pattern	Omni
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

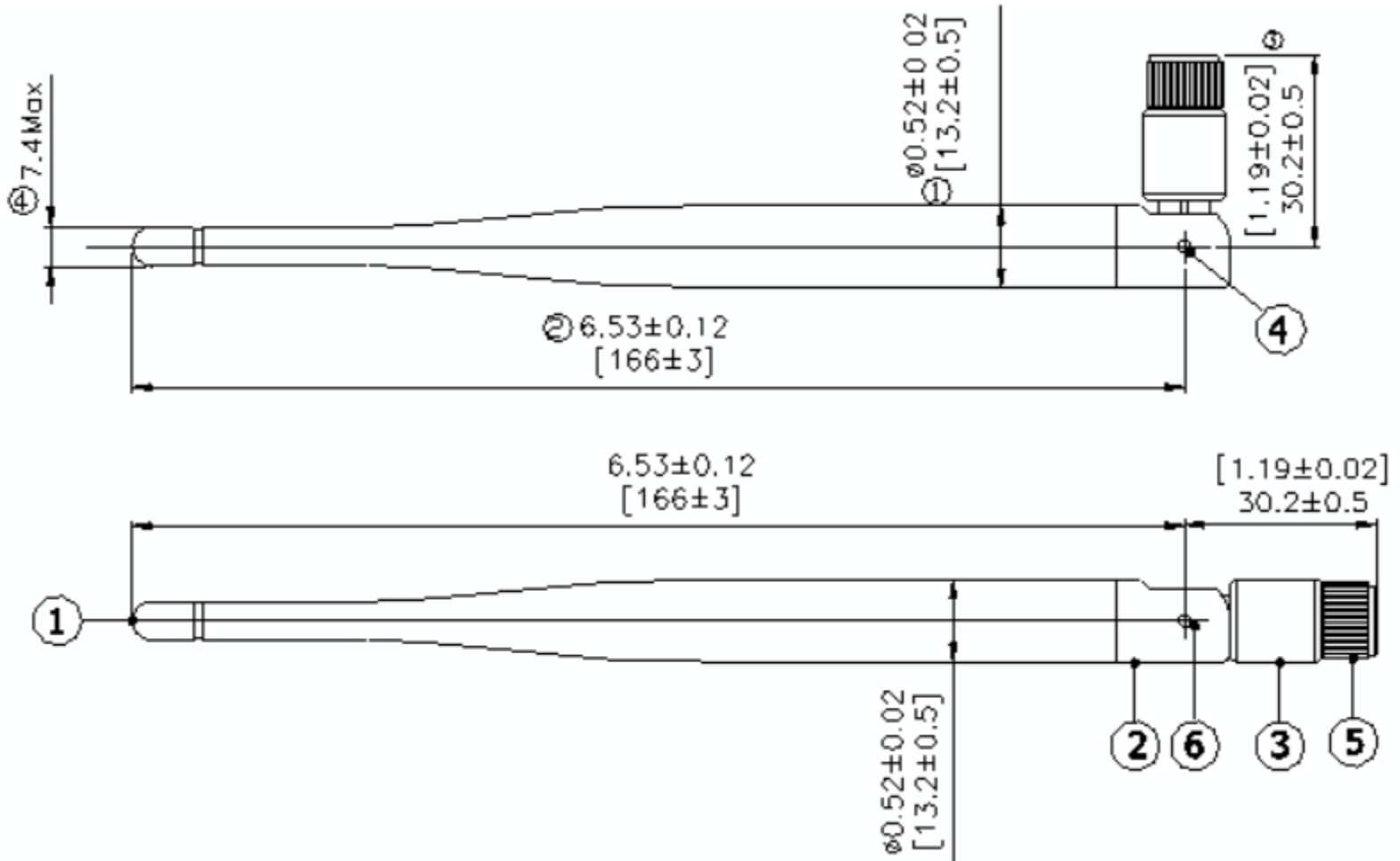
Operating Temperature	-20~+65° C
Storage Temperature	-30~+75° C
RoHS Compliant	Yes

**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

**MECHANICAL DRAWING**



Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

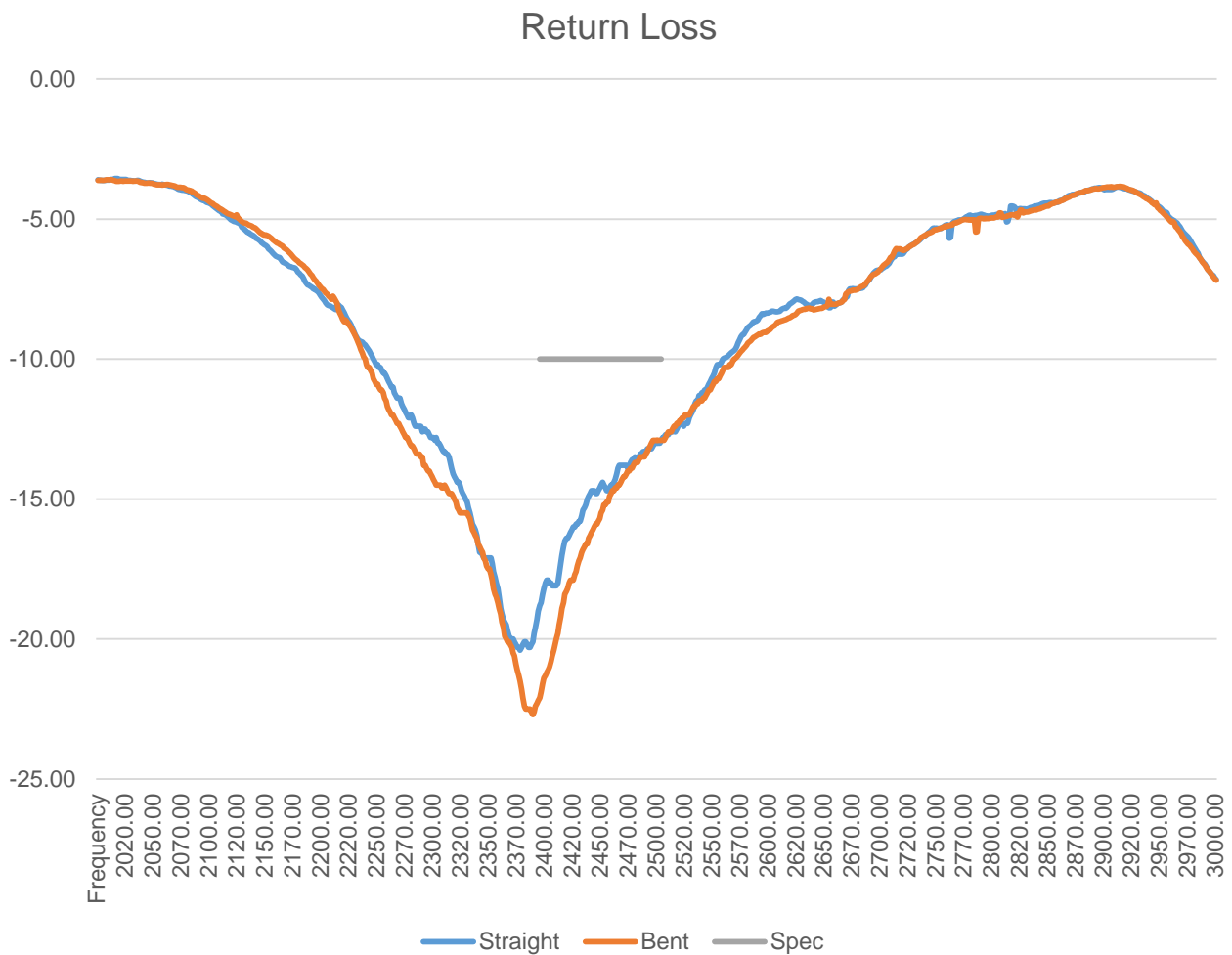
**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

CHARTS

Return Loss



Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

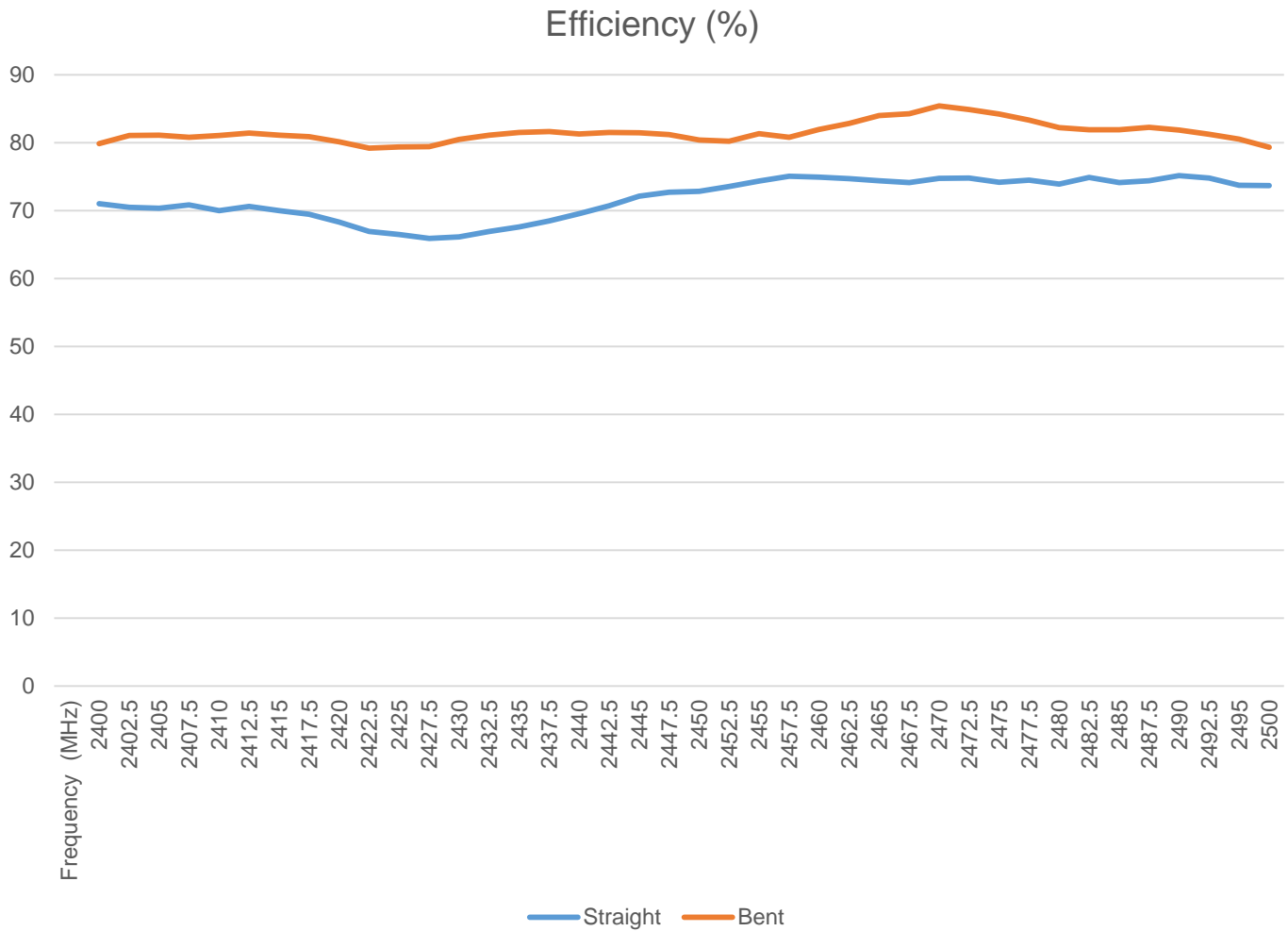
**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

CHARTS

Efficiency(%)



Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

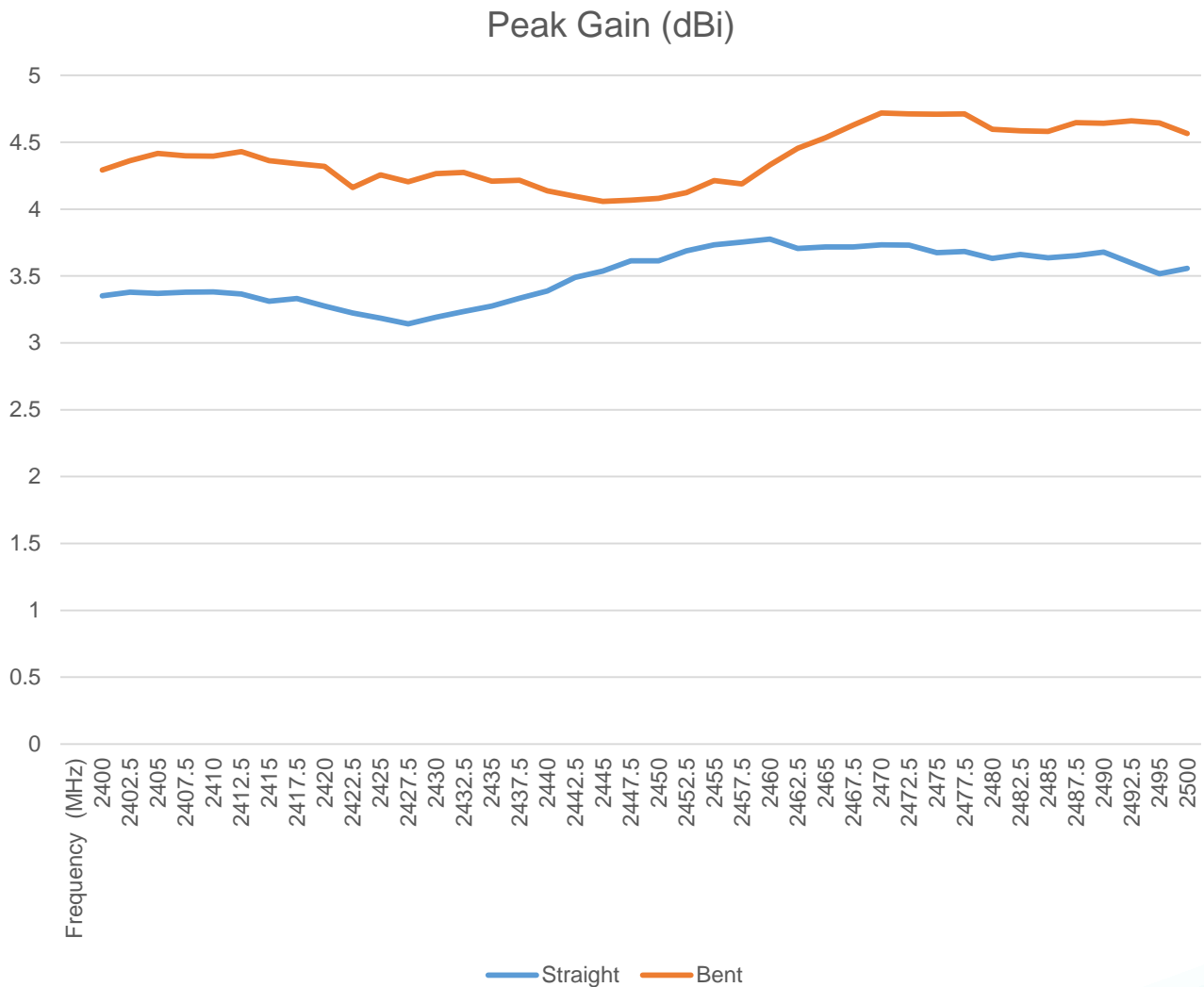
**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

CHARTS

Peak Gain (dBi)



Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

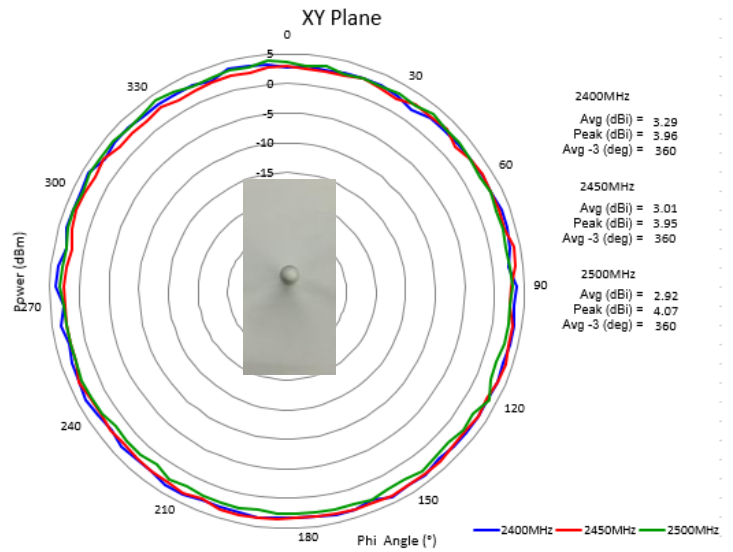
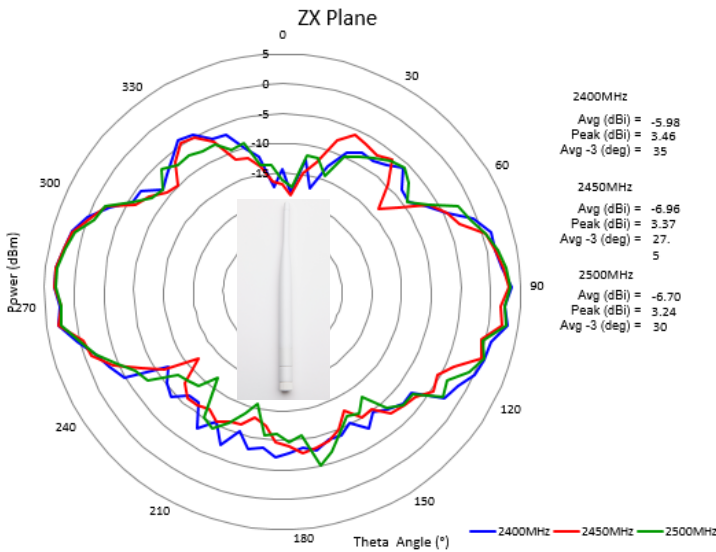
CHARTS

Free Space Radiation Pattern

Straight

Elevation Plane

Horizontal Plane



Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



**Description:** Wireless External Antenna for 2.4 GHz Applications

**Series:** Stick Antenna

**PART NUMBER:** W1038x

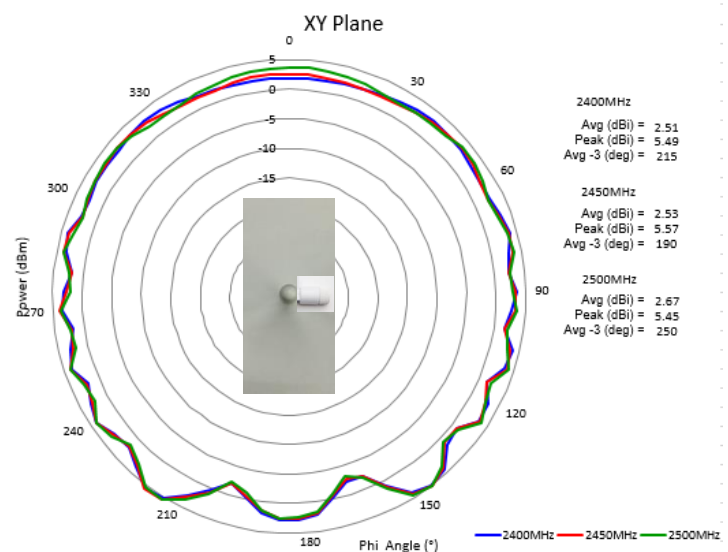
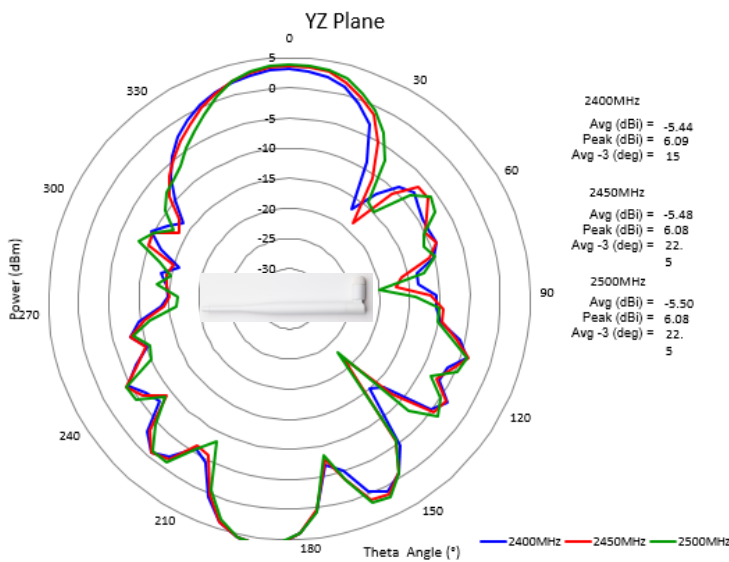
CHARTS

Free Space Radiation Pattern

Bent

Elevation Plane

Horizontal Plane



Issue: 1821

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.