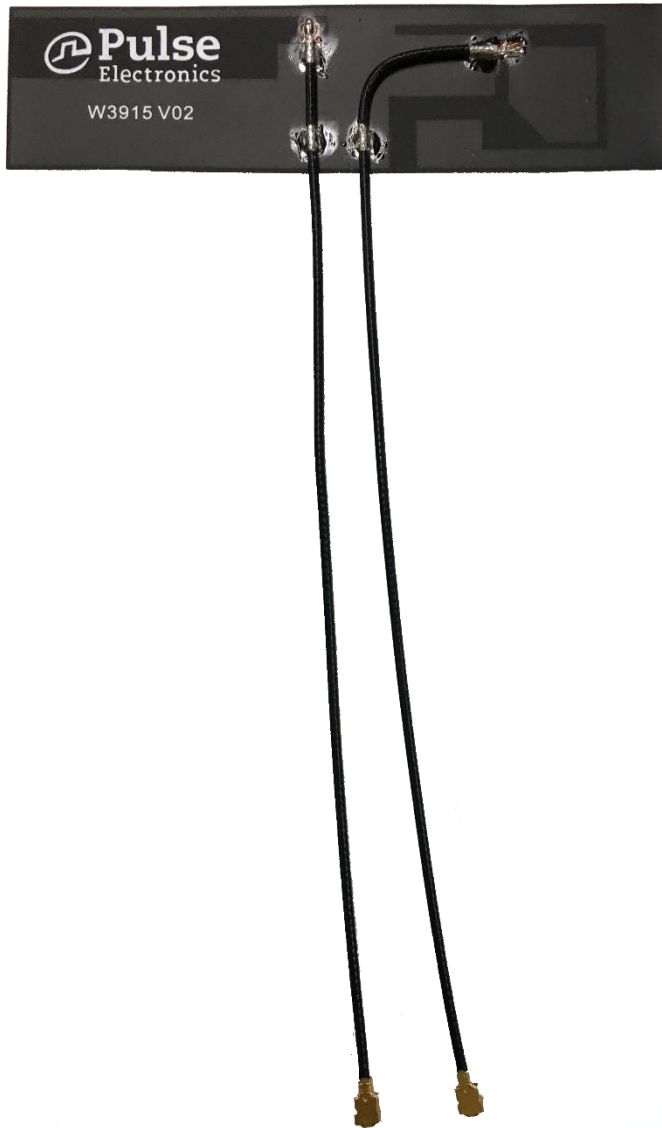


**Description: 3G 880-960/1710-2170MHz +
GNSS Antenna**

Series: Internal FPC Antenna

PART NUMBER: W3915



Features:

- Cellular 880-960/1710-2170MHz
- GNSS 1575.42-1605MHz
- Radiator size 74x19mm
- Cable length 100mm
- U.FL compatible connectors
 - Port 1: Cellular
 - Port 2: GNSS

Applications:

- 2G, 3G radios with GNSS support
- Satellite navigation
- Telematics, Asset tracking
- Fleet management

Issue: 1730

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 34th 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,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998



**Description: 3G 880-960/1710-2170MHz +
GNSS Antenna****Series: Internal FPC Antenna****PART NUMBER: W3915****ELECTRICAL SPECIFICATIONS (1)**

(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Frequency	Cellular:	880-960 MHz/1710-2170MHz
	GNSS:	1565-1605MHz
Nominal Impedance		50Ω
Return Loss 880-915 (925-960)		6dB (4dB)
Return Loss 1710-2170		8dB
Return Loss 1575-1605		8dB
Isolation Cellular-GNSS		15dB
Total Efficiency 880-960		50%
Total Efficiency 1710-2170		75%
Total Efficiency 1575-1605		55%
Peak Gain 880-960		1dBi
Peak Gain 1710-2170		2dBi
Peak Gain 1575-1605		0.5dBiC
Power withstanding		24dBm CW

Issue: 1730

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: 3G 880-960/1710-2170MHz +
GNSS Antenna****Series: Internal FPC Antenna****PART NUMBER: W3915**

MECHANICAL SPECIFICATIONS

Weight	2.35 g
Radiator size	74 x 19 mm
Radiator thickness with adhesive tape	0.2 mm
Connector type	u.FL compatible
Cable type	Ø1.13 coaxial cable
Cable length	100mm
Mounting with adhesive tape	3M467

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40 - +65 °C
Temperature	50 °C
Humidity	85%RH

Issue: 1730

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

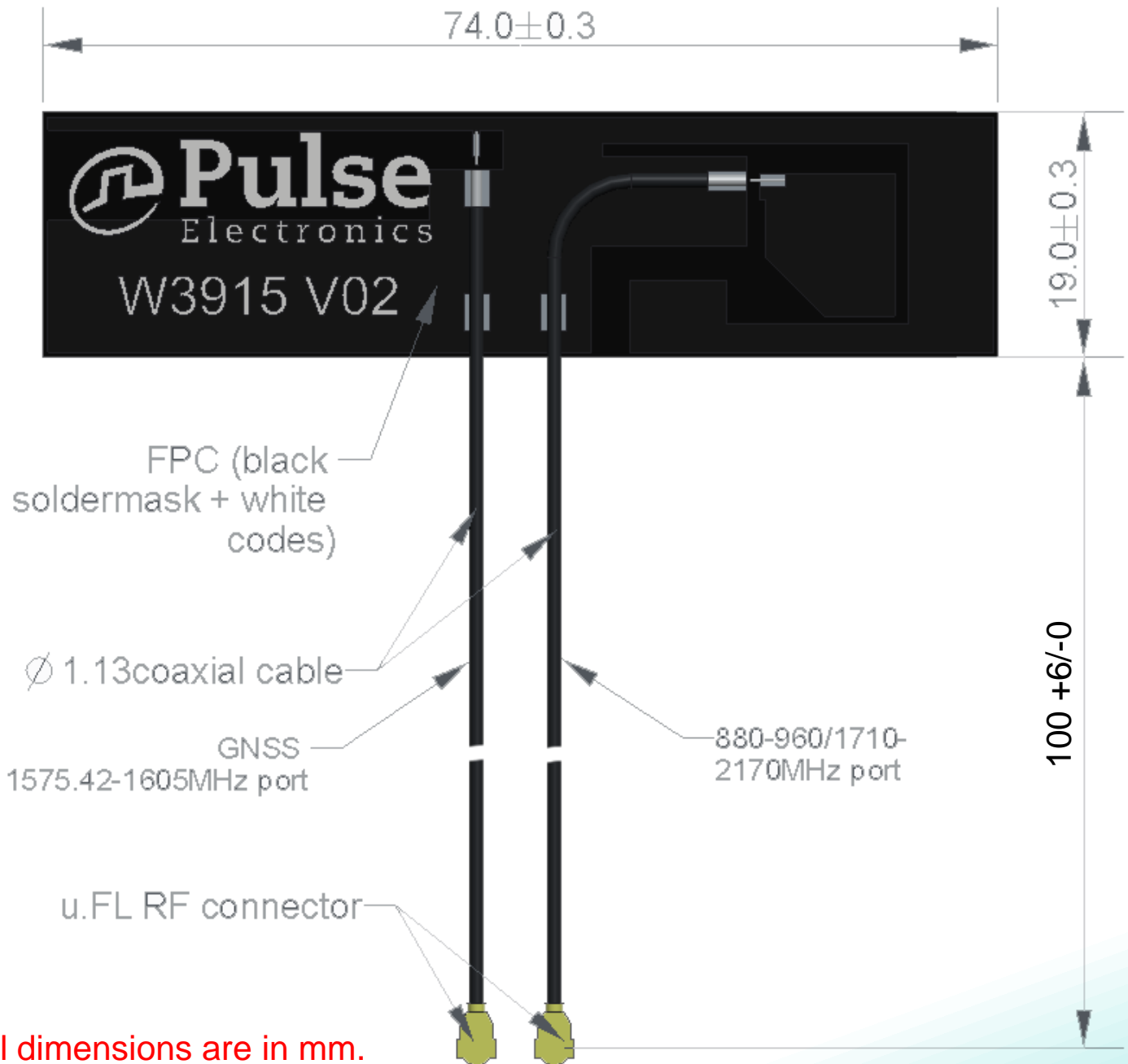
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 3G 880-960/1710-2170MHz +
GNSS Antenna

Series: Internal FPC Antenna

PART NUMBER: W3915

MECHANICAL DRAWING



All dimensions are in mm.

Issue: 1730

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.

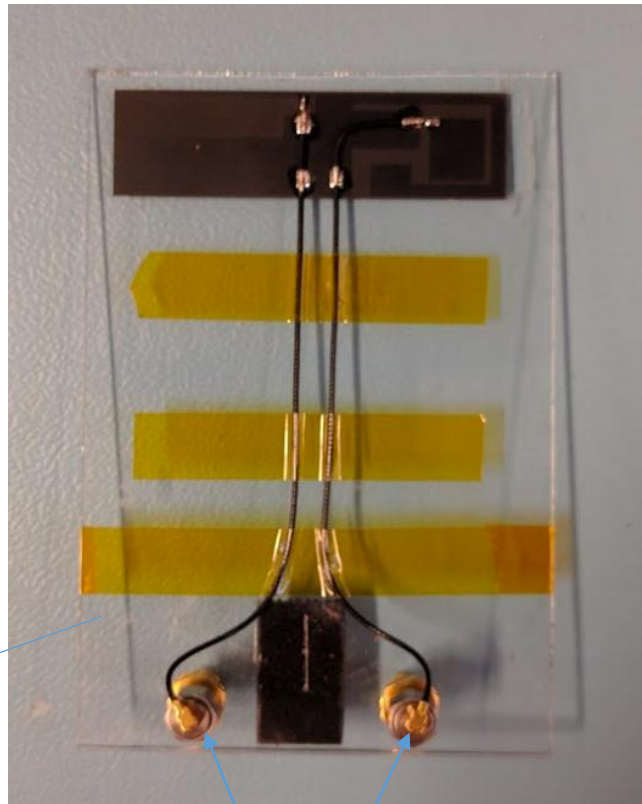
Description: 3G 880-960/1710-2170MHz +
GNSS Antenna

Series: Internal FPC Antenna

PART NUMBER: W3915

OTHER SPECIFICATIONS

Test setup for all RF parameters



2mm thick
polycarbonate plate

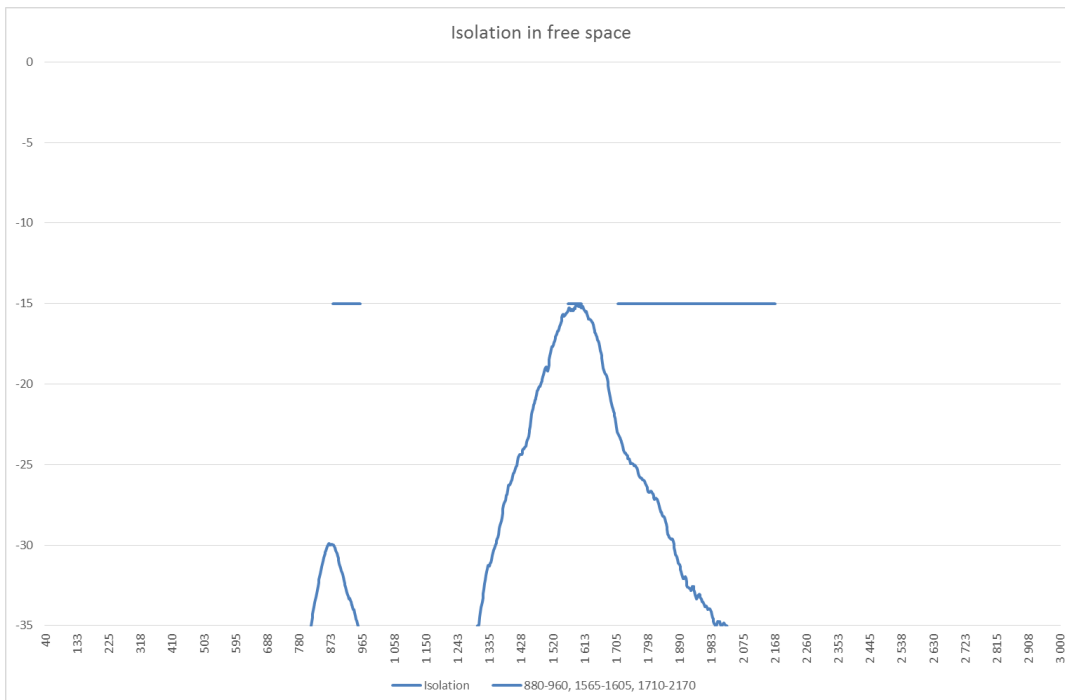
U.FL – SMA adapters

Description: 3G 880-960/1710-2170MHz + GNSS Antenna

Series: Internal FPC Antenna

PART NUMBER: W3915

CHARTS



(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Issue: 1730

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.

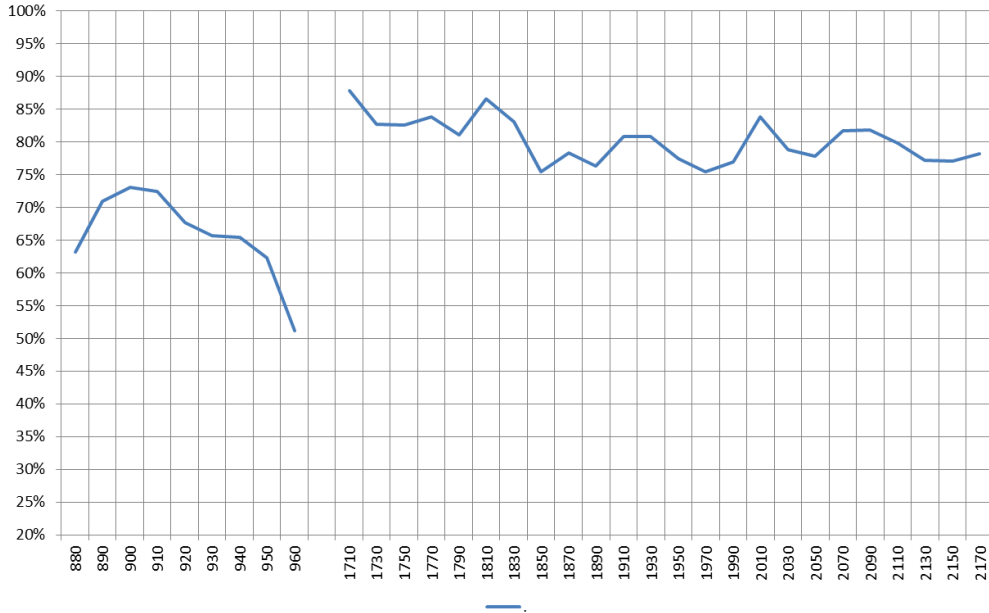
Description: 3G 880-960/1710-2170MHz + GNSS Antenna

Series: Internal FPC Antenna

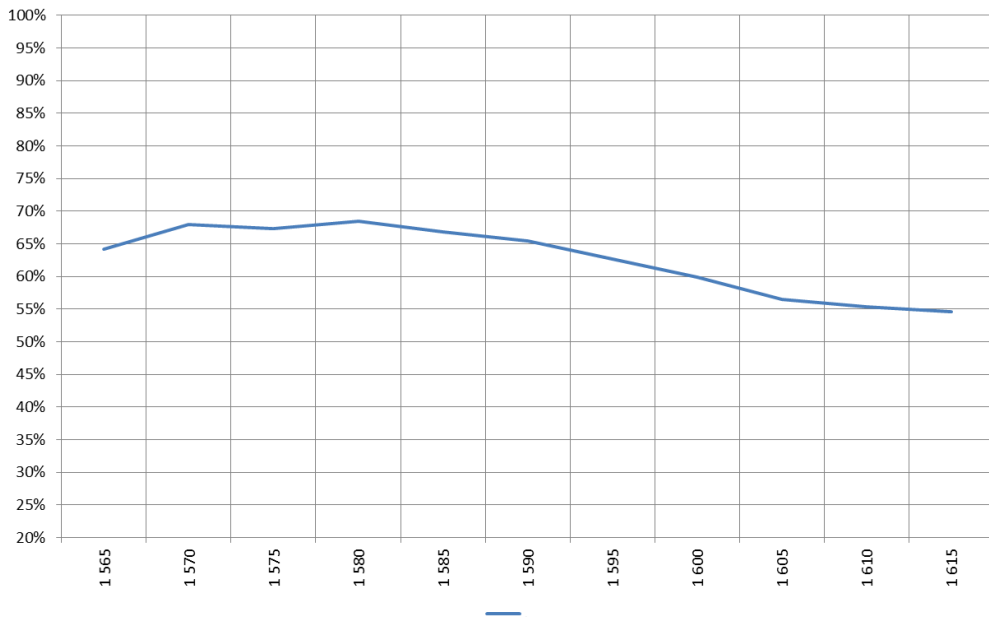
PART NUMBER: W3915

CHARTS

Cellular Antenna Total Efficiency %



GNSS Antenna Total Efficiency %



(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Issue: 1730

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.

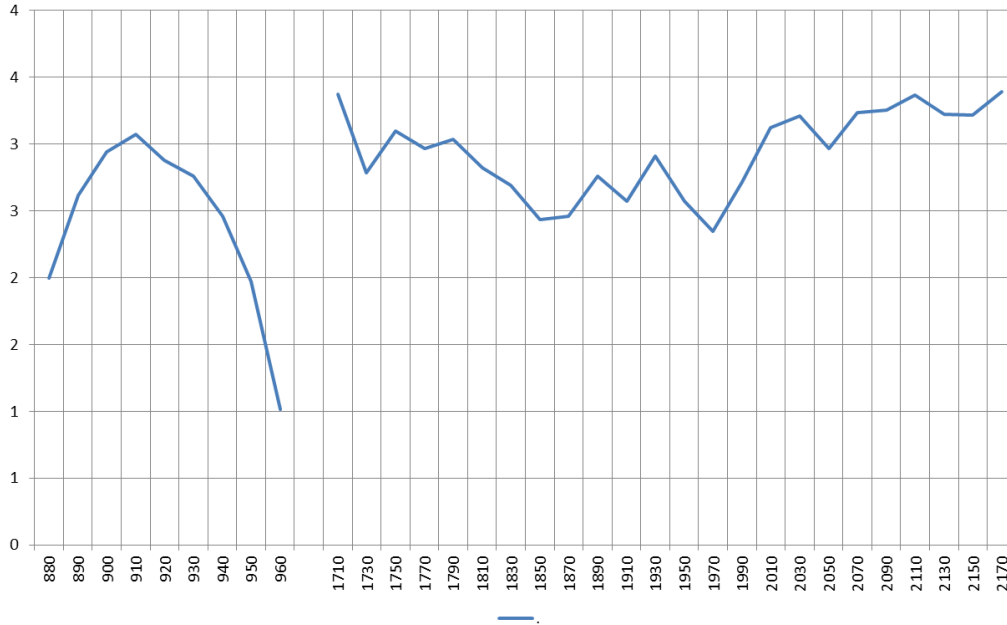
Description: 3G 880-960/1710-2170MHz + GNSS Antenna

Series: Internal FPC Antenna

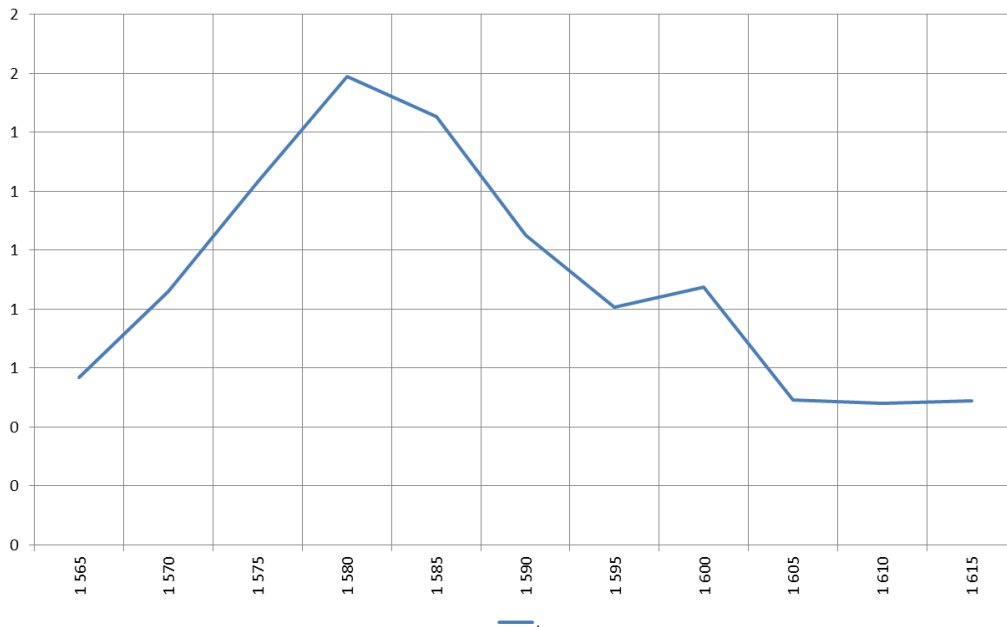
PART NUMBER: W3915

CHARTS

Cellular Antenna Peak Gain, dBi



GNSS Antenna Peak Gain, dBic



(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Issue: 1730

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.

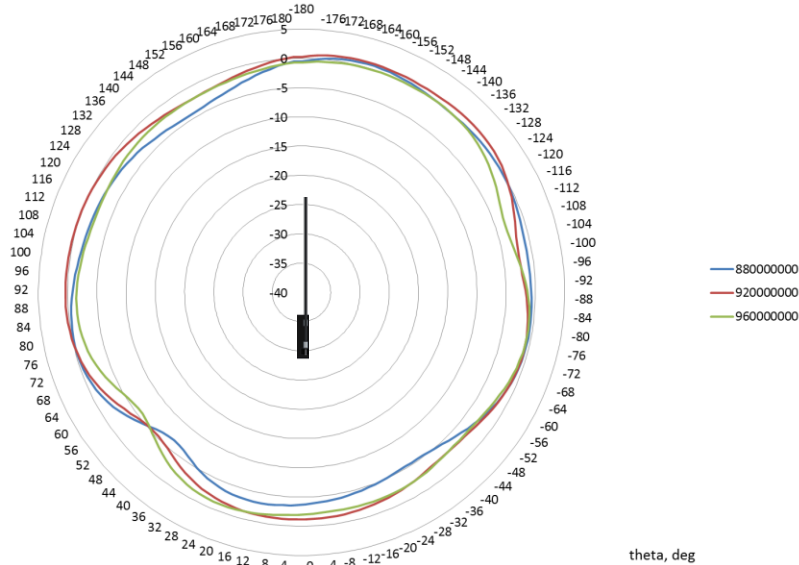
Description: 3G 880-960/1710-2170MHz +
GNSS Antenna

Series: Internal FPC Antenna

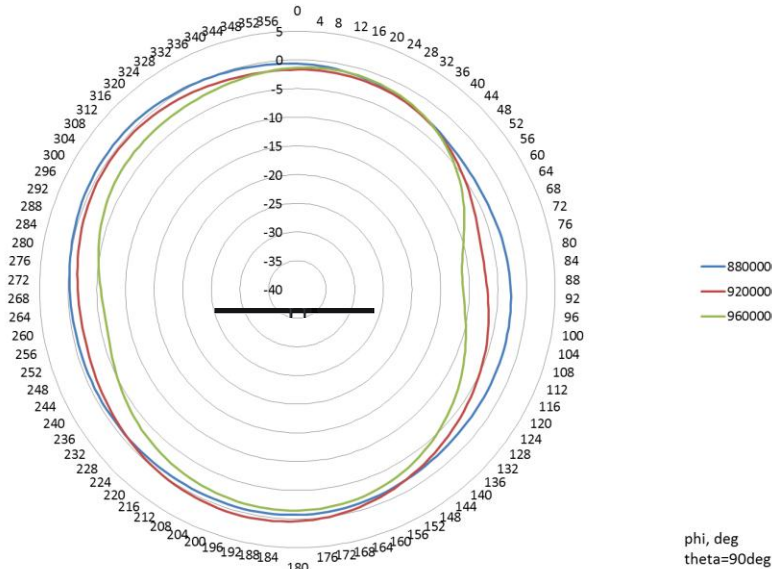
PART NUMBER: W3915

CHARTS

Elevation



Azimuth plane



(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Issue: 1730

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.

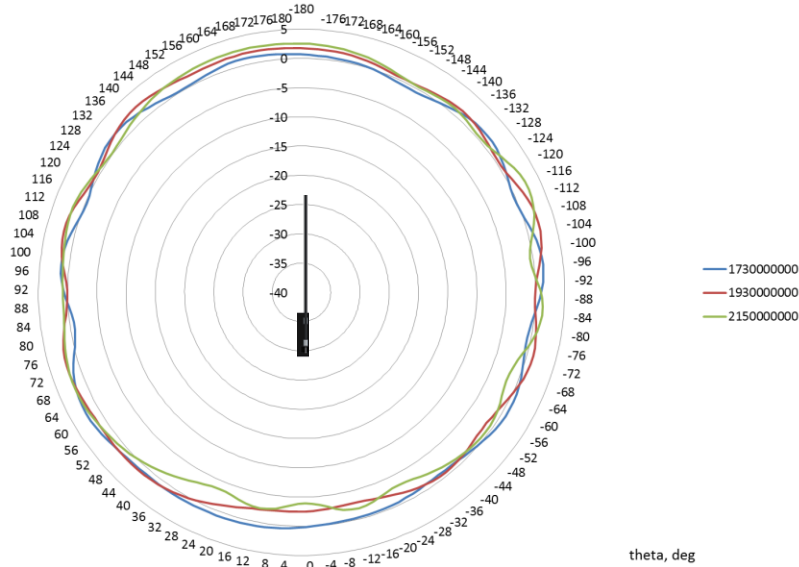
Description: 3G 880-960/1710-2170MHz +
GNSS Antenna

Series: Internal FPC Antenna

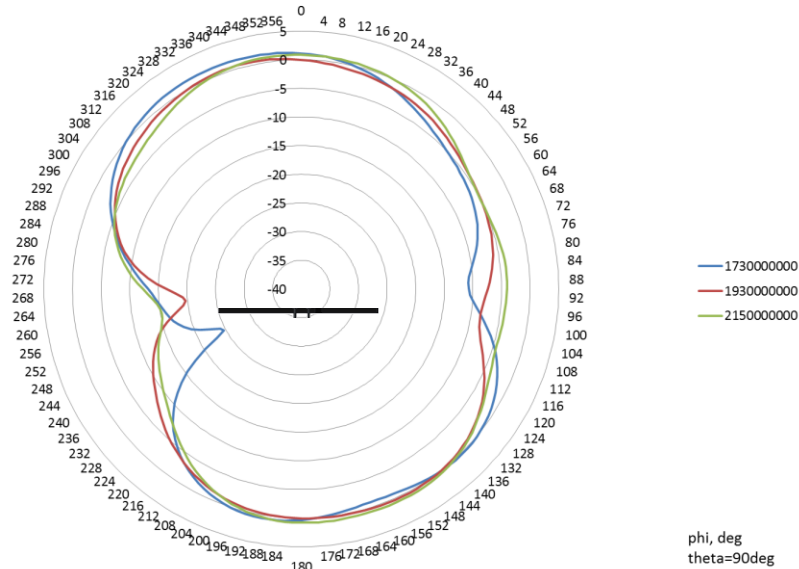
PART NUMBER: W3915

CHARTS

Elevation



Azimuth plane



(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Issue: 1730

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.

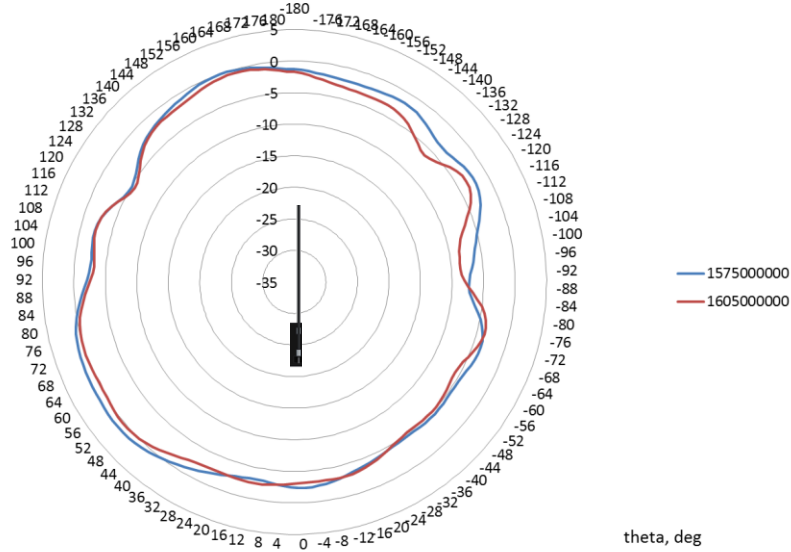
Description: 3G 880-960/1710-2170MHz +
GNSS Antenna

Series: Internal FPC Antenna

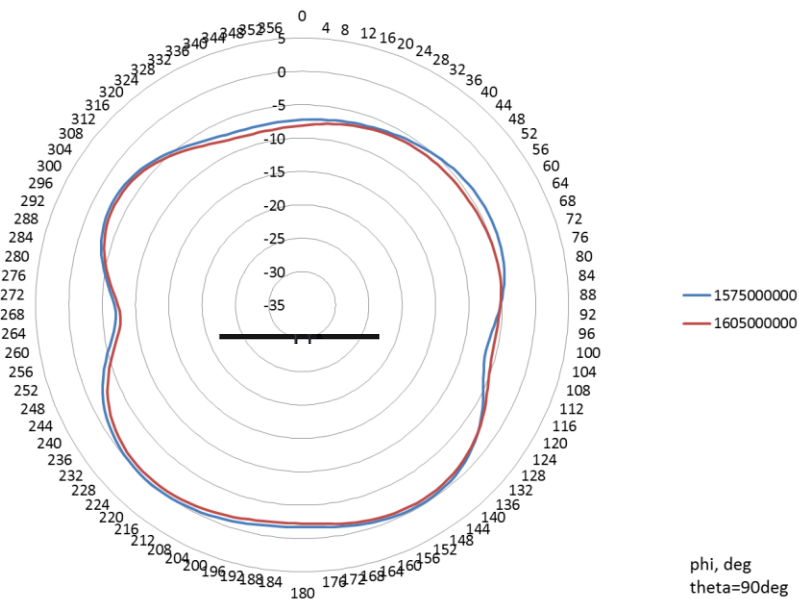
PART NUMBER: W3915

CHARTS

GNSS elevation



GNSS Azimuth plane



(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Issue: 1730

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: 3G 880-960/1710-2170MHz +
GNSS Antenna**

Series: Internal FPC Antenna

PART NUMBER: W3915

PACKAGING

25pcs antennas/sealed plastic bag, plastic bag size:
120mmx180mm;

1000pcs antennas/packing carton box, carton box
size:460mmx235mmx140mm.