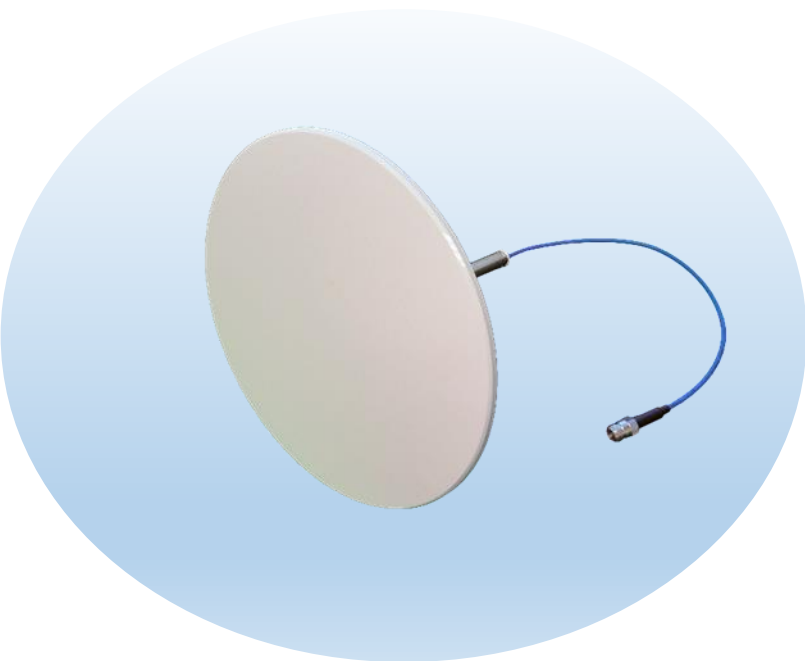


Description: In Building Public Safety

Series: Clarity™ Pearl

PART NUMBER: PSUTWCNF



Features:

- **Frequency of Operation:**
 - 380-570 MHz (UHF)
 - 698-960 MHz
- **Excellent Performance Across all bands**
 - VSWR 2:1 Max.
- **Size : 311mm Diameter**
 - 9.5mm below ceiling
- **White radome; UV stabilized plastic, UL94-V0 flamm.**
- **500mm coax; N Female Conn.**

Applications:

- **In-Building Public Safety repeater systems.**
- **Excellent Coverage of Public Safety networks**
 - Includes T-Band, Tetra coverage
- **Pleasing aesthetic design.**
- **Ideal for Challenging building types: Hospitals, Schools, Shopping malls, Government buildings, Multi-Tenant Units.**

All dimensions are in mm / inches

Issue: 1635

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
12220 World Trade Drive
San Diego, CA 92128
USA
Tel: 1-858-674-8100

Pulse/Larsen Antennas
3611 NE 112th Ave
Vancouver, WA 98682
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: In Building Public Safety

Series: Clarity™ Pearl

PART NUMBER: PSUTWCNF

ELECTRICAL SPECIFICATIONS

Frequency	380-570, 700-960 MHz
Nominal Impedance	50 Ω
VSWR	2:1
Average peak gain 380-570 MHz	1.8 dBi
Average peak gain 700-960 MHz	3.5 dBi
Radiation Pattern	
3 dB beamwidth	
Horizontal plane	Omni
Vertical plane	100 deg
Power withstanding	10 W
Connector type	N female
Cable type	Ø 4mm / 0.16"
Cable length	500mm / 19.7"

Issue: 1635

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: In Building Public Safety

Series: Clarity™ Pearl

PART NUMBER: PSUTWCNF

MECHANICAL SPECIFICATIONS

Plastic radome	UV protected, UL94-V0
Color	White
Weight	550g
Cable retention: Pull off	30 N
Fixing system	Suspended ceiling, through hole mount, Drill Ø 64-70 [2 ½"-2 ¾"]

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	0 - 70° C
Storage temperature	MIL STD 801G: 24h at 85C and 24h at -40C
Temperature shock	MIL STD 810G: Method 503.5, -40 for 1 hr to +85 C for 1 hr @ 15 deg.C/min rate of change; 3 cycles
Humidity	MIL STD 810G: 24h at 60C and 95%RH
Vibration	MIL STD 810G: 514.6 C-II
Chemical resistance	MIL STD 810G
Drop test	Top, bottom, side. 3 times/orientation, 40"
Package drop	All faces & corners, 40"

Issue: 1635

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

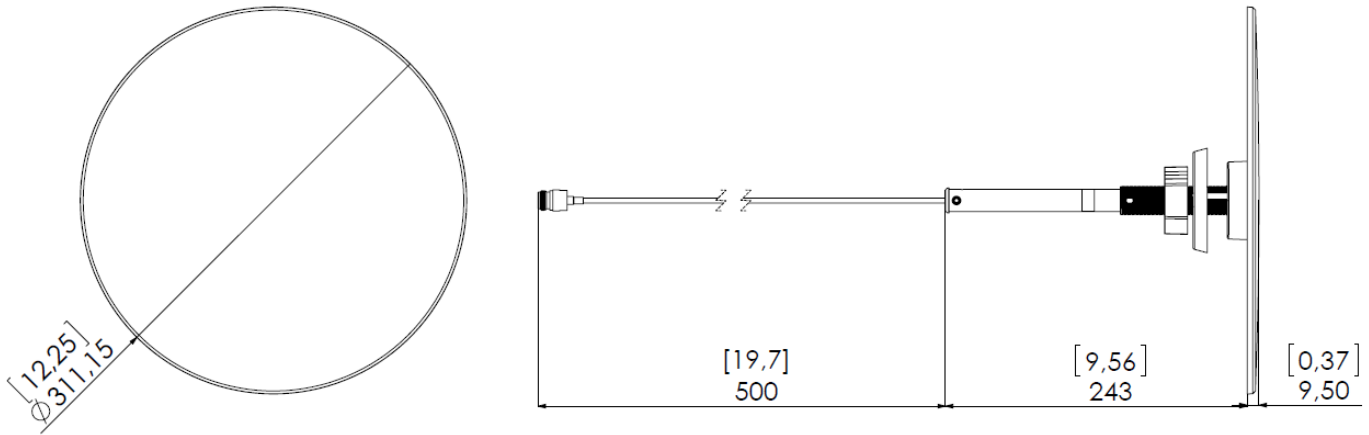
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: In Building Public Safety

Series: Clarity™ Pearl

PART NUMBER: PSUTWCNF

MECHANICAL DRAWING



DIMENSIONS IN MILLIMETERS [INCH]

Issue: 1635

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.

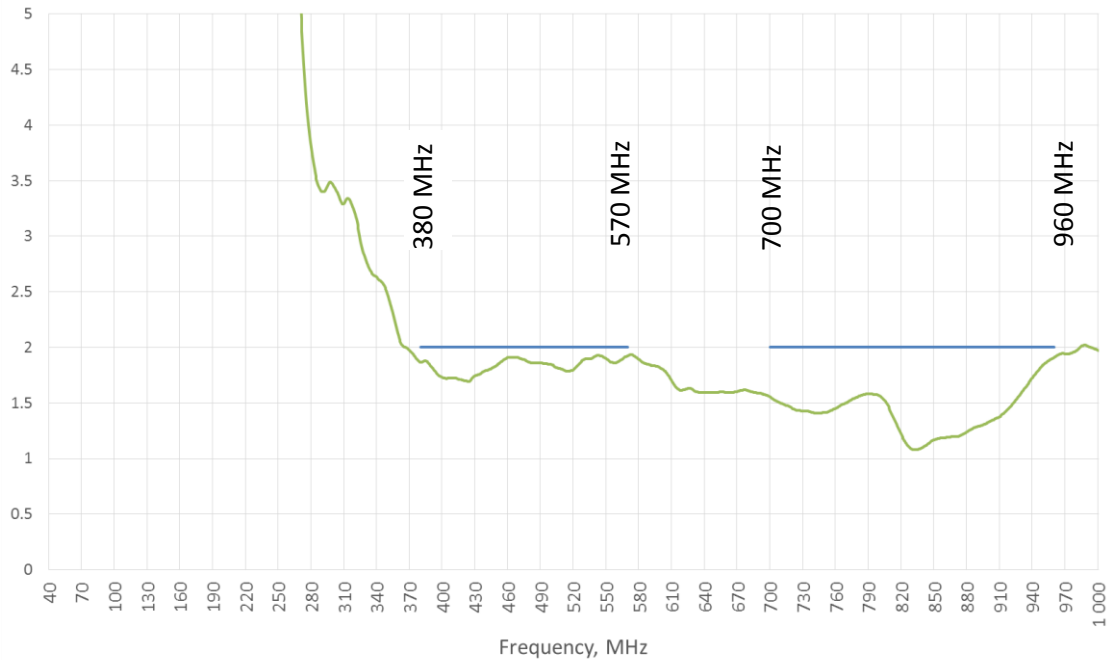
Description: In Building Public Safety

Series: Clarity™ Pearl

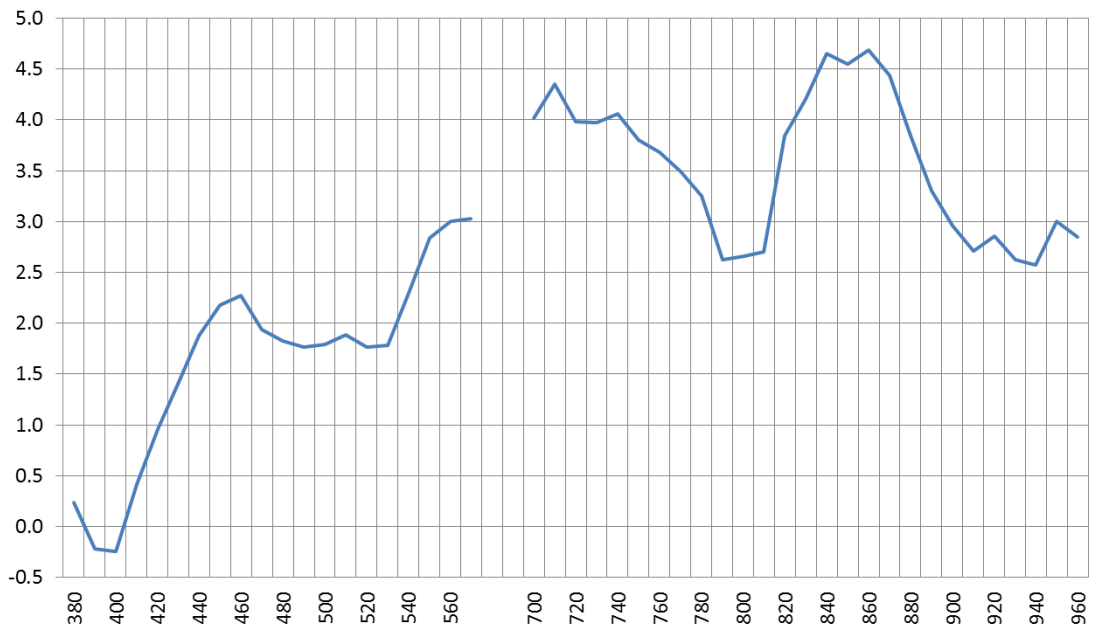
PART NUMBER: PSUTWCNF

CHARTS

VSWR in free space



Peak Gain, dBi



Issue: 1635

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.



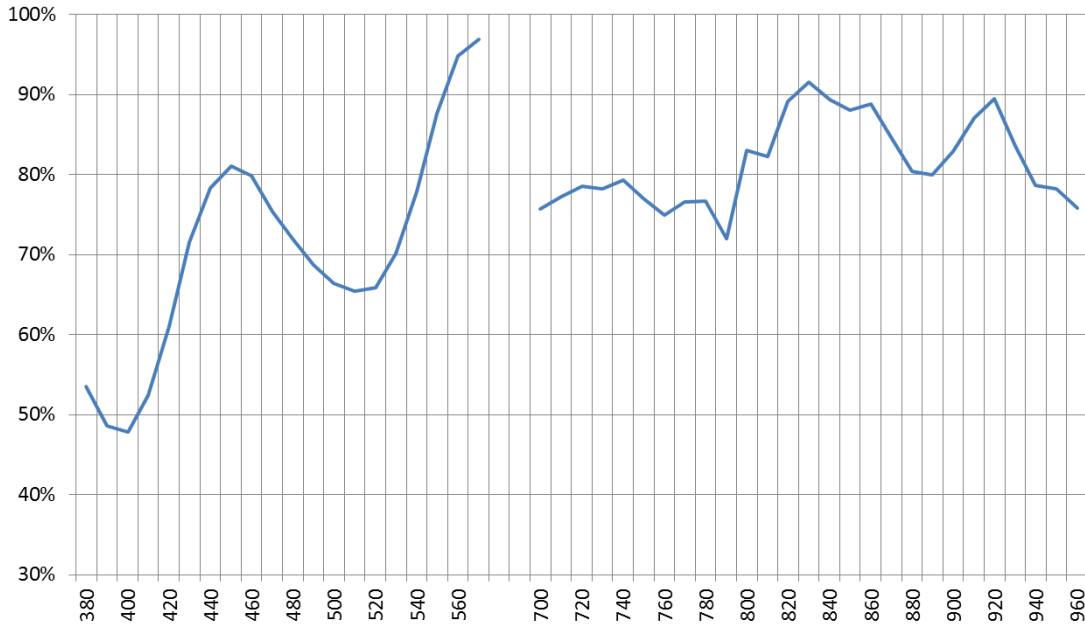
Description: In Building Public Safety

Series: Clarity™ Pearl

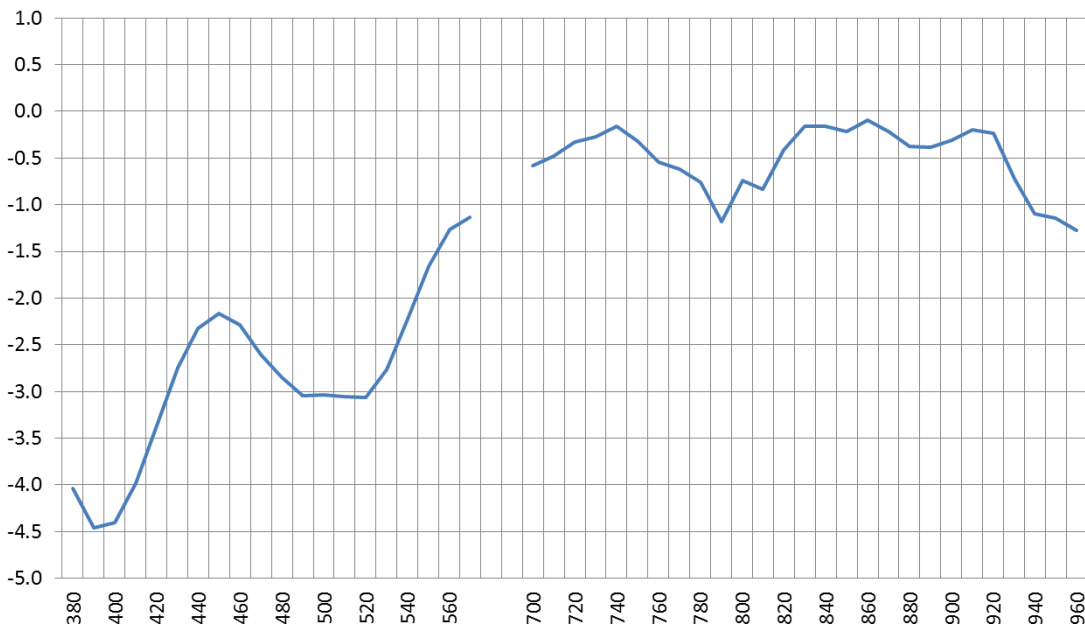
PART NUMBER: PSUTWCNF

CHARTS

Total efficiency, %



Average (3D) Gain, dBi



Issue: 1635

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.



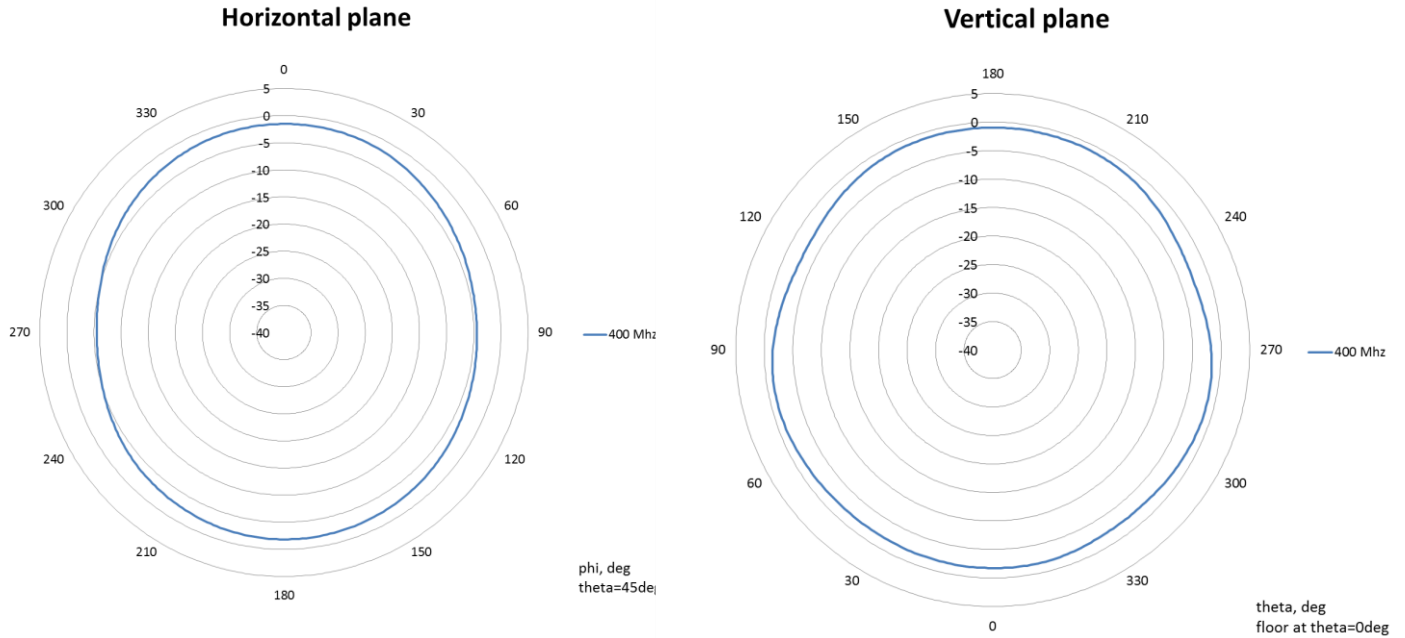
Description: In Building Public Safety

Series: Clarity™ Pearl

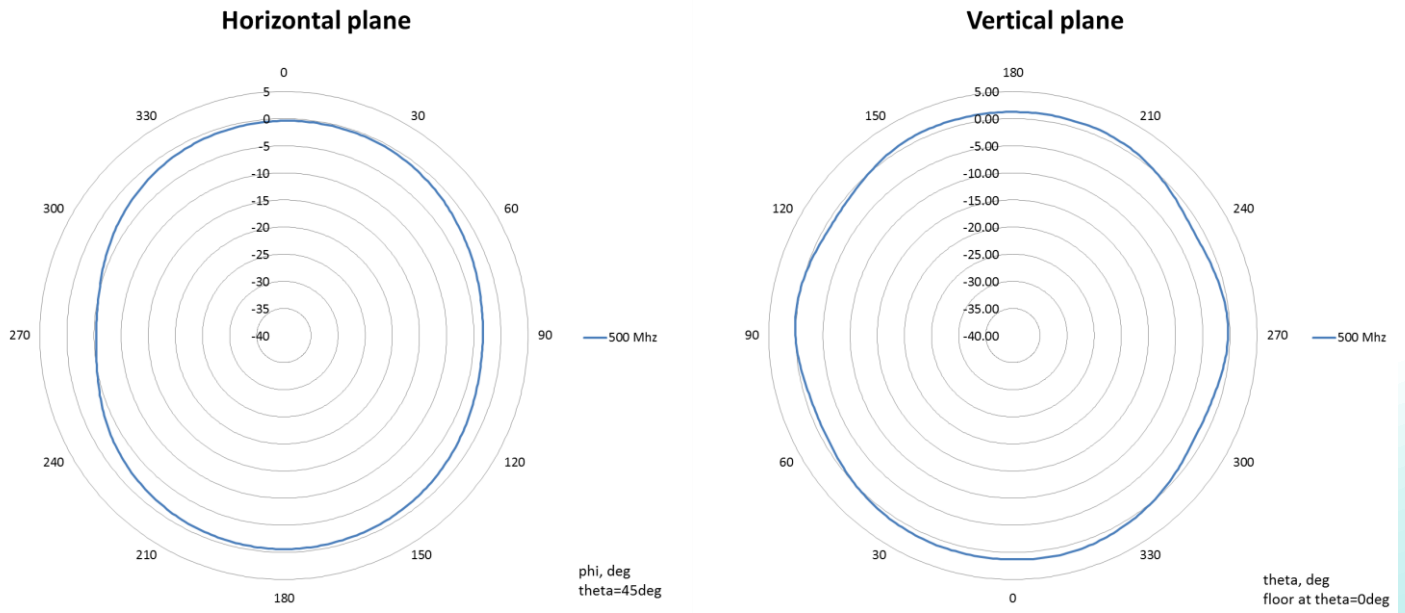
PART NUMBER: PSUTWCNF

CHARTS

Gain patterns, 400MHz



Gain patterns, 500MHz



Issue: 1635

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.

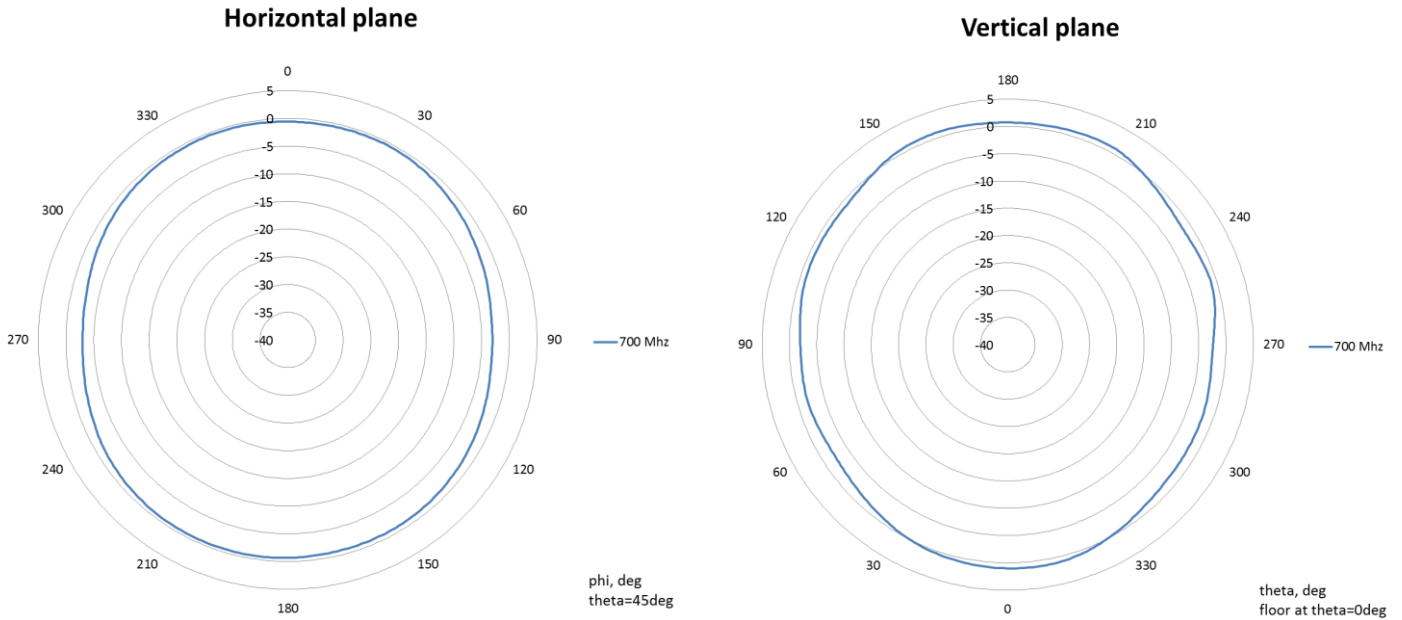
Description: In Building Public Safety

Series: Clarity™ Pearl

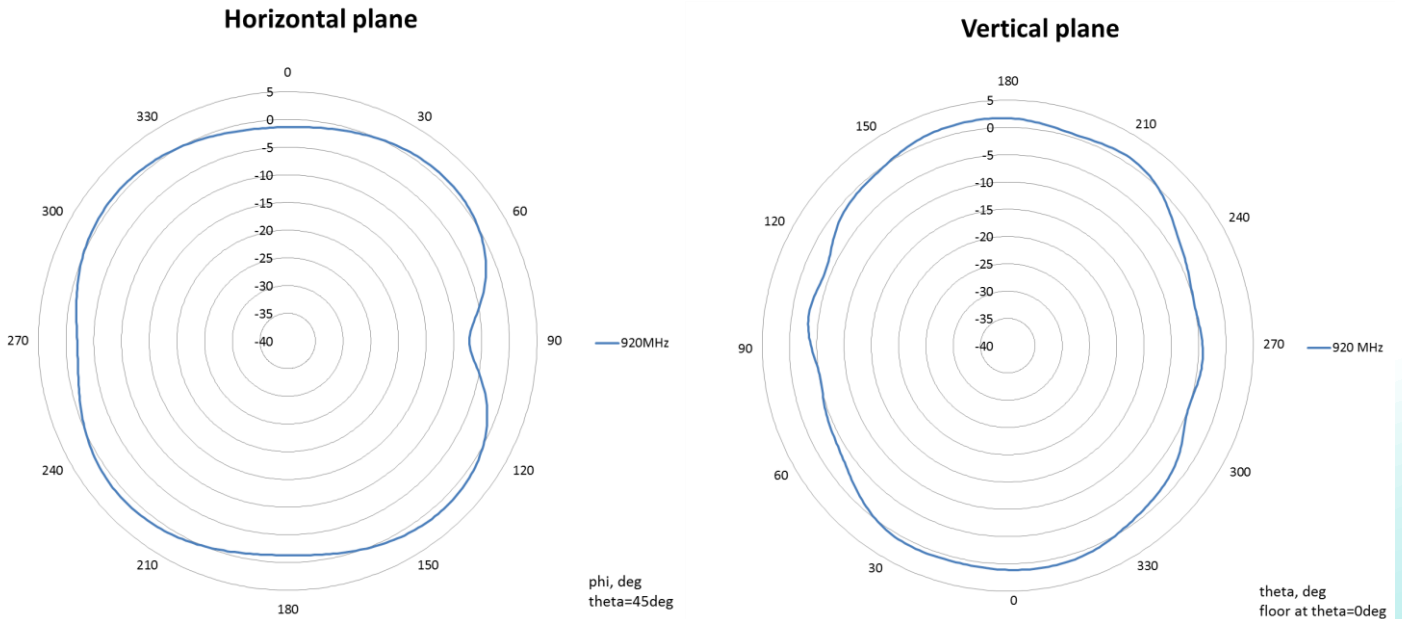
PART NUMBER: PSUTWCNF

CHARTS

Gain patterns, 700MHz



Gain patterns, 920MHz



Issue: 1635

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.

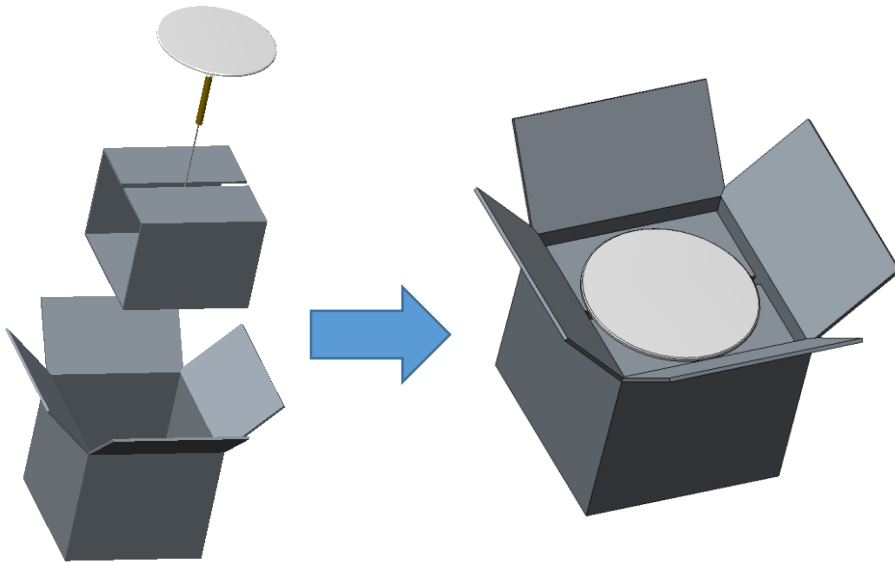


Description: In Building Public Safety

Series: Clarity™ Pearl

PART NUMBER: PSUTWCNF

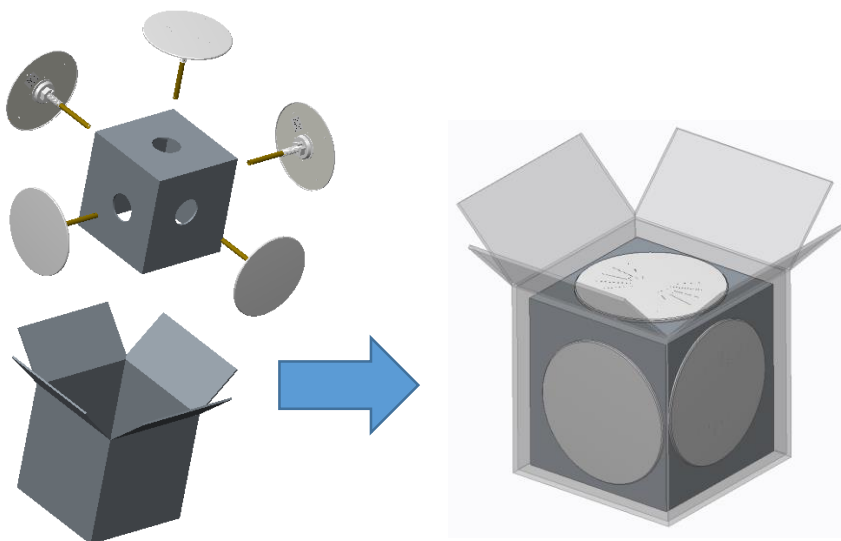
PACKAGING – Option 1



PSUTWCNF

1 antenna packed in one carton
(14.6x14.6x13) inch
(370x370x330) mm

PACKAGING – Option 2



PSUTWCNF5P

5 antennas packed in one carton
(15.7x15.7x16.5) inch
(400x400x420) mm

Issue: 1635

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: In Building Public Safety

Series: Clarity™ Pearl

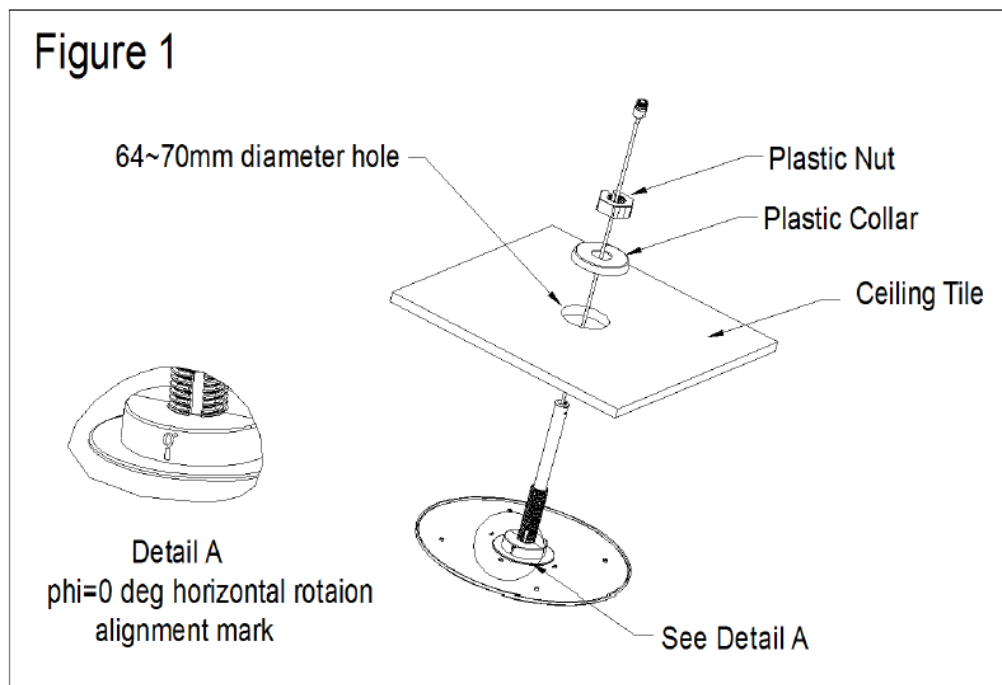
PART NUMBER: PSUTWCNF

ASSEMBLY

PSUTWCNF

Clarity Pearl In-Building Public Safety Antenna INSTALLATION:

Drill or cut a hole 2.5-2.75 inches (64-70 mm) diameter at the center of the ceiling tile or at the desired location. Slide the antenna cable/connector assembly through the hole. Slide the Collar and Nut onto the cable. Turn the Nut, tightening the antenna against the ceiling tile. See Figure 1.



Note: Fiberboard ceiling tile is soft; tighten the nut just enough to hold the antenna firmly in place.

Issue: 1635

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: In Building Public Safety

Series: Clarity™ Pearl

PART NUMBER: PSUTWCNF

ASSEMBLY

ADDITIONAL NOTES:

Some customers may chose to take into consideration the antenna propagation orientation during their planning process. The Horizontal rotation alignment mark ($\Phi=0$ deg), along with data from iBwave file will support this.

For Optimum Performance, Metal ceiling rails need to be a minimum 200mm from the - antenna center as the antenna requires 400mm x 400mm space free of any metal.

CONNECTOR TORQUE REQUIREMENTS

N Female: Maximum Torque 6.2-9.74 in-lbs (0.7-1.1Nm)