NPR-4RPHA

4" Pearl LED Round Adjustable Pinhole Retrofit

Source: 12W LED 1000lm

PRODUCT DESCRIPTION

Pearl LED Retrofit series is cULus classified for use in existing IC housings manufactured by Nora. The 4" retrofit luminaires deliver up to 800 lumens with 2" pinhole to focus the beam spread through small opening. Available in fixed downlight or adjustable.

FEATURES

- · 1000lm LED output
- · Comfort Dim (warm dimming) also available in 800lm only
- · 2700K, 3000K, 3500K, 4000K @ 90+ CRI
- · Field changeable optics included (Spot, Narrow Flood and Flood installed)
- · Integral dimmable driver
- · 5-year limited warranty
- · ENERGY STAR certified
- · cULus classified for damp locations

SPECIFICATION

Construction: Reflectors are constructed of heat dissipating, die-cast aluminum. The aluminum die-cast LED heat sink is threaded to fit the reflector and transfer heat.

Mounting: Reflector includes friction blades to mount securely to housing.

OPTICS

Each reflector includes field changeable optics (27° spot, 35° narrow flood and 45° flood - preinstalled). Premium 15° and 25° TIR optics are also available.

ELECTRICAL

Input Voltage: 120V

Lumens / Wattage: 1000lm / 12W (800lm w/ Comfort Dim) **Color Temperature:** 2700K, 3000K, 3500K, 4000K

CRI: 90+CR

Operating Temp.: 0°C to 25°C ambient temperature

Lifetime: 50,000 hours @ L70

Comfort Dim: Comfort Dim color tunes the temperature from a bright 3100K, to a romantic and comfortable 2000K on a

gradual, even curve. Available in 800lm only.

Dimming: Triac or ELV

Click Here or check complete dimmer list at www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE HOUSING

Pearl adjustable pinhole retrofit reflectors are compatible with 4" Max. Adjustability IC housing by Nora only.

New Construction

NSIC-4LMRAT Max. Adjustability ICAT Dedicated LED

Accessories: Reflectors will accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page.

LABELS AND LISTINGS

- · cULus classified for Damp Locations
- · ENERGY STAR certified
- · RoHS compliant
- 5-Year Limited Warranty
- · Certified to the high efficacy requirements of California Title 24 JA8-2019



Trim Type













4" Pearl LED Round Adjustable Pinhole Retrofit

NPR-4RPHA = Round Adjustable Pinhole

Color Temperature / Lumens 27X = 2700K / 1000lm

BB = Black / Black

Finish

30X = 3000K / 1000lm **35X** = 3500K / 1000lm BMPW = Black / Matte Powder White HZMPW = Haze / Matte Powder White MPW = Matte Powder White

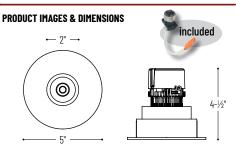
40X = 4000K / 1000lm **CDX** = Comfort Dim / 800lm

WW = White

Example: NPR-4RPHA27XWW = 4" Pearl LED Round Adjustable Pinhole Retrofit, 2700K / 1000lm, White finish



Type
Project
Catalog No.
Notes



NPR-4RPHA

Round Adjustable Pinhole 20° Adjustable (varies by housing) * For maximum adjustment use NSIC-4LMRAT *



BB Black Pinhole Black Flange



BMPWBlack Pinhole
Matte Powder White Flange



HZMPWHaze Pinhole
Matte Powder White Flange



MPWMatte Powder White Pinhole
Matte Powder White Flange



WW White Pinhole White Flange

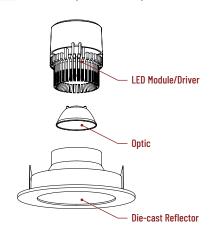
Pearl LED Retrofit Accessories

4" Pearl LED Round Adjustable Pinhole Retrofit

| Туре | | |
|-------------|--|--|
| Project | | |
| Catalog No. | | |
| Notes | | |

FIELD CHANGEABLE OPTICS

Pearl reflectors include spot, narrow flood and flood optics. Optics can be changed in the field by removing LED module from die-cast reflector. Replacement optics include an optional frosted lens. Note: Premium TIR optics are not compatible with Comfort Dim LED modules.







Frosted Filter-Optic

| NIO-REFL15FR | 15° Optio |
|--------------|-----------|
| NIO-REFL25FR | 27° Optio |
| NIO-REFL38FR | 35° Optio |
| NIO-REFL60FR | 45° Optio |

Optic assemblies includes specified optic and optional frosted lens. 27°, 35° and 45° optics are included with each reflector.

Premium TIR Optics

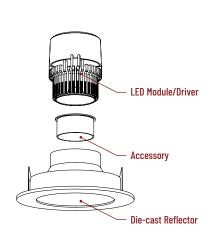
| NIO-REFLTIR15 | 15° Optic |
|---------------|-----------|
| NIO-REFLTIR25 | 25° Optic |

Premium TIR (total internal reflection) optics create optimal spot and narrow flood beam spread.

Not compatible with Comfort Dim (CDX) LED module

ACCESSORIES

Pearl accessories can be added at any point in the design process. Accessories easily install between LED module and die-cast reflector. Luminaire will accommodate (1) hex louver and (1) collar accessory, no accessory holder required.









| NIO-AS14(color) | 5/8" length |
|-----------------|-------------|
| NIO-AS19(color) | 3/4" length |
| NIO-AS26(color) | 1" length |
| Color: | - |

AM (amber), BLU (blue), FR (frosted), R (red)

Translucent collars color the aperture with the specified color while producing white general light. Collars are available in different lengths. Use to add interest, create a theme, match a theme or define a space.





| NIO-AS14(color) | 5/8" length |
|-----------------|-------------|
| NIO-AS19(color) | 3/4" length |
| NIO-AS26(color) | 1" length |
| <u>Color</u> : | Í |

BLK (black), MPW (matte powder white), WH (white)

Opaque snoot greatly reduces aperture brightness while preserving light output. (Note: Black snoot will reduce light)



Hex Cell Louver

| NIO-HC | Black |
|--------|-------|
| | |

Hex cell louver subtly reduces aperture brightness by reducing light output by about 20%.



PHOTOMETRICS

4" Pearl LED Round Adjustable Pinhole Retrofit

Type

Project

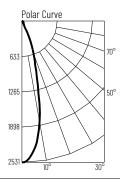
Catalog No.

Notes

Test Information

Test Number: NTR1545 Part Number: NPR-4RPHA30XWW Beam Spread: 27° Spot Lumens: 747lm Wattage: 11.65W

Efficacy: 64pw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.46 Spacing Criteria (90º-270): 0.46



Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|----------------------------|-------------|---------------|
| 4' | 158fc | 1'-11" |
| 6' | 70.2fc | 2'-11" |
| 8' | 39.5fc | 3'-10" |
| 10' | 25.3fc | 4'-10" |
| 12' | 17.6fc | 5'-10" |

Zonal Lumen Summary

| Zone | Lumens | % Luminaire |
|--------|--------|----------------|
| 0-30 | 616 | 82.5 |
| 0-40 | 652 | 87.3 |
| 0-60 | 703 | 94.1 |
| 0-90 | 744 | 99.7 |
| 90-180 | 2 | 0.3 |
| 0-180 | 747 | 100 |
| | | |

Candela Table

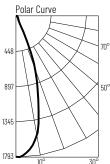
| candela rable | |
|--------------------|---------|
| Vertical Angles | Candela |
| 0 | 2528 |
| 5 | 2335 |
| 15 | 1031 |
| 25 | 213 |
| 35 | 56 |
| 45 | 35 |
| | |

Test Information

Test Number: NTR1546 Part Number: NPR-4RPHA30XWW Beam Spread: 35° Narrow Flood Lumens: 730Im

Lumens: 730lm Wattage: 11.69W Efficacy: 62pw CCT / CRI: 3000K

CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.58 Spacing Criteria (90º-270): 0.58



Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|----------------------------|-------------|---------------|
| 4' | 112fc | 2'-7" |
| 6' | 49.6fc | 3'-10" |
| 8' | 27.9fc | 5'-1" |
| 10' | 17.9fc | 6'-5" |
| 12' | 12.4fc | 7'-8" |

Zonal Lumen Summary

| Zone | Lumens | % Luminaire |
|--------|--------|----------------|
| 0-30 | 598 | 81.9 |
| 0-40 | 630 | 86.2 |
| 0-60 | 685 | 93.8 |
| 0-90 | 728 | 99.7 |
| 90-180 | 2 | 0.3 |
| 0-180 | 730 | 100 |

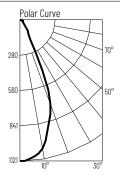
Candela Table

| Vertical Angles | Candela |
|--------------------|---------|
| 0 | 1787 |
| 5 | 1715 |
| 15 | 1098 |
| 25 | 259 |
| 35 | 54 |
| 45 | 35 |
| | |

Test Information

Test Number: NTR1547 Part Number: NPR-4RPHA30XWW Beam Spread: 45° Flood Lumens: 690lm Wattage: 11.65W

Efficacy: 59pw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.76 Spacing Criteria (90º-270): 0.76



Illuminance at a Distance

| Distance from Luminaire | FC at Nadir | Beam Diameter |
|----------------------------|-------------|---------------|
| 4' | 70.1fc | 3'-4" |
| 6' | 31.1fc | 5' |
| 8' | 17.5fc | 6'-7" |
| 10' | 11.2fc | 8'-4" |
| 12' | 7.8fc | 9'-11" |

Zonal Lumen Summary

| Zone | Lumens | % Luminaire |
|--------|--------|----------------|
| 0-30 | 516 | 74.8 |
| 0-40 | 582 | 84.3 |
| 0-60 | 640 | 92.8 |
| 0-90 | 688 | 99.7 |
| 90-180 | 2 | 0.3 |
| 0-180 | 690 | 100 |

Candela Table

| Vertical Angles | Candela |
|--------------------|---------|
| 0 | 1121 |
| 5 | 1097 |
| 15 | 874 |
| 25 | 357 |
| 35 | 103 |
| 45 | 39 |

Lumen Output Multipliers

Color Temperature: 2700K (0.97), 3000K (1.00), 3500K (1.05), 4000K (1.09)