# NPR-4RNDC

# 4" Pearl LED Round Retrofit Reflector with Round Aperture

Source: 12W LED

# 1000lm

### PRODUCT DESCRIPTION

Pearl LED Retrofit series is cULus classified for use in existing IC or Non-IC housings manufactured by Nora and others. The 4" retrofit luminaires deliver over 1100 lumens with deep regressed cone reflector for optimal visual cut-off.

### 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
- Includes medium base socket adapter for easy retrofitting in 4" recessed housings
- 5-year limited warranty
- **ENERGY STAR certified**
- cULus classified for wet 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 (29° spot, 43° narrow flood and 62° 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+CRI

**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

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www.NoraLighting.com in the "Compatibility" page under "Resources" tab

# COMPATIBLE HOUSINGS

Pearl retrofit reflectors are compatible with most 4" IC and Non-IC housings by Nora and others. Fire Box

NFBIC-4LMRATA\* ICAT Dedicated LED NFBIC-4INCATA ICAT Line Voltage New Construction NSIC-4LMRAT\* Max. Adjustability ICAT Dedicated LED ICAT Dedicated LED NHIC-4LMRAT\* NHIC-4LMRAT/277\* ICAT Dedicated LED, 277V (includes step-down transformer) NSIC-4010AT ICAT Line Voltage NS-4010AT AT Line Voltage NHIC-4G24AT ICAT GU24 <u>Remodel</u> NHRIC-4LMRAT\* ICAT Dedicated LED NSRIC-404QAT ICAT Line Voltage NSR-4040AT AT Line Voltage NHRIC-4G24AT ICAT GU24 \* Nora Dedicated LED housings are cULus listed for use

only with Nora LED Retrofits.

Retrofit: Pearl retrofit series includes medium base screw-socket adapter (NRA-211SM) for retrofitting into existing medium base downlight housings. GU24 socket adapter is available for use with GU24 housings, must specify NRA-212SM.

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 Wet Locations
- ENERGY STAR certified
- **RoHS** compliant
- 5-Year Limited Warranty
- Certified to the high efficacy requirements of California Title 24 JA8-2019



# Туре

Project

Catalog No.

Notes



| Reflector Type                                  | Color Temperature / Lumens  | Finish                                     |
|---|-----------------------------|--|
| NPR-4RNDC = Round Reflector with Round Aperture | 27X = 2700K / 1000lm        | BB = Black / Black                         |
|   | <b>30X</b> = 3000K / 1000lm | BW = Black / White                         |
|   | <b>35X</b> = 3500K / 1000lm | <b>BZ</b> = Bronze / Bronze                |
|   | <b>40X</b> = 4000K / 1000Im | CHMPW = Champagne / Matte Powder White     |
|   | CDX = Comfort Dim / 800lm   | CMPW = Specular Clear / Matte Powder White |
|   |                             | HW = Haze / White                          |
|   |                             | HZMPW = Haze / Matte Powder White          |
|   |                             | MPW = Matte Powder White                   |
|   |                             | NN = Natural Metal / Natural Metal         |
|   |                             | WW = White / White                         |

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Example: NPR-4RNDC27XWW = 4" Pearl LED Round Retrofit Reflector with Round Aperture, 2700K / 1000lm, White finish

# **Pearl LED Retrofit Accessories**

4" Pearl LED Round Retrofit Reflector with Round Aperture

# Type Project Catalog No. Notes

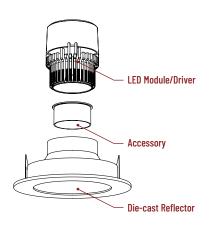
## FIELD CHANGEABLE OPTICS

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.



#### 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.





Translucent Decorative Collar

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

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.



**Opaque Collar Snoot** 

| NIO-AS14(color)           | 5/8" lei       |
|---------------------------|----------------|
| NIO-AS19(color)           | 3/4″ lei       |
| NIO-AS26(color)           | 1″ lei         |
| <u>Color</u> :            |                |
| BLK (black), MPW (matte p | oowder white), |

WH (white) Opaque snoot greatly reduces aperture brightness while preserving light output.

(Note: Black snoot will reduce light)



### Hex Cell Louver

| th | NIO-HC |
|----|--------|

5/8" leng

3/4″ length

1″ length

Black

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

# **PHOTOMETRICS**

**Test Information** 

Test Number: NTR1533

Beam Spread: 29° Spot

CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.5

Spacing Criteria (90º-270): 0.5

Lumens: 1187lm

Wattage: 11.66W

Efficacy: 102pw

Part Number: NPR-4RNDC30XWW

4" Pearl LED Round Retrofit Reflector with Round Aperture

# Туре

Project

Beam Diameter

2'-1"

3'-2"

4'-4"

5'-4"

6'-5"

Catalog No.

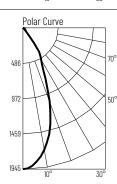
# Notes

|   | Zonal Lumen Summary |        |                |  | Candela 1          | Tab |
|---|---------------------|--------|----------------|--|--------------------|-----|
|   | Zone                | Lumens | %<br>Luminaire |  | Vertical<br>Angles | C   |
|   | 0-30                | 900    | 75.9           |  | 0                  |     |
|   | 0-40                | 1088   | 91.7           |  | 5                  |     |
|   | 0-60                | 1160   | 97.7           |  | 15                 |     |
| 1 | 0-90                | 1184   | 99.7           |  | 25                 |     |
|   | 90-180              | 3      | 0.3            |  | 35                 |     |
| - | 0-180               | 1187   | 100            |  | 45                 |     |

| Candela Table      |         |  |
|--------------------|---------|--|
| Vertical<br>Angles | Candela |  |
| 0                  | 2732    |  |
| 5                  | 2537    |  |
| 15                 | 1356    |  |
| 25                 | 636     |  |
| 35                 | 344     |  |
| 45                 | 55      |  |

## **Test Information**

Test Number: NTR1534 Part Number: NPR-4RNDC30XWW Beam Spread: 43° Narrow Flood Lumens: 1194lm Wattage: 11.67W Efficacy: 102pw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.7 Spacing Criteria (90º-270): 0.7



Polar Curve

683

1366

2049

2732

|     | Illuminance at a Distance  |             |               |  |
|-----|----------------------------|-------------|---------------|--|
| 70° | Distance from<br>Luminaire | FC at Nadir | Beam Diameter |  |
|     | 4'                         | 122fc       | 3'-1"         |  |
| 50° | 6'                         | 54fc        | 4'-8"         |  |
| 50  | 8'                         | 30.4fc      | 6'-4"         |  |
|     | 10'                        | 19.4fc      | 7'-10"        |  |
|     | 12'                        | 13.5fc      | 9'-5"         |  |
|     |                            |             |               |  |

Illuminance at a Distance

FC at Nadir

171fc

75.9fc

42.7fc

27.3fc

19fc

Distance from

Luminaire

4'

6'

8'

10'

12'

70°

50°

300

| Zonal Lumen Summary |        |                |  |
|---------------------|--------|----------------|--|
| Zone                | Lumens | %<br>Luminaire |  |
| 0-30                | 901    | 75.5           |  |
| 0-40                | 1094   | 91.6           |  |
| 0-60                | 1166   | 97.6           |  |
| 0-90                | 1191   | 99.8           |  |
| 90-180              | 3      | 0.2            |  |
| 0-180               | 1194   | 100            |  |

#### **Test Information**

Test Number: NTR1535 Part Number: NPR-4RNDC30XWW Beam Spread: 62° Flood Lumens: 1178lm Wattage: 11.72W Efficacy: 101pw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.94 Spacing Criteria (90º-270): 0.96

| IU          | 30                 |
|-------------|--------------------|
| Polar Curve |                    |
|             |                    |
| 306         | 70°                |
| 612         | 50°                |
| 918         | $\left\{ \right\}$ |
| 1224 10°    | 30°                |

# Illuminance at a Distance

| 70° | Distance from<br>Luminaire | FC at Nadir | Beam Diameter |
|-----|----------------------------|-------------|---------------|
|     | 4'                         | 76.5fc      | 4'-10"        |
| 500 | 6'                         | 34fc        | 7'-2"         |
| 50° | 8'                         | 19.1fc      | 9'-7"         |
|     | 10'                        | 12.2fc      | 12'           |
|     | 12'                        | 8.5fc       | 14'-5"        |
|     |                            |             |               |

#### Zonal Lumen Summary

| Zulidi Lulileli Sullillidi y |        |                |  |
|------------------------------|--------|----------------|--|
| Zone                         | Lumens | %<br>Luminaire |  |
| 0-30                         | 805    | 68.4           |  |
| 0-40                         | 1045   | 88.7           |  |
| 0-60                         | 1148   | 97.4           |  |
| 0-90                         | 1176   | 99.8           |  |
| 90-180                       | 3      | 0.2            |  |
| 0-180                        | 1178   | 100            |  |

#### Candela Table

| Vertical<br>Angles | Candela |
|--------------------|---------|
| 0                  | 1224    |
| 5                  | 1209    |
| 15                 | 1112    |
| 25                 | 829     |
| 35                 | 421     |
| 45                 | 74      |

#### Lumen Output Multipliers

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

