## **NPRLV-4RPHA**

4" Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit

Source: 11W LED 950lm

#### 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 950 lumens with 2" pinhole to focus the beam spread through small opening. Available in fixed downlight or adjustable.

#### **FEATURES**

- · Comfort Dim (warm dimming) is available in 600lm only
- · 2700K, 3000K, 3500K, 4000K @ 90+ CRI
- · Field changeable optics included (Spot, Narrow Flood and Flood installed)
- · Integral dimmable driver
- 5-year limited warranty
- · cULus classified for damp locations

#### **SPECIFICATION**

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

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

#### **OPTICS**

Three field changeable optics (spot, narrow flood and flood) are included with each LED module. Premium  $22^{\circ}$  and  $26^{\circ}$  TIR optics are also available.

#### **ELECTRICAL**

Input Voltage: 12VAC 60Hz

Socket: GU5.3

**Lumens / Wattage:** 950lm / 11W (600lm w/ Comfort Dim) **Color Temperature:** 2700K, 3000K, 3500K, 4000K

Color Rendering Index: 90+CRI

Beam Spread: 26° Spot, 35° Narrow Flood, 44° Flood

**Operating Temperature:** 0°C to 25°C **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 600lm only. **Dimming:** Triac (leading edge) or ELV (trailing edge)

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

#### **COMPATIBLE HOUSING**

 $Pearl\ adjustable\ pinhole\ retrofit\ reflectors\ \ are\ compatible\ with\ 4"\ IC\ and\ Non-IC\ housings\ by\ Nora\ and\ others.$ 

NLIC-401 4" IC Air-Tight Double Wall New Construction

NL-401 4" Non-IC New Construction
NLR-404 4" Non-IC Remodel

**Accessories:** Luminaires can 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
- · RoHS compliant
- <u>5-Year Limited Warranty</u>
- · Certified to the high efficacy requirements of California Title 24 JA8-2022













## 4" Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit

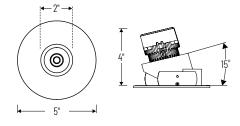
Color Temperature	FINISN
<b>NPRLV-4RPHA27X</b> = 2700K	BB = Black / Black
NPRLV-4RPHA30X = 3000K	BMPW = Black / Matte Powder White
<b>NPRLV-4RPHA35X</b> = 3500K	HZMPW = Haze / Matte Powder White
NPRLV-4RPHA4OX = 4000K	MPW = Matte Powder White
NPRLV-4RPHACDX = Comfort Dim	<b>WW</b> = White

Type
Project
Catalog No.
Notes

Performance Data			
Part Number	Lumens	CCT	Optic
NPRLV-4RPHA40XWW	957lm	4000K	Spot
NPRLV-4RPHA40XWW	934lm	4000K	Narrow
NPRLV-4RPHA40XWW	859lm	4000K	Flood

Delivered lumens will vary depending on CCT, optic and finish

#### **PRODUCT IMAGES & DIMENSIONS**



NPRLY-4RPHA Round Adjustable Pinhole 15° Adjustable



**BB** Black Pinhole Black Flange



**BMPW**Black Pinhole
Matte Powder White Flange



**HZMPW**Haze Pinhole
Matte Powder White Flange



Matte Powder White Pinhole Matte Powder White Flange



Www White Pinhole White Flange

 $\textbf{Example: NPRLV-4RPHA27XWW} = 4 \text{" Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit, 2700K, White finish Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit, 2700K, White finish Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit, 2700K, White finish Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit, 2700K, White finish Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit, 2700K, White Finish Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit, 2700K, White Pinhole Retrofit, 2700K, Whi$ 



# **Pearl Accessories**

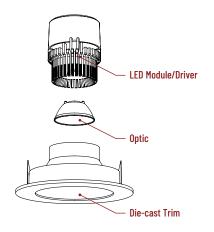
4" Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit

Type
Project
Catalog No.
Notes

#### FIELD CHANGEABLE OPTICS

Pearl luminaires include spot, narrow flood and flood optics. Optics can be changed in the field by removing LED module from die-cast trim. Replacement optics include an optional frosted lens.

Note: Premium TIR optics are not compatible with Comfort Dim LED modules.





### Frosted Optics

NIO-REFL38FR 60° Optic NIO-REFL60FR 73° Optic

Replaces optics that are included with each LED module.



## Premium TIR Optics

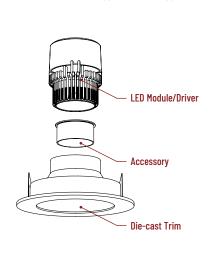
NIO-REFLTIR15 22° Optic NIO-REFLTIR25 26° Optic

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 trim. Luminaire will accommodate (1) hex louver and (1) collar accessory, no accessory holder required.





## Translucent Decorative Collar

 NIO-AS14(color)
 5/6" length

 NIO-AS19(color)
 5/4" length

 NIO-AS26(color)
 1" length

 Color:
 1" length

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% length
NIO-AS19(color) 3/4" length
NIO-AS26(color) 1" length
Color:
MPW (matte powder white), WH (white)

Opaque snoot greatly reduces aperture brightness while preserving light output.



## Hex Cell Louver

NIO-HC Black

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

Hex cell louver is  $\underline{\it not}$  compatible with TIR optics.

# **PHOTOMETRICS**

# 4" Pearl 12VAC Low Voltage LED Round Adjustable Pinhole Retrofit

Туре

**Project** 

Catalog No.

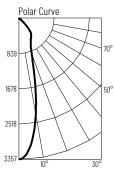
Notes

### **Test Information**

Test Number: NTR2252R1 Part Number: NPRLV-4RPHA40XWW Beam Spread: 26° Spot

Lumens: 957lm Wattage: 10.87W Efficacy: 88pw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.44 Spacing Criteria (90°-270°): 0.46



# Illuminance at a Distance

FC at Nadir	Beam Diameter
210fc	1'-11"
93.2fc	2'-10"
52.4fc	3'-8"
33.6fc	4'-7"
23.3fc	5'-7"
	210fc 93.2fc 52.4fc 33.6fc

#### Zonal Lumen Summary

	,	
Zone	Lumens	% Luminaire
0-30	806	84.2
0-40	853	89.1
0-60	911	95.2
0-90	957	100
90-180	0	0
0-180	957	100

### Candela Table

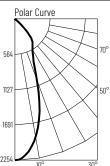
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Vertical Angles	Candela
0	3357
5	3082
15	1269
25	242
35	72
45	44

#### **Test Information**

Test Number: NTR2253R1 Part Number: NPRLV-4RPHA40XWW Beam Spread: 35° Narrow Flood

Lumens: 934lm Wattage: 10.87W Efficacy: 86pw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.58 Spacing Criteria (90°-270°): 0.58



#### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	141fc	2'-6"
6'	62.6fc	3'-10"
8'	35.2fc	5'-1"
10'	22.5fc	6'-4"
12'	15.7fc	7'-7"

#### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	770	82.5
0-40	818	87.6
0-60	881	94.3
0-90	934	100
90-180	0	0
0-180	934	100

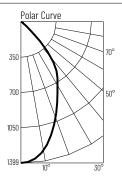
#### Candela Table

Vertical Angles	Candela
0	2254
5	2171
15	1364
25	348
35	71
45	50

### **Test Information**

Test Number: NTR2254R1
Part Number: NPRLV-4RPHA40XWW
Beam Spread: 44° Flood
Lumens: 859Im
Wattage: 10.87W
Efficacy: 79pw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.74 Spacing Criteria (90°-270°): 0.74



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	87.5fc	3'-2"
6'	38.9fc	4'-11"
8'	21.9fc	6'-6"
10'	14fc	8'-1"
12'	9.7fc	9'-8"

### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	648	75.5
0-40	731	85.1
0-60	801	93.3
0-90	859	100
90-180	0	0
0-180	859	100

### Candela Table

0 1700
0 1399
5 1374
15 1085
25 496
35 131
45 54