NPR-4RPHA
4" Pearl LED Round Adjustable Pinhole Retrofit
Source: 12W LED
         750lm

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 550 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 550lm 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: 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° and 26° TIR optics are also available.

ELECTRICAL
Input Voltage: 120V
Lumens / Wattage: 750lm / 12W (550lm w/ Comfort Dim)
Color Temperature: 2700K, 3000K, 3500K, 4000K
Color Rendering Index: 90+CRI
Beam Spread: 27° Spot, 35° Narrow Flood, 45° 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 550lm 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" Max. Adjustability IC housing by Nora only.
New Construction
NSIC-4LMRAT   Max. Adjustability ICAT Dedicated LED

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
· ENERGY STAR certified
· RoHS compliant
· 5-Year Limited Warranty
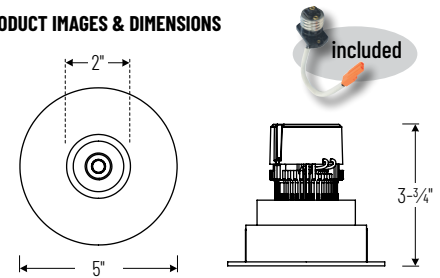· Certified to the high efficacy requirements of California Title 24 JA8-2022

Performance Data

Part Number	Lumens	CCT	Optic
NPR-4RPHA30XWW	747lm	3000K	Spot
NPR-4RPHA30XWW	730lm	3000K	Narrow
NPR-4RPHA30XWW	690lm	3000K	Flood

Delivered lumens will vary depending on CCT, optic and finish
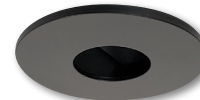
PRODUCT IMAGES & DIMENSIONS

included

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

BB
Black Pinhole
Black Flange

BMPW
Black Pinhole
Matte Powder White Flange

HZMPW
Haze Pinhole
Matte Powder White Flange

MPW
Matte Powder White Pinhole
Matte Powder White Flange

WW
White Pinhole
White Flange

4" Pearl LED Round Adjustable Pinhole Retrofit

Trim Type	Color Temperature	Finish
NPR-4RPHA = Round Adjustable Pinhole	**27X** = 2700K	**BB** = Black / Black
	30X = 3000K	**BMPW** = Black / Matte Powder White
	35X = 3500K	**HZMPW** = Haze / Matte Powder White
	40X = 4000K	**MPW** = Matte Powder White
	CDX = Comfort Dim	**WW** = White

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

Pearl LED Retrofit Accessories
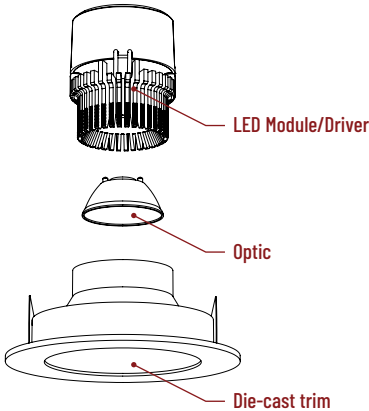4" Pearl LED Round Adjustable Pinhole Retrofit

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.
<u>Note:</u> Premium TIR optics are not compatible with Comfort Dim LED modules.

LED Module/Driver

Optic

Die-cast trim

Frosted Filter-Optic

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

Replaces optics that are included with each LED module.

Premium TIR Optics

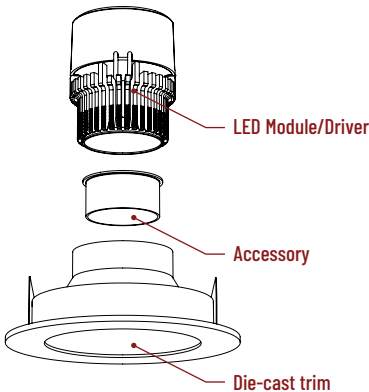|	
NIO-REFLTIR15	22° Optic
NIO-REFLTIR25	26° Optic

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.

LED Module/Driver

Accessory

Die-cast trim

Translucent Decorative Collar

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.

Opaque Collar Snoot

NIO-AS14(color)	⅝" length
NIO-AS19(color)	¾" length
NIO-AS26(color)	1" length

Color:
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
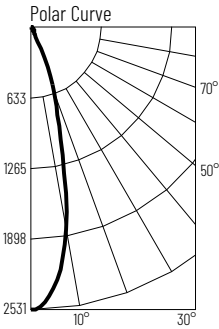## 4" Pearl LED Round Adjustable Pinhole Retrofit

Type _____

Project _____

Catalog No. _____ <small>010923P3</small>

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
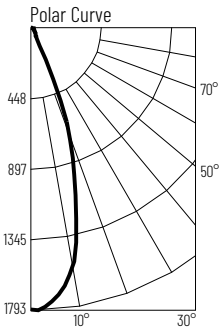Spacing Criteria (90º–270): 0.46

Polar Curve

633 / 1265 / 1898 / 2531
70° / 50° / 10° / 30°

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

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: 730lm
Wattage: 11.69W
Efficacy: 62pw
CCT / CRI: 3000K / 90 CRI
Spacing Criteria (0º–180): 0.58
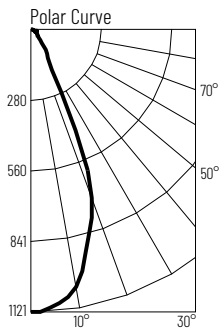Spacing Criteria (90º–270): 0.58

Polar Curve

448 / 897 / 1345 / 1793
70° / 50° / 10° / 30°

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

Polar Curve

280 / 560 / 841 / 1121
70° / 50° / 10° / 30°

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)