

NPR-4RPHA

4" Pearl LED Round Adjustable Pinhole Retrofit

Source: 10W LED
950lm

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Pearl LED Retrofit series is cULus classified for use in existing IC housings manufactured by Nora. The 4" retrofit luminaires deliver over 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 550lm only
- 2700K, 3000K, 3500K, 4000K @ 90+ CRI
- Three field changeable optics included
- Integral dimmable driver
- 5-year limited warranty
- cULus classified for damp locations

SPECIFICATION

Construction: Trims are constructed of heat-dissipating die-cast aluminum. A threaded aluminum LED heat sink integrates directly with the trim for optimal heat transfer, while a heat-resistant polycarbonate blend plate enhances overall temperature control and performance.

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

OPTICS

Three field changeable optics (spot, narrow flood and flood - installed) are included with each LED module. Premium 22° and 26° TIR optics are also available.

ELECTRICAL

Input Voltage: 120V

Lumens / Wattage: 950lm / 10W (550lm w/ Comfort Dim)

Color Temperature: 2700K, 3000K, 3500K, 4000K

Color Rendering Index: 90+CRI

Beam Spread: 26° Spot, 35° Narrow Flood, 51° Flood

Operating Temperature: 0°C to 25°C

Lifetime: 50,000 hours @ L70

Comfort Dim: Comfort Dim color tunes the temperature from a bright 3000K, 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

Retrofit: A medium base screw-socket adapter is included for retrofitting into existing housings. Medium base sockets may require removal, dependent on trim and housing height. A GU24 socket adapter is also available, ordered separately (NRA-212SM).

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
- [5-Year Limited Warranty](#)
- Certified to the high efficacy requirements of California Title 24 JA8-2025
- Patent Pending



4" Pearl LED Round Adjustable Pinhole Retrofit

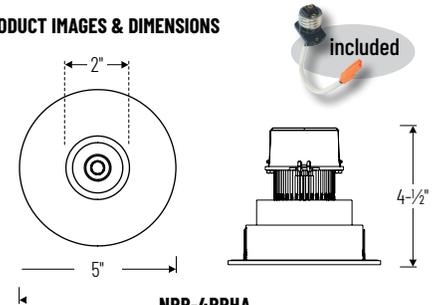
Color Temperature	Finish
NPR-4RPHA27X = 2700K	BB = Black
NPR-4RPHA30X = 3000K	BMPW = Black Pinhole / Bright White Flange
NPR-4RPHA35X = 3500K	HZMPW = Haze Pinhole/ Bright White Flange
NPR-4RPHA40X = 4000K	MPW = Bright White
NPR-4RPHACDX = Comfort Dim	WW = Warm White

Performance Data

Part Number	Lumens	CCT	Optic
NPR-4RPHA40XMPW	976lm	4000K	Spot
NPR-4RPHA40XMPW	981lm	4000K	Narrow
NPR-4RPHA40XMPW	977lm	4000K	Flood

Delivered lumens will vary depending on CCT, optic and finish

PRODUCT IMAGES & DIMENSIONS

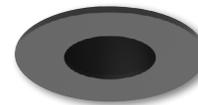


NPR-4RPHA

Round Adjustable Pinhole

20° Adjustable (varies by housing)

* For maximum adjustment use [NSIC-4LMRAT](#) *



BB

Black Pinhole
Black Flange



BMPW

Black Pinhole
Bright White Flange



HZMPW

Haze Pinhole
Bright White Flange



MPW

Bright White Pinhole
Bright White Flange



WW

Warm White Pinhole
Warm White Flange

Example: **NPR-4RPHA40XMPW** = 4" Pearl LED Round Adjustable Pinhole Retrofit, 4000K, Bright White finish

ACCESSORIES

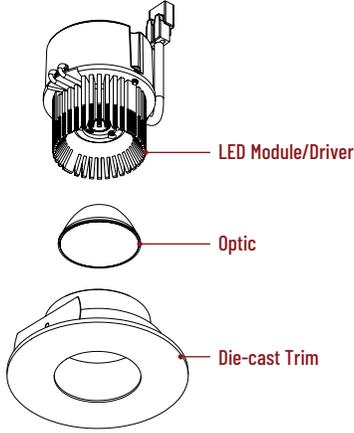
4" Pearl LED Round Adjustable Pinhole Retrofit

Type
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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

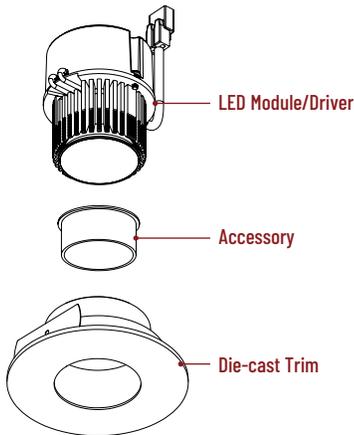
Premium TIR (total internal reflection) optics create optimal spot and narrow flood beam spread.

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) 5/8" 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-AS14WH 5/8" length / warm white finish
- NIO-AS19MPW 3/4" length / bright white finish
- NIO-AS19WH 3/4" length / warm white finish
- NIO-AS26WH 1" length / warm white finish

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 not compatible with TIR optics.

PHOTOMETRICS

4" Pearl LED Round Adjustable Pinhole Retrofit

Type

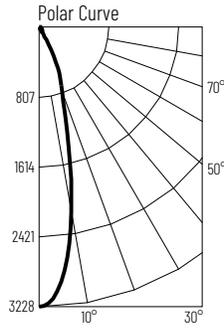
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Test Information

Test Number: NTR2940R1
 Part Number: NPR-4RPHA40XMPW
 Beam Spread: 26° Spot
 Lumens: 976lm
 Wattage: 9.86W
 Efficacy: 99lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180°): 0.44
 Spacing Criteria (90°-270°): 0.44



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	202fc	1'-10"
6'	89.7fc	2'-10"
8'	50.4fc	3'-8"
10'	32.3fc	4'-7"
12'	22.4fc	5'-6"

Zonal Lumen Summary

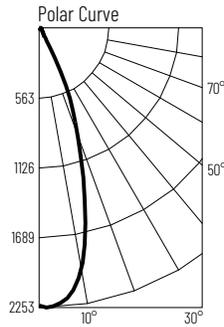
Zone	Lumens	% Luminaire
0-30	834	85.5
0-40	884	90.6
0-60	937	96.1
0-90	976	100
90-180	0	0
0-180	976	100

Candela Table

Vertical Angles	Candela
0	3228
5	2952
15	1267
25	519
35	68
45	41

Test Information

Test Number: NTR2939R1
 Part Number: NPR-4RPHA40XMPW
 Beam Spread: 35° Narrow Flood
 Lumens: 981lm
 Wattage: 9.86W
 Efficacy: 100lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180°): 0.6
 Spacing Criteria (90°-270°): 0.6



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	140fc	2'-6"
6'	62.1fc	3'-10"
8'	34.9fc	5'-1"
10'	22.4fc	6'-5"
12'	15.5fc	7'-7"

Zonal Lumen Summary

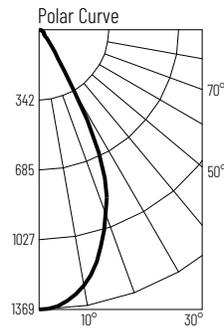
Zone	Lumens	% Luminaire
0-30	830	84.6
0-40	878	89.5
0-60	939	95.7
0-90	981	100
90-180	0	0
0-180	981	100

Candela Table

Vertical Angles	Candela
0	2236
5	2210
15	1435
25	547
35	71
45	41

Test Information

Test Number: NTR2938R1
 Part Number: NPR-4RPHA40XMPW
 Beam Spread: 51° Flood
 Lumens: 977lm
 Wattage: 9.86W
 Efficacy: 99lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180°): 0.84
 Spacing Criteria (90°-270°): 0.84



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	85.6fc	3'-10"
6'	38fc	5'-10"
8'	21.4fc	7'-8"
10'	13.7fc	9'-7"
12'	9.5fc	11'-6"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	757	77.5
0-40	863	88.3
0-60	929	95.1
0-90	977	100
90-180	0	0
0-180	977	100

Candela Table

Vertical Angles	Candela
0	1369
5	1345
15	1138
25	733
35	152
45	48

Lumen Output Multipliers

Color Temperature: 2700K (0.89), 3000K (0.94), 3500K (0.98), 4000K (1.00)

Finish Multipliers

Finish: Black (0.84), Haze (0.95), Bright White (1.00), Warm White (1.03)