NPR-4SNDSQ

4" Pearl 120V LED Square Retrofit Reflector with Square Aperture
Source: 10W LED
1150lm

Type	
Project	
Catalog No.	
Notes	

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 1150 lumens with deep regressed cone reflector for optimal visual cut-off.

FEATURES

· Medium base socket adapter included
· Retrofit existing 4" recessed housings
· Comfort Dim (warm dimming) is available in 700lm only
· 2700K, 3000K, 3500K, 4000K @ 90+ CRI
· Three field changeable optics included
· Integral dimmable driver
· 5-year limited warranty
· cULus classified for wet 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: Luminaire 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: 1150lm / 10W (700lm w/ Comfort Dim)
Color Temperature: 2700K, 3000K, 3500K, 4000K
Color Remdering Index: 90+CRI
Beam Spread: 26° Spot, 36° Narrow Flood, 58° 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 700lm 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 HOUSINGS

Pearl retrofits 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
NHIC-4LMRAT* ICAT Dedicated LED
NHIC-4LMRAT/277* ICAT Dedicated LED, 277V (includes step-down transformer)
NSIC-401QAT ICAT Line Voltage
NS-401QAT AT Line Voltage
NHIC-4G24AT ICAT GU24

Remodel
NHRIC-4LMRAT* ICAT Dedicated LED
NSRIC-404QAT ICAT Line Voltage
NSR-404QAT AT Line Voltage

* Nora Dedicated LED housings are cULus listed for use only with Nora LED Retrofits.

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 Wet Locations
· RoHS compliant
· 5-Year Limited Warranty
· Certified to the high efficacy requirements of California Title 24 JA8-2025
· Patent Pending

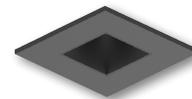### Performance Data

Part Number	Lumens	CCT	Optic
NPR-4SND040XMPW	1158lm	4000K	Spot
NPR-4SND040XMPW	1164lm	4000K	Narrow
NPR-4SND040XMPW	1160lm	4000K	Flood

Delivered lumens will vary depending on CCT, optic and finish

PRODUCT IMAGES & DIMENSIONS

included

2-½"
5"
4"
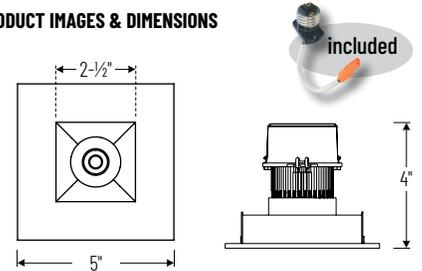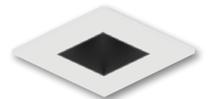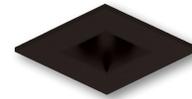
NPR-4SNDSQ
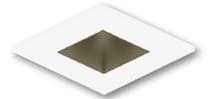Square Reflector with Square Aperture
Non-Adjustable

BB
Black Reflector
Black Flange

BW
Black Reflector
Warm White Flange

BZ
Bronze Reflector
Bronze Flange

CHMPW
Champagne Haze Reflector
Bright White Flange

HN
Haze Reflector
Natural Metal Flange

HW
Haze Reflector
Warm White Flange

HZMPW
Haze Reflector
Bright White Flange

MPW
Bright White Reflector
Bright White Flange

WW
Warm White Reflector
Warm White Flange

4" Pearl 120V LED Square Retrofit Reflector with Square Aperture

Color Temperature	Finish
NPR-4SNDSQ27X = 2700K	**BB** = Black
NPR-4SNDSQ30X = 3000K	**BW** = Black Reflector / Warm White Flange
NPR-4SNDSQ35X = 3500K	**BZ** = Bronze
NPR-4SNDSQ40X = 4000K	**CHMPW** = Champagne Haze Reflector / Bright White Flange
NPR-4SNDSQCDX = Comfort Dim	**HN** = Haze Reflector/ Natural Metal Flange
	HW = Haze Reflector/ Warm White Flange
	HZMPW = Haze Reflector/ Bright White Flange
	MPW = Bright White
	WW = Warm White

Example: **NPR-4SNDSQ040XMPW** = 4" Pearl 120V LED Square Retrofit Reflector with Square Aperture, 4000K, Bright White finish

013026P1

ACCESSORIES
4" Pearl 120V LED Square Retrofit Reflector with Square Aperture

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
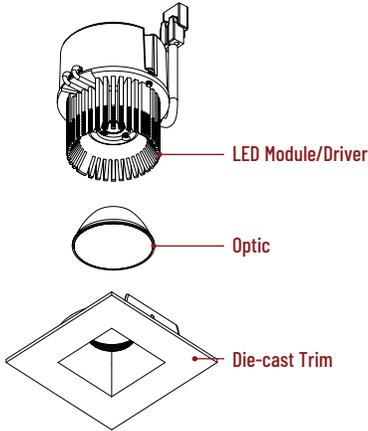
Frosted Optics

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.

LED Module/Driver

Accessory

Die-cast Trim
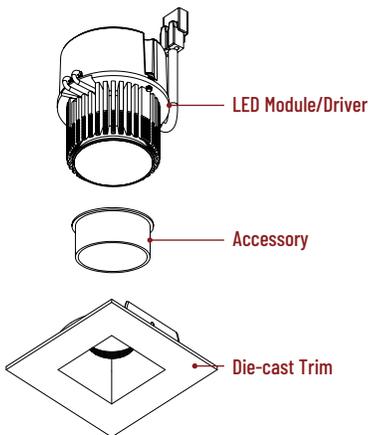
Translucent Decorative Collar

NIO-AS14(color)	⅝" length
NIO-AS19(color)	¾" 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-AS14WH	⅝" length / warm white finish
NIO-AS19MPW	¾" length / bright white finish
NIO-AS19WH	¾" length / warm white finish
NIO-AS26WH	1" length / warm white finish

Opaque snoot greatly reduces aperture brightness while preserving light output.
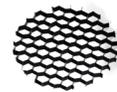
Hex Cell Louver

NIO-HC	Black

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

Hex cell louver is <u>not</u> compatible with TIR optics.

PHOTOMETRICS
4" Pearl 120V LED Square Retrofit Reflector with Square Aperture
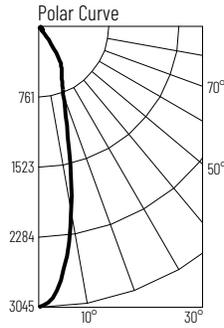
Type

Project

Catalog No.

Notes

Test Information
Test Number: NTR2964R1
Part Number: NPR-4SNDSQ40XMPW
Beam Spread: 26° Spot
Lumens: 1158lm
Wattage: 9.9W
Efficacy: 117pw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.46
Spacing Criteria (90°-270°): 0.46

Polar Curve
761
1523
2284
3045
70° 50° 10° 30°

Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	190fc	1'-11"
6'	84.6fc	2'-10"
8'	47.6fc	3'-8"
10'	30.5fc	4'-8"
12'	21.1fc	5'-7"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	869	75
0-40	1044	90.2
0-60	1125	97.2
0-90	1158	100
90-180	0	0
0-180	1158	100

Candela Table

Vertical Angles	Candela
0	3045
5	2764
15	1237
25	594
35	289
45	61

Test Information
Test Number: NTR2963R1
Part Number: NPR-4SNDSQ40XMPW
Beam Spread: 36° Narrow Flood
Lumens: 1164lm
Wattage: 9.9W
Efficacy: 118pw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.6
Spacing Criteria (90°-270°): 0.6

Polar Curve
536
1073
1609
2146
70° 50° 10° 30°
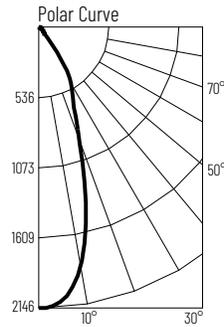
Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	134fc	2'-7"
6'	59.6fc	3'-11"
8'	33.5fc	5'-4"
10'	21.5fc	6'-7"
12'	14.9fc	7'-11"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	869	74.6
0-40	1039	89.2
0-60	1129	97
0-90	1164	100
90-180	0	0
0-180	1164	100

Candela Table

Vertical Angles	Candela
0	2146
5	2093
15	1391
25	629
35	292
45	62

Test Information
Test Number: NTR2962R1
Part Number: NPR-4SNDSQ40XMPW
Beam Spread: 58° Flood
Lumens: 1160lm
Wattage: 9.9W
Efficacy: 117pw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180°): 0.86
Spacing Criteria (90°-270°): 0.86

Polar Curve
331
662
992
1323
70° 50° 10° 30°
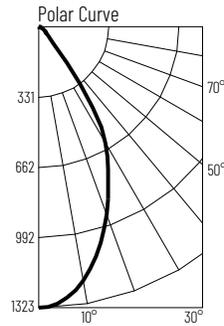
Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	82.7fc	4'-5"
6'	36.8fc	6'-8"
8'	20.7fc	8'-11"
10'	13.2fc	11'-1"
12'	9.2fc	13'-4"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	782	67.4
0-40	1020	88
0-60	1119	96.5
0-90	1160	100
90-180	0	0
0-180	1160	100

Candela Table

Vertical Angles	Candela
0	1323
5	1294
15	1088
25	779
35	395
45	73

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