# NPR-4SNDSO

# 4" Pearl LED Square Retrofit Reflector with Square Aperture Source: 12W LED

800lm or 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 1150 lumens with deep regressed cone reflector for optimal visual cut-off.

## FEATURES

- 1000Im LED output (800Im with Comfort Dim)
- Cree® LED COB or Comfort Dim Technology
- 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 ( $27^{\circ}$  spot,  $37^{\circ}$ narrow flood and 51° 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 @ | 70

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

**<u>Click Here</u>** or check complete dimmer list at 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 NHIC-4LMRAT\* ICAT Dedicated LED NHIC-4LMRAT/277\* ICAT Dedicated LED, 277V (includes step-down transformer) ICAT Line Voltage NSIC-4010AT 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



# Type

Project

Catalog No.

Notes



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

Example: NPR-4SNDSQ27XWW = 4" Pearl LED Square Retrofit Reflector with Square Aperture, 2700K / 1000Im, White finish

# **Pearl LED Retrofit Accessories**

4" Pearl LED Square Retrofit Reflector with Square Aperture

# Type Project Catalog No. Notes

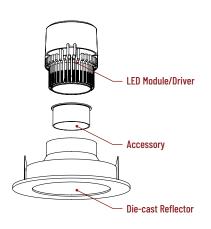
# FIELD CHANGEABLE OPTICS

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
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.



5/8" length

3/4″ length

1″ length

**Opaque Collar Snoot** 

NIO-AS14(color)
NIO-AS19(color)
NIO-AS26(color)
Color:
DLV (black) MDW (master

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
Hex cell louver subtly reduces aperti

Black

He aperture brightness by reducing light output by about 20%.



# **PHOTOMETRICS**

**Test Information** 

Test Number: NTR1548

Beam Spread: 27° Spot

CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.46

Spacing Criteria (90º-270): 0.46

Lumens: 1156lm

Wattage: 11.67W

Efficacy: 99pw

Part Number: NPR-4SNDSQ30XXWW

4" Pearl LED Square Retrofit Reflector with Square Aperture

# Туре

Project

Beam Diameter

2'

2'-11"

3'-11"

4'-11"

5'-11"

Catalog No.

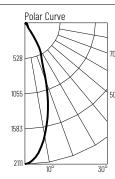
# Notes

	Zonal Lume	n Summary		Candela T	Гаb
	Zone	Lumens	% Luminaire	Vertical Angles	С
1	0-30	873	75.6	0	
]	0-40	1037	89.7	5	
1	0-60	1118	96.8	15	
1	0-90	1153	99.8	25	
]	90-180	3	0.2	35	
_	0-180	1156	100	45	

Candela Table		
Vertical Angles	Candela	
0	2891	
5	2675	
15	1254	
25	560	
35	114	
45	59	

## **Test Information**

Test Number: NTR1549 Part Number: NPR-4SNDSQ30XXWW Beam Spread: 37° Narrow Flood Lumens: 1151lm Wattage: 11.65W Efficacy: 99pw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.62 Spacing Criteria (90º-270): 0.62



Polar Curve

723

1446

2168

2891

Illuminance at a Distance			
70°	Distance from Luminaire	FC at Nadir	Beam Diameter
	4'	132fc	2'-8"
500	6'	58.6fc	4
50°	8'	33fc	5'-4"
	10'	21.1fc	6'-8"
	12'	14.7fc	8'

Illuminance at a Distance

FC at Nadir

181fc

80.3fc

45.2fc

28.9fc

20.1fc

Distance from

Luminaire

4'

6'

8'

10'

12'

70°

50°

30

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	863	75
0-40	1023	88.8
0-60	1112	96.6
0-90	1148	99.8
90-180	3	0.2
0-180	1151	100

Candela Table		
Vertical Angles	Candela	
0	2111	
5	1993	
15	1338	
25	600	
35	128	
45	58	

#### **Test Information**

Test Number: NTR1550 Part Number: NPR-4SNDSQ30XXWW Beam Spread: 51° Flood Lumens: 1137lm Wattage: 11.67W Efficacy: 97pw CCT / CRI: 3000K / 90 CRI Spacing Criteria (0º-180): 0.76 Spacing Criteria (90º-270): 0.76

2111	10°	30°
	Polar Curve	
	$\land \models$	-
352		70'
705	+	50'
1057	A	
1410	10°	30°

# Illuminance at a Distance

	mannance at a	Distance	
70°	Distance from Luminaire	FC at Nadir	Beam Diameter
	4	88.1fc	3'-10"
500	6'	39.2fc	5'-10"
50°	8'	22fc	7'-8"
	10'	14.1fc	9'-7"
	12'	9.8fc	11'-6"

## Zonal Lumen Summary

Zunai Lumen Summary		
Zone	Lumens	% Luminaire
0-30	774	68.1
0-40	994	87.4
0-60	1095	96.3
0-90	1134	99.8
90-180	3	0.2
0-180	1137	100

#### Candela Table

Vertical Angles	Candela
0	1410
5	1200
15	1031
25	725
35	212
45	76

# Lumen Output Multipliers

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

