# NPR-4RNDC

# 4" Pearl LED Round Retrofit Reflector with Round Aperture

# Source: 12W LED

1200lm

## 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 1200 lumens with deep regressed cone reflector for optimal visual cut-off.

## FEATURES

- Comfort Dim (warm dimming) is available in 900lm only
- 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: 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: Luminaire 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: 1200Im / 12W (900Im w/ Comfort Dim) Color Temperature: 2700K, 3000K, 3500K, 4000K

Color Rendering Index: 90+CRI

Beam Spread: 29° Spot, 44° Narrow Flood, 61° 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 900lm 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

4" Pearl LED Round Retrofit Reflector with Round Aperture

## COMPATIBLE HOUSINGS

Pearl retrofits are compatible with most 4" IC and Non-IC housings by Nora and others.

Fire Box MFBIC-4LMRATA\* ICAT Dedicated LED MFBIC-4INCATA ICAT Line Voltage New Construction NSIC-4LMRAT\* Max. Adjustability ICAT Dedicated LED ICAT Dedicated LED NHIC-4LMRAT\* NHIC-4LMRAT/277\* ICAT Dedicated LED, 277V (includes step-down transformer) ICAT Line Voltage NSIC-4010AT <u>NS-401QAT</u> AT Line Voltage NHIC-4G24AT ICAT GU24 <u>Remodel</u> ICAT Dedicated LED NHRIC-4LMRAT\* NSRIC-4040AT ICAT Line Voltage NSR-4040AT AT Line Voltage \* 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: Luminaires can accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see page 2.

## 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 JA8-2022



# Туре

#### Project

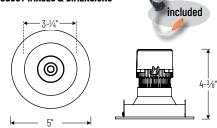
Catalog No.

## Notes

Lumens	CCT	Optic
1218Im	4000K	Spot
1225lm	4000K	Narrow
1200lm	4000K	Flood
	1218lm 1225lm	1218Im 4000K   1225Im 4000K

Delivered lumens will vary depending on CCT, optic and finish

## **PRODUCT IMAGES & DIMENSIONS**



NPR-4RNDC Round Reflector with Round Aperture Non-Adjustable



BB Black Reflector Black Flange

# BW Black Reflector White Flange





R7 Bronze Reflector Bronze Flange

Champagne Haze Reflector Matte Powder White Flange

CMPW Specular Clear Reflector Matte Powder White Flange

HW Haze Reflector White Flange



H7MPW Haze Reflector Matte Powder White Flange

NN

Natural Metal Reflector

Natural Metal Flange

MPW Matte Powder White Reflector Matte Powder White Flange



White Reflector White Flange

im Type	Color Temperature	Finish
<b>PR-4RNDC</b> = Round Reflector with Round Aperture	<b>27X</b> = 2700K	BB = Black / Black
	<b>30X</b> = 3000K	BW = Black / White
	<b>35X</b> = 3500K	BZ = Bronze / Bronze
	<b>40X</b> = 4000K	CHMPW = Champagne / Matte Powder White
	CDX = Comfort Dim	CMPW = Specular Clear / Matte Powder White
		HW = Haze / White
		HZMPW = Haze / Matte Powder White
		MPW = Matte Powder White
		•••• • • • • • • • • • • • • • • • •

NN = Natural Metal / Natural Metal WW = White / White

Example: NPR-4RNDC27XWW = 4" Pearl LED Round Retrofit Reflector with Round Aperture, 2700K, White finish

Trir NPF





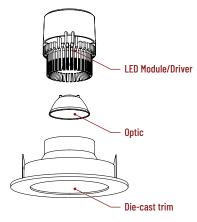
# Pearl LED Retrofit Accessories

4" Pearl LED Round Retrofit Reflector with Round Aperture

# 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. Optional frosted and TIR optics are also available. <u>Note</u>: Premium TIR optics are not compatible with Comfort Dim LED modules.





Frosted Filter-Optic

NIO-REFL38FR NIO-REFL60FR

Replaces optics that are included with each LED module.

60° Optic

73° Optic

⁵⁄%" length

3⁄4" length

1" length



Premium TIR Optics

⁵⁄%" length

3⁄4" length

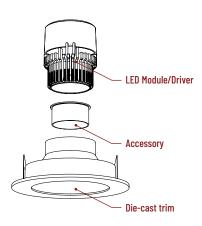
1" length

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)	
NIO-AS19(color)	
NIO-AS26(color)	
Color:	
AM (ample an) DLLL (blue)	ED / 6

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)
NIO-AS19(color)
NIO-AS26(color)
<u>Color</u> :
<b>BLK</b> (black) MPW (matto now

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 apertur	

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



# **PHOTOMETRICS**

**Test Information** 

Test Number: NTR1885R1

Beam Spread: 29° Spot

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.48

Spacing Criteria (90°-270°): 0.48

Lumens: 1218lm

Wattage: 11.89W

Efficacy: 102pw

Part Number: NPR-4RNDC40XWW

4" Pearl LED Round Retrofit Reflector with Round Aperture

# Туре

Project

Beam Diameter

2'

3'

4'-1"

5'-1"

6'-1"

Catalog No.

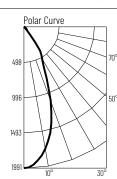
# Notes

Zonal Lumen Summary			Candela 1	Tab	
	Zone	Lumens	% Luminaire	Vertical Angles	(
	0-30	928	76.2	0	
1	0-40	1122	92.1	5	
	0-60	1194	98.1	15	
1	0-90	1218	100	25	
1	90-180	0	0	35	
-	0-180	1218	100	45	

Candela Table		
Vertical Angles	Candela	
0	2831	
5	2547	
15	1324	
25	716	
35	346	
45	58	

## **Test Information**

Test Number: NTR1886R1 Part Number: NPR-4RNDC40XWW Beam Spread: 44° Narrow Flood Lumens: 1225lm Wattage: 11.91W Efficacy: 103pw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.7 Spacing Criteria (90°-270°): 0.7



Polar Curve

708

1416

2124

2831

Illuminance at a Distance			
70°	Distance from Luminaire	FC at Nadir	Beam Diameter
	4	124fc	3'-2"
509	6'	55.3fc	4'-10"
50°	8'	31.1fc	6'-5"
	10'	19.9fc	8'
	12'	13.8fc	9'-7"

Illuminance at a Distance

FC at Nadir

177fc

78.7fc

44.2fc

28.3fc

19.7fc

Distance from

Luminaire

4'

6'

8'

10'

12'

70°

50°

300

Zonal Lumen Summary			
Zone	Lumens	% Luminaire	
0-30	932	76.1	
0-40	1128	92.1	
0-60	1200	98	
0-90	1225	100	
90-180	0	0	
0-180	1225	100	

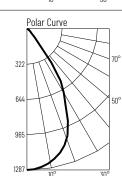
Candela Table		
Vertical Angles	Candela	
0	1991	
5	1906	
15	1444	
25	771	
35	338	

55

45

#### **Test Information**

Test Number: NTR1887R1 Part Number: NPR-4RNDC40XWW Beam Spread: 61° Flood Lumens: 1200lm Wattage: 11.94W Efficacy: 100pw CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180°): 0.94 Spacing Criteria (90°-270°): 0.94



Illuminance at a Distance
Distance from

	70°	Distance from Luminaire	FC at Nadir	Beam Diameter	
1		4'	80.5fc	4'-8"	
~	50°	6'	35.8fc	7'-1"	
		8'	20.1fc	9'-6"	
`		10'	12.9fc	11'-11"	
		12'	8.9fc	14'-2"	

Zunai Lunien Sunnary				
Zone	Lumens	% Luminaire		
0-30	838	69.9		
0-40	1089	90.8		
0-60	1173	97.8		
0-90	1200	100		
90-180	0	0		
0-180	1200	100		

Candela Table				
Vertical Angles	Candela			
0	1287			
5	1268			
15	1146			
25	875			

431

65

35

45

# Lumen Output Multipliers

Color Temperature: 2700K (0.9), 3000K (0.92), 3500K (0.97), 4000K (1.0)

