

# NIO-4SW

## 4" Iolite Square Wall Wash Reflector

Source: 14W to 24W LED  
800lm to 2000lm

Type

Project

Catalog No.

Notes

### PRODUCT DESCRIPTION

4" Iolite Wall wash reflectors can be specified for use with Iolite new construction housings. Wall wash reflector to illuminate a wall evenly at a fixed angle.

### FEATURES

- 800lm, 1000lm, 1500lm or 2000lm LED packages
- 2700K, 3000K, 3500K, 4000K, 5000K @ 90+ CRI
- Comfort Dim (warm dimming) also available in 800lm only
- Flood optic, narrow flood and spot optics (included)
- 5-Year limited warranty

### 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

**800-1000lm:** Each reflector includes field changeable optics (25° spot, 38° narrow flood and 60° flood - preinstalled).

**1500-2000lm:** Each reflector includes field changeable TIR optics (30° spot, 45° narrow flood - preinstalled and 65° flood).

### ELECTRICAL

**Lumens / Wattage:** 800lm / 14W, 1000lm / 14W, 1500lm / 20W, 2000lm / 24W

**Color Temperature:** 2700K, 3000K, 3500K, 4000K, 5000K

**CRI:** 90+CRI

**Operating Temp.:** Specified by housing

**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 800lm only.

**Dimming:** Specified by housing

### COMPATIBLE HOUSINGS

Reflectors are compatible with respective Iolite housings manufactured by Nora Lighting.

CATALOG NO.	DESCRIPTION	LUMENS / WATTAGE
NHIOICD-48	ICAT New Construction	800-1000lm / 14W
NHIOICDCP-48	Chicago Plenum	800-1000lm / 14W
NHIOICD-415	ICAT New Construction	1500lm / 20W
NHIOICDCP-415	Chicago Plenum	1500lm / 20W
NHIOICD-420	ICAT New Construction	2000lm / 24W
NHIOICDCP-420	Chicago Plenum	2000lm / 24W

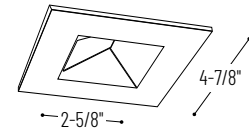
**Accessories:** Flush mount mud ring is available to give the appearance of a trimless reflector.

### LABELS AND LISTINGS

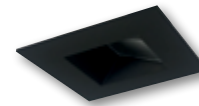
- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2019



### PRODUCT IMAGES & DIMENSIONS



**NIO-4SW**  
Square Wall Wash Reflector  
Non-Adjustable



**BB**  
Black Reflector  
Black Flange



**CHMPW**  
Champagne Haze Reflector  
Matte Powder White Flange



**HW**  
Haze Reflector  
White Flange



**HZMPW**  
Haze Reflector  
Matte Powder White Flange



**MPW**  
Matte Powder White Reflector  
Matte Powder White Flange



**WW**  
White Reflector  
White Flange

### 4" Iolite Square Wall Wash Reflector - Dedicated Housing Required

Reflector Type	Color Temp.	Finish	Lumens / Wattage
<b>NIO-4SW</b> = Square Wall Wash Reflector	<b>50X</b> = 5000K*	<b>BB</b> = Black / Black	(blank) = 800lm / 14W
	<b>CDX</b> = Comfort Dim†	<b>CHMPW</b> = Champagne / Matte Powder White	
	<b>27X</b> = 2700K	<b>HW</b> = Haze / White	<b>/10</b> = 1000lm / 14W <b>/HL</b> = 1500-2000lm (varies by housing)
	<b>30X</b> = 3000K	<b>HZMPW</b> = Haze / Matte Powder White	
	<b>35X</b> = 3500K	<b>MPW</b> = Matte Powder White	
	<b>40X</b> = 4000K <b>50X</b> = 5000K	<b>WW</b> = White / White	

\* 5000K LED modules in 800lm are while supplies last

† Comfort Dim available in 800lm only and 1" Iolite uses a different dimming curve than 2" & 4" Iolite

### Compatible Housings

Housing Type
<b>NHIOICD-48</b> = ICAT New Construction / 800-1000lm / 14W
<b>NHIOICDCP-48</b> = Chicago Plenum / 800-1000lm / 14W
<b>NHIOICD-415</b> = ICAT New Construction / 1500lm / 20W
<b>NHIOICDCP-415</b> = Chicago Plenum / 1500lm / 20W
<b>NHIOICD-420</b> = ICAT New Construction / 2000lm / 24W
<b>NHIOICDCP-420</b> = Chicago Plenum / 2000lm / 24W

Example: **NIO-4SW50XWW** = 4" Iolite Square Wall Wash Reflector, 5000K, White finish, 800lm / 14W

## 4" Iolite Accessories

### 4" Iolite Square Wall Wash Reflector

Type \_\_\_\_\_

Project \_\_\_\_\_

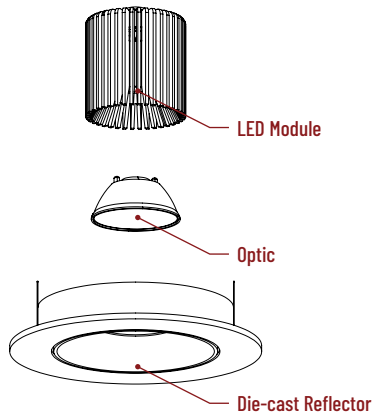
Catalog No. \_\_\_\_\_

Notes \_\_\_\_\_

#### FIELD CHANGEABLE OPTICS

Iolite 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:** Frosted filter-optics and Premium TIR optics are not compatible with /HL LED modules.



Frosted Filter-Optic

<b>NIO-REFL15FR</b>	15° Optic
<b>NIO-REFL25FR</b>	25° Optic
<b>NIO-REFL38FR</b>	38° Optic
<b>NIO-REFL60FR</b>	60° Optic

Optic assembly includes optional frosted lens. 25°, 38° and 60° optics are included with 800lm and 1000lm reflector.  
**Not compatible with /HL LED module.**

#### FLUSH MOUNT

4" Iolite reflectors can be installed flush with the drywall for a flush mount appearance. A flush mount mud ring is installed after the drywall and a professional drywall finisher floats the ceiling to blend in the mud ring.



Flush Mount Mud Ring

<b>NIO-FMMR-4S</b>	Square Mud Ring
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Mounts reflector flush to ceiling with flange visible. Mud ring attaches to drywall. **Only for use with NH10ICD-48 or NH10ICDCP-48 new construction housings and NIO-4S reflectors.**  
Dimensions: 7-7/8" diameter 1/2" thick

# PHOTOMETRICS

## 4" Iolite Square Wall Wash Reflector 1000, 1500 and 2000 lumens

Type

Project

Catalog No.

Notes

### Test Information

Test Number: NTR1260  
Part Number: NIO-4SW40XWW/10  
Lumens: 8931m  
Wattage: 13.69W  
Efficacy: 65lpw  
CCT / CRI: 4000K / 90 CRI  
Spacing Criteria (0°-180°): 0.38  
Spacing Criteria (90°-270°): 1.06

Multiple unit data (footcandles)

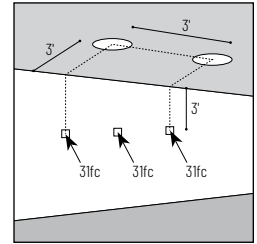
Distance from ceiling (ft.)	2' from wall 2' on center		
1'	30	27	30
2'	70	70	70
3'	41	41	41
4'	23	23	23
5'	13	14	13
6'	8	9	8
7'	6	6	6
8'	4	4	4
9'	3	3	3
10'	2	2	2

Multiple unit data (footcandles)

Distance from ceiling (ft.)	2' from wall 3' on center		
1'	28	15	28
2'	60	48	60
3'	35	31	35
4'	20	19	20
5'	12	12	12
6'	8	8	8
7'	5	5	5
8'	4	4	4
9'	3	3	3
10'	2	2	2

Multiple unit data (footcandles)

Distance from ceiling (ft.)	3' from wall 3' on center		
1'	8	7	8
2'	26	17	26
3'	31	31	31
4'	22	22	22
5'	15	15	15
6'	10	10	10
7'	7	7	7
8'	5	5	5
9'	4	4	4
10'	3	3	3



**Example:** Two luminaires located 3' from wall and spaced 3' on center, the illumination on the wall 3' down from ceiling will be 31fc beneath and 31fc between luminaires.

### Lumen Output Multipliers

Color Temperature: 2700K (0.82), 3000K (0.84), 3500K (0.92), 4000K (1.00), 5000K (0.97)

### Test Information

Test Number: NTR1262  
Part Number: NIO-4SW40XWW/HL  
Lumens: 15391m  
Wattage: 19.34W  
Efficacy: 80lpw  
CCT / CRI: 4000K / 90 CRI  
Spacing Criteria (0°-180°): 0.24  
Spacing Criteria (90°-270°): 0.86

Multiple unit data (footcandles)

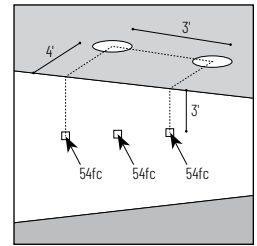
Distance from ceiling (ft.)	3' from wall 3' on center		
1'	15	11	15
2'	80	66	80
3'	81	76	81
4'	57	55	57
5'	37	36	37
6'	24	23	24
7'	16	15	16
8'	11	10	11
9'	7	7	7
10'	5	5	5

Multiple unit data (footcandles)

Distance from ceiling (ft.)	4' from wall 3' on center		
1'	4	4	4
2'	30	27	30
3'	55	55	55
4'	52	52	52
5'	39	40	39
6'	29	29	29
7'	20	20	20
8'	15	14	15
9'	11	10	11
10'	8	8	8

Multiple unit data (footcandles)

Distance from ceiling (ft.)	4' from wall 4' on center		
1'	4	3	4
2'	28	19	28
3'	49	42	49
4'	46	43	46
5'	35	34	35
6'	26	25	26
7'	19	18	19
8'	13	13	13
9'	10	10	10
10'	7	7	7



**Example:** Two luminaires located 4' from wall and spaced 3' on center, the illumination on the wall 3' down from ceiling will be 55fc beneath and 55fc between luminaires.

### Lumen Output Multipliers

Color Temperature: 2700K (0.83), 3000K (0.89), 3500K (1.00), 4000K (1.00), 5000K (1.06)

### Test Information

Test Number: NTR1261  
Part Number: NIO-4SW40XWW/HL  
Lumens: 17881m  
Wattage: 23.29W  
Efficacy: 77lpw  
CCT / CRI: 4000K / 90 CRI  
Spacing Criteria (0°-180°): 0.28  
Spacing Criteria (90°-270°): 0.72

Multiple unit data (footcandles)

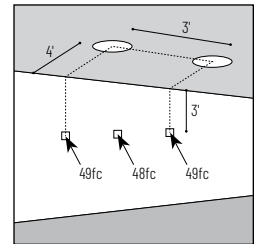
Distance from ceiling (ft.)	3' from wall 3' on center		
1'	7	5	7
2'	65	47	65
3'	89	82	89
4'	69	66	69
5'	47	46	47
6'	32	31	32
7'	22	21	22
8'	15	15	15
9'	11	11	11
10'	8	8	8

Multiple unit data (footcandles)

Distance from ceiling (ft.)	4' from wall 3' on center		
1'	2	2	2
2'	16	14	16
3'	49	48	49
4'	57	57	57
5'	47	47	47
6'	36	36	36
7'	26	26	26
8'	19	19	19
9'	14	14	14
10'	11	11	11

Multiple unit data (footcandles)

Distance from ceiling (ft.)	4' from wall 4' on center		
1'	2	2	2
2'	15	10	15
3'	44	36	44
4'	50	46	50
5'	42	40	42
6'	32	31	32
7'	24	23	24
8'	18	17	18
9'	13	13	13
10'	10	10	10



**Example:** Two luminaires located 4' from wall and spaced 3' on center, the illumination on the wall 3' down from ceiling will be 49fc beneath and 48fc between luminaires.

### Lumen Output Multipliers

Color Temperature: 2700K (0.84), 3000K (0.87), 3500K (0.99), 4000K (1.00), 5000K (1.07)