

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
- Cree® LED COB or Comfort Dim Technology
- 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). Premium 15° and 25° TIR optics are also available.

1500-2500lm: 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

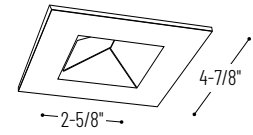
Accessories: Flush mount mud ring is available to give the appearance of a trimless reflector.

LABELS AND LISTINGS

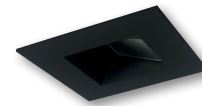
- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2019



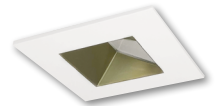
PRODUCT IMAGES & DIMENSIONS



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

[†] Comfort Dim technology available in 800lm & uses non-Cree COB modules. ^{††} Comfort Dim uses a different dimming curve than 2" & 4" Comfort Dim

Compatible Housings

Housing Type
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

Example: **NIO-4SW27XWW** = 4" Iolite Square Wall Wash Reflector, 2700K, White finish, 800lm / 14W

4" Iolite Accessories

4" Iolite Square Wall Wash Reflector

Type	
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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.



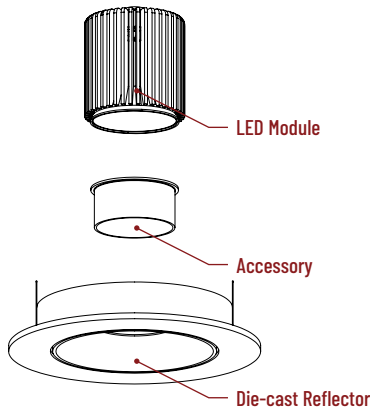
Frosted Filter-Optic

NIO-REFL15FR	15° Optic
NIO-REFL25FR	25° Optic
NIO-REFL38FR	38° Optic
NIO-REFL60FR	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.

ACCESSORIES

Iolite 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, no accessory holder required.



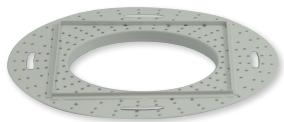
Hex Cell Louver

NIO-HC	Black
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Hex cell louver subtly reduces aperture brightness by reducing light output by about 20%.

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

NIO-FMMR-4S	Square Mud Ring
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Mounts reflector flush to ceiling with flange visible. Mud ring attaches to drywall. **Only for use with NHIOICD-48 or NHIOICDCP-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

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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)

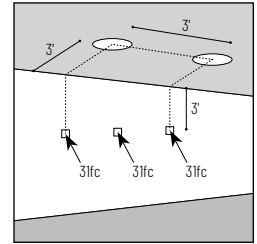
Distance from ceiling (ft.)	2' from wall 2' on center		
	1'	2'	3'
1'	30	27	30
2'	70	70	70
3'	41	41	41
4'	23	23	23
5'	13	14	13
6'	8	9	8
7'	6	6	6
8'	4	4	4
9'	3	3	3
10'	2	2	2

Multiple unit data (footcandles)

Distance from ceiling (ft.)	2' from wall 3' on center		
	1'	2'	3'
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'	2'	3'
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)

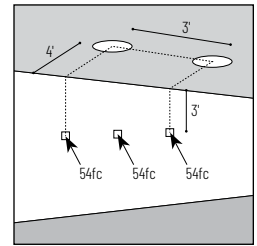
Distance from ceiling (ft.)	3' from wall 3' on center		
	1'	2'	3'
1'	15	11	15
2'	80	66	80
3'	81	76	81
4'	57	55	57
5'	37	36	37
6'	24	23	24
7'	16	15	16
8'	11	10	11
9'	7	7	7
10'	5	5	5

Multiple unit data (footcandles)

Distance from ceiling (ft.)	4' from wall 3' on center		
	1'	2'	3'
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'	2'	3'
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)

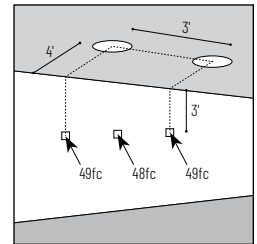
Distance from ceiling (ft.)	3' from wall 3' on center		
	1'	2'	3'
1'	7	5	7
2'	65	47	65
3'	89	82	89
4'	69	66	69
5'	47	46	47
6'	32	31	32
7'	22	21	22
8'	15	15	15
9'	11	11	11
10'	8	8	8

Multiple unit data (footcandles)

Distance from ceiling (ft.)	4' from wall 3' on center		
	1'	2'	3'
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'	3'
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)