

NMIO Series

Iolite Multiple Lighting System (MLS)

Source: 12W LED per head
1000lm per head

Type

Project

Catalog No.

Notes

PRODUCT DESCRIPTION

Endless possibilities with Iolite multiple's functionality and architectural aesthetics. Iolite multiple recessed family consist of one to three independently adjustable heads, variety of beam distributions and multiple reflector options. Iolite multiple series is a perfect solution for most retail, hospitality and commercial applications.

FEATURES

- Trimless or Flanged appearance
- One to three head configurations
- Three optics included with each trim type (Premium TIR optics available)
- Customizable reflector options
- Housing includes individual drivers for each module
- Comfort Dim (warm dim) also available in 800lm only
- Triac, ELV or 0-10V dimming

SPECIFICATION

Housing: 0.0475" Galvanized steel housing with quick connects from each driver for ease of installation. Housing accepts standard ceiling thickness up to 1-1/2" may vary depending on ceiling type (up to 1" ceiling thickness when used with NMIO-W).

Air Flow Restriction: Housing has factory installed gaskets to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

Clearance: "IC" Insulated ceiling housings are direct contact rated; no minimum clearance is required. Not to be used in direct contact with spray foam insulation.

Bar Hangers: Two 13-7/8" to 25" adjustable bar hangers with captive nails are included with the housing. Bar hangers are parallel to junction box, but can be repositioned 90° perpendicular to junction box if desired. "L"-shaped bar hanger foot to align to bottom of construction joist. A T-bar notch allows for easy installation in a suspended ceiling.

Junction Box: Pre-wired 40 cubic inch 0.0475" thick galvanized steel, with six 1/2" knockouts. Leads are #18AWG wire. Maximum of 8 no. 12 AWG through branch circuit conductors suitable for at least 90°C permitted in junction box (max. of 4 with wall wash trims).

Trimless: Mud plate mounts inside Iolite Multiple Housing and screws into drywall to be flush. A professional drywall finisher floats the ceiling to blend in the mud plate, sands and paints. The trims are then inserted into the mud plate and the results are a spectacular, minimalist appearance with no flange.

ELECTRICAL

Voltage: 120-277V

Lumens / Wattage:

1000lm / 12W per head (Comfort Dim is 800lm per head) (Delivered lumens will vary depending on reflector, CCT, beam spread and finish)

Color Temperature:

2700K, 3000K, 3500K, 4000K or 5000K

Color Rendering Index: 90+CRI

Optics (included): 25° Spot, 38° Narrow Flood, 60° Flood

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, ELV or 0-10V

[Click Here](#) or check complete dimmer list at

www.NoraLighting.com in the "Compatibility" page under "Resources" tab.

Optics: Each reflector includes field changeable optics (spot, narrow flood and flood - preinstalled). Premium 15° and 25° TIR optics are also available. (Note: TIR optics are not compatible with Comfort Dim)

TRIMS

Fixed Downlight: Fixed downlight delivers over 1300lm in four finishes; Black (B), Black interior / Matte Powder White (BMPW - Note: adjustable and wall wash reflectors mixed with BMPW will be MPW), Haze (HZ) or Matte Powder White (MPW).

Adjustable Snoot: Rotates 359° horizontally and pivots 20° while delivering over 1100 lumens.

Adjustable Gimmel: Rotates 359° horizontally and pivots 38° while delivering over 1300 lumens.

Wall Wash: Fixed wall wash reflector aims LED modules at optimal angle for maximum light distribution along wall surfaces.

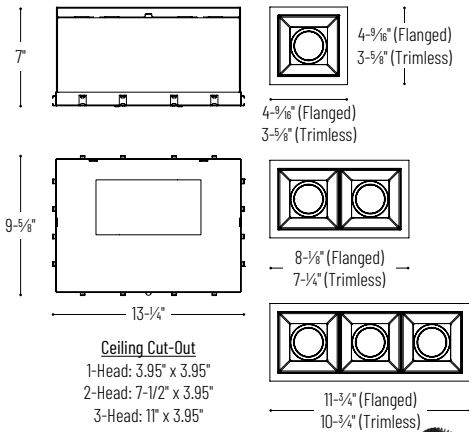
Blank Plate: Blank plate is used in conjunction with two or three head configurations where a blank head is needed.

LABELS AND LISTINGS

- cULus Listed for Damp Location
- ENERGY STAR certified (wall wash not certified)
- [5-Year Limited Warranty](#)
- Certified to the high efficacy requirements of California Title 24 JA8-2019



PRODUCT IMAGES AND DIMENSIONS



Iolite Multiple New Construction Housing

Number of Head(s)	Driver / Dimming
NMHOIC-11 = One Head	LE4 = 120-277V input; Triac / ELV / 0-10V dimming
NMHOIC-12 = Two Heads	
NMHOIC-13 = Three Heads	

Optional Accessories

Description
NIO-REFLTR15 = Premium 15° TIR Optic (must specify per head)
NIO-REFLTR25 = Premium 25° TIR Optic (must specify per head)

Iolite Multiple Trim

Installation Type	Number of Head(s)	Flange Finish	Trim Type (specify one per head)	Color Temp.	Lumens / Wattage per Head	Trim Finish
NMIOT = Flanged	-11 = One Head	-B = Black	-A = Adjustable Snoot	-27X = 2700K	-10 = 1000lm / 12W per head (800lm w/Comfort Dim)	-B = Black
NMIOTL = Trimless	-12 = Two Heads	-MPW = Matte Powder White	-B = Blank Finished Plate	-30X = 3000K		-BMPW* = Black / Matte Powder White (Fixed downlight only)
	-13 = Three Heads	-NF = No Flange (Trimless)	-F = Fixed Downlight	-35X = 3500K		-HZ = Haze
			-G = Adjustable Gimmel	-40X = 4000K		-MPW = Matte Powder White
			-W = Wall Wash	-50X = 5000K		
				-CDX = Comfort Dim		

* Adjustable snoot and/or wall wash ordered in combination with BMPW will be MPW

Example: NMHOIC-13LE4 / NMIOT-13-MPW-AAF-30X-10-MPW = Three Head Iolite Multiple, Matte Powder White Flange, Adjustable Snoot-Fixed-Adjustable Snoot, 3000K, 1000lm / 12W per head, / Matte Powder White finish

PHOTOMETRICS

Iolite Multiple Lighting System (MLS) Fixed Downlight

Type

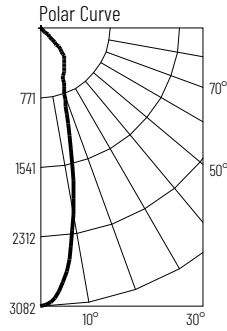
Project

Catalog No.

Notes

Test Information

Test Number: NTR11396
 Part Number: NM10T-11-B-F-40X-10-BMPW
 Beam Spread: 26° Spot
 Lumens: 1361lm
 Wattage: 11.65W
 Efficacy: 117lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.44
 Spacing Criteria (90°-270): 0.44



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	193fc	1'-10"
6'	85.6fc	2'-10"
8'	48.2fc	3'-8"
10'	30.8fc	4'-7"
12'	21.4fc	5'-6"

Zonal Lumen Summary

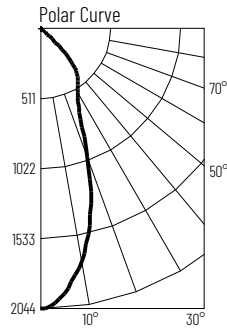
Zone	Lumens	% Luminaire
0-30	868	63.8
0-40	1157	85
0-60	1346	98.9
0-90	1349	99.1
90-180	12	0.9
0-180	1361	100

Candela Table

Vertical Angles	Candela
0	3082
5	2821
15	1208
25	595
35	464
45	227

Test Information

Test Number: NTR11397
 Part Number: NM10T-11-B-F-40X-10-BMPW
 Beam Spread: 38° Narrow Flood
 Lumens: 1368lm
 Wattage: 11.65W
 Efficacy: 117lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.64
 Spacing Criteria (90°-270): 0.64



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	127fc	2'-10"
6'	56.5fc	4'-4"
8'	31.8fc	5'-8"
10'	20.4fc	7'-1"
12'	14.1fc	8'-6"

Zonal Lumen Summary

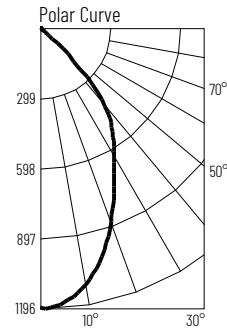
Zone	Lumens	% Luminaire
0-30	867	63.4
0-40	1152	84.2
0-60	1354	99
0-90	1361	99.5
90-180	7	0.5
0-180	1368	100

Candela Table

Vertical Angles	Candela
0	2036
5	1942
15	1386
25	654
35	455
45	237

Test Information

Test Number: NTR11398
 Part Number: NM10T-11-B-F-40X-10-BMPW
 Beam Spread: 60° Flood
 Lumens: 1340lm
 Wattage: 11.64W
 Efficacy: 115lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.9
 Spacing Criteria (90°-270): 0.9



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	53.8fc	4'-11"
6'	23.9fc	7'-5"
8'	13.5fc	9'-11"
10'	8.6fc	12'-5"
12'	6fc	14'-10"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	750	55.9
0-40	1095	81.7
0-60	1323	98.7
0-90	1333	99.5
90-180	7	0.5
0-180	1340	100

Candela Table

Vertical Angles	Candela
0	1194
5	1178
15	1033
25	763
35	557
45	258

PHOTOMETRICS

Iolite Multiple Lighting System (MLS) Adjustable Snoot

Type

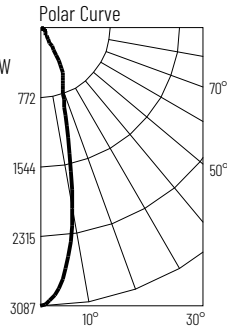
Project

Catalog No.

Notes

Test Information

Test Number: NTR11391
 Part Number: NM10T-11-MPW-A-40X-10-MPW
 Beam Spread: 25° Spot
 Lumens: 1116lm
 Wattage: 11.63W
 Efficacy: 96lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.44
 Spacing Criteria (90°-270): 0.44



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	193fc	1'-10"
6'	85.8fc	2'-8"
8'	48.2fc	3'-6"
10'	30.9fc	4'-5"
12'	21.4fc	5'-4"

Zonal Lumen Summary

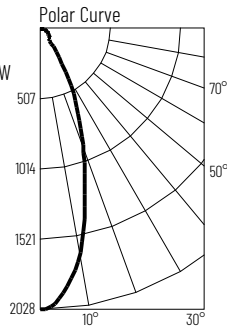
Zone	Lumens	% Luminaire
0-30	824	73.8
0-40	921	82.5
0-60	1045	93.6
0-90	1111	99.5
90-180	6	0.5
0-180	1116	100

Candela Table

Vertical Angles	Candela
0	3087
5	2834
15	1120
25	574
35	122
45	84

Test Information

Test Number: NTR11392
 Part Number: NM10T-11-MPW-A-40X-10-MPW
 Beam Spread: 38° Narrow Flood
 Lumens: 1096lm
 Wattage: 11.62W
 Efficacy: 94lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.6
 Spacing Criteria (90°-270): 0.6



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	127fc	2'-7"
6'	56.3fc	3'-11"
8'	31.7fc	5'-2"
10'	20.3fc	6'-6"
12'	14.1fc	7'-10"

Zonal Lumen Summary

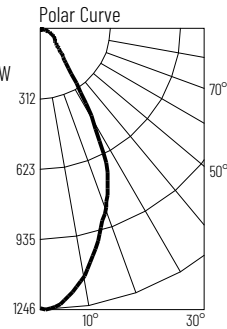
Zone	Lumens	% Luminaire
0-30	796	72.6
0-40	896	81.8
0-60	1023	93.3
0-90	1091	99.5
90-180	5	0.5
0-180	1096	100

Candela Table

Vertical Angles	Candela
0	2028
5	1918
15	1239
25	619
35	126
45	85

Test Information

Test Number: NTR11393
 Part Number: NM10T-11-MPW-A-40X-10-MPW
 Beam Spread: 60° Flood
 Lumens: 1060lm
 Wattage: 11.62W
 Efficacy: 91lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.84
 Spacing Criteria (90°-270): 0.84



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	77.9fc	4'-1"
6'	34.6fc	6'-1"
8'	19.5fc	8'-1"
10'	12.5fc	10'-1"
12'	8.7fc	12'-2"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	701	66.1
0-40	849	80.1
0-60	986	93.1
0-90	1055	99.6
90-180	5	0.4
0-180	1060	100

Candela Table

Vertical Angles	Candela
0	1246
5	1221
15	982
25	708
35	208
45	93

PHOTOMETRICS

Iolite Multiple Lighting System (MLS) Adjustable Gimbal

Type

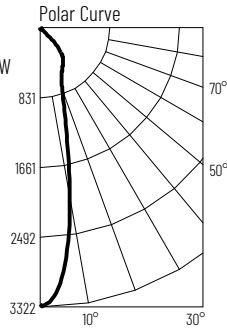
Project

Catalog No.

Notes

Test Information

Test Number: NTR1609R1
Part Number: NM10T-11-MPW-G-40X-10-MPW
Beam Spread: 24° Spot
Lumens: 1335lm
Wattage: 11.83W
Efficacy: 113lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180): 0.4
Spacing Criteria (90°-270): 0.42



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	206fc	1'-8"
6'	91.4fc	2'-6"
8'	51.4fc	3'-4"
10'	32.9fc	4'-2"
12'	22.8fc	5'

Zonal Lumen Summary

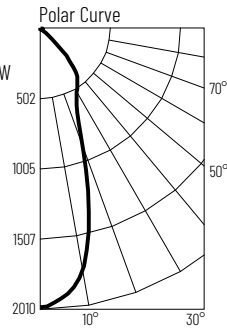
Zone	Lumens	% Luminaire
0-30	856	64.1
0-40	1143	85.6
0-60	1318	98.7
0-90	1329	99.6
90-180	6	0.5
0-180	1335	100

Candela Table

Vertical Angles	Candela
0	3290
5	2877
15	1147
25	599
35	464
45	176

Test Information

Test Number: NTR1610R1
Part Number: NM10T-11-MPW-G-40X-10-MPW
Beam Spread: 37° Narrow Flood
Lumens: 1331lm
Wattage: 11.8W
Efficacy: 113lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180): 0.62
Spacing Criteria (90°-270): 0.62



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	125fc	2'-8"
6'	55.4fc	4'
8'	31.2fc	5'-5"
10'	20fc	6'-8"
12'	13.9fc	8'-1"

Zonal Lumen Summary

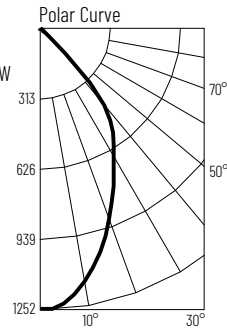
Zone	Lumens	% Luminaire
0-30	843	63.3
0-40	1102	82.8
0-60	1312	98.6
0-90	1326	99.6
90-180	5	0.4
0-180	1331	100

Candela Table

Vertical Angles	Candela
0	1995
5	1937
15	1355
25	630
35	474
45	229

Test Information

Test Number: NTR1611R1
Part Number: NM10T-11-MPW-G-40X-10-MPW
Beam Spread: 63° Flood
Lumens: 1320lm
Wattage: 11.81W
Efficacy: 112lpw
CCT / CRI: 4000K / 90 CRI
Spacing Criteria (0°-180): 0.86
Spacing Criteria (90°-270): 0.88



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	78.2fc	4'-11"
6'	34.7fc	7'-4"
8'	19.5fc	9'-8"
10'	12.5fc	12'-2"
12'	8.7fc	14'-7"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	755	57.2
0-40	1102	83.5
0-60	1300	98.5
0-90	1315	99.6
90-180	5	0.4
0-180	1320	100

Candela Table

Vertical Angles	Candela
0	1251
5	1213
15	1022
25	759
35	565
45	195

PHOTOMETRICS

Iolite Multiple Lighting System (MLS)

Wall Wash

Type _____

Project _____

Catalog No. _____

Notes _____

Test Information

Test Number: NTR11400R1
 Part Number: NM10T-11-B-W-40X-10-MPW
 Lumens: 586lm
 Wattage: 11.85W
 Efficacy: 49lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.9
 Spacing Criteria (90°-270): 1.28

Multiple unit data (footcandles)

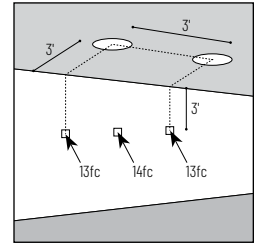
Distance from ceiling (ft.)	2' from wall 2' on center		
1'	31	28	31
2'	30	31	30
3'	17	18	17
4'	10	10	10
5'	6	6	6
6'	4	4	4
7'	2	2	2
8'	2	2	2
9'	1	1	1
10'	1	1	1

Multiple unit data (footcandles)

Distance from ceiling (ft.)	2' from wall 3' on center		
1'	28	16	28
2'	25	22	25
3'	15	15	15
4'	8	9	8
5'	5	5	5
6'	3	4	3
7'	2	2	2
8'	2	2	2
9'	1	1	1
10'	1	1	1

Multiple unit data (footcandles)

Distance from ceiling (ft.)	3' from wall 3' on center		
1'	8	7	8
2'	16	15	16
3'	13	14	13
4'	9	10	9
5'	6	7	6
6'	4	5	4
7'	3	3	3
8'	2	2	2
9'	2	2	2
10'	1	1	1



Example: Two luminaires located 3' from wall and spaced 3' on center, the illumination on the wall 3' down from ceiling will be 13fc beneath and 14fc between luminaires.