

# NI0B-2SNDC

2" Iolite Square Reflector with Round Aperture

Source: 14W to 28W LED  
800lm to 2500lm

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

2" Iolite downlights can be specified for use with Iolite new construction or remodel housings. Deep regressed cone reflectors optimize visual cut-off.

## FEATURES

- 800lm, 1000lm, 1500lm, 2000lm or 2500lm 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:** Trims 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:** Luminaire includes friction blades to mount securely to housing.

## OPTICS

**800-1000lm:** Three field changeable optics (spot, narrow flood and flood) are included with each LED module. Premium 10° TIR narrow spot optic assembly also available ([Click Here](#) for more information). Optional frosted and TIR optics are also available.

**1500-2500lm:** Three field changeable TIR optics (spot, narrow flood and flood) are included with each LED module.

## ELECTRICAL

**Lumens / Wattage:** 800lm / 14W, 1000lm / 14W, 1500lm / 20W, 2000lm / 24W, 2500lm / 28W

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

**Color Rendering Index:** 90+ CRI

**Operating Temperature:** 0°C to 40°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 800lm only.

**Dimming:** Specified by housing

## COMPATIBLE HOUSINGS

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

CATALOG NO.	DESCRIPTION	LUMENS / WATTAGE
<a href="#">NHIOICD-28</a>	ICAT New Construction	800-1000lm / 14W
<a href="#">NHIOICDCP-28</a>	Chicago Plenum	800-1000lm / 14W
<a href="#">NHRIOIC-28</a>	ICAT Remodel	800-1000lm / 14W
<a href="#">NHIOICD-215</a>	ICAT New Construction	1500lm / 20W
<a href="#">NHIOICDCP-215</a>	Chicago Plenum	1500lm / 20W
<a href="#">NHIOICD-220</a>	ICAT New Construction	2000lm / 24W
<a href="#">NHIOICDCP-220</a>	Chicago Plenum	2000lm / 24W
<a href="#">NHIOICD-225</a>	ICAT New Construction	2500lm / 28W
<a href="#">NHIOICDCP-225</a>	Chicago Plenum	2500lm / 28W

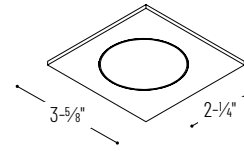
**Accessories:** Luminaires can accommodate (1) hex louver and (1) translucent deco collar or opaque snoot, no accessory holder is required, see accessories page. Flush mount mud ring is available to give the appearance of a trimless, compatible with new construction housing only.

## LABELS AND LISTINGS

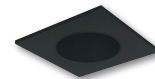
- cULus Listed for Wet Locations
- ENERGY STAR certified
- [5-Year Limited Warranty](#)
- RoHS Compliant
- Certified to the high efficacy requirements of California Title 24 JA8-2022



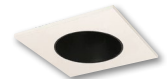
## PRODUCT IMAGES & DIMENSIONS



**NI0B-2SNDC**  
Square Reflector with Round Aperture  
Non-Adjustable



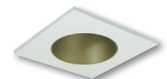
**BB**  
Black Reflector  
Black Flange



**BW**  
Bronze Reflector  
White Flange



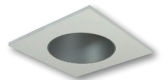
**BZ**  
Bronze Reflector  
Bronze Flange



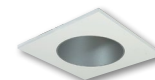
**CHMPW**  
Champagne Haze Reflector  
Matte Powder White Flange



**CMPW**  
Specular Clear 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



**NN**  
Natural Metal Reflector  
Natural Metal Flange



**WW**  
White Reflector  
White Flange

## 2" Iolite Square Reflector / Round Aperture - Dedicated Housing Required

Trim Type	Color Temp.	Finish	Lumens / Wattage
<b>NI0B-2SNDC</b> = Square Reflector with Round Aperture	<b>50X</b> = 5000K* <b>CDX</b> = Comfort Dim <sup>†</sup>	<b>BB</b> = Black / Black <b>BW</b> = Black / White <b>BZ</b> = Bronze / Bronze <b>CHMPW</b> = Champagne / Matte Powder White <b>CMPW</b> = Specular Clear / Matte Powder White <b>HW</b> = Haze / White <b>HZMPW</b> = Haze / Matte Powder White <b>MPW</b> = Matte Powder White <b>NN</b> = Natural Metal / Natural Metal <b>WW</b> = White / White	(blank) = 800lm / 14W  /10 = 1000lm / 14W /HL = 1500-2500lm (varies by housing)
	<b>27X</b> = 2700K <b>30X</b> = 3000K <b>35X</b> = 3500K <b>40X</b> = 4000K <b>50X</b> = 5000K		

\* 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-28</b> = ICAT New Construction / 800-1000lm / 14W
<b>NHIOICDCP-28</b> = Chicago Plenum / 800-1000lm / 14W
<b>NHRIOIC-28</b> = ICAT Remodel / 800-1000lm / 14W
<b>NHIOICD-215</b> = ICAT New Construction / 1500lm / 20W
<b>NHIOICDCP-215</b> = Chicago Plenum / 1500lm / 20W
<b>NHIOICD-220</b> = ICAT New Construction / 2000lm / 24W
<b>NHIOICDCP-220</b> = Chicago Plenum / 2000lm / 24W
<b>NHIOICD-225</b> = ICAT New Construction / 2500lm / 28W
<b>NHIOICDCP-225</b> = Chicago Plenum / 2500lm / 28W

Example: **NI0B-2SNDC50XBB** = 2" Iolite Square Reflector / Round Aperture, 5000K, Black finish, 800lm / 14W

## 2" Iolite Accessories

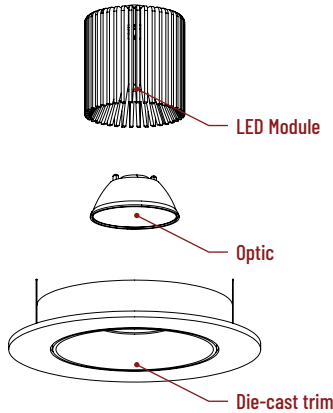
### 2" Iolite Square Reflector with Round Aperture

Type
Project
Catalog No.
Notes

#### FIELD CHANGEABLE OPTICS

Iolite luminaires include spot, narrow flood and flood optics. Optics can be changed in the field by removing LED module from die-cast trim. 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-REFL38FR**  
**NIO-REFL60FR**

60° Optic  
73° Optic

**Not compatible with /HL LED module.**



#### Premium TIR Optics

**NIO-REFLTIR15**  
**NIO-REFLTIR25**

22° Optic  
26° Optic

**Not compatible with /HL, Comfort Dim (CDX) LED modules or Hex Cell Louver.**



#### 10° TIR Optic Assembly

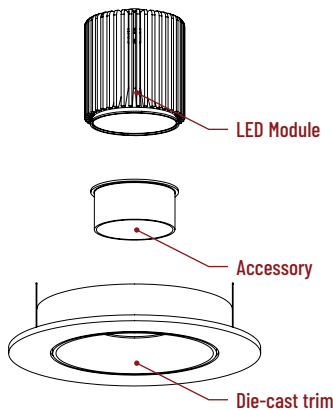
Specialized narrow spot LED module assembly is also available. Requires LE4 housing. [Click Here](#) for more information.



#### ACCESSORIES

Iolite 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)** 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.



#### Opaque Collar Snoot

**NIO-AS14(color)** 5/8" length  
**NIO-AS19(color)** 3/4" length  
**NIO-AS26(color)** 1" length  
**Color:** MPW (matte powder white), WH (white)

Opaque snoot greatly reduces aperture brightness while preserving light output.



#### Hex Cell Louver

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

**Hex cell louver is not compatible with TIR optics.**



#### FLUSH MOUNT

2" Iolite trims 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-2S** Square Mud Ring

Mounts trim flush to ceiling with flange visible. **Mud ring attaches to drywall. Only for use with NH10ICD-28 or NH10ICDCP-28 new construction housings and NIOB-2S trims.** Dimensions: 7-7/8" diameter 1/2" thick



# PHOTOMETRICS

2" Iolite Square Reflector with Round Aperture  
1000 lumens

Type

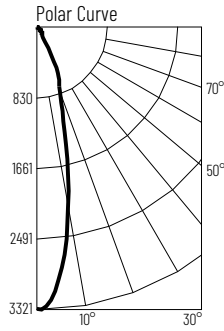
Project

Catalog No.

Notes

## Test Information

Test Number: NTR11271R2  
Part Number: NI0B-2RNDC30XWW/10  
Beam Spread: 25° Spot  
Lumens: 1105lm  
Wattage: 13.78W  
Efficacy: 80lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180°): 0.42  
Spacing Criteria (90°-270°): 0.44



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	207fc	1'-10"
6'	9fc	2'-7"
8'	51.8fc	3'-6"
10'	33.1fc	4'-5"
12'	23fc	5'-4"

## Zonal Lumen Summary

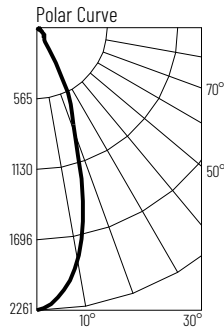
Zone	Lumens	% Luminaire
0-30	869	78.7
0-40	944	85.5
0-60	1055	95.5
0-90	1105	100
90-180	0	0
0-180	1105	100

## Candela Table

Vertical Angles	Candela
0	3313
5	2927
15	1297
25	619
35	115
45	83

## Test Information

Test Number: NTR11270R2  
Part Number: NI0B-2RNDC30XWW/10  
Beam Spread: 35° Narrow Flood  
Lumens: 1088lm  
Wattage: 13.8W  
Efficacy: 79lpw  
CCT / CRI: 3000K / 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'	141fc	2'-6"
6'	62.8fc	3'-10"
8'	35.3fc	5'-1"
10'	22.6fc	6'-5"
12'	15.7fc	7'-7"

## Zonal Lumen Summary

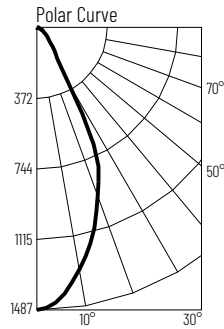
Zone	Lumens	% Luminaire
0-30	850	78.1
0-40	918	84.3
0-60	1036	95.2
0-90	1088	100
90-180	0	0
0-180	1088	100

## Candela Table

Vertical Angles	Candela
0	3313
5	2927
15	1297
25	619
35	115
45	83

## Test Information

Test Number: NTR11269R2  
Part Number: NI0B-2RNDC30XWW/10  
Beam Spread: 50° Flood  
Lumens: 1068lm  
Wattage: 13.84W  
Efficacy: 77lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180°): 0.78  
Spacing Criteria (90°-270°): 0.76



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	92.9fc	3'-8"
6'	41.3fc	5'-7"
8'	23.2fc	7'-6"
10'	14.9fc	9'-4"
12'	10.3fc	11'-2"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	763	71.4
0-40	887	83
0-60	1011	94.7
0-90	1068	100
90-180	0	0
0-180	1068	100

## Candela Table

Vertical Angles	Candela
0	1487
5	1430
15	1135
25	744
35	185
45	89

## Lumen Output Multipliers

Color Temperature: 2700K (0.98), 3000K (1.00), 3500K (1.09), 4000K (1.19), 5000K (1.16)

# PHOTOMETRICS

2" Iolite Square Reflector with Round Aperture  
1500 lumens

Type

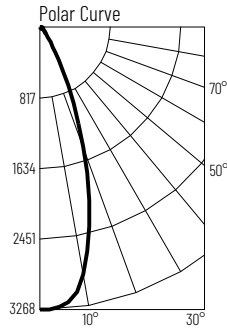
Project

Catalog No.

Notes

## Test Information

Test Number: NTR1422  
Part Number: NI0B-2RNDC30XWW/HL  
Beam Spread: 38° Spot  
Lumens: 1667lm  
Wattage: 19.8W  
Efficacy: 84lpw  
CCT / CRI: 3000K / 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
6'	90.8fc	4'-1"
8'	51.1fc	5'-6"
10'	32.7fc	6'-11"
12'	22.7fc	8'-4"
14'	16.7fc	9'-7"

## Zonal Lumen Summary

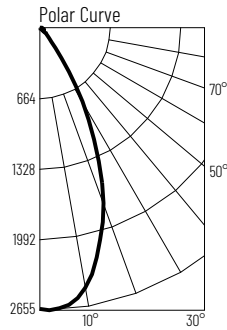
Zone	Lumens	% Luminaire
0-30	1315	78.9
0-40	1473	88.4
0-60	1600	96
0-90	1662	99.7
90-180	5	0.3
0-180	1667	100

## Candela Table

Vertical Angles	Candela
0	3267
5	3216
15	2243
25	862
35	246
45	90

## Test Information

Test Number: NTR1425  
Part Number: NI0B-2RNDC30XWW/HL  
Beam Spread: 48° Narrow Flood  
Lumens: 1843lm  
Wattage: 19.86W  
Efficacy: 93lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.78  
Spacing Criteria (90°-270): 0.8



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	73.4fc	5'-5"
8'	41.3fc	7'-1"
10'	26.4fc	8'-11"
12'	18.3fc	10'-8"
14'	13.5fc	12'-6"

## Zonal Lumen Summary

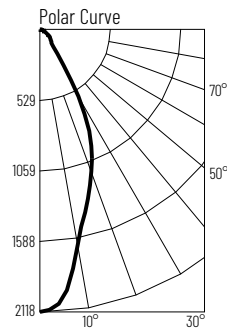
Zone	Lumens	% Luminaire
0-30	1401	76
0-40	1663	90.2
0-60	1783	96.8
0-90	1838	99.7
90-180	5	0.3
0-180	1843	100

## Candela Table

Vertical Angles	Candela
0	2642
5	2600
15	2101
25	1236
35	401
45	93

## Test Information

Test Number: NTR1428  
Part Number: NI0B-2RNDC30XWW/HL  
Beam Spread: 44° Flood  
Lumens: 1416lm  
Wattage: 19.65W  
Efficacy: 72lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.66  
Spacing Criteria (90°-270): 0.66



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
6'	58.8fc	4'-10"
8'	33.1fc	6'-5"
10'	21.2fc	8'
12'	14.7fc	9'-7"
14'	10.8fc	11'-2"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	971	68.6
0-40	1159	81.9
0-60	1329	93.8
0-90	1413	99.8
90-180	3	0.2
0-180	1416	100

## Candela Table

Vertical Angles	Candela
0	2118
5	2012
15	1366
25	901
35	273
45	122

## Lumen Output Multipliers

Color Temperature: 2700K (0.92), 3000K (1.00), 3500K (1.1), 4000K (1.12), 5000K (1.18)

# PHOTOMETRICS

2" Iolite Square Reflector with Round Aperture  
2000 lumens

Type

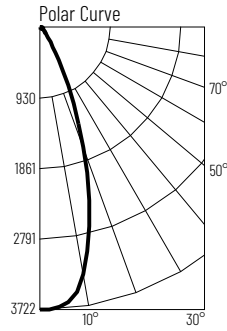
Project

Catalog No.

Notes

## Test Information

Test Number: NTR1423  
Part Number: NI0B-2RNDC30XWW/HL  
Beam Spread: 38° Spot  
Lumens: 1892lm  
Wattage: 23.54W  
Efficacy: 80lpw  
CCT / CRI: 3000K / 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
8'	58.1fc	5'-6"
10'	37.2fc	6'-11"
12'	25.8fc	8'-4"
14'	19fc	9'-8"
16'	14.5fc	11'

## Zonal Lumen Summary

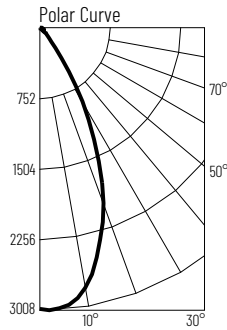
Zone	Lumens	% Luminaire
0-30	1495	79
0-40	1663	87.9
0-60	1816	96
0-90	1886	99.7
90-180	6	0.3
0-180	1892	100

## Candela Table

Vertical Angles	Candela
0	3718
5	3663
15	2562
25	973
35	276
45	101

## Test Information

Test Number: NTR1426  
Part Number: NI0B-2RNDC30XWW/HL  
Beam Spread: 48° Narrow Flood  
Lumens: 2088lm  
Wattage: 23.6W  
Efficacy: 88lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.78  
Spacing Criteria (90°-270): 0.8



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
8'	46.8fc	7'-1"
10'	29.9fc	8'-11"
12'	20.8fc	10'-8"
14'	15.3fc	12'-6"
16'	11.7fc	14'-4"

## Zonal Lumen Summary

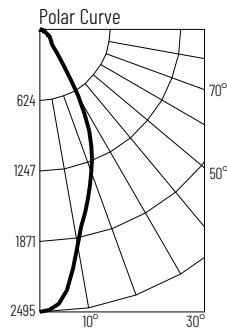
Zone	Lumens	% Luminaire
0-30	1588	76.1
0-40	1885	90.3
0-60	2020	96.8
0-90	2081	99.7
90-180	6	0.3
0-180	2088	100

## Candela Table

Vertical Angles	Candela
0	2993
5	2948
15	2381
25	1402
35	453
45	105

## Test Information

Test Number: NTR1429  
Part Number: NI0B-2RNDC30XWW/HL  
Beam Spread: 44° Flood  
Lumens: 1666lm  
Wattage: 23.53W  
Efficacy: 71lpw  
CCT / CRI: 3000K / 90 CRI  
Spacing Criteria (0°-180): 0.66  
Spacing Criteria (90°-270): 0.68



## Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
8'	38.9fc	6'-5"
10'	24.9fc	8'
12'	17.3fc	9'-7"
14'	12.7fc	11'-2"
16'	9.7fc	12'-10"

## Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1142	68.5
0-40	1349	81
0-60	1561	93.7
0-90	1661	99.7
90-180	5	0.3
0-180	1666	100

## Candela Table

Vertical Angles	Candela
0	2492
5	2372
15	1606
25	1063
35	320
45	144

## Lumen Output Multipliers

Color Temperature: 2700K (0.94), 3000K (1.00), 3500K (1.13), 4000K (1.13), 5000K (1.2)

# PHOTOMETRICS

## 2" Iolite Square Reflector with Round Aperture 2500 lumens

Type

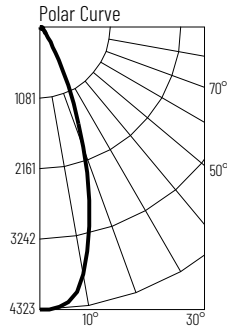
Project

Catalog No.

Notes

### Test Information

Test Number: NTR1424  
 Part Number: NI0B-2RNDC30XWW/HL  
 Beam Spread: 38° Spot  
 Lumens: 2142lm  
 Wattage: 28.47W  
 Efficacy: 75lpw  
 CCT / CRI: 3000K / 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
10'	43.fc	6'-10"
12'	30fc	8'-2"
14'	22fc	8'-4"
16'	16.9fc	10'-11"
18'	13.3fc	12'-4"

### Zonal Lumen Summary

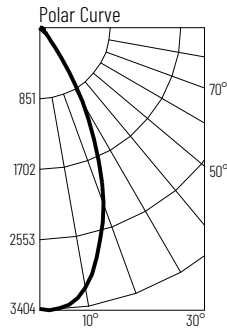
Zone	Lumens	% Luminaire
0-30	1703	79.5
0-40	1886	88.1
0-60	2057	96
0-90	2134	99.6
90-180	8	0.4
0-180	2142	100

### Candela Table

Vertical Angles	Candela
0	4318
5	4253
15	2944
25	1076
35	299
45	114

### Test Information

Test Number: NTR1427  
 Part Number: NI0B-2RNDC30XWW/HL  
 Beam Spread: 48° Narrow Flood  
 Lumens: 2359lm  
 Wattage: 28.08W  
 Efficacy: 84lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.78  
 Spacing Criteria (90°-270): 0.8



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
10'	33.8fc	8'-11"
12'	23.5fc	10'-8"
14'	20.8fc	10'-8"
16'	13.2fc	14'-4"
18'	10.4fc	16'

### Zonal Lumen Summary

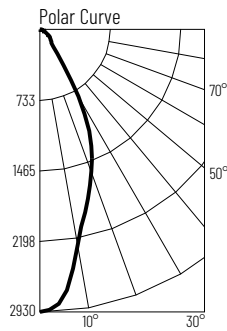
Zone	Lumens	% Luminaire
0-30	1796	76.1
0-40	2130	90.3
0-60	2283	96.8
0-90	2352	99.7
90-180	7	0.3
0-180	2359	100

### Candela Table

Vertical Angles	Candela
0	3385
5	3331
15	2691
25	1583
35	508
45	118

### Test Information

Test Number: NTR1430  
 Part Number: NI0B-2RNDC30XWW/HL  
 Beam Spread: 44° Flood  
 Lumens: 1950lm  
 Wattage: 28.32W  
 Efficacy: 69lpw  
 CCT / CRI: 3000K / 90 CRI  
 Spacing Criteria (0°-180): 0.66  
 Spacing Criteria (90°-270): 0.68



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
10'	29.1fc	8'
12'	20.2fc	9'-7"
14'	17.3fc	9'-7"
16'	11.4fc	12'-10"
18'	9fc	14'-5"

### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1336	68.5
0-40	1579	80.9
0-60	1827	93.7
0-90	1945	99.7
90-180	6	0.3
0-180	1950	100

### Candela Table

Vertical Angles	Candela
0	2910
5	2763
15	1878
25	1243
35	371
45	168

### Lumen Output Multipliers

Color Temperature: 2700K (0.96), 3000K (1.00), 3500K (1.14), 4000K (1.16), 5000K (1.24)