

alphabet

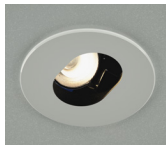
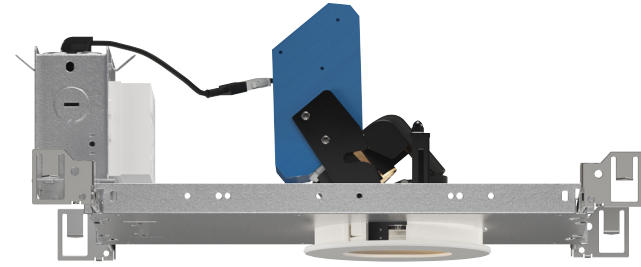
NU2

Round Adjustable Pinhole Tunable White

AT
airtight

DF
dead-front

PR
plenum rated



Trim

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

20° - 50° BEAM (Note: Specifications are subject to change without notice)		
14mm LUMINUS COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
13LM	840LM @35K/95CRI	15W
Notes	Delivered lumens based on 35D optic with no accessory, (see page 2)	

25° - 45° BEAM (Note: Specifications are subject to change without notice)		
18mm LUMINUS COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
20LM	1250LM @35K/95CRI	23W
Notes	Delivered lumens based on 50D optic with no accessory, (see page 2)	

20° - 50° BEAM (Note: Specifications are subject to change without notice)		
18mm NICHIA COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	1070LM @35K/85CRI	15W
20LM	1490LM @35K/85CRI	18W
30LM	2140LM @35K/85CRI	32W
Notes	Delivered lumens based on 50D optic with no accessory, (see page 3)	



FEATURES

- True 40° Tilt with <10% beam disruption (clipping)
- Zero ceiling line obstruction at Full Tilt
- Concentric Tilt Tracking ensures minimal light loss
- 20° - 50° optical beam control
- UGR <5
- Multiple mounting, glare control options, trims, and finishes available

DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0%
- eldoLED flicker free DALI dimming to 0%
- Casambi bluetooth dimming to 0%
- NLight control interface dimming to 0%

CONSTRUCTION

- Shatter proof acrylic bezel lens
- Lexan Optimized for wireless signal controls
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 0.4" to 2.0"
- Fixture is pre-set and shipped at 20deg tilt

LED

- Luminus tunable white COB from 2700K - 6500K: 95 CRI, R9 > 70: SDCM = 4-step MacAdam Ellipse; Lumen Maintenance: L₇₀ > 54,000 hrs
- Nichia tunable white COB from 2700K to 5000K: 80 CRI, R9 > 0: SDCM = 3-step MacAdam Ellipse; Lumen Maintenance: L₉₀ > 33,000 hrs

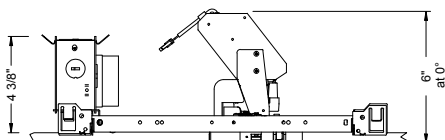
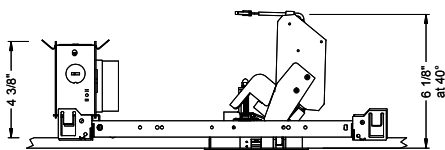
LISTING

- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- Suitable for damp locations
- Dead-front construction (Shower Approved)
- Made in the USA - meets the requirements of the Buy American provision within the ARRA
- 5 Year Limited warranty

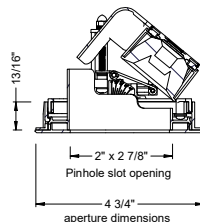
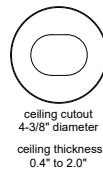
ELECTRICAL

- 120V only Triac/ELV, 120V-277V
- Power factor ≥ 0.9
- 2kV driver input surge protection
- Max. ambient installation temperature 95°F (35°C)

FIXTURE HEIGHT



TRIMMED



alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

20° - 50° BEAM ORDERING CODE

SERIES	NU2	NU2																								
TYPE	RAPH	round adjustable, pinhole																								
LED	TW	tunable white (Luminus)																								
DELIVERED LUMENS	13LM¹	840 lm																								
	20LM²	1250 lm																								
Standard Configuration: 3500K 45D NA Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Optic Multiplier] x [Lens Multiplier]																										
CCT	2765	2700K to 6500K tunable white																								
		<table border="1"> <thead> <tr> <th>CCT</th> <th>2700K</th> <th>3000K</th> <th>3500K</th> <th>4000K</th> <th>5000K</th> <th>5700K</th> <th>6500K</th> </tr> </thead> <tbody> <tr> <td>CCT MULTIPLIER FOR LUMEN OUTPUT</td> <td>0.91</td> <td>0.98</td> <td>1.00</td> <td>0.99</td> <td>1.00</td> <td>1.01</td> <td>1.02</td> </tr> <tr> <td>EML RATIO³</td> <td>0.49</td> <td>0.57</td> <td>0.68</td> <td>0.79</td> <td>0.96</td> <td>1.04</td> <td>1.12</td> </tr> </tbody> </table>	CCT	2700K	3000K	3500K	4000K	5000K	5700K	6500K	CCT MULTIPLIER FOR LUMEN OUTPUT	0.91	0.98	1.00	0.99	1.00	1.01	1.02	EML RATIO ³	0.49	0.57	0.68	0.79	0.96	1.04	1.12
		CCT	2700K	3000K	3500K	4000K	5000K	5700K	6500K																	
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EML RATIO ³	0.49	0.57	0.68	0.79	0.96	1.04	1.12																			
CRI	95	95 CRI max at 3500K, 90 CRI at 6500K																								
OPTIC & LM MULTIPLIER SEE PAGE 4	20D	20 degrees	(0.83)																							
	25D	25 degrees	(0.82)																							
	30D	30 degrees	(0.94)																							
	35D	35 degrees	(0.99)																							
	45D	45 degrees	(1.00)																							
	50D	50 degrees	(1.00)																							
TIR OPTIC ACCESSORY SEE PAGE 4	NA	no accessory	(1.00)																							
	HCL	honeycomb louver	(0.70)																							
	DL	diffused lens	(0.74)																							
	HET	high efficiency textured lens, similar to Solite™	(0.89)																							
	SBL	smoothing beam lens	(0.93)																							
Attached to TIR optic, field replaceable (maximum, 1 media)																										
TRIM COLOR SEE PAGE 4	BK	black, with black optical cavity																								
	WH	white, with black optical cavity																								

20° - 50° BEAM ORDERING CODE

MOUNTING OPTIONS SEE PAGE 8, 9	NC	new construction with ceiling fitting plate
	IC	insulation contact housing
	ICAT	insulation contact/airtight housing
	CP	chicago plenum housing
	RET	retrofit, no ceiling fitting plate
VOLTAGE	120	120V
	UNV	120V-277V
DIMMING	DIM10Z⁴	eldoLED flicker free 0-10V dimming to 0%
	DALIZ	eldoLED flicker free DALI dimming to 0%
	NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dim to off
	CASZ	Casambi Bluetooth dim to zero
ELECTRICAL OPTIONS	EM7	emergency battery backup, 90 minutes at 7W to LED
	EM12	emergency battery backup, 90 minutes at 12W to LED
	EM10CA20	remote emergency battery backup, 90 minutes at 10W to LED, CA title 20
SPECIAL SEE PAGE 8	TC	thick ceiling application

ADDITIONAL MOUNTING INFO

New Construction Bar Hangers (included)	Mounting Length: 14-3/4" to 26"
Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	Extends a pair of Bar Hangers Total Mounting Length: 29" to 48"

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:
NU2 - RAPH - TW - 20LM - 2765 - 95 - 30D - SBL - WH - NC - UNV - DIM10Z - EM12 - TC

Power Factor ≥ 0.9

NOTES

- 13LM not available with 30D and 45D optics.
- 20LM not available with 20D and 50D optics.
- EML = equivalent melanopic lux. To calculate EML, multiply the measured photopic lux by the EML ratio for the given CCT.
Example: 254 lux x 0.79 = 200 melanopic lux at 4000K.
- Requires 2 wall controllers (see wiring diagram).

alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

20° - 50° BEAM ORDERING CODE

SERIES	NU2	NU2										
TYPE	RAPH	round adjustable, pinhole										
LED	TW	tunable white (Nichia)										
DELIVERED LUMENS	15LM	1070 lm										
	20LM	1490 lm										
	30LM	2140 lm										
Standard Configuration: 3500K 50D NL Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Optic Multiplier] x [Lens Multiplier]												
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EML RATIO ¹	0.43	0.51	0.63	0.69	0.80							
CRI	80	80 CRI										
OPTIC & LM MULTIPLIER SEE PAGE 4	20D	20 degrees (0.84)										
	25D	25 degrees (0.95)										
	30D	30 degrees (0.99)										
	50D	50 degrees (1.00)										
TIR OPTIC ACCESSORY SEE PAGE 4	NA	no accessory (1.00)										
	HCL	honeycomb louver (0.73)										
	DL	diffused lens (0.76)										
	HET	high efficiency textured lens, similar to Solite™ (0.88)										
	SBL	smoothing beam lens (0.93)										
Attached to TIR optic, field replaceable (maximum, 1 media)												
TRIM COLOR SEE PAGE 4	BK	black, with black optical cavity										
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20° - 50° BEAM ORDERING CODE

MOUNTING OPTIONS SEE PAGE 8, 9	NC	new construction with ceiling fitting plate
	IC²	insulation contact housing
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	CP²	chicago plenum housing
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VOLTAGE	120	120V
	UNV	120V-277V
DIMMING	DIM10Z³	eldoLED flicker free 0-10V dimming to 0%
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	EM10CA20	remote emergency battery backup, 90 minutes at 10W to LED, CA title 20
SPECIAL SEE PAGE 8	TC	thick ceiling application

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Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	Extends a pair of Bar Hangers Total Mounting Length: 29" to 48"

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:
NU2 - RAPH - TW - 20LM - 2750 - 80 - 30D - SBL - WH - NC - UNV - DIM10Z - EM12 - TC

Power Factor ≥ 0.9

NOTES

- EML = equivalent melanopic lux. To calculate EML, multiply the measured photopic lux by the EML ratio for the given CCT. Example: 254 lux x 0.79 = 200 melanopic lux at 4000K.
- IC/ICAT/CP not available for 30LM.
- Requires 2 wall controllers (see wiring diagram).

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PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

TRIM OPTIONS

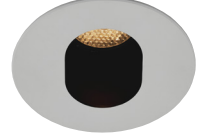
TRIM/BEZEL COLORS



LUMINUS OPTICAL OPTIONS

- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 15LM fixtures, unless otherwise noted.

TIR OPTIC ACCESSORY Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
20D	20.7	≤5
30D	24.7	≤5
35D	29.6	≤5
50D	39.5	9.5

TIR OPTIC ACCESSORY DL



OPTIC	BEAM ANGLE	UGR
20D	35	7.9
30D	38.1	11.1
35D	41.4	12.3
50D	50.1	15.1

TIR OPTIC ACCESSORY HET



OPTIC	BEAM ANGLE	UGR
20D	25.3	≤5
30D	29.7	5.9
35D	34.4	7.3
50D	46.6	13.4

NA



OPTIC	BEAM ANGLE	UGR
20D	21.6	≤5
30D	27.1	≤5
35D	33.3	≤5
50D	47.4	12.7

TIR OPTIC ACCESSORY SBL



OPTIC	BEAM ANGLE	UGR
20D	22.5	≤5
30D	27.8	≤5
35D	33.7	5.4
50D	47.9	12.6

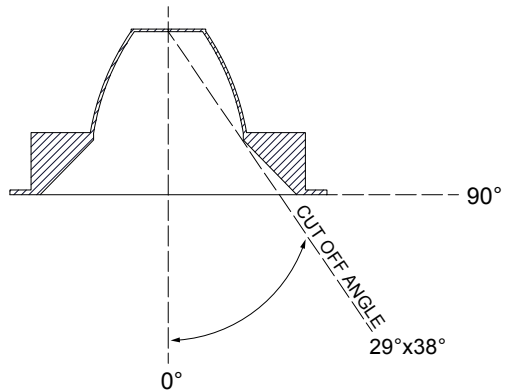
GLARE CONTROL

CUT-OFF ANGLE

Visual comfort is achieved with a lower cut-off angle due to improved glare control. The smaller the cut-off angle, the easier it is on the eye.

Alphabet downlights have been thoughtfully engineered to eliminate glare while still delivering functional illumination.

- Cutoff angle of NA is 29°x38° ;



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PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

TRIM OPTIONS

TRIM/BEZEL COLORS



NICHIA OPTICAL OPTIONS

- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 15LM fixtures, unless otherwise noted.

TIR OPTIC ACCESSORY Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
20D	17.6	≤5
25D	22.4	≤5
30D	27.8	≤5
50D	40.4	9.3

TIR OPTIC ACCESSORY DL



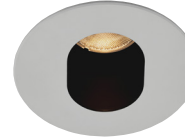
OPTIC	BEAM ANGLE	UGR
20D	33.1	7.3
25D	36	11.2
30D	39.4	12.4
50D	49.6	15.8

TIR OPTIC ACCESSORY HET



OPTIC	BEAM ANGLE	UGR
20D	22.5	≤5
25D	26.8	5.3
30D	31.6	6.3
50D	46.5	13.1

NA



OPTIC	BEAM ANGLE	UGR
20D	18.1	≤5
25D	24.2	≤5
30D	30.7	≤5
50D	48.2	12.7

TIR OPTIC ACCESSORY SBL



OPTIC	BEAM ANGLE	UGR
20D	19.2	≤5
25D	24.8	≤5
30D	31	≤5
50D	48.2	12.7

CL

Clear Lens



OPTIC	BEAM ANGLE	UGR
20D	18.2	≤5
25D	25.4	≤5
30D	31.8	5.5
50D	50.4	13.5

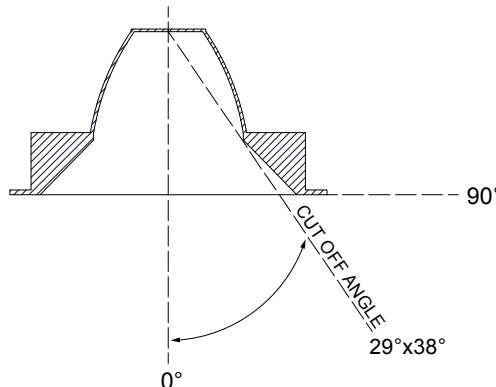
GLARE CONTROL

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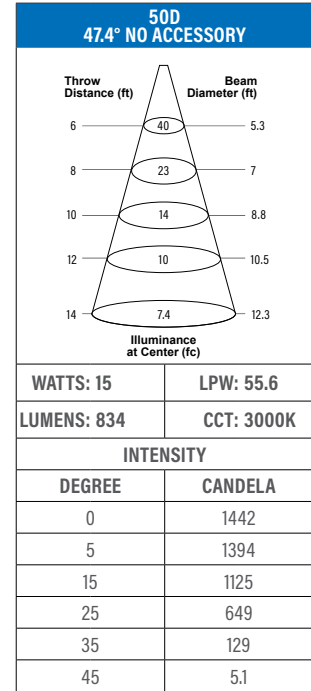
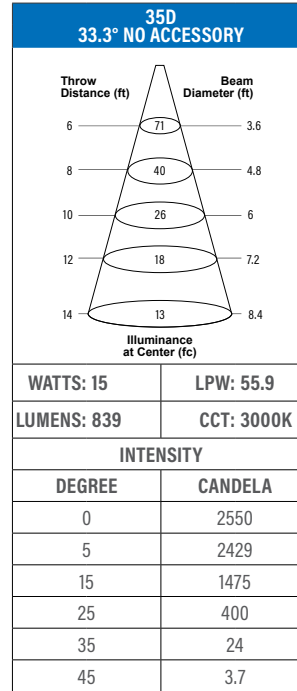
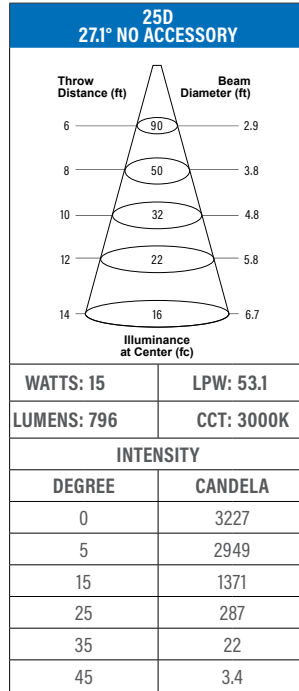
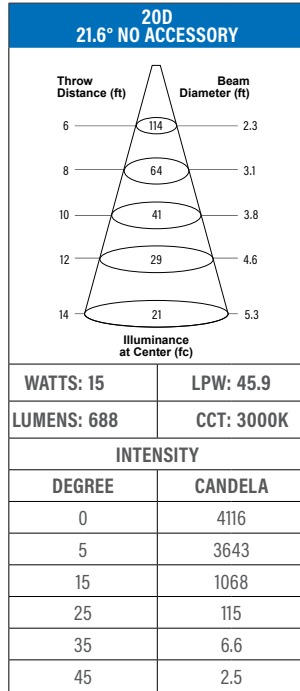
- Cutoff angle of NA is 29°x38° ;



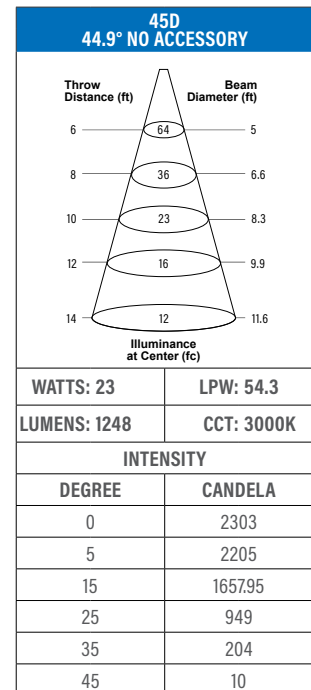
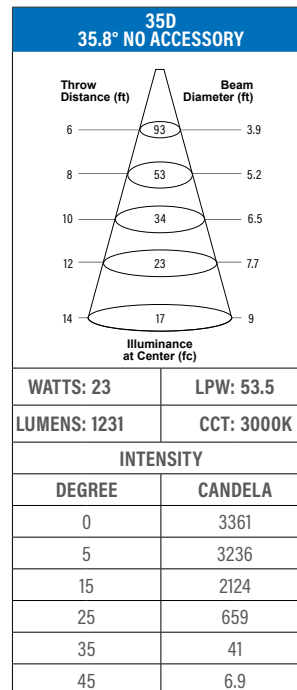
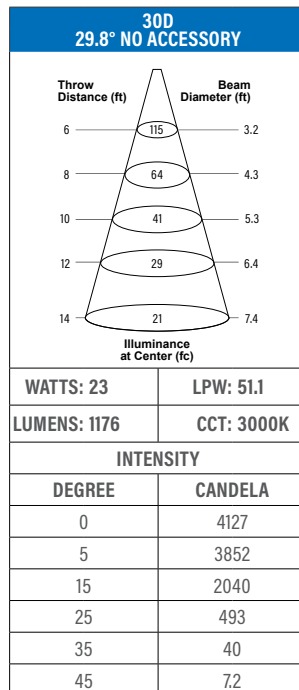
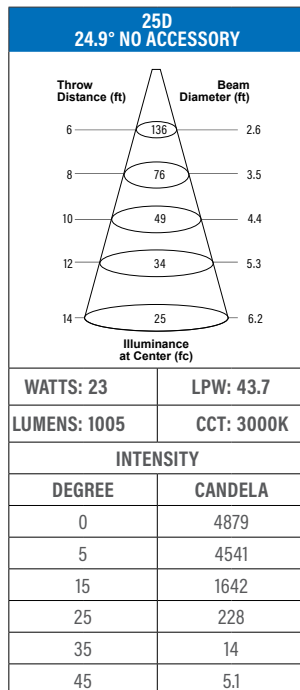
PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

PHOTOMETRIC DATA

LUMINUS CTM14



LUMINUS CTM18

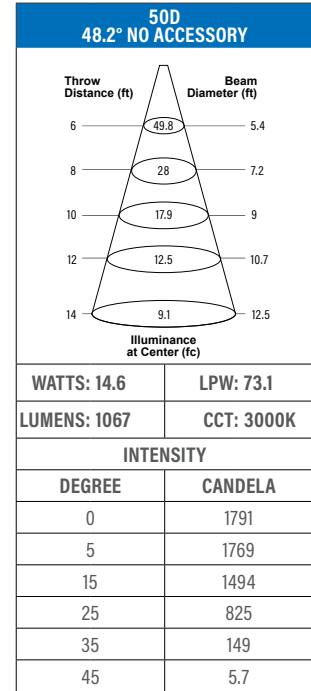
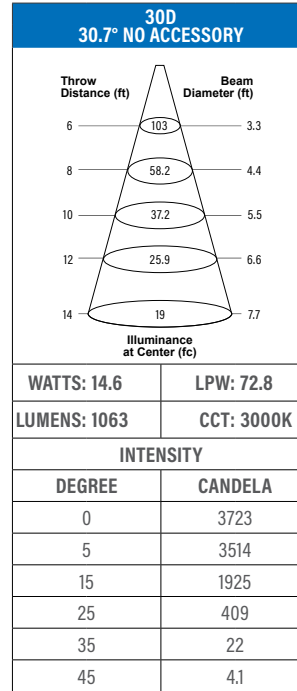
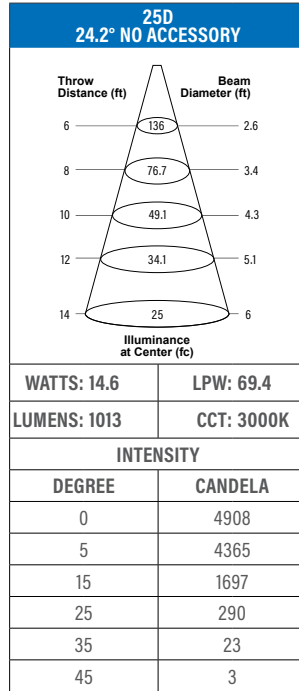
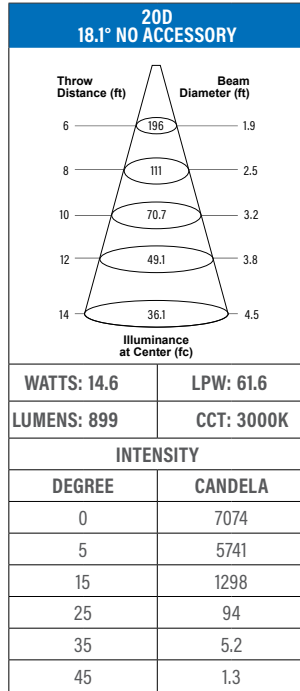


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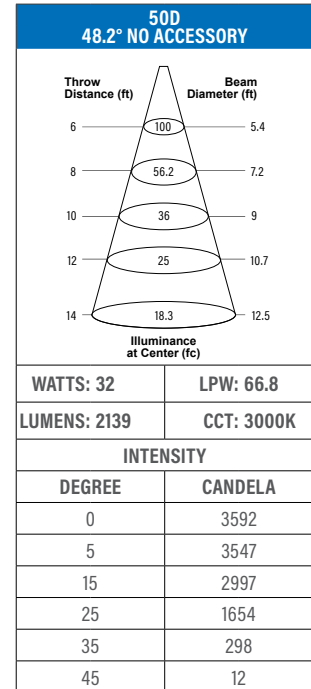
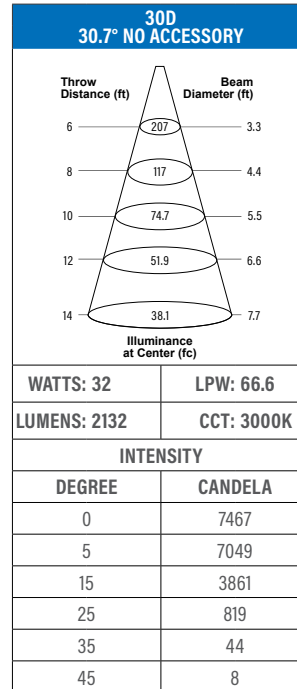
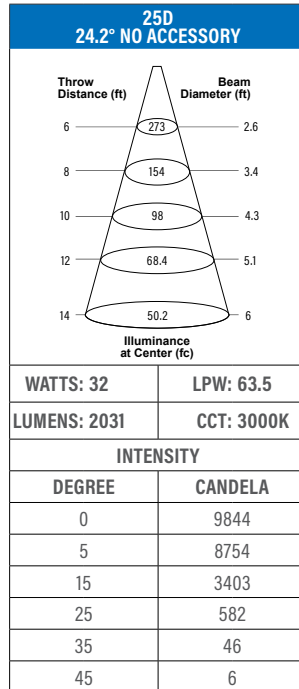
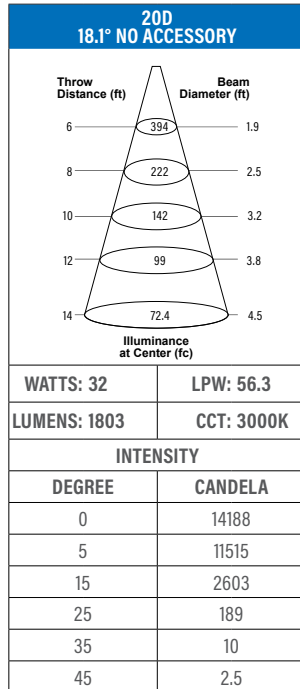
PROJECT INFORMATION		
JOB NAME		TYPE
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PHOTOMETRIC DATA

NICHIA



NICHIA

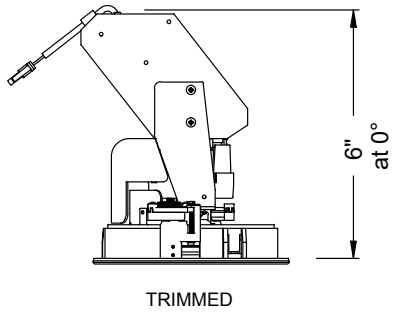


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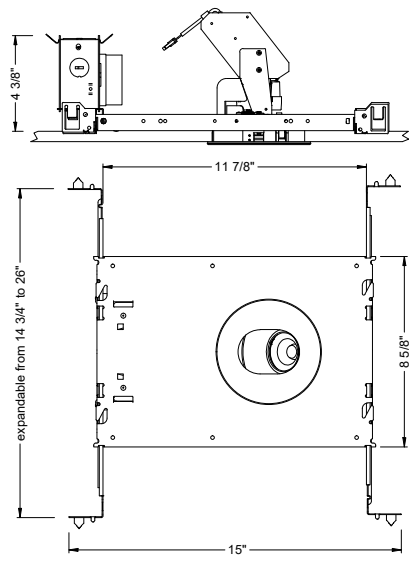
MOUNTING OPTIONS

FIXTURE HEIGHT

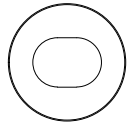


NC - NEW CONSTRUCTION

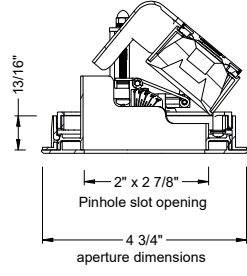
TRIM



TRIM

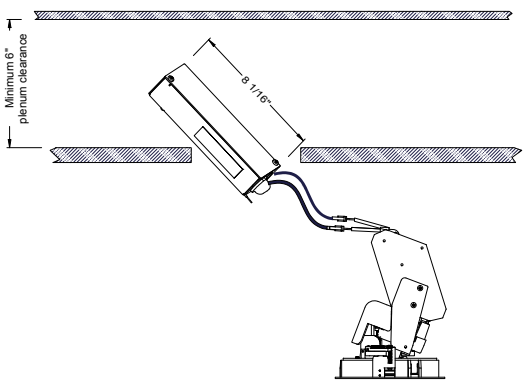


ceiling cutout
4-3/8" diameter
ceiling thickness
0.4" to 2.0"



RET - RETRO

TRIM/TRIMLESS



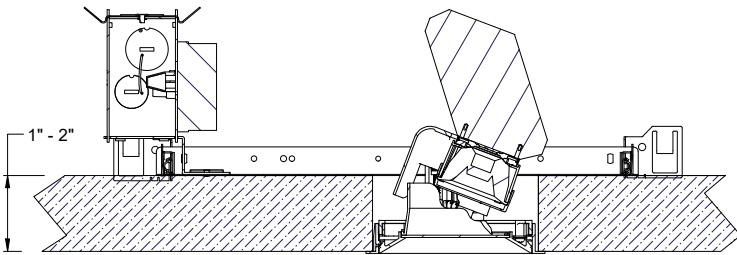
PROJECT INFORMATION		
JOB NAME	TYPE	
ORDERING CODE		

MOUNTING OPTIONS (CONTINUED)

RATINGS / CERTIFICATIONS	NC	RET	IC	ICAT	CP
TYPE NON-IC	✓	✓			
TYPE IC			✓	✓	✓
CHICAGO PLENUM (CCEA)					✓
SUITABLE FOR AIR HANDLING PLENUMS	✓	✓	✓	✓	✓
REDUCED AIRFLOW (WITH LENS) ASTM E283	✓	✓	✓	✓	✓

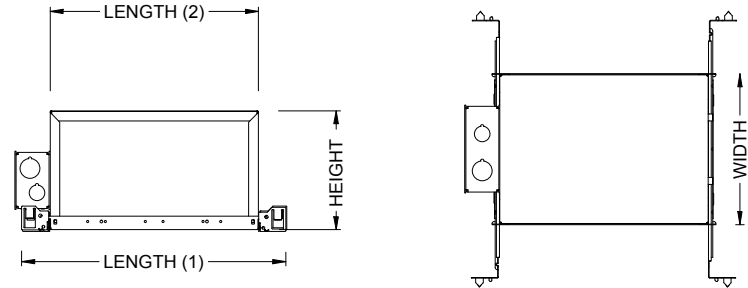
CEILING THICKNESS		
FIXTURE TYPE	MOUNTING TYPE	
	NC, IC, ICAT, CP, RET	NC, IC, ICAT, CP, RET
	STANDARD CEILING THICKNESS	THICK CEILING THICKNESS
TRIM	0.4" to 1.1"	1.0" to 2.0"
TRIMLESS	0.4" to 1.1"	1.0" to 2.0"
MILLWORK (TRIMLESS)	0.5" to 1.1"	1.0" to 2.0"

TC - THICK CEILING (1" TO 2") APPLICATION TRIM/TRIMLESS



THICK CEILING FIXTURE INFO		
TILT	ROTATION	CEILING THICKNESS
0° - 20°	360°	UP TO 2"
20° - 30°	160°	UP TO 2"
30° - 40°	160°	UP TO 1.625"

IC - INSULATION CONTACT HOUSING ICAT - INSULATION CONTACT / AIR TIGHT CP - CHICAGO PLENUM



BOX SIZE	L 1	L 2	W	H
A	15 - 7/16"	11 - 3/4"	8 - 1/2"	6 - 3/4"
B	18 - 1/4"	14 - 7/8"	12 - 1/8"	11 - 1/4"
C	18 - 1/4"	14 - 7/8"	12 - 1/8"	6 - 3/4"

BOX TYPE / LUMEN OUTPUT - NARROW BEAMS - LUMINUS (20° - 50°)					
LUMEN OUTPUT	BOX - A			BOX - B	BOX - C
	CP	IC	ICAT	IC	ICAT
13LM				✓	

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS - LUMINUS (30° - 50°)					
LUMEN OUTPUT	BOX - A			BOX - B	BOX - C
	CP	IC	ICAT	IC	ICAT
20LM				✓	

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS - NICHIA (20° - 50°)					
LUMEN OUTPUT	BOX - A			BOX - B	BOX - C
	CP	IC	ICAT	IC	ICAT
10LM	✓	✓	✓		
20LM	✓	✓	✓		
30LM					

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

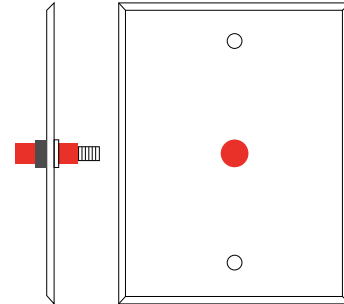
BATTERY OPTIONS

EMERGENCY BATTERY

IOTA's ILB battery backups are UL Listed LED emergency drivers that allow the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the ILB switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can. The constant power design of the ILB maintains the output wattage to the LED array even as the system voltage diminishes. UL 924 Listed for U.S. and Canada. UL 1310 Certified, output class 2 compliant. Includes single-piece TBTS test switch and charge indicator accessory kit. For use with switched and unswitched fixtures, and includes two-wire universal AC input. Meets or exceeds all National Electric Code and Life Safety Code Emergency Lighting requirements. Rated for use in plenum, damp location, recessed type IC, and enclosed and gasketed luminaires.

REMOTE TEST SWITCH

The remote test switch can be mounted adjacent to the LED Fixture by others.



Remote Test Switch

EMERGENCY BATTERY ACCESS

Above ceiling access is recommended for ease of service, but LED fixture sizes of 4" and larger are capable of below ceiling access. IC/ICAT/CP box and ITS option require an access panel in the ceiling (or other form of access) adjacent to the installation location of the emergency battery.

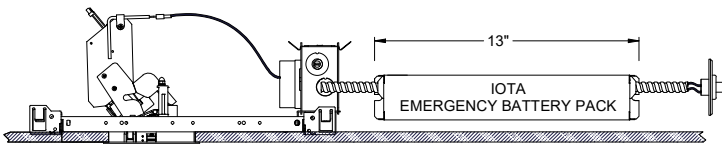
REMOTE LOCATION

Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all local and national electric/building codes.

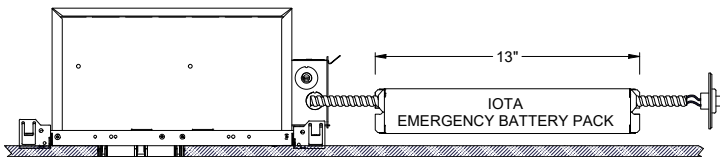
EM MODE OUTPUT (LUMINUS COB - DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (10LM TO 20LM)	440LM	620LM	700LM
Notes: Based on 35K, 95CRI			

EM MODE OUTPUT (NICHIA COB - DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (10LM TO 30LM)	490LM	690LM	850LM
Notes: Based on 35K, 85CRI			

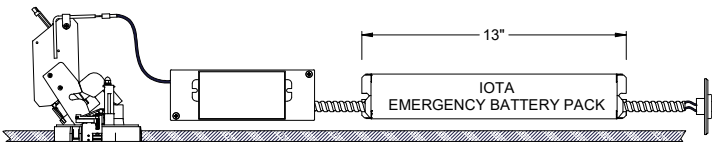
NC - NEW CONSTRUCTION WITH EM BATTERY (REMOTE TEST SWITCH)



IC / ICAT / CP - INSULATION CONTACT HOUSING WITH EM BATTERY (REMOTE TEST SWITCH)

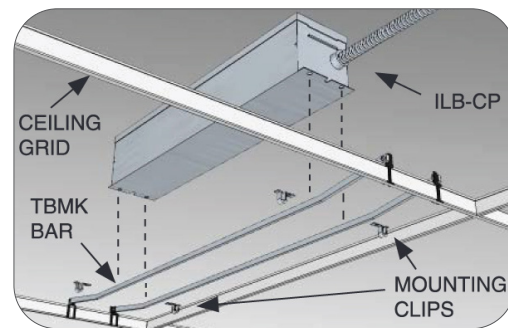


RET - RETROFIT WITH EM BATTERY (REMOTE TEST SWITCH)



Accessory

76066 Optional T-Grid Mounting Kit¹

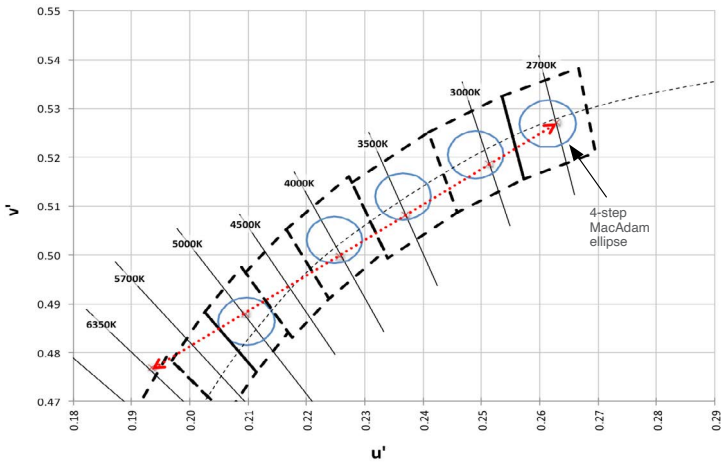


1. Can be used with any of the Emergency Battery Backups. Must be ordered as a separate line item.

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

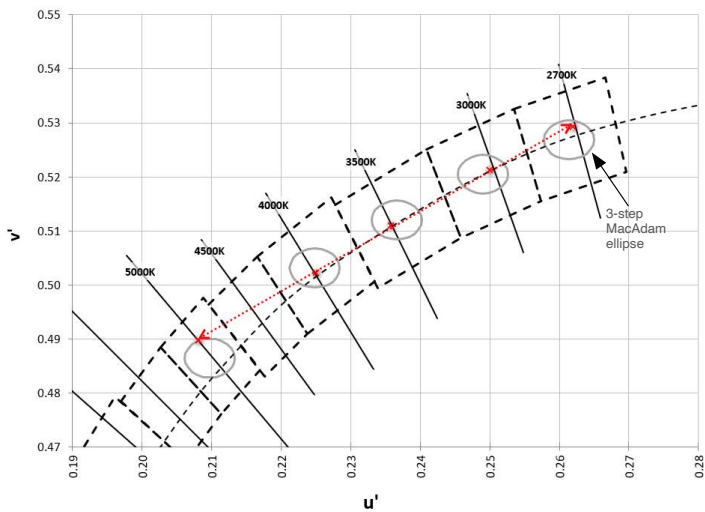
LUMINUS 95CRI

Chromaticity Coordinates (CIE 1976) & CCT range



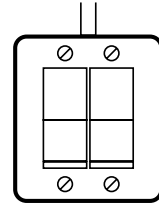
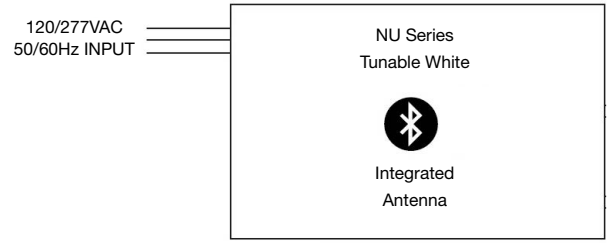
NICHIA 80CRI

Chromaticity Coordinates (CIE 1976) & CCT range



WIRING DIAGRAMS

“CAS” CASAMBI CONTROLS

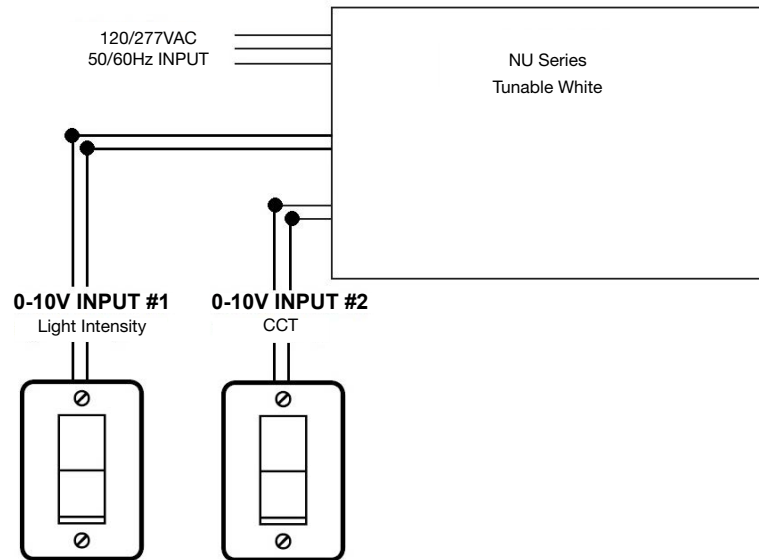


COMPATIBLE WIRELESS SWITCHES
CCT & Light Intensity Control



CASAMBI™ APP (IOS & Android)
Wireless Commissioning,
CCT & Light Intensity Control

“DIM10Z” HARDWIRED 0-10V CONTROL



STANDARD 0-10V SWITCHES
(provided by others)

NOTES

- 1 Consult factory to order compatible wireless switches.