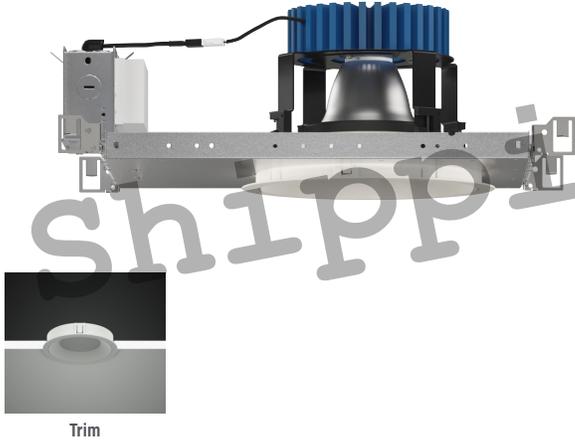


# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## NU8

### 8" Round Downlight Standard White



Trim

12° - 75° BEAM (Note: Specifications are subject to change without notice)		
14mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	1010LM @30K/80CRI	9W
15LM	1510LM @30K/80CRI	12W
20LM	1990LM @30K/80CRI	16W
25LM	2470LM @30K/80CRI	20W
30LM	2940LM @30K/80CRI	24W
35LM	3500LM @30K/80CRI	29W
40LM	4050LM @30K/80CRI	35W
45LM	4480LM @30K/80CRI	40W
10LM	860LM @30K/90CRI	9W
15LM	1280LM @30K/90CRI	12W
20LM	1690LM @30K/90CRI	16W
25LM	2100LM @30K/90CRI	20W
30LM	2490LM @30K/90CRI	24W
35LM	2970LM @30K/90CRI	29W
40LM	3440LM @30K/90CRI	35W
45LM	3810LM @30K/90CRI	40W
Notes	Delivered lumens based on 60D optic with no lens, (see page 2)	



May

#### FEATURES

- Thermally optimized for longevity
- 2" bezel regress with 1/16" micro flange
- 12° to 75° optical beam control
- UGR < 20
- Glare control, specialty optics, trim options, and custom finishes available
- Microban® antimicrobial finish available on all exposed painted surfaces

#### LED

- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs
- 80 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L<sub>70</sub> > 66,000 hrs

#### DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0% and 1%
- eldoLED flicker free DALI dimming to 0% and 1%
- DMX dim to zero
- Lutron Hi-lume (Eco System) dimming to 0.1% and 1%
- Lutron Hi-lume 1% 3-wire/Ecosystem
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi dimming to 1%
- NLight control interface dimming to 0%

#### LISTING

- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- Non-conductive, dead-front construction (shower approved)
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

#### CONSTRUCTION

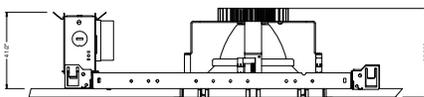
- Lexan™ (PC) highly resistant to impact and heat (240°F)
- Optimal material for wireless signal connectivity
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-5/8"

#### ELECTRICAL

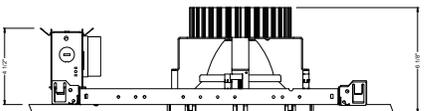
- 120V-277V, 120 only Triac / ELV
- Power factor ≥ 0.9
- 2kV driver input surge protection
- Remote and Integral (ITS) emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)
- Low Voltage Luminaire option, see page 8.

#### FIXTURE HEIGHT

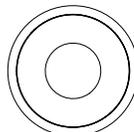
##### 10LM-30LM LOW LUMEN



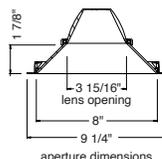
##### 40LM-45LM HIGH LUMEN



#### TRIMMED (STANDARD)



ceiling cutout  
8-1/2" diameter  
ceiling thickness  
1/8" to 2"



aperture dimensions

# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

ORDERING CODE		
<b>SERIES</b>	NU8	NU8
<b>TYPE</b>	RD	round downlight
<b>LED</b>	SW	standard white
<b>DELIVERED LUMENS</b>	10LM	1010 lm
	15LM	1510 lm
	20LM	1990 lm
	25LM	2470 lm
	30LM	2940 lm
	35LM	3500 lm
	40LM	4050 lm
	45LM	4480 lm
Standard Configuration: 3000K 80CRI 60D Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]		
<b>CCT</b>	27K	2700K
	30K	3000K
	35K	3500K
	40K	4000K
<b>CRI</b>	80	80 CRI
	90	90 CRI
<b>OPTIC &amp; LM MULTIPLIER</b> SEE PAGE 3	12D	12 degrees (0.96)
	20D	20 degrees (0.96)
	35D	35 degrees (0.95)
	50D	50 degrees (0.99)
	60D	60 degrees (1.00)
	75D	75 degrees (0.91)
<b>ACCESSORY</b>	HCL <sup>1</sup>	honeycomb louver (0.70) Attached to bezel
<b>BEZEL LENS</b> SEE PAGE 3	NL <sup>2</sup>	no lens (1.00)
	CL	clear lens (0.96)
	E <sup>3</sup>	elliptical beam spread (0.92)
	DL	diffused lens (0.93)
	HET	high efficiency textured lens, similar to Solite™ (0.95)
	SBL	smoothing beam lens (0.95)
<b>TRIM COLOR</b> SEE PAGE 3	BK	black
	WH	white
	MC	matte chrome
	BZ	bronze
	WT	wheat
	CC <sup>4</sup>	custom color, consult factory for details
Antimicrobial finish, add AM to black, white or matte chrome i.e. BKAM.		
<b>BEZEL COLOR</b> SEE PAGE 3	BK	black (0.98)
	WH	white (1.00)
	BZ	bronze (0.98)
	MC	matte chrome (0.99)
	WT	wheat (0.99)
		CC <sup>4</sup>
Antimicrobial finish, add AM to black, white or matte chrome i.e. BKAM.		

ORDERING CODE		
<b>MOUNTING OPTIONS</b> SEE PAGE 6, 7	NC	new construction with ceiling fitting plate
	RET	retrofit, no ceiling fitting plate
<b>VOLTAGE</b>	120	120V
	UNV	120V-277V
	LVL <sup>5</sup>	low voltage luminaire
<b>DIMMING</b>	DIM10	eldoLED flicker free 0-10V dimming to 1%
	DIM10Z	eldoLED flicker free 0-10V dimming to 0%
	DALI	eldoLED flicker free DALI-2 dimming to 1%
	DALIZ	eldoLED flicker free DALI-2 dimming to 0%
	LUTP <sup>6</sup>	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black
	ELV1 <sup>7</sup>	leading & trailing edge (Triac/ELV) dimming to 1%
	NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dim to off
	CAS	Casambi control with flicker free 1% dimming
	LUT	Lutron Hi-lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black
	DMX-RJ45	DMX control dimming to 0.1% with RJ45 connection
	DMX-XLR	DMX control dimming to 0.1% with XLR 5pin connection
	DMX-WL	DMX control dimming to 0.1% with wire lead connection
	L3DA	Lutron Hi-lume 1% 3-wire/Ecosystem
ND	No Driver Included. Customer to Supply PoE system components or order remote driver separately. Refer to POE/Remote Driver reference sheet for additional details.	
<b>ELECTRICAL OPTIONS</b>	EM7 <sup>7</sup>	emergency battery backup, 90 minutes at 7W to LED
	EM12 <sup>7</sup>	emergency battery backup, 90 minutes at 12W to LED
	EM10CA20 <sup>7</sup>	remote emergency battery backup, 90 minutes at 10W to LED, CA title 20

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:
<b>NU8 - RD - SW - 30LM - 35K - 90 - 20D - SBL - WH - WH - NC - 120 - DIM10 - EM7</b>

## NOTES

- HCL not available with lens.
- NL option does not meet requirement for AT/DF/WET/NSF listings.
- Actual beam distributions for optic (Actual beam distributions for optic (12D= 34° x 63°, 20D= 40° x 68°, 35D= 48° x 75°, 50D= 58° x 85°, 60D= 66° x 92°, 75D= 85° x 100°).
- Custom set up fee plus minimum quantity required per color.
- Must select ND dimming code, for remote driver or POE specifications see page 9.
- LUTP not available in 25LM/30LM/40LM/45LM.
- ELV (120V) not available in 10LM
- For integrated test switch add "ITS" after emergency backup code, i.e. EM12ITS. Test switch is mounted in the bezel of the fixture.

\* EdoLED and DMX uses logarithmic dimming curve as standard. For linear dimming curve, add "LIN" after dimming code, i.e. DIM10LIN.

# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## TRIM OPTIONS

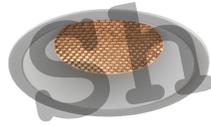
### TRIM/BEZEL COLORS



## 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.

### HCL Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
12D	12.6	7.4
20D	21	7.6
35D	32	8.1
50D	43	10.1
60D	53	11.6
75D	67	12.9

### NL No Lens



OPTIC	BEAM ANGLE	UGR
12D	12.8	10.8
20D	22	10.9
35D	35	11.1
50D	49	12.6
60D	62	14
75D	76	18.4

### CL Clear Lens



OPTIC	BEAM ANGLE	UGR
12D	12.8	10.5
20D	21	10.6
35D	35	10.9
50D	50	12.7
60D	65	14.2
75D	76	18.4

### DL Diffused Lens



OPTIC	BEAM ANGLE	UGR
12D	34	13.8
20D	40	14.2
35D	48	15
50D	57	16.4
60D	65	17.3
75D	82	19.5

### HET High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
12D	14	10.2
20D	25	10.9
35D	36	11.6
50D	50	13.3
60D	62	14.7
75D	77	18.4

### SBL Smoothing Beam Lens



OPTIC	BEAM ANGLE	UGR
12D	14	10.2
20D	22	10.4
35D	35	10.9
50D	50	12.8
60D	64	14.2
75D	76	18.2

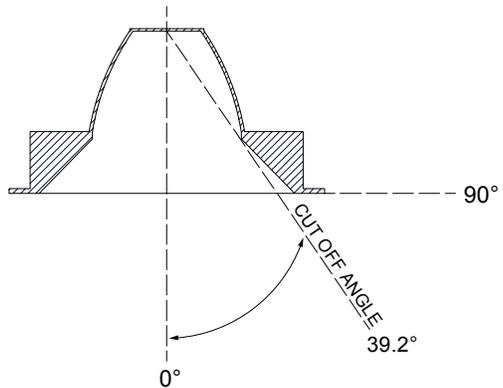
## GLARE CONTROL

### 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 is 39.2° degrees;



# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## PHOTOMETRIC DATA

20LM	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91

FC Formula = CBCP / Distance<sup>2</sup>

12D 12.8° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	1.4
8	1.8
10	2.3
12	2.7
14	3.2
Illuminance at Center (fc)	
555	
312	
200	
139	
102	
WATTS: 15.8	LPW: 121.3
LUMENS: 1917	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	19996
5	13714
15	1009
25	692
35	566
45	1

20D 22° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	2.3
8	3.1
10	3.8
12	4.6
14	5.4
Illuminance at Center (fc)	
230	
129	
83	
58	
42	
WATTS: 15.8	LPW: 120.9
LUMENS: 1911	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	8285
5	7250
15	2160
25	726
35	588
45	1

35D 35° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	3.8
8	5.1
10	6.3
12	7.6
14	8.8
Illuminance at Center (fc)	
113	
63	
41	
28	
21	
WATTS: 15.8	LPW: 119.8
LUMENS: 1892	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	4052
5	4038
15	2567
25	1002
35	600
45	2

50D 49° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	5.4
8	7.3
10	9.1
12	10.9
14	12.7
Illuminance at Center (fc)	
78	
44	
28	
20	
14	
WATTS: 15.8	LPW: 124.4
LUMENS: 1966	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2810
5	2819
15	2318
25	1357
35	693
45	20

45LM	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91

FC Formula = CBCP / Distance<sup>2</sup>

12D 12.8° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	1.4
8	1.8
10	2.3
12	2.7
14	3.2
Illuminance at Center (fc)	
1251	
704	
450	
313	
230	
WATTS: 40	LPW: 108
LUMENS: 4319	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	45042
5	30892
15	2273
25	1558
35	1276
45	2

20D 22° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	2.3
8	3.1
10	3.8
12	4.6
14	5.4
Illuminance at Center (fc)	
518	
292	
187	
130	
95	
WATTS: 40	LPW: 107.6
LUMENS: 4304	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	18662
5	16330
15	4865
25	1635
35	1324
45	3

35D 35° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	3.8
8	5.1
10	6.3
12	7.6
14	8.8
Illuminance at Center (fc)	
254	
143	
91	
63	
47	
WATTS: 40	LPW: 106.6
LUMENS: 4262	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	9126
5	9096
15	5783
25	2257
35	1351
45	4

50D 49° WITH NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	5.4
8	7.3
10	9.1
12	10.9
14	12.7
Illuminance at Center (fc)	
176	
99	
63	
44	
32	
WATTS: 40	LPW: 110.7
LUMENS: 4428	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	6329
5	6349
15	5222
25	3056
35	1562
45	45

# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## PHOTOMETRIC DATA

20LM		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance <sup>2</sup>		

**60D  
62° WITH NO LENS**

WATTS: 15.8	LPW: 126
LUMENS: 1990	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2276
5	2259
15	1998
25	1442
35	860
45	50

**75D  
76° WITH NO LENS**

WATTS: 15.8	LPW: 114.7
LUMENS: 1812	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1146
5	1140
15	1098
25	1017
35	853
45	252

45LM		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance <sup>2</sup>		

**60D  
62° WITH NO LENS**

WATTS: 40	LPW: 112.1
LUMENS: 4483	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	5126
5	5089
15	4500
25	3249
35	1936
45	112

**75D  
76° WITH NO LENS**

WATTS: 40	LPW: 102
LUMENS: 4081	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2582
5	2569
15	2473
25	2290
35	1922
45	567

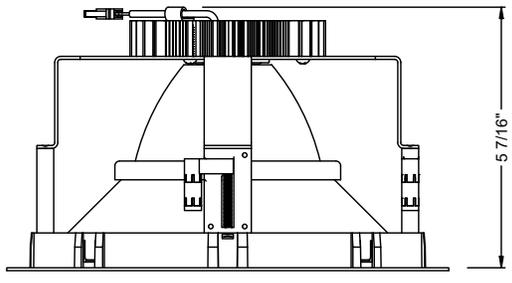
# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## MOUNTING OPTIONS

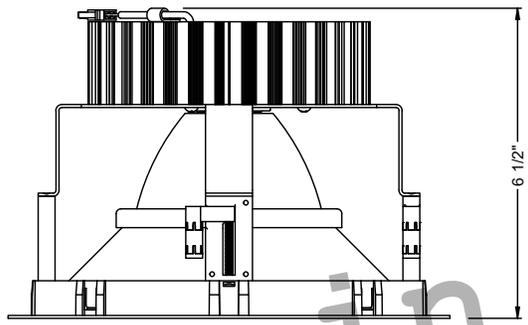
### FIXTURE HEIGHT

10LM-30LM LOW LUMEN



TRIMMED

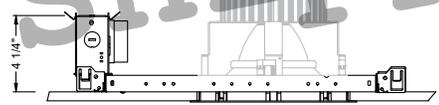
40-45LM HIGH LUMEN



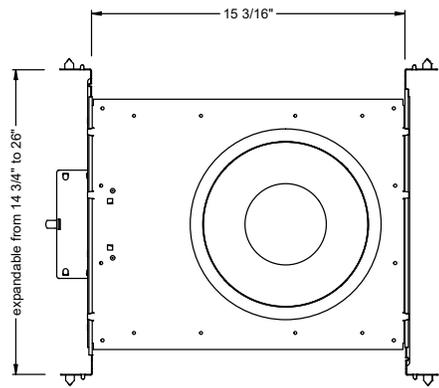
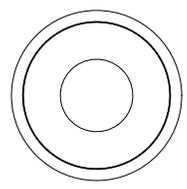
TRIMMED

### NC - NEW CONSTRUCTION

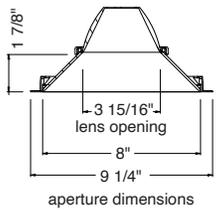
TRIM



TRIMMED (STANDARD)



ceiling cutout  
8-1/2" diameter  
ceiling thickness  
1/8" to 2"

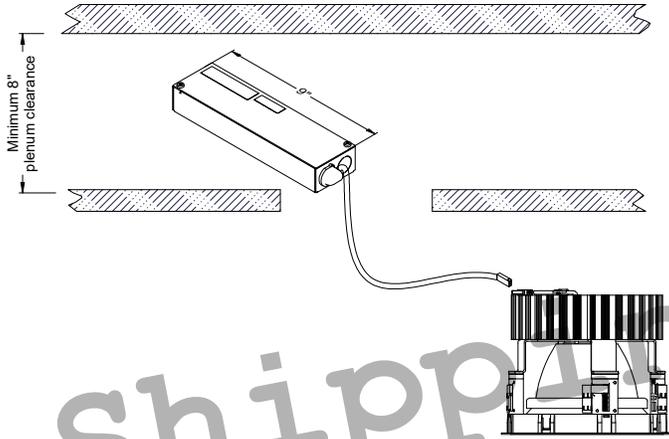


# alphabet

PROJECT INFORMATION		
JOB NAME	TYPE	
ORDERING CODE		

## MOUNTING OPTIONS (CONTINUED)

### RET - RETRO TRIM/TRIMLESS



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

FIXTURE TYPE	CEILING THICKNESS
	MOUNTING TYPE
TRIM	NC, RET
	STANDARD CEILING THICKNESS
	1/8" to 2"

Shipping in May

# alphabet

PROJECT INFORMATION		
JOB NAME	TYPE	
ORDERING CODE		

## LOW VOLTAGE OPTIONS

### 20° - 75° BEAM

(Note: Specifications are subject to change without notice)

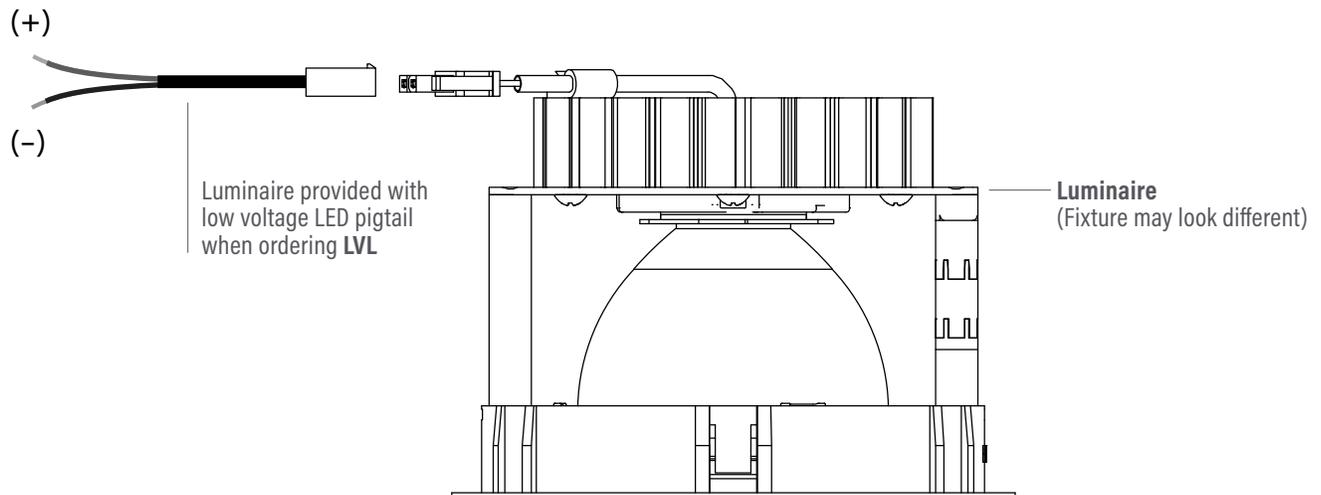
#### 14mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
10LM	1010LM @30K/80CRI	200mA	8W
15LM	1510LM @30K/80CRI	300mA	11W
20LM	1990LM @30K/80CRI	400mA	15W
25LM	2470LM @30K/80CRI	500mA	18W
30LM	2940LM @30K/80CRI	600mA	22W
35LM	3500LM @30K/80CRI	725mA	26W
40LM	4050LM @30K/80CRI	850mA	31W
45LM	4480LM @30K/80CRI	950mA	35W
10LM	860LM @30K/90CRI	200mA	8W
15LM	1280LM @30K/90CRI	300mA	11W
20LM	1690LM @30K/90CRI	400mA	15W
25LM	2100LM @30K/90CRI	500mA	18W
30LM	2490LM @30K/90CRI	600mA	22W
35LM	2970LM @30K/90CRI	725mA	26W
40LM	3440LM @30K/90CRI	850mA	31W
45LM	3810LM @30K/90CRI	950mA	35W

Shipping in May

## NOMINAL LED VOLTAGE: 36VDC

Customer to order CC Remote Driver separately or POE Node by others.



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 Luminares.

### REMOTE TEST SWITCH

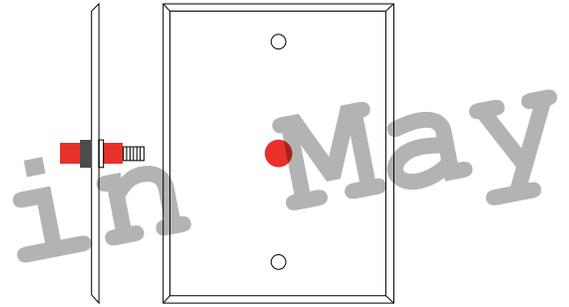
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

### 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.

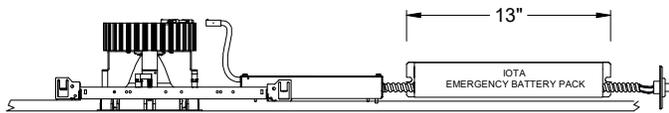


Remote Test Switch

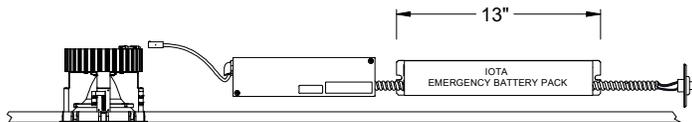
EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (30LM TO 1000LM)	786LM	1123LM	1347LM

Notes: Based on 30K, 80CRI

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

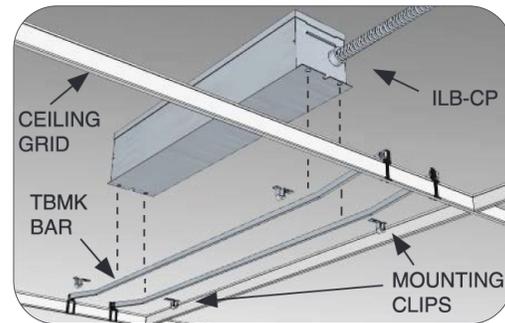


### RET - RETROFIT WITH EM BATTERY (REMOTE TEST SWITCH)



### Accessory

76066 Optional T-Grid Mounting Kit<sup>1</sup>



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