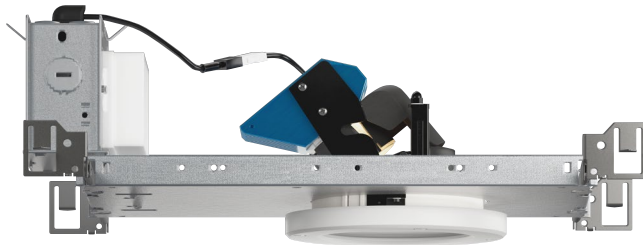


# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## NU4

### 4" Round Adjustable Tamper Resistant Standard White



20° - 55° BEAM (Note: Specifications are subject to change without notice)		
9mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	790LM @30K/80CRI	9W
15LM	1150LM @30K/80CRI	13W
20LM	1500LM @30K/80CRI	17W
25LM	1810LM @30K/80CRI	22W
30LM	2160LM @30K/80CRI	27W
35LM	2550LM @30K/80CRI	34W
40LM	2850LM @30K/80CRI	40W
10LM	660LM @30K/90CRI	9W
15LM	970LM @30K/90CRI	13W
20LM	1270LM @30K/90CRI	17W
25LM	1540LM @30K/90CRI	22W
30LM	1830LM @30K/90CRI	27W
35LM	2170LM @30K/90CRI	34W
40LM	2440LM @30K/90CRI	40W
Notes	Delivered lumens based on 35D optic with no lens, (see page 2)	

15° BEAM (Note: Specifications are subject to change without notice)		
6mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	780LM @30K/80CRI	11W
15LM	1070LM @30K/80CRI	19W
20LM	1400LM @30K/80CRI	31W
10LM	650LM @30K/90CRI	11W
15LM	920LM @30K/90CRI	19W
20LM	1170LM @30K/90CRI	31W
Notes	Delivered lumens based on 15D optic with no lens, (see page 2)	

9.5° BEAM (Note: Specifications are subject to change without notice)		
4.5mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	630LM @30K/80CRI	17.5W
10LM	530LM @30K/90CRI	17.5W
Notes	Delivered lumens based on 9D optic with SBL lens, (see page 2)	



#### FEATURES

- Designed to meet NYS-OMH rigorous requirements
- Spun aluminum frame with stainless steel tamper resistant screws
- Polycarbonate (3mm) shatter proof lensing
- Optical beam control 9.5° to 55°
- UGR <5
- Microban® antimicrobial finish available on all exposed painted surfaces

#### 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-lumen 2-Wire (Eco System) dimming to 0.1% and 1%
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi bluetooth dimming to 1.0%
- NLight control interface dimming to 0%

#### CONSTRUCTION

- Aluminum 6061 lensing frame
- 18-8 stainless steel tamper resistant screws
- Shatter resistant Polycarbonate (PC) lensing
- Electrocoated 16-gauge cold rolled steel construction
- Accommodates ceiling thickness from 3/8" to 1"

#### 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

#### LISTING

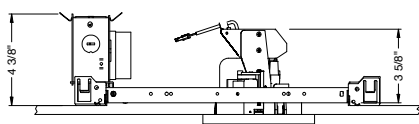
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations
- Non-conductive, dead-front construction (shower approved)
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- NYSOMH - New York State Office of Mental Health compliant
- 5 Year Limited warranty

#### ELECTRICAL

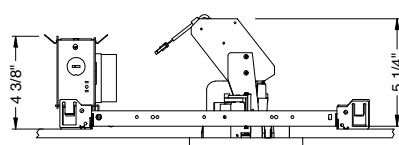
- 120V-277V, 120 only Triac / ELV
- Power factor ≥ 0.9
- 2kV driver input surge protection
- Remote emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

#### FIXTURE HEIGHT

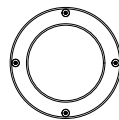
##### 10LM - 30LM LOW LUMENS



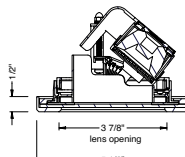
##### 40LM HIGH LUMENS



#### TAMPER RESISTANT



ceiling cutout  
4-3/8 diameter  
ceiling thickness  
3/8" to 1"



# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## 9°- 55° BEAM ORDERING CODE

<b>SERIES</b>	NU4	NU4									
<b>TYPE</b>	RATR	round adjustable tamper resistant									
<b>LED</b>	SW	standard white									
<b>DELIVERED LUMENS</b>	10LM	790 lm									
	15LM	1150 lm									
	20LM	1500 lm									
	25LM	1810 lm									
	30LM	2160 lm									
	35LM	2550 lm									
	40LM	2850 lm									
Standard Configuration: 3000K 80CRI 35D NL Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]											
<b>CCT</b>	27K	2700K	CCT	2700K	3000K	3500K	4000K				
	30K	3000K	CRI	80+	90+	80+	90+	80+	90+		
	35K	3500K	CCT MULTIPLIER FOR LUMEN OUTPUT	0.96	0.81	1.00	0.85	1.03	0.88	1.06	0.91
	40K	4000K									
<b>CRI</b>	80	80 CRI									
	90	90 CRI									
<b>OPTIC &amp; LM MULTIPLIER</b> SEE PAGE 3	9D	9.5 degrees	(0.80)								
	15D	15 degrees	(1.05)								
	20D	20 degrees	(0.93)								
	25D	25 degrees	(0.96)								
	35D	35 degrees	(1.00)								
	55D	55 degrees	(0.97)								
<b>TIR OPTIC ACCESSORY</b> SEE PAGE 3	NA	no accessory	(1.00)								
	HETA	high efficiency textured lens, similar to Solite™	(0.90)								
Attached to TIR optic, active											
<b>BEZEL LENS</b> SEE PAGE 3	CL	clear lens	(0.98)								
	DL	diffused lens	(0.91)								
	HET	high efficiency textured lens, similar to Solite™	(0.92)								
	SBL	smoothing beam lens	(0.92)								
	EA	elliptical lens	(0.90)								
<b>TRIM COLOR</b> SEE PAGE 3	BK	black									
	WH	white									
	MC	matte chrome									
	CC	custom color, consult factory for details									
Antimicrobial finish, add AM to black, white or matte chrome i.e. BKAM.											
Includes shatter proof lens and tamper resistant screws.											
<b>BEZEL COLOR</b> SEE PAGE 3	BK	black	(0.98)								
	WH	white	(1.00)								
	MC	matte chrome	(0.99)								
	CC	custom color, consult factory for details									
Antimicrobial finish, add AM to black, white or matte chrome i.e. BKAM.											

## 9°- 55° BEAM ORDERING CODE

<b>MOUNTING OPTIONS</b> SEE PAGE 6	NC	new construction with ceiling fitting plate
<b>VOLTAGE</b>	120	120V
	UNV	120V-277V
<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%
	DMXZ	DMX dim to zero
	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
	LUT	Lutron Hi-lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black
	LUTP <sup>1</sup>	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black
ELV1 <sup>2</sup>	leading & trailing edge (Triac/ELV) dimming to 1%	
NLT	nLight control interface: standard Cat-5/RJ45 connection (female), dim to off	
CAS	Casambi Bluetooth control with flicker free 1% dimming	
<b>ELECTRICAL OPTIONS</b>	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

## 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>NU4 - RATR - SW - 20LM - 35K - 90 - 35D - NA - HET - WH - NC - UNV - DIM10 - EM7</b>

## NOTES

- 9D available in 10LM.
- 15D available in 10LM/15LM/20LM. Not available with DL lens.
- Elliptical lens not available with 9D/15D optics. Actual beam distributions [20D= 35° x 60°, 25D= 40° x 65°, 35D= 45° x 70°, 55D= 55° x 80°]
- LUTP not available in 15D/20LM or 25LM/30LM/35LM/40LM.
- ELV1 (120V) not available in 10LM with 20D/25D/35D/55D optics.

<sup>1</sup> 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 COLORS

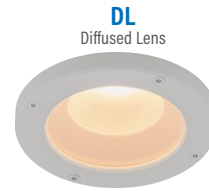


## OPTICAL OPTIONS

- 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.



OPTIC	BEAM ANGLE	UGR
15D	13.7	≤5
20D	20.1	≤5
25D	25.5	≤5
35D	34.4	7.5
55D	52.9	14



OPTIC	BEAM ANGLE	UGR
20D	38.3	15.7
25D	41.5	17.2
35D	45	18.2
55D	57.8	20.9



OPTIC	BEAM ANGLE	UGR
20D	24.9	≤5
25D	28.7	8.8
35D	34	9.9
55D	51.6	15.7



OPTIC	BEAM ANGLE	UGR
9D*	9.5	8.2
15D	17	≤5
20D	21	≤5
25D	26.5	6.3
35D	33.3	8.1
55D	52.8	14.8

\* UGR Calculation based on 10LM for 9D.

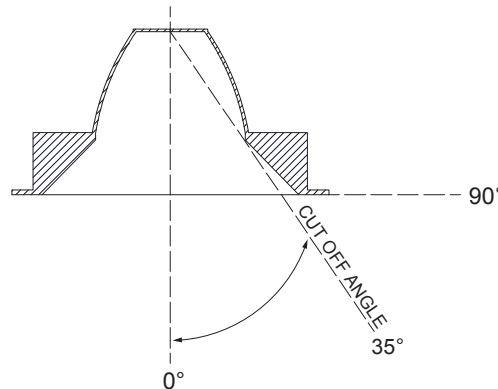
## GLARE CONTROL

### 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 CL is 35 degrees;



# alphabet

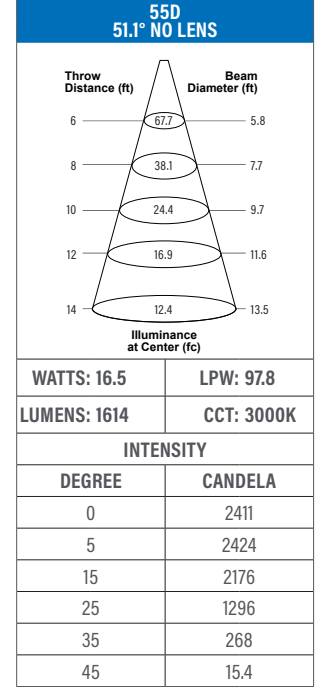
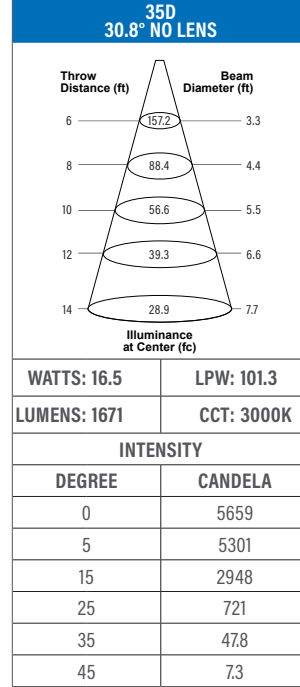
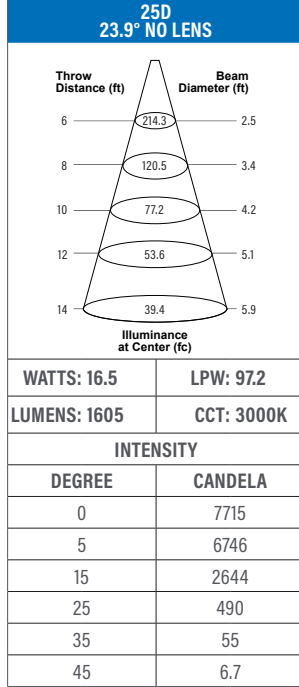
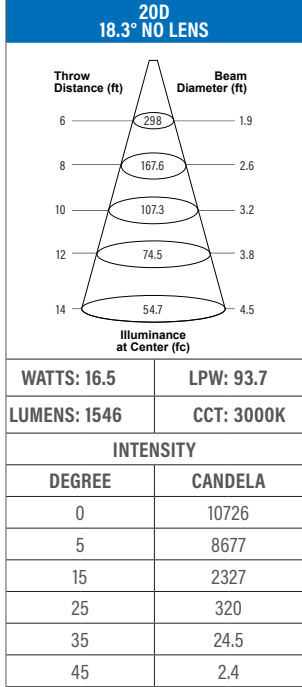
PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## PHOTOMETRIC DATA

### 20LM CCT MULTIPLIERS

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

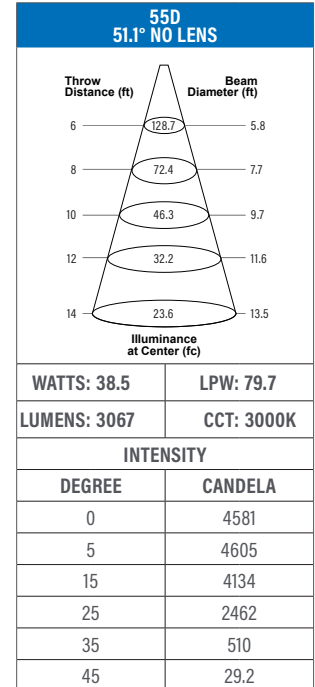
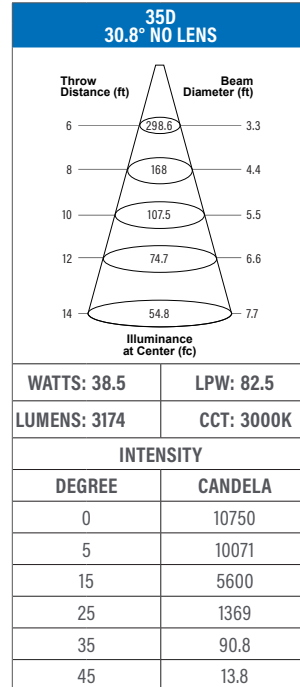
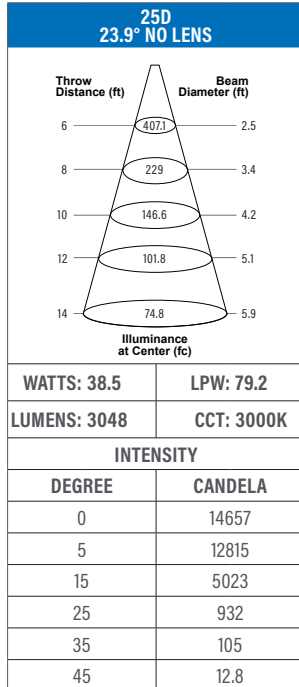
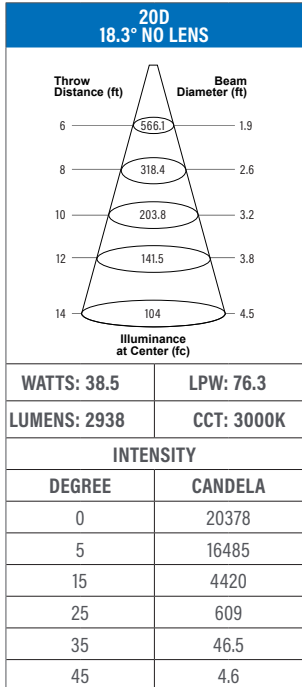
FC Formula = CBCP / Distance<sup>2</sup>



### 40LM CCT MULTIPLIERS

	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>



# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## PHOTOMETRIC DATA (CONTINUED)

10LM CCT MULTIPLIERS		
	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>		

15D 13.5° NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	299
8	168
10	108
12	75
14	55
Illuminance at Center (fc)	
WATTS: 11.5	LPW: 75.4
LUMENS: 868	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	10779
5	7316
15	942
25	53.6
35	6.2
45	0.7

9D 9.5° SMOOTHING BEAM LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	389
8	219
10	140
12	97
14	71
Illuminance at Center (fc)	
WATTS: 17.1	LPW: 40.4
LUMENS: 692	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	14002
5	6549
15	392
25	146
35	53.2
45	15.8

20LM CCT MULTIPLIERS		
	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>		

15D 13.5° NO LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	535
8	301
10	192
12	134
14	98.2
Illuminance at Center (fc)	
WATTS: 30.5	LPW: 50.8
LUMENS: 1549	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	19249
5	13063
15	1682
25	95.6
35	11
45	1.3

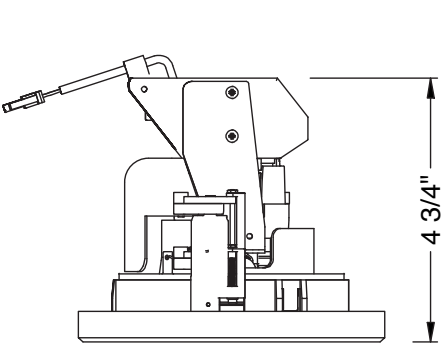
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PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

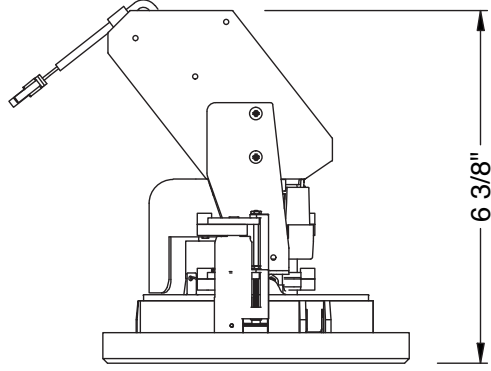
## MOUNTING OPTIONS

### FIXTURE HEIGHT

10LM - 30LM CONFIGURATIONS

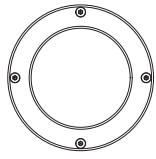
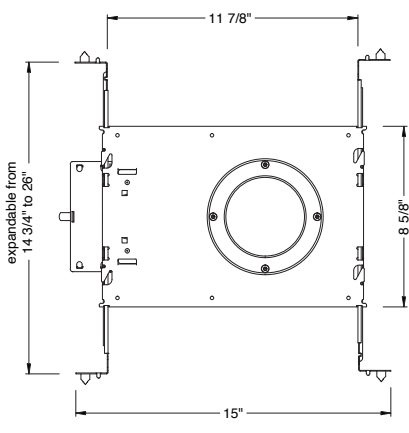
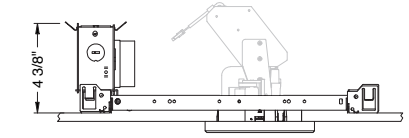


40LM CONFIGURATIONS

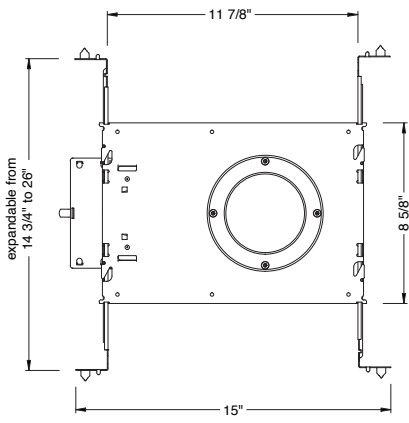
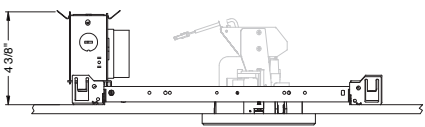
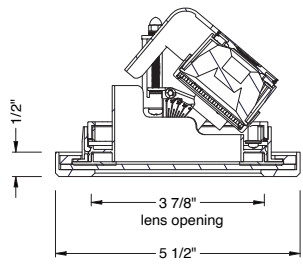


### NC - NEW CONSTRUCTION

TAMPER RESISTANT



ceiling cutout  
4-3/8 diameter  
ceiling thickness  
3/8" to 1"



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

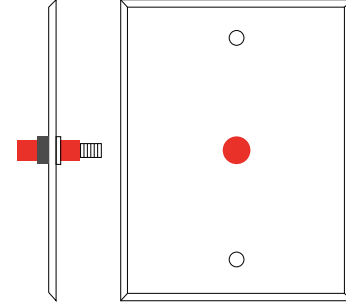
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

### EMERGENCY BATTERY ACCESS

Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery is required.

### 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 (10LM TO 40LM)	880LM	1280LM	1480LM
Notes: Based on 30K, 80CRI			

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

