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NU6

6" Round High Performance Downlight
Standard White

NSF | AT airtight | DF dead-front | wet rated
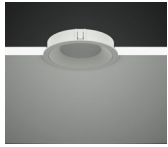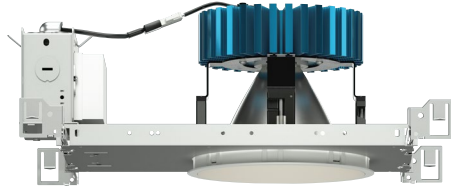
Trim

25° - 75° BEAM
(Note: Specifications are subject to change without notice)

29mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
50LM	4043LM @30K/80CRI	34W
60LM	5260LM @30K/80CRI	42W
70LM	6190LM @30K/80CRI	50W
80LM	7500LM @30K/80CRI	58W
90LM	8845LM @30K/80CRI	67W
100LM	9930LM @30K/80CRI	74W
50LM	3436LM @30K/90CRI	34W
60LM	4470LM @30K/90CRI	42W
70LM	5262LM @30K/90CRI	50W
80LM	6375LM @30K/90CRI	58W
90LM	7518LM @30K/90CRI	67W
100LM	8441LM @30K/90CRI	74W
Notes	Delivered lumens based on 40D optic with No lens, (see page 2)	

eldoLED your product | our drive   CASAMBI

FEATURES

- Up to 10000LM delivered
- Thermally optimized for sustained efficacy and performance
- UGR <16
- 25° - 75° optical beam control
- Multiple mounting, glare control options, trims, and finishes available

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 0.1%
- Casambi bluetooth dimming to 1%

CONSTRUCTION

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

LED

- Bridgelux BXRC:
  80 CRI: SDCM = 3-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 50,000 hrs
- Bridgelux BXRC:
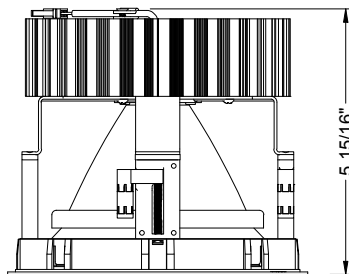 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 50,000 hrs

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
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty
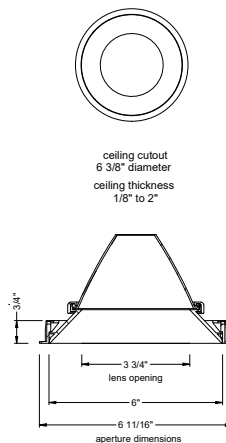
ELECTRICAL

- 120V-277V
- Power factory ≥ 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

5 15/16"

TRIMMED

ceiling cutout
6 3/8" diameter
ceiling thickness
1/8" to 2"

3/4"

3 3/4"
lens opening

6"

6 11/16"
aperture dimensions

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25°- 75° BEAM ORDERING CODE

SERIES	NU6	NU6
TYPE	RDX	round downlight high lumen
LED	SW	standard white

DELIVERED LUMENS	50LM	4043 lm
	60LM	5260 lm
	70LM	6190 lm
	80LM	7500 lm
	90LM	8845 lm
	100LM[1]	9930 lm

Standard Configuration: 3000K 80CRI 40D

Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]

CCT	27K	2700K								
	30K	3000K	CCT		2700K		3000K		3500K		4000K	
	35K	3500K	CRI		80+	90+	80+	90+	80+	90+	80+	90+
	40K	4000K	CCT MULTIPLIER FOR LUMEN OUTPUT		0.96	0.81	1.00	0.85	1.03	0.88	1.06	0.91

CRI	80	80 CRI
	90	90 CRI

OPTIC & LM MULTIPLIER SEE PAGE 3	25D	25 degrees
	30D	30 degrees
	40D	40 degrees
	70D	70 degrees

BEZEL LENS SEE PAGE 3	NL[2]	no lens
	CL	clear lens
	DL	diffused lens
	HET	high efficiency textured lens, similar to Solite™
	SBL	smoothing beam lens
	E[3]	elliptical lens

TRIM COLOR SEE PAGE 3	BK	black	
	WH	white	
	MC	matte chrome	
	BZ	bronze	
	WT	wheat	

BEZEL COLOR SEE PAGE 3	BK	black	(0.98)
	WH	white	(1.00)
	MC	matte chrome	(0.99)
	BZ	bronze	(0.98)
	WT	wheat	(0.99)

25°- 75° BEAM ORDERING CODE

MOUNTING OPTIONS SEE PAGE 5, 6	NC	new construction with ceiling fitting plate
	RET	retrofit, no ceiling fitting plate
VOLTAGE	UNV	120V-277V

DIMMING	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%
	DMX-RJ45	DMX control dimming to 0.1% with RJ45 connection
	DMX-WL	DMX control dimming to 0.1% with wire lead connection
	DMX-XLR	DMX control dimming to 0.1% with XLR 5pin connection
	CAS	Casambi Bluetooth control with flicker free 1% dimming

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

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:

NU6 - RDX - SW - 100LM - 30K - 90 - 40D - SBL - WH - WH - NC - UNV - DIM10 - EM7

NOTES

1. Lens options not available in 100LM

2. NL option does not meet requirement for AT/DF/WET/NSF listing.

3. Elliptical lens not available with 70D optic. Actual beam distributions for optic (25D= 35° x 60°, 30D= 45° x 65°, 40D= 40° x 70°).

* EldoLED uses logarithmic dimming curve as standard. For linear add **LIN** after dimming code, i.e. **DIM10LIN**.

* DMX uses logarithmic dimming curve as standard. For linear or square add **LIN** or **SQU** after dimming code, i.e. **DMXSQU-RJ45**.

* Ambient temperature = 40C max. For higher temperatures consult factory.

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TRIM OPTIONS

TRIM/BEZEL COLORS

Trim
Bezel Lens
Bezel

WH   **MC**   **BK**   **BZ**   **WT**

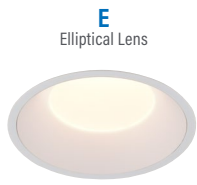## OPTICAL OPTIONS

▪ UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
▪ UGR calculation based on 45LM fixtures, unless otherwise noted.

E
Elliptical Lens

OPTIC	BEAM ANGLE	UGR
25D	46x74	24.1
30D	50x77	24.3
40D	52x79	24.6
70D	78x97	26.7

NL
No Lens

OPTIC	BEAM ANGLE	UGR
25D	25	15.4
30D	32	15.8
40D	39	15.6
70D	71	23.6

CL
Clear Lens

OPTIC	BEAM ANGLE	UGR
25D	25	16.3
30D	32	15.1
40D	39	15.4
70D	70	23.7

DL
Diffused Lens

OPTIC	BEAM ANGLE	UGR
25D	46.2	21.3
30D	49.6	21.3
40D	51.7	21.4
70D	77.8	25.3

HET
High Efficiency Textured Lens

OPTIC	BEAM ANGLE	UGR
25D	31	16.6
30D	36	16.3
40D	41	16.8
70D	70	23.7

SBL
Smoothing Beam Lens

| OPTIC	BEAM ANGLE	UGR
25D	26.9	15
30D	33	15.5
40D	40	15.9
70D	71	23.7

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.
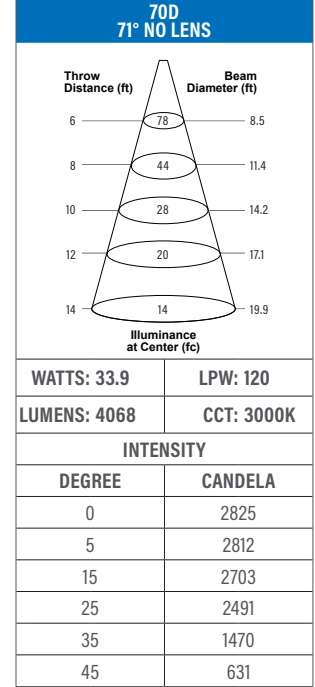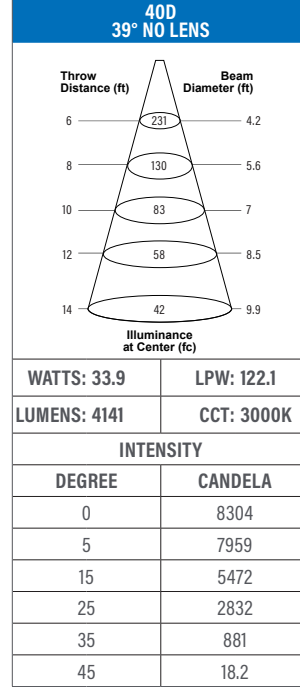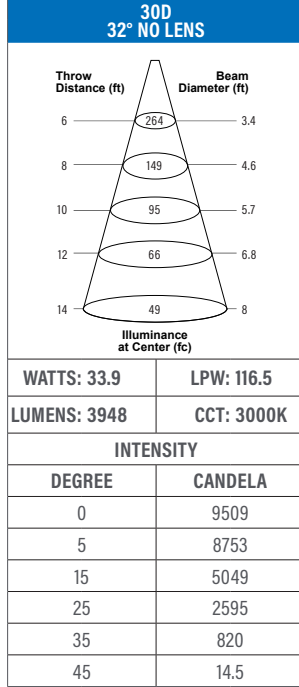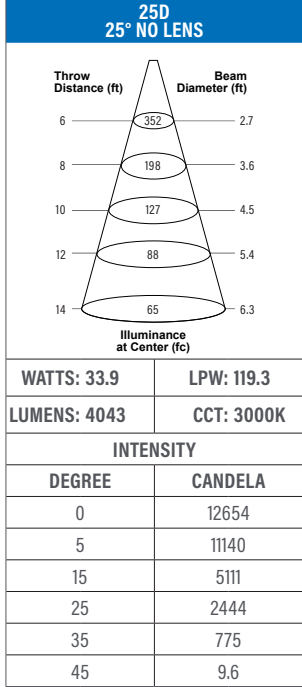
▪ Cutoff angle of NL and CL is 33.8 degrees;

90°

CUT OFF ANGLE

33.8°

0°

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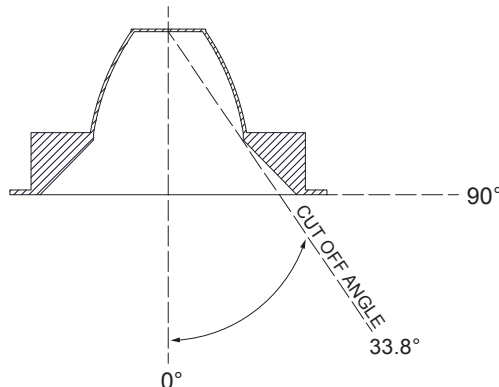
PHOTOMETRIC DATA

50LM CCT MULTIPLIERS

	80 CRI	90CRI
2700K	0.94	0.8
3000K	1	0.85
3500K	1.02	0.87
4000K	1.03	0.88

FC Formula = CBCP / Distance^2

25D — 25° NO LENS

Throw Distance (ft) / Beam Diameter (ft)

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	352	2.7
8	198	3.6
10	127	4.5
12	88	5.4
14	65	6.3

Illuminance at Center (fc)

WATTS: 33.9	LPW: 119.3
LUMENS: 4043	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	12654
5	11140
15	5111
25	2444
35	775
45	9.6

30D — 32° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	264	3.4
8	149	4.6
10	95	5.7
12	66	6.8
14	49	8

Illuminance at Center (fc)

WATTS: 33.9	LPW: 116.5
LUMENS: 3948	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	9509
5	8753
15	5049
25	2595
35	820
45	14.5

40D — 39° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	231	4.2
8	130	5.6
10	83	7
12	58	8.5
14	42	9.9

Illuminance at Center (fc)

WATTS: 33.9	LPW: 122.1
LUMENS: 4141	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	8304
5	7959
15	5472
25	2832
35	881
45	18.2

70D — 71° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	78	8.5
8	44	11.4
10	28	14.2
12	20	17.1
14	14	19.9

Illuminance at Center (fc)

WATTS: 33.9	LPW: 120
LUMENS: 4068	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	2825
5	2812
15	2703
25	2491
35	1470
45	631

100LM CCT MULTIPLIERS

	80 CRI	90CRI
2700K	0.94	0.8
3000K	1	0.85
3500K	1.02	0.87
4000K	1.03	0.88

FC Formula = CBCP / Distance^2

25D — 25° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	691	2.7
8	389	3.6
10	249	4.5
12	173	5.4
14	127	6.3

Illuminance at Center (fc)

WATTS: 75	LPW: 105.9
LUMENS: 7945	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	24867
5	21892
15	10044
25	4803
35	1524
45	18.9

30D — 32° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	519	3.4
8	292	4.6
10	187	5.7
12	130	6.8
14	95	8

Illuminance at Center (fc)

WATTS: 75	LPW: 103.5
LUMENS: 7759	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	18687
5	17201
15	9922
25	5099
35	1612
45	28.5

40D — 39° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	453	4.2
8	255	5.6
10	163	7
12	113	8.5
14	83	9.9

Illuminance at Center (fc)

WATTS: 75	LPW: 108.5
LUMENS: 8137	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	16318
5	15640
15	10754
25	5565
35	1731
45	35.8

70D — 71° NO LENS

Throw Distance (ft)	Illuminance	Beam Diameter (ft)
6	154	8.5
8	87	11.4
10	56	14.2
12	39	17.1
14	28	19.9

Illuminance at Center (fc)

WATTS: 75	LPW: 106.6
LUMENS: 7994	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	5552
5	5526
15	5313
25	4896
35	2890
45	1240

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MOUNTING OPTIONS

FIXTURE HEIGHT
LED LIGHT ENGINE: 50LM-100LM
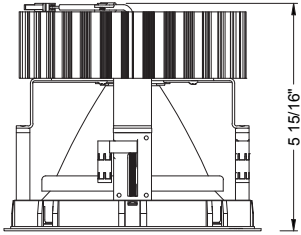
5 15/16"

NC - NEW CONSTRUCTION

TRIM
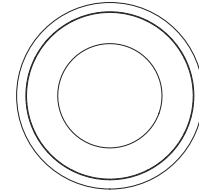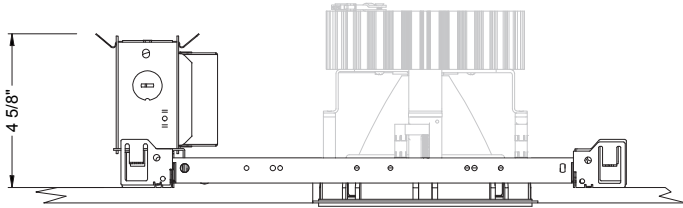
4 5/8"

11 7/8"

expandable from 14 7/8" to 26"

8 5/8"

15"

ceiling cutout
6 3/8" diameter

ceiling thickness
1/8" to 2"

3/4"

3 3/4"
lens opening

6"

6 11/16"
aperture dimensions

RET - RETRO
TRIM/TRIMLESS

Plenum Clearance (H)

LED Light Engine	Plenum Clearance (H)
50LM-100LM	H= 7"
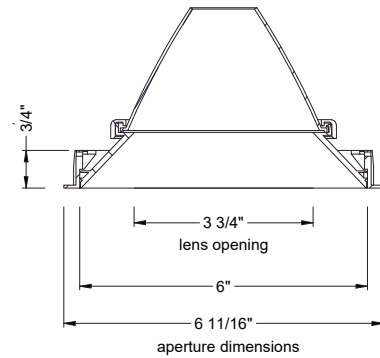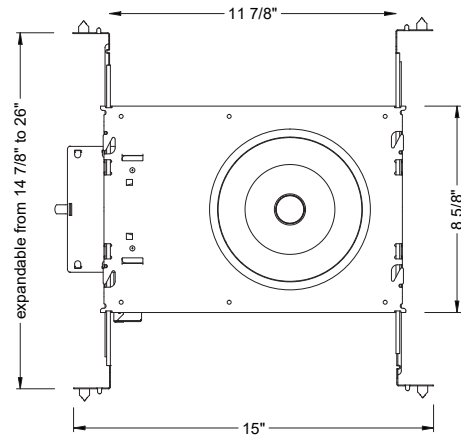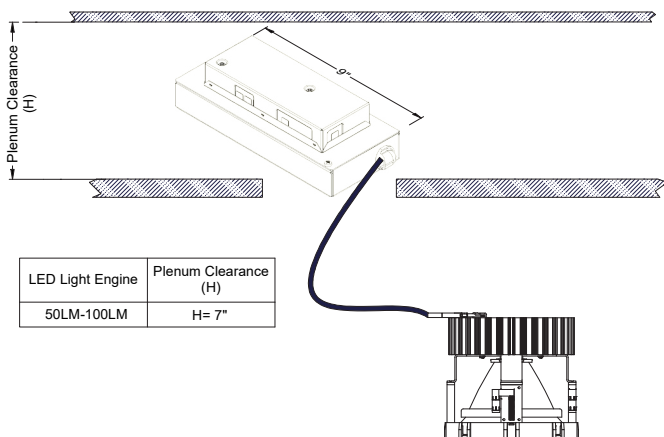
RATINGS / CERTIFICATIONS	NC	RET
TYPE NON-IC	✔	✔
SUITABLE FOR AIR HANDLING PLENUMS		
REDUCED AIRFLOW (WITH LENS) ASTM E283	✔	✔

CEILING THICKNESS		
	MOUNTING TYPE	
FIXTURE TYPE	NC, RET	
	NC, RET	
TRIM	1/8" to 1-5/8"	

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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.
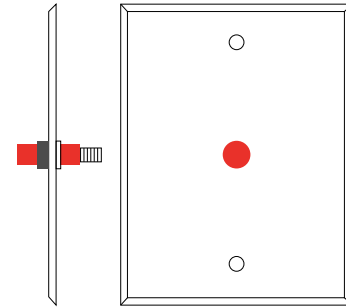
REMOTE TEST SWITCH

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.
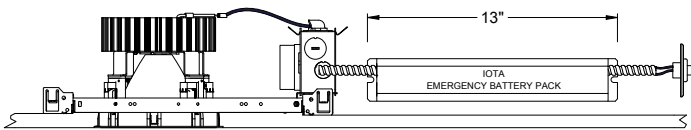
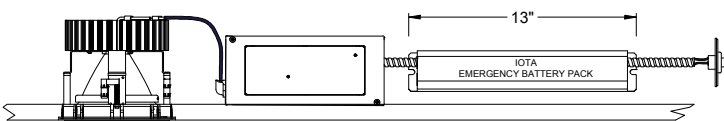

Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (50LM TO 1000LM)	900LM	1200LM	1500LM
Notes: Based on 30K, 80CRI			

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

13"

IOTA EMERGENCY BATTERY PACK

RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)

13"

IOTA EMERGENCY BATTERY PACK

Accessory
76066 Optional T-Grid Mounting Kit[1]

CEILING GRID

TBMK BAR

ILB-CP

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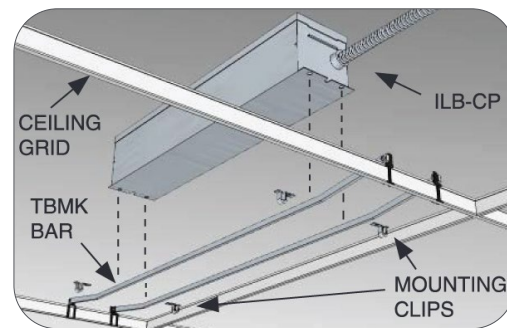
1. Can be used with any of the Emergency Battery Backups. Must be ordered as a separate line item.

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