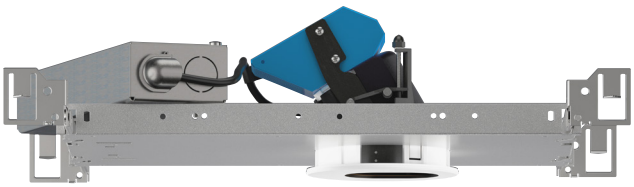
alphabet

NU1

1" Round Adjustable Pinhole Standard White

PR
plenum rated





Trim

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

20° - 50° BEAM
(Note: Specifications are subject to change without notice)

9mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	760LM @30K/80CRI	9W
15LM	1110LM @30K/80CRI	13W
20LM	1440LM @30K/80CRI	17W
25LM	1740LM @30K/80CRI	22W
30LM	2090LM @30K/80CRI	27W
35LM	2490LM @30K/80CRI	34W
40LM	2780LM @30K/80CRI	40W
10LM	650LM @30K/90CRI	9W
15LM	950LM @30K/90CRI	13W
20LM	1230LM @30K/90CRI	17W
25LM	1480LM @30K/90CRI	22W
30LM	1780LM @30K/90CRI	27W
35LM	2120LM @30K/90CRI	34W
40LM	2370LM @30K/90CRI	40W
Notes	Delivered lumens based on 30D 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	680LM @30K/80CRI	11W
15LM	980LM @30K/80CRI	19W
10LM	580LM @30K/90CRI	11W
15LM	840LM @30K/90CRI	19W
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 no lens, (see page 2)	

FEATURES
- True 30° Tilt with <5% beam disruption (clipping)
- Zero ceiling line obstruction at Full Tilt
- Concentric Tilt Tracking ensures minimal light loss
- 9° - 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% and 1%
- eldoLED flicker free DALI dimming to 0% and 1%
- Lutron Hi-lumen 2-Wire (Triac and Eco System) dimming to 0.1%
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi dimming to 0.1%
- NLight control interface dimming to 0%

CONSTRUCTION
- Lexan™ (PC) Optimal connectivity for wireless control signal.
- Impact and chemical resistant at the highest level.
- Withstands temperatures up to 240°F.
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 0.2" to 1.25"

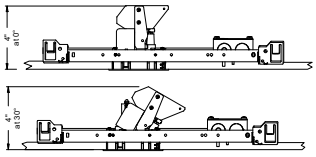
LED
- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs
- 80 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs

LISTING
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- Suitable for dry and damp locations
- Made in the USA - meets the requirements of the Buy American provision within the ARRA
- 5 Year Limited warranty

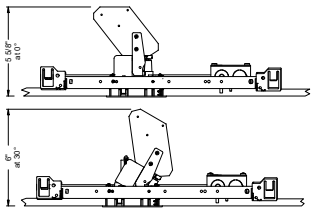
ELECTRICAL
- 120V-277V, 120 only Triac / ELV
- Power factor ≥ 0.9
- 2kV driver input surge protection
- Remote emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

FIXTURE HEIGHT

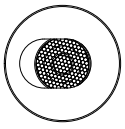
LED LIGHT ENGINE: 1000LM - 3000LM



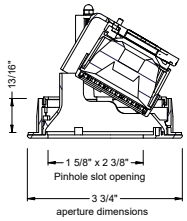
LED LIGHT ENGINE: 3500LM - 4000LM



TRIMMED



ceiling cutout
3-3/8" diameter
ceiling thickness
0.2" to 1.25"



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In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

9°- 50° BEAM ORDERING CODE

SERIES	**NU1**	NU1
TYPE	**RAPH**	round adjustable, pinhole
LED	**SW**	standard white
DELIVERED LUMENS	**10LM**	760 lm
	15LM	1110 lm
	20LM	1440 lm
	25LM	1740 lm
	30LM	2090 lm
	35LM[1]	2490 lm
	40LM[1]	2780 lm
	Standard Configuration: 3000K 80CRI 30D NL **Calculated Delivered Lumens** = [Delivered Lumen Value] x [CCT Multiplier] x [Optic Multiplier] x [Lens Multiplier]	
CCT	**27K**	2700K
	30K	3000K
	35K	3500K
	40K	4000K

CCT	2700K		3000K		3500K		4000K	
CRI	80+	90+	80+	90+	80+	90+	80+	90+
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	**9D**[2]	9.5 degrees	(0.70)
	15D[3]	15 degrees	(0.80)
	20D	20 degrees	(0.76)
	25D	25 degrees	(0.87)
	30D	30 degrees	(1.00)
	50D	50 degrees	(0.98)
TIR OPTIC ACCESSORY SEE PAGE 3	**NA**	no accessory	(1.00)
	HCL	honeycomb louver	(0.72)
	DL	diffused lens	(0.75)
	HETA	high efficiency textured lens, similar to Solite™	(0.89)
	SBL	smoothing beam lens	(0.93)
	Attached to TIR optic, active		
TRIM COLOR SEE PAGE 3	**BK**	black, with black optical cavity	
	WH	white, with black optical cavity	

9°- 50° BEAM ORDERING CODE

MOUNTING OPTIONS SEE PAGE 6, 7	**NC**	new construction with ceiling fitting plate
	IC[4]	insulation contact housing
	ICAT[4]	insulation contact/airtight housing
	CP[4]	chicago plenum housing
	RET	retrofit, no ceiling fitting plate
VOLTAGE	**120**	120V
	UNV	120V-277V
DIMMING	**DIM10**[5]	eldoLED flicker free 0-10V dimming to 1%
	DIM10Z[6]	eldoLED flicker free 0-10V dimming to 0%
	DALI[6]	eldoLED flicker free DALI-2 dimming to 1%
	DALIZ[6]	eldoLED flicker free DALI-2 dimming to 0%
	LUTP[7]	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black
	ELV1[8]	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
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:

NU1 - RAPH - SW - 20LM - 35K - 90 - 30D - HCL - WH - NC - UNV - DIM10 - EM7

NOTES

1. 35LM/40LM available with ELV1/DIM10 dimming.
2. 9D available in 10LM. Only available with NL/SBL lens.
3. 15D available in 10LM/15LM. Not available with DL lens.
4. IC/ICAT/CP not available in 9D/10LM or 30LM/35LM/40LM.
5. DIM10 code uses ERP 1% Driver for 35LM/40LM.
6. 35LM/40LM not available.
7. LUTP not available in 25LM/30LM/35LM/40LM.
8. ELV1 (120V input) not available in 10LM with 20D/25D/35D/55D optics.

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

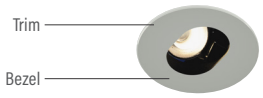
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PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM/BEZEL COLORS



WH



BK

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
15D	13	≤5
20D	17	≤5
25D	22	≤5
30D	28	≤5
50D	43	11.5

TIR OPTIC ACCESSORY
DL



OPTIC	BEAM ANGLE	UGR
15D	30	9.6
20D	31	10.2
25D	35	13.8
30D	39	15.4
50D	51	18.6

TIR OPTIC ACCESSORY
HET



OPTIC	BEAM ANGLE	UGR
15D	17	≤5
20D	20	≤5
25D	25	7.4
30D	31	7.8
50D	51	15.8

NA
No Accessory



OPTIC	BEAM ANGLE	UGR
9D*	9.7	≤5
15D	13	≤5
20D	17	≤5
25D	23	≤5
30D	30	≤5
50D	52	15.6

* UGR Calculation based on 10LM for 9D.

TIR OPTIC ACCESSORY
SBL



OPTIC	BEAM ANGLE	UGR
15D	14	≤5
20D	18	≤5
25D	24	≤5
30D	30	≤5
50D	52	15.5

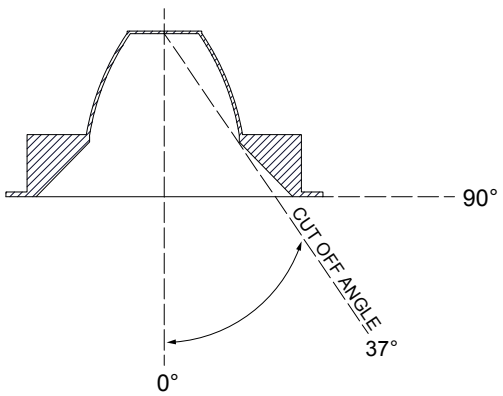
GLARE CONTROL

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 37 degrees;



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alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

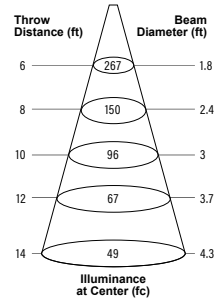
PHOTOMETRIC DATA

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^2

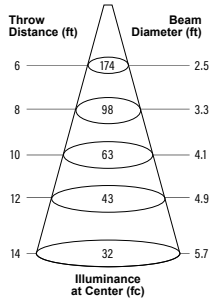
20D 17° NO LENS



WATTS: 16.5	LPW: 66.3
LUMENS: 1095	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	9595
5	7609
15	1471
25	100
35	7
45	2

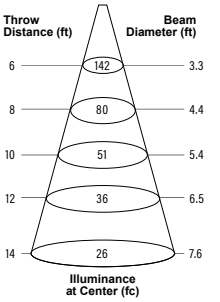
25D 23° NO LENS



WATTS: 16.5	LPW: 76.1
LUMENS: 1255	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	6263
5	5420
15	2081
25	392
35	25
45	3

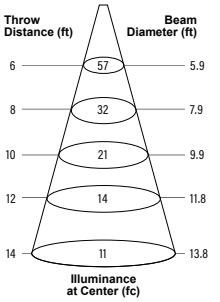
30D 30° NO LENS



WATTS: 16.5	LPW: 87.1
LUMENS: 1438	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	5123
5	4766
15	2620
25	570
35	26
45	4

50D 52° NO LENS



WATTS: 16.5	LPW: 84.9
LUMENS: 1401	CCT: 3000K

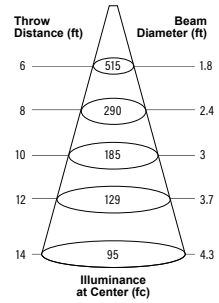
INTENSITY	
DEGREE	CANDELA
0	2037
5	2026
15	1888
25	1124
35	245
45	10

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^2

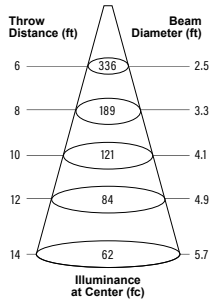
20D 17° NO LENS



WATTS: 38.5	LPW: 54.9
LUMENS: 2114	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	18534
5	14698
15	2841
25	193
35	13.5
45	3

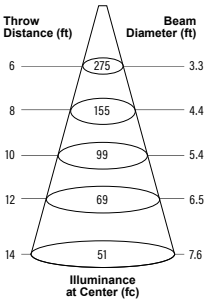
23° NO LENS THROW DISTANCE



WATTS: 38.5	LPW: 63
LUMENS: 2424	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	12099
5	10469
15	4019
25	757
35	49
45	5

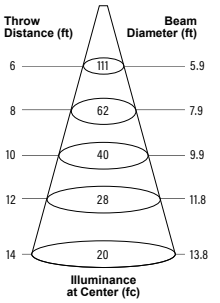
30D 30° NO LENS



WATTS: 38.5	LPW: 72.1
LUMENS: 2778	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	9896
5	9206
15	5060
25	1101
35	50
45	7

50D 52° NO LENS



WATTS: 38.5	LPW: 70.3
LUMENS: 2707	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	3934
5	3913
15	3646
25	2172
35	473
45	20

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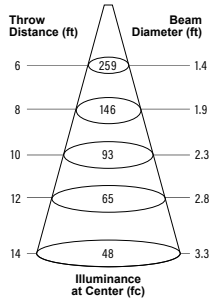
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PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

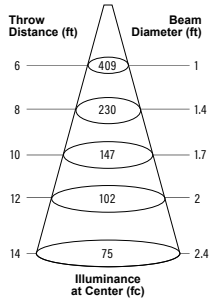
10LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance^2		

15D 13° NO LENS



WATTS: 11.2	LPW: 59.9
LUMENS: 671	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	9318
5	6258
15	598
25	28
35	2
45	1

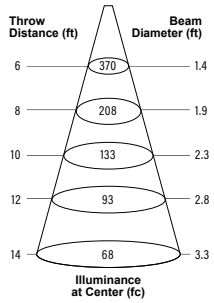
9D 9.7° NO LENS



WATTS: 17.4	LPW: 36.1
LUMENS: 628	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	14721
5	7077
15	323
25	54
35	15
45	1

15LM 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^2		

15D 13° NO LENS



WATTS: 17.4	LPW: 55.1
LUMENS: 959	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	13322
5	8947
15	854
25	40
35	3
45	1

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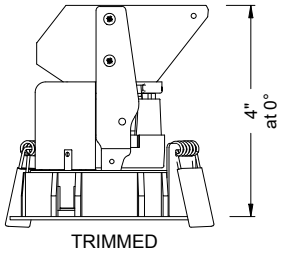
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PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

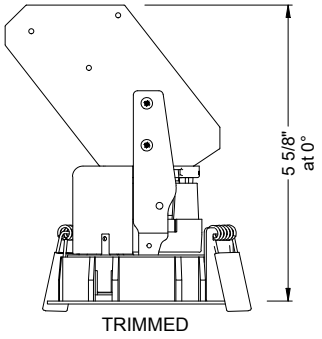
MOUNTING OPTIONS

FIXTURE HEIGHT

LED LIGHT ENGINE: 1000LM - 3000LM

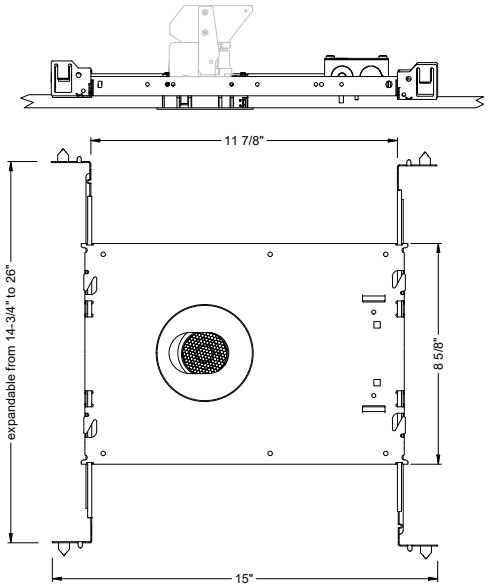


LED LIGHT ENGINE: 3500LM - 4000LM

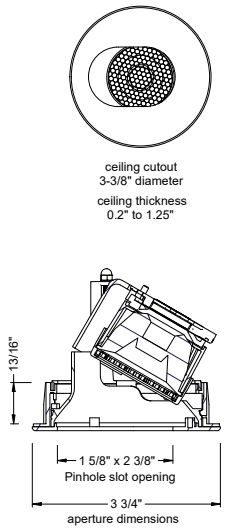


NC - NEW CONSTRUCTION

TRIM

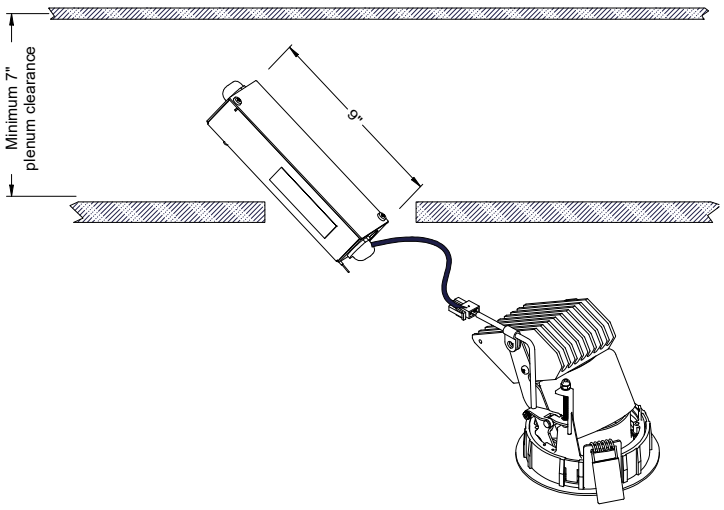


TRIM



RET - RETRO

TRIM/TRIMLESS



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In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

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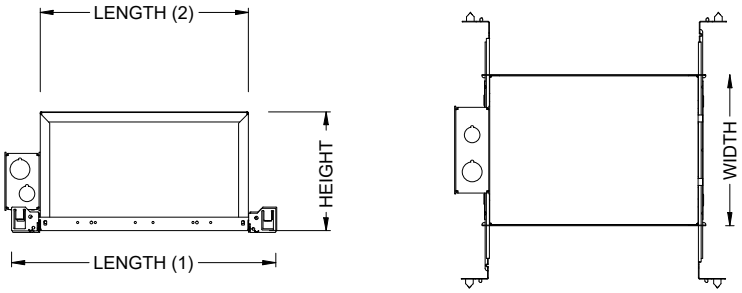
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

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
	STANDARD CEILING THICKNESS
TRIM	0.2" to 1.25"

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 BEAM (9°)					
LUMEN OUTPUT	BOX - A			BOX - B	BOX -C
	CP	IC	ICAT	IC	ICAT
10LM					

BOX TYPE / LUMEN OUTPUT - NARROW BEAM (15°)					
LUMEN OUTPUT	BOX - A			BOX - B	BOX -C
	CP	IC	ICAT	IC	ICAT
10LM	✔	✔	✔		
15LM	✔	✔	✔		

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS (20° - 55°)					
LUMEN OUTPUT	BOX - A			BOX - B	BOX -C
	CP	IC	ICAT	IC	ICAT
10LM	✔	✔	✔		
15LM	✔	✔	✔		
20LM	✔	✔	✔		
25LM	✔	✔	✔		
30LM					
35LM					
40LM					

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alphabet

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.

INTEGRAL AND REMOTE TEST SWITCH

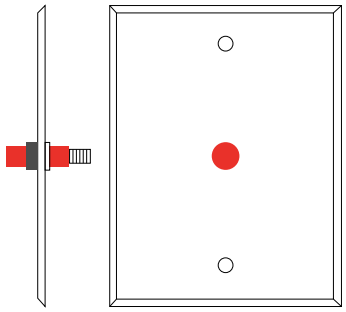
The LED Fixture may be offered with the option for an Integral Test Switch, which is mounted in the Trim/Bezel and pre-wired to the Emergency Circuitry. The Remote Test Switch comes as a standard option, and may be mounted adjacent to the LED Fixture by others.

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

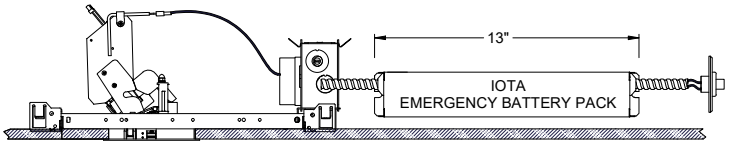
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.



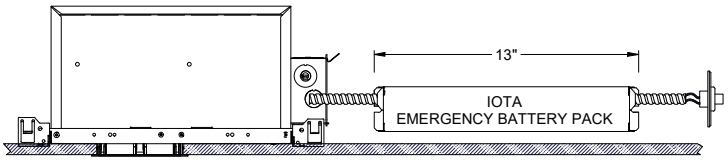
Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (10LM TO 30LM)	750LM	1080LM	1210LM
Notes: Based on 30K, 80CRI			

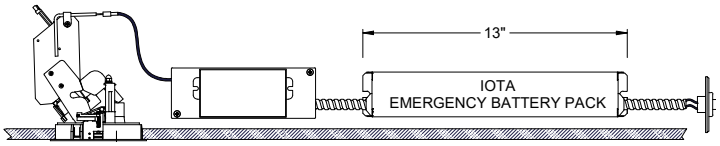
NC - NEW CONSTRUCTION
WITH EM BATTERY (REMOTE TEST SWITCH)



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

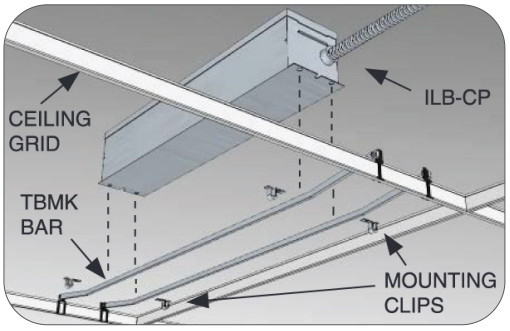


RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



Accessory

76066 Optional T-Grid Mounting Kit[2]



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

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In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.