

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

NU4 LOPRO

4" Round Adjustable Standard White



AT  
airtight

DF  
dead-front

PR  
plenum rated

wet rated



Trim



Trimless



Trimless Millwork

20° - 55° BEAM		
(Note: Specifications are subject to change without notice)		
9mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	880LM @30K/80CRI	9W
15LM	1280LM @30K/80CRI	13W
20LM	1670LM @30K/80CRI	17W
25LM	2020LM @30K/80CRI	22W
30LM	2410LM @30K/80CRI	27W
10LM	740LM @30K/90CRI	9W
15LM	1080LM @30K/90CRI	13W
20LM	1410LM @30K/90CRI	17W
25LM	1710LM @30K/90CRI	22W
30LM	2030LM @30K/90CRI	27W
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	870LM @30K/80CRI	11W
15LM	1220LM @30K/80CRI	19W
10LM	730LM @30K/90CRI	11W
15LM	1025LM @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	705LM @30K/80CRI	17.5W
10LM	595LM @30K/90CRI	17.5W
Notes	Delivered lumens based on 9D optic with SBL lens, (see page 2)	

FEATURES

- True 40° Tilt with <5% beam disruption (clipping)
- Zero ceiling line obstruction at Full Tilt
- Concentric Tilt Tracking ensures minimal light loss
- Double jointed driver box allows for 4" shallow plenum installation
- 1/16" micro flange
- 9° - 55° optical beam control
- UGR <5
- Multiple mounting, glare control options, trims, and finishes available

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

- 0-10V dimming to 1%
- leading & trailing edge (Triac / ELV) dimming to 1%

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

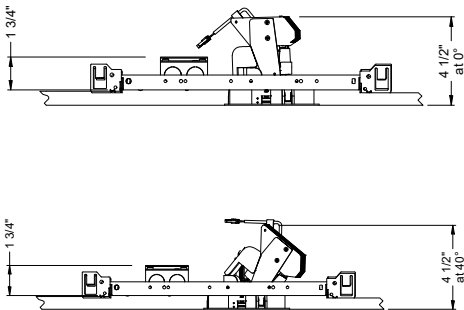
CONSTRUCTION

- Shatter proof acrylic bezel lens
- 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 Standard 0.4" to 1.1" and Thick Ceiling 1.0" to 2.0"
- Fixture is pre-set and shipped at 20deg tilt

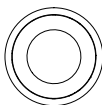
ELECTRICAL

- 120V-277V, 120 only Triac / ELV
- 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)

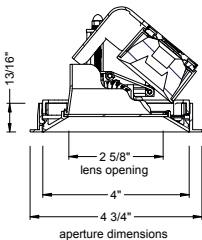
FIXTURE HEIGHT



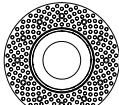
TRIMMED



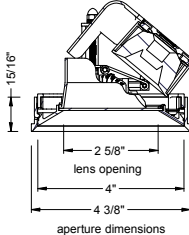
ceiling cutout  
4-3/8" diameter  
ceiling thickness  
0.4" to 1.1"



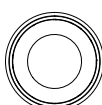
TRIMLESS



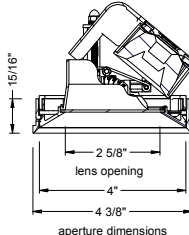
ceiling cutout  
4-1/2" diameter  
ceiling thickness  
0.4" to 1.1"



MILLWORK



ceiling cutout  
4-3/8" diameter  
ceiling thickness  
0.5" to 1.1"



PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

9°- 55° BEAM ORDERING CODE												
SERIES	NU4	NU4										
TYPE	RALP	round adjustable lopro										
	RATLP	round adjustable trimless lopro										
	RATMWLP	round adjustable trimless millwork lopro										
LED	SW	standard white										
DELIVERED LUMENS	10LM	880 lm										
	15LM	1280 lm										
	20LM	1670 lm										
	25LM	2020 lm										
	30LM	2410 lm										
	Standard Configuration: 3000K 80CRI 35D NL Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Optic Multiplier] x [Lens Multiplier]											
CCT	27K	2700K	CCT		2700K		3000K		3500K		4000K	
	30K	3000K	CRI		80+	90+	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										
CRI	80	80 CRI										
	90	90 CRI										
OPTIC & LM MULTIPLIER SEE PAGE 3	9D <sup>1</sup>	9.5 degrees										(0.80)
	15D <sup>2</sup>	15 degrees										(1.05)
	20D	20 degrees										(0.93)
	25D	25 degrees										(0.96)
	35D	35 degrees										(1.00)
	55D	55 degrees										(0.97)
TIR OPTIC ACCESSORY SEE PAGE 3	NA	no accessory										(1.00)
	HCL	honeycomb louver										(0.85)
	HETA	high efficiency textured lens, similar to Solite™										(0.90)
	EA <sup>3</sup>	elliptical lens										(0.90)
	Attached to TIR optic, active											
BEZEL LENS SEE PAGE 3	NL <sup>4</sup>	no lens										(1.00)
	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)
TRIM COLOR SEE PAGE 3	BK	black										
	WH	white										
	MC	matte chrome										
	BZ	bronze										
	WT	wheat										
Not applicable to trimless option. Do not include in trimless ordering code.												
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)

9°- 55° BEAM ORDERING CODE		
MOUNTING OPTIONS SEE PAGE 6, 7	NC	new construction with ceiling fitting plate
	IC <sup>5</sup>	insulation contact housing
	RET	retrofit, no ceiling fitting plate
VOLTAGE	120	120V
	UNV	120V-277V
DIMMING	DIM10	standard 0-10V dimming to 1%
	ELV1 <sup>6</sup>	leading & trailing edge (Triac/ELV) dimming to 1%
ELECTRICAL OPTIONS	EM7	emergency battery backup, 90 minutes at 7W to LED
	EM12 <sup>7</sup>	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 7	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)	<i>Extends a pair of Bar Hangers</i> Total Mounting Length: 29" to 48"

YOUR COMPLETED ORDERING CODE	
Follow the steps to specify your fixture, example:	
NU4 - RALP - SW - 20LM - 35K - 90 - 35D - NA - HET - WH - WH - NC - UNV - DIM10 - EM7	

NOTES

- 9D only available in 10LM. Not available in IC.
- 15D only available in 10LM/15LM. Not available with DL lens options.
- Elliptical lens not available with 9D and 15D optics. Actual beam distributions for optic [20D= 35° x 60°, 25D= 40° x 65°, 35D= 45° x 70°, 55D= 55° x 80°].
- NL option does not meet requirement for dead-front, airtight, wet and NSF. It is damp location rated.
- IC not available in 30LM or 25LM.
- ELV1 not available in 10LM with 20D, 25D, 35D and 55D. Triac/ELV dimming available in 120V only.
- EM12 not available in 10LM

# alphabet

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## 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.

### TIR OPTIC ACCESSORY

Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
20D	16.9	≤5
25D	22.5	≤5
35D	28.5	≤5
55D	45.9	10.5

### NL

No Lens



OPTIC	BEAM ANGLE	UGR
15D	13.6	≤5
20D	18.3	≤5
25D	23.9	≤5
35D	30.8	≤5
55D	51.1	13.1

### CL

Clear Lens



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

### DL

Diffused Lens



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

### HET

High Efficiency Textured Lens



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

### SBL

Smoothing Beam Lens



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.

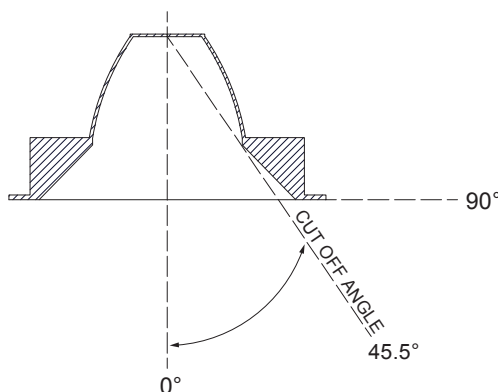
## GLARE CONTROL

### 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.

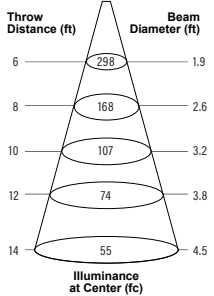
- Cutoff angle of NL and CL is 45.5 degrees;

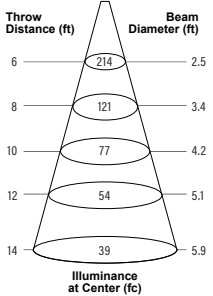


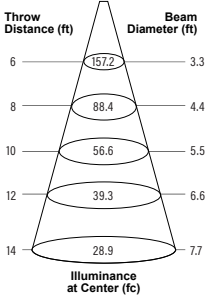
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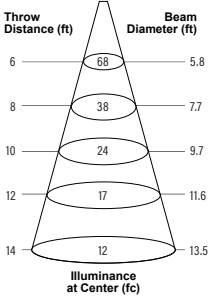
## PHOTOMETRIC DATA

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>		

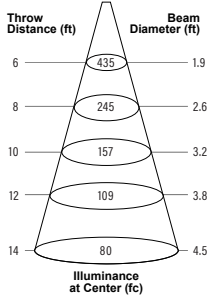
20D 18.3° NO LENS	
	
WATTS: 16.5	LPW: 93.7
LUMENS: 1546	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	10726
5	8677
15	2327
25	320
35	24
45	2.4

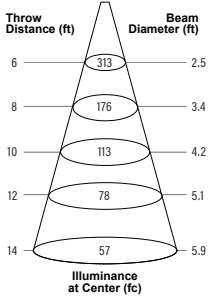
25D 23.9° NO LENS	
	
WATTS: 16.5	LPW: 97.2
LUMENS: 1605	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	7715
5	6746
15	2644
25	490
35	55
45	6.7

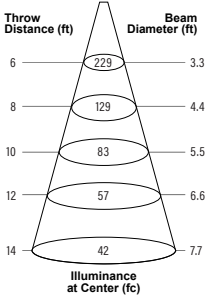
35D 30.8° NO LENS	
	
WATTS: 16.5	LPW: 101.3
LUMENS: 1671	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	5659
5	5301
15	2948
25	721
35	48
45	7.3

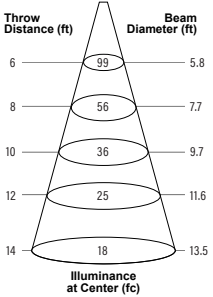
55D 51.1° NO LENS	
	
WATTS: 16.5	LPW: 97.8
LUMENS: 1614	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2411
5	2424
15	2176
25	1296
35	268
45	15.4

30LM 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>		

20D 18.3° NO LENS	
	
WATTS: 26	LPW: 86.8
LUMENS: 2257	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	15656
5	12665
15	3396
25	468
35	35.7
45	3.5

25D 23.9° NO LENS	
	
WATTS: 26	LPW: 90.1
LUMENS: 2342	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	11261
5	9846
15	3859
25	716
35	80.3
45	9.8

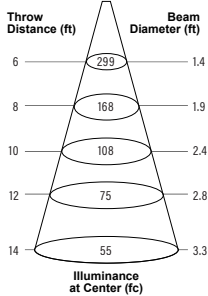
35D 30.8° NO LENS	
	
WATTS: 26	LPW: 93.8
LUMENS: 2439	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	8259
5	7737
15	4303
25	1052
35	69.8
45	10.6

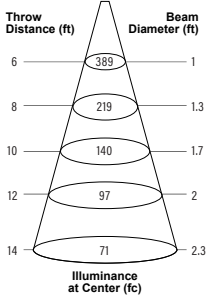
55D 51.1° NO LENS	
	
WATTS: 26	LPW: 90.6
LUMENS: 2356	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	3520
5	3538
15	3176
25	1892
35	391
45	22.4

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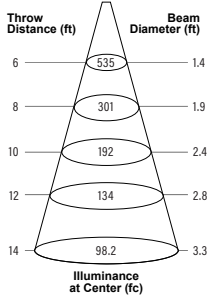
PHOTOMETRIC DATA

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 <sup>2</sup>		

15D 13.5° NO LENS	
	
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	
	
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

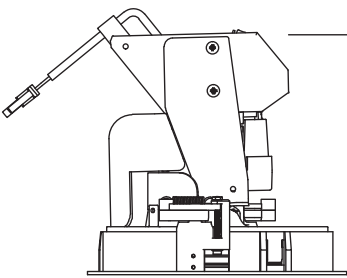
20LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance <sup>2</sup>		

15D 13.5° NO LENS	
	
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

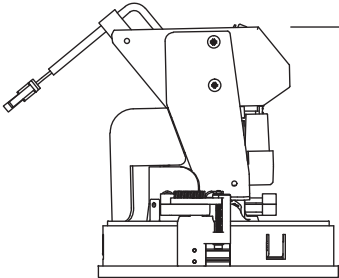
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MOUNTING OPTIONS

FIXTURE HEIGHT



TRIMMED



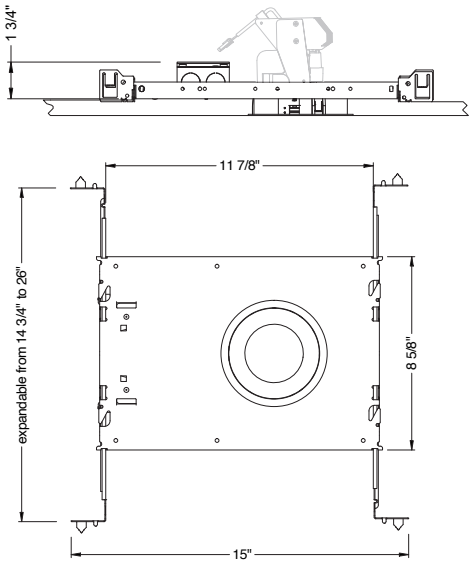
TRIMLESS & MILLWORK

4 1/2"  
at 0°

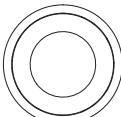
4 1/2"  
at 0°

NC - NEW CONSTRUCTION

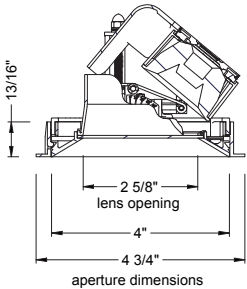
TRIM



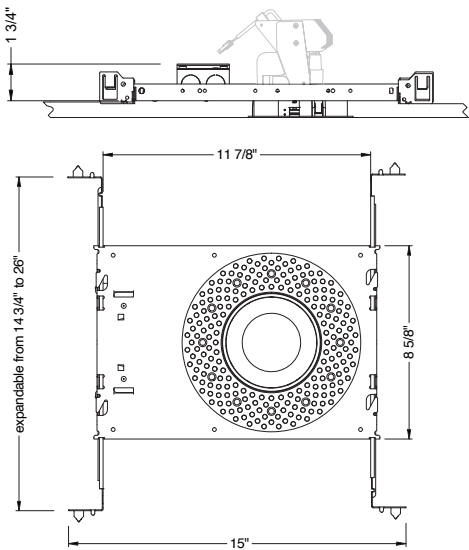
TRIM



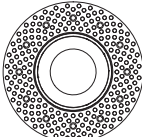
ceiling cutout  
4-3/8" diameter  
ceiling thickness  
0.4" to 1.1"



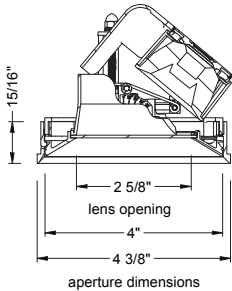
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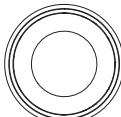
TRIMLESS



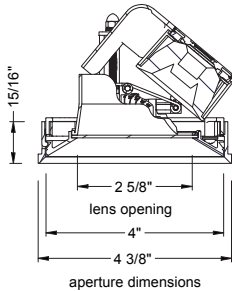
ceiling cutout  
4-1/2" diameter  
ceiling thickness  
0.4" to 1.1"



TRIMLESS/MILLWORK



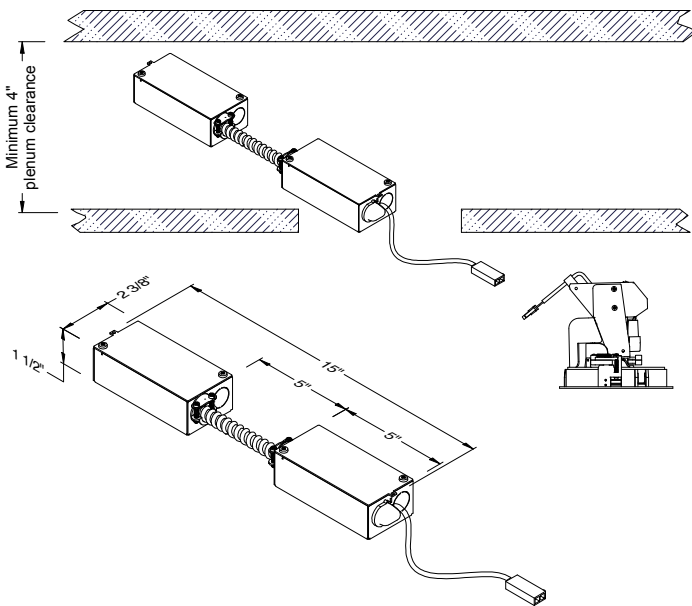
ceiling cutout  
4-3/8" diameter  
ceiling thickness  
0.5" to 1.1"



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## MOUNTING OPTIONS (CONTINUED)

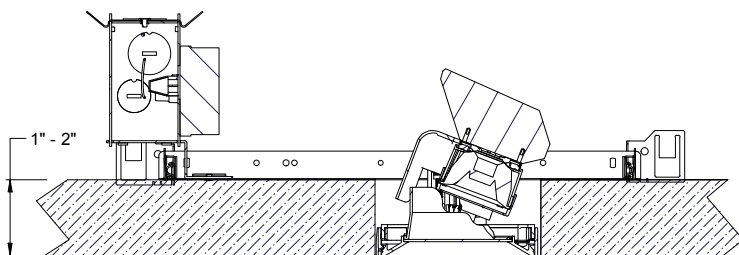
### RET - RETRO TRIM/TRIMLESS



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

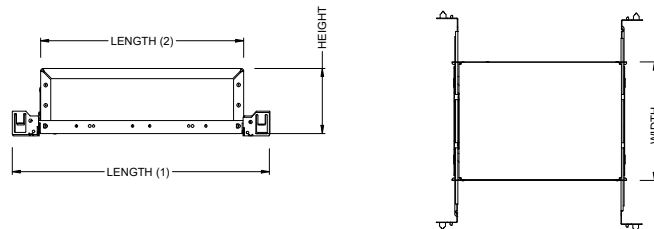
CEILING THICKNESS		
FIXTURE TYPE	MOUNTING TYPE	
	NC, RET	IC
	STANDARD CEILING THICKNESS	
TRIM	0.4" to 1.1"	0.625" to 1.1"
TRIMLESS	0.4" to 1.1"	0.625" to 1.1"
MILLWORK (TRIMLESS)	0.5" to 1.1"	0.625" to 1.1"

### 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



BOX SIZE	L 1	L 2	W	H
A	15 - 7/16"	11 - 3/4"	8 - 1/2"	3 - 3/4"

BOX TYPE / LUMEN OUTPUT - NARROW BEAM (9°)	
LUMEN OUTPUT	IC
10LM	

BOX TYPE / LUMEN OUTPUT - NARROW BEAM (15°)	
LUMEN OUTPUT	IC
10LM	✓
15LM	✓
20LM	

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS (25° - 55°)	
LUMEN OUTPUT	IC
10LM	✓
15LM	✓
20LM	✓
25LM	✓
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 Luminares.

REMOTE TEST SWITCH

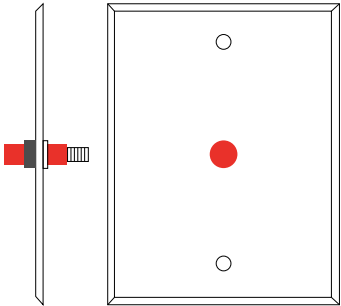
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

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

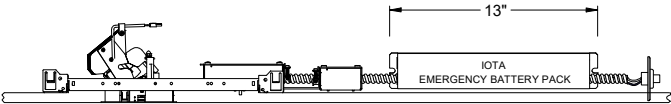
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.



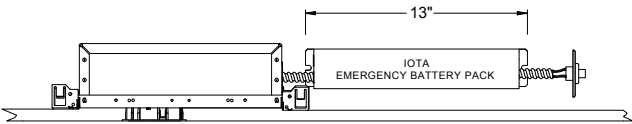
Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (10LM TO 30LM)	880LM	1280LM	1480LM
Notes: Based on 30K, 80CRI			

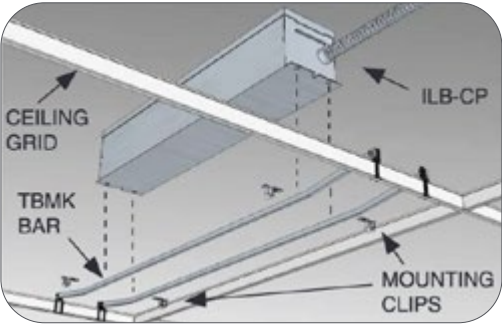
NC - NEW CONSTRUCTION  
WITH EM BATTERY (REMOTE TEST SWITCH)



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



Accessory  
76066 Optional T-Grid Mounting Kit<sup>2</sup>



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