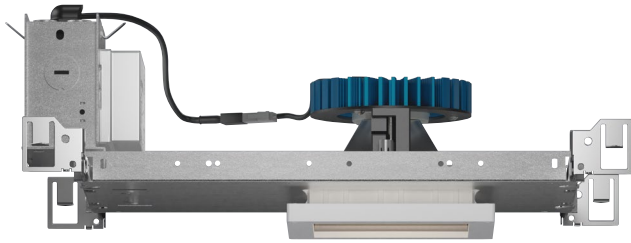


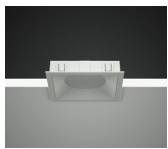
PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## NU4

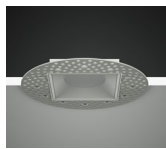
### 4" Square Downlight Tamper Resistant Standard White



60° - 80° BEAM (Note: Specifications are subject to change without notice)		
14mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	840LM @30K/80CRI	9W
15LM	1200LM @30K/80CRI	14W
20LM	1680LM @30K/80CRI	16W
25LM	2000LM @30K/80CRI	20W
30LM	2520LM @30K/80CRI	24W
35LM	2940LM @30K/80CRI	28W
40LM	3360LM @30K/80CRI	32W
10LM	710LM @30K/90CRI	9W
15LM	1020LM @30K/90CRI	14W
20LM	1420LM @30K/90CRI	16W
25LM	1700LM @30K/90CRI	20W
30LM	2100LM @30K/90CRI	24W
35LM	2500LM @30K/90CRI	28W
40LM	2850LM @30K/90CRI	32W
Notes	Delivered lumens based on WH80 optic with no lens, (see page 2)	



Trim



Trimless



Trimless Millwork



#### 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 30° to 70°
- UGR <15
- Antimicrobial (Microban®) painted finishes

#### 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%
- 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 1/8" to 1-5/8"

#### 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

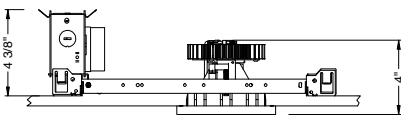
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations
- Non-conductive, dead-front construction (shower approved)
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- NYSOMH - New York State Office of Mental Health compliant
- 5 Year Limited warranty

#### ELECTRICAL

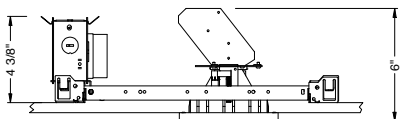
- 120V-277V, 120 only Triac / ELV
- Power factory ≥ 0.9
- 2kV driver input surge protection
- Remote emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

#### FIXTURE HEIGHT

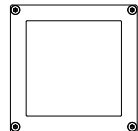
##### LED LIGHT ENGINE: 10LM - 30LM



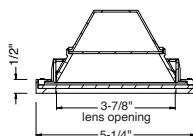
##### LED LIGHT ENGINE: 35LM - 40LM



#### TAMPER RESISTANT



ceiling cutout  
4-1/4" square  
ceiling thickness  
1/8" to 1-5/8"



# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## 60°- 80° BEAM ORDERING CODE

<b>SERIES</b>	<b>NU4</b>	NU4																										
<b>TYPE</b>	<b>QDTR</b>	square downlight tamper resistant																										
<b>LED</b>	<b>SW</b>	standard white																										
<b>DELIVERED LUMENS</b>	<b>10LM</b>	840 lm																										
	<b>15LM</b>	1200 lm																										
	<b>20LM</b>	1680 lm																										
	<b>25LM</b>	2000 lm																										
	<b>30LM</b>	2520 lm																										
	<b>35LM</b>	2940 lm																										
	<b>40LM</b>	3360 lm																										
Standard Configuration: 3000K 80CRI WH80																												
Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Reflector Multiplier]																												
<b>CCT</b>	<b>27K</b>	2700K																										
	<b>30K</b>	3000K																										
	<b>35K</b>	3500K																										
	<b>40K</b>	4000K																										
		<table border="1"> <thead> <tr> <th>CCT</th> <th colspan="2">2700K</th> <th colspan="2">3000K</th> <th colspan="2">3500K</th> <th colspan="2">4000K</th> </tr> <tr> <th>CRI</th> <th>80+</th> <th>90+</th> <th>80+</th> <th>90+</th> <th>80+</th> <th>90+</th> <th>80+</th> <th>90+</th> </tr> </thead> <tbody> <tr> <td>CCT MULTIPLIER FOR LUMEN OUTPUT</td> <td>0.96</td> <td>0.81</td> <td>1.00</td> <td>.85</td> <td>1.03</td> <td>.88</td> <td>1.06</td> <td>.91</td> </tr> </tbody> </table>	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	.85	1.03	.88	1.06
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	.85	1.03	.88	1.06	.91																				
<b>CRI</b>	<b>80</b>	80 CRI																										
	<b>90</b>	90 CRI																										
<b>OPTIC &amp; LM MULTIPLIER</b> SEE PAGE 3	<b>HE60</b>	60° high efficiency diffused lens	(0.94)																									
	<b>HE70</b>	70° high efficiency diffused lens	(0.98)																									
	<b>HE80</b>	80° high efficiency diffused lens	(0.97)																									
	<b>D65</b>	65° diffused with clear lens	(1.00)																									
	<b>WH80</b>	80° brilliant white with clear lens	(0.98)																									
<b>TRIM COLOR</b> SEE PAGE 3	<b>BK</b>	black																										
	<b>WH</b>	white																										
	<b>MC</b>	matte chrome																										
Antimicrobial finish, add <b>AM</b> to black, white or matte chrome i.e. BKAM.																												
Includes shatter proof lens and tamper resistant screws.																												
<b>BEZEL COLOR</b> SEE PAGE 3	<b>BK</b>	black	(0.98)																									
	<b>WH</b>	white	(1.00)																									
	<b>MC</b>	matte chrome	(0.99)																									
Antimicrobial finish, add <b>AM</b> to black, white or matte chrome i.e. BKAM.																												

## 60°- 80° BEAM ORDERING CODE

<b>MOUNTING OPTIONS</b> SEE PAGE 5	<b>NC</b>	new construction with ceiling fitting plate
	<b>RET</b>	retrofit, no ceiling fitting plate
<b>VOLTAGE</b>	<b>120</b>	120V
	<b>UNV</b>	120V-277V
<b>DIMMING</b>	<b>DIM10</b>	eldoLED flicker free 0-10V dimming to 1%
	<b>DIM10Z</b>	eldoLED flicker free 0-10V dimming to 0%
	<b>DALI</b>	eldoLED flicker free DALI dimming to 1%
	<b>DALIZ</b>	eldoLED flicker free DALI dimming to 0%
	<b>DMXZ</b>	DMX dim to zero
	<b>LUT</b>	Lutron Hi-lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black
	<b>LUTP<sup>1</sup></b>	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black
<b>ELV1<sup>2</sup></b>	leading & trailing edge (Triac/ELV) dimming to 1%	
<b>NLT</b>	nLight control interface: standard Cat-5/RJ45 connection (female), dimming to 0%	
<b>CAS</b>	Casambi Bluetooth control with flicker free 1.0% dimming	
<b>ELECTRICAL OPTIONS</b>	<b>EM7</b>	emergency battery backup, 90 minutes at 7W to LED
	<b>EM12</b>	emergency battery backup, 90 minutes at 12W to LED
	<b>EM10CA20</b>	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 - QDTR - SW - 20LM - 35K - 90 - HE60 - WH - WH - NC - UNV - DIM10</b>

## NOTES

- LUTP not available in 25LM/30LM/40LM.
- ELV1 (120V) not available in 10LM.

\* EldoLED driver 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
D65	68	20.1
WH80	77	22.8



OPTIC	BEAM ANGLE	UGR
HE60	67	22.5
HE70	74	22.8
HE80	82	24.2

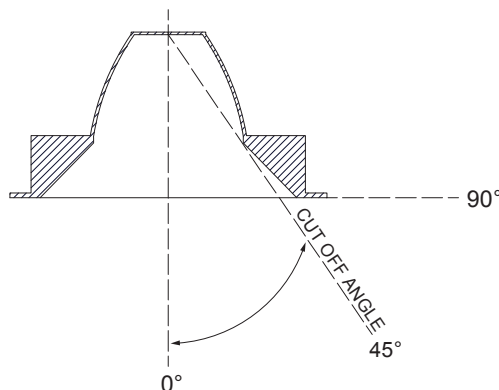
## GLARE CONTROL

### 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 of NL and CL is 45.5 degrees;



# alphabet

PROJECT INFORMATION		
JOB NAME		TYPE
ORDERING CODE		

## PHOTOMETRIC DATA

20LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	.96	.81
3000K	1	.85
3500K	1.03	.88
4000K	1.06	.91
FC Formula = CBCP / Distance <sup>2</sup>		

D65 69° DIFFUSED WITH CLEAR LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	8.3
8	11
10	13.8
12	16.6
14	19.3
Illuminance at Center (fc)	
42	
24	
15	
10	
8	
6	
WATTS: 16.2	LPW: 104.9
LUMENS: 1700	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1507
5	1487
15	1327
25	1060
35	734
45	165

HE60 67° HIGH EFFICIENCY DIFFUSED LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	8
8	10.7
10	13.4
12	16
14	18.7
Illuminance at Center (fc)	
36	
21	
13	
9	
7	
WATTS: 16.2	LPW: 104.3
LUMENS: 1689	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1312
5	1291
15	1137
25	896
35	619
45	310

HE80 85° HIGH EFFICIENCY DIFFUSED LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	11
8	14.6
10	18.3
12	22
14	25.6
Illuminance at Center (fc)	
25	
14	
9	
6	
5	
WATTS: 16.2	LPW: 103.2
LUMENS: 1672	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	906
5	901
15	856
25	766
35	622
45	387

WH80 80° BRILLIANT WHITE WITH CLEAR LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	10.1
8	13.5
10	16.9
12	20.2
14	23.6
Illuminance at Center (fc)	
29	
16	
10	
7	
5	
WATTS: 16.2	LPW: 109.2
LUMENS: 1769	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1028
5	1025
15	996
25	925
35	799
45	296

40LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	.96	.81
3000K	1	.85
3500K	1.03	.88
4000K	1.06	.91
FC Formula = CBCP / Distance <sup>2</sup>		

D65 69° DIFFUSED WITH CLEAR LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	8.3
8	11
10	13.8
12	16.6
14	19.3
Illuminance at Center (fc)	
73	
41	
26	
18	
13	
WATTS: 30.4	LPW: 97.2
LUMENS: 2956	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2621
5	2585
15	2307
25	1844
35	1277
45	287

HE60 67° HIGH EFFICIENCY DIFFUSED LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	8
8	10.7
10	13.4
12	16
14	18.7
Illuminance at Center (fc)	
63	
36	
23	
16	
12	
WATTS: 30.4	LPW: 96.6
LUMENS: 2937	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2281
5	2245
15	1977
25	1558
35	1076
45	538

HE80 85° HIGH EFFICIENCY DIFFUSED LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	11
8	14.6
10	18.3
12	22
14	25.6
Illuminance at Center (fc)	
44	
25	
16	
11	
8	
WATTS: 30.4	LPW: 95.6
LUMENS: 2907	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1576
5	1566
15	1489
25	1333
35	1081
45	673

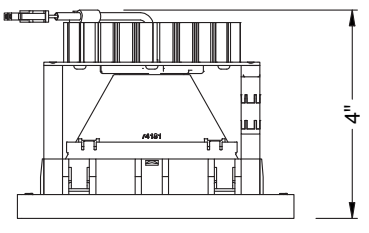
WH80 80° BRILLIANT WHITE WITH CLEAR LENS	
Throw Distance (ft)	Beam Diameter (ft)
6	10.1
8	13.5
10	16.9
12	20.2
14	23.6
Illuminance at Center (fc)	
50	
28	
18	
12	
9	
WATTS: 30.4	LPW: 101.1
LUMENS: 3075	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1788
5	1782
15	1731
25	1609
35	1389
45	514

PROJECT INFORMATION		
JOB NAME	TYPE	
ORDERING CODE		

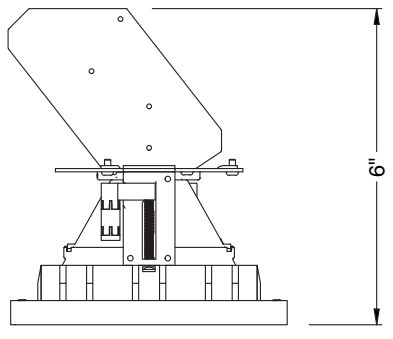
## MOUNTING OPTIONS

### FIXTURE HEIGHT

#### 10LM-30LM CONFIGURATIONS

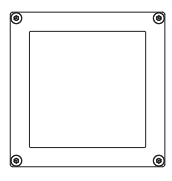
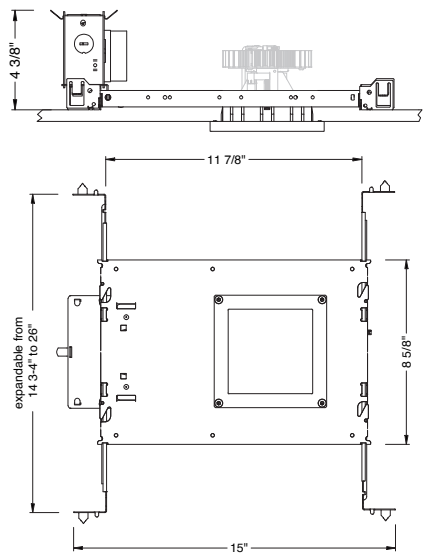


#### 35LM-40LM CONFIGURATIONS

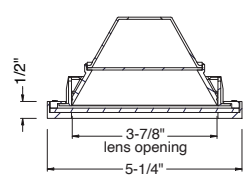


### NC - NEW CONSTRUCTION

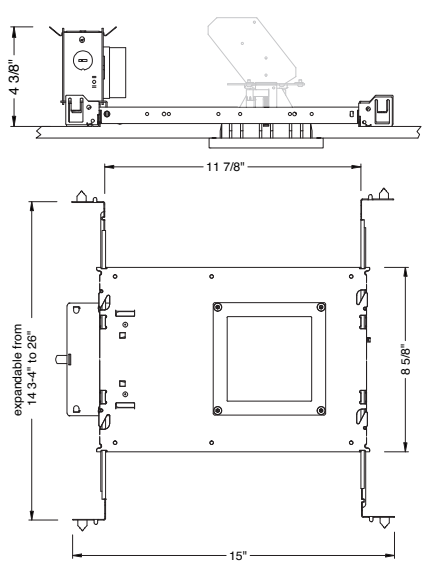
#### LED LIGHT ENGINE 10LM-30LM



ceiling cutout  
4-1/4" square  
ceiling thickness  
1/8" to 1-5/8"



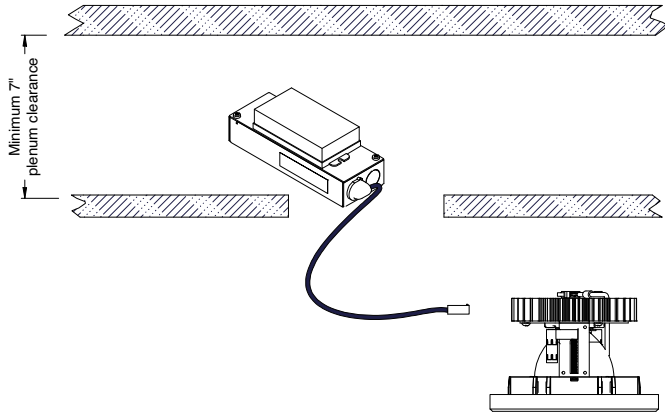
#### LED LIGHT ENGINE 35LM-40LM



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 (CECA)		
SUITABLE FOR AIR HANDLING PLENUMS		
REDUCED AIRFLOW (WITH LENS) ASTM E283	✓	✓

CEILING THICKNESS		
FIXTURE TYPE	MOUNTING TYPE	
	NC, RET	NC, RET
	CEILING THICKNESS	CEILING CUTOUT
TRIM	3/8" to 1-5/8"	4-1/4" square

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 Luminaires.

### REMOTE TEST SWITCH

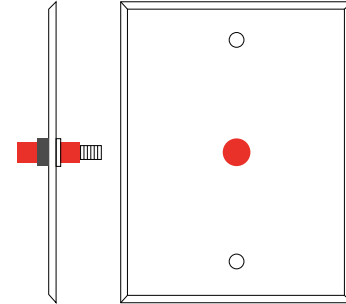
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

### 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

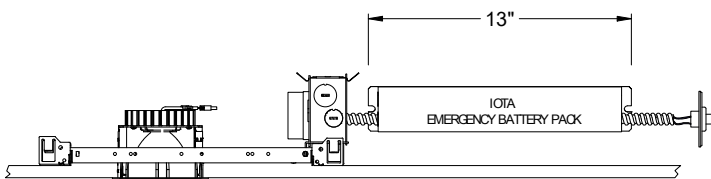
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/Building Codes.



Remote Test Switch

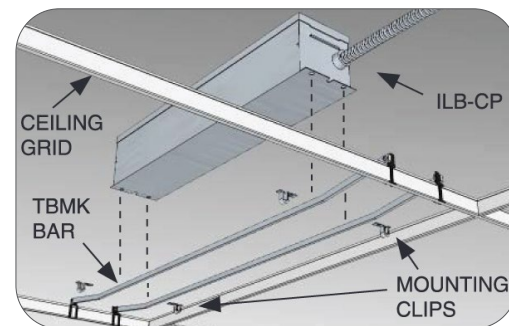
EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (10LM TO 40LM)	650LM	930LM	1000LM
Notes: Based on 30K, 80CRI			

## NC - NEW CONSTRUCTION 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.