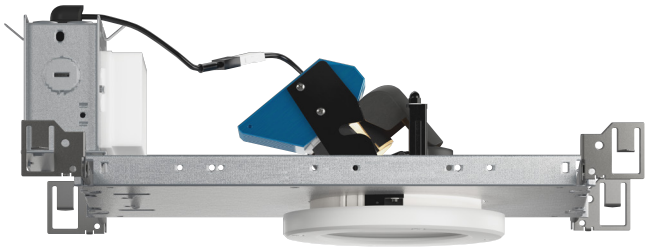
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NU4

4" Round Adjustable
Tamper Resistant Standard White

NSF · AT airtight · DF dead-front · PR plenum rated · wet rated · IK10



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
- Tamper resistant, Anti ligature, IK10 impact, vandal rated
- 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-lume Eco System dimming to 0.1% and 1.%
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi dimming to 1.0%
- NLight control interface dimming to 0%

CONSTRUCTION
- Spun Aluminum 6061 lensing frame
- 18-8 stainless steel tamper resistant screws
- Polycarbonate (3mm) shatter resistant lensing.
- IK10 impact rated
- Electrocoated 16-gauge cold rolled steel construction
- Accommodates ceiling thickness from 3/8" to 1"

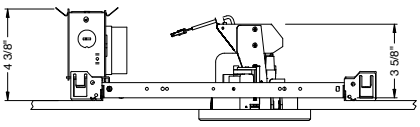
LED
- 90 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs
- 80 CRI: SDCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs

LISTING
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- 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
- **Declare.** - LBC Red List Approved
- 5 Year Limited warranty

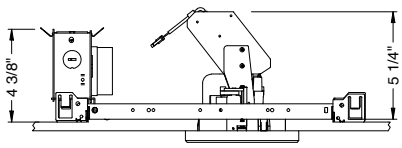
ELECTRICAL
- 120V-277V, 120 only Triac / ELV
- Power factor ≥ 0.9
- 2kV driver input surge protection
- Remote emergency test switch
- 7W, 10W (T20 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

FIXTURE HEIGHT

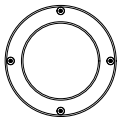
10LM - 30LM LOW LUMENS

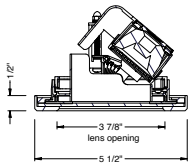


40LM HIGH LUMENS



TAMPER RESISTANT





alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

9°- 55° BEAM ORDERING CODE

SERIES	**NU4**	NU4
TYPE	**RATR**	round adjustable tamper resistant
LED	**SW**	standard white
DELIVERED LUMENS	**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]	
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**[1]	9.5 degrees	(0.80)
	15D[2]	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)
	HETA	high efficiency textured lens, similar to Solite™	(0.90)
	Attached to **TIR** optic, active		
BEZEL LENS SEE PAGE 3	**CL**	clear lens	(0.98)
	DL	diffused lens	(0.91)
	HET	high efficiency textured lens, similar to Solite™	(0.92)
	EA[3]	elliptical lens	(0.90)
	SBL	smoothing beam lens	(0.92)
TRIM COLOR 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.		
BEZEL COLOR 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

MOUNTING OPTIONS SEE PAGE 6	**NC**	new construction with ceiling fitting plate
VOLTAGE	**120**	120V
	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-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[4]	Lutron Hi-lume Premier Ecosystem dimming to 0.1%, Soft-on & Fade-to-Black
	ELV1	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:

NU4 - RATR - SW - 20LM - 35K - 90 - 35D - NA - HET - WH - NC - UNV - DIM10 - EM7

NOTES

1. 9D available in 10LM.
2. 15D available in 10LM/15LM/20LM. Not available with DL lens.
3. 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°]
4. LUTP not available in 15D/20LM or 25LM/30LM/35LM/40LM.

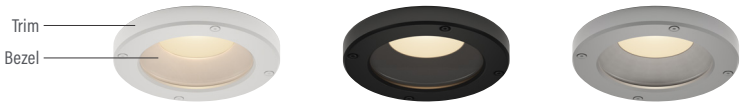
* EldoLED and DMX uses logarithmic dimming curve as standard. For linear dimming curve, add "LIN" after dimming code, i.e. DIM10LIN.

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM COLORS



WH BK MC

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.

CL
Clear Lens



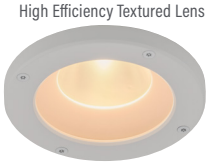
OPTIC	BEAM ANGLE	UGR
15D	13.7	≤5
20D	20.1	≤5
25D	25.5	≤5
35D	34.4	7.5
55D	52.9	14

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.

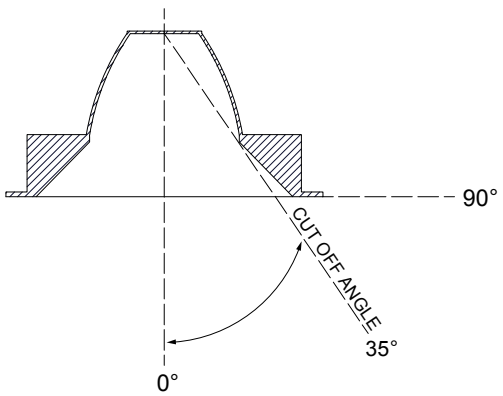
GLARE CONTROL

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 CL is 35 degrees;



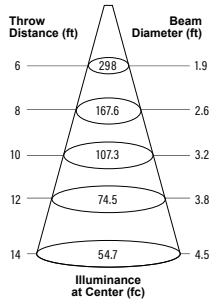
alphabet

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^2		

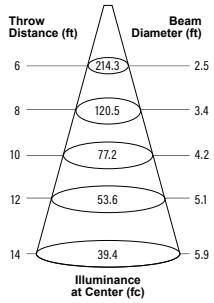
20D 18.3° NO LENS



WATTS: 16.5	LPW: 93.7
LUMENS: 1546	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	10726
5	8677
15	2327
25	320
35	24.5
45	2.4

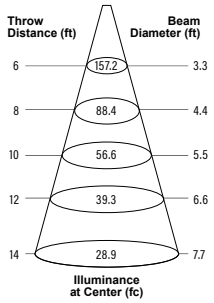
25D 23.9° NO LENS



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

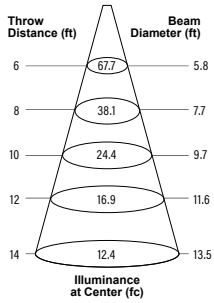
35D 30.8° NO LENS



WATTS: 16.5	LPW: 101.3
LUMENS: 1671	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	5659
5	5301
15	2948
25	721
35	47.8
45	7.3

55D 51.1° NO LENS

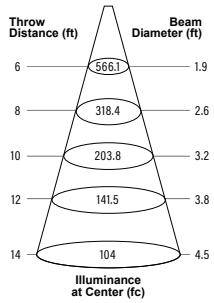


WATTS: 16.5	LPW: 97.8
LUMENS: 1614	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	2411
5	2424
15	2176
25	1296
35	268
45	15.4

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		

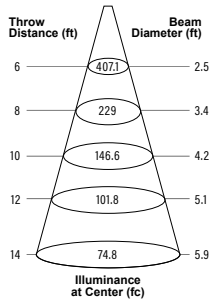
20D 18.3° NO LENS



WATTS: 38.5	LPW: 76.3
LUMENS: 2938	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	20378
5	16485
15	4420
25	609
35	46.5
45	4.6

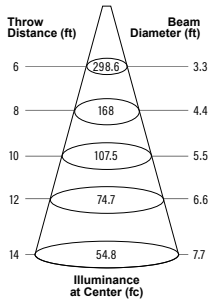
25D 23.9° NO LENS



WATTS: 38.5	LPW: 79.2
LUMENS: 3048	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	14657
5	12815
15	5023
25	932
35	105
45	12.8

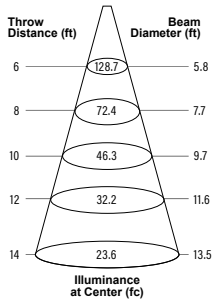
35D 30.8° NO LENS



WATTS: 38.5	LPW: 82.5
LUMENS: 3174	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	10750
5	10071
15	5600
25	1369
35	90.8
45	13.8

55D 51.1° NO LENS



WATTS: 38.5	LPW: 79.7
LUMENS: 3067	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	4581
5	4605
15	4134
25	2462
35	510
45	29.2

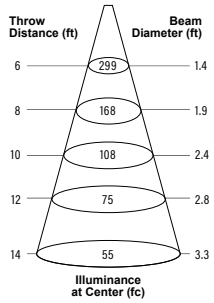
alphabet

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^2		

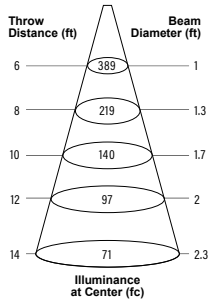
15D
13.5° NO LENS



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

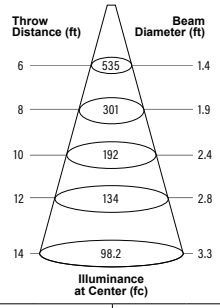


WATTS: 17.1	LPW: 40.4
LUMENS: 692	CCT: 3000K

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^2		

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

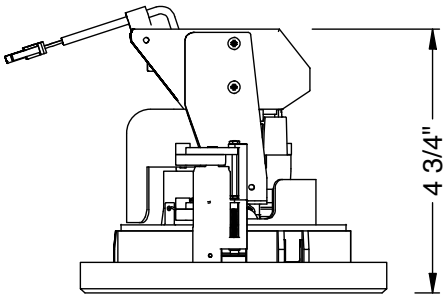
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

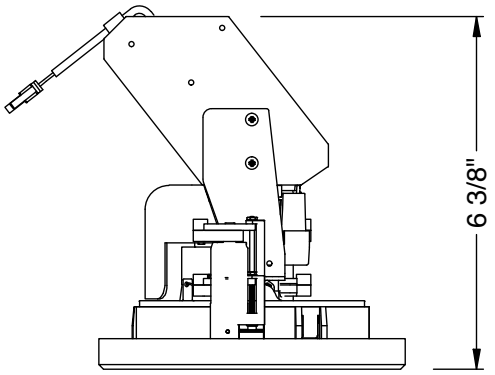
MOUNTING OPTIONS

FIXTURE HEIGHT

10LM - 30LM CONFIGURATIONS

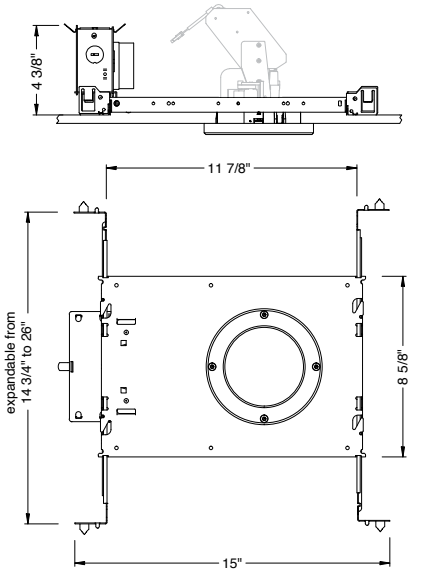


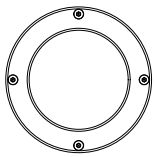
40LM CONFIGURATIONS



NC - NEW CONSTRUCTION

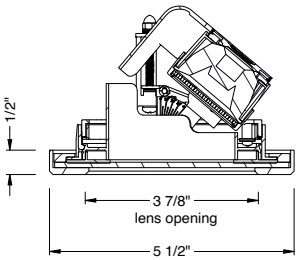
TAMPER RESISTANT

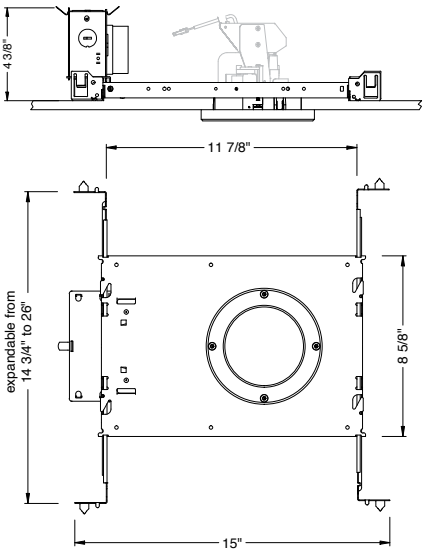




ceiling cutout
4-3/8 diameter

ceiling thickness
3/8" to 1"





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.

REMOTE TEST SWITCH

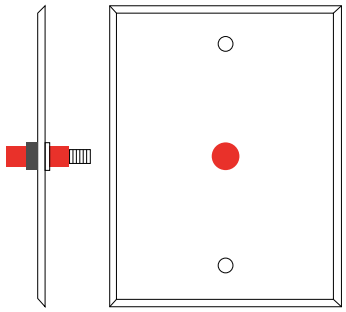
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

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)

