alphabet

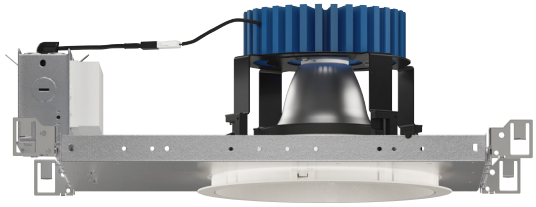
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

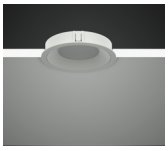
NU8

8" Round High Performance Downlight Standard White

NSF AT airtight DF dead-front wet rated

20° - 75° BEAM (Note: Specifications are subject to change without notice)		
22mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
50LM	4960LM @30K/90CRI	39W
60LM	5990LM @30K/90CRI	49W
70LM	7010LM @30K/90CRI	58W
80LM	7990LM @30K/90CRI	69W
90LM	8990LM @30K/90CRI	84W





Trim

FEATURES
- Up to 9000LM delivered
- Thermally optimized for sustained efficacy and performance
- UGR <25
- 20° - 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 dimming to 1%

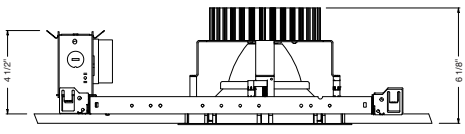
CONSTRUCTION
- Lexan™ (PC) highly resistant to impact and heat (240°F).
- Optimal material for wireless signal connectivity.
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-5/8"

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

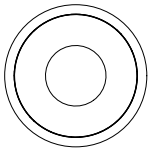
LISTING
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

ELECTRICAL
- 120V-277V
- Power 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)

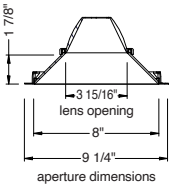
FIXTURE HEIGHT



TRIMMED



ceiling cutout
8-1/2" diameter
ceiling thickness
1/8" to 1 5/8"



aperture dimensions

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

ORDERING CODE

SERIES	**NU8**	NU8
TYPE	**RDX**	round downlight high lumen
LED	**SW**	standard white
DELIVERED LUMENS	**50LM**	4960 lm
	60LM	5990 lm
	70LM	7010 lm
	80LM	7990 lm
	90LM[1]	8990 lm
	Standard Configuration: 3000K 90CRI 20D **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	90+	90+	90+	90+
CCT MULTIPLIER FOR LUMEN OUTPUT	0.81	0.85	0.88	0.91

CRI	**90**	90 CRI	
OPTIC & LM MULTIPLIER SEE PAGE 3	**20D**	20 degrees	(1.00)
	25D	25 degrees	(0.99)
	40D	40 degrees	(0.98)
	65D	65 degrees	(0.98)
	75D	75 degrees	(0.94)
BEZEL LENS SEE PAGE 3	**NL**[2]	no lens	(1.00)
	CL	clear lens	(0.96)
	DL	diffused lens	(0.94)
	E[3]	elliptical beam spread	(0.93)
	HET	high efficiency textured lens, similar to Solite™	(0.96)
	SBL	smoothing beam lens	(0.96)
ACCESSORY	**HCL**[4]	honeycomb louver	(0.72)
	Attached to bezel		
TRIM COLOR SEE PAGE 3	**WH**	white	
	BK	black	
	MC	matte chrome	
	BZ	bronze	
	WT	wheat	
	CC[5]	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)
	BZ	bronze	(0.98)
	WT	wheat	(0.99)
	CC[5]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		

ORDERING CODE

MOUNTING OPTIONS SEE PAGE 5	**NC**	new construction plate
	RET	retrofit, no ceiling plate
VOLTAGE	**UNV**	120V-277V
	LVL[6]	low voltage luminaire
DIMMING	**DIM10**	eldoLED flicker free 0-10V dim to 1%
	DIM10Z	eldoLED flicker free 0-10V dim 0.1%
	DALI	eldoLED flicker free DALI-2 dim to 1%
	DALIZ	eldoLED flicker free DALI-2 dim to 0.1%
	DMX-RJ45	DMX control dimming to 0.1% with RJ45 connection
	DMX-WL	DMX-512/RDM dim to 0% with lead wire input
	DMX-XLR	DMX-512/RDM dim to 0% with XLR input
	CAS	Casambi control with flicker free 1% dimming
	ND	no driver included
ELECTRICAL OPTIONS	**EM7**	remote emergency battery, 90 min at 7W
	EM12	remote emergency battery, 90 min at 12W
	EM10CA20	remote emergency battery, 90 min at 10W

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:

NU8 - RDX - SW - 90LM - 30K - 90 - 20D - SBL - WH - WH - NC - UNV - DIM10 - EM7

NOTES

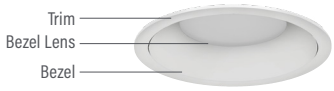
1. Lens options not available in 90LM.
2. NL option does not meet requirement for AT/DF/WET/NSF listing.
3. Actual beam distributions for optic (20D= 37° x 65°, 25D= 42° x 70°, 40D= 49° x 76°, 65D= 67° x 93°, 75D= 85° x 100°).
4. HCL not available with lens.
5. Custom set up fee plus minimum quantity required per color.
6. Must select ND dimming code, for remote driver or POE specifications see page 6.

* 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.

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM/BEZEL COLORS



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.

HCL

Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
20D	19	12.1
25D	23	12.3
40D	33	12.9
65D	58	16.4
75D	65	17.8

NL

No Lens



OPTIC	BEAM ANGLE	UGR
20D	20	15.2
25D	25	15.4
40D	37	15.8
65D	66	18.8
75D	76	23.3

CL

Clear Lens



OPTIC	BEAM ANGLE	UGR
20D	20	15.1
25D	25	15.2
40D	37	15.7
65D	67	18.9
75D	77	23.3

DL

Diffused Lens



OPTIC	BEAM ANGLE	UGR
20D	37	18.9
25D	42	19.3
40D	50	20.1
65D	68	22.2
75D	82	24.4

HET

High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
20D	23	15.5
25D	29	15.7
40D	38	16.6
65D	64	19.6
75D	76	23.3

SBL

Smoothing Beam Lens



OPTIC	BEAM ANGLE	UGR
20D	21	15.1
25D	27	15.3
40D	37	15.9
65D	66	19.2
75D	76	23.2

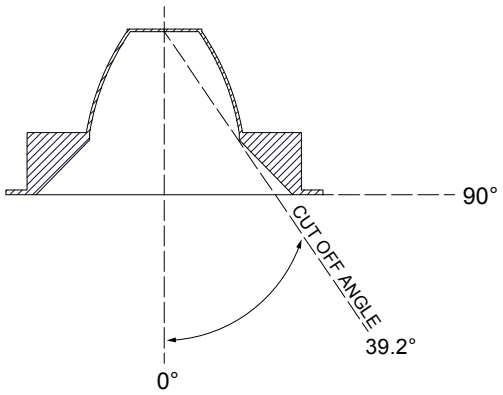
GLARE CONTROL

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 is 39.2° degrees;



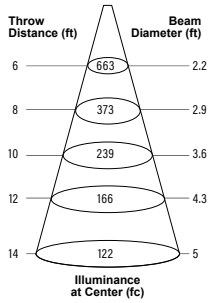
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

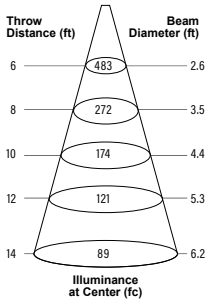
50LM CCT MULTIPLIERS	
	90CRI
2700K	0.96
3000K	1
3500K	1.01
4000K	1.02
FC Formula = CBCP / Distance^2	

20D 20° NO LENS



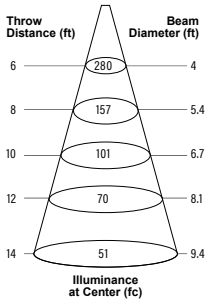
WATTS: 39	LPW: 127.3
LUMENS: 4963	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	23768
5	23183
15	4472
25	1886
35	1264
45	19

25D 25° NO LENS



WATTS: 39	LPW: 127.2
LUMENS: 4960	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	17400
5	15140
15	6510
25	2148
35	1289
45	3

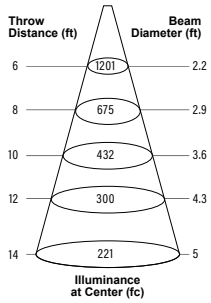
40D 37° NO LENS



WATTS: 39	LPW: 126.2
LUMENS: 4923	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	10060
5	9829
15	6596
25	2867
35	1340
45	11

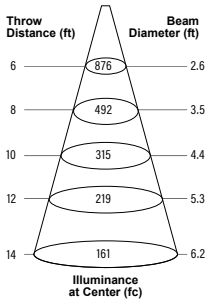
90LM CCT MULTIPLIERS	
	90CRI
2700K	0.96
3000K	1
3500K	1.01
4000K	1.02
FC Formula = CBCP / Distance^2	

20D 20° NO LENS



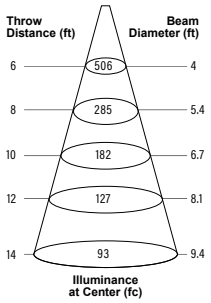
WATTS: 84	LPW: 107
LUMENS: 8991	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	43056
5	41995
15	8101
25	3417
35	2290
45	35

25D 25° NO LENS



WATTS: 84	LPW: 107
LUMENS: 8985	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	31520
5	27425
15	11793
25	3891
35	2334
45	6

40D 37° NO LENS



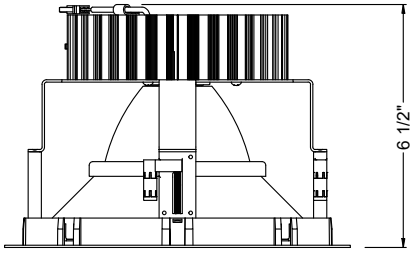
WATTS: 84	LPW: 106.2
LUMENS: 8918	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	18223
5	17805
15	11948
25	5194
35	2427
45	19

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

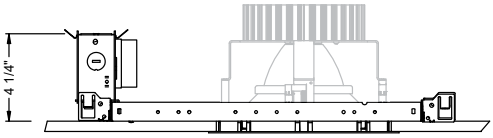
FIXTURE HEIGHT

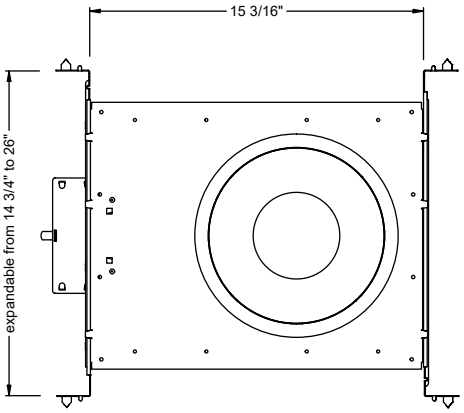
LED LIGHT ENGINE: 50LM - 90LM

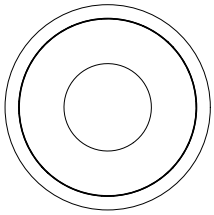


NC - NEW CONSTRUCTION

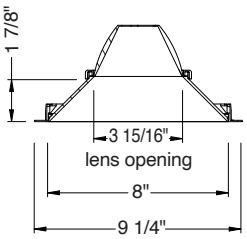
TRIM







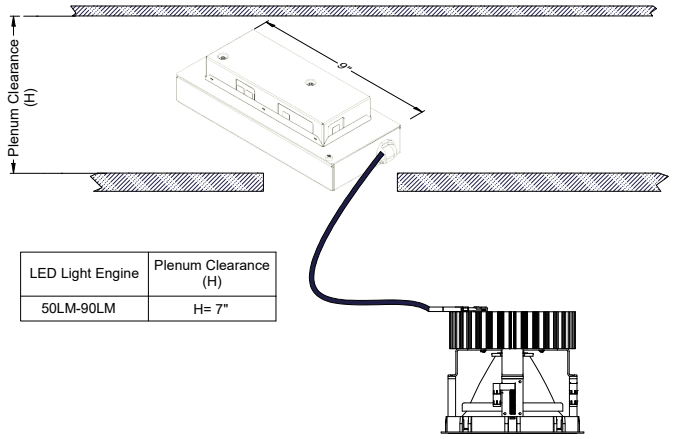
ceiling cutout
8-1/2" diameter
ceiling thickness
1/8" to 1 5/8"



aperture dimensions

RET - RETRO

TRIM/TRIMLESS



LED Light Engine	Plenum Clearance (H)
50LM-90LM	H= 7"

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

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

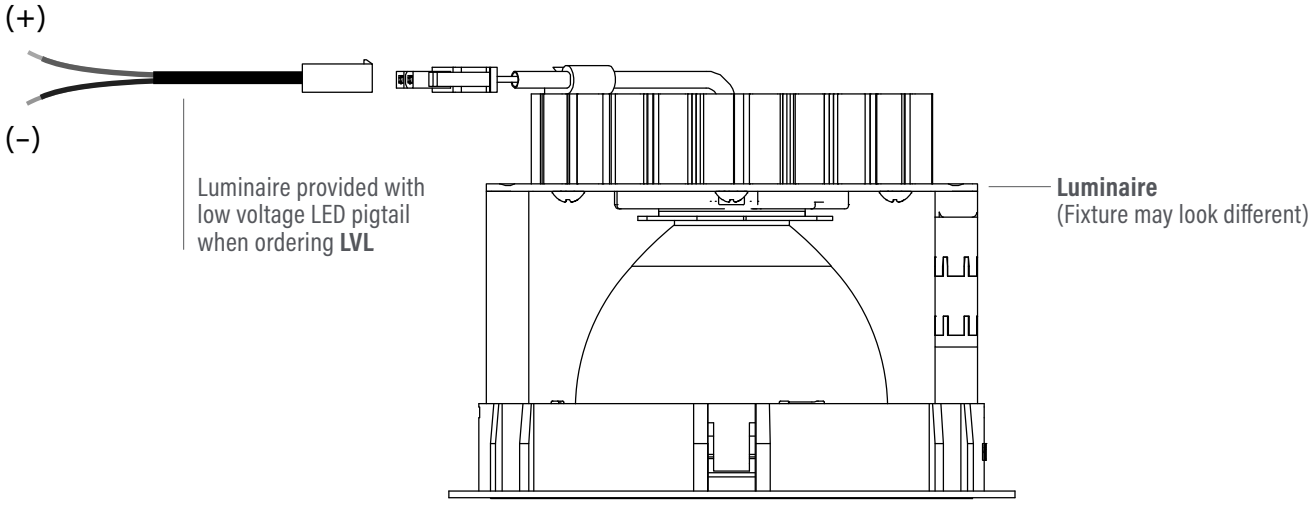
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

LOW VOLTAGE OPTIONS

22MM COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
50LM	4960LM @30K/90CRI	950mA	35W
60LM	5990LM @30K/90CRI	1175mA	43W
70LM	7010LM @30K/90CRI	1425mA	52W
80LM	7990LM @30K/90CRI	1675mA	61W
90LM	8990LM @30K/90CRI	1950mA	71W
Notes	Delivered lumens based on 20D optic with no lens, (see page 2)		

NOMINAL LED VOLTAGE: 36VDC

Customer to order CC Remote Driver separately or POE Node by others.



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

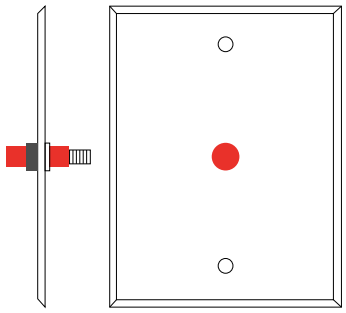
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

EMERGENCY BATTERY ACCESS

Above ceiling access is 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

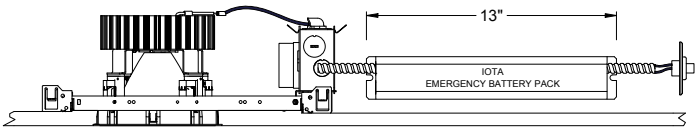
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.



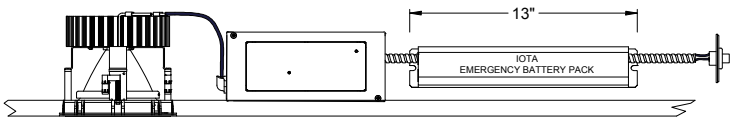
Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (50LM TO 90LM)	992LM	1417LM	1700LM
Notes: Based on 30K, 90CRI			

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

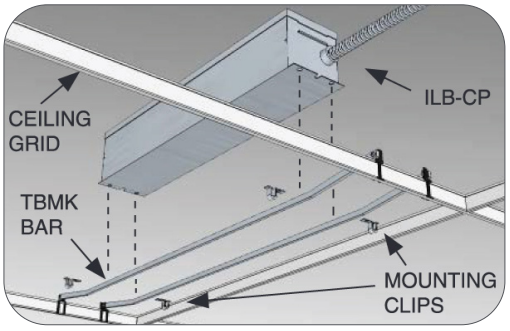


RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



Accessory

76066 Optional T-Grid Mounting Kit[1]



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

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.