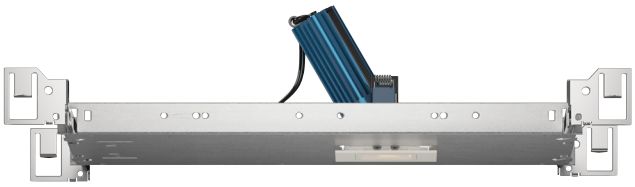
alphabet

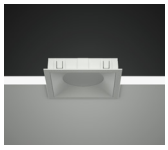
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NU1

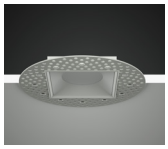
1" Square Adjustable Standard White

NSF · AT airtight · PR plenum rated · wet rated





Trim



Trimless



Trimless Millwork

22° - 55° BEAM (Note: Specifications are subject to change without notice)			
6mm COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
07LM	630LM @30K/80CRI	150mA	5.5W
10LM	800LM @30K/80CRI	200mA	7.5W
13LM	1150LM @30K/80CRI	300mA	11W
07LM	530LM @30K/90CRI	150mA	5.5W
10LM	680LM @30K/90CRI	200mA	7.5W
13LM	980LM @30K/90CRI	300mA	11W
Notes	Delivered lumens based on 55D optic with no lens, (see page 2)		

17° BEAM (Note: Specifications are subject to change without notice)			
4mm COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
05LM	550LM @30K/80CRI	150mA	5.5W
05LM	500LM @30K/90CRI	150mA	5.5W
Notes	Delivered lumens based on 17D optic with SBL lens, (see page 2)		

FEATURES

- True 30° Tilt with <6% beam disruption (clipping)
- Zero ceiling line obstruction at Full Tilt
- Concentric Tilt Tracking ensures minimal light loss
- 17° - 55° optical beam control
- UGR < 19
- Glare control, specialty optics, trim options, and custom finishes available
- 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%
- Lutron Hi-lume Eco System dimming to 0.1% and 1.%
- Leading & trailing edge (Triac/ELV) dimming to 1%
- All driver offerings are remote with above ceiling access, see page 3 for details.
- Refer to DX remote panels for additional options.

CONSTRUCTION

- High-grade die-cast and cold forged aluminum alloy assembly that has superior thermal and corrosion resistance properties.
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-1/2", On-field thick ceiling adjustment, see page 9

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

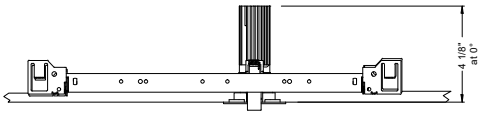
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP44 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- **Declare.** - LBC Red List Approved
- 5 Year Limited warranty

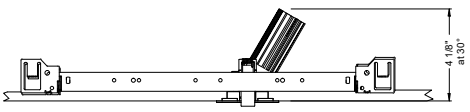
ELECTRICAL

- Low voltage luminaire: 36Vdc nominal
- 07LM - 150mA
- 10LM - 200mA
- 13LM - 300mA

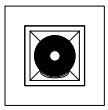
FIXTURE HEIGHT

LED LIGHT ENGINE: 07LM - 13LM



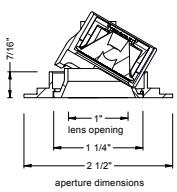


TRIMMED



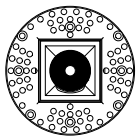
ceiling cutout 2-1/8" square

ceiling thickness 1/8" to 1-1/2"



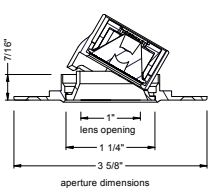
aperture dimensions

TRIMLESS



ceiling cutout 2-1/8" square

ceiling thickness 1/8" to 1-1/2"



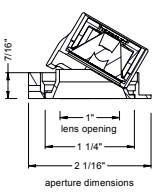
aperture dimensions

MILLWORK



ceiling cutout 2-1/8" square

ceiling thickness 1/8" to 1-1/2"



aperture dimensions

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

ORDERING CODE

SERIES	**NU1**	NU1
TYPE	**QA**	square adjustable
	QAT	square adjustable trimless
	QATMW	square adjustable trimless millwork
LED	**SW**	standard white
DELIVERED LUMENS	**07LM**	630lm
	10LM	800 lm
	13LM	1150 lm
	Standard Configuration: 3000K 80CRI 60D, **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
CRI	**80**	80 CRI
	90	90 CRI
OPTIC & LM MULTIPLIER SEE PAGE 6	**17D**[1, 2, 3]	17 degrees (0.80)
	22D[2, 3]	22 degrees (0.95)
	30D	30 degrees (0.93)
	40D	40 degrees (0.92)
	55D	55 degrees (1.00)
TIR OPTIC ACCESSORY SEE PAGE 5	**NA**	no accessory (1.00)
	HCL	honeycomb louver (0.67)
	HETA	high efficiency textured lens, similar to Solite™ (0.90)
	EA[4]	elliptical lens (0.78)
	Maximum 2pcs of media per fixture.	
BEZEL LENS SEE PAGE 5	**NL**[5]	no lens (1.00)
	CL	clear lens (0.92)
	DL	diffused lens (0.90)
	HET	high efficiency textured lens, similar to Solite™ (0.91)
	SBL	smoothing beam lens (0.91)
TRIM COLOR SEE PAGE 5	**BK**	black
	WH	white
	MC	matte chrome
	BZ	bronze
	CC[6]	custom color, consult factory for details
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.	
	Not applicable to trimless option. Do not include in trimless ordering code.	
BEZEL COLOR SEE PAGE 5	**BK**	black (0.98)
	WH	white (1.00)
	MC	matte chrome (0.99)
	BZ	bronze (0.98)
	CC[6]	custom color, consult factory for details
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.	

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

ORDERING CODE

MOUNTING OPTIONS SEE PAGE 7, 8	**NC**	new construction plate
	NCINH[7]	new construction with ceiling fitting plate, IC rated, inherently protected
	IC[8]	insulation contact housing
	ICAT[8]	insulation contact/airtight housing
	CP[8]	chicago plenum housing
	RET	retrofit, no ceiling plate
	RETINH[7]	retrofit, no ceiling fitting plate, IC rated, inherently protected
	remote driver only	
VOLTAGE	**LVL**	low voltage luminaire
DIMMING	**ND**	No driver included. See page 3 for remote driver options.

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:

NU1 - QA - SW - 10LM - 35K - 90 - 30D - NA - HET - WH - WH - NC - LVL - ND

NOTES

1. 17D available in 07LM.
2. 17D & 22D not available with NL and CL options.
3. 17D & 22D includes SBL lens as standard. One additional media may be used.
4. Elliptical lens not available with 17D optic options. Actual beam distributions [22D= 25° x 60° , 30D= 30° x 65° , 40D= 40° x 70° , 55D= 55° x 80°]
5. NL option does not meet requirements for AT/WET/NSF listings. Bezel lensing cannot be added in the field.
6. Custom set up fee plus minimum quantity required per color.
7. NCINH, RETINH available in 07LM.
8. IC/ICAT/CP/NCINH available in 07LM/10LM.

* EldoLED 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			

REMOTE DRIVER - ORDERING CODE		
SERIES	DX-C	compact driver box
NUIMBER OF DRIVERS	1-5	number of drivers, 1-5
CURRENT	150	150mA
	200	200mA
	300	300mA
VOLTAGE	120	120V
	UNV	120V-277V
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[1]	DMX control dimming to 0.1% with RJ45 connection
	DMX-WL[1]	DMX-512/RDM dim to 0% with lead wire input
	DMX-XLR[1]	DMX-512/RDM dim to 0% with XLR input
	LUT	Lutron Hi-lume Ecosystem dimming to 1%, Soft-on & Fade-to-Black
	LUTP	Lutron Hi-Lume Eco (fade) dim to 0.1%
	ELV1[2]	leading edge & trailing edge (Triac/ELV) dim to 1%
	NLT	nLight control interface: Cat-5/RJ45, dim to off
	CAS[3]	Casambi control with flicker free 1% dimming
	AWNR[4]	lutron athena wireless node
ELECTRICAL OPTIONS	EM7[5]	remote emergency battery backup, 90 minutes at 7 watts to LED, Remote TS

YOUR COMPLETED ORDERING CODE
Follow the steps to specify your fixture, example:
DX-C - 1 - 300 - UNV - DIM10 - EM7

NOTES

1. DMX available only in DX-C-1.
2. ELV available in 120V.
3. All drivers on single Casambi dimming circuit.
4. AWNR reference page 10 for product specification on Athena wireless node.
5. EM available only with DX-C-1. Box size same as DX-C-2, with one driver and one battery.

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

22° - 55° BEAM
(Note: Specifications are subject to change without notice)

6mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
07LM	630LM @30K/80CRI	7W
10LM	800LM @30K/80CRI	9W
13LM	1150LM @30K/80CRI	14W
07LM	530LM @30K/90CRI	7W
10LM	680LM @30K/90CRI	9W
13LM	980LM @30K/90CRI	14W
Notes	Delivered lumens based on 55D optic with no lens, (see page 2)	

17° BEAM
(Note: Specifications are subject to change without notice)

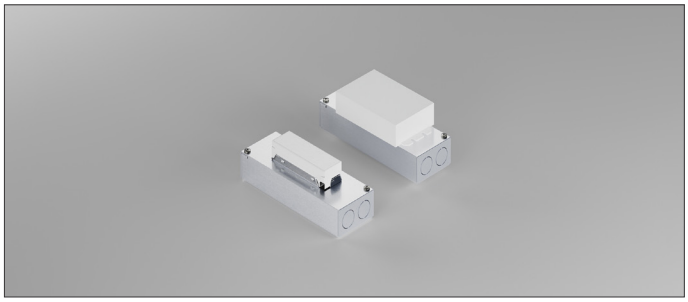
4mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
05LM	550LM @30K/80CRI	7W
05LM	500LM @30K/90CRI	7W
Notes	Delivered lumens based on 17D optic with SBL lens, (see page 2)	

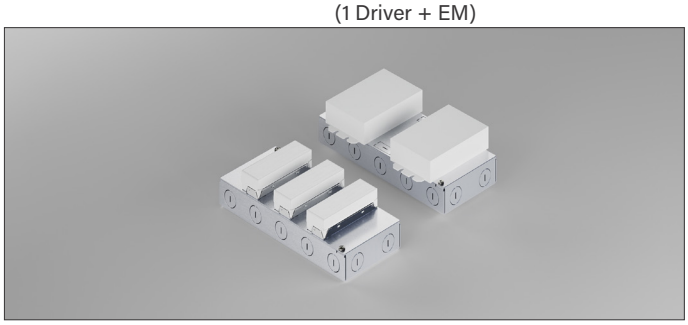
ELECTRICAL/CONTROLS

- 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)
- Minimum wire gauge approved mounting distance 18 AWG, 330 feet
- Maximum Remote mounting distance of EM driver shall be 50 feet

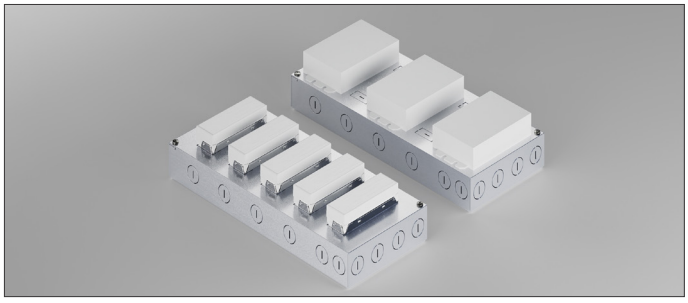
REMOTE SINGLE DRIVER BOX



REMOTE 2 TO 3 DRIVER BOX (2 Drivers for DIM10Z/DALI/DALIZ/LUT/LUTP) (1 Driver + EM)



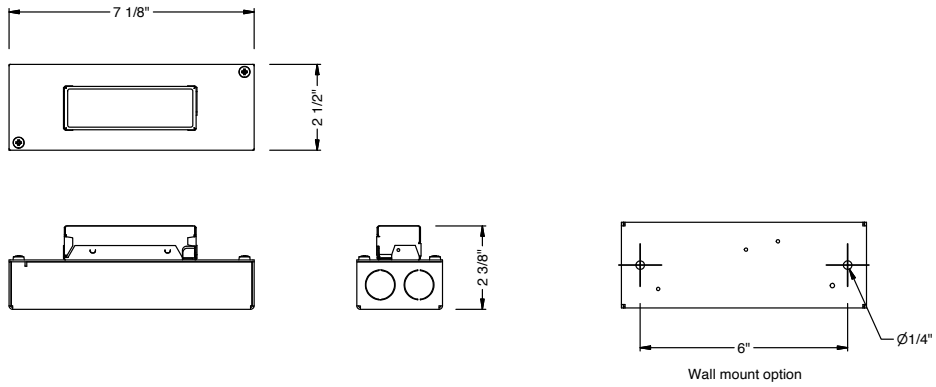
REMOTE 4 TO 5 DRIVER BOX (3 Drivers for DIM10Z/DALI/DALIZ/LUT/LUTP)



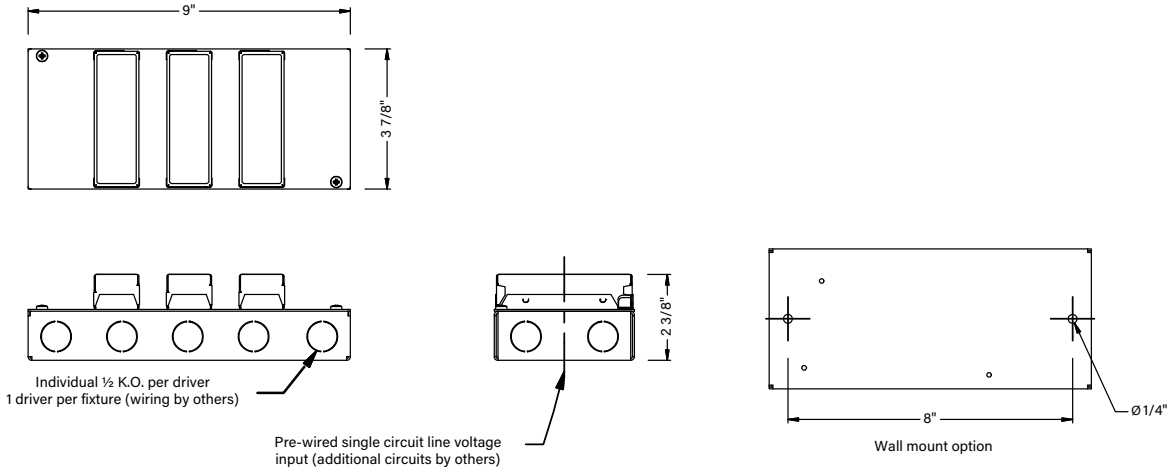
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

DRIVER BOXES

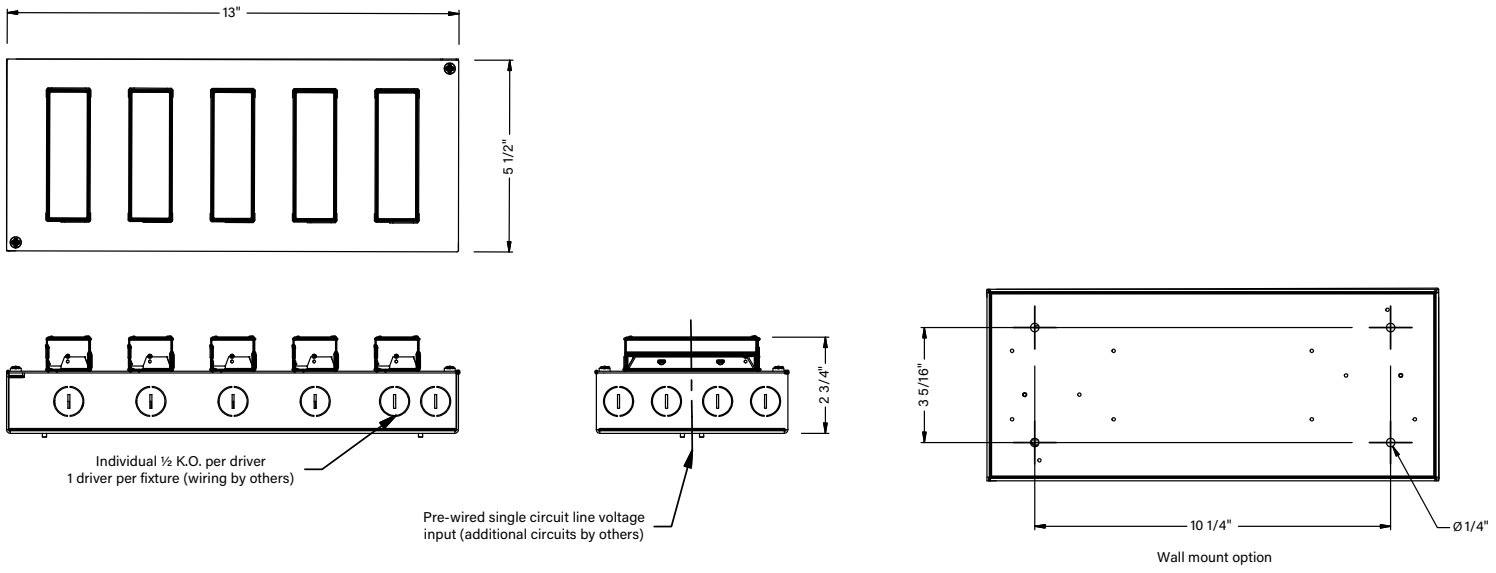
REMOTE SINGLE DRIVER BOX



REMOTE 2 TO 3 DRIVER BOX (2 Drivers for DIM10Z/DALI/DALIZ/LUT/LUTP)



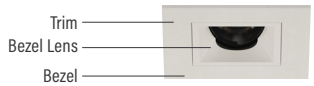
REMOTE 4 TO 5 DRIVER BOX (3 Drivers for DIM10Z/DALI/DALIZ/LUT/LUTP)



PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM/BEZEL COLORS









WH **MC** **BK** **BZ**

OPTICAL OPTIONS

- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 05LM fixtures, unless otherwise noted.

HCL
Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
17D	17	5
22D	20	6.3
30D	26.8	12.4
40D	34.5	14
55D	44	19.4

NL
No Lens



OPTIC	BEAM ANGLE	UGR
30D	30.2	18.1
40D	40	18.7
55D	54.9	24.6

CL
Clear Lens



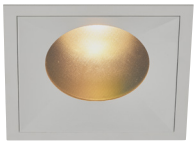
OPTIC	BEAM ANGLE	UGR
30D	28	16.1
40D	36.4	17.6
55D	52.1	23.9

DL
Diffused Lens



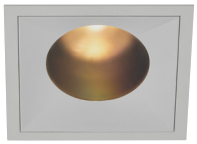
OPTIC	BEAM ANGLE	UGR
22D	36	21.4
30D	40	22.3
40D	45.1	23.8
55D	58	27.6

HET
High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
17D	21	9.5
22D	24	13.5
30D	33	18.2
40D	40.1	19.7
55D	53.8	24.6

SBL
Smoothing Beam Lens



OPTIC	BEAM ANGLE	UGR
17D	18	8
22D	23	13.8
30D	32	17.2
40D	40	18.7
55D	54	24

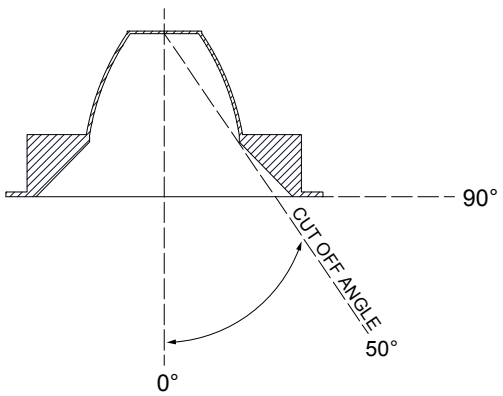
GLARE CONTROL

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 50 degrees;



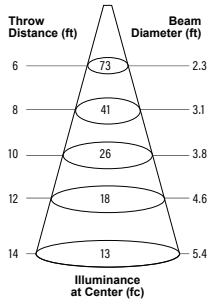
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

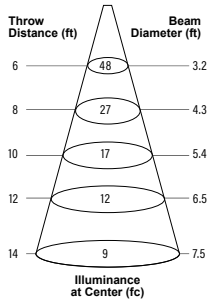
07LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance^2		

22D 22° SBL LENS



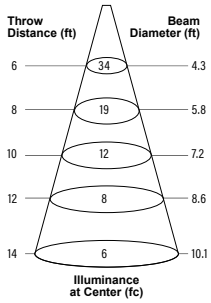
WATTS: 5.5	LPW: 92.7
LUMENS: 510	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2631
5	2287
15	738
25	162
35	25
45	9

30D 30° NO LENS



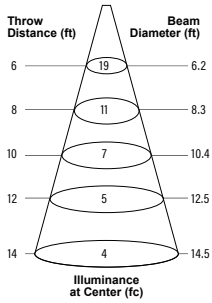
WATTS: 5.5	LPW: 105.4
LUMENS: 580	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1733
5	1599
15	873
25	279
35	57
45	17

40D 40° NO LENS



WATTS: 5.5	LPW: 105.3
LUMENS: 579	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1215
5	1177
15	853
25	339
35	74
45	21

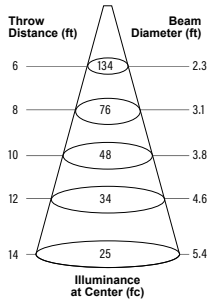
55D 55° NO LENS



WATTS: 5.5	LPW: 113.9
LUMENS: 627	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	699
5	689
15	597
25	402
35	199
45	74

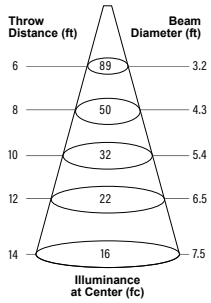
13LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance^2		

22D 22° SBL LENS



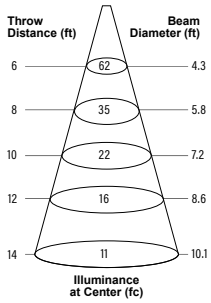
WATTS: 11	LPW: 85.3
LUMENS: 938	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	4842
5	4209
15	1357
25	298
35	45
45	16

30D 30° NO LENS



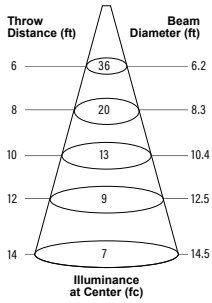
WATTS: 11	LPW: 97
LUMENS: 1067	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	3189
5	2941
15	1606
25	513
35	105
45	32

40D 40° NO LENS



WATTS: 11	LPW: 96.9
LUMENS: 1066	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2236
5	2165
15	1569
25	624
35	137
45	38

55D 55° NO LENS



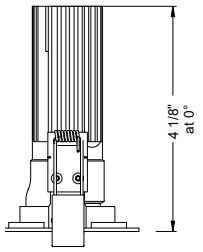
WATTS: 11	LPW: 104.8
LUMENS: 1153	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1287
5	1268
15	1098
25	739
35	366
45	136

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

FIXTURE HEIGHT

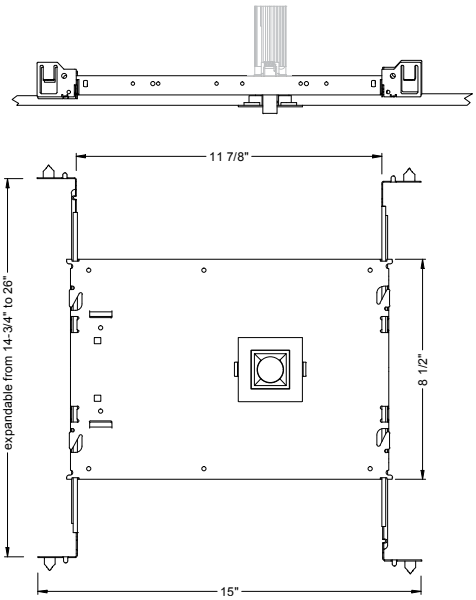
07LM - 13LM LOW LUMENS



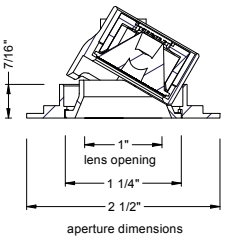
TRIMMED, TRIMLESS &
MILLWORK

NC - NEW CONSTRUCTION

TRIM



TRIM



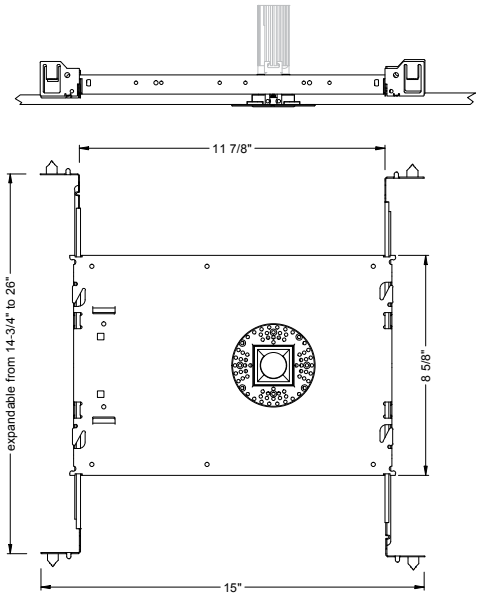
ceiling cutout
2-1/8" square

ceiling thickness
1/8" to 1-1/2"

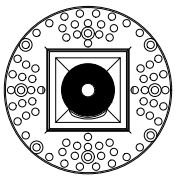
aperture dimensions

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"

TRIMLESS

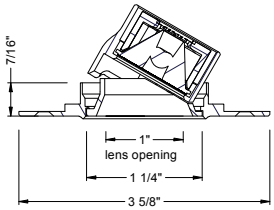


TRIMLESS



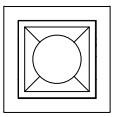
ceiling cutout
2-1/8" square

ceiling thickness
1/8" to 1-1/2"



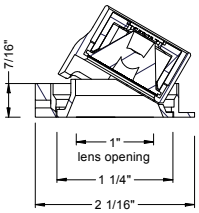
aperture dimensions

TRIMLESS/MILLWORK



ceiling cutout
2-1/8" square

ceiling thickness
1/8" to 1-1/2"

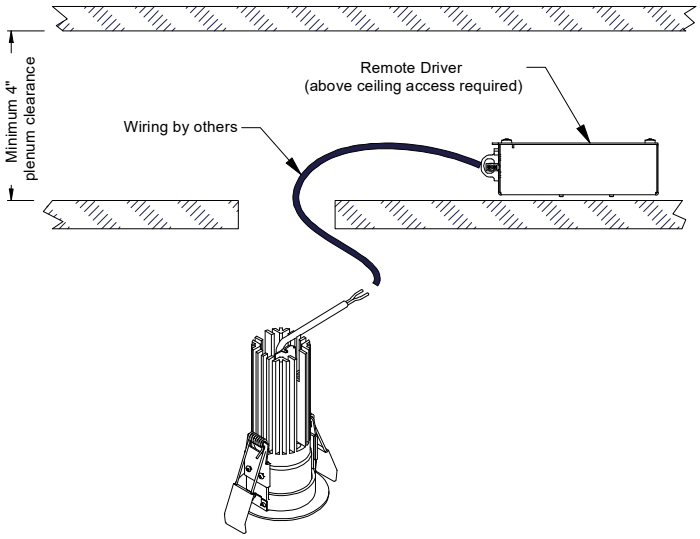


aperture dimensions

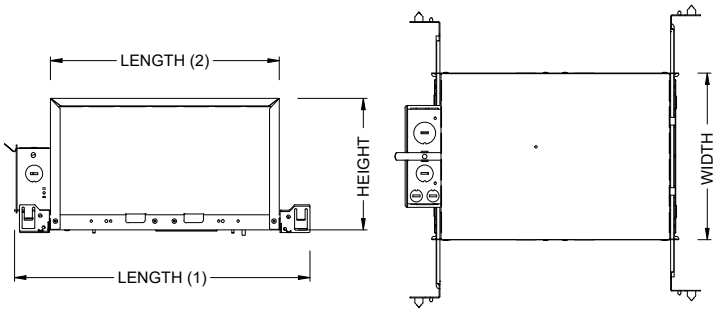
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

RET - RETRO
TRIM/TRIMLESS



IC - INSULATION CONTACT HOUSING
ICAT - INSULATION CONTACT / AIR TIGHT
CP - CHICAGO PLENUM

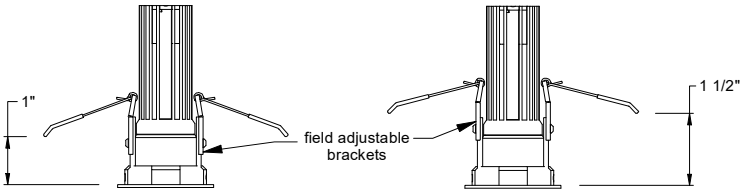


BOX SIZE	L 1	L 2	W	H
A	15 - 7/16"	11 - 3/4"	8 - 1/2"	6 - 3/4"

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

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS (14°-60°)			
LUMEN OUTPUT	BOX - A		
	CP	IC	ICAT
07LM	✔	✔	✔
10LM	✔	✔	✔
13LM			

CEILING THICKNESS			
FIXTURE TYPE	MOUNTING TYPE		
	NC, IC, ICAT, CP, RET	NC, IC, ICAT, CP, RET	NC, IC, ICAT, CP, RET
	STANDARD CEILING THICKNESS	THICK CEILING THICKNESS	CEILING CUTOUT
TRIM	1/8" to 1.0"	1.0" to 1 1/2"	2-1/8" square
TRIMLESS	1/8" to 1.0"	1.0" to 1 1/2"	2-1/8" square
MILLWORK (TRIMLESS)	1/8" to 1.0"	1.0" to 1 1/2"	2-1/8" square



1/8" to 1" thick ceiling

1" to 1-1/2" thick ceiling

FIXTURE TILT INFO	
TILT	CEILING THICKNESS
0° TO 30°	1/8" to 1.0"
0° TO 20°	1.0" to 1 1/2"

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

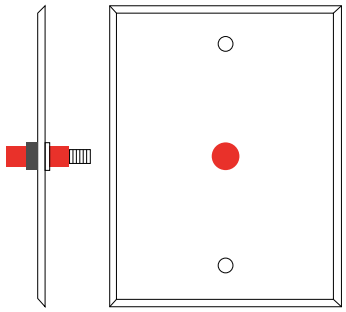
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

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

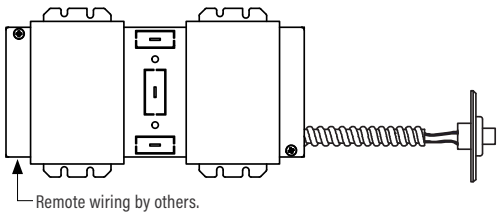
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.



Remote Test Switch

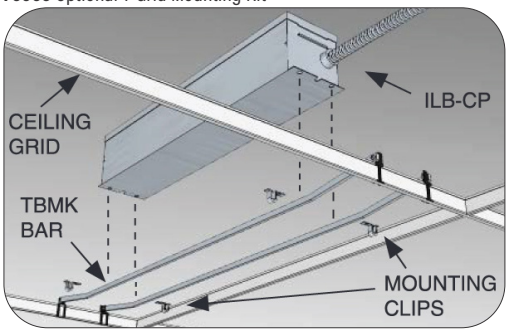
EM MODE OUTPUT (DELIVERED LUMENS)	
LUMEN ORDERING CODE	EM7
ALL OPTIONS (07LM TO 13LM)	600
Notes: Based on 30K, 80CRI	

REMOTE EM BATTERY (REMOTE TEST SWITCH)



Accessory

76066 Optional T-Grid Mounting Kit[1]



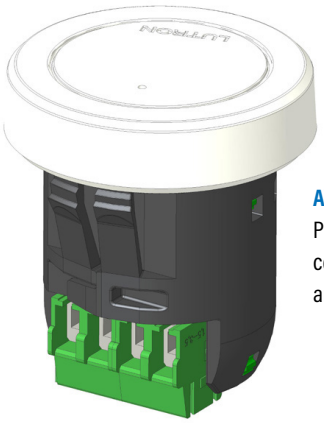
1. Can be used with any of the Emergency Battery Backups. Must be ordered as a separate line item.

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

AWNR OPTIONS

Athena Wireless Node

The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system.



Athena Wireless Node RF

OEM ADVANTAGE LUTRON

AWNR

Plenum rated and can be installed above the ceiling for wireless control of a fixture without any impact on fixture aesthetics.

FEATURES

- Enables individual, wireless control of each fixture in an Athena control system. Accommodates zone and control changes without rewiring.
- Installed at factory – no wiring required on-site. Fixture is ready to communicate wirelessly once power is connected.
- All drivers on the link are controlled as a single zone.

REGULATORY APPROVALS

- cULus Listed (UL916)
- Complies with requirements for use in other spaces used for environmental air (plenums) per NEC® 2014 300.22(C)(3).
- FCC compliant with the limits for a Class B digital device.
- IC (Industry Canada)
- ANSI C137.1 0–10 V- Electronic Off

POWER / LOAD

- IEC SELV/NEC® Class 2
- 1 Watt

ENVIRONMENTAL

- Ambient operating temperature (immediate vicinity of Athena wireless node): **32 °F to 131 °F** (0 °C to 55 °C), 0% to 90% humidity.

BATTERY OPTIONS

- For EM options please consult factory.

Note: Default behavior prior to programming

- Light level 100%
- Athena wireless node performs an unprogrammed startup sequence on every power up until the device is added to an Athena system.
- Each Athena wireless node should be installed within 25 ft (7.62 m) of two or more Athena wireless nodes or other Clear Connect – Type X devices.
- For Chicago plenum installations, the Athena wireless node may not be installed in the plenum space. It must be installed in the occupied space.

For servicing the driver/j-box, access above ceiling is required. (NC Mounting)

IC/ICAT/CP not available in AWNR.