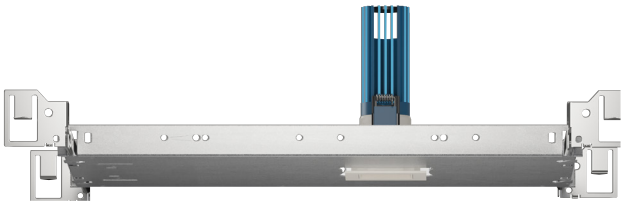
alphabet

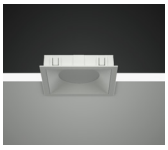
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NU1

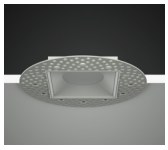
1" Square Deep Regress Standard White

NSF | AT airtight | PR plenum rated | wet rated





Trim



Trimless



Trimless Millwork

22° - 50° BEAM (Note: Specifications are subject to change without notice)			
6mm COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
07LM	610LM @30K/80CRI	150MA	5.5W
10LM	790LM @30K/80CRI	200MA	7.5W
13LM	1110LM @30K/80CRI	300MA	11W
07LM	520LM @30K/90CRI	150MA	5.5W
10LM	670LM @30K/90CRI	200MA	7.5W
13LM	940LM @30K/90CRI	300MA	11W
Notes	Delivered lumens based on 30D optic with no lens, (see page 2)		

17° BEAM (Note: Specifications are subject to change without notice)			
4.5mm COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
07LM	580LM @30K/80CRI	150MA	5.5W
07LM	490LM @30K/90CRI	150MA	5.5W
Notes	Delivered lumens based on 17D optic with no lens, (see page 2)		

FEATURES

- 3/4" bezel regress with 1/16" micro flange
- 17° - 50° optical beam control
- Superior 38° cut off angle
- Up to 110 LPW
- 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 2 dimming to 0% and 1%
- Lutron Hi-lumen 2-Wire (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

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

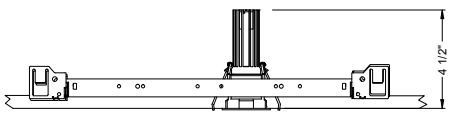
- ULus Listed to UL1598 & UL2108; cUL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- **Declare.** - LBC Red List Approved
- 5 Year Limited warranty

ELECTRICAL

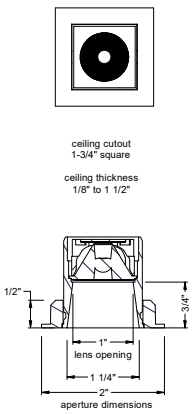
- Low voltage luminaire: 36Vdc nominal
- 07LM - 150mA
- 10LM - 200mA
- 13LM - 300mA

FIXTURE HEIGHT

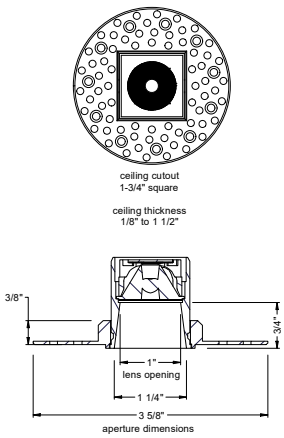
LED LIGHT ENGINE: 07LM - 13LM



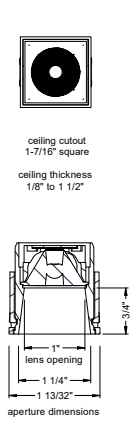
TRIMMED



TRIMLESS



MILLWORK



101216

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

ORDERING CODE

SERIES	**NU1**	NU1
TYPE	**QDDR**	square downlight deep regress
	QDTDR	square downlight trimless deep regress
	QDTMWDR	square downlight trimless millwork deep regress
LED	**SW**	standard white
DELIVERED LUMENS	**07LM**	610 lm
	10LM	790 lm
	13LM	1110 lm
	Standard Configuration: 3000K 80CRI 20D, **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

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

CRI	**80**	80 CRI	
	90	90 CRI	
OPTIC & LM MULTIPLIER SEE PAGE 6	**17D**[1, 2, 3]	17 degrees	(1.00)
	22D[2, 3]	22 degrees	(0.96)
	30D	30 degrees	(1.00)
	40D	40 degrees	(0.98)
	50D	50 degrees	(0.97)
BEZEL LENS SEE PAGE 5	**NL**[4]	no lens	(1.00)
	CL	clear lens	(0.98)
	DL	diffused lens	(0.90)
	HCL	honeycomb louver	(0.65)
	HET	high efficiency textured lens, similar to Solite™	(0.91)
	SBL	smoothing beam lens	(0.92)
	Maximum 2pcs of media per fixture.		
TRIM COLOR SEE PAGE 5	**BK**	black	
	WH	white	
	MC	matte chrome	
	BZ	bronze	
	CC[5]	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[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 8, 9	**NC**	new construction plate
	NCINH[6]	new construction with ceiling fitting plate, IC rated, inherently protected
	IC[7, 8]	insulation contact housing
	ICAT[7, 8]	insulation contact/airtight housing
	CP[7, 8]	chicago plenum housing
	RET	retrofit, no ceiling plate
	RETINH[6]	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 - QDDR - SW - 10LM - 35K - 90 - 30D - 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. NL option does not meet requirements for AT/DF/WET/NSF listings.
5. Custom set up fee plus minimum quantity required per color.
6. NCINH, RETINH available in 07LM.
7. IC/ICAT/CP not available in 13LM.
8. IC/ICAT/CP not available in QDDRTMW.

alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

REMOTE DRIVER - ORDERING CODE		
SERIES	DX-C	compact driver box
NUMBER 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 11. 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° - 50° BEAM
(Note: Specifications are subject to change without notice)

6mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
07LM	610LM @30K/80CRI	7W
10LM	790LM @30K/80CRI	9W
13LM	1110LM @30K/80CRI	14W
07LM	520LM @30K/90CRI	7W
10LM	670LM @30K/90CRI	9W
13LM	940LM @30K/90CRI	14W

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

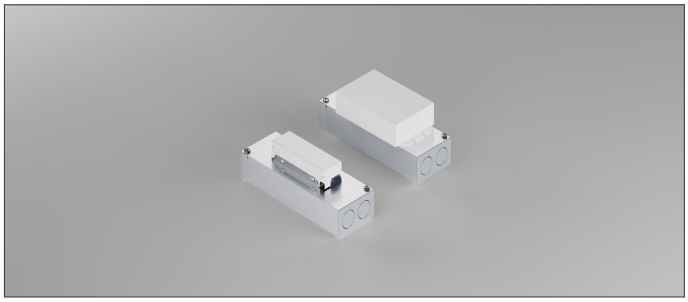
4.5mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
07LM	580LM @30K/80CRI	8W
07LM	490LM @30K/90CRI	8W

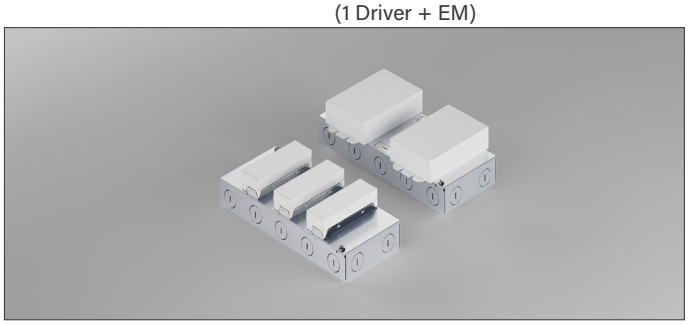
ELECTRICAL/CONTROLS

- 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

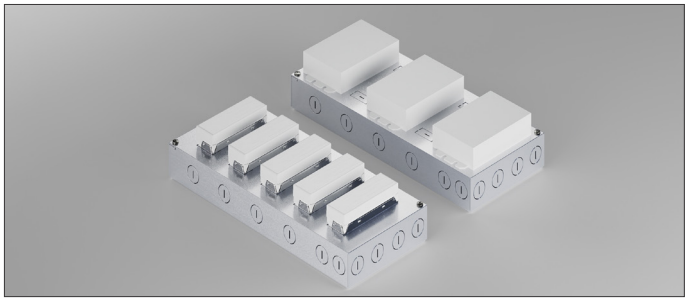
REMOTE SINGLE DRIVER BOX



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)

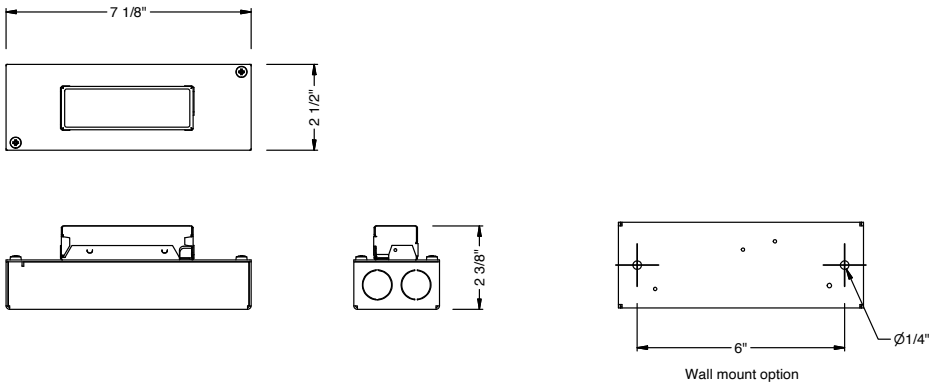


alphabet

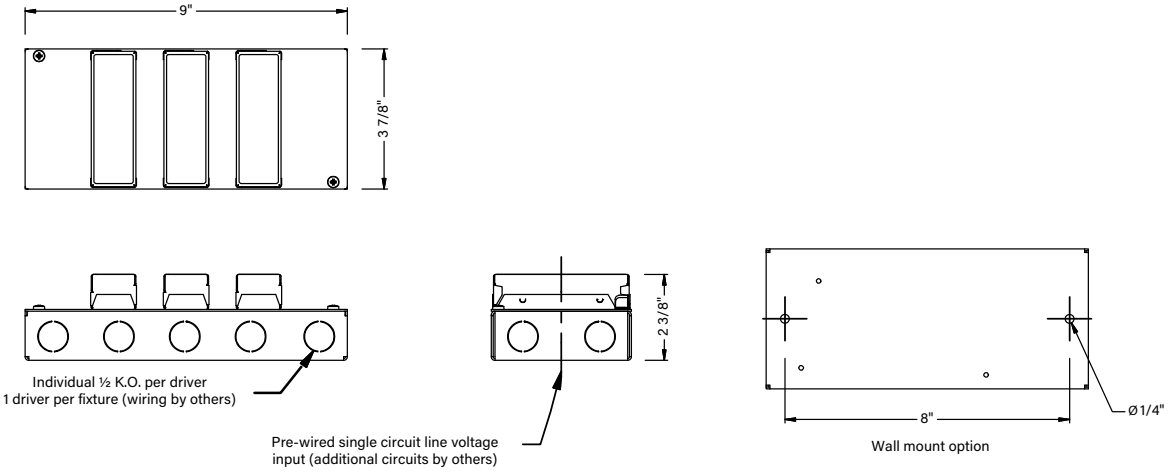
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

DRIVER BOXES

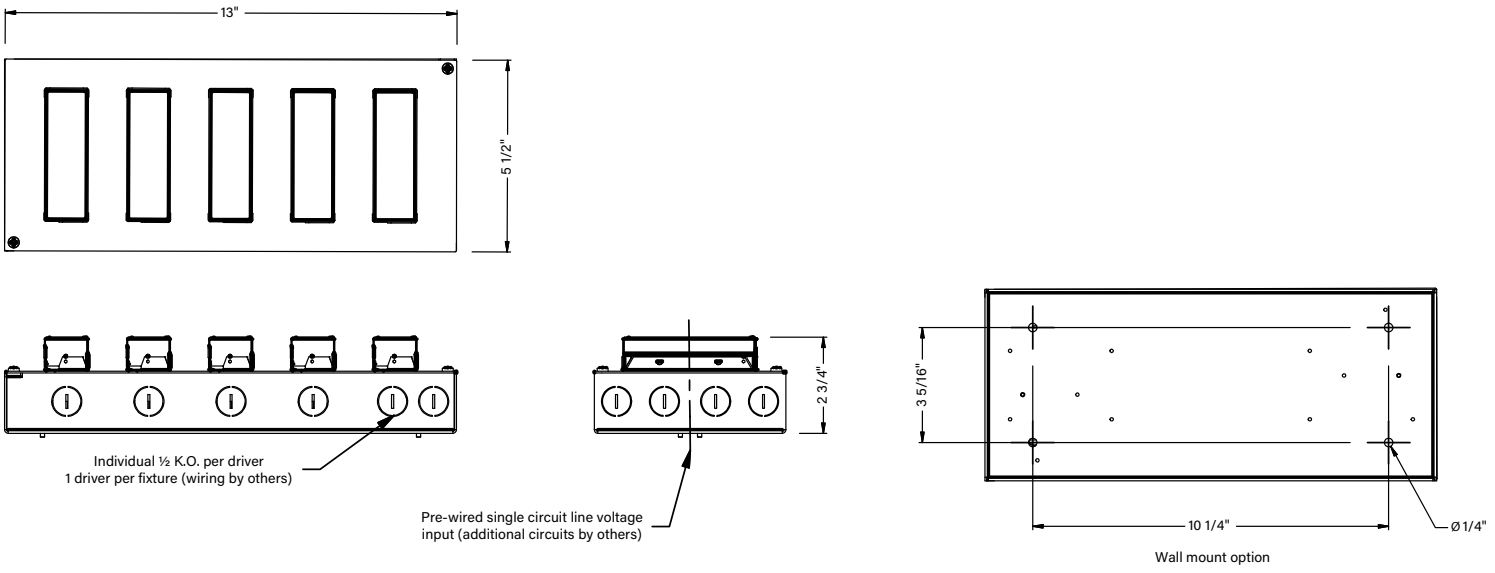
REMOTE SINGLE DRIVER BOX



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



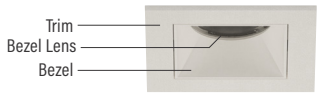
REMOTE 4 TO 5 DRIVER BOX (3 Drivers for DIM10Z/DALI/DALIZ/LUT/LUTP)



PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

TRIM OPTIONS

TRIM/BEZEL COLORS



WH



MC



BK



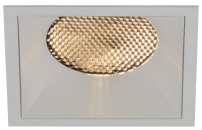
BZ

OPTICAL OPTIONS

- UGR calculation based on CIE 117-1995; room size: 4H X 8H, reflectance: 70/50/20;
- UGR calculation based on 07LM BK fixtures, unless otherwise noted.

HCL

Honeycomb Louver



OPTIC	BEAM ANGLE	UGR
17D	17	5
22D	20	5
30D	25.4	7.6
40D	31.6	10.4
50D	38	16.3

NL

No Lens



OPTIC	BEAM ANGLE	UGR
30D	28	9.4
40D	36	13.4
50D	48	21

CL

Clear Lens



OPTIC	BEAM ANGLE	UGR
30D	28.2	9
40D	35.4	13.3
50D	46.3	20.5

DL

Diffused Lens



OPTIC	BEAM ANGLE	UGR
22D	33.5	14.5
30D	38.5	15.7
40D	41.9	17.9
50D	50.8	20

HET

High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
17D	21	5
22D	23	9.8
30D	30	11
40D	35.6	14.7
50D	46.3	20

SBL

Smoothing Beam Lens



OPTIC	BEAM ANGLE	UGR
17D	17	5
22D	22	5
30D	28.8	9.7
40D	35.4	13.9
50D	46.4	20.2

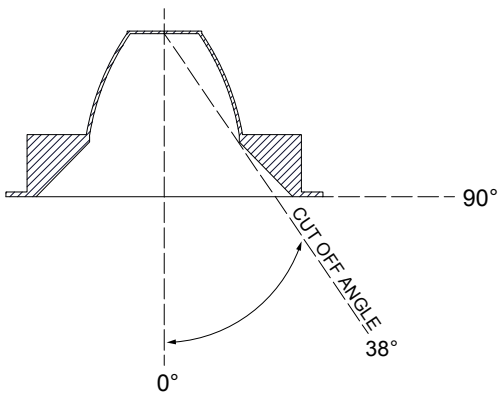
GLARE CONTROL

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.

- Cut-off angle of NL and CL is 38°



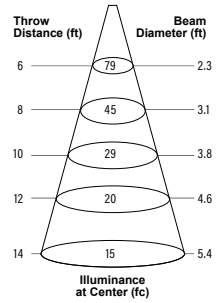
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

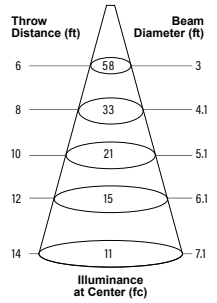
07LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance^2		

22D 22° WITH SBL LENS



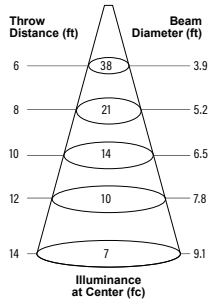
WATTS: 5.5	LPW: 97.3
LUMENS: 535	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2862
5	2487
15	788
25	109
35	28
45	18

30D 28° WITH NO LENS



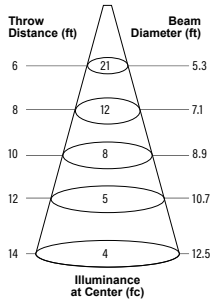
WATTS: 5.5	LPW: 111.4
LUMENS: 613	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2102
5	1917
15	965
25	199
35	43
45	25

40D 36° WITH NO LENS



WATTS: 5.5	LPW: 109.2
LUMENS: 601	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1372
5	1316
15	904
25	293
35	71
45	30

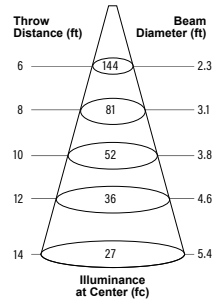
50D 48° WITH NO LENS



WATTS: 5.5	LPW: 111
LUMENS: 610	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	773
5	752
15	617
25	360
35	176
45	66

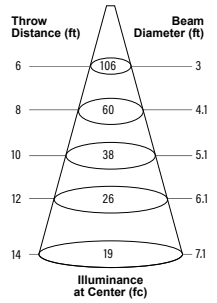
13LM CCT MULTIPLIERS		
	80CRI	90CRI
2700K	0.96	0.81
3000K	1	0.85
3500K	1.03	0.88
4000K	1.06	0.91
FC Formula = CBCP / Distance^2		

22D 22° WITH SBL LENS



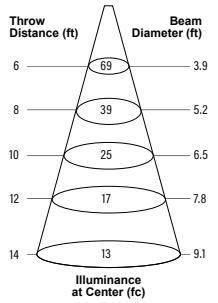
WATTS: 11	LPW: 88.4
LUMENS: 972	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	5195
5	4514
15	1430
25	198
35	51
45	32

30D 28° WITH NO LENS



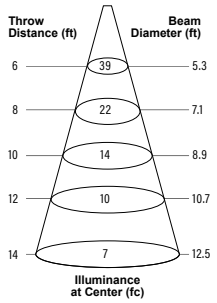
WATTS: 11	LPW: 101.1
LUMENS: 1112	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	3815
5	3479
15	1752
25	362
35	78
45	45

40D 36° WITH NO LENS



WATTS: 11	LPW: 99.1
LUMENS: 1090	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	2491
5	2390
15	1641
25	532
35	129
45	54

50D 48° WITH NO LENS



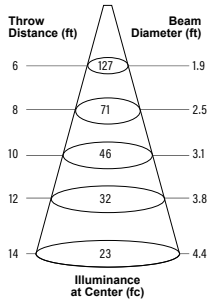
WATTS: 11	LPW: 100.7
LUMENS: 1108	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	1404
5	1364
15	1119
25	654
35	319
45	120

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		

17D
17° WITH SBL LENS



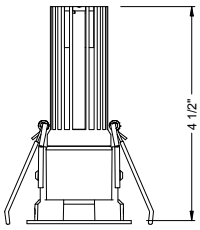
WATTS: 5.5	LPW: 106
LUMENS: 583	CCT: 3000K
INTENSITY	
DEGREE	CANDELA
0	4570
5	3655
15	794
25	73
35	19
45	9

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

FIXTURE HEIGHT

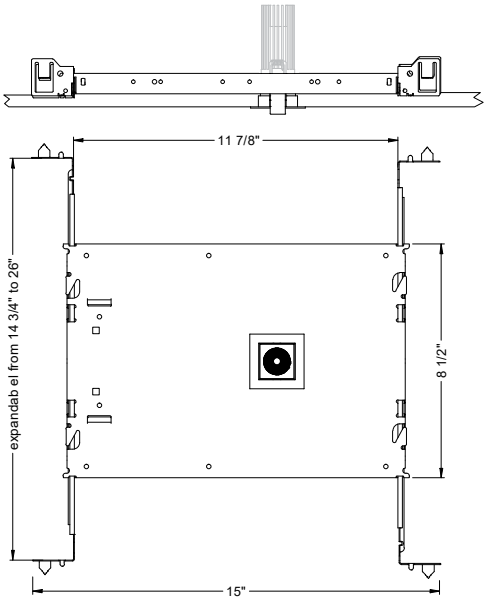
LED LIGHT ENGINE: 07 - 13LM



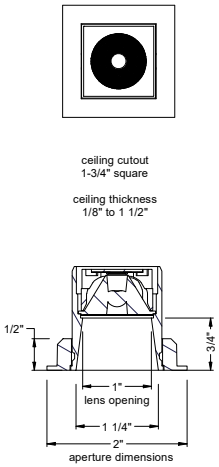
TRIMMED, TRIMLESS & MILLWORK

NC - NEW CONSTRUCTION

TRIM

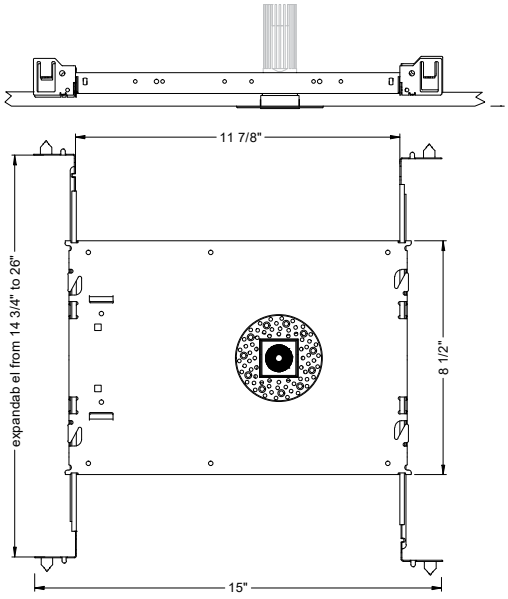


TRIM

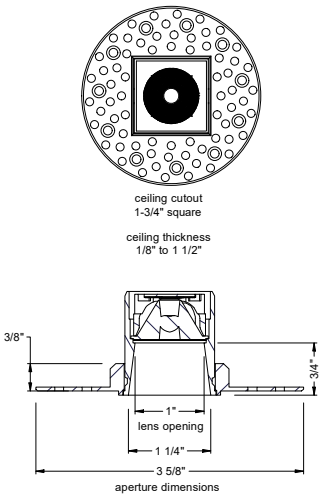


ADDITIONAL MOUNTING INFO	
New Construction Bar Hangers (included)	Mounting Length: 14-3/4" to 26"
Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	*Extends a pair of Bar Hangers* Total Mounting Length: 29" to 48"

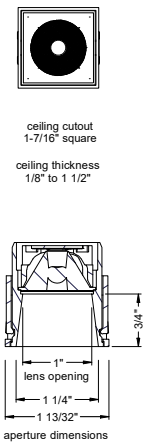
TRIMLESS



TRIMLESS



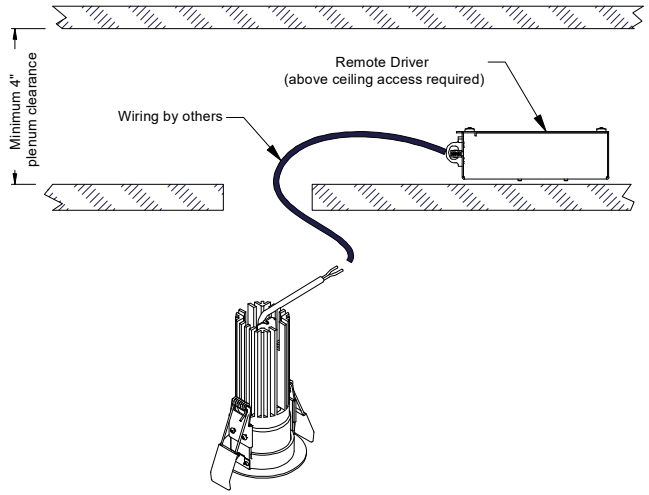
TRIMLESS/MILLWORK



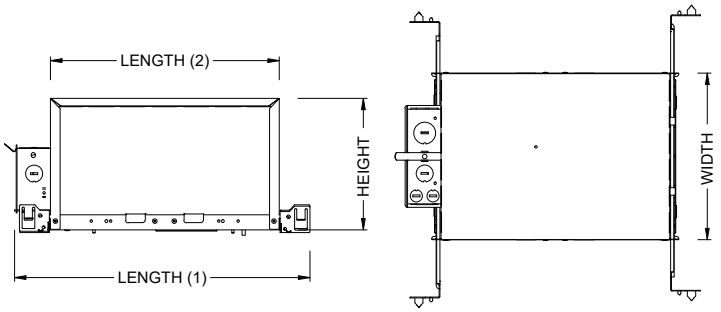
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

RET - RETRO
TRIM/TRIMLESS



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

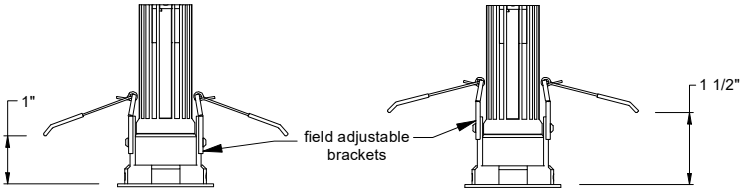


BOX SIZE	L1	L2	W	H
A	15 - 7/16"	11 - 3/4"	8 - 1/2"	6 - 3/4"

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

BOX TYPE / LUMEN OUTPUT - STANDARD BEAMS (14°-50°)			
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
	STANDARD CEILING THICKNESS	THICK CEILING THICKNESS
TRIM	1/8" to 1.0"	1.0" to 1 1/2"
TRIMLESS	1/8" to 1.0"	1.0" to 1 1/2"
MILLWORK (TRIMLESS)	1/8" to 1.0"	1.0" to 1 1/2"



1/8" to 1" thick ceiling

1" to 1-1/2" thick ceiling

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

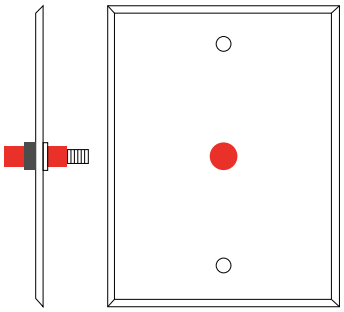
The Remote Test Switch may be mounted adjacent to the LED Fixture by others.

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

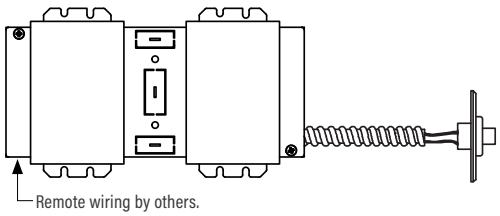
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.



Remote Test Switch

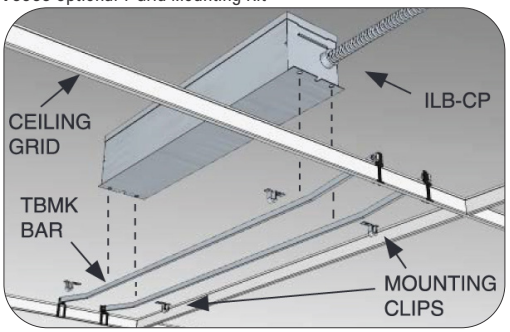
EM MODE OUTPUT (DELIVERED LUMENS)	
LUMEN ORDERING CODE	EM7
ALL OPTIONS (07LM TO 13LM)	600
Notes: Based on 30K, 80CRI	

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.

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.

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.