alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

NU2

2" Square Adjustable Warm Dim

NSF · AT airtight · PR plenum rated · wet rated · BABA•BAA

20° - 50° BEAM (Note: Specifications are subject to change without notice)		
6mm COB PERFORMANCE DATA		
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
05LM	470LM @30K/90CRI	7W
10LM	1090LM @30K/90CRI	16W
Notes	Delivered lumens based on 25° optic with no lens, (see page 2)	



FEATURES

- True 40° Tilt with <20% beam disruption (clipping)
- Zero ceiling line obstruction at Full Tilt
- Full, 360° rotation
- UGR < 17
- 85 LPW average
- Glare control, specialty optics, trim options, and custom finishes available
- Microban® antimicrobial finish available on all exposed painted surfaces

DIMMING AND CONTROLS

- eldoLED 0-10V, 0.1% and 1%
- BAA - BABA compliant, flicker free 0-10V dim to 1%
- eldoLED DALI, dim to 0.1% and 1%
- DMX-512/RDM dim to 0%
- Lutron Hi-Lume Ecosystem, dim to 1% and 0.1%
- Leading & trailing edge (Triac/ELV), dim to 0%
- NLight control interference dimming to 0%
- Wireless control options, dim to 1% (Ref. page 12)

CONSTRUCTION

- High-grade die-cast and cold forged aluminum alloy assembly with superior thermal and corrosion resistant properties
- Shatter proof acrylic bezel lens
- 20-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-3/4"
- **CUTOUT DIMENSIONS:**
  Trim - 2-3/4" x 2-3/4"
  Trimless - 2-3/4" x 2-3/4"
  Millwork - 2-5/8" x 2-5/8"

LED

- Luminus Dim-to-warm COB: 97 CRI: SDCM = 3-step MacAdam Ellipse; Lumen Maintenance: L_{70} > 54,000 hrs

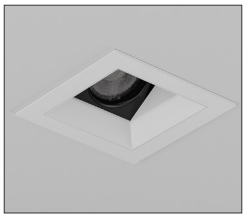
LISTING

- 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

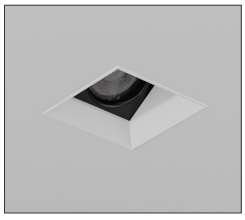
ELECTRICAL

- 120V-277V, 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)

TRIM OPTIONS



Trimmed

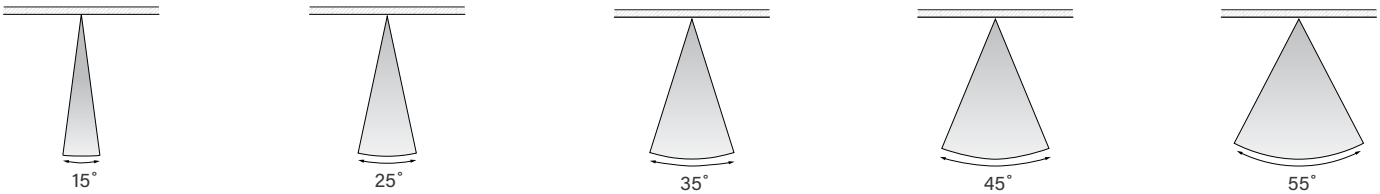


Trimless



Trimless Millwork

BEAM SPREADS



alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

ORDERING CODE

SERIES	**NU2**	NU2
TYPE	**SA**	square adjustable
	SAT[1]	square adjustable trimless
	SATMW[1]	square adjustable trimless millwork
LED	**WD**	warm dim (Luminus)- halogen curve
DELIVERED LUMENS	**05LM**[2]	470 lm
	10LM	1090 lm
	Standard Configuration: 3000K 90CRI 35D, **NL**	
	Calculated Delivered Lumens = [Delivered Lumen Value] x [CCT Multiplier] x [Optic Multiplier] x [Lens Multiplier]	
CCT	**2718**	2700K, dim to 1800K
	3018	3000K, dim to 1800K
	3020	3000K, dim to 2000K

CCT at Light Level (%LF)

%LF	2718	3018	3020
100%	2710	3050	3050
50%	2670	2990	3000
25%	2570	2850	2850
10%	2090	2200	2240
5%	1880	1880	1980

CRI	**90**	90 CRI	
OPTIC & LM MULTIPLIER	**20D**	20 degrees	(0.98)
	25D	25 degrees	(1.00)
	35D	35 degrees	(0.96)
	50D	50 degrees	(0.85)
ACCESSORY	**NA**	no accessory	(1.00)
	DLA	diffused lens	(0.84)
	EA	elliptical lens	(0.79)
	HCL	honeycomb louver	(0.67)
	HETA	high efficiency textured lens, similar to Solite™	(0.92)
	SBLA	smoothing beam lens	(0.94)
	Maximum 2pcs of media per fixture.		
BEZEL LENS	**NL**[3]	no lens	(1.00)
	CL	clear lens	(0.85)
	DL	diffused lens	(0.82)
	E	elliptical beam spread	(0.80)
	HET	high efficiency textured lens, similar to Solite™	(0.83)
	SBL	smoothing beam lens	(0.83)
TRIM COLOR	**BK**	black	
	WH	white	
	MC	matte chrome	
	BZ	bronze	
	CC[4]	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	**BK**	black	(0.98)
	WH	white	(1.00)
	MC	matte chrome	(0.99)
	BZ	bronze	(0.98)
	CC[4]	custom color, consult factory for details	
	Antimicrobial finish, add **AM** to black, white or matte chrome i.e. BKAM.		

ORDERING CODE

MOUNTING OPTIONS	**NC**	new construction plate
	NC-F	new construction plate, fixed driver
	NCINH[5]	new construction with ceiling fitting plate, IC rated, inherently protected
	IC[6]	insulation contact housing
	ICAT[6]	insulation contact/airtight housing
	CP[6]	chicago plenum housing
	RET	retrofit, no ceiling plate
	RETINH[5]	retrofit, no ceiling fitting plate, IC rated, inherently protected
VOLTAGE	**120**	120V
	UNV	120V-277V
	LVL[7]	low voltage luminaire
DIMMING	**DIM10**	eldoLED flicker free 0-10V dim to 1%
	BDIM10	BAA – BABA compliant, 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%
	LUTP[8, 9]	Lutron Hi-Lume Eco (fade) dim to 0.1%
	ELV1	leading edge & trailing edge (Triac/ELV) dim to 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
	NLT	nLight control interface: Cat-5/RJ45, dim to off
	ND	no driver included
	WIRELESS (ref. page 12 for available options)	
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

YOUR COMPLETED ORDERING CODE

Follow the steps to specify your fixture, example:

NU2 - SA - WD - 20LM - 3018 - 90 - 25D - NA - NL - WH - WH - NC - UNV - DIM10 - EM7

COMPATIBILITY - MOUNTING / ACCESSIBILITY / DIMMING

DIMMING	NC-F	NC	IC	ICAT	CP	RET
	FIXED	FLOATING	FLOATING	FLOATING	FLOATING	FLOATING
DIM10	✔	✔	✔	✔	✔	✔
DIM10Z	✔					
BDIM10	✔	✔	✔	✔	✔	✔
DALI	✔	✔	✔	✔	✔	✔
DALIZ	✔					
LUTP	✔	✔	✔	✔	✔	✔
ELV1	✔	✔	✔	✔	✔	✔
ND	REMOTE POWER SUPPLY					

Fixed driver - above ceiling access required (grid / T-Bar ceiling)

Floating driver - below ceiling accessible (gypsum / hard lid ceiling)

NOTES

1. Available in DIM10/BDIM10 only, floating single knockout box.
2. 05LM 1:1 linear dimming.
3. NL option does not meet requirements for AT/WET/NSF listings.
4. Custom set up fee plus minimum quantity required per color.
5. RETINH/NCINH available in 05LM.
6. IC/ICAT/CP not available in 10LM.
7. Must select ND dimming code, for remote driver or POE specifications see page 12.
8. ELV1 available in 120V.
9. Available in NC-F for SAT/SATMW.

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

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

OPTICAL OPTIONS

- Corrected UGR values generated per CIE 190-2010 at the following reference condition:
  Room dimensions: X = 4H, Y = 8H
  Reflectances: 70/50/20
- UGR calculation based on 10LM fixtures, unless otherwise noted.

HCL-NL
Honeycomb Louver



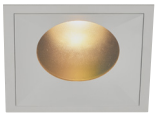
OPTIC	BEAM ANGLE	UGR
20D	19	<10
25D	23	<10
35D	30	<10
50D	39	<10

NA-NL
No Lens



OPTIC	BEAM ANGLE	UGR
20D	20	<10
25D	26	<10
35D	34	<10
50D	52	<10

HETA-NL
High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
20D	23	<10
25D	28	<10
35D	35	<10
50D	49	13.7

DLA-NL
Diffused Lens



OPTIC	BEAM ANGLE	UGR
20D	35	12.1
25D	39	10.6
35D	43	12.2
50D	53	16.9

EA-NL
Elliptical Lens



OPTIC	BEAM ANGLE	UGR
20D	36x54	14x17
25D	39x58	14x15
35D	43x61	15x16
50D	**53x66**	**17x18**

SBLA-NL
Smoothing Beam Lens



OPTIC	BEAM ANGLE	UGR
20D	21	<10
25D	26	<10
35D	35	<10
50D	50	13.2

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			

OPTICAL OPTIONS

- Corrected UGR values generated per CIE 190-2010 at the following reference condition:
  Room dimensions: X = 4H, Y = 8H
  Reflectances: 70/50/20
- UGR calculation based on 10LM fixtures, unless otherwise noted.

NA-CL
Clear Lens



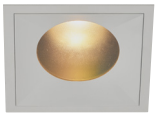
OPTIC	BEAM ANGLE	UGR
20D	20	<10
25D	25	<10
35D	33	10.3
50D	45	15.5

NA-NL
No Lens



OPTIC	BEAM ANGLE	UGR
20D	20	<10
25D	26	<10
35D	34	<10
50D	52	<10

NA-HET
High Efficiency Textured Lens



OPTIC	BEAM ANGLE	UGR
20D	23	<10
25D	27	<10
35D	33	10.3
50D	44	15.3

NA-DL
Diffused Lens



OPTIC	BEAM ANGLE	UGR
20D	35	13.5
25D	38	13.6
35D	42	14.8
50D	51	19.8

NA-E
Elliptical Lens



OPTIC	BEAM ANGLE	UGR
20D	35x57	15x20
25D	38x60	15x20
35D	41x64	16x21
50D	51x73	20x25

NA-SBL
Smoothing Beam Lens



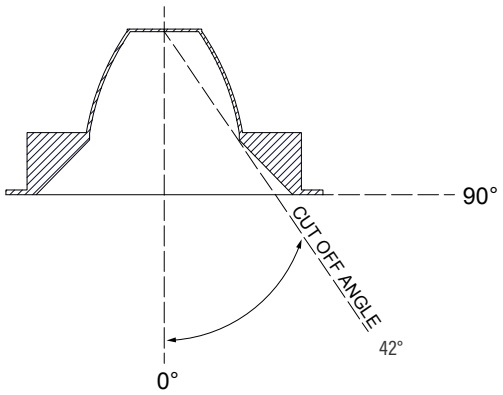
OPTIC	BEAM ANGLE	UGR
20D	20	<10
25D	26	<10
35D	33	10.3
50D	45	15.2

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 42° degrees;



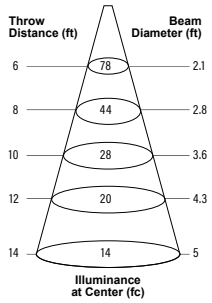
alphabet

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

PHOTOMETRIC DATA

05LM

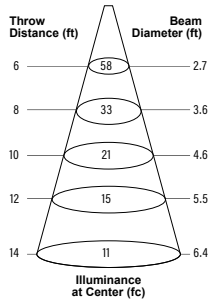
20D 20° WITH NO LENS



WATTS: 7	LPW: 66.4
LUMENS: 465	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	2825
5	2539
15	576
25	121
35	29
45	8

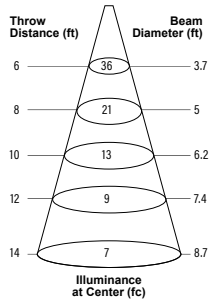
25D 26° WITH NO LENS



WATTS: 7	LPW: 66.6
LUMENS: 466	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	2098
5	1879
15	795
25	125
35	27
45	9

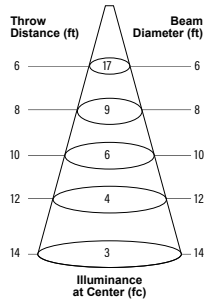
35D 34° WITH NO LENS



WATTS: 7	LPW: 66.1
LUMENS: 463	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	1313
5	1246
15	800
25	203
35	34
45	10

50D 52° WITH NO LENS

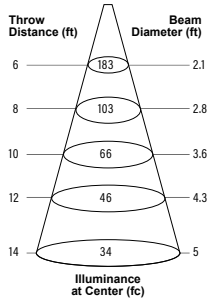


WATTS: 7	LPW: 62.6
LUMENS: 438	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	595
5	590
15	516
25	329
35	112
45	14

10LM

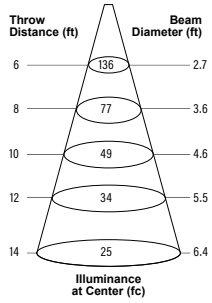
20D 20° WITH NO LENS



WATTS: 15.9	LPW: 68.3
LUMENS: 1085	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	6591
5	5925
15	1343
25	282
35	67
45	19

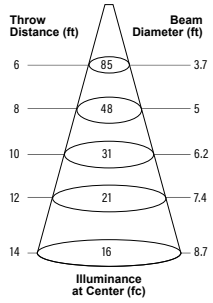
25D 26° WITH NO LENS



WATTS: 15.9	LPW: 68.4
LUMENS: 1088	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	4896
5	4383
15	1854
25	292
35	62
45	21

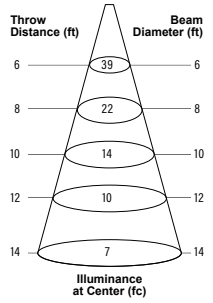
35D 34° WITH NO LENS



WATTS: 15.9	LPW: 68
LUMENS: 1080	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	3064
5	2907
15	1866
25	475
35	79
45	23

50D 52° WITH NO LENS



WATTS: 15.9	LPW: 64.3
LUMENS: 1022	CCT: 3000K

INTENSITY	
DEGREE	CANDELA
0	1389
5	1377
15	1203
25	768
35	261
45	32

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

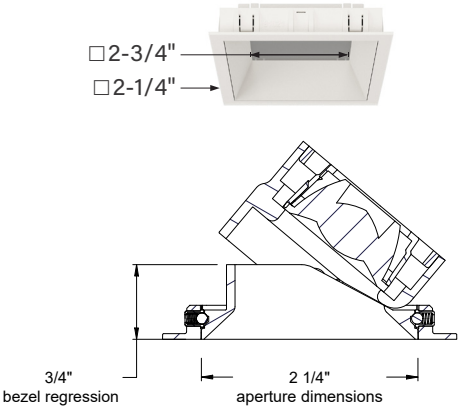
TRIM OPTIONS

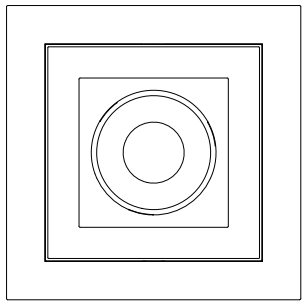
TRIM/BEZEL COLORS



WH MC BK BZ CC

TRIMMED

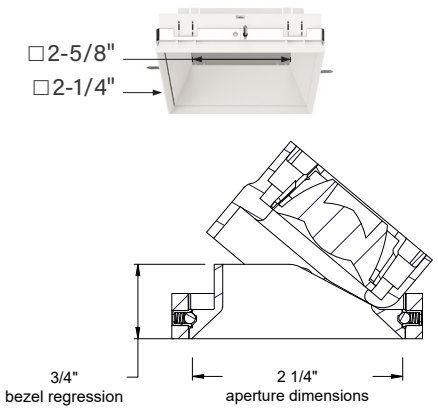


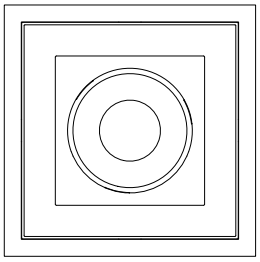


ceiling cutout
2-3/4" diameter

ceiling thickness
1/8" to 1-3/4"

MILLWORK

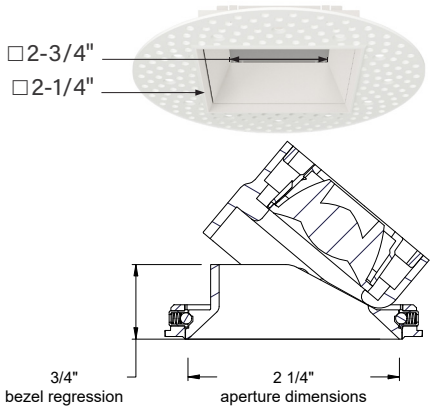


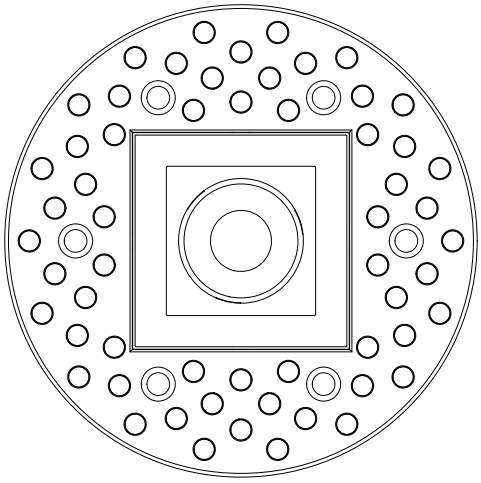


ceiling cutout
2-5/8" diameter

ceiling thickness
1/2" to 2"

TRIMLESS





ceiling cutout
2-3/4" diameter

ceiling thickness
3/8" to 2"

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

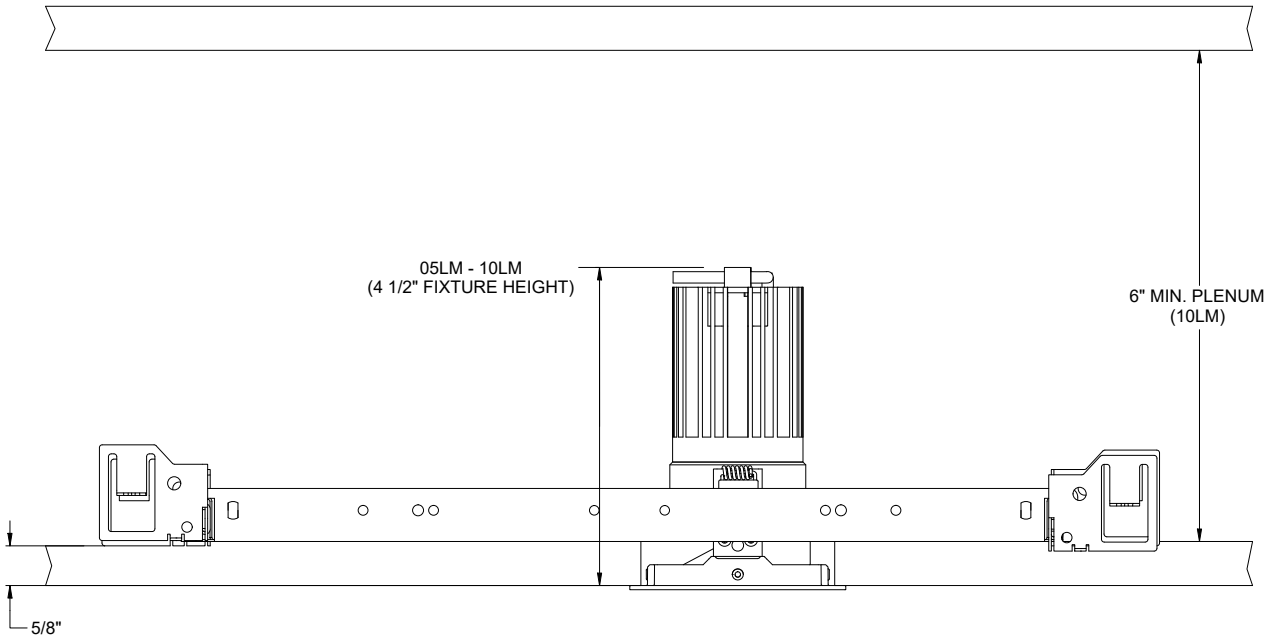
MOUNTING OPTIONS

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

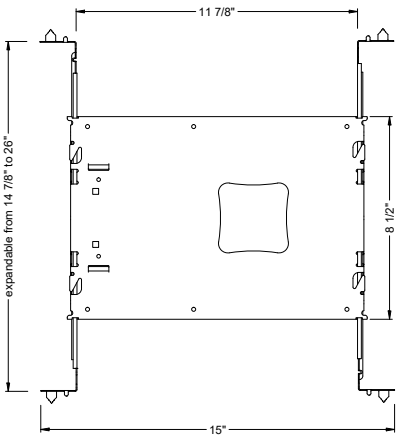
MOUNTING TYPE	STANDARD CEILING THICKNESS	STANDARD CEILING CUTOUT
TRIM	1/8" to 1-3/4"	2-3/4"
TRIMLESS	3/8" to 2"	2-3/4"
MILLWORK (TRIMLESS)	1/2" to 2"	2-5/8"

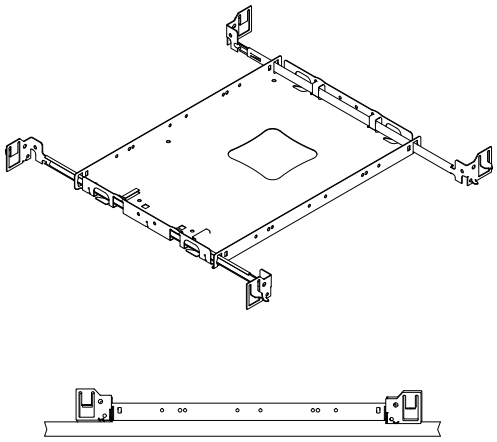
CEILING THICKNESS	TILT
1/8" TO 3/4"	40°
1"	30°
1-1/2"	20°
2"	10°

PLENUM HEIGHT



NEW CONSTRUCTION - NC



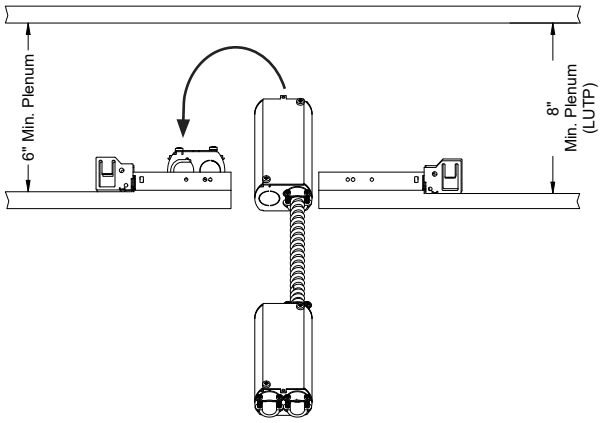


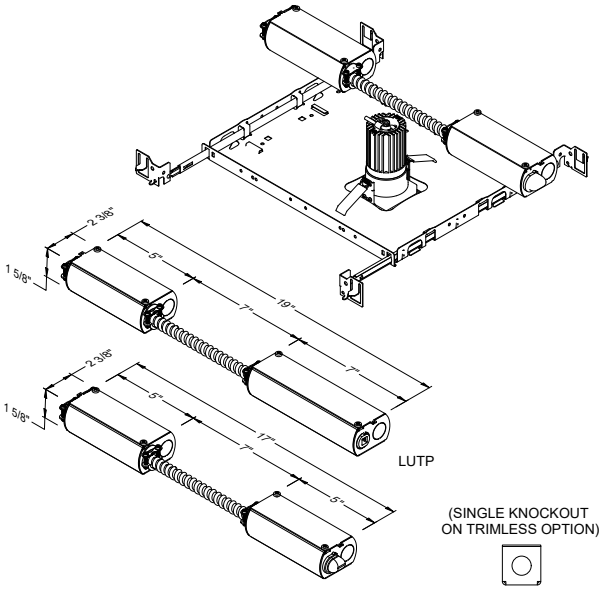
ADDITIONAL MOUNTING INFO	
New Construction Bar Hangers (included)	Mounting Length: 14-3/4" to 26"
Extension Kit p/n: K20266 (ordered separately, 1 per fixture)	*Extends a pair of Bar Hangers* Total Mounting Length: 29" to 48"

PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

MOUNTING OPTIONS

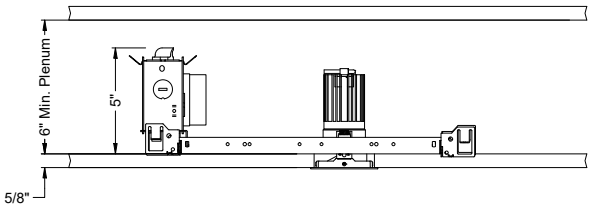
05LM-10LM (DIM10 / BDIM10 / DALI / ELV1 / LUTP) - FLOATING
(BELOW CEILING ACCESSIBLE)

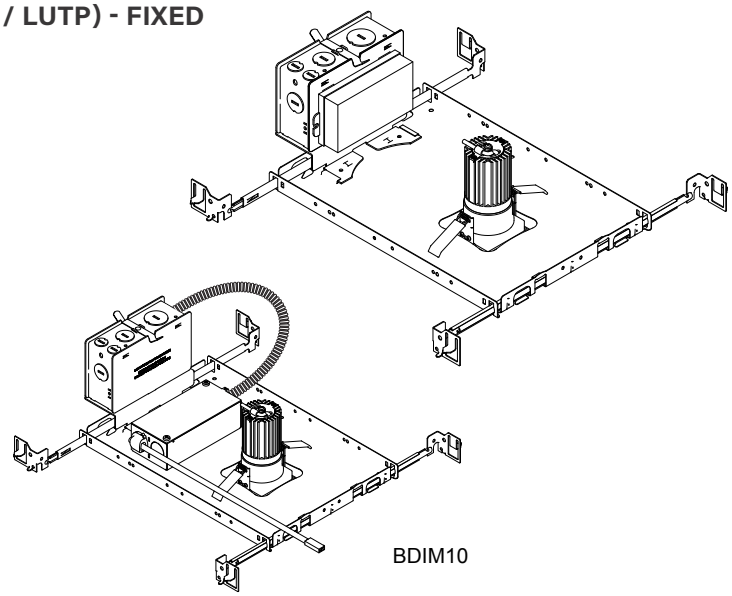




(SINGLE KNOCKOUT ON TRIMLESS OPTION)

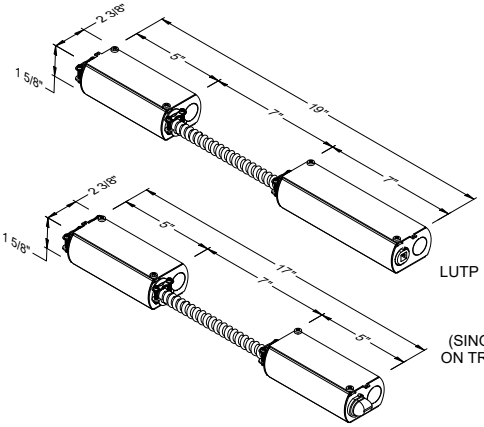
05LM-10LM (DIM10 / BDIM10 / DIM10Z / DALI / DALIZ / ELV1 / LUTP) - FIXED
(ABOVE CEILING ACCESS REQUIRED)





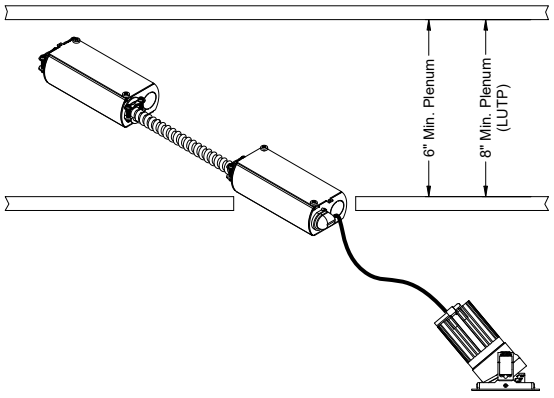
BDIM10

05LM-10LM (DIM10 / BDIM10 / DALI / ELV1 / LUTP) - FLOATING
(BELOW CEILING ACCESSIBLE)



(SINGLE KNOCKOUT ON TRIMLESS OPTION)

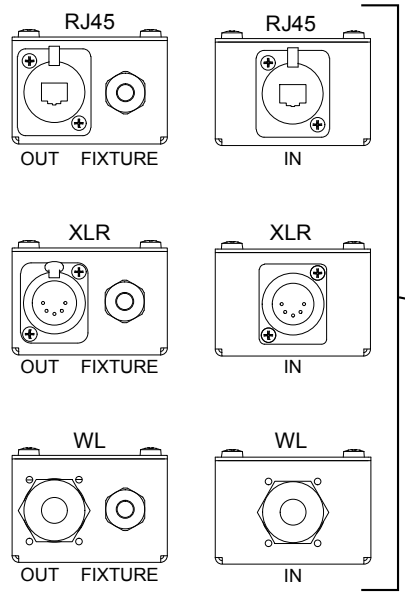


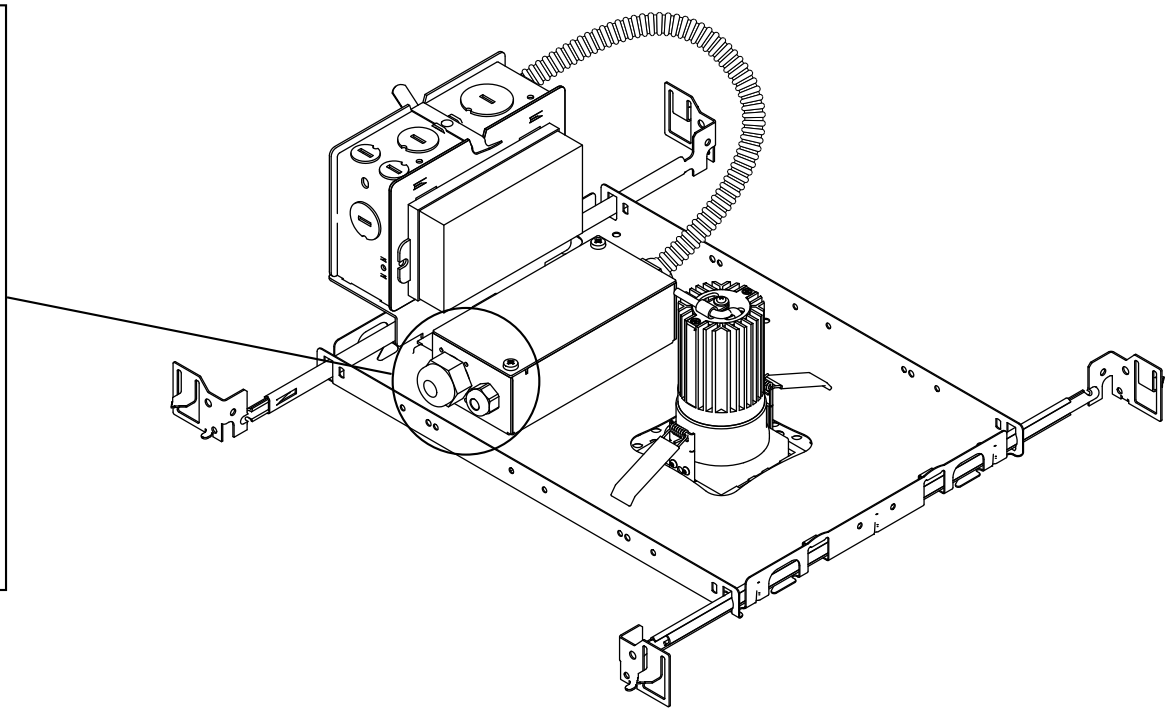


PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

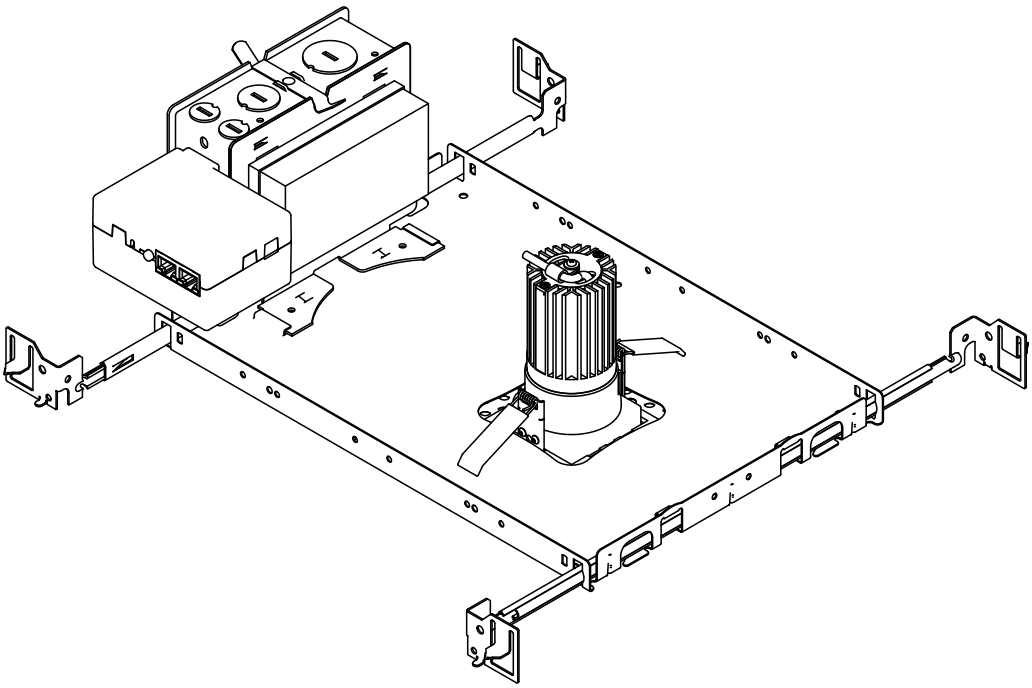
MOUNTING OPTIONS

05LM-10LM (DMX) - FIXED
(ABOVE CEILING ACCESS REQUIRED)





05LM-10LM (NLT) - FIXED
(ABOVE CEILING ACCESS REQUIRED)

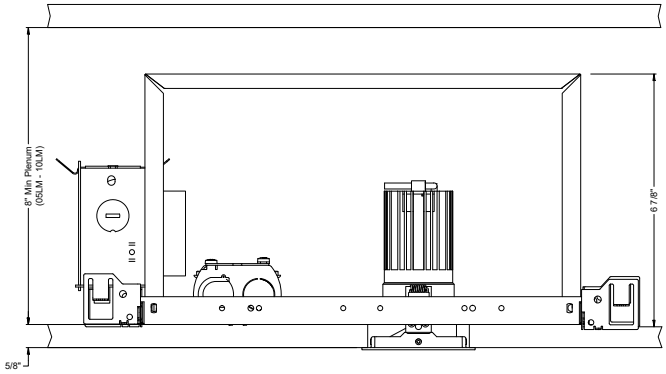


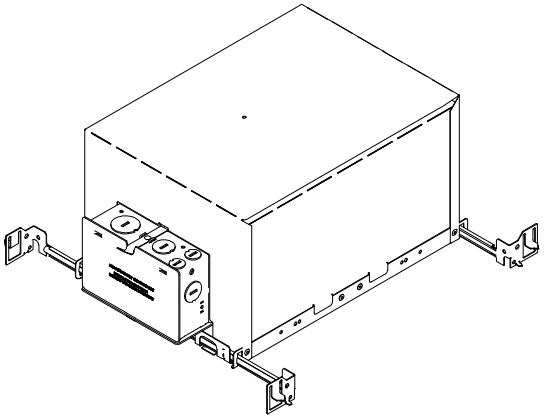
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

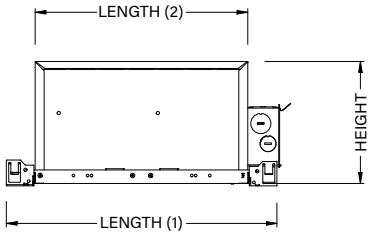
MOUNTING OPTIONS

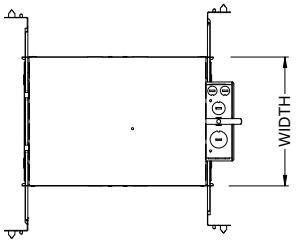
IC - INSULATION CONTACT | ICAT - INSULATION CONTACT / AIR TIGHT | CP - CHICAGO PLENUM - FIXED

(DIM10 / DIM10Z / DALI / DALIZ / LUTP / ELV1 / ND)









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

BOX TYPE / LUMEN OUTPUT - NARROW BEAM (20°-55°)			
LUMEN OUTPUT	BOX-A		
	CP	IC	ICAT
05LM	✔	✔	✔
10LM			

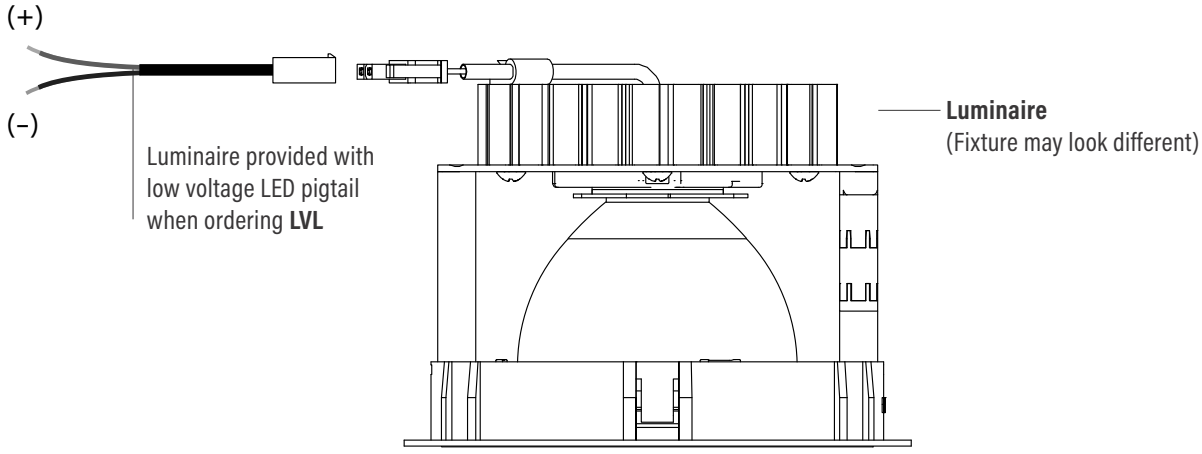
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

LOW VOLTAGE OPTIONS

20° - 50° BEAM (Note: Specifications are subject to change without notice)			
6mm COB PERFORMANCE DATA			
LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	DRIVE CURRENT	LED WATTAGE
05LM	470LM @30K/90CRI	150mA	5.5W
10LM	1090LM @30K/90CRI	350mA	13W
Notes	Delivered lumens based on 35° optic with no lens, (see page 2)		

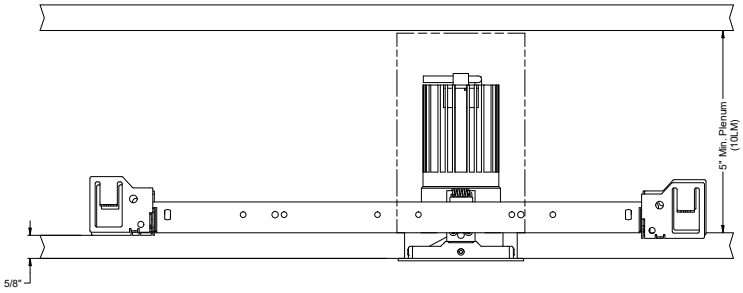
NOMINAL LED VOLTAGE: 36VDC

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

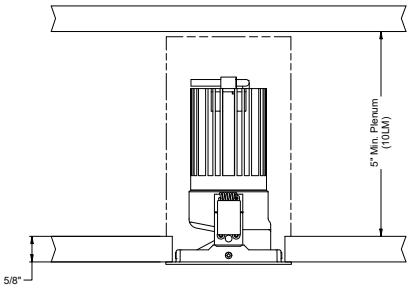


PLENUM HEIGHT

(NC-LVL-ND) NEW CONSTRUCTION REMOTE DX PANEL



(RET-LVL-ND) REMOTE DX PANEL RETRO

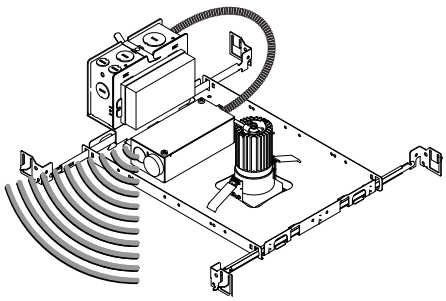


**Ref. DX panel specification sheet for remote driver options.*

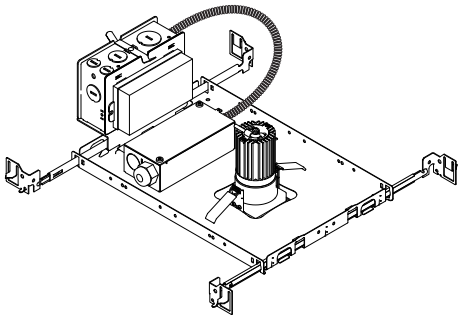
PROJECT INFORMATION			
JOB NAME		TYPE	
ORDERING CODE			

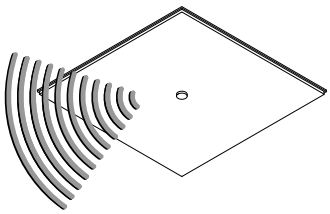
WIRELESS OPTIONS

NC - NEW CONSTRUCTION - FIXED
PLENUM SIDE

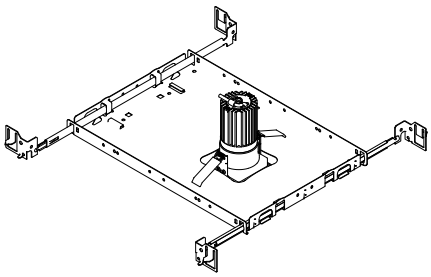


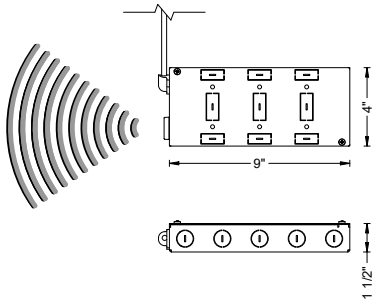
NC - NEW CONSTRUCTION - FIXED
R CEILING SIDE





NC - NEW CONSTRUCTION
DX REMOTE





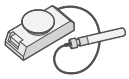
Customer must verify system design and installation with their controls provider (e.g., Lutron).
Wireless signal strength, reliability, performance, and commissioning are the responsibility of the customer. Remote DX can power LEDs up to 330FT (18 AWG), but adequate wireless signal is customers responsibility.

YOUR COMPLETED ORDERING CODE
Follow the steps to specify your fixture, example:
NU2 - SA - WD - 10LM - 3018 - 90 - 35D - NA - NL - WH - WH - NC - UNV - AWN
NU2 - SA - WD - 10LM - 3018 - 90 - 35D - NA - NL - WH - WH - NC - LVL - AWN - DX

nLIGHT

ORDERING CODE

NLTA ..... nlight air wireless device (0-10V Driver) - integrated / above ceiling
NLTA-DX ... nlight air wireless device (0-10V Driver) - remote DX Compact Driver



MODEL NUMBER

nlight air model #: RIO-ZT-180D-G2

POWER SUPPLY

(0-10V Driver): ELDOled 0-10V Optotronic LED driver with Aux Power, Dim-to-off

LUTRON Athena

ORDERING CODE

AWN ..... athena wireless node (0-10V Driver) - integrated / above ceiling
AWN-DX ... athena wireless node (0-10V Driver) - remote DX Compact Driver
AWND ..... athena wireless node (DALI2 Driver) - integrated / above ceiling
AWND-DX .. athena wireless node (DALI2 Driver) - remote DX Compact Driver
AWND-R ... athena wireless OCC Sensor / 4FT lead (DALI2 Driver) - ceiling installation



MODEL NUMBER

athena node model #: A-WN-D01-RF
athena OCC model #: A-WN-D01-OCC-WH

POWER SUPPLY

(0-10V Driver): ELDOled 0-10V Optotronic LED driver with Aux Power, Dim-to-off
(DALI2 Driver): Moons D4i DALI2 LED driver with DALI Bus Power, Dim-to-off

legrand WATTSTOPPER® PLUS

ORDERING CODE

CLM ..... connected lighting module (0-10V Driver) - integrated / above ceiling
CLM-DX .... connected lighting module (0-10V Driver) - remote DX Compact Driver
CLMD ..... connected lighting module (DALI2 Driver) - integrated / above ceiling
SENSI-R ... SensiLUM sensor / 4FT lead (DALI2 Driver) - ceiling installation



MODEL NUMBER

CLM model #: ZBHA-CLM-DIM
SensiLUM sensor model #: EN-CLM-PIR-DD-ZB

POWER SUPPLY

(0-10V Driver): ELDOled 0-10V Optotronic LED driver with Aux Power, Dim-to-off
(DALI2 Driver): Moons D4i DALI2 LED driver with DALI Bus Power, Dim-to-off

CASAMBI

ORDERING CODE

CAS ..... Casambi wireless controller (0-10V Driver) - integrated / above ceiling
CAS-DX .... Casambi wireless controller (0-10V Driver) - remote DX Compact Driver



MODEL NUMBER

Casambi model #: CBU-ARP-LR

POWER SUPPLY

(0-10V Driver): ELDOled 0-10V Optotronic LED driver with Aux Power, Dim-to-off

101530

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			

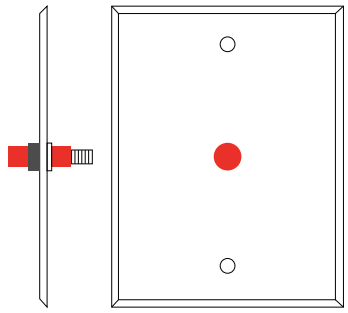
BATTERY OPTIONS

EMERGENCY BATTERY
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.

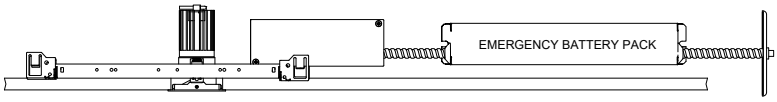
REMOTE LOCATION
Maximum remote mounting distance of the emergency driver shall be 50 feet. Remote location wiring provided by others. Follow all Local and National Electric/ Building Codes.



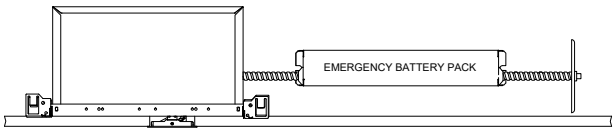
Remote Test Switch

EM MODE OUTPUT (DELIVERED LUMENS)			
LUMEN ORDERING CODE	EM7	EM10	EM12
ALL OPTIONS (05LM TO 10LM)	540	830	990
Notes: Based on 30K, 90CRI			

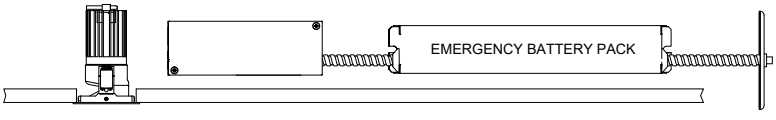
NC - NEW CONSTRUCTION
WITH EM BATTERY (REMOTE TEST SWITCH)



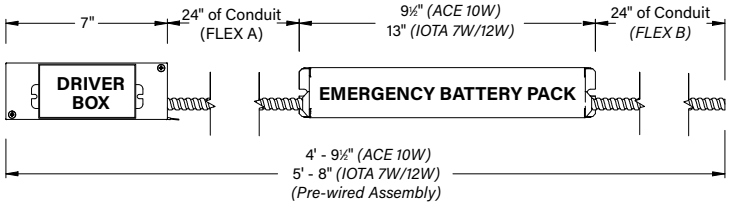
IC / ICAT / CP - INSULATION CONTACT HOUSING
WITH EM BATTERY (REMOTE TEST SWITCH)



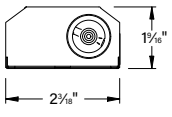
RET - RETROFIT
WITH EM BATTERY (REMOTE TEST SWITCH)



REMOTE BATTERY DIMENSIONS



EMERGENCY BATTERY PACK



DRIVER BOX

