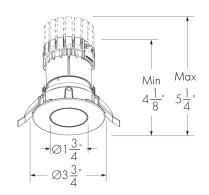
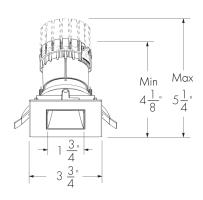
Project Name Qty

Catalog / Part Number







Round trim

(Shown with 1 in ceiling springs) Round trim ceiling cutout: Ø3.25 in

Square trim

(Shown with 1 in ceiling springs) Square trim ceiling cutout: 3.25 in x 3.25 in

## **Photometric Summary**

Based on Narrow Optic (nominal 25°) 4000K CRI 80+

		Insulated ceiling		Non-insulated ceiling	
Nominal output [lm]	Delivered output [lm] <sup>(1)</sup>	Power (120V) [W]	Efficacy [lm/W]		Efficacy [lm/W]
700	508	7.5	68	9.5	53
1000	668	11	61	13	51
1300	910	13	70	15	61

[1] Consult website for latest IES files.

# **Description**

The Lumencore Nano Pinhole is a high-performance LED downlight for ceiling applications. Available in an array of trims and finishes, outputs, optics, color renderings, and accessories, these luminaires are here to outperform. The Lumencore Nano Pinhole possesses a previously unseen lifespan, is quick to install, and can be used with a number of different control options.

# Optics











# Physical Cutout

Decorative Bezel	PB: Pinhole
Trim	<b>PR:</b> Pinhole round, <b>PS:</b> Pinhole square, <b>PSR:</b> Pinhole square trim with round hole

R: Round, S: Square

#### **Ceiling Thickness** 1: 0.04 in to 1 in ceiling thickness 2: 1.05 in to 2 in ceiling thickness

Housing Material	Aluminum		
TIR Optics Material	Clear polycarbonate		

Reflector Material	Aluminum
Weight	3 lbs with RM installation type,

4000K	4.2 lbs with NC installation type, 7.2 lbs with PC, IC, IC/AT and
	RMR installation types

(Weights are approximate based on the heaviest fixture configuration)

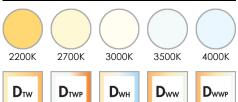
Please consult factory if exact fixture weight is needed.

#### Ceiling Space Requirements (Length x Width x Height)

Up to 15 in  $\times$  8 in  $\times$  8 in with RM installation type, Up to 15 in  $\times$ 10 in x 8 in with NC installation type

Up to 18 in x 15 in x 9 in with PC/IC/ICAT/RMR installation types (Dimensions will vary by output and color rendering, refer to Ceiling Requirements table for details.)

# Color and Color Temperature



# **Color Rendering**

CRI	CRI	CRI
80+	90+	9.5

|--|

ON/OFF 0-10V PH PRO DALI DALI **CLUTRON** ♪DMXrdm lumen talk DALIT8

# **Ceiling Cutout Shapes**





# Decorative Bezel (Round Trim)



PB - Pinhole

## Decorative Bezel (Square Trim)



# Standard Finishes for Decorative Bezel



MBK - Matte black

# **Trim Shapes**











PSR - Pinhole square round hole

## **Standard Finishes for Trim**











color)

4-digit RAL KŹ



(choose from standard Point Source color palette)

## **Features**

Output (Nominal Lumens)	<b>L07:</b> 700 lm, <b>L10:</b> 1000 lm, <b>L13:</b> 1300 lm, <b>L20:</b> 2000 lm, <b>L30:</b> 3000 lm
Color and Color Temperature	22K: 2200K 27K: 2700K 30K: 3000K 35K: 3500K 40K: 4000K DTW: Dim to Warm DTWP: Dim to Warm Plus DWH: Dynamic White DWW: Dynamic Warm White DWWP: Dynamic Warm White
Optics (Nominal Distribution)	XN: Extra Narrow Spot Distribution 5° VN: Very Narrow Spot Distribution 10° NS: Narrow Spot Distribution 15° N: Narrow Distribution 25° NFR: Narrow Faceted Reflector 25° M: Medium Reflector 40° MFR: Medium Faceted Reflector 40° W: Wide Reflector 60° WFR: Wide Faceted Reflector 60° VW: Very Wide Reflector 80° VWFR: Very Wide Faceted Reflector 80°
Decorative Bezel Finish	MBK: Matte Black
Trim Finish	MWH: Matte White MBK: Matte Black NKS: Nickel Satin CC: Custom color Trim (specify 4-digit RAL K7 color) SP: Special color (choose from standard Point Source color palette)
Installation Type	RM: Remodel Non-Insulated Ceiling (Plenum Rated in accordance to UL 2043 & CAN/ULC-S142)  NC: New Construction Non-Insulated Ceiling (Plenum Rated in accordance to UL 2043 & CAN/ULC-S142)  PC: Plenum Non-Insulated Ceiling (enclosed box)  IC: New Construction Insulated Ceiling (enclosed box)  IC/AT: New Construction Insulated Ceiling (Chicago Plenum/airtight, enclosed box)  RMR: Remote Recessed Insulated Ceiling/Plenum (enclosed box)
Option	EBB: Emergency Battery Backup with Hanger Bar (Bodine BSL17C-C2) EBI: Emergency Battery Backup with Hanger Bar (lota ILB-CP07-A TBTS)
Certifications	UL compliant (this luminaire is listed & labeled for such use in

Warranty

Voltage

**Electrical and control** 

120: 120 volts, 277: 277 volts, 347: 347 volts

5-year limited warranty

accordance with UL2043 & CAN/ULC-\$142), RoHS

LCRN

# **Options**



battery backup

# Rating

**IP20** 

# Certifications







Wattage Range	8.5W to 30W (wattage will vary based on voltage, output, colo temperature, color rendering, optic, control and installation
	type, refer to Power Consumption table for details)
Control	NO: On/Off control
	NO3: On/Off control 347V
	DAMC: Standard 0-10V dimming to 1% linear curve
	DA1: Standard 0-10V dimming 1% linear
	DA2: Standard 0-10V dimming 1% logarithmic
	DA3: Standard 0-10V dimming 1% linear (347V)
	PDA1: Pro 0-10V dimming 0.1% linear
	PDA2: Pro 0-10V dimming 0.1% logarithmic
	PH: Phase dimming
	PPH: Pro Phase 1% dimming
	ESP: Lutron® Hi-lume Premier 0.1% EcoSystem® PEQ0 Soft-
	on/Fade-to-Black (temporarily unavailable)
	SDALI1: Standard DALI dimming 1% linear
	SDALI2: Standard DALI dimming 1% logarithmic
	DALI1: Pro DALI dimming 0.1% linear
	DALI2: Pro DALI dimming 0.1% logarithmic
	DALIT8: DALI-2 dimming Type 8 (multi channel capability)
	DMX/RDM: DMX/RDM (configurable to 1, 2, or 3 channel
	control via RDM in the field)

LT: Lumentalk dimming

# **Performance**

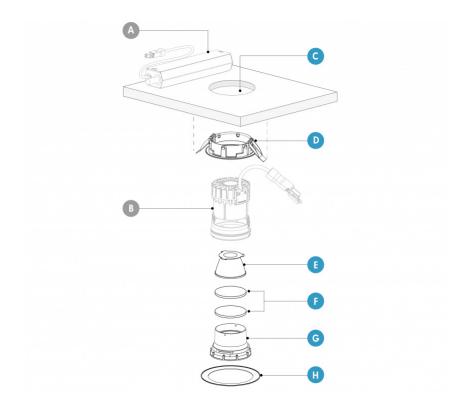
Maximum Delivered Output	Up to 1,766 lm (Medium Faceted Reflector optic 40°, 4000K, CRI 80)			
Maximum Delivered Intensity	Up to 31,473 cd (Extra Narrow Spot optic 5°, 4000K, CRI 80)			
Efficacy	Up to 70 Im/W (Narrow Spot distribution optic 15°, 4000K, CRI 80, 120V, New Construction Non-insulated Ceiling), Up to 80 Im/W (Narrow Spot Distribution optic 15°, 4000K, CRI 80, 120V, New Construction Insulated Ceiling)			
Color Consistency	2 SDCM, 3 SDCM (XN optic only)			
Color Rendering	80: CRI 80+, 90: CRI 90+, 95: CRI 95+			
Lumen Maintenance	L95 55,000 hrs (Ta 25 °C) L70 225,000 hrs (Ta 25 °C)			
Environmental				
Ingress Protection Rating	IP20			
Environment	Damp location rating (interior applications only)			
Operating Temperature (Ceiling Cavity Ambient Temperature)	-4°F to 104°F (DA1, DA2, DA3, PDA1, PDA2, SDALI1, SDALI2, DALI1, DALI2, DALI1, DALI2, DALI18, LT, DMX/RDM, PH and PPH control options), 14°F to 104°F (NO control option), 32°F to 104°F			



(NO3, ESP control options and EBB and EBI options)

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# **Exploded Overview - Part Selection**



#### Standard parts

A - MTG kit

B - LUM Core (heatsink, universal fixing ring, LED

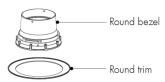
MTG: Mounting Kit LUM: Luminaire

#### **Customizable Parts**

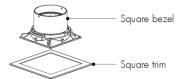
- C Ceiling cutout shape (round or square)
- **D** Ceiling mounting ring (round or square, based on ceiling cutout selection)
- E Optic\*
- F Optical accessory (up to two optical accessories can be combined in the fixture, field changeable)
- **G** Decorative bezel\*\*
- ${\bf H}$  Trim (round or square, based on ceiling ring selection)\*\*
- \*Field changeable. Consult Interchangeable Optics section of the specification sheet for details. Consult factory for ordering details.
- \*\*Field changeable, consult installation instructions for details. Consult factory for ordering details.

# **Ceiling Cutout Shape Options**

#### **RD - Round Ceiling Cutout**



#### **SQ - Square Ceiling Cutout**



# **Decorative Bezel Options**

#### **RD - Compatible Round Decorative Bezels**



PB - Pinhole

#### **SQ - Compatible Square Decorative Bezels**



PB - Pinhole

# Standard Finishes - Decorative Bezels



MBK - Matte black

#### **Trim Shape Options**

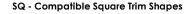
## **RD - Compatible Round Trim Shapes**



PR - Pinhole round



PSR - Pinhole square trim with round hole





PS - Pinhole square

# **Standard Finishes - Trims**



MWH - Matte white



MBK - Matte black



NKS - Nickel satin



CC - Custom colour\*



<sup>\*</sup>Custom color: specify 4-digit RAL K7 color.

<sup>\*\*</sup>Special color: choose one of the standard Point Source colors from the Cylinders product brochure or specification sheets. Contact manufacturer for additional information.

\*Also applicable to L13 for VN optic (CR80/90), L13 for NS and N optics (CR90/95), L13 for DTW and DTWP, L13 for DWH, DWW and

DWWP

L20, L30\*

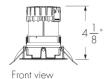
Front view

LCRN

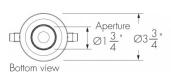
# **Dimensions**

#### PB - Pinhole

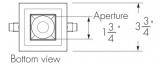
# L07, L10, L13



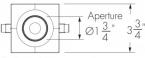
PR - Pinhole Round



#### PS - Pinhole Square



#### PSR - Pinhole Square Trim with Round Hole

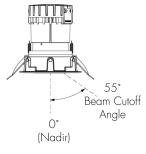


Bottom view

Round ceiling cutout: Ø3.25 in Square ceiling cutout: 3.25 in x 3.25 in

# **Beam Cutoff Angle**

#### PB - Pinhole



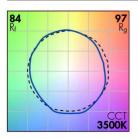
Front view



# TM-30

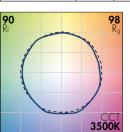
#### CRI 80+

CRI 80 +					
CCT	C	IE	TM-30		
25001/	R <sub>a</sub>	84	84	$\mathbf{R}_{f}$	
3500K	R <sub>9</sub>	15	97	$R_g$	



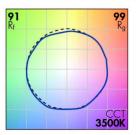
CRI 90+

CRI 90 +					
ССТ	С	IE	TM	-30	
35001/	R <sub>a</sub>	92	90	$R_{\rm f}$	
3500K	R <sub>9</sub>	59	98	$R_g$	



CRI 95+

	CRI	95 +		
ССТ		IE	TM	-30
25001/	R <sub>a</sub>	97	91	$\mathbf{R}_{f}$
3500K	R <sub>9</sub>	97	99	R <sub>g</sub>

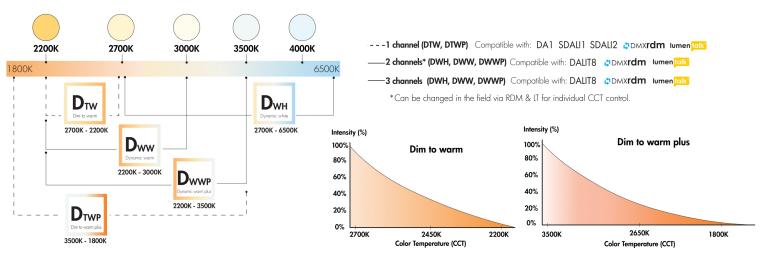


Refer to TM-30 Reference Guide for details.

LCRN

# **Color and Color Temperature**

#### **Color Temperature Ranges**



## Control



Dimming	Control options with linear dimming curve	Control options with logarithmic dimming curve
Dimming down to 0.1%	PDA1 ESP* DALI1	PDA2 DALI2 DALIT8 CDMX <b>rdm</b> **
Dimming down to 1%	DA1 DA3 DAMC PPH SDALI1	DA2 SDALI2 DALIT8 CDMXrdm** lumen lak

<sup>\*</sup>Temporarily unavailable, consult factory.

Refer to website product code for exceptions.

<sup>\*\*</sup>DMX/RDM control can be programmed onsite via RDM for linear dimming curve option. Logarithmic curve is standard from factory. Consult factory for further details.

# **Optics**

**TIR Optic - Total Internal Reflection** 

Applicable to XN (5°), VN (10°), NS (15°) and N



Semi-Specular Reflector

Applicable to M (40°), W (60°) and VW (80°) distributions.

## **Faceted Reflector**



Applicable to NFR (25°), MFR (40°), WFR (60°) and VWFR (80°) distributions.

# **Beam Widening Lenses**

(25°) distributions.

		Optic installed in fixture									
	<b>XN</b> 5°	<b>VN</b> 10°	<b>NS</b> 15°	<b>N</b> 25°	NFR 25°	<b>M</b> 40°	MFR 40°	<b>W</b> 60°	WFR 60°	<b>VW</b> 80°	VWFR 80°
BW1	11°	14°	21°	26°	26°	51°	51°	61°	61°	81°	81°
BW2	21°	22°	27°	31°	31°	54°	54°	63°	63°	82°	82°
BW3	30°	32°	35°	38°	38°	58°	58°	67°	67°	85°	85°

The above beam angles are nominal beam angles.

Variations in beam angles can be seen due to different LES sizes. For exact beam calculations please consult factory.

Beam widening lenses should not be used with other accessories with the nominal results above.

# **Interchangeable Optics**

		Optic installed in fixture									
	<b>XN</b> 5°	<b>VN</b> 10°	<b>NS</b> 15°	<b>N</b> 25°	NFR 25°	<b>M</b> 40°	MFR 40°	<b>W</b> 60°	WFR 60°	<b>VW</b> 80°	VWFR 80°
Interchangeable optics	N/A	N/A	N NFR	NS NFR	NS N	MFR W WFR VW	M W WFR VW	M MFR WFR VW VWFR	M MFR W VW	M MFR W WFR	M MFR W WFR

The optic options listed above are field changeable. Consult factory and installation instructions for details.

# **Power Consumption**

#### **Static White Color Temperatures**

	Power consumption [W]									
	XN (5°) - VN (10°) NS (15°) - N (25°) - NFR (25°) M (40°) - MFR (40°) - W (60°) - WFR (60°) - WW (80°) - VWFR (80°)					<b>NS</b> (15°) - <b>N</b> (25°) - <b>NFR</b> (25°)			(60°) -	
	120 V	277 V	12	120 V 277 V		12	0 V	27	7 V	
Output [lm]	CR80	/CR90	CR80	CR90/CR95	CR80	CR90/CR95	CR80	CR90/CR95	CR80	CR90/CR95
700	13	15	9.5	10	10.5	12	8.5	9	9.5	11
1000	17*	18*	13	14.5	14	16	10	13	12	15
1300	23*	24*	15	20	16	21	13	15	15	16
2000	N/A	N/A	23**	N/A	24**	N/A	20	23	21	24
3000	N/A	N/A	N/A	N/A	N/A	N/A	30	N/A	30	N/A

<sup>\*</sup>Not applicable to XN optic.

## **Dynamic Colors**

Power consumption [W]							
NFR (25°) - M (40°) - MFR (40°) - W (60°) - WFR (60°) - VW (80°) - VWFR (80°)							
		120 V	277 V				
Output [lm]	DTW - DTWP	DWW - DWH - DWWP	DTW - DTWP	DWW - DWH - DWWP			
1000	14	N/A	15	N/A			
1300	17	26	19	26			

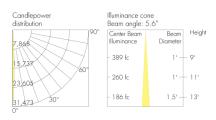
- Power consumption values are for non-insulated ceiling (RM and NC) and remote recessed insulated ceiling/plenum (RMR) installation types. For plenum ceiling (PC), new construction insulated ceiling (IC and IC/AT) installation types, remove 2 watts per fixture.
- Add 3 watts per fixture when specifying LT control option.
- Add 2 watts per fixture when specifying DMX/RDM control option.
- Add 4 watts per fixture when specifying 347V.

<sup>\*\*</sup>Not applicable to NS and N optics.

## **Photometric Information**

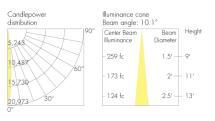
#### XN - Extra Narrow Spot (Nominal 5°), 4000K

Nominal output [lm]	Delivered output [Im	
	CR80	CR90
700	628	565



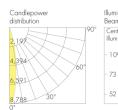
## VN - Very Narrow Spot (Nominal 10°), 4000K

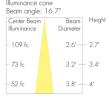
Nominal output [lm]	Delivered output [lm]			
	CR80	CR90		
700	635	572		
1000	908	817		
1300	1,180	1,062		



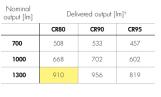
#### NS - Narrow Spot (Nominal 15°), 4000K

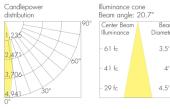
Nominal output [lm]	Delivered output [lm] <sup>†</sup>				
	CR80	CR90	CR95		
700	582	611	524		
1000	766	804	689		
1300	1,043	1,095	938		





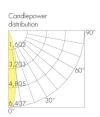
#### N - Narrow (Nominal 25°), 4000K

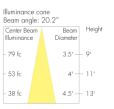




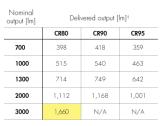
#### NFR - Narrow Faceted Reflector (Nominal 25°), 4000K

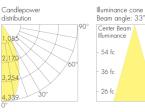
Nominal output [lm]	Delivered output [lm] <sup>†</sup>				
	CR80	CR90	CR95		
700	503	528	453		
1000	662	695	596		
1300	902	947	812		
2000	1,409	N/A	N/A		





M - Medium Reflector (Nominal 40°), 4000KR





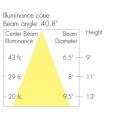
	Illuminance cone Beam angle: 33		
90°	Center Beam Illuminance	Beam Diameter	Height
	- 54 fc	5.5'	- 91
	- 36 fc	6.5'	- 11'
	- 26 fc	7.5' —	- 13'

Q

## MFR - Medium Faceted Reflector (Nominal 40°), 4000K

Nominal output [lm]	Delivered output [lm] <sup>†</sup>					
	CR80	CR90	CR95			
700	424	445	381			
1000	547	575	493			
1300	759	797	683			
2000	1,183	1,242	1,065			
3000	1,766	N/A	N/A			

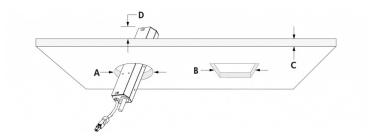




Based on Pinhole Bezel and Round or Square Trim configuration. † Consult website for IES files. Delivered output: +/- 10% tolerance. Consult Power consumption section for more wattage information.

# **Ceiling Requirements**

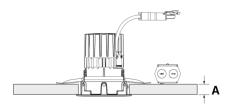
# Ceiling Cutout



- A Ceiling cutout: Ø3.25 in
- B Ceiling cutout: 3.25 in x 3.25 in
- C Maximum ceiling thickness: 2 in
- D Minimum ceiling height: refer to Ceiling Cavity Space Requirements table

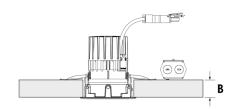
## **Ceiling Thickness Options**

## Ceiling Thickness 1



# A - Ceiling thickness range: 0.04 in to 1 in

## Ceiling Thickness 2



**B** - Ceiling thickness range: 1.05 in to 2 in

Ceiling springs are field changeable, consult installation instructions and factory for details.

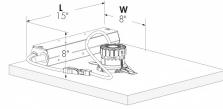
# **Installation Types**

#### RM: Remodel Non-Insulated Ceiling (Plenum Rated in Accordance to UL 2043 & CAN/ULC-\$142) (NO, PH, ES and ESP Controls Only)



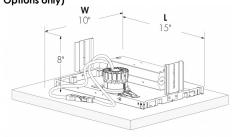
Ceiling cavity space requirements for L20 CR90/95 and L30 CR80 shown.

#### RM: Remodel Non-Insulated Ceiling (Plenum Rated in Accordance to UL 2043 & CAN/ULC-\$142) (Other Controls)



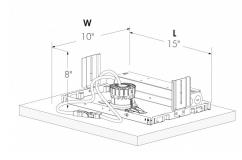
Ceiling cavity space requirements up to L20 CR90/95 and L30 CR80 shown.

NC: New Construction Non-Insulated Ceiling (Plenum Rated in accordance to UL 2043 & CAN/ULC-\$142) (NO, PH, ES and ESP Control Options only)



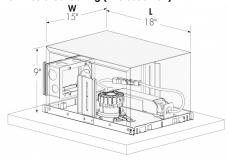
Ceiling cavity space requirements for L20 CR90/95 and L30 CR80 shown.

#### NC: New Construction Non-Insulated Ceiling (Plenum Rated In Accordance To UL 2043 & CAN/ULC-\$142) (Other Controls)



Ceiling cavity space requirements up to L20 CR90/95 and L30 CR80 shown.

#### IC, PC, IC/AT: New Construction Insulated and Non-Insulated Ceiling (Enclosed Box)

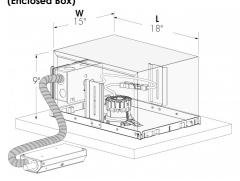


IC - New construction insulated ceiling (enclosed

PC - Plenum non-insulated ceiling (enclosed box) IC/AT - New construction insulated ceiling (Chicago Plenum/airtight, enclosed box)

Ceiling cavity space requirements for L13 CR80/90/95 and L20 CR80 shown.

#### RMR: Remote Recessed Insulated Ceiling/Plenum (Enclosed Box)



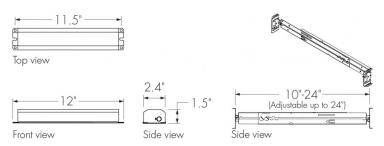
Luminaire ceiling cavity space requirements for L13 CR80/90/95 and L20 CR80 shown, Refer to remote driver box dimensions in installation instructions for space required for driver.

Remote distance is a maximum of 75 ft, consult Lumenpulse Application Engineering Team for longer remote distances.

Fixture shown for reference only. Refer to Ceiling Requirements section and installation instructions for dimensions and ceiling cutout requirements.

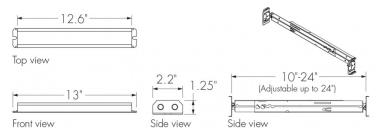
# **Options**

#### EBB - Emergency Battery Backup With Hanger Bar (Bodine BSL17C-C2)



Hardware to mount the battery backup to the hanger bar is included. A test button is included. The unit comes pre-wired with 2 ft flexible conduit in and out. Refer to installation instructions for details.

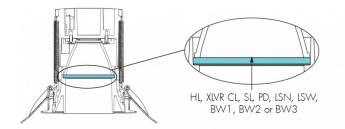
#### EBI - Emergency Battery Backup With Hanger Bar (lota ILB-CP07-A TBTS)



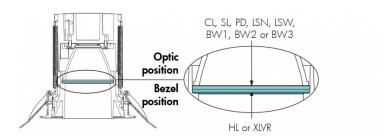
Hardware to mount the battery backup to the hanger bar is included. A test button is included. The unit comes pre-wired with 2 ft flexible conduit in and out. Refer to installation instructions for details.

# Optical Accessories - Installation Options (Field Changeable)

#### One Optical Accessory Installed



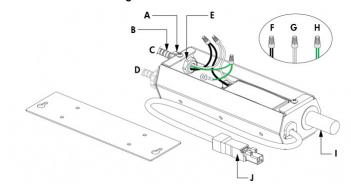
#### Two Optical Accessories Installed



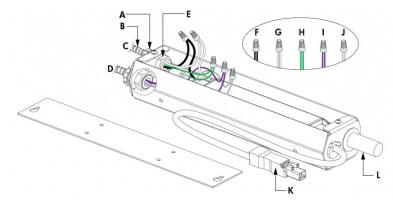
Accessories specified in the fixture code will ship from the factory in the position shown above.

# Wiring Details RM: Remodel Non-Insulated Ceiling (Plenum Rated In Accordance to UL 2043 & CAN/ULC-S142)

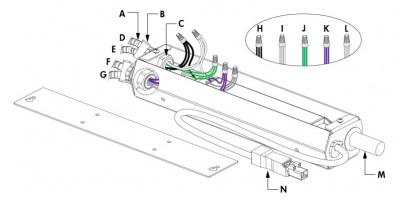
#### NO And PH Controls - Wiring Detail



Other Controls - Wiring Detail



Other controls - daisy chain layout wiring detail



Remodel driver box varies by control option. Refer to installation instructions for additional wiring details.

- A Conduit fitting (by others)
- **B** Conduit (by others)
- C Power Input
- D Optional Output
- E Locknut (by others)
- F Line
- G Neutral
- H Ground
- I Thermal protector
- J Output to luminaire
- A Conduit fitting (by others)
- **B** Conduit (by others)
- C Power Input
- **D** Data Input from Control System
- E Locknut (by others)
- F Line
- G Neutral
- H Ground
- I Data +
- J Data -
- K Output to luminaire
- L Thermal protector
- A Conduit (by others)
- **B** Duplex connector (by others)
- C Locknut (by others)
- **D** Power Output to next luminaire
- E Power input
- F Data Output to next luminaire
- G Data Input from Control System
- H Line
- I Neutral
- J Ground
- K Data +
- L Data -
- M Thermal protector
- N Output to luminaire

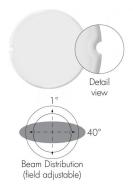
**HL - Honeycomb Louver** 



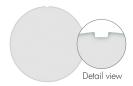
SL - Softening Glass Lens



LSN - Linear Spread Lens Narrow (1° x 40°)



BW1 - Beam Widening Lens (+10°)

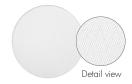


Refer to Beam Widening Lens table for beam distribution based on optic installed in the fixture.

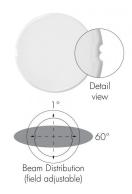
XLVR - Concentric Ring Louver



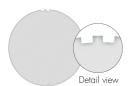
PD - Prismatic Diffuser



LSW - Linear Spread Lens Wide (1° x 60°)



BW2 - Beam Widening Lens (+20°)

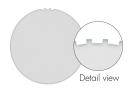


Refer to Beam Widening Lens table for beam distribution based on optic installed in the fixture.

CL - Clear Glass Lens



BW3 - Beam widening lens (+30°)



Refer to Beam Widening Lens table for beam distribution based on optic installed in the fixture.

# **How to Order**

Housing (1)	Certification	Туре	Voltage	Cutout	Output (Nominal Lumens)	Color and Color Temperature	Color Rendering	Optics (Nominal Distribution)	Control (20)
LCRN Lumencore Nano - 2.75 in aperture	A UL/cUL	P Pinhole	120 120 volts 277 277 volts 347 347 volts (2) (3) (4)	R Round S Square	L07 700 Im L10 1000 Im L13 1300 Im L20 2000 Im L30 3000 Im (5) (6)	22K 220K (?) (8) 27K 2700K (8) 30K 300K 300K (8) 35K 40K 400K (8) DTW Dim to Warm (2700K to 2200K) (9) (10) (11) DTWP Dim to Warm Plus (3500K to 1800K) (9) (10) (11) DWH Dynamic White (2700K to 3000K) (10) (12) (13) DWW Dynamic Worm White Plus (2200K to 3000K) (10) (12) (13) DWWP Dynamic Worm White Plus (2200K to 3000K) (10) (12) (13)	80 CRI 80+ 90 CRI 90+ 95 CRI 95+	XN Extra Narrow Sport Narrow Sport Distribution 10° (15)  N Narrow Distribution 15° (16)  N Narrow Distribution 15° (16)  N NARR Arrow Distribution 15° (16)  N NARR Narrow Distribution 15° (16)  N NARR Narrow Distribution 15° (16)  N NARR A0° Faceted Reflector (18) W A0° Faceted Reflector (18) (19)  VW 80° Faceted Reflector (18) (19)  VW 80° Reflector (18) (19)  VW 80° Reflector (18) (19)  VW 80° Faceted Reflector (18) (19)  VW 80° Faceted Reflector (18) (19)  VW Reflector (18) (19)  VW Reflector (18) (19)  VW Reflector (18) (19)	NO On/Off control (21) (22) NO3 On/Off control 347V (2) (3) (23)  DAMC Standard 0-10V dimming to 1% linear curve (4) (22) (24) (25)  DA1 Standard 0-10V dimming 1% linear (22) (26)  DA2 Standard 0-10V dimming 1% logarithmic (22) (24)  DA3 Standard 0-10V dimming 1% linear (347V) (2) (3) (23)  PDA1 Pro 0-10V dimming 0.1% linear (22) (26)  PDA2 Pro 0-10V dimming 0.1% logarithmic (22) (26)  PH Phase dimming (27) (28)  PH Phase dimming (27) (28)  PH Pro Phase 1% dimming (3) (4) (28) (29)  ESP Lutron® Hi-lume Premier 0.1% EcoSystem® PEQ0 Soft-on/Fade-to-Black (temporarily unavailable) (22) (30) (31) (32)  SDALI2 Standard DALI dimming 1% linear (22)  SDALI2 Standard DALI dimming 1% logarithmic (22)  DALI1 Pro DALI dimming 0.1% linear (22)  DALI2 Pro DALI dimming 0.1% logarithmic (22)  DALI3 DALI4 dimming 0.1% logarithmic (22)  DALI5 DALI5 DALI6 DALI6 dimming Type 8 (multi channel capability) (3) (22) (33) (34)  DMX/RDM (configurable to 1, 2, or 3 channel control via RDM in the field) (22) (35) (35)

- 1. Refer to website product configurator for all exceptions.
- 2. Not available for 700 lumens. Not available for 1000 lumens when combined with 80 color rendering option.
- 3. Not available for XN and VN optics.
  4. Not available for DTW, DTWP, DWH, DWW or DWWP color options.
- 5. Available for M, MFR, W, WFR, VW and VWFR optics only. 6. Not available with PC, IC, IC/AT or RMR installation types.
- 7. Available for CRI 80 only.
- 8. Compatible with all control options except for DALIT8.
- 9. Available for 1000 and 1300 lumens when combined with 90 color rendering option and MFR, W, WFR, VW or VWFR optics only.
- 10. MFR, WFR and VWFR faceted reflector optics are recommended for optimal performance.

  11. Compatible with DA1, SDALI1, SDALI2, DMX/RDM and LT control options only.
- 12. Available for 1300 lumens when combined with 80 color rendering option and MFR, W, WFR, VW or VWFR optics only.
- 13. Compatible with LT, DMX/RDM and DALIT8 control options only.
- 14. Available for 700 lumens when combined with 80 or 90 color rendering options and 27K, 30K, 35K or 40K color temperature options only.
- 15. Available up to 1300 lumens when combined with 80 or 90 color rendering options and 27K, 30K, 35K or 40K color temperature options only.
- 16. Available up to 1300 lumens when combined with 80, 90 or 95 color rendering options only.
- 17. Available up to 2000 lumens when combined with 80 color rendering option and up to 1300 lumens when combined with 80, 90 or 95 color rendering options only.

- 18. Available up to 3000 lumens when combined with 80 color rendering option and up to 2000 lumens when combined with 80, 90 or 95 color rendering options only.
- 19. Beam angle will be affected by the Pinhole bezel. Consult factory for details
- 20. Control options vary according to color temperature, color rendering, optics and installation type combination. Refer to website product configurator for details.
- 21. Manufacturer's choice driver. Order code may change to NO1.
- 22. Not available with 347V.
- 23. Not available for 3000 lumens
- 24. Manufacturer's choice driver. Order code may change to DAMC1 or DAMC2.
- 25. Not available for XN and VN optics.26. Driver cuts off power to the fixture when the control signal drops below 0.5V. 27. Manufacturer's choice driver. Order code may change to PH1 or PH2.
- 28. Available for 120V voltage option only.
- 29. Manufacturer's choice driver. Order code is subject to change.
- Consult factory for availability.
- 31. One EcoSystem® address per fixture. Lutron® EcoSystem® Enabled dimming not available for 1300 lumens combined with VN optic. Available for static white color temperatures only.
- 32. Not available for 3000 lumens.
- 33. Available for DWH, DWW and DWWP color options only. DALI-2 Type 8 controller required. 34. Not available for PC, IC or IC/AT installation types.



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F 514,937,6289

# **Specification Sheet**

downlights - lumencore

Pinhole

LCRN

35. Configurable between 8 or 16-bit dimming control via RDM. DMX/RDM requires LumenID, LumenID software and onsite

36. A Control Box (CBX-DS or CBX-ST) and lumenID (LID) must be specified.

 $\textbf{37.} \ A \ \mathsf{Lumentranslator} \ 2 \ \mathsf{(LTL2)} \ \mathsf{and} \ \mathsf{Lumentranslator} \ \mathsf{(LIDLT)} \ \mathsf{must} \ \mathsf{be} \ \mathsf{specified} \ \mathsf{for} \ \mathsf{Lumentralk} \ \mathsf{applications}. \ \mathsf{Consult} \ \mathsf{Lumentranslator} \ \mathsf{2}$ and Lumentalk pages and specification sheets for details.

38.1% minimum dimming value.

# **How to Order**

Decorative Bezel	Decorative Bezel Finish	Trim	Trim Finish	Installation Type	Ceiling Thickness (47)	Option	Accessories (51)
PB Pinhole	MBK Matte Black	PR Pinhole round (39) PS Pinhole square (40) PSR Pinhole square trim with round hole (39)	MWH Matte White MBK Matte Black NKS Nickel Satin CC Custom Color Trim (41) SP Special Point Source Color (42)	RM Remodel Non- Insulated Ceiling (Plenum Rated in accordance to UL 2043 & CAN/ULC- \$142) (43)  NC New Construction Non-Insulated Ceiling (Plenum Rated in accordance to UL 2043 & CAN/ULC- \$142) (43)  PC Plenum Non-Insulated Ceiling (enclosed box) (52) (44) (45)  IC New Construction Insulated Ceiling (enclosed box) (52) (44) (45)  IC/AT New Construction Insulated Ceiling (enclosed box) (52) (44) (45)  IC/AT Rew Construction Insulated Ceiling (enclosed box) (52) (44) (45)  RMR Remote Recessed Insulated Ceiling/Plenum (enclosed box) (32) (44) (45)  RMR Remote Recessed Insulated Ceiling/Plenum (enclosed box) (32) (44) (45) (46)	1 0.04 in to 1 in ceiling thickness 2 1.05 in to 2 in ceiling thickness	EBB Emergency Battery Backup with Hanger Bar (Bodine BSL17C- C2) (4) (22) (48) (49) (50) EBI Emergency Battery Backup with Hanger Bar (Iota ILB-CP07-A TBTS) (4) (22) (48) (49) (50)	NA No accessory HL Honeycomb Louver (52) XLVR Concentric Ring Louver (53) (54) Cl Clear Glass Lens SL Softening Glass Lens PD Prismatic Diffuser (55) LSN Linear Spread Lens Narrow (1° x 40°) (57) (58) Linear Spread Lens Wide (1° x 60°) (57) (58) BW1 Beam Widening Lens (+10°) (57) BW2 Beam Widening Lens (+20°) (57) BW3 BW3 Beam Widening Lens (+30°) (57)

#### Notes:

- 4. Not available for DTW, DTWP, DWH, DWW or DWWP color options.
- 22. Not available with 347V.32. Not available for 3000 lumens.
- 39. Cannot be combined with square ceiling cutout
- 40. Cannot be combined with round ceiling cutout.
- 41. Longer lead times can be expected for custom RAL color finishes
- 42. Refer to Cylinder specification sheet and brochure for color options
- 43. Available for 700 lumens when combined with XN optic and up to 1300 lumens when combined with VN, NS and N optics. Available up to 2000 lumens when combined with NFR optic and up to 3000 lumens when combined with M, MFR, W, WFR, VW and VWFR optics. Refer to optic option notes for color rendering limitations.
- 44. Available for 700 lumens when combined with XN optic and up to 1300 lumens when combined with VN, NS, N and NFR optics. Available up to 2000 lumens when combined 80 color rendering option and M, MFR, W, WFR, VW and VWFR optics. Refer to optic option notes for color rendering limitations.
- 45. Not available for DWH, DWW or DWWP color options
- 46. Remote distance is a maximum of 75 ft. For longer remote distances, please contact Lumenpulse Application Engineering Team for application validation.
- 47. Ceiling springs are field changeable, consult factory and installation instructions for details

- 48. Available for RM and NC installation types only.
- 49. Emergency battery backup options require ceiling access for test button use. The battery will operate for 90 minutes minimum and maintain a minimum of 1 fc from a 7 ft 2 in height as per UL 924. For indoor use only in dry or damp locations.
- 50. Emergency battery backup options are field installed and not presided by Lumenpulse. Refer to related installation instructions for details.
- 51. Maximum two accessories per fixture
- 52. Not available for DTW and DTWP color options
- 53. Available for XN, VN and NS optics only.
- 54. Can be combined with PD accessory only.55. Recommended to be combined with HL or XLVR accessory only.
- 56. Recommended for XN, VN, NS, N and NFR optics when combined with 2200K, 2700K, 3000K, 3500K, 4000K color temperature options. Nominal 10° x 40° distribution when used with the NS optic. Recommended for MFR optic when combined with DTW, DTWP, DWH, DWW or DWWP color options only.
- 57. For optimal performance, it is not recommended to mix with other accessories
- 58. Recommended for XN, VN, NS, N and NFR optics when combined with 2200K, 2700K, 3000K, 3500K, 4000K color temperature options only. Nominal 10° x 60° distribution when used with the NS optic. Recommended for MFR optic when combined with DTW, DTWP, DWH, DWW or DWWP color options only.