

- Ambient, exam, and reading or night light functions within same luminaire
- Recessed 4" x 24" / 36" / 48" / 72" / 96" nominal lengths
- Versatile mounting trims for sheet rock with flange, sheet rock trimless mud-in, or grid ceiling types
- Multiple outputs offered for design flexibility
- nLight® wired options
- IP64 and Wet Location standard, NSF Splash Zone 2 optional

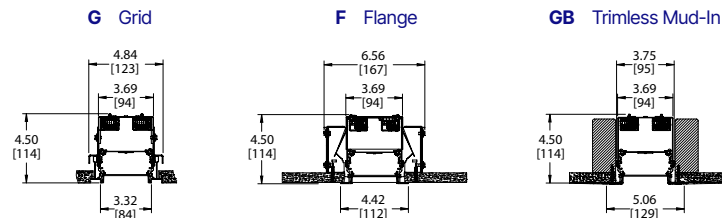
TYPICAL APPLICATIONS

Patient Room, PACU, Dental Office, Senior Living, Long Term Care, Emergency Department, Recovery Room



Dimensions

*Reference Drawing Detail section for additional information



Performance Data

Lumen Output

Lumen values are from photometric tests from an accredited laboratory.

Data is considered to be representative of the configurations shown, within generally accepted industry tolerances.

Performance data based upon 48LONG/ASD/35K/90CRI/FC100 Ambient Only

Ambient Nominal/FT	500LMF	750LMF
Distribution	ASD	ASD
Delivered Lumens/FT	610	852
Input Watts/FT	5	8
Lumens/Watt	116	114
Total Lumens 48LONG	2441	3409
Total Input Watts 48LONG	21	30

Performance data based upon 48LONG/ASD/35K/90CRI/FC100 Ambient + Exam

Ambient Nominal/FT	500LMF	750LMF
Distribution	MULTI	MULTI
Delivered Lumens/FT	1139	1591
Input Watts/FT	11	15
Lumens/Watt	109	106
Total Lumens 48LONG	4557	6365
Total Input Watts 48LONG	42	60

Catalog Number

Example: HPL 48LONG MULTI 750LMF FC100 G MVOLT 35K 90CRI NLIGHT DARK RC27K GWAM

Series		Size		Distribution		Output		Exam Level	
HPL	Healthcare Patient Linear	48LONG	48IN Nominal Length	MULTI	Multifunction Distribution	500LMF	500 Nominal Lumens per Foot	FC100	High Exam Mode
		72LONG	72IN Nominal Length			750LMF	750 Nominal Lumens per Foot		
		96LONG	96IN Nominal Length						

Mounting		Voltage		Ambient LED Color Temperature		Ambient LED Color Rendering		Control Input	
F	Flange	MVOLT	120-277V	27K	2700 Kelvin	90CRI	90CRI	DALI	DALI
G	Grid			30K	3000 Kelvin			NLIGHT ¹	NLIGHT enabled
GB	Flangeless Sheetrock Mud-In			35K	3500 Kelvin			NLIGHTER ¹	Emergency nLight Device for use w/ Generator Supply EM Power
				40K	4000 Kelvin			ZT	0-10V control
				50K	5000 Kelvin			Pillow Switch and LVC Integration <i>For assistance with selecting control input and sequence of operations for pillow switch, see guide on page 9.</i>	

Minimum Dimming Level		Reading Light ²		Night Light ³		Certification		Finish	
DARK	Constant Current, Dimming to <1%	[Blank]	Not Required	[Blank]	Not Required	[Blank]	Not Required	BZAM	Bronze Antimicrobial
		RC27K	2700 Kelvin Reading Light	ANL	Amber Night Light			GWAM	Gloss White Antimicrobial
		RC30K	3000 Kelvin Reading Light	RNL	Red Night Light			MWAM	Matte White Antimicrobial
		RC35K	3500 Kelvin Reading Light	NL27K	2700 Kelvin Night Light			GBKAM	Gloss Black Antimicrobial
		RC40K	4000 Kelvin Reading Light	NL30K	3000 Kelvin Night Light			MBKAM	Matte Black Antimicrobial
		RC50K	5000 Kelvin Reading Light	NL35K	3500 Kelvin Night Light			SIAM	Gloss Silver Antimicrobial
		(Reading Light is an Asymmetrical Distribution)		NL40K	4000 Kelvin Night Light			RALTBD	RAL Paint Finish
				NL50K	5000 Kelvin Night Light			<i>*RALTBD for pricing only. Replace with applicable RAL call out when ready to order. See the Architectural RAL Color Brochure for available options. NSF only available w/ GWAM and MWAM.</i>	
				(Night Light is a Symmetrical Distribution)					

Notes

1. Not available with CP
2. Not available with Night Light
3. Not available with Reading Light

Specifications

Housing

Extruded aluminum ceiling trim with cast aluminum endcaps and fabricated 18 gauge cold-rolled steel upper electronics channel housing.

Lens

Extruded 1/16" translucent acrylic snap-in lens.

Reflector

Formed painted steel with gloss white powder coat.

Distribution

Multi-function with standard lens and inner angled boards.

Finish

Painted in durable polyester powder coat paint with antimicrobial* additive. Available in six standard solid colors. Consult tech support for custom colors or specify RAL colors from Architectural RAL Color brochure.

*Antimicrobial properties are built in to inhibit the growth of bacteria that may affect this product. The antimicrobial properties do not protect users or others against bacteria, viruses, germs, or other pathogens.

Mounting

Three recessed ceiling only installation options available. Grid (G) mount for 9/16" or 15/16" lay-in or tegular grid ceiling systems. Flanged (F) mounting for post sheet rock install with above ceiling installation clip retention system for 1/2" (min) to 5/8" (max) drywall. Flangeless/trim-less sheet rock mud-in (GB) mounting for post sheet rock install secured to sheet rock. Reference installation instructions for more information.

Source

Multiple LED lumen packages provided for (5) static white color temperature options: 2700K, 3000K, 3500K, 4000K, or 5000K in either 90CRI standard. All LED within a 2.5 step MacAdam ellipse.

LED Life

LED light engines consisting of multiple length linear boards. LED rated for 83,000 hours L80 at 25°C ambient temperature.

LED Driver

Driver provides smooth, continuous, flicker free dimming to dark <1%. THD < 20%. Insignificant inrush current at 120 and 277VAC. FCC Class A and B tested for EMI and RFI. Acuity luminaires incorporating eldoLED LED drivers perform within the recommended operating areas for flicker as a function of frequency and modulation (%) outlined in IEEE Standard 1789-2015 (IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers), in typical operating conditions at representative dimming levels. Driver will be set for Logarithmic or Linear dimming curve. Reference Intelligent Luminaire chart for specific setting based upon options selected.

Luminaire Surge Protection Level

Designed to withstand up to 2kV based upon eldoLED driver specification.

Voltage

120 through 277 VAC in 50 through 60Hz.

Emergency (Optional)

Optional emergency circuit (NLIGHTER) available.

Controls and System Networking Options

Optional integrated nLight® controls make each fixture addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors, and photocontrols. Connection to nLight is simple. It can be accomplished with standard Cat-5 cabling. (cabling "by others") nLight offers unique plug-and-play convenience as devices and luminaires automatically discover each other.

Multi-Function

Ambient light function operates the primary light engine at 100% output. Dimming occurs from 100% down to <1% with DARK driver option.

Exam light function (FC100) operates the Exam light engine at 100% output with the Ambient light function. Dimming occurs from 100% down to <1% with DARK driver options. Reading light (1RC)/night light (xxxNL) is always on Ch2, will run the length of the fixture (every other chip).

Fixture Weight

Weight may vary depending upon options or accessories selected.

SIZE	BASE	
	lbs	kg
24LONG	6.5	2.9
36LONG	9.0	4.1
48LONG	11.5	5.2
72LONG	16.5	7.5
96LONG	21.5	9.8

Environment

Wet location listed, IP64 rated from below fixture.

Ambient Operating Temperature

-20°C (-4°F) to +25°C (+77°F).

Ambient Operating Humidity

<80% relative humidity non-condensing

Certification

CSA certified to meet U.S. and Canadian standards (UL1598 and UL8750) and CAN/CSA C22.2 No. 250.0. IC rated. Certified for NSF Splash Zone 2.

Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Notes:

Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

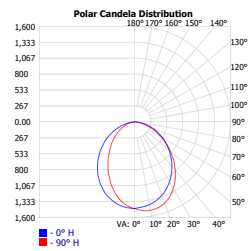
Specifications subject to change without notice.

Photometrics

Lumen values are from photometric tests from an accredited laboratory. Data is considered to be representative of the configurations shown, within generally accepted industry tolerances.

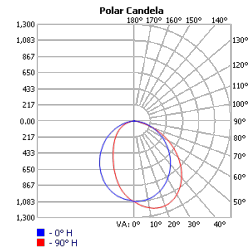
AMBIENT + EXAM

Test Report: ISF 211936



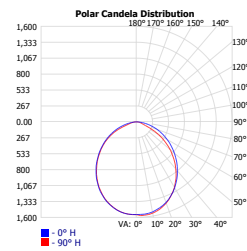
READING

Test Report: ISF 212120



AMBIENT or NIGHT LIGHT

Test Report: ISF 211938



PERFORMANCE TABLE FOR A SINGLE FIXTURE

*Performance data based upon 48LONG/MULTI/90CRI/RC

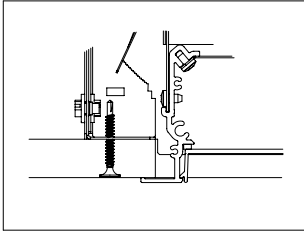
Ambient Nominal Lumens/FT	Function	Total Delivered Lumens 48LONG					Total Input Watts 48LONG
		CCT					
500LMF	Ambient Only	27K	30K	35K	40K	50K	21
		2264	2325	2441	2464	2564	
	Ambient + Exam	27K	30K	35K	40K	50K	42
		4226	4341	4557	4600	4787	
	Reading Light Only	RC27K	RC30K	RC35K	RC40K	RC50K	22
		2247	2308	2423	2446	2545	
Night Light Only	NL27K	NL30K	NL35K	NL40K	NL50K	22	
	2573	2643	2775	2801	2915		
750LMF	Ambient Only	27K	30K	35K	40K	50K	30
		3162	3248	3409	3441	3581	
	Ambient + Exam	27K	30K	35K	40K	50K	60
		5903	6064	6365	6425	6686	
	Reading Light Only	RC27K	RC30K	RC35K	RC40K	RC50K	32
		3163	3249	3410	3442	3582	
Night Light Only	NL27K	NL30K	NL35K	NL40K	NL50K	32	
	3622	3721	3905	3942	4102		

PERFORMANCE TABLE FOR A PAIR OF FIXTURES

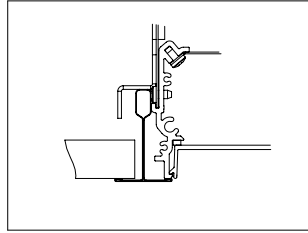
*Performance data based upon 48LONG/MULTI/90CRI/RC

Ambient Nominal Lumens/FT	Function	Total Delivered Lumens Pair of 48LONG Fixtures					Total Input Watts 48LONG Pair
		CCT					
		27K/RC27K	30K/RC30K	35K/RC35K	40K/RC40K	50K/RC50K	
500LMF Pair	Ambient Only	4494	4616	4846	4892	5090	44
	Ambient + Exam	8452	8682	9114	9200	9574	84
750LMF Pair	Ambient Only	6324	6498	6820	6884	7164	64
	Ambient + Exam	11806	12128	12730	12850	13372	120

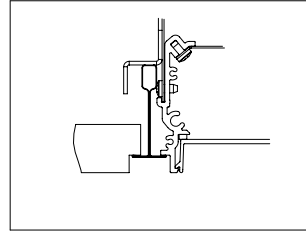
Ceiling Trim



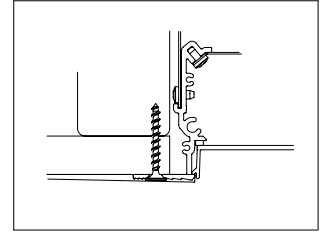
F
(Flanged Sheetrock)



G
(15/16" Grid)



G
(9/16" Grid)

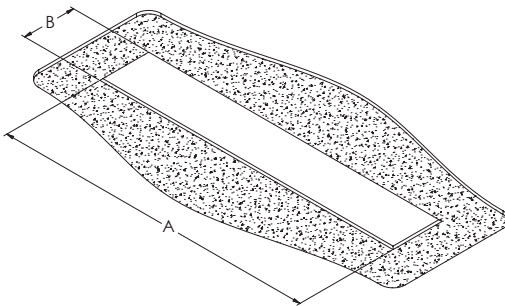


GB
(Flangeless Sheetrock Mud-In)

Mounting

Rough-In Dimensions F and GB Ceiling Trims

*For more mounting information, please reference the installation instructions.

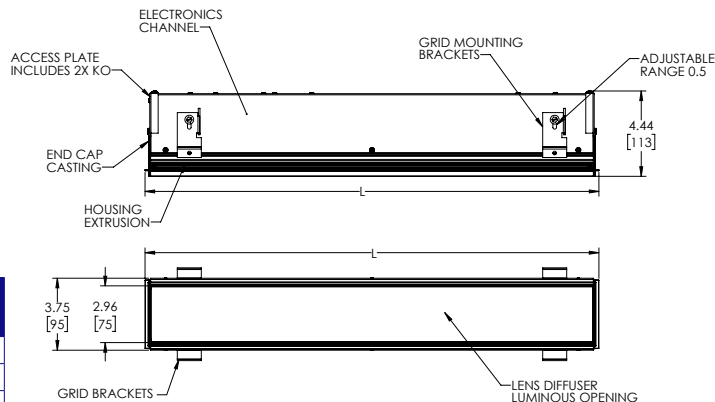
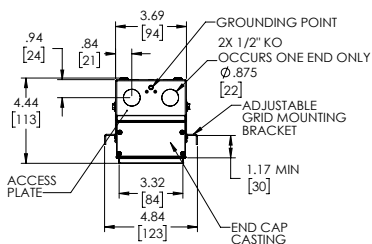
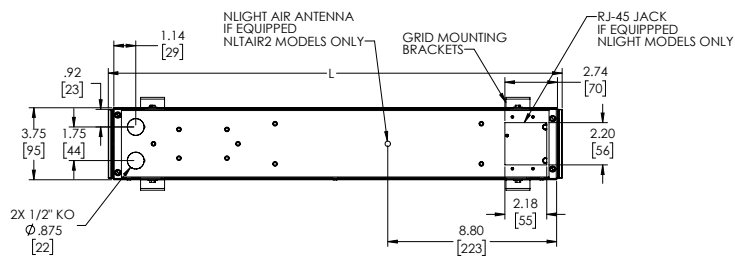
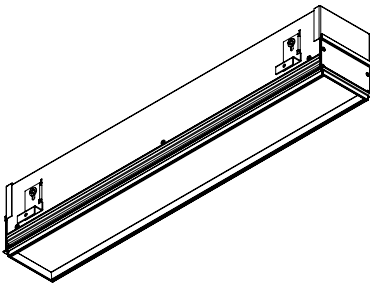


SIZE	TRIM STYLE	A	B	ALLOWANCE
48LONG	F	47.50 in	4.000 in	+/- 1/8"
72LONG	F	71.50 in	4.000 in	+/- 1/8"
96LONG	F	95.50 in	4.000 in	+/- 1/8"

SIZE	TRIM STYLE	A	B	ALLOWANCE
48LONG	GB	48.125 in	3.875 in	+/- 1/8"
72LONG	GB	72.125 in	3.875 in	+/- 1/8"
96LONG	GB	96.125 in	3.875 in	+/- 1/8"

Dimensions

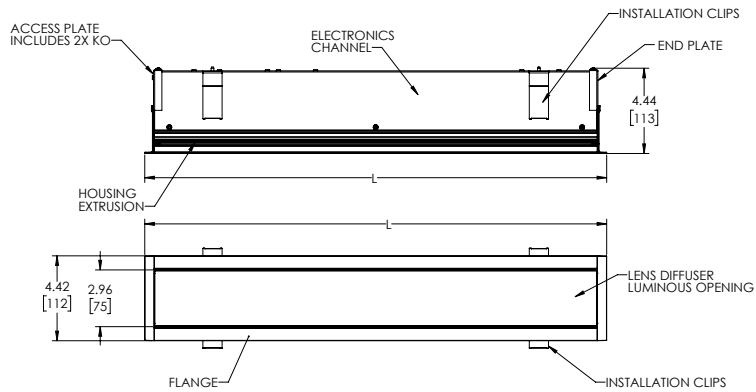
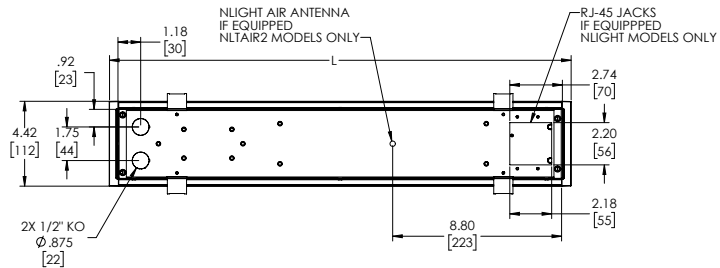
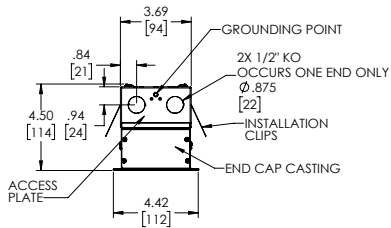
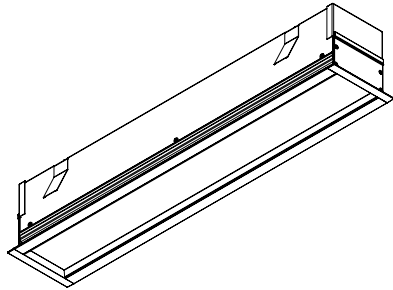
G Grid



SIZE	MOUNTING	L (OVERALL LENGTH) IN	L (OVERALL LENGTH) MM
48LONG	G	47.64	1210
72LONG	G	71.64	1820
96LONG	G	95.64	2429

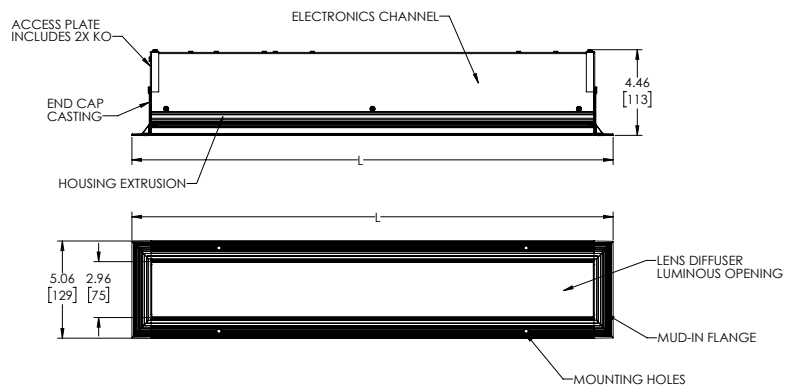
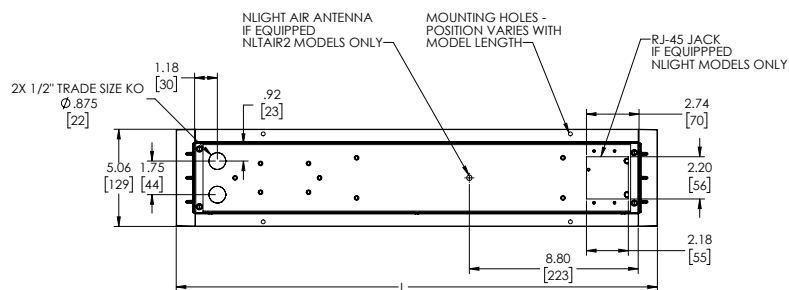
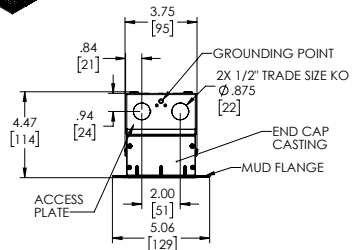
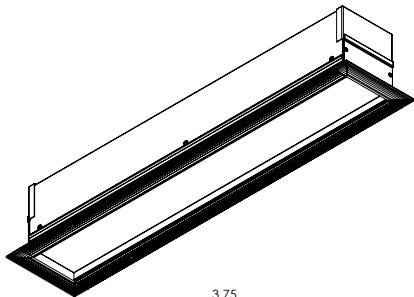
Dimensions

F Flange



SIZE	MOUNTING	L (OVERALL LENGTH) IN	L (OVERALL LENGTH) MM
48LONG	F	48.06	1221
72LONG	F	72.06	1830
96LONG	F	96.06	2440

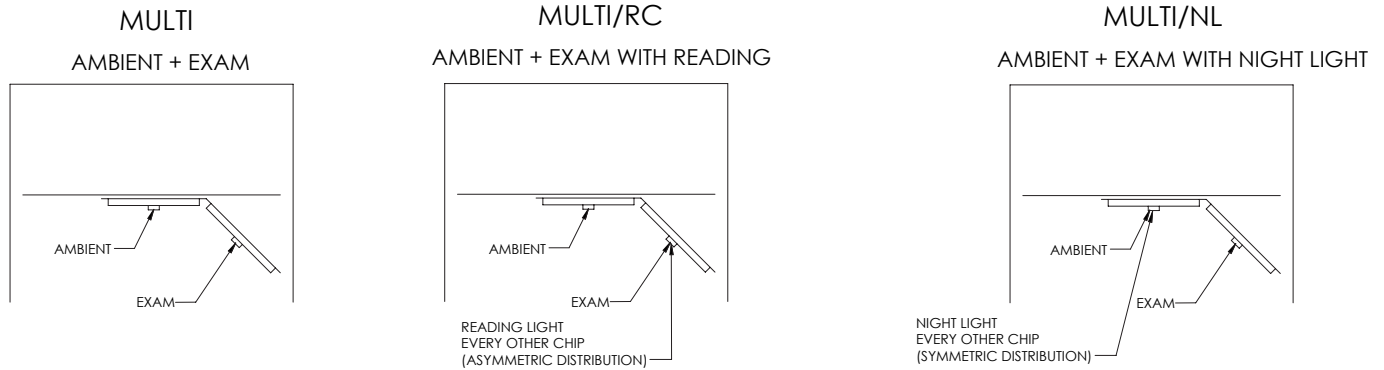
GB Trimless Mud-In



SIZE	MOUNTING	L (OVERALL LENGTH) IN	L (OVERALL LENGTH) MM
48LONG	GB	49.06	1246
72LONG	GB	73.06	1856
96LONG	GB	97.06	2465

LED Schematic

Schematic simplification of lighting options within luminaire, viewed in cross section, facing headwall. Reading Light, Night Light options run length of fixture.



Intelligent Luminaire Technology Guide

Choose Nomenclature from these columns

Minimum Dimming Level		Control Input		Driver (Secondary Feature)	Dimming Range	Notes
DARK	+	ZT	=	eldoLED SOLOdrive	100 to 0.1%	LINEAR DIMMING, TO BE WIRED TO 0-10V CONTROL
DARK	+	DALI	=	eldoLED SOLOdrive	100 to 0.1%	LOGARITHMIC DIMMING, TO BE WIRED TO DALI CONTROL
DARK	+	NLIGHT	=	eldoLED SOLOdrive	100 to 0.1%	LOGARITHMIC DIMMING, NIO EZ PH FOR AMB AND NIO EZPH SW2 FOR EXAM/RL/NL INTERNAL*

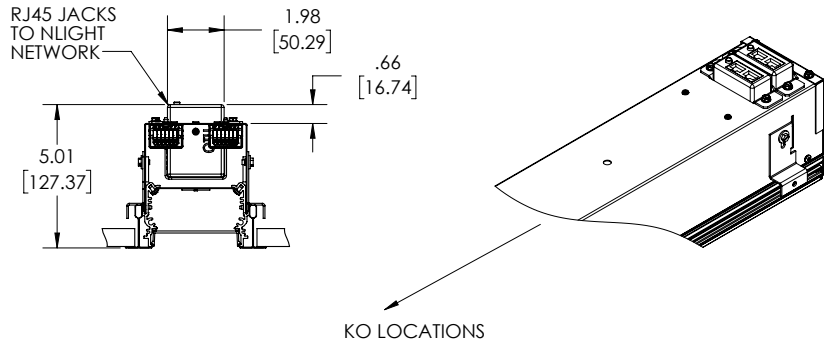
*May require commissioning

NLight

NLIGHT (Wired) Enabled Network

RJ45 Jack Location

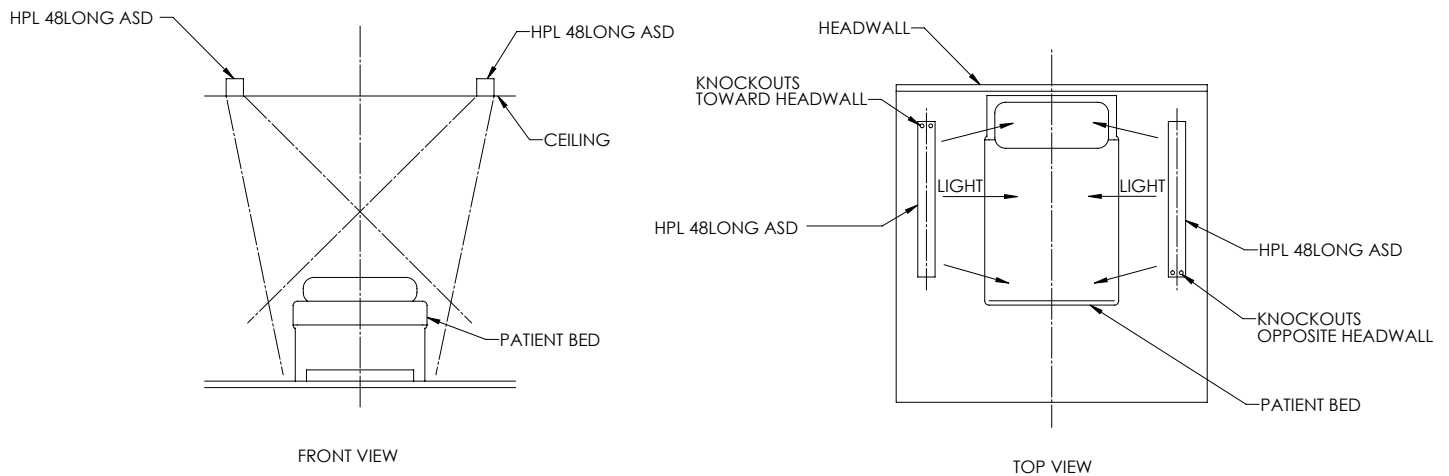
Typical for all mounting styles (Grid mount shown for reference.)



29.4 RJ45 JACK DETAIL (ISO)
NLIGHT MODELS

Layout

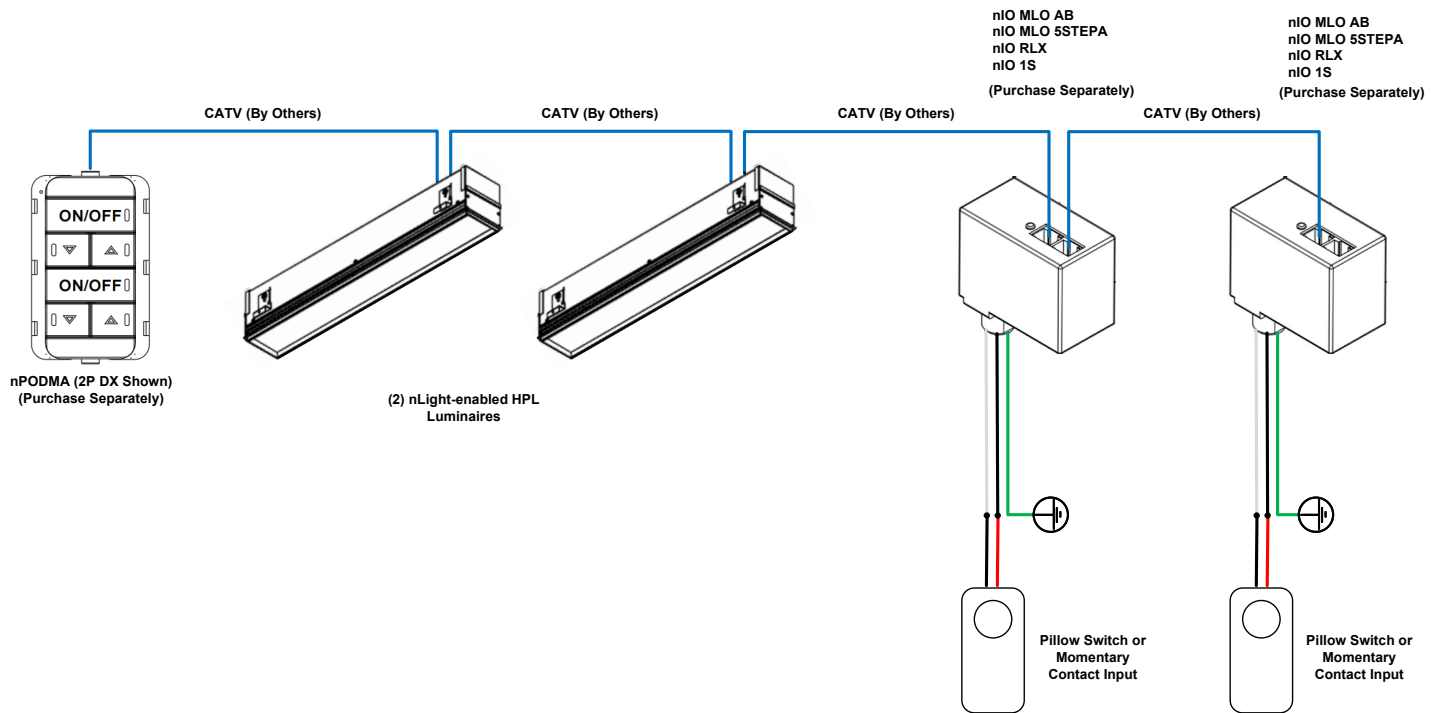
Diagram "Not to Scale"



Pillow Switch Integration

NLIGHT

To control Ambient, Exam, or Reading functions via pillow switch with nLight-enabled HPL luminaires, specify nLight "switch input" nIO devices. Common scenarios are detailed below. One or more nIOs may be combined with one or multiple luminaires. Additional configurations are possible, which may require commissioning. Consult factory or refer to device specification sheets for additional details



Example system configuration. Luminaire functions may be controlled by wall station and switches

To adjust the ambient light level via step dimming, connect the pillow switch to a nIO MLO 5STEPA:

Switch Input	Ambient	Reading	Exam
Press 1	20%	No change	No change
Press 2	50%	No change	No change
Press 3	80%	No change	No change
Press 4	100%	No change	No change
Press 5	OFF	No change	No change

To switch between the Ambient and Reading functions, connect one pillow switch input to a nIO MLO AB:

Switch Input	Ambient	Reading	Exam
Press 1	ON	OFF	No change
Press 2	OFF	ON	No change
Press 3	ON	ON	No change
Press 4	OFF	OFF	No change

To adjust the ambient light level via ramp dimming, connect the pillow switch to a nIO RLX:

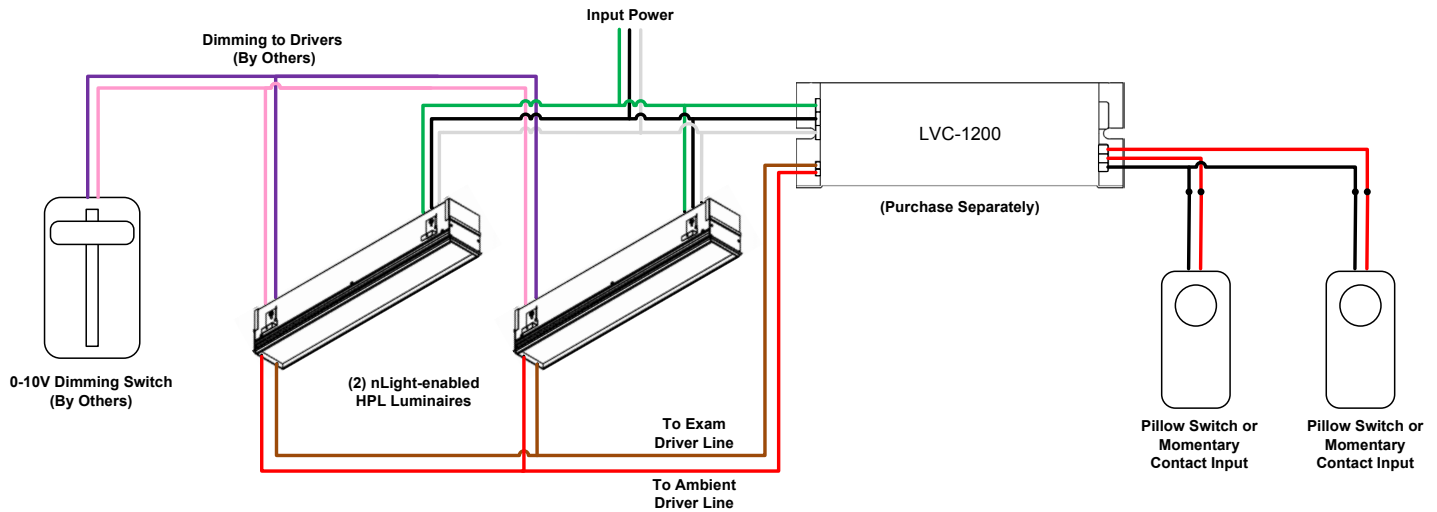
Switch Input	Ambient	Reading	Exam
Press > 0.5s	Ramp dim 0%-100%	No change	No change

To enable switch or push-button control of the Exam function, connect the exam switch to a nIO 1S:

Switch Input	Ambient	Reading	Exam
Press 1	No change	No change	ON
Press 2	No change	No change	OFF

ZT, DALI

Use the LVC1200 Low Voltage Controller (sold separately) to control up to two functions (Ambient/Exam, Ambient/Reading, etc) via pillow switch input. The LVC1200 performs line-voltage switching of single, pair, or zone of luminaires up to 8 Amps. Example implementations are shown below, other configurations are possible. Consult factory or refer to device specification sheets for additional details.



Example system configuration. Luminaire functions are toggled via pillow switch, 0-10V dimming possible by wall switch or other typical means.

To control Ambient and Exam functions via a single pillow switch, connect one switch across pins 5,6 on the LVC1200 (refer to specification sheet for additional wiring details):

Switch Input	Ambient	Reading	Exam
Press 1	ON	No change	OFF
Press 2	OFF	No change	ON
Press 3	ON	No change	ON
Press 4	OFF	No change	OFF

To control Ambient and Reading functions separately, connect two pillow switch inputs to pins 4,5,6 on the LVC1200 (refer to specification sheet for additional wiring details):

Switch Input 1	Switch Input 2	Ambient	Reading	Exam
Press 1	-	ON	No change	No change
Press 2	-	OFF	No change	No change
-	Press 1	No change	No change	ON
-	Press 2	No change	No change	OFF