MARK
ARCHITECTURAL
LIGHTING™

Slot 4 LED

Surface Mount Tunable White

The Slot LED family of luminaires offers an unparalleled package of performance and features for your next lighting project. Precision lumen DIRECTIR optics deliver optimized light where needed for ceilings and walls. With other key features such as simplified installation, seamless controls integration and superior LED color constancy, the Slot LED family from Mark Lighting offers exceptional quality and design flexibility.

Type:

Project:

Catalog Number:

DO NOT TYPE HERE. Autopopulated field.

Specification Features

Housing
Nominal 3.5" x 3.75" extruded aluminum housing

Finish
White, Black or Silver powdercoat

Reflector
Formed steel with high reflectance white.

Distribution/Shielding
Extruded 90% transmissive acrylic lens with a textured surface providing diffuse illumination and a uniform appearance for direct lambertian distribution (No Optics). Wall Wash (WW) and Wall Graze (WG) distribution options incorporate co-extruded lenses. Shielding is available as an external blade louver for WW or WG options, or an internal blade louver in lieu of lambertian distribution diffuser. Clear Acrylic dustcover (DC) is available for the indirect distribution only.

LED Components
Linear: Nichia®- 757 series LED chips (>80 CRI)

Electrical
Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000).

Color Consistency
The Acuity Brands circuit boards for the linear LED components use a precise binning algorithm which creates a consistent color temperature from board to board. The color a variation of no greater than a 2.5 Step MacAdam (2.5SDCM) along the black body locus from board to board.

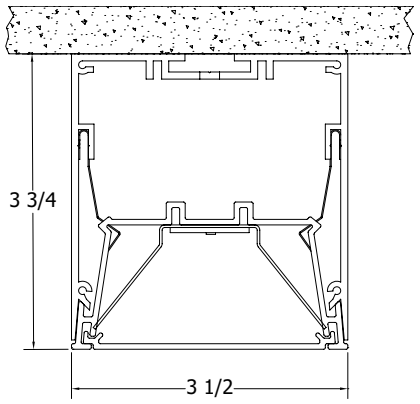
Driver
Factory tuned constant current electronic dimming driver is standard. Flicker free dimming available down to <1%. LED drivers perform within the recommended operating areas for flicker as a function of frequency and modulation (%) IEEE Standard 1789 2015 (IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers), in typical operating conditions at representative dimming levels. Electrical specifications at maximum driver load: PF > 0.9 and THD <20%. Meets FCC Title 47 Class A or Class B. Other available drivers include Lutron, DMX and DALI protocol drivers.

Certification
CSA tested to UL 1598 standards, assembled in the USA.

Warranty
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: *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.*

Technical Drawing



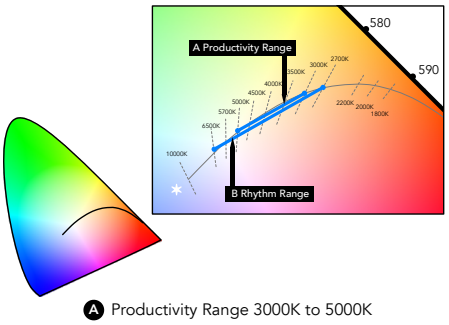
Direct Surface

Buy American nLIGHT eldoLED Declare.

Buy American:
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

Mainstream Dynamic Tunable White with nTune Technology
Tunable white nTune™ is an all digital light color temperature control within an nLight enabled luminaire. This brings tunable white lighting control into the mainstream with repeatable, consistent results in an economical luminaire form and system already familiar to schools. Designers and facility operators are granted the freedom to tie scenes to specific activities or to complement colors or materials within a visual environment. nTune™ allows color temperature settings through the Productivity Range of 3000K 5000K or Rhythm Range of 2700K to 6500K. Refer to the nLight Programming User's Guide for instructions on customizing to your application with SensorView™.

Tunable White GPHD
- **Gamut**: One dimensional warm-Cool
- **Path**: Direct 3000K to 5000k (Productivity Range) or 2700K to 6500K (Rhythm Range)
- **Handle**: Two Natural Language Handles: Intensity and CCT
- **Data**: nLight with nTune technology for both handles of control



Ⓐ Productivity Range 3000K to 5000K
Ⓑ Rhythm Range 2700K to 6500K

MAINSTREAM DYNAMIC BY ACUITY BRANDS

MARK ARCHITECTURAL LIGHTING™

Slot 4 LED
Surface Mount Tunable White

A+ Capable options indicated by this color background.

Ordering

Example: S4LS 4FT MSL4 80CRI TUWH PROR 600LMF DARK NLT 120 WHT

Series

S4LS	Slot 4 Surface - Indirect / Direct

Plan

LCB	Linear center balanced
LLP	Linear longest possible

Total Run Length

_FT[1]	Specify continuous run length (in whole feet 2' minimum)

Max Section Length

MSL4	4'
MSL5	5'
MSL6	6'
MSL7	7'
MSL8	8'

Direct Light Source Color Rendering

80CRI	80 CRI
90CRI	90 CRI

Dynamic Feature

TUWH	Tunable White

Dynamic Range

PROR	Productivity Range (3000K-5000K)
RHYR	Rhythm Range (2700K-6500K)

Direct LED Light Output

400LMF	400 Lumens per FT
600LMF	600 Lumens per FT
800LMF	800 Lumens per FT
1000LMF	1000 Lumens per FT
_LMF	## Lumens per FT (Limited to 350LMF to 1050LMF in 50LMF increments)

Direct Distribution (Optics)

(blank)	Standard Lambertian Distribution
WW[3]	Wallwash Distribution
WG[3]	Wall Graze Distribution

Minimum Dimming Level

DARK	Constant current, dimming to 0.1%

Control Interface

NLT	nLight nTune interface

Optional Shielding[4]

(blank)	Standard Shielding only
LVRD	Dropped Louver
LVRR	Regressed Louver painted to match fixture finish
LVRRA	Regressed Aluminum Finish
EGLD	Edge View Direct Lens

Voltage

MVOLT	Multi-volt, 120-277
120	120V
277	277V

Finish

WHT	White (gloss)
BLK	Black (gloss)
SLV	Silver (gloss)
WHTT	White (textured)
BLKT	Black (textured)
SLVT	Silver (textured)

Emergency Options

E10WLCP[5]	4ft emergency section w/ battery pack XXX lumens
_E10WLCP[5]	# 4ft emergency sections w/ battery pack XXX lumens
_EC[6]	# of Emergency Circuits
BGTD[6,7]	Generator Transfer Device

Sensor

(blank)	No Sensor
PDT_	Occupancy Sensor- Dual Technology (Passive Infrared & Microphonics)
ADC_	Photocell- Daylight Dimming Sensor
API_	PIR Occupancy Sensor & Photocell
APD_	PDT Occupancy Sensor & Photocell

Secondary Sensor

(blank)	No secondary sensor
SPDT_	Occupancy Sensor- Dual Technology (Passive Infrared & Microphonics)
SADC_	Photocell- Daylight Dimming Sensor
SAPI_	PIR Occupancy Sensor & Photocell
SAPD_	PDT Occupancy Sensor & Photocell

Options

BAA	Buy America(n) Compliant
WL	Wet Location Listing
DPL	Damp Location Listing

Notes:
1. Fixture length may effect available options, consult factory with validation issues.
2. Requires extended lead consult factory.
3. Not available with EGLD, LVRR, or LVRRA options.
4. Optional sheilding not available with sensors.
5. One EL pack per fixture section not available on 2t or 3FT sections.
6. Powers entire direct fixture section (power direct and indirect fixture sections on 2ft fixtures).
7. Must select 120 or 277.

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

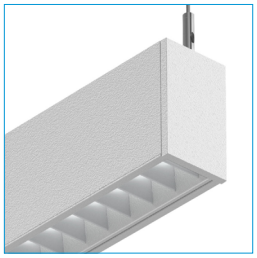
Shielding

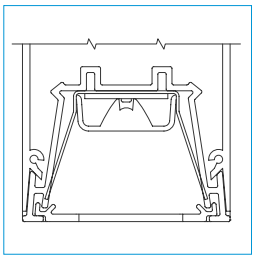

Co-Extruded WG

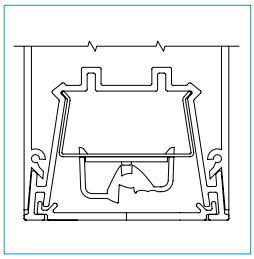

Co-Extruded WW

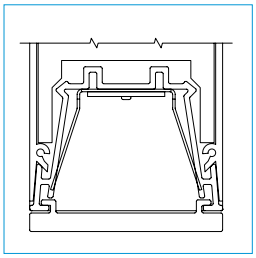

Edge View Lens

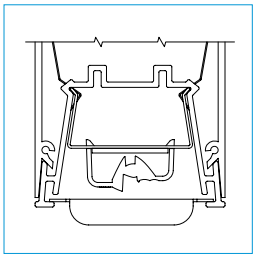

External Louver

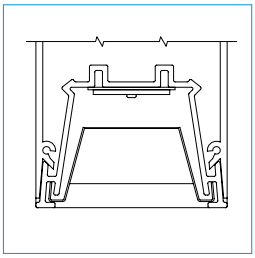

Regressed Louver


Co-Extruded WG (Standard)


Co-Extruded WW (Standard)


Edge View Lens (Optional)


External Louver WW (Painted to Match Housing)


Regressed Louver (Natural Aluminum or Painted to Match Housing)

Fixture Performance

		Rhythm Range (RHYR)						Productivity Range (PROR)					
4FT Individual (80 CRI)		Total Lumens			Lumens Per Watt			Total Lumens			Lumens Per Watt		
	Lumen Output	2700K	4600K	6500K	2700K	4600K	6500K	3000K	4000K	5000K	3000K	4000K	5000K
Direct	400LMF	1255	1200	1224	87	89	90	1344	1168	1241	89	90	92
	600LMF	1884	1806	1802	85	88	90	1938	1750	1782	89	90	93
	800LMF	2537	2318	2392	85	91	90	2568	2303	2435	87	91	90
	1000LMF	3024	2865	3011	84	91	89	3057	2861	3054	85	92	91

LINEAR PLAN:

Mark Lighting offers the ability to provide a continuous run plan to suit your requirements by optionally offering three different methods of configuration.

LSL- Linear Same Length:
In this configuration, each segment is the same length and is standardized based on the longest length available and is the only option provided. Because it is dependent on one segment length there are mathematical limitations on what overall row lengths can be achieved. Example: 20 FT row would be achieved with 5, 4 FT long segments equaling 20 FT (nominal).

LSL	4FT	4FT	4FT	4FT	4FT

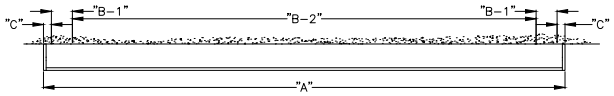
LLP- Linear Longest Possible
In this configuration, the longest length available is optimized, resulting in the fewest segments and mounting locations. Caution, should be used where balanced appearance is a concern. Example: 20 FT run would have 2, 8 FT segment and 1, 4 FT segment at the end of the run.

LLP	8 FT	8 FT	4FT

LCB- Linear Center Balanced:
This configuration incorporates the longest center segment(s) along with any additional lengths required to fill the run length, added to the run ends. Example: 16 FT run would have 2, 4 FT segments (one at each end) and 1, 8 FT segment in the center.

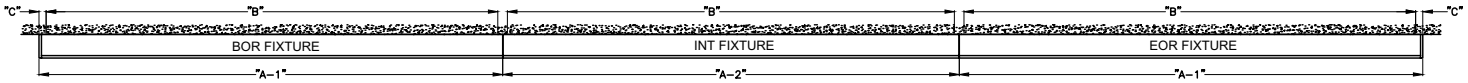
LCB	4 FT	8 FT	4FT

Individual Fixture Configurations



INDIVIDUAL UNITS (MOUNTING)				
LENGTH	"A" O.A.L.	"B-1" O.C.	"B-2" O.C.	"C" FROM END
2FT	2'- 5/8"	2"	1'-7"	13/16"
3FT	3'- 5/8"	2"	2'-7"	13/16"
4FT	4'- 5/8"	2"	3'-7"	13/16"
5FT	5'- 5/8"	2"	4'-7"	13/16"
6FT	6'- 5/8"	2"	5-7"	13/16"
7FT	7'- 5/8"	2"	6'-7"	13/16"
8FT	8'- 5/8"	2"	7'-7"	13/16"

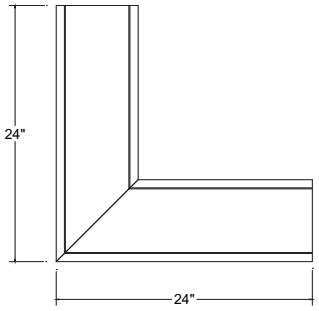
Run Configurations



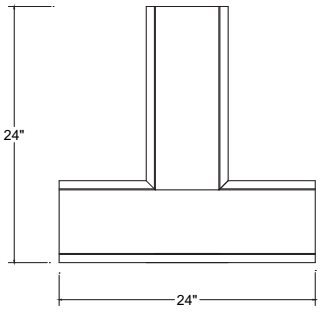
RUN LAYOUT (MOUNTING)				
LENGTH	"A-1" O.A.L.	"A-2" O.A.L.	"B" O.C.	"C" FROM END
2FT	2'-0 5/16"	2'-0"	2'-0"	13/16"
3FT	3'-0 5/16"	3'-0"	3'-0"	13/16"
4FT	4'-0 5/16"	4'-0"	4'-0"	13/16"
5FT	5'-0 5/16"	5'-0"	5'-0"	13/16"
6FT	6'-0 5/16"	6'-0"	6-0"	13/16"
7FT	7'-0 5/16"	7'-0"	7'-0"	13/16"
8FT	8'-0 5/16"	8'-0"	8'-0"	13/16"

Run Patterns, Corners and Junction

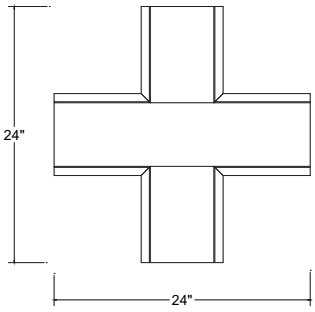
Slot 4 LED patterns be configured in 1' increments with illuminated 90° inside and outside corners, T junctions, and X junctions with standard 2' corner and junction lengths. For custom angles, corner or junction lengths, consult factory.



90° Corner



T Junction

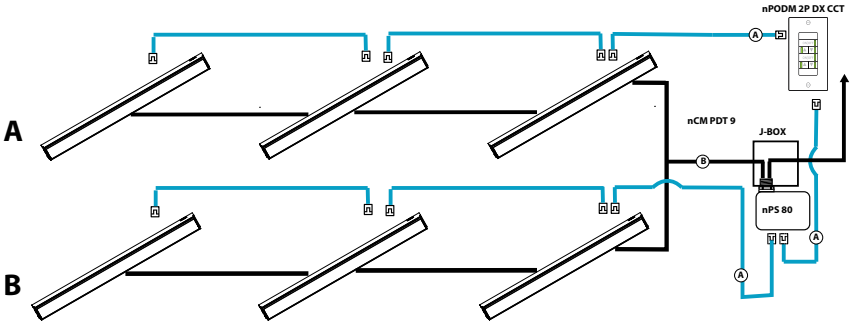


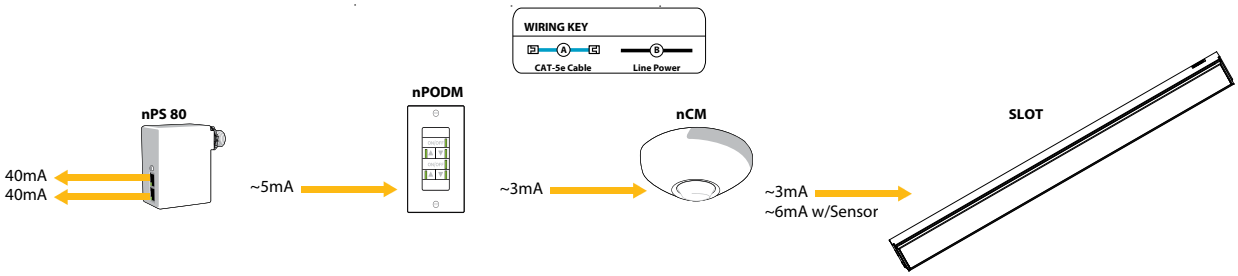
X Junction

Tunable White Wall Pod

nPODM 2P DX CCT

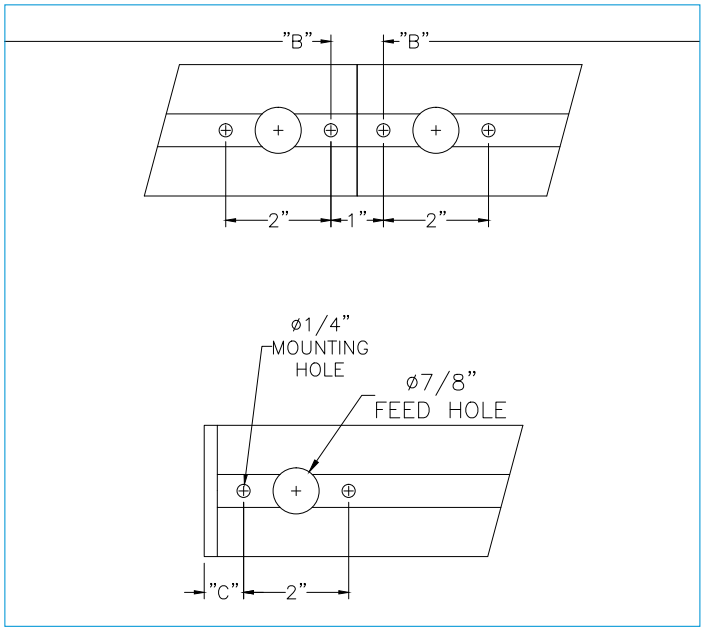
Typical nLight network layout with power supply, sensor and wallpod.



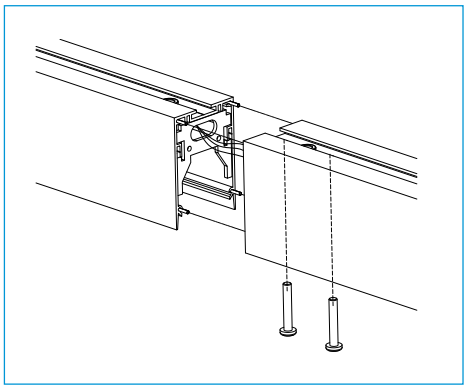


***Note: Also applicable to linear runs. Each 4' fixture section must be connected, by CAT5 cable, to another fixture.**

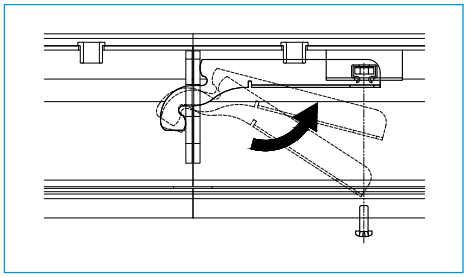
Mounting



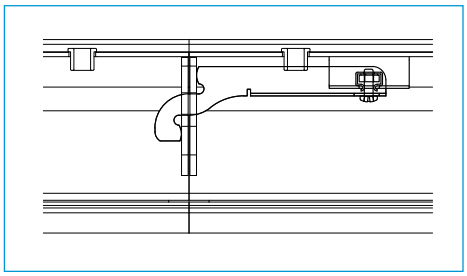
Joiners
AEL Precision Row-Mount 3-step fixture-to-fixture connection method



Step 1: Align



Step 2: Engage



Step 3: Lock

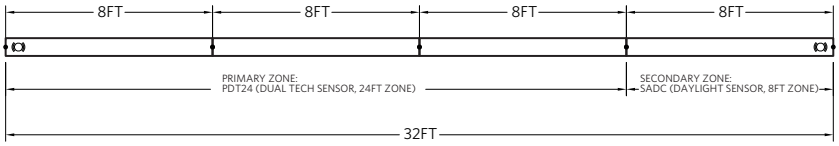
Continuous Runs

Slot 4 LED continuous rows can be configured in 1' increments and featuring the AEL precision joiner to create a hairline seam between luminaires, providing a monolithic visual aesthetic. (see AEL joiner information on page 5). For custom run lengths less than a 1' increment, consult factory.

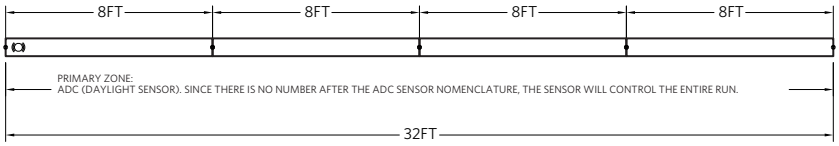
INTEGRATED SENSOR LAYOUT

CORRECT:

32FT MSL8 RUN WITH 2 SENSORS WITH PRIMARY ZONE 24FT AND SECONDARY ZONE 8FT -- PDT24 SADC8

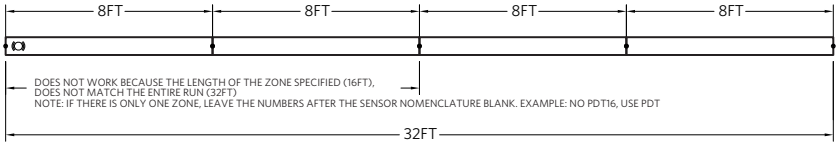


32FT MSL8 RUN WITH 1 SENSOR ALL ONE ZONE -- ADC

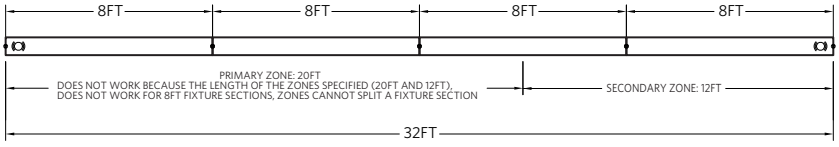


INCORRECT:

32FT MSL8 RUN WITH 1 SENSOR ALL ONE ZONE -- PDT16



32FT MSL8 RUN WITH 2 SENSORS WITH PRIMARY ZONE 20FT AND SECONDARY ZONE 12FT -- PDT20 SADC12



Notes:
- Only one sensor per zone
- At the most, the entire run can only have 2 sensors (thus 2 sensors zones at the most)
- Sensor zone can not split fixture sections
- No overlapping zones

OCCUPANCY DETECTION COVERAGE

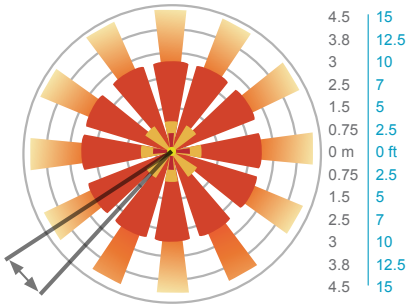
At the 7.5 ft (2.9 m) hanging height of a typical pendant mount fixture the sensor provides 10 ft (3.05 m) radial detection of small motion. At a 9 ft (2.74 m) hanging height the radius is 12 ft (3.66 m) for small motion.

Adequate for walking motion detection from mounting heights between 7.5 ft (2.29 m) and 20 ft (6.10 m).

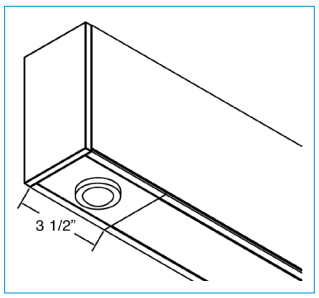
Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor.

Initial detection of walking motion into long coverage segment will occur at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m). Lens assembly rotates 15° to enable adjustment in order to line up long segments.

Lens rotates 15° to enable adjustment



Integrated Controls
Optional nLight® integrated controls make Slot LED luminaires addressable- allowing them to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Simply connect all the nLight enabled control devices using standard CAT5 Cabling.

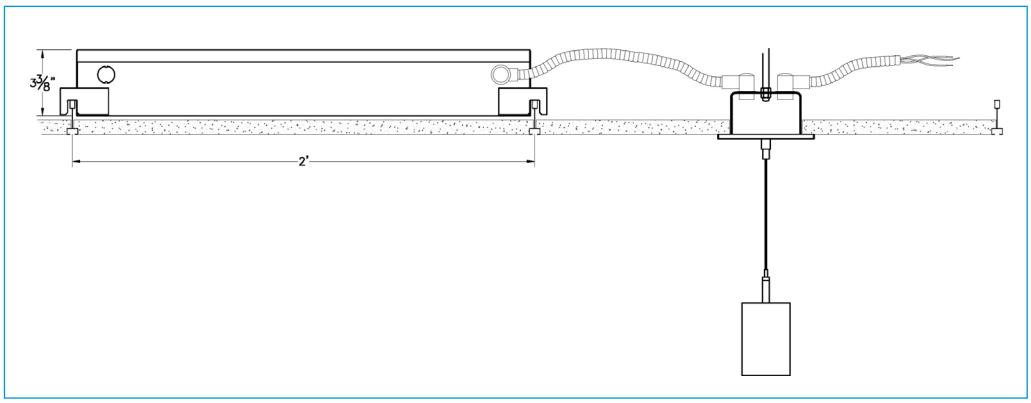


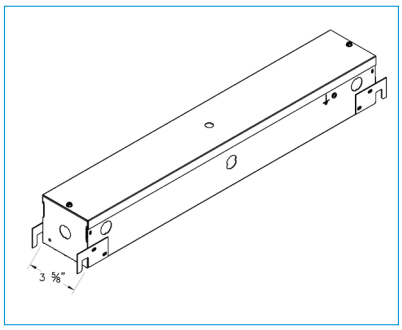
Occupancy Sensor (MSD9N) and/or Photocell (DSCC)

Remote BGTD Mounting Option

Recessed in sheetrock ceiling; rod mounted to structure. Consult factory for other ceiling types or canopy options.

6 foot flexible conduit included, BGTD option should be mounted within 6 feet of junction box above fixture.





Accessible Ceiling

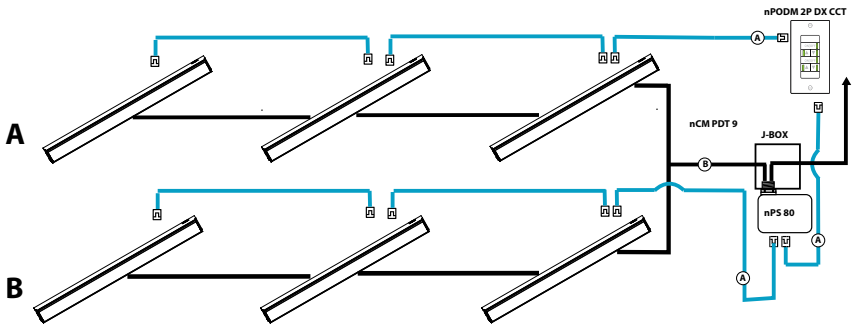
Emergency Battery Packs

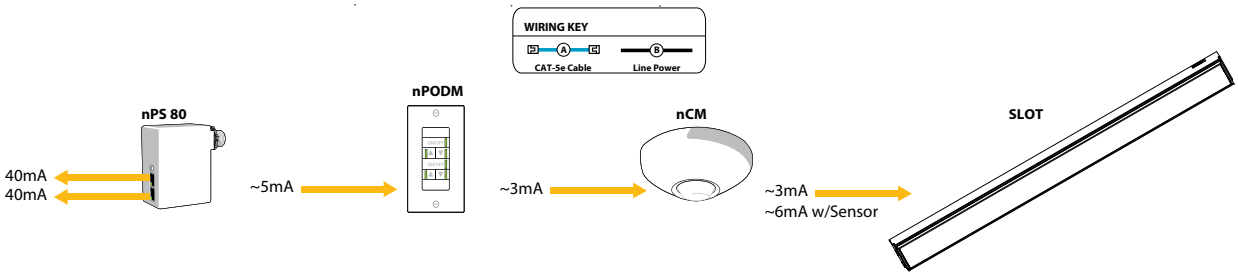
The PS1055LCP battery is integral to the fixture and comes standard with a remote test switch and self-diagnostics.

Tunable White Wall Pod

nPODM 2P DX CCT

Typical nLight network layout with power supply, sensor and wallpod.





***Note: Also applicable to linear runs. Each 4' fixture section must be connected, by CAT5 cable, to another fixture.**

