Peerless
Lighting for People®

Square LED

SQM4 | LED | Indirect/Direct | Suspended

HIGHLIGHTS

- Total System Integration features 5-year limited warranty by Acuity Brands covering all components and construction
- 4' and 8' sections
- Up to 94 lm/W
- Four distributions available
- Softshine®-engineered comfort optics
- High performance batwing distribution using injection molded optic
- Continuously illuminated lens
- Available with lit corners
- Flicker-free dimming to dark (0.1%) powered by eldoLED® driver
- Optional dual circuit switching for independent dimming of indirect and direct light outputs.
- Integrated nLight® module for system networking (optional)
- Integrated sensor for daylight dimming and/or occupancy detection (optional)
- White, black, painted aluminum, anodized aluminum or custom color

nA+ CAPABLE

5 YEAR warranty

soft shine®

eldoLED™

nLIGHT

BAA

DIMENSIONS

☐ **SQM4**

3 ½"

3 ½"

DETAILS

Flat end cap

Option: Sculptured end cap

Option: Lit corners

COMPANION LUMINAIRE(S)

SQM1
Square Indirect

SQMS
Square Direct

SQW4
Square Wall I/D

LUMEN PACKAGES

Indirect /Direct LED Ouput	I500LMF /400LMF	I500LMF /800LMF	I900LMF /400LMF	I900LMF /800LMF
Indirect Delivered Lumens Per Foot/ Direct Delivered Lumens Per Foot	483/411	467/763	896/421	865/767
Total Delivered Lumens Per Foot	896	1232	1318	1632
Input Watts Per Foot	9.5	14.7	15.3	20
Lumens Per Watt	94	84	86	82

STANDARD DISTRIBUTION

68% Up | 32% Down | HI/LO
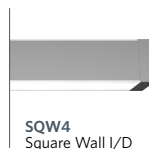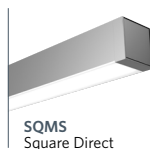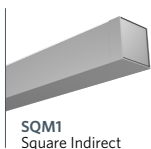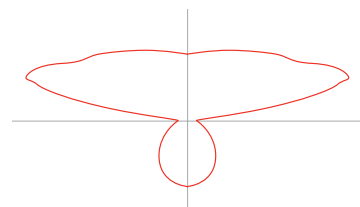
CUSTOMIZATION

Ask us about the following possibilities: Higher lumen outputs, alternate section lengths in 2' increments, alternate distributions, alternate voltages, additional mounting options, custom colors, higher CRI and R9 values and other modifications.

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SPECIFICATIONS

Housing
Extruded aluminum housing is 3.5" square.

End Caps
Extruded aluminum end caps are mechanically attached with no exposed fasteners. Flat end caps standard. For sculptured end caps, choose option SCEP.

Color
Color for housing and end caps is gloss white, black, painted aluminum or anodized aluminum. Consult factory for custom colors.

Luminaire Length
4' and 8' lengths in a single section for exact suspension spacing of 4' and 8'. For total length, add 1" for each standard end cap and $2\frac{1}{4}$" for each sculptured end cap. Longer rows are comprised of starter, joiner and end sections.

Source
Four LED lumen packages and three available color temperature options (3000K, 3500K and 4000K) — all within 2.5 MacAdam ellipses.

Optics
Softshine® optical system consists of injection-molded primary optics, co-extruded acrylic lenses and metal reflectors. Lenses connect end to end to form a continuous line of light.

Dimming Driver
eldoLED driver provides "natural dimming" with smooth, continuous and flicker-free operation to 0.1% dim levels. 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. Syncing for controls: 2mA max. THD: < 20%. Insignificant inrush current at 120 and 277VAC. FCC Class A and B tested for EMI and RFI.

When Control Input of 0-10V is specified driver will be set for linear dimming curve,If NLIGHT is specified driver will be set for logarithmic dimming curve

Controls and System Networking Options
For wired networking via Cat-5e, choose an integrated nLight® module. For daylight dimming and/or dual technology occupancy detection, see Integrated Sensor Layout Page for more details.

Electrical
LED light engine — consisting of modular LED boards and 0-10V dimming driver — is rated for 60,000 hours (L_{80}) at 25° C ambient temperature. Specify 120V or 277V. Pre-wired with 16AWG fixture wire. For special circuiting or wire gauge, consult factory. Plug-in electrical connectors included.

Environment
Suitable for damp location.

Validation
CSA/CUS listed. CSA tested to UL 1598 standards. LM-79 tested. Individual sections meet FCC Part 15 requirements.

Packaging
100% post-consumer recycled cardboard box and inserts. Biodegradable protective luminaire bag. Recycled kraft paper tape.

Buy American Act
This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty
5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/support/customer-support/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.
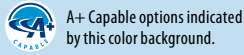
A+ Capable Luminaire
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- 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

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A+ Capable options indicated by this color background.

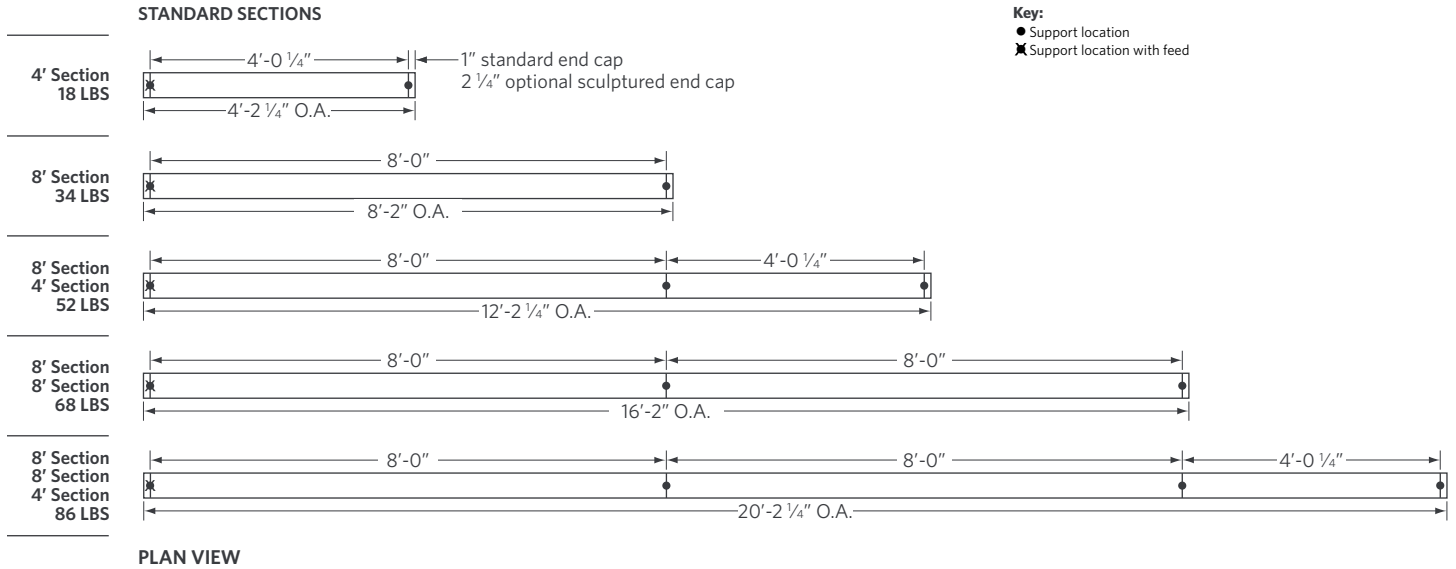## MODEL NUMBER   **Example:** SQM4 LLP 16FT MSL8 80CRI 35K I500LMF 800LMF DARK ZT 120 SCT F1/24A C110

Luminaire	Linear Length Plan		Total Run Length	Maximum Section Length		LED Color Rendering		LED Color Temperature		Indirect LED Ouput		Direct LED Output	
SQM4	LLP	Linear longest possible	__FT	MSL4	4' Section(s)	80CRI	80+ CRI	30K	3000K	I500LMF	500 nominal indirect lumens per foot	400LMF	400 nominal direct lumens per foot
	LSL	Longest same length	*Indicate Luminaire Row Length in 4' increments. Ex: 12FT*	MSL8	8' Section(s)			35K	3500K	I900LMF	900 nominal indirect lumens per foot	800LMF	800 nominal direct lumens per foot
								40K	4000K				

Minimum Dimming Level		Control Input		Voltage		Wiring Option		Emergency Options		Primary Sensor		Secondary Sensor	
DARK	Constant current, dimming to < 1%	ZT*	0-10V	120	120V	SCT	Single circuit	(Blank)	None	(blank)	No factory-installed, integrated sensor	(blank)	No factory-installed, integrated sensor
		NLIGHT**	nLight enabled	277	277V	DCT*	Dual circuit	1EC	(1) Emergency circuit module	PDT_	Dual technology occupancy sensor. PIR & microphonics sensor	SPDT_	Dual technology occupancy sensor. PIR & microphonics sensor
		DALI***	DALI	347*	347V	*For independent dimming of indirect and direct light outputs, choose DCT*		2EC	(2) Emergency circuit module	ADC_	Daylight Dimming Sensor	SADC_	Daylight Dimming Sensor
		*0-10V will use linear dimming curve		**J-box mount step down transformer (1) per section*		**DCT not available in 4' section and NLIGHT*		__EC	___ Emergency circuit modules	APD_	Dual technology PDT and ADC sensor	SAPD_	Dual technology PDT and ADC sensor
		** Will use logarithmic dimming curve						*Emergency type is installed in last 4' of luminaire sections. Separate feed required.*		**Available with ZT or nLight only*		**Available with ZT or nLight only*	
		***Not available with sensors											
		***Will use logarithmic dimming curve											

Mounting Type/		Overall Suspension		Color		Options					
F1/	T-bar ceiling (universal mounting bracket)	24A	24" adjustable	C032	Gloss white	BLK*	Black cord and canopy	GMF	Slow blow		
F1A/	T-bar ceiling (UMB with integrated J-box)	36A	36" adjustable	C100	Anodized aluminum	CSA**	Manufactured to Canadian Standards	MCS***	Matching canopy at support for aesthetics		
F2/	Hard ceiling (horizontal J-box)	48A	48" adjustable	C110	Painted aluminum	CP	Chicago Plenum (available with F1A only)	MCSJ****	Matching canopy for J-box mounting at non-power feed support locations		
		72A	72" adjustable	C201	Black (low gloss)	DU	Dust cover				
*F1 & F1A Mount uses standard 3 1/2" canopy on feed and 2" canopy on support		96A	96" adjustable	C099**	Custom color	GLR	Fast blow	OJB***	Offset J-box at feed		
		144A	144" adjustable	RALTBD*	Ral Paint finishes			SCEP	Sculptured end cap		
**F2 Mount uses standard 5" canopy on feed and 2" canopy on support		192A	192" adjustable	**RALTBD for pricing only. replace with applicable RAL call out when ready to order. See the RAL BROCHURE for available options*		** Not available with NLIGHT*		SLP*****	Sloped ceiling		
		240A	240" adjustable			***CSA with EC consult factory*					
*** All feed cords, cord managers and canopies are standard white. They are not painted to match fixture color.		*Measured from ceiling to bottom of luminaire.*		***C099 for pricing only. Custom color chip needs to be sent in to Customer Care and matched up with our paint department and customer approved before order is entered.*		****MCS & OJB cannot be chosen together*					
						****MCSJ Available with F2 Mount only					
						*****When SLP is chosen need to choose F2 mount and OJB					

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WEIGHTS & SUPPORT SPACING

Suspension spacing equals section length. Default location shown.

STANDARD SECTIONS

Key:
● Support location
✖ Support location with feed

4' Section
18 LBS

4'-0 ¼" — 1" standard end cap
2 ¼" optional sculptured end cap
4'-2 ¼" O.A.

8' Section
34 LBS

8'-0"
8'-2" O.A.

8' Section
4' Section
52 LBS

8'-0" — 4'-0 ¼"
12'-2 ¼" O.A.

8' Section
8' Section
68 LBS

8'-0" — 8'-0"
16'-2" O.A.

8' Section
8' Section
4' Section
86 LBS

8'-0" — 8'-0" — 4'-0 ¼"
20'-2 ¼" O.A.

PLAN VIEW

LINEAR PLAN:

PEERLESS 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

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MOST COMMON MOUNTING TYPES AND OPTIONS Options available for this specific luminaire are checked in the boxes below.
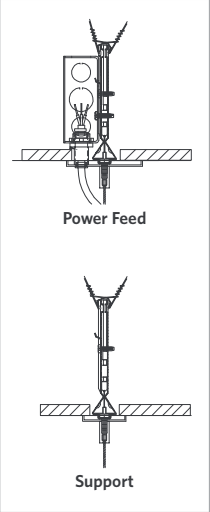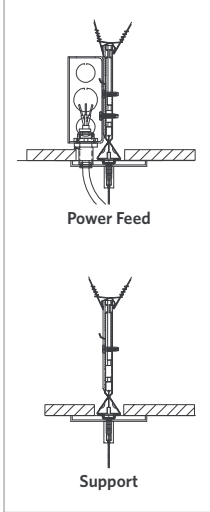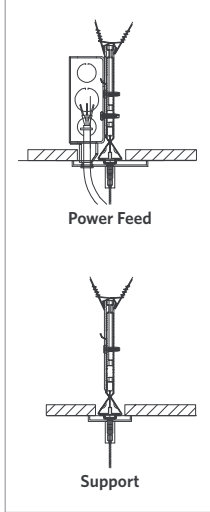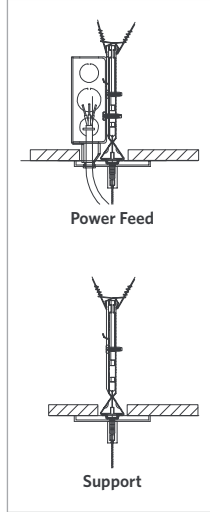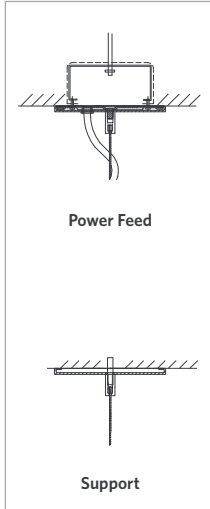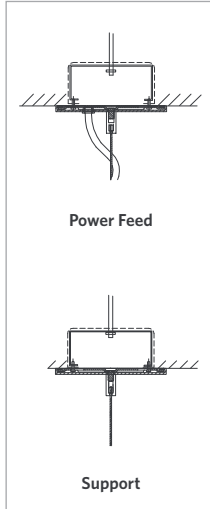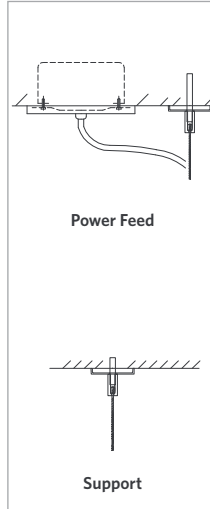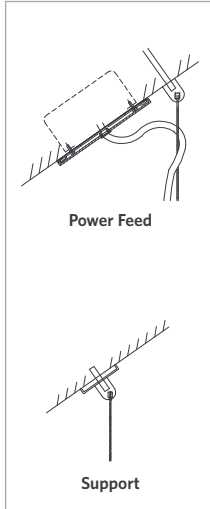
Mounting Type
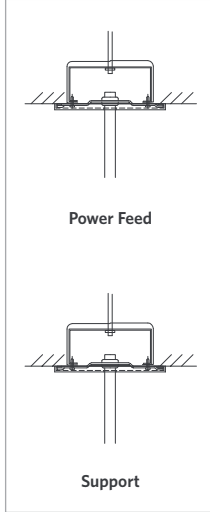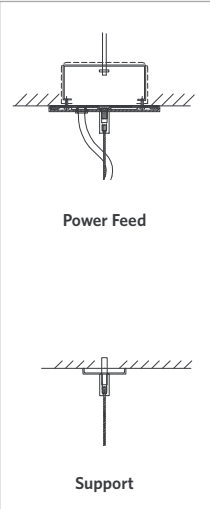
F1/ For use with most T-Bar and screw slot grid ceilings. Designed for on-grid and off-grid applications.

F2/ For use with recessed or surface mount horizontal J-box applications.

F3/ Stem mounting for use with recessed or surface mount horizontal J-box applications. *Check with local jurisdiction regarding rigid stem code requirements.*

F1A/ For use with most T-Bar and screw slot grid ceilings. Designed for on-grid and off-grid applications. *Comes complete with vertical J-box with built-in wire way. See also CP.*

Mounting Options

MCS Matching canopy at support for aesthetics.

MCSJ Matching canopy for J-box mounting at non-power feed support locations.

OJB Offset J-box at feed.

**SLP OJB** Sloped ceiling couplers and offset J-box option at feed.

For more detailed mounting drawings and information, see https://peerlesslighting.acuitybrands.com/resources/product-resources

☑ **Indicates mounting options available with this luminaire.**

☑ **F1/**

Power Feed

Support

☑ **F1/MCS**

Power Feed

Support

☑ **F1A/**

Power Feed

Support

☑ **F1A/MCS**

Power Feed

Support

☐ **F3/**

Power Feed

Support

☑ **F2/**

Power Feed

Support

☑ **F2/MCS**

Power Feed

Support

☑ **F2/MCSJ**

Power Feed

Support

☑ **F2/OJB**

Power Feed

Support

☑ **F2/SLP OJB**

Power Feed

Support

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INTEGRATED SENSOR OPTIONS

Control + Sensor Configurations	Control Input		Sensor		Sensor	Notes
	ZT	+	ADC	=	SensorSwitch NES ADCX	0-10V control Daylight Sensor
	ZT	+	PDT	=	SensorSwitch NES PDT 7	0-10V control Occupancy sensor
	ZT	+	APD	=	SensorSwitch NES PDT 7 ADCX	0-10V control Daylight with Occupancy sensor
	NLIGHT	+	ADC	=	SensorSwitch NES ADCX	nLight control Daylight Sensor
	NLIGHT	+	PDT	=	SensorSwitch NES PDT 7	nLight control Occupancy sensor
	NLIGHT	+	APD	=	SensorSwitch NES PDT 7 ADCX	nLight control Daylight with Occupancy Sensor
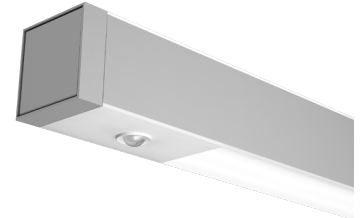
Daylight harvesting deactivated by default and field programmed per sequence of operations for PDT sensor options.

Luminaires specified with nLight system networking ship with one RJ-45 connector integrated into the luminaire, 10' of Cat-5e cable and a splitter to control the entire luminaire row (depending on wattage/voltage limitations). For multiple zones, please contact TechSupport-Peerless@AcuityBrands.com.

nES ADCX   nES PDT 7

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

4.5	15
3.8	12.5
3	10
2.5	7
1.5	5
0.75	2.5
0 m	0 ft
0.75	2.5
1.5	5
2.5	7
3	10
3.8	12.5
4.5	15
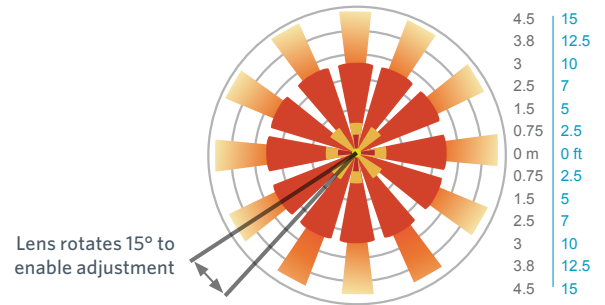
COMPATIBLE nLIGHT COMPONENTS WITH INTEGRATED CONTROLS

nPODMA DX WH   nPODMA 2P DX WH   nPODMA 4P DX WH   nPODMA 2L WH   nPOD UNITOUCH WH

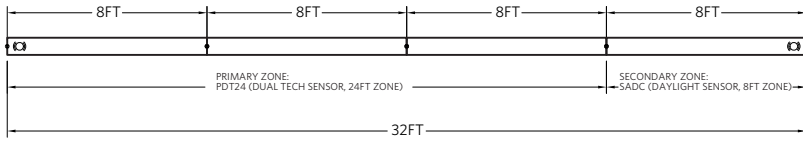Sensor Switch.com/DataSheets/nPODMA.PDF   Sensor Switch.com/DataSheets/nPOD Unitouch.PDF

eldoLED COMPATIBILITY   For compatible dimmers & switches please see the EldoLED compatibility document.
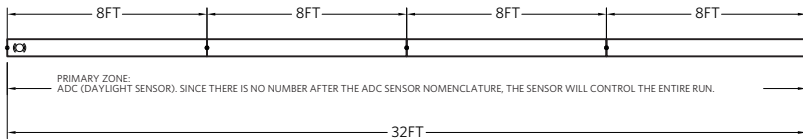
PeerlessLighting.com/eldoLED-compatibility

Type:

Project:

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INTEGRATED SENSOR LAYOUT

CORRECT:

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

| 8FT | 8FT | 8FT | 8FT |

PRIMARY ZONE:
PDT24 (DUAL TECH SENSOR, 24FT ZONE)

SECONDARY ZONE:
SADC (DAYLIGHT SENSOR, 8FT ZONE)

32FT

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

| 8FT | 8FT | 8FT | 8FT |

PRIMARY ZONE:
ADC (DAYLIGHT SENSOR). SINCE THERE IS NO NUMBER AFTER THE ADC SENSOR NOMENCLATURE, THE SENSOR WILL CONTROL THE ENTIRE RUN.

32FT

INCORRECT:

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

| 8FT | 8FT | 8FT | 8FT |

DOES NOT WORK BECAUSE THE LENGTH OF THE ZONE SPECIFIED (16FT),
DOES NOT MATCH THE ENTIRE RUN (32FT).
NOTE: IF THERE IS ONLY ONE ZONE, LEAVE THE NUMBERS AFTER THE SENSOR NOMENCLATURE BLANK. EXAMPLE: NO PDT16, USE PDT

32FT

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

| 8FT | 8FT | 8FT | 8FT |
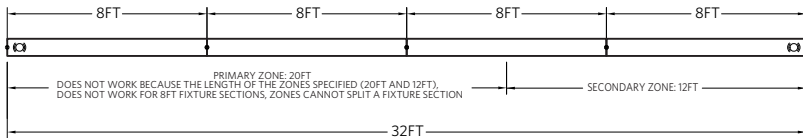
PRIMARY ZONE: 20FT
DOES NOT WORK BECAUSE THE LENGTH OF THE ZONES SPECIFIED (20FT AND 12FT),
DOES NOT WORK FOR 8FT FIXTURE SECTIONS, ZONES CANNOT SPLIT A FIXTURE SECTION

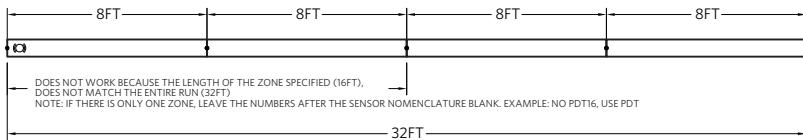SECONDARY ZONE: 12FT

32FT

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
- One nLight or NLTAIR2 device per zone or per sensor, for multiple zones without sensors contact factory