

# Square LED SQMS | LED | Direct | Suspended

SPECIFICATIONS Type:

Project:



# DIMENSIONS

# SQMS 🛛



# DETAILS





# COMPANION LUMINAIRE(S)







# CUSTOMIZATION

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

# HIGHLIGHTS

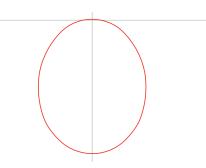
- Total System Integration features 5-year limited warranty by Acuity Brands covering all components and construction
- 4' and 8' sections
- Up to 86 lm/W
- Two lumen packages
- Softshine<sup>®</sup>-engineered comfort optics
- Continuously illuminated lens
- Available with lit corners
- Flicker-free dimming to dark (0.1%) powered by eldoLED® driver
- Integrated nLight<sup>®</sup> module for system networking (optional)
- Integrated sensor for daylight dimming and/or occupancy detection (optional)
- Flat or sculptured end caps
- White, black, painted aluminum, anodized aluminum or custom color

# LUMEN PACKAGES

Direct LED Ouput	400LMF	800LMF
Delivered Lumens Per Foot	407	781
Input Watts Per Foot	4.8	10
Lumens Per Watt	84	79

# DISTRIBUTION







# 54PAB

soft shine









# **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

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

#### Source

Two 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 co-extruded acrylic lenses and metal reflectors. Lenses connect end to end to form a continuous line of light.

#### **Dimming Driver**

eldoLED<sup>®</sup> driver provides "natural dimming" with smooth, continuous and flicker-free dimming to dark (0.1%). 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

For 0-10V driver details go to: PeerlessLighting.com/566L

#### Controls and System Networking Options

For wired networking via Cat-5e, choose an integrated nLight<sup>®</sup> module. For daylight dimming and/or dual technology occupancy detection, see Page 5 for integrated sensor options.

One control module per 4' section or 40' maximum row.

#### Electrical

LED light engine — consisting of modular LED boards and 0-10V dimming driver — is rated for 60,000 hours (L<sub>80</sub>) 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. 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.

#### Warranty

5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/ CustomerResources/Terms\_and\_conditions.aspx

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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Type:

Project:

A+ Capable options indicated by this color background. 

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

Luminaire SQMS	LLP Linear longest possible LSL Longest same length In Rd		Total Run Length FT Indicate Luminaire Row Length in 4' increments. Ex: 12	_FT MSL ndicate Luminaire MSL		aximum Section Length ISL4 4' Section(s) ISL8 8' Section(s)		LED Color Temperature           30K         3000K           35K         3500K           40K         4000K	400LMI	Direct LED Output 400LMF 400 Nominal direct lumens per foot 800LMF 800 Nominal direct lumens per foot	
Vinimum D ∟evel	imming	Control Input	Voltage	2	Wiring Option	Emer	gency Options	Primary Sensor		Secondary Sensor	
cu dir	nstant rrent, nming < 1%	ZT* 0-10V NLIGHT*** nLight enable DALI*** DALI *0-10V will use linea dimming curve ** Will use logarithm dimming curve ***Not available with sensors ***Will use logarithm dimming curve	ar nic h	20V 77V	SCT Single circuit	1EC 2EC EC Emerg last 4	Ik) None (1) Emergency circuit module (2) Emergency circuit module Emergency circuit modules rency type is installed in of luminaire sections. ate feed required.	sens micro sens ADC_ Daylight Di Sens APD_ Dual techno	sensor ology pancy pr. PIR & ophonics or nming pr or or ology and ADC or	(blank) No factory-installed integrated sensor SPDT_ Dual technology occupancy sensor. PIR & microphonics sensor SADC_ Daylight Dimming Sensor SAPD_ Dual technology PDT and ADC sensor *Available with ZT or nLight only	
Mounting T	ype/	Overall Susp	ension	Color		Op	otions				
(univ brack F1A/ T-ba with	r ceiling versal mounting ket) r ceiling (UMB integrated J-bo l ceiling	g <b>36A</b> 36" <b>48A</b> 48" (72A 72"	adjustable adjustable adjustable adjustable adjustable adjustable	C100 C110 C201	Gloss white Anodized aluminum Painted aluminum Black (low gloss) Custom color	C: Cl	<ul> <li>Chicago Plenum only)</li> </ul>	o Canadian Standards (available with F1A ugh wiring w/single	MCS MCSJ	Slow blow Matching canopy at support for aesthetics Matching canopy for J-box mounting at non-power feed support locations	

GLR

Fast blow

\* Not available with NLIGHT

\*\* Not available with CSA

ELS2\*\* Emergency through wiring w/single

feed, seperate neutrals

F2/ Hard ceiling (horizontal J-box)

144A 144" adjustable 192A 192" adjustable

240A 240" adjustable

Measured from ceiling to bottom of luminaire.

OJB Offset J-box at feed

SCEP Sculptured end cap

\*Not available with NLIGHT

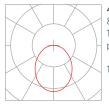
\*\*Not available with CSA

SLP Sloped ceiling



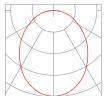


# PHOTOMETRICS



400LMF 80CRI 35K 84 lumens per watt 1629 delivered lumens per 4' section

100% down



800LMF 80CRI 35K 79 lumens per watt 3124 delivered lumens per 4' section 100% down

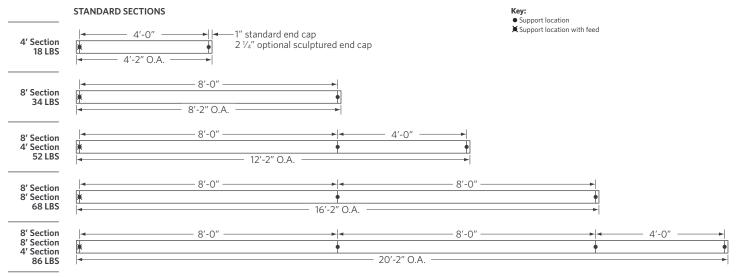
# CONFIGURATIONS



Square can be configured with special mitered sections to provide seamless corner illumination where two luminaires join together. Reference Pattern Connector Guide for additional details.

# WEIGHTS & SUPPORT SPACING

Suspension spacing equals section length. Default location shown. Consult factory for stem mounting suspension spacing and alternate locations.



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.

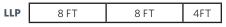
#### LSL- Linear Same Length:

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).



#### 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.



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Matching canopy at support for aesthetics.

feed support locations.

Offset J-box at feed.

Matching canopy for J-box mounting at non-power

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

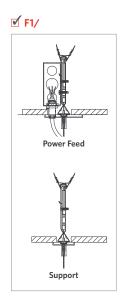
#### MOST COMMON MOUNTING TYPES AND OPTIONS Options available for this specific luminaire are checked in the boxes below.

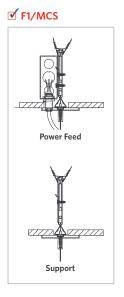
#### Mounting Type

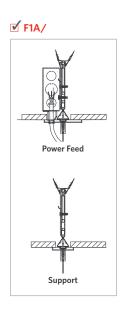
- **F1/** For use with most T-Bar and screw slot grid ceilings. Designed for on-grid and off-grid applications.
- **F2/** For use with recessed or surface mount horizontal J-box applications.
- **F3/** Stem mounting for use with recessed or surface mount horizontal J-box applications. *Check with local 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.*

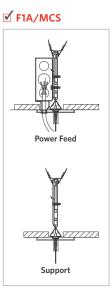
For more detailed mounting drawings and information, see PeerlessLighting.com/MountingOptions

# ✓ Indicates mounting options available with this luminaire.









**Mounting Options** 

MCS

MCSJ

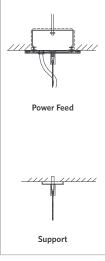
OJB

SLP OJB

Power Feed

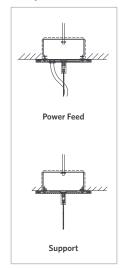
□ F3/

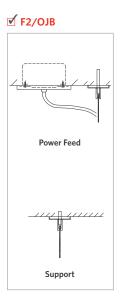
✓ F2/



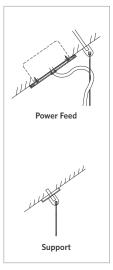
F2/MCS

🗹 F2/MCSJ





# **F2/SLP OJB**



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# For more information about sensor and networking options, download the controls guide at PeerlessLighting.com/ControlsGuide

# INTEGRATED SENSOR OPTIONS

Control Input	Integrated Sensor	Daylight Dimming	Daylight Dimming and/or Occupancy Detection	nLight Wired Networking	Link to Spec Sheet
NLIGHT	ADC	Х		Х	<u>nES-ADCX</u>
NLIGHT	PDT		Х	Х	<u>nES-7</u>
ZT	ADC	Х			<u>nES-ADCX</u>
ZT	PDT		Х		<u>nES-7</u>

Daylight harvesting deactivated by default and field programmed per sequence of operations.

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@PeerlessLighting.com.

# OCCUPANCY DETECTION COVERAGE

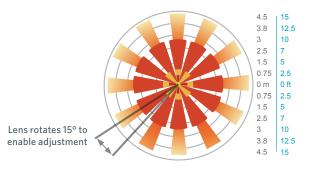
At the 7.5 ft (2.9 m) hanging height of a typical pendant mount fixture the sensor provides 10 ft (3.05 m) radial detection of small motion. At a 9 ft (2.74 m) hanging height the radius is 12 ft (3.66 m) for small motion.

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.





# COMPATIBLE nLIGHT COMPONENTS WITH INTEGRATED CONTROLS



SensorSwitch.com/DataSheets/nPODM.pdf



nPODM 2L WH

SensorSwitch.com/DataSheets/nPODM-xL.pdf



SensorSwitch.com/DataSheets/nPOD-GEX.pdf

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eldoLED COMPATIBILITY Additional control options with eldoLED 0-10V driver(s).

PeerlessLighting.com/eldoLED-compatibility

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# Type:

Project:

# INTEGRATED SENSOR LAYOUT

#### CORRECT:

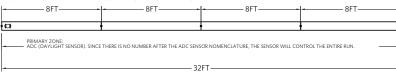




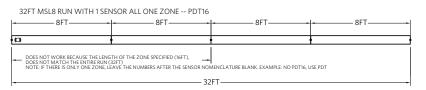
#### Notes:

- 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

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



#### INCORRECT:



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

-		8FT	8FT			
Ø	1		•	0		
	<ul> <li>DOES NOT WORK BECAUSE THE DOES NOT WORK FOR 8FT FIXTU</li> </ul>	PRIMARY ZONE: 20FT LENGTH OF THE ZONES SPECIFIED (20FT ANI RE SECTIONS, ZONES CANNOT SPLIT A FIXTU	D 12FT), URE SECTION	CONDARY ZONE: 12FT		

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