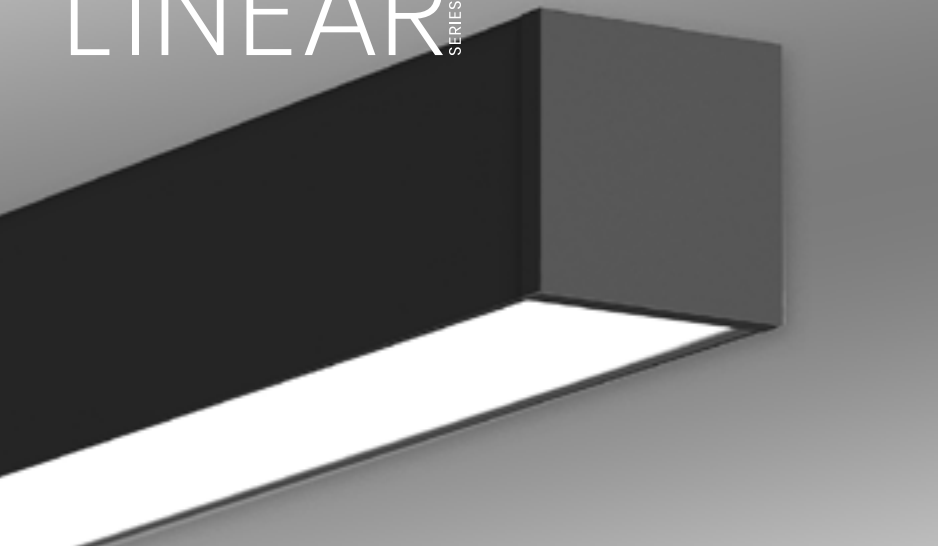


# LINEAR SERIES



DATE PROJECT

COMMENTS

CERTIFICATIONS



## SQ2 WALL INDIRECT / DIRECT

FEATURES

### OPTICAL SYSTEM

- OPTIMAL ASYMMETRIC DISTRIBUTION**  
Upper optics consist of an asymmetric distribution designed to throw light into the room providing more evenly illuminated wall and ceiling for visual comfort.
- VERSATILE LIGHT ENGINE**  
Multiple lumen intensities provide the correct level of illumination within each space.
- SEAMLESS, HIGH EFFICIENCY LIGHT DIFFUSER**  
Seamless, roll-in lens eliminates light leaks, minimizes glare, and provides uniform light distribution.

### ADA COMPLIANT HOUSING

- SURE-FIT ALIGNMENT**  
Full-body alignment system adjoins each luminaire section to ensure straighter rows while minimizing the appearance of seams.

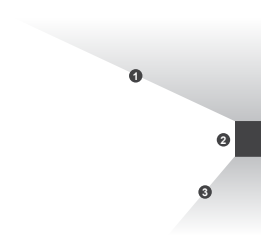
### ELECTRICAL

- EFFICACY**  
Luminaire efficacy up to 147 lumens per watt helps achieve Best in Class power density performance.

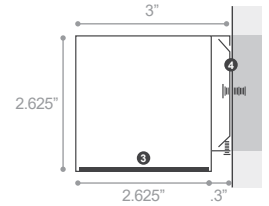
### DIMMING

- 0-10 VOLT DIMMING TO 1% STANDARD**

LIGHT DISTRIBUTION



CROSS-SECTION



SAMPLE PART NUMBER: SQ2-WID-24-MU-MD-30-UNV-WH

ORDERING

SERIES	LENGTH <sup>1</sup>	UPPER OUTPUT			DIRECT OUTPUT			CCT	VOLTAGE	FINISH	ORDERING NOTES
<b>SQ2-WID</b>	<b>XX FT</b>	<b>VHU<sup>4</sup></b> 1250 LM/FT	<b>LU</b> 500 LM/FT	<b>VHD<sup>4</sup></b> 1250 LM/FT	<b>LD</b> 500 LM/FT	<b>30</b> 3000K	<b>UNV</b> 120-277V	<b>WH</b> White	1 Nominal length.		
	2' Increments EX: 20' FT = 20	<b>HU<sup>4</sup></b> 1000 LM/FT	<b>VLU</b> 250 LM/FT	<b>HD<sup>4</sup></b> 1000 LM/FT	<b>VLD</b> 250 LM/FT	<b>35</b> 3500K	<b>347<sup>2</sup></b> 347V	<b>BLK</b> Black	2 EM not available with 347V.		
		<b>MU</b> 750 LM/FT	<b>CU</b> Custom	<b>MD</b> 750 LM/FT	<b>CD</b> Custom	<b>40</b> 4000K		<b>S<sup>5</sup></b> Silver	3 EM and sensors are not available with 2' and 3' fixtures.		
								<b>GR<sup>5</sup></b> CHARCOAL Gray	4 VHU, HU, VHD, HD not available with 2' fixture		
									5 Contact factory for available configurations, additional lead times, and adder		

OPTIONS

CRI	INTEGRATED CONTROLS <sup>3, 6, 7</sup>	CIRCUITING	FOR INDIVIDUALS	FOR LINEAR RUNS <sup>8, 9</sup>		
<b>BLANK = 80 CRI</b>	<b>DOS</b> Daylight Occupancy Sensor DALI DRIVER STANDARD	<b>SS-U/D</b> Separate Switching UPLIGHTSWITCHEDSEPARATELYFROMDIRECTLIGHT	<b>EM<sup>2, 3</sup></b> Emergency Battery CEC LISTED	<b>EM</b> EMERGENCY BATTERY PACK	QUANTITY PER RUN <sup>6</sup>	POSITION IN RUN <sup>6</sup>
<b>C90</b> 90 CRI			<b>EC</b> Emergency Circuit	<b>EC</b> EMERGENCY CIRCUIT	QUANTITY PER RUN <sup>6</sup>	POSITION IN RUN <sup>6</sup>

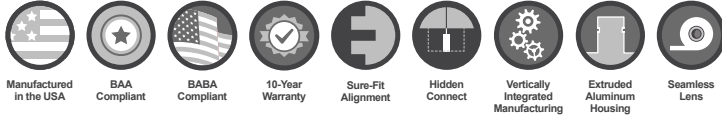
OPTIONS NOTES

- 6 Consult factory for component or system not listed.
- 7 For individual fixtures, sensor located at power feed end. For runs, a sensor is installed into each fixture in run, ex. 2 sensors are installed in a 16' run (1 sensor in each 8' fixture).
- 8 EM and EC quantity is not to exceed number of discrete fixture sections in a row.
- 9 EM and EC position refers to which fixture in the run that will be powered by the EM/EC circuit. Position Options: S = Starter; J = Joiner; E = Ender Ex: SQ2-WID-24-MU-MD-30-UNV-WH-EM2SJ



# SQ2 WALL

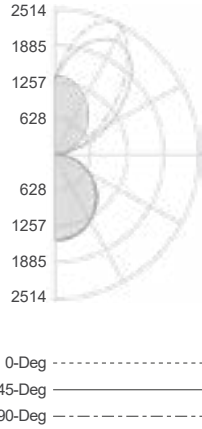
INDIRECT / DIRECT



## PHOTOMETRICS & ENERGY CHARTS

### SQ2-WID-04-HU-HD-35

Total Lumens: 7,840  
 Ratio: 50% Up & 50% Down  
 Wattage: 61.32  
 Efficacy: 128 LM/W  
 Fixture Length: Four Feet



### Zonal Lumen Summary

Zone	Lumens	% Fixt
0 - 30	1084.3	13.8
0 - 40	1765.9	22.5
0 - 60	3099.0	39.5
0 - 90	3956.3	50.5
90 - 180	3884.1	49.5
0 - 180	7840.4	100.0

### Indirect (Asymmetric) / Direct (Lambertian) Light, 3500K

	VHU-VHD	VHU-HD	VHU-MD	VHU-LD	VHU-VLD
<b>Watts/ft</b>	19.7	17.1	14.7	12.4	10.2
<b>Lumens/ft</b>	2477	2230	1982	1738	1501
<b>LPW</b>	125.8	130.4	134.9	140.2	147.9

	HU-VHD	HU-HD	HU-MD	HU-LD	HU-VLD
<b>Watts/ft</b>	17.9	15.3	12.9	10.6	8.4
<b>Lumens/ft</b>	2208	1960	1713	1469	1232
<b>LPW</b>	123.1	127.9	132.5	138.2	147

	MU-VHD	MU-HD	MU-MD	MU-LD	MU-VLD
<b>Watts/ft</b>	16.4	13.8	11.4	9.1	6.8
<b>Lumens/ft</b>	1951	1703	1456	1212	975
<b>LPW</b>	119.1	123.6	128	133.5	142.8

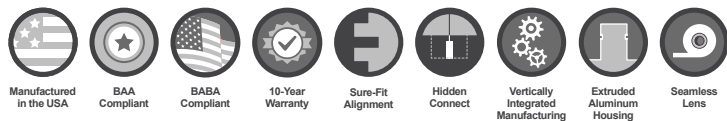
	LU-VHD	LU-HD	LU-MD	LU-LD	LU-VLD
<b>Watts/ft</b>	15	12.4	10	7.7	5.5
<b>Lumens/ft</b>	1729	1481	1234	990	753
<b>LPW</b>	115.2	119.4	123.4	128.5	138.1

	VLU-VHD	VLU-HD	VLU-MD	VLU-LD	VLU-VLD
<b>Watts/ft</b>	13.6	11	8.6	6.3	4
<b>Lumens/ft</b>	1489	1241	994	750	513
<b>LPW</b>	109.9	113.4	116.3	120	128.3

### Lumen Adjustment Calculations

LUMEN MULTIPLIERS	
3000K	0.989
4000K	1.042

**Example: MU-MD, 3000K at 90CRI**  
 Light Output: 5824 x 0.989 = 5760 lm  
 Light Output/ft: 1456 x 0.989 = 1440 lm/ft  
 Efficacy = 1440 / 11.4 = 126.3 lm/w



**SPECIFICATIONS**

**MECHANICAL**

**Housing Construction:**

Extruded aluminum 6063-T5 alloy outer housing with die-formed steel internal components for strength, alignment, and mounting attachment.

**Alignment/Assembly:**

The Sure-Fit alignment system employs a full height joining biscuit, designed to create straighter rows and eliminate light leak at fixture seams. Two nuts are used to draw fixtures together to secure housing-to-housing attachment.

**Lengths:**

The SQ2 is available in individual 2-foot (25.25"), 4-foot (48"), 6-foot (72"), 8-foot (96"), 10-foot (120"), and 12-foot (144") lengths (±0.030"). Longer fixture rows are available and will be configured per Lumato factory specifications; typical rows are configured with 8-foot fixtures. Our high-quality die-cast end caps are engineered to conceal all fasteners and to retain the sealing gaskets on the inside of the fixture while completing the clean and minimalistic look of this luminaire. Each end cap adds 5/16" to the length of each fixture run.

**Mounting Method/Hardware:**

Wall mounting hardware uses 2 galvanized sheet metal mounting cleats with side-to-side adjustability for final alignment. Position all junction boxes in accordance with submittal drawings and installation instructions.

**Fixture Finish:**

The SQ2 fixture finish is available in White, Black, Sliver or Charcoal Gray polyester powder coat finish to ensure durability. Luminaires are available in any RAL color as an option.

**Integrated Controls:**

The SQ2 is available with optional integrated controls. Sensors are conveniently designed to mount in aperture and are located at the power feed end of each fixture. For runs, each fixture section will be supplied with a discrete sensor that will control that specific section. Philips EasySense is standard daylight/occupancy sensor. DALI driver required. If your project requires a component or system not listed, please contact your Lumato lighting representative.

MANUFACTURER	ORDERING CODE	SENSOR	CONNECTION	DRIVER
Philips EasySense	DOS	Daylight/PIR Occupancy	Wireless	DALI (Advanced Xitanium SR, 1% Dimming)

**OPERATION**

**Light Engine:**

The SQ2 is available in 3000K, 3500K, and 4000K CCT all within a 3-Step MacAdam Ellipse and has a standard CRI of 80+ with a 90+ CRI option available. Longer lead-times may apply for 90 CRI. Consult factory.

**Direct Optics:**

Our frosted acrylic roll in lens is designed to maximize efficiency while minimizing glare and eliminating light leaks at fixture joints. Individual fixtures come with lens factory installed while continuous runs will have a separate lens kit installed in the field once the run is hung. This will allow for a continuous/seamless lens up to 100'.

**Upper Optics:**

The upper optics consist of an extruded acrylic lens that provides an asymmetric distribution designed to throw light into the room. This produces a more evenly illuminated wall and ceiling for visual comfort.

**Electrical:**

Class 2 programmable (factory pre-set) premium power supply, 120-277VAC input or 347V. Power factor >0.9 THD<15%. Integral Surge Protection to 2KV.

**Dimming:**

The SQ2 comes standard with 0-10V dimming to 1%. For DOS (Daylight/Occupancy Sensor) ordering code, DALI driver required. Advance Xitanium SR, 1% dimming to be utilized.

**Emergency Battery Pack:**

Emergency Battery Pack has been engineered to exceed UL minimum safety standards. Standard battery is CEC Listed. For most fixtures, the entire direct portion of the fixture will be illuminated by the EM Battery Pack. For 8' VHD, only the first portion of the fixture will be illuminated by the EM battery pack. "Quantity per Run" refers to the number of fixtures in the run that will be supplied with an emergency battery pack. "Position in Run" refers to which fixture in the run that will contain the battery. Position options are Starter (S), Joiner (J), or Ender (E). For example, a 24' run needing two emergency battery packs, one in the starter and one in the joiner, would be ordered as EM2SJ. When a joiner is selected, battery packs are always supplied in 8' fixtures before 6' fixtures in that run.

**Emergency Circuit:**

Emergency Circuit fixtures are engineered so that the entire fixture is wired to the emergency circuit. "Quantity per Run" refers to the number of fixtures in the run that are wired to the emergency circuit. "Position in Run" refers to which fixture in the run that will be powered by the Emergency Circuit. Position options are Starter (S), Joiner (J), or Ender (E). For example, a 24' run needing two emergency sections, one in the starter and one in the joiner, would be ordered as EC2SJ. When a joiner is selected, Emergency Circuits are always supplied in 8' fixtures before 6' fixtures in that run.

**GENERAL**

**Warranty:**

Ten (10) year limited warranty from date of shipment, covers LED's, driver and luminaire. Optional accessories are covered by their individual Manufacturers' warranties.

**Lumen Maintenance:**

Rated for 85% initial lumen output (L85) at 50,000 hours of operation, operated at 25°C ambient temperatures; per TM-21 Guidelines published by the Illuminated Engineering Society (IES).

**Certification:**

All luminaires are UL/cUL Listed to UL 1598 Standards and approved for Indoor use in Dry/Damp Locations.

**Manufactured in the USA:**

All Lumato luminaires and components (with the exception of our LED boards and drivers) are proudly manufactured and assembled in the USA.

**Shipping:**

4 week lead-time for orders up to 1000 linear feet. Lead-time for orders greater than 1000 linear feet will be determined at time of order.

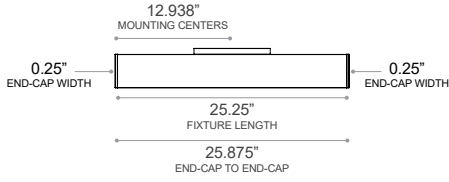
# SQ2 WALL

INDIRECT / DIRECT

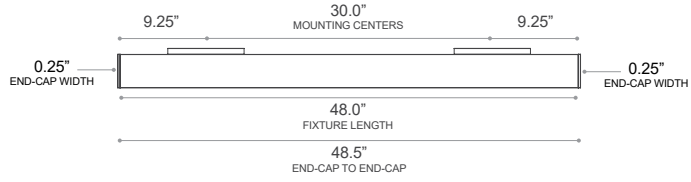


FIXTURE ROW LAYOUT: SINGLE UNIT 2' - 4' - 6' - 8' - 10' - 12'

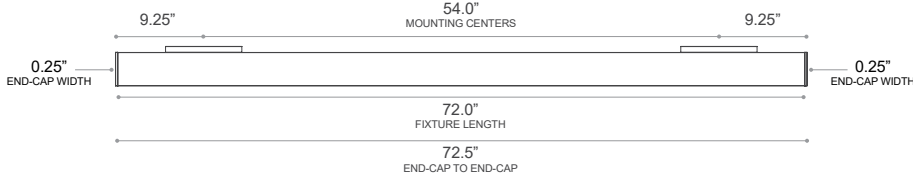
2' FIXTURE



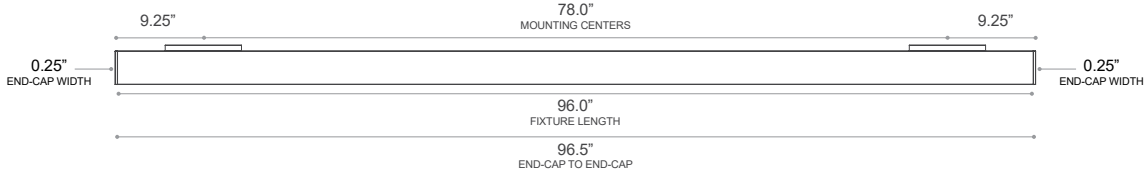
4' FIXTURE



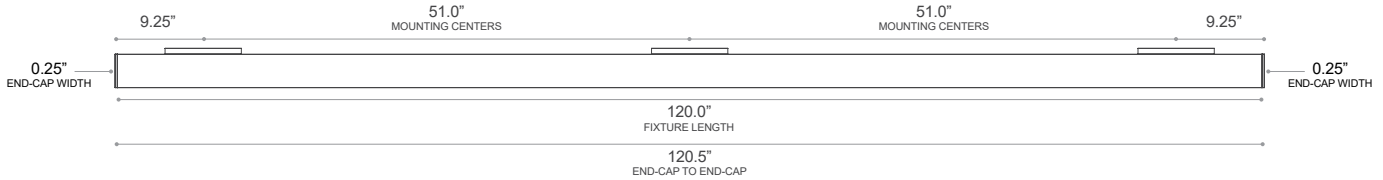
6' FIXTURE



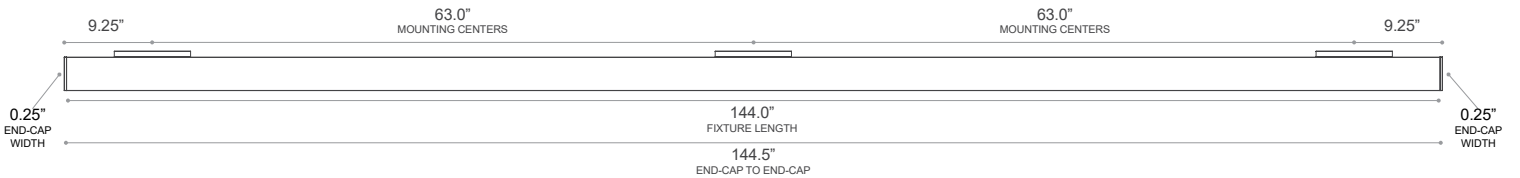
8' FIXTURE



10' FIXTURE

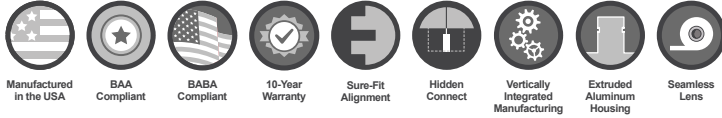


12' FIXTURE



# SQ2 WALL

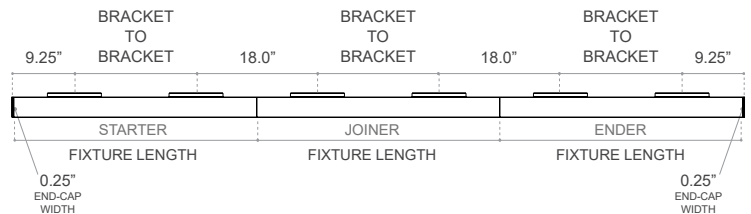
INDIRECT / DIRECT



## FIXTURE ROW COMPONENTS

RUN LENGTH (FT)	FIXTURE LENGTHS									JOINER KITS
	STARTER	JOINER							ENDER	
	1	2	3	4	5	6	7	8	9	
14	6'	-	-	-	-	-	-	-	8'	1
16	8'	-	-	-	-	-	-	-	8'	1
18	4'	6'	-	-	-	-	-	-	8'	2
20	4'	8'	-	-	-	-	-	-	8'	2
22	6'	8'	-	-	-	-	-	-	8'	2
24	8'	8'	-	-	-	-	-	-	8'	2
26	4'	6'	8'	-	-	-	-	-	8'	3
28	4'	8'	8'	-	-	-	-	-	8'	3
30	6'	8'	8'	-	-	-	-	-	8'	3
32	8'	8'	8'	-	-	-	-	-	8'	3
34	4'	6'	8'	8'	-	-	-	-	8'	4
36	4'	8'	8'	8'	-	-	-	-	8'	4
38	6'	8'	8'	8'	-	-	-	-	8'	4
40	8'	8'	8'	8'	-	-	-	-	8'	4
42	4'	6'	8'	8'	8'	-	-	-	8'	5
44	4'	8'	8'	8'	8'	-	-	-	8'	5
46	6'	8'	8'	8'	8'	-	-	-	8'	5
48	8'	8'	8'	8'	8'	-	-	-	8'	5
50	4'	6'	8'	8'	8'	8'	-	-	8'	6
52	4'	8'	8'	8'	8'	8'	-	-	8'	6
54	6'	8'	8'	8'	8'	8'	-	-	8'	6
56	8'	8'	8'	8'	8'	8'	-	-	8'	6
58	4'	6'	8'	8'	8'	8'	8'	-	8'	7
60	4'	8'	8'	8'	8'	8'	8'	-	8'	7
62	6'	8'	8'	8'	8'	8'	8'	-	8'	7
64	8'	8'	8'	8'	8'	8'	8'	-	8'	7
66	4'	6'	8'	8'	8'	8'	8'	8'	8'	8
68	4'	8'	8'	8'	8'	8'	8'	8'	8'	8
70	6'	8'	8'	8'	8'	8'	8'	8'	8'	8
72	8'	8'	8'	8'	8'	8'	8'	8'	8'	8

	FIXTURE LENGTH	CENTER-TO-CENTER BRACKET SPACING
4'	48.0"	30.0"
6'	72.0"	54.0"
8'	96.0"	78.0"



**NOTE 1**  
2' fixtures use a single mounting bracket centered on the fixture

**NOTE 2**  
10' & 12' fixtures have a third mounting bracket centered on the fixture