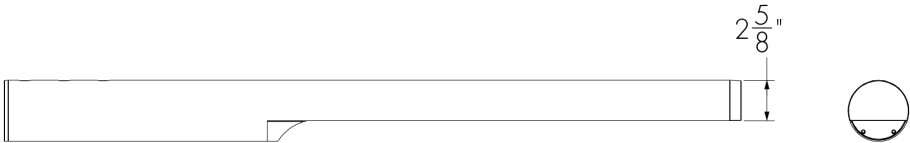


Project Name

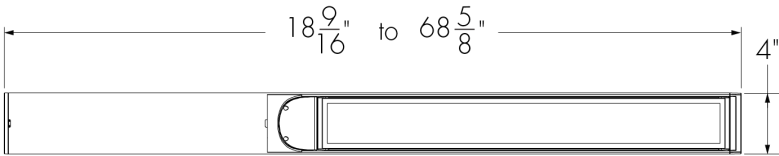
Qty

Type

Catalog / Part Number



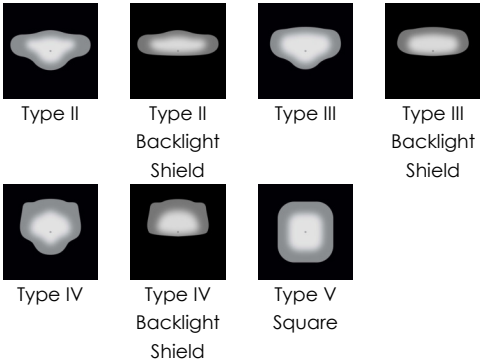
Side and Front Views



Bottom View

M80 or M100 Output (2 LED Boards), FLT Endcap Shown
See Dimensions Section for Details

Distributions



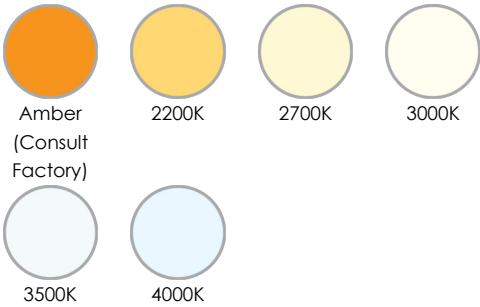
Description

Lumenspoke is a sleek, modular site and area luminaire that merges minimalist design, exceptional performance, and environmental responsibility. With its rounded form, hidden hardware, and flexible mounting and optical options, Lumenspoke delivers precise, beautiful illumination for urban environments—all while minimizing light trespass and maximizing visual comfort. From pathways and campuses to public spaces and collector roads, Lumenspoke adapts seamlessly to your design vision and is DarkSky approved, providing a stellar quality of light that brings the night to life.

Features

Mounting	SD: Side Mounting
Color and Color Temperature	AMB: Amber (Consult Factory) 22K: 2200K 27K: 2700K 30K: 3000K 35K: 3500K 40K: 4000K
Distributions	2: Type II 2BLS: Type II Backlight Shield 3: Type III 3BLS: Type III Backlight Shield 4: Type IV 4BLS: Type IV Backlight Shield 5S: Type V Square
Optical Options (Factory Installed)	LV: Louver HL: Honeycomb Louver
Endcap Options	FLT: Flat Endcap DM: Domed Endcap CYL: Cylindrical Endcap CRV: Curved Endcap

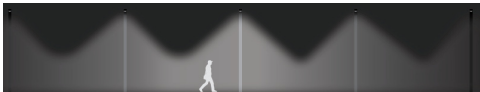
Color and Color Temperature



Control

0-10V

Motion Detector Options



Rating

IP66 (optical chamber)
IK06 (glass lens)
IK10 (housing)

Lumencycle™ Program



Certifications



Options	Corrosion-Resistant Coating for Hostile Environments Surge Protector Button Type Photocell Motion Detector ANSI C136.31 - 2018 Vibration Rating for Bridge and Overpass Applications 3-Pin Receptacle With or Without Shorting Cap 5-Pin Receptacle With or Without Shorting Cap 7-Pin Receptacle With or Without Shorting Cap (Consult Factory)
Vibration Rated	ANSI C136.31 - 2018 Vibration Rating for Bridge and Overpass Applications (VRBO) available for certain configurations, refer to Product Configurator and Website for details
Warranty	5-year limited warranty
Performance	
Color Rendering	CRI 70+, CRI 80+, CRI 90+
Output (Nominal Lumens)	Up to 14000lm (3 boards)
Efficacy	Up to 103 lm/W (Type 5 square, 4000K, CRI 70+, XS20 lumen output)
Color Consistency	3 SDCM for CRI 70+ 2 SDCM for CRI 80+ and CRI 90+ (with the exception of 2200K)
Lumen Maintenance	TM-21 L70 > 145,000 hrs (reported, Ta 25 - 50 °C [77 - 122 °F])
DarkSky	DarkSky Approved (2200K, 2700K and 3000K color temperatures) Refer to DarkSky Approved Specification Sheet
Physical	
Housing Material	Extruded aluminium 6000 alloy series
Lens Material	Optical Tempered Clear Glass (Clearsite Lens)
Surface Finish	Super durable resistant exterior polyester powder coating meets AAMA 2604-98 requirements (5-years Florida exposure). A corrosion resistant finish (CRC) pre-finish is available to meet ASTM B-117 & ASTM D-1654 (salt spray resistance) and ASTM D-2247 requirements (humidity resistance).
Weight	N LED Boards: 7.15 lbs XS LED Boards: 11.05 lbs S LED Boards: 16.1 lbs M LED Boards: 19 lbs L LED Boards: 23.25 lbs Refer to Fixture Weights Table in complete specification sheet for fixture weights with motion detector installed and double configurations
Electrical and Control	
Voltage	120 Volts, 208 Volts, 240 Volts, 277 Volts, 347 Volts
Control	On/Off Control, 0-10V Dimming, Lumentalk

Environmental

Storage Temperature	-40°C to 50°C [-40°F to 122°F] (device must reach start-up temperature value before operating)
Operating Temperature	-40 °C to 50 °C [-40°F to 122°F]
Start-up Temperature	-40°C to 50°C [-40°F to 122°F]
Ingress Protection Rating	IP66 (optical chamber) Wet location rated
Impact Resistance Rating	IK06 (glass lens) IK10 (housing)
Environment	Dry/damp/wet location

Important

Virtual Patent Marking Notice

This website (<https://www.lmpg.com/patents-trademarks>) is provided to satisfy the virtual patent marking provisions of applicable jurisdictions. Some products listed may be covered by additional patents not referenced here.

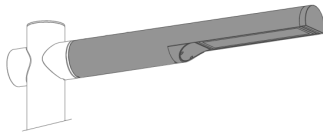
Lumencycle™ Program

Lumencycle is a comprehensive program designed to maximize the life of Lumenpulse fixtures while preserving their performance, quality, and design intent. Built around three pillars—Repair, Restore, and Recycle—the program provides clear pathways to maintain existing installations, restore fixtures, and responsibly manage them at end of life. For full program details, visit <https://www.lumenpulse.com/lumencycle>.

EPA And Fixture Weight Tables

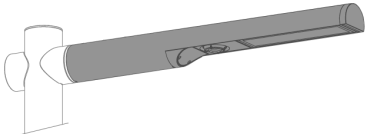
Fixture weights are estimated.

Standard Fixture



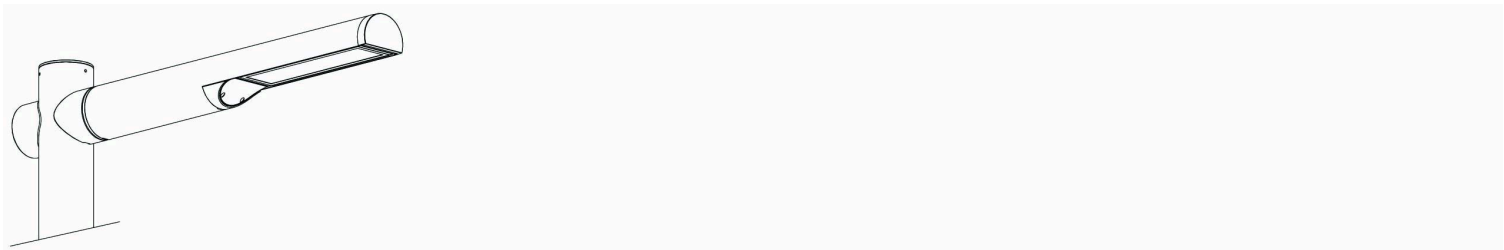
	SPKS-N	SPKS-XS	SPKS-S	SPKS-M	SPKS-L
EPA (sq ft.)	0.767	1.071	1.404	1.713	2.113
Weight (lbs)	7.15	11.05	16.1	19	23.25

Fixture With Motion Detector Option



	SPKS-N	SPKS-XS	SPKS-S	SPKS-M	SPKS-L
EPA (sq ft.)	0.939	1.243	1.577	1.886	2.286
Weight (lbs)	9.15	13.05	18.1	21	25.25

EPA And Mounting Arm Weight Tables - Round Pole Shape



SPKS-S1E-4-R shown

SO2 - Side Overlap (2 3/8 in Tenon) and SO2N - Side Overlap (2 3/8 in Tenon) for N10 or N15 Output

Arm Style	Arm Configurations						
		S1X 	S1E 	S2E 	S3E 	S3Y 	S4E 
SPKS4 	EPA	0.10 sq.ft.	0.10 sq.ft.	0.10 sq.ft.	0.27 sq.ft.	0.24 sq.ft.	0.33 sq.ft.
	Weight	5.47 lbs.	5.47 lbs.	6.85 lbs.	10.27 lbs.	10.27 lbs.	13.69 lbs.
SPKR4 	EPA	N/A	0.58 sq.ft.	0.84 sq.ft.	1.57 sq.ft.*	1.41 sq.ft.*	1.95 sq.ft.*
	Weight		10.74 lbs.	17.09 lbs.	21.48 lbs.*	22.04 lbs.*	25.90 lbs.*
SPKH4 	EPA	0.47 sq.ft.	0.47 sq.ft.	N/A			
	Weight	7.86 lbs.	7.86 lbs.				

Mounting Arm weights are estimated.
*For SPKR4 Arm Style specified with S3E, S3Y and S4E Arm Configuration, consult factory for availability.

EPA And Mounting Arm Weight Tables - Square Pole Shape



SPKS-S1E-4-S shown

SO2 - Side Overlap (2 3/8 in Tenon) and SO2N - Side Overlap (2 3/8 in Tenon) for N10 or N15 Output

Arm Style	Arm Configurations					
		S1X 	S1E 	S2E 	S3E 	S4E 
 SPKS4	EPA	0.10 sq.ft.	0.10 sq.ft.	0.10 sq.ft.	0.27 sq.ft.	0.33 sq.ft.
	Weight	5.47 lbs.	5.47 lbs.	6.85 lbs.	10.27 lbs.	13.69 lbs.
 SPKH4	EPA	0.47 sq.ft.	0.47 sq.ft.	N/A		
	Weight	7.86 lbs.	7.86 lbs.			

Mounting Arm weights are estimated.

Endcap Options

FLT - Flat Endcap Option



DM - Domed Endcap Option



CYL - Cylindrical Endcap Option

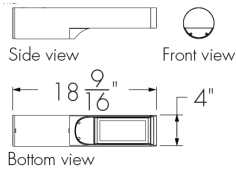


CRV - Curved Endcap Option

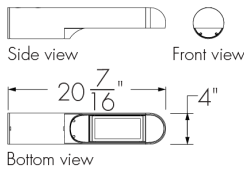


Dimensions - Fixture with Flat and Domed Endcap Options

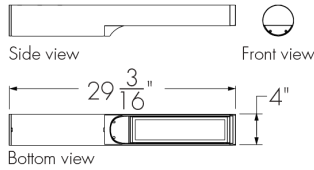
N02, N10 and N15 Output with Flat Endcap Option



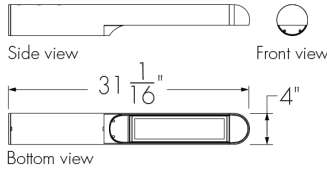
N02, N10 and N15 Output with Domed Endcap Option



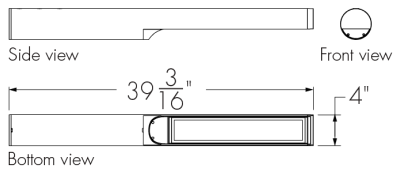
XS05, XS20, XS25, XS30 Output with Flat Endcap Option



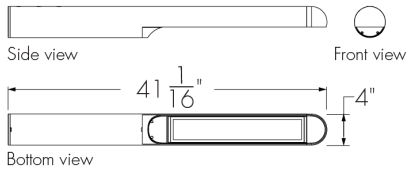
XS05, XS20, XS25, XS30 Output with Domed Endcap Option



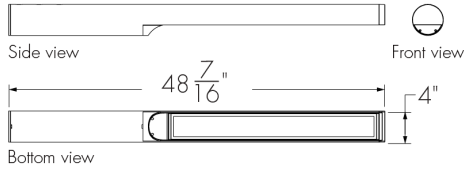
S07, S40 and S60 Output with Flat Endcap Option



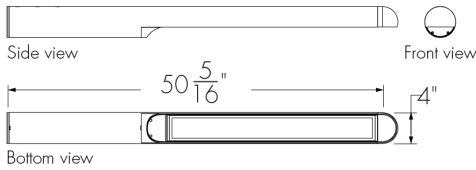
S07, S40 and S60 Output with Domed Endcap Option



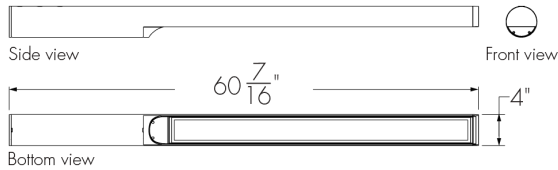
M15, M80 and M100 Output with Flat Endcap Option



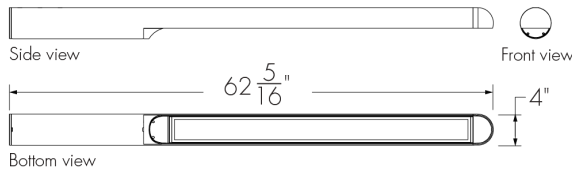
M15, M80 and M100 Output with Domed Endcap Option



L20, L120 and L140 Output with Flat Endcap Option

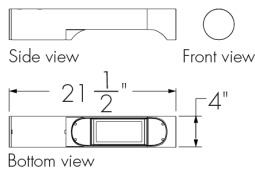


L20, L120 and L140 Output with Domed Endcap Option

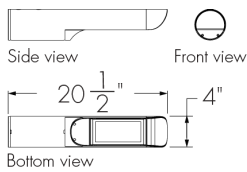


Dimensions - Fixture with Cylindrical and Curved Endcap Options

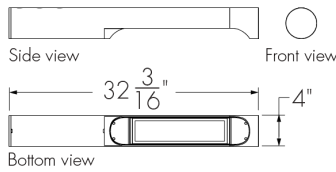
N02, N10 and N15 Output with Cylindrical Endcap Option



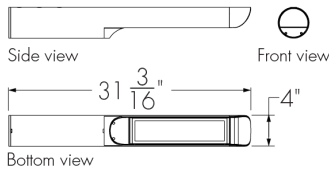
N02, N10 and N15 Output with Curved Endcap Option



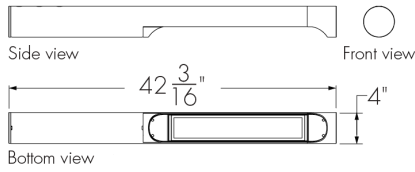
XS05, XS20, XS25 and XS30 Output with Cylindrical Endcap Option



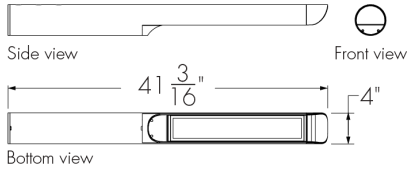
XS05, XS20, XS25 and XS30 Output with Curved Endcap Option



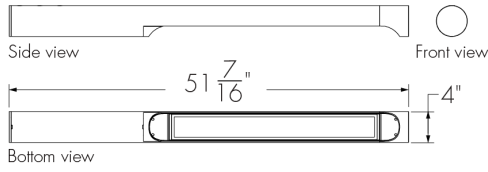
S07, S40 and S60 Output with Cylindrical Endcap Option



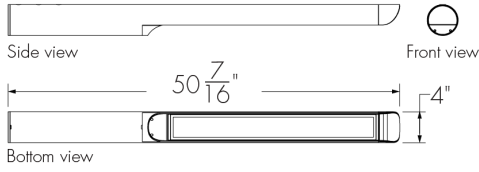
S07, S40 and S60 Output with Curved Endcap Option



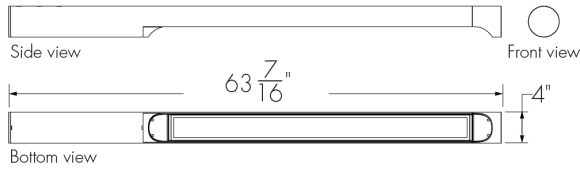
M15, M80 and M100 Output with Cylindrical Endcap Option



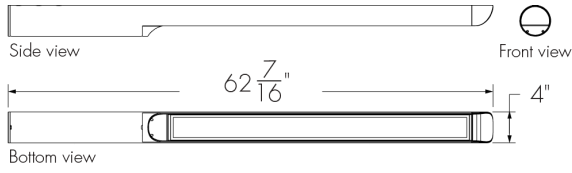
M15, M80 and M100 Output with Curved Endcap Option



L20, L120 and L140 Output with Cylindrical Endcap Option

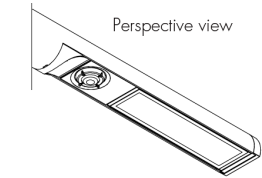


L20, L120 and L140 Output with Curved Endcap Option

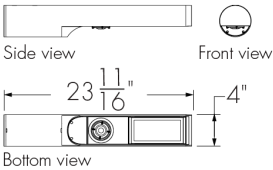


Dimensions - Fixture with Motion Detector Options

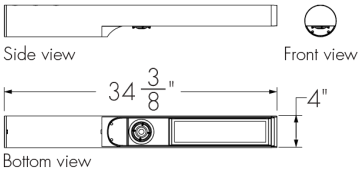
Fixture with Flat Endcap shown. Motion Detector option increases fixture length by 5 3/16 in.



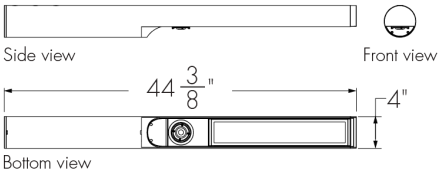
N02, N10 and N15 Output with Flat Endcap Option



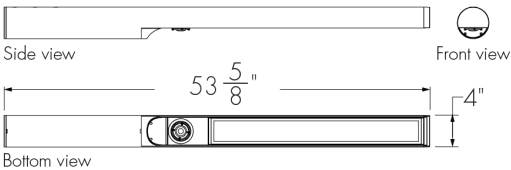
XS05, XS20, XS25, XS30 Output with Flat Endcap Option



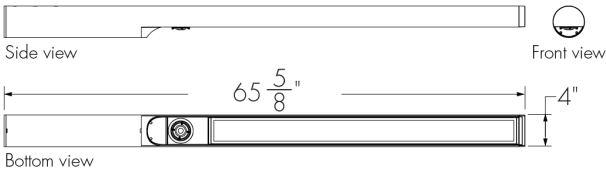
S07, S40 and S60 Output with Flat Endcap Option



M15, M80 and M100 Output with Flat Endcap Option



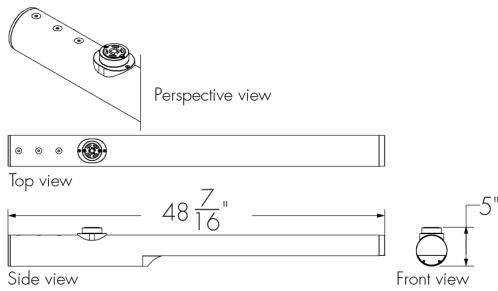
L20, L120 and L140 Output with Flat Endcap Option



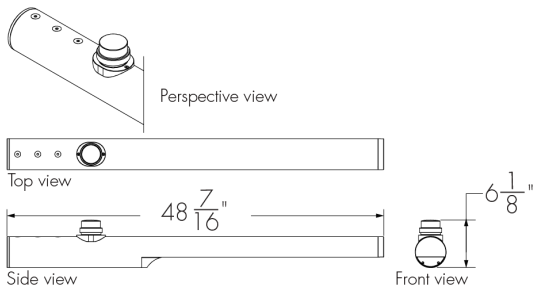
Dimensions - Fixture with Receptacle Options

M15, M80 and M100 Output with Flat Endcap Option shown. Receptacle Options does not change fixture length.

Fixture with Receptacle

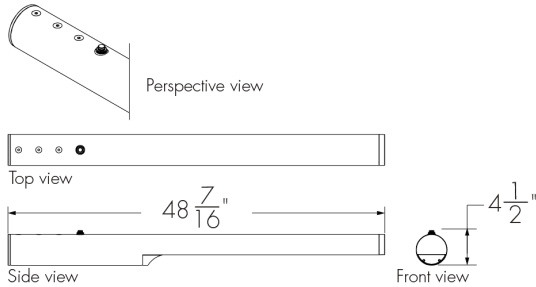


Fixture with Receptacle and Shorting Cap



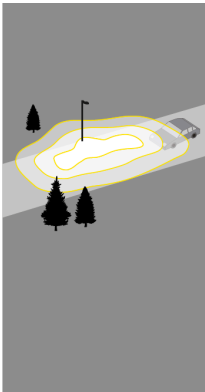
Dimensions - Fixture with Button Type Photocell Option

M15, M80 and M100 Output with Flat Endcap Option shown. Button Type Photocell Option does not change fixture length.

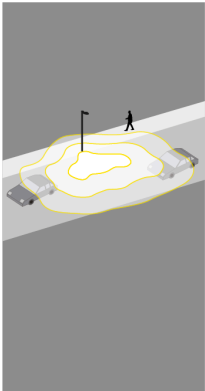


Photometric Information

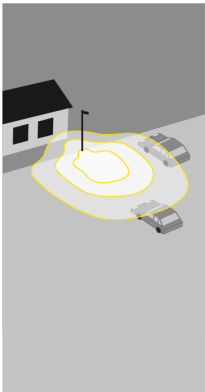
Type II, 4000K, CRI 70+, Clearsite Lens

	Nominal Output [lm]	Typical Delivered Output [lm]	Efficiency (lm/W)	BUG Rating			Typical Maximum Power 120/277V (W)
	N10	944	86	0	0	0	11
	N15	1,432	72	0	0	0	20
	XS20	2,213	89	1	0	1	25
	XS25	2,495	83	1	0	1	30
	XS30	2,864	82	1	0	1	35
	S40	2,972	83	1	0	1	36
	S60	4,329	75	1	0	1	58
	M80	6,531	82	1	0	1	80
	M100	8,581	75	2	0	2	115
	L120	10,458	87	2	0	2	120
	L140	11,901	85	2	0	2	140

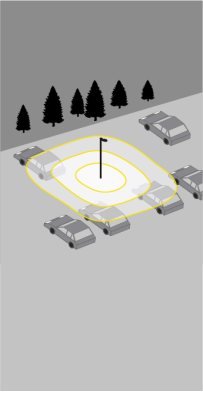
Type III, 4000K, CRI 70+, Clearsite Lens

	Nominal Output [lm]	Typical Delivered Output [lm]	Efficiency (lm/W)	BUG Rating			Typical Maximum Power 120/277V (W)
	N10	1,069	97	0	0	0	11
	N15	1,622	81	1	0	1	20
	XS20	2,507	100	1	0	1	25
	XS25	2,827	94	1	0	1	30
	XS30	3,245	93	1	0	1	35
	S40	3,368	94	1	0	1	36
	S60	4,904	85	1	0	1	58
	M80	7,399	92	2	0	2	80
	M100	9,422	82	2	0	2	115
	L120	11,848	99	2	0	2	120
	L140	13,483	96	2	0	2	140

Type IV, 4000K, CRI 70+, Clearsite Lens

	Nominal Output [lm]	Typical Delivered Output [lm]	Efficiency (lm/W)	BUG Rating			Typical Maximum Power 120/277V (W)
	N10	891	81	0	0	0	11
	N15	1,352	68	1	0	1	20
	XS20	2,089	84	1	0	1	25
	XS25	2,356	79	1	0	1	30
	XS30	2,704	77	1	0	1	35
	S40	2,806	78	1	0	1	36
	S60	4,086	70	1	0	1	58
	M80	6,165	77	2	0	2	80
	M100	8,101	70	2	0	2	115
	L120	9,873	82	2	0	2	120
	L140	11,235	80	2	0	2	140

Type V Square, 4000K, CRI 70+, Clearsite Lens

	Nominal Output [lm]	Typical Delivered Output [lm]	Efficiency (lm/W)	BUG Rating			Typical Maximum Power 120/277V (W)
	N10	1,098	100	1	0	0	11
	N15	1,666	83	1	0	0	20
	XS20	2,575	103	2	0	0	25
	XS25	2,903	97	2	0	1	30
	XS30	3,333	95	2	0	1	35
	S40	3,459	96	2	0	1	36
	S60	5,037	92	3	0	1	55
	M80	7,599	97	3	0	2	78
	M100	9,985	87	3	0	2	115
	L120	12,169	101	4	0	2	120
	L140	13,848	99	4	0	2	140

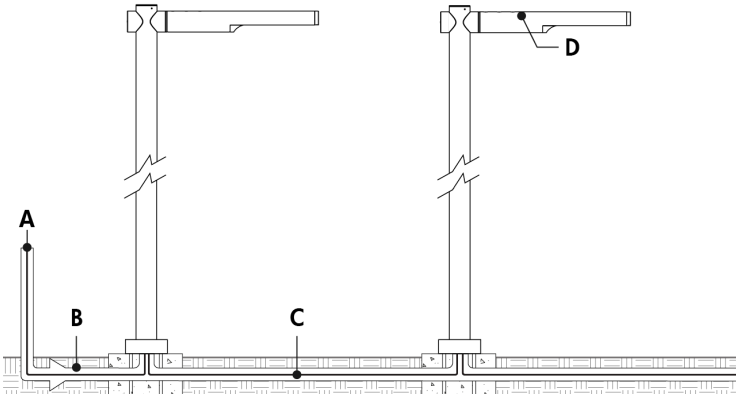
*Photometric performance is measured in compliance with IESNA LM-79-24. Due to rapid and continuous advance in LED technology, photometric information is subject to change without notice.

Typical Wiring Diagrams

Wiring Color Code

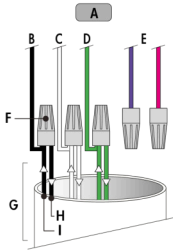
UL Color Code	Black	White	Green	Purple	Pink
Use	Line	Line/ Neutral	Ground	0-10V / Data +	0-10V / Data -

On/Off Control (NO)



- A - Power input (120-347V, wiring by others)
- B - Conduit (by others)
- C - Power wiring (by others)
- D - Lumenspoke

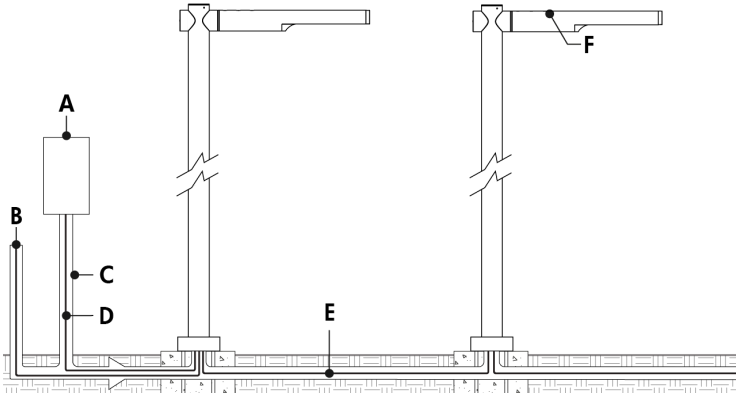
On/Off Control (NO) - Wiring Detail



- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - Not required
- F - Wire-nuts (by others)
- G - Conduit (by others)
- H - To next fixture
- I - Power input or from previous fixture

- Consult factory for specific applications and maximum fixture count/cable length recommendations.

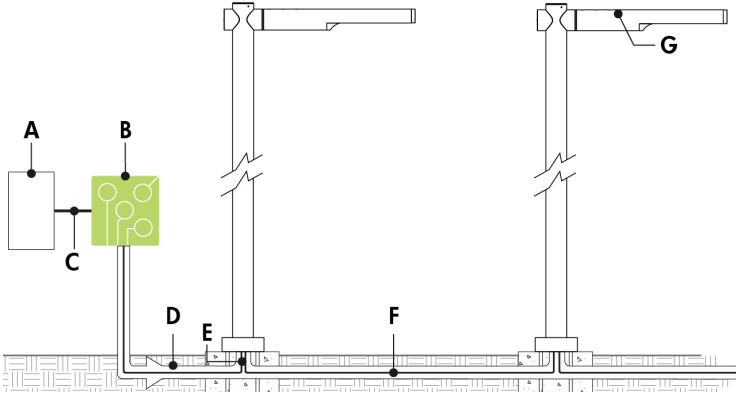
0-10V Dimming (DIM)



- A - Dimmer (by others)
- B - Power input (120-347V, wiring by others)
- C - Conduit (by others)
- D - Data wiring (by others)
- E - Power and data wiring (by others)
- F - Lumenspoke

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 0-10V mA ratings: passive dimmer (Current Sink): 3mA per fixture, active dimmer (Current Source): 0.5mA per fixture.
- 1% minimum dimming value.

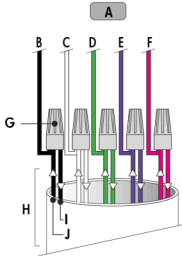
Lumentalk (LT)



- A - Third party dimmer/controller
- B - Lumentranslator (LTL-010)
- C - Data wiring (by others)
- D - Power line (120-277V, wiring by others)
- E - Conduit (by others)
- F - Power wiring (by others)
- G - Lumenspoke

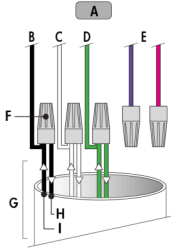
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk enabled fixtures must be commissioned using LumentalkID software and a LID-LT. Consult factory for details.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.

0-10V Dimming (DIM) - Wiring Detail



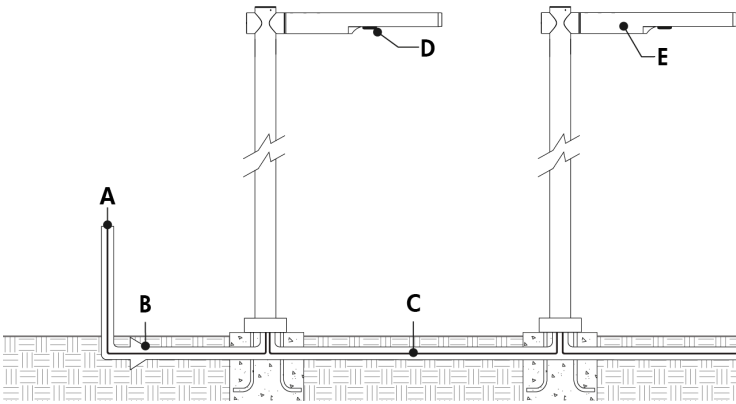
- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - 0-10V +
- F - 0-10V -
- G - Wire-nuts (by others)
- H - Conduit (by others)
- I - To next fixture
- J - Power input and from third party dimmer or from previous fixture

Lumentalk (LT) - Wiring Detail



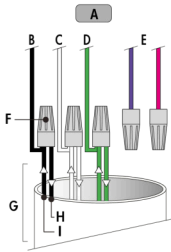
- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - Not required
- F - Wire-nuts (by others)
- G - Conduit (by others)
- H - To next fixture
- I - Power input or from previous fixture

Motion Detector Control (MDxx)



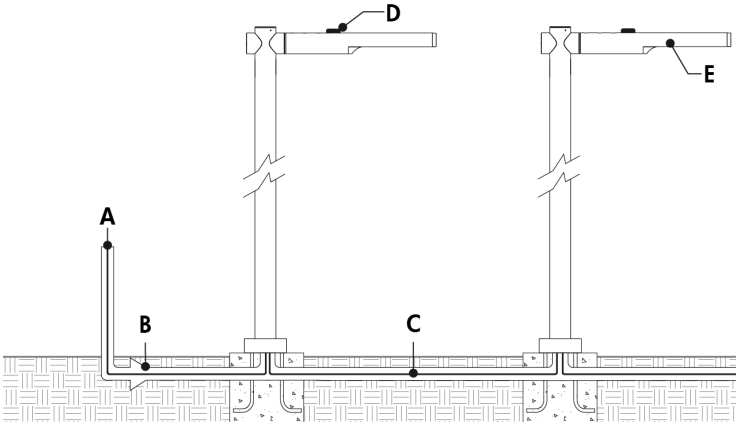
- A - Power input (120-347V, wiring by others)
- B - Conduit (by others)
- C - Power wiring (by others)
- D - Motion detector
- E - Lumenspoke

Motion Detector Control (MDxx) - Wiring Detail



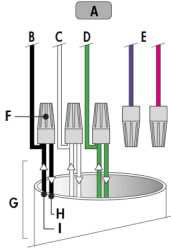
- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - Not required
- F - Wire-nuts (by others)
- G - Conduit (by others)
- H - To next fixture
- I - Power input or from previous fixture

3-Pin, 5-Pin and 7-Pin Receptacle Control (SPR3, SPR3 SC, SPR5, SPR5 SC, SPR7, SPR7 SC)



- A - Power input (120-347V, wiring by others)
- B - Conduit (by others)
- C - Power wiring (by others)
- D - Photoelectric control
- E - Lumenspoke

3 Pins, 5 Pins And 7Pins Receptacle Control (SPR3, SPR3 SC, SPR5, SPR5 SC, SPR7, SPR7 SC) - Terminal Connector Wiring Detail



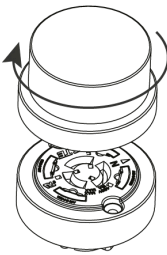
- A - To fixture
- B - Line
- C - Line/Neutral
- D - Ground
- E - SPR3: Not required. SPR5/SPR7: From photocell receptacle
- F - Wire-nuts (by others)
- G - Conduit (by others)
- H - To next fixture
- I - Power input or from previous fixture

Options

SPR3, SPR5 And SPR7 - 3-Pin, 5-Pin And 7-Pin Receptacles



SPR3 SC, SPR5 SC And SPR7 SC - 3-Pin, 5-Pin And 7-Pin Receptacles With Shorting Cap



- Dimming receptacle meets ANSI C136.41 Standard.

The Difference Between a 3-Pin, 5-Pin And 7-Pin Receptacle

SPR3 SPR3 SC		• ON/OFF control • Compatible with photocell
SPR5 SPR5 SC		• 0 -10V dimming • Compatible with photocell and intelligent centralized control
SPR7* SPR7 SC*		• 0-10V dimming • DALI dimming • Compatible with photoelectric sensors, intelligent controllers with different communication methods

*For SPR7 and SPR7 SC Option, consult factory for availability.

Motion Detector Options

Programming

	MD10N Narrow Lens, 10% Dimming Level	MD30N Narrow Lens, 30% Dimming Level	MD50N Narrow Lens, 50% Dimming Level	MD50BN Narrow Lens, 50% Bi-Level Dimming Level ¹⁰	MD70BN Narrow Lens, 70% Bi-Level Dimming Level ¹¹	MDPN Narrow Lens, Programmable					
	100% (10V)	10% (1V)	100% (10V)	30% (3V)	100% (10V)	50% (5V)	100% (10V)	50% (5V)	100% (10V)	70% (7V)	How to Provide Code:
High Mode ¹	10V		10V		10V		10V		10V		• 5V - 10V (Increment: 0.2V) 10V
Low Mode ²	1V		3V		5V		5V		7V		• OFF 2.6V
Time Delay ³	5 min		5 min		5 min		15 min		15 min		• 0V - 9.8V (Increment: 0.2V)
Cut Off ⁴	1 hr		1 hr		1 hr		DIS		DIS		• 1 min - 30min (Increment: 30 seconds) 10 min
Set Point ⁵	Dis		Dis		Dis		DIS		DIS		• Disable
											• 1 min - 59min (Increment: 30 seconds) 3 h
											• 1h - 5h (Increment: 1 hour)
											• Disable
											• Auto Auto
											• 1fc - 250fc (Increment: 1fc)
											• On-Fix
											• Off-Fix
Sensitivity ⁶	Max		Max		Max		Max		Max		• Low Med
											• Med
											• Max
											• Disable
Ramp up Time ⁷	3 sec		3 sec		3 sec		3 sec		3 sec		• 1sec - 60sec (Increment: 1 second) 10 sec
Fade Down Time ⁸	3 sec		3 sec		3 sec		3 sec		3 sec		• Disable
Photocell On/Off ⁹	Dis		Dis		Dis		30fc		30fc		• 1sec - 60sec (Increment: 1 second) 10 sec
											• Disable
											• 1fc - 250fc (Increment: 1fc) Dis

¹ When the sensor detects motion, the dimming control output ramps up to the selected HIGH light level.

² After the sensor stops detecting motion and the time delay expires, the dimming control output fades down to the selected LOW light level.

³ The selected time period that must elapse after the last time the sensor detects motion for the electric lights to fade to LOW mode.

⁴ The time period that must elapse after the lights fade to LOW mode, and the sensor detects no motion for the electric lights to turn OFF.

⁵ When enabled, the selectable ambient light level threshold that will hold the electric lights off or at LOW level when the sensor detects motion.

⁶ The response of the PIR detector to motion within the sensor's coverage area.

⁷ Time period for light level to increase from LOW to HIGH.

⁸ Time period for light level to decrease from HIGH to LOW.

⁹ When enabled, the sensor will force the load OFF after the light level has exceeded the selected photocell setpoint PRIOR SAVE SEND for at least a minute. It will also force the load ON when the light level goes below the setpoint, even if no motion is detected.

¹⁰ Meets CNEB 2015 requirements.

¹¹ Meets ASHRAE 2016 requirements.

The motion detector programming can be modified on site. A remote is required, order separately. See Remote section in the specification sheet for details.

Dimming: When motion is detected within the sensor's coverage area, the sensor sends a signal to ramp the load up to the selectable High Mode level unless the ambient light level is higher than the selected setpoint. When no motion is detected for the duration of the time delay setting, the lights will go to the selectable Low Mode level based on the signal from the sensor. If desired, a cut off time delay will trigger to eventually turn the lights OFF.

Non dimming: When motion is detected within the sensor's coverage area, the sensor sends a signal to turn the load ON unless the ambient light level is higher than the selected setpoint. When no motion is detected for the duration of the time delay setting, the lights will go OFF based on the signal from the sensor.

Dusk to dawn control: When photocell on/off is enabled, and the ambient light falls below the photocell setpoint, the sensor ramps the load up to the selectable High Mode level. If no motion is detected for the duration of the time delay setting, the lights will go to the selectable Low Mode level. If the cut off time delay is disabled, the load will remain on, at High or Low level, based on motion detection, until the ambient light increases above the photocell setpoint.

	MDMS Motion Detector (MSOD)	MDMSW Motion Detector (MSOD)
Motion Time Delay ¹	30 sec - 20 min (*5 min) Blink Light & LED* Blink LED only Auto-Setpoint Blink Set-Point ³ Test Mode ⁴	30 sec - 20 min (*5 min) Blink Light & LED* Blink LED only Auto-Setpoint Blink Set-Point ³ Test Mode ⁴
Test & Blink-Back Mode ²		
Ten's Digit of Set-Point ⁵	0 fc - 200 fc (*0fc)	0 fc - 200 fc (*0fc)
One's Digit of Set-Point ⁶	0 fc - 9 fc (*5 fc)	0 fc - 9 fc (*5 fc)
Sunlight Discount Factor ⁷	x/1 - x/10 (*x/1, x/4)	x/1 - x/10 (*x/1, x/4)
Incremental Set-Point Adjustment ⁸	Decrease 1 fc Increase 1 fc	Decrease 1 fc Increase 1 fc
Restore Factory Defaults ⁹	Keep Current* Restore Factory Defaults	Keep Current* Restore Factory Defaults
Photocell Operation ¹⁰	High/Off* High/Low Disabled	High/Off* High/Low Disabled
Ramp Up Rate ¹¹	Instant - 1 min (*3 sec)	Instant - 1 min (*3 sec)
Fade Down Rate ¹²	Instant - 1 hr (*5 min)	Instant - 1 hr (*5 min)
Dimming Range (High Trim) ¹³	Off/0 volt - 10 volts (*9.1 volts, 10 volts)	Off/0 volt - 10 volts (*9.1 volts, 10 volts)
Dimming Range (Low Trim) ¹⁴	Off/0 volt - 10 volts (*1 volt, 1.5 volts)	Off/0 volt - 10 volts (*1 volt, 1.5 volts)
Photocell Transition Off Time ¹⁵	45 sec - 25 min (*5 min)	45 sec - 25 min (*5 min)
Photocell Transition On Time ¹⁶	45 sec - 25 min (*45 sec)	45 sec - 25 min (*45 sec)

* Default setting.

¹ The length of time the motion sensor will keep the lights on and at maximum level after it last detects motion.

² **Auto set-point:** Photocell calibration procedure for detecting optimum lighting control level.

Blink-back mode: The type of visual feedback that is provided when programming via the push-button; i.e. entire fixture will blink or just sensor LED will blink.

Test mode: Disables minimum on time, sets motion time delay to 30 sec, and shortens all photocell transition and dimming rates. Mode will expire after 10 min or if function 4 is changed.

³ The LED will blink back the ten's digit, the pause, then blink back the one's digit. For a "0" the LED will blink very rapidly. The sequence is repeated 3 times.

⁴ Test Mode will set Motion Time Delay to 30 sec, and shorten all photocell transitions and dimming rates. Mode will expire after 10 min or if function 4 is set back to previous setting.

⁵ The ten's digit of the target light level that is to be maintained by the device (in foot-candles).

⁶ The one's digit of the target light level that is to be maintained by the device (in foot-candles).

⁷ Value used to improve the tracking accuracy of a photocell during periods of high daylight. Decreasing the value will lower the controlled level of the lights.

⁸ Alters the target light level that is to be maintained by the device (in foot-candles)

⁹ Returns the sensor to its default settings.

¹⁰ Indicates what mode of photocell operation, if any, is enabled.

¹¹ Time period from when motion is detected to when lights are at high trim level.

¹² Time period from when motion time delay expires to when lights are at low trim level.

¹³ The output level (0-10 VDC) of the sensor after motion is detected.

¹⁴ The output level (0-10 VDC) of the sensor after the fade down time has elapsed.

¹⁵ The time period after the photocell measures a light level above the set-point (plus the deadband) that it will turn lights off (or dim them to min level).

¹⁶ The time period after the photocell measures a light level below the set-point that it will turn lights on.

	MDNL Motion Detector, 30% Factory-Set Dimming Level (rMSOD Narrow Lens) with Dual Band External Antenna	MDNLW Motion Detector (rMSOD) with Dual Band External Antenna
Occupancy Control	Enabled	Enabled
Idle Time Until Dim	7.5 min	7.5 min
Occupied Dim Level	100%	100%
Unoccupied Dim Level	30%	30%
Dimming Fade Rate Time	5 min	5 min
Photocontrol	Enabled	Enabled
Photocontrol Set Point	5 fc	5 fc
Photocontrol Transition On Time	45 sec	45 sec
Photocontrol Transition Off Time	5 min	5 min
Default Max Trim Level (ZT Devices)	8 V	8 V

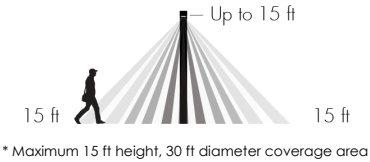
Default setting. On-site commissioning is required for other settings, consult factory.
MDNL and MDNLW are Acuity Brands motion detectors. Consult factory for programming information.



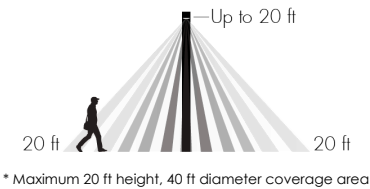
All nLight trademarks/logos are registered and/or unregistered trademarks of Acuity Brands Lighting, Inc. and are used under license.

Coverage Area

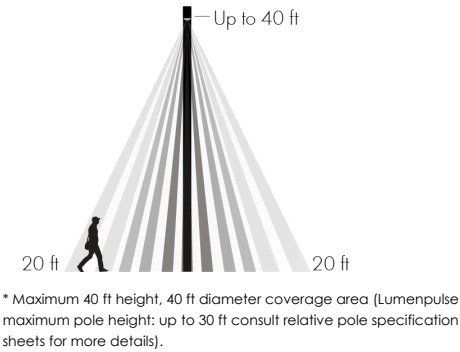
Motion Detector (MDNL And MDMS)



Narrow Lens (MD10N, MD30N, MD50N, MD50BN, MD70N and MDPN)*



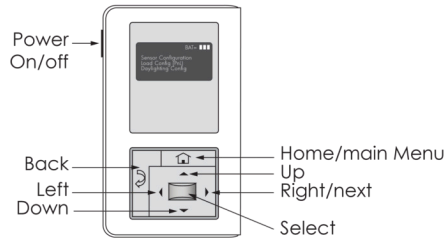
Wide Lens (MDNLW and MDMSW)*



High temperatures at the covered area (above 88 °F - 91 °F) reduce the detection zone of the sensor. Consider adding more sensors if the ambient temperatures are expected to be high. Additionally, high floor level temperature may require larger movement for detection. Coverages shown in the diagrams are maximum, measured in linear feet. They represent coverage for walking motion, with no obstacles.

Remote (Order Separately)

MDRC001 - Remote to Program Motion Detector on Site



- Compatible with all motion detector options.

How to Order

Housing	Mounting	Voltage	Lens ⁽⁵⁾	Output (Nominal Lumens)	Color and Color Temperature	Color Rendering	Distributions	Optical Options (Factory Installed) ⁽¹⁴⁾
SPKS Lumenspoke Small ⁽¹⁾	SD Side Mounting	120 120 Volts 208 208 Volts 240 240 Volts 277 277 Volts 347 347 Volts ^{(2) (3) (4)}	CSL Clearsite Lens	N02 200lm Amber (4 LEDs) ^{(2) (3) (4) (7) (8)} N10 1000lm (4 LEDs) ^{(2) (3) (7) (8)} N15 1500lm (4 LEDs) ^{(2) (3) (7) (8)} XS05 500lm Amber (8 LEDs) ⁽⁶⁾ XS20 2000lm (8 LEDs) XS25 2500lm (8 LEDs) XS30 3000lm (8 LEDs) S07 700lm Amber (1 LED Board) ⁽⁴⁾ S40 4000lm (1 LED Board) ⁽⁷⁾ S60 6000lm (1 LED Board) M15 1500lm Amber (2 LED Boards) ⁽⁶⁾ M80 8000lm (2 LED Boards) M100 10000lm (2 LED Boards) L20 2000lm Amber (3 LED Boards) ⁽⁴⁾ L120 12000lm (3 LED Boards) L140 14000lm (3 LED Boards)	AMB Amber (Consult Factory) ⁽⁹⁾ 22K 2200K ⁽¹⁰⁾ 27K 2700K ⁽¹¹⁾ 30K 3000K 35K 3500K 40K 4000K	CRI 70 CRI 70+ ⁽¹²⁾ CRI 80 CRI 80+ ⁽¹³⁾ CRI 90 CRI 90+ ⁽¹³⁾	2 Type II ⁽¹⁴⁾ 2BLS Type II Backlight Shield ^{(14) (15)} 3 Type III ⁽¹⁴⁾ 3BLS Type III Backlight Shield ^{(14) (15)} 4 Type IV ⁽¹⁴⁾ 4BLS Type IV Backlight Shield ^{(14) (15)} 5S Type V Square	LV Louver HL Honeycomb Louver ⁽¹⁷⁾

Notes:

1. Product code is for a single fixture only (S1E configuration). For double configuration (S2E), a second product code must be completed.

2. Not available with LT control option.

3. Not available with PB Button Type Photocell option.

4. Not available with MDNL, MDNLW, MDMS and MDMSW motion detector options.

5. Consult factory for SoftSite Lens option. Available for 3000lm (1 board), 5000lm (2 boards) and 7000lm (3 boards) outputs.

6. Available with AMB color temperature only. Consult factory for details. True Amber 585nm-595nm (Turtle friendly).

7. Available up to 277V.

8. Not available with SPR3, SPR3 SC, SPR5, SPR5 SC, SPR7 and SPR7 SC 3-Pin, 5-Pin, and 7-Pin receptacle options.

9. Consult factory. Available with N02, XS05, S07, M15, L20 outputs only.
10. Available for CRI 80 only.

11. Available for CRI 80 and CRI 90 only.

12. Binning within a 3-step McAdam ellipse

13. Binning within a 2-step McAdam ellipse, with the exception of 2200K.

14. Not available with HL option.

15. Not available with LV option.

16. Consult IES files for effect on performance. Only one louver option can specified per fixture. Factory installed, not field changeable.

17. Available for Type V Square distribution only.

How to Order

Finish	Control	Endcap Options	Option	Luminaire Mounting Options
BK Black Sandtex® BRZ Bronze Sandtex® SI Silver Sandtex® BKTX Textured Black BRZTX Textured Bronze Non-Metallic GRATX Textured Medium Gray GRNTX Textured Green WHTX Textured White CC Custom Color & Finish ⁽¹⁸⁾ _{(19) (20)}	DIM 0-10V Dimming ⁽²¹⁾ LT Lumentalk ^{(3) (4) (7) (8) (22)} _{(23) (24) (25)}	FLT Flat Endcap DM Domed Endcap CYL Cylindrical Endcap CRV Curved Endcap	CRC Corrosion-Resistant Coating ^{(26) (27)} SP Surge Protector ^{(2) (3) (8) (24) (28) (29)} PB Button Type Photocell ^{(2) (4) (8) (29)} MD10N Motion Detector 10% Factory-set Dimming Level (Narrow Lens) ^{(2) (3) (4) (30) (31) (32)} MD30N Motion Detector 30% Factory-set Dimming Level (Narrow Lens) ^{(2) (3) (4) (30) (31) (32)} MD50N Motion Detector 50% Factory-set Dimming Level (Narrow Lens) ^{(2) (3) (4) (30) (31) (32)} MD50BN Motion Detector 50% with Photocell Activated (Narrow Lens) ^{(2) (3) (4) (5) (30) (31) (33) (34)} MD70BN Motion Detector 70% with Photocell Activated (Narrow Lens) ^{(2) (3) (4) (5) (30) (31) (34) (35)} MDPN Motion Detector Programmable, Factory-set Dimming Level (Narrow Lens) ^{(2) (3) (4) (31) (32) (34) (36)} MDNL Motion Detector, 30% Factory-Set Dimming Level (rMSOD Narrow Lens) with Dual Band External Antenna ^{(2) (3) (22) (25) (30) (31) (34) (37) (38)} MDNLW Motion Detector (rMSOD) with Dual Band External Antenna ^{(2) (3) (22) (25) (30) (31) (34) (37) (38)} MDMS Motion Detector (MSOD Narrow Lens) ^{(2) (3) (22) (25) (30) (31) (34) (37) (38)} MDMSW Motion Detector (MSOD Wide Lens) ^{(2) (3) (22) (25) (30) (31) (34) (37) (38)} VRBO ANSI C136.31 - 2018 Vibration Rating for Bridge and Overpass Applications ^{(8) (29) (39)} ₍₄₀₎ SPR3 3-Pin Receptacle ^{(2) (3) (41)} SPR3 SC 3-Pin Receptacle with Shorting Cap ^{(2) (3) (41)} SPR5 5-Pin Receptacle ^{(2) (3) (41)} SPR5 SC 5-Pin Receptacle with Shorting Cap ^{(2) (3) (41)} SPR7 7-Pin Receptacle ^{(2) (3) (41) (42)} SPR7 SC 7-Pin Receptacle with Shorting Cap ^{(2) (3) (41) (42)}	SO2 Side Overlap (2 3/8 in Diameter Arm, 6 in length) ^{(24) (43)} SO2N Side Overlap (2 3/8 in Tenon) for Lumenspoke with N10 and N15 Output ^{(43) (44)}

Notes:

2. Not available with LT control option.

3. Not available with PB Button Type Photocell option.

4. Not available with MDNL, MDNLW, MDMS and MDMSW motion detector options.

5. Consult factory for Softsite Lens option. Available for 3000lm (1 board), 5000lm (2 boards) and 7000lm (3 boards) outputs.

7. Available up to 277V.

8. Not available with SPR3, SPR3 SC, SPR5, SPR5 SC, SPR7 and SPR7 SC 3-Pin, 5-Pin, and 7-Pin receptacle options.

18. Specify RAL number followed by "TX" for textured finish (ex: RAL9007TX) or STX for Sandtex finish (ex: RAL9007STX). Textured or Sandtex finishes are recommended for the durability of all products. If a finish is not specified with the RAL number (ex: RAL9007), a glossy finish will be provided. Please consult factory for other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.

19. Setup charges apply for RAL colors. Consult factory for details.

20. Longer lead times can be expected for custom RAL color finishes.

21. DIM control can be used as NO (On/Off control) if no data is required.

22. Not available with MD10N, MD30N, MD50N, MD50BN, MD70BN and MDPN motion detector options.

23. Not available with SP option.

24. Not available for N02, N10 and N15 Outputs.

25. Minimum working temperature with is -4 °F.

26. Use only when exposed to salt spray. This option is not required for normal outdoor exposure.

27. Setup charges apply. Consult factory for details.
28. Not available with 347V voltage option when combined with S40 Output.

29. Not available with MD10N, MD30N, MD50N, MD70BN, MD50BN, MDPN, MDNL, MDNLW, MDMS and MDMSW motion detector options.

30. The motion detector programming can be modified on site. A remote is required, order separately. See Remote section in the specification sheet for details.

31. Only one motion detector can be specified per fixture, cannot be combined with a receptacle.

32. MD10N, MD30N, MD50N, MD50BN, MD70BN and MDPN are Wattstopper motion detectors.

33. As per CNEB 2015.

34. Multi-Level dimming compatible (motion detector + daylight based control).

35. As per ASHRAE 2016.

36. The motion detector is programmed in the factory, as per the settings requested at the time of the order.

37. Coming soon, consult factory for details.

38. MD50BN, MDPN, MDNL, MDNLW, MDMS and MDMSW are Acuity Brands motion detectors.

39. Vibration tested in accordance with ANSI 136.31 2018 for bridge and overpass applications at 4.2G.

40. Not available with PB option.

41. Only one receptacle can be specified per fixture, cannot be combined with motion detector option.

42. Consult factory for details.

43. Consult Pole Mounting Adaptor section for standard available configurations.

44. Available with N02, N10 and N15 Outputs only.