



Gardco SlenderForm luminaires combine LED performance excellence and advanced LED thermal management technology with a distinct styling to provide outdoor area lighting that is both energy efficient and aesthetically pleasing. SlenderForm is defined by its high performance, sleek low profile design and rugged construction.

The advanced LED optical systems provide IES Types II, III, IV and V distributions. Surge protection included with all SlenderForm luminaires.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

example: SFRP-APD-T3-4-80LA-NW-120-NP-PCR5

Prefix	Controls	Mounting ⁴	Optical Sytem ⁶	Wattage	LED Temp	Voltage	Finish	Options
SFRP	—	—	—	—	—	—	—	—
SFRP- SlenderForm Round Post Top luminaire	— Standard luminaire DIM 0-10V Dimming APD ¹ Automatic Profile Dimming APD-MRI ^{2,3} Auto Profile Dimming with Motion Response Override Luminaire mounted sensor MRI ^{2,3} Motion Response at 50% low, fixture mounted sensor	T3 Mounts to 3" x 4" Tenon (standard) T2 Mounts to 2 3/8" x 4" Tenon mounting kit. Must be ordered separately (See accessories)	Standard Optic Position 2 Type 2 3 Type 3 4 Type 4 5W Type 5 Wide 5M Type 5 Medium BLC Backlight Control 2BL Type 2 with backlight (less shield) Optic Rotated Left (90°) LCL ⁵ LEED Corner Left Optic Rotated Right (270°) 2-270 Type 2 3-270 Type 3 4-270 Type 4 BLC-270 Backlight Ctrl 2BL-270 Type 2 with backlight (less shield) LCR ⁵ LEED Corner Right	150 mA 25LA-4815 350 mA 55LA-4835 ¹ 70LA-6435 90LA-8035 530 mA 80LA-4853 105LA-6453 130LA-8053 700mA 110LA-4870 140LA-6470	NW Neutral White 4,000K 70 CRI (nominal) WW ⁶ Warm White 3,000K 70 CRI (nominal)	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V 50hz/60hz HVU 347-480V 50hz/60hz	BRP Bronze Paint BLP Black Paint WP White Paint NP Natural Paint OC Optional Color Specify optional color or RAL (ex: RAL7024) SC Special color Specify, must supply color chip. Requires factory quote.	LF ⁷ Line Fusing LFC ⁷ Line Fusing for Canada PC ^{7,8} Photocell with Receptacle (Includes PCR5 receptacle) PCB ^{7,8} Photocell Button PCR5 ^{9,10} Photocell Receptacle only with 2 dimming connections PCR7 ^{10,11} Photocell Receptacle only with 2 dimming and 2 auxiliary connections DL ¹² Diffusing Lens CLR ¹² Clear Glass Lens

1. Available 120V–277V only.
2. Available 120V or 277V only.
3. MRI and APD-MRI luminaires include an integral motion sensor.
4. Mount to a round pole with 4" O.D. for a smooth transition.
5. Available with 90LA-6435 and 130LA-8053 only.
6. Consult factory for lead times.

7. Must specify input voltage with LF, LFC, PC, and PCB options.
8. Not available in 480V. Provide specific input voltage.
9. Works with 3-pin or 5-pin NEMA photocell/dimming device.
10. If ordered with DIM, APD, MRI, APD-MRI, dimming will not be connected to NEMA receptacle.

11. Works with 3-pin or 5-pin NEMA photocell/dimming device and auxiliary connections are not connected (for future use only).
12. Reduces performance.

SFRP SlenderForm LED luminaire

Round post top

SlenderForm Accessories (order separately)

FS1R-100

MR hand held programmer

For use with 'MRI' motion response when field programming is required.

For use with MRI and APD-MRI only. If desired, only one is needed per job.

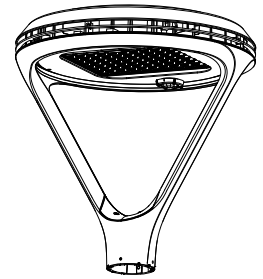
T2 Post Top 2-3/8 Tenon SFRP

For 2 3/8" x 4" Tenon

Description

Gardco SlenderForm luminaires combine LED performance excellence and advanced Gardco LED thermal management technology with a distinct styling to provide outdoor area lighting that is both energy efficient and aesthetically pleasing. SlenderForm is defined by its high performance, sleek low profile design and rugged construction. The die cast aluminum housing has a maximum profile of just 3.67". The advanced LED optical systems provide IES Types II, III, IV and V distributions. All LED wattages utilize high performance Class 1 LED systems. The luminaire features a state of the art integral thermal

control system to maximize LED performance and life, and to extend component life. The door frame is die cast aluminum. Luminaires are finished with a fade and abrasion resistant TGIC powdercoat. All SlenderForm luminaires provide full cutoff performance, with 0% lumens at or above 90° above nadir.



Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
40°C	up to 700mA	>200,000 hours	>60,000 hours	>94%

LED Wattage and Lumen Values Standard SFRP Luminaires

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5M		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
SFRP-x-25LA-4815-NW	48	150	4000	25	3,423	137	B1-U0-G1	3,328	133	B1-U0-G1	3,157	126	B0-U0-G1	3,684	147	B2-U0-G0
SFRP-x-55LA-4835-NW	48	350	4000	53	7,192	136	B1-U0-G1	6,992	132	B1-U0-G2	6,926	131	B1-U0-G2	7,740	146	B3-U0-G1
SFRP-x-70LA-6435-NW	64	350	4000	69	9,531	138	B2-U0-G2	9,266	134	B1-U0-G2	9,179	133	B1-U0-G2	10,258	149	B3-U0-G1
SFRP-x-90LA-8035-NW	80	350	4000	84	11,639	139	B2-U0-G2	11,315	135	B1-U0-G2	11,208	133	B1-U0-G2	12,525	149	B3-U0-G1
SFRP-x-80LA-4853-NW	48	530	4000	80	10,337	129	B2-U0-G2	10,049	126	B1-U0-G2	9,709	121	B1-U0-G2	11,124	139	B3-U0-G1
SFRP-x-105LA-6453-NW	64	530	4000	105	13,701	130	B2-U0-G2	13,319	127	B1-U0-G2	13,209	126	B1-U0-G2	14,743	140	B4-U0-G1
SFRP-x-130LA-8053-NW	80	530	4000	128	16,728	131	B3-U0-G2	16,262	127	B2-U0-G3	15,929	124	B2-U0-G2	18,001	141	B4-U0-G1
SFRP-x-110LA-4870-NW	48	700	4000	107	12,915	121	B2-U0-G2	12,555	117	B1-U0-G2	12,403	116	B1-U0-G2	13,898	130	B3-U0-G1
SFRP-x-140LA-6470-NW	64	700	4000	140	17,117	122	B3-U0-G2	16,641	119	B2-U0-G3	16,437	117	B2-U0-G3	18,420	132	B4-U0-G1

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 5W			Type BLC			Type 2BL		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
SFRP-x-25LA-4815-NW	48	150	4000	25	3,625	145	B2-U0-G1	2,136	85	B0-U0-G0	3,664	147	B2-U0-G2
SFRP-x-55LA-4835-NW	48	350	4000	53	7,589	143	B3-U0-G1	4,490	85	B0-U0-G1	7,697	145	B3-U0-G3
SFRP-x-70LA-6435-NW	64	350	4000	69	10,057	146	B3-U0-G2	5,950	86	B1-U0-G2	10,202	148	B3-U0-G3
SFRP-x-90LA-8035-NW	80	350	4000	84	12,280	146	B4-U0-G2	7,264	86	B1-U0-G2	12,456	148	B3-U0-G3
SFRP-x-80LA-4853-NW	48	530	4000	80	11,175	140	B3-U0-G2	6,453	81	B1-U0-G2	11,064	138	B3-U0-G3
SFRP-x-105LA-6453-NW	64	530	4000	105	14,438	138	B4-U0-G2	8,552	81	B1-U0-G2	14,663	140	B3-U0-G3
SFRP-x-130LA-8053-NW	80	530	4000	128	17,846	139	B4-U0-G2	10,441	82	B1-U0-G2	17,903	140	B4-U0-G4
SFRP-x-110LA-4870-NW	48	700	4000	107	13,665	128	B4-U0-G2	8,061	75	B1-U0-G2	13,821	129	B3-U0-G3
SFRP-x-140LA-6470-NW	64	700	4000	140	18,110	129	B4-U0-G2	10,684	76	B1-U0-G2	18,319	131	B4-U0-G4

Wattage and lumen output may vary due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Measured wattage may vary due to variation in input voltage. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

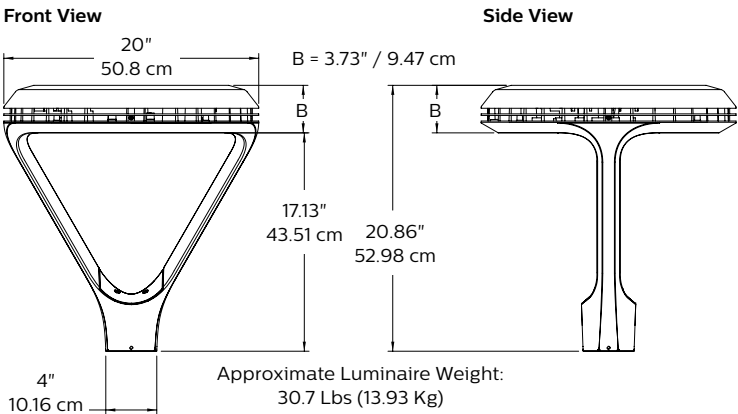
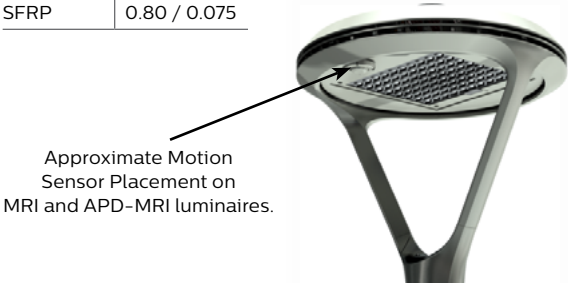
SFRP SlenderForm LED luminaire

Round post top

Dimensions – Post Top Luminaire (SFRP)

Effective Projected Area ft² / m²

Type	Single
SFRP	0.80 / 0.075



Luminaire Configuration Information

SFRP

Philips Gardco SlenderForm LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

SFRP-DIM

Philips Gardco SlenderForm LED luminaire provided with 0 -10V dimming for connection to a control system provided by others.

SFRP-APD

Philips Gardco SlenderForm LED luminaire with Automatic Profile Dimming. Luminaire is provided with a programmable LED Driver, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the programmable LED Driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

APD is available in 120V – 277V input only.

SFRP- APD Dimming Profile:

100%	2 hours	6 hours	100%
	50%	50%	
Power On	Mid Point	Power Off	

The SFRP-APD offers many of the advantages of a sophisticated control system, including an average energy savings of at least 33% versus constant wattage, constant light output systems, without the need for a control system.

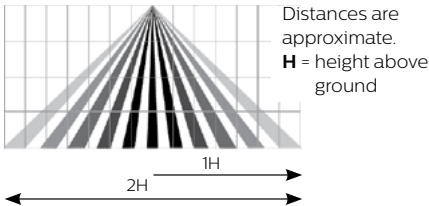
SFRP-MRI

Luminaires with Integral Motion Sensor: Luminaires with Motion Response and an integral motion sensor include a programmable LED driver and an integral motion sensor. The LED driver is set to a constant 50%. When motion is detected, the luminaire goes to 100%. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes. Available with 120V or 277V input only.

SFRP-MRI luminaires are provided with the WattStopper FSP-211 motion sensor, equipped with an L3-W lens, with a maximum recommended 20 ft. mounting height. The area coverage and range of the integral sensors make them most suitable for applications not requiring long range detection. For longer range detection applications, configurations with pole mounted motion sensors are recommended.

FSP-211-L3W - Supplied with SlenderForm Round MRI Luminaires.

Side Coverage Pattern



Top Coverage Pattern



SFRP SlenderForm LED luminaire

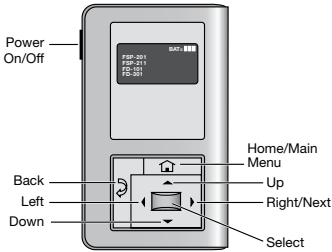
Round post top

Luminaire Configuration Information continued

FS1R-100

Wireless Remote Programming Tool: The FS1R-100 Remote Programming Tool accessory permits adjustment of sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire. The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes. The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons. The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.



The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.

You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

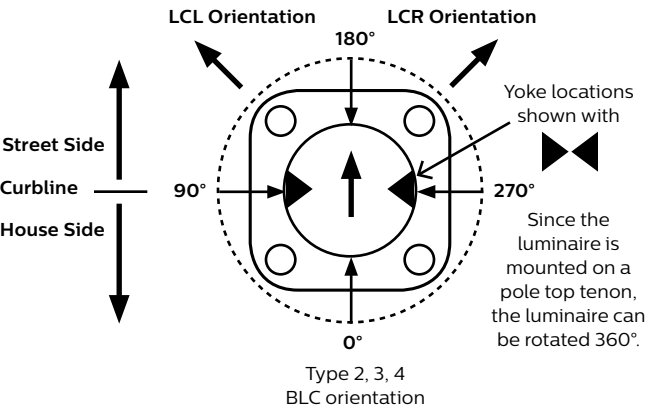
Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in “less-than/greater-than” symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost.

Asymmetric Optical Orientation Information

Standard Optic Position

Aimed Between The Yoke Supports

Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:

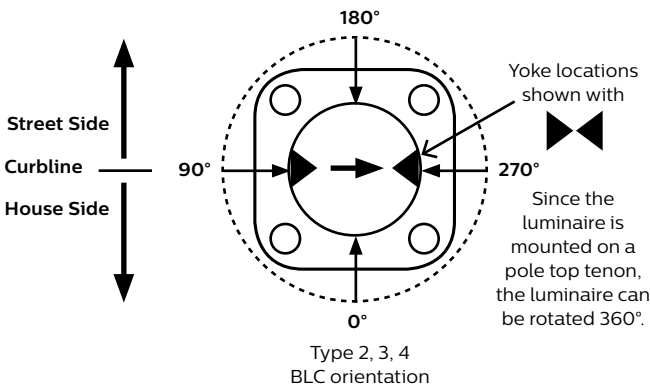


Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

Aimed Toward One Yoke Support

Luminaires ordered with asymmetric optical systems in the Optic Rotated RIGHT (270°) optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

SFRP SlenderForm LED luminaire

Round post top

Specifications

Housing

The SlenderForm features a die cast aluminum housing, and mounts directly to a pole.

IP Rating

SlenderForm luminaires have a rating of IP66.

Vibration Resistance

SlenderForm Round Post Top carries a 1.5G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Luminaires are equipped with an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F / 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaire consumes 0.0 watts in the off state. All motion sensors utilized consume 0.0 watts in the off state. Surge protector standard. 10kA per ANSI/IEEE C62.41.2002.

LED Thermal Management

The Gardco SlenderForm LED provides die cast aluminum integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

Optical Systems

The advanced LED optical systems provide IES Types II, III, IV and V distributions, All optical systems feature unitized lens optic construction.

SlenderForm Round luminaires are provided standard without a lens, for maximized performance. A clear glass lens is available as an option. A diffuse lens is also available as an option, resulting in reduced performance.

Listings

All luminaires bear UL or CUL (where applicable) Wet Location labels. Most SlenderForm configurations are DesignLights Consortium® qualified. Consult DLC Qualified Products list for more details.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

Warranty

Gardco luminaires feature a 5 year limited warranty. Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See signify.com/warranties for complete details and exclusions.

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