



Gardco OptiForm site and area luminaires are available in three sizes: small, medium and large. Featuring the latest in LED technology, OptiForm achieves up to 192 lumens per watt. Eleven optical distributions are available, suitable for a range of outdoor lighting applications. OptForm features a unique mounting system with a two-piece housing for hassle-free installation. Mounting options include a standard arm, mast arm, and wall mount bracket. Service Tag is a standard feature with every OptiForm luminaire, providing maintenance or upgrade assistance throughout the life of the product.

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

Ordering guide

example: OPF-M-A08-840-T4M-AR1-240-BL50-L3-BZ

Luminaire		Configuration (nom. lumens)	Color Temperature	Distribution				Mounting		Voltage			
OPF-M													
OPF-M	OptiForm Medium Area Light	A08	13,500 lumens	827 ¹	80CRI 2700K	AFR	Autofront row	LCL	LEED corner optic left	AR1 ^{2,13} MAR ³ WAL MOS ⁴	Arm mount (standard)	120	120V
		A09	17,000 lumens	830	80CRI 3000K	T2M	Type 2 medium	LCL	LEED corner optic right		208	208V	
		A10	20,000 lumens	840	80CRI 4000K	T3M	Type 3 medium	BLC	Back light control		240	240V	
		A11	23,000 lumens	727 ¹	70CRI 2700K	T4M	Type 4 medium	2RL	Type 2 rotated left 90°		277	277V	
		A12	26,000 lumens	730	70CRI 3000K	T4W	Type 4 wide	2RR	Type 2 rotated right 270°		347	347V	
		A13	30,000 lumens	740	70CRI 4000K	T5M	Type 5 medium	3RL	Type 3 rotated left 90°		480	480V	
		A14	32,000 lumens	750	70CRI 5000K	T5N	Type 5 narrow	3RR	Type 3 rotated right 270°		UNV	120-277V	
		A15	34,000 lumens			T5W	Type 5 wide	4RL ¹	Type 4 rotated left 90°		HVU	347-480V	
				4RR ¹ Type 4 rotated right 270°									
Dimming Controls				Sensing		Options (electrical, mechanical, etc)				Finish			
The following options include 0-10V Driver				L3 PIR sensor, #3 lens (Required if BL50 is selected)		None Surge protector 10kV/10kA standard				Standard textured finish			
none	0-10V dimming driver		SP2 Surge protector 20kV/10kA (option)				BK	Black					
DLEA ⁵	Dimming leads externally accessible (controls by others)		FS1 ¹¹ Single fuse (120, 277, or 347VAC)				WH	White					
FAWS ^{5,6}	Field adjustable wattage selector		FS2 ¹¹ Double fuse (208, 240, or 480V)				BZ	Bronze					
BL50 ^{5,7,12}	Bi-level with motion sensor		PCB ^{10,11} Photocontrol button connected to 0-10V driver				DG	Dark Gray					
						TR5 5-pin twist lock receptacle connected to 0-10V driver				MG	Medium Gray		
The following options include SR/DALI Driver						TR7 7-pin twist lock receptacle connected to D4i compliant driver				Customer specified			
SRDR ^{5,8}	SR driver connected to Zhaga socket (D4i)		TLP ¹¹ 7-pin twist lock receptacle connected to D4i compliant driver w/ 3-pin Photocell				OC	Special optional color or RAL, consult factory					
OMSR ^{5,8}	Outdoor multi-sensor						SC	Special color (must supply color chip, requires factory quote)					
DynaDimmer: Automatic Profile Dimming													
CS50 ⁵	Security 50% dimming, 7 hours												
CM50 ⁵	Median 50% dimming, 8 hours												
CS30 ⁵	Security 30% dimming, 7 hours												
CM30 ⁵	Median 30% dimming, 8 hours												

- Extended lead time applies. Consult factory for details.
- Mounts to a square pole with knockout for 4-5" OD round pole.
- Mounts to a 2-3/8" x 5" tenon.
- Must be ordered with mounting accessory. Photocell option (TR7) must be selected with mounting accessory.
- Not available with other dimming control options (mutually exclusive).
- Not available with motion sensor (physical restriction).

- Must be specified with a motion sensor lens (L2 or L3).
- Not available with PCB, TR5.
- Must be specified with a motion sensor LW, LB, HW, HB.
- Not available in 347, 480, or HVU.
- Must specify input voltage.
- Not available with TR7, TLP.
- OPF-RMB accessory recommended for retrofit applications

OPF-M OptiForm medium

Site & area luminaire

Shielding Accessories (order separately)

- OPF-M-HIS-2** Internal house side shield, Type 2 & 3, qty 2
OPF-M-HIS-T4-2 Internal house side shield, Type 4 only, qty 2

Luminaire Accessories (order separately)

Pole Mount Fusing

- FP1¹¹** Pole mount single fuse (120V, 277V, or 347V)
FP2¹¹ Pole mount double fuse (208V, 240V, or 480V)
FP3¹¹ Pole mount double fuse canadian double pull (208V, 240V, or 480V)

Photocell Accessories

- P400S** Shorting cap

Mountings (boxed and shipped separately)

Must choose MOS mounting ordered separately for mounting option on luminaire.
(F) Must specify finish

Standard Arm

- OPF-AR1-(F)^{2,13}** Standard arm mount
OPF-AR1-TR7-(F)^{2,13} Standard arm mount with 7-pin (TR7) receptacle

Wall Mount

- OPF-WAL-(F)** Wall mount bracket
OPF-WAL-TR7-(F) Wall mount with 7-pin (TR7) receptacle

Mast Arm

- OPF-MAR-(F)³** Mast arm mount
OPF-MAR-TR7-(F)³ Mast arm mount with 7-pin (TR7) receptacle

Retrofit Mounting

- OPF-RMB** Retrofit Mounting Bolster Plate for attaching OptiForm to existing poles.
Recommended for retrofit applications.

Pole Top Fitters

(F) Must specify finish

PTF2 - Pole top fitter fits 2 3/8 - 2 1/2" OD x 4" depth tenon

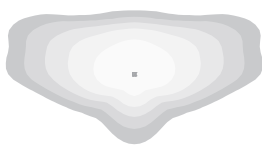
- PTF2-1-90-(F)** 1 luminaire at 90°
PTF2-2-90-(F) 2 luminaires at 90°
PTF2-3-90-(F) 3 luminaires at 90°
PTF2-4-90-(F) 4 luminaires at 90°
PTF2-2-180-(F) 2 luminaires at 180°
PTF2-3-120-(F) 3 luminaires at 120°

PTF3 - Pole top fitter fits 3-3 1/2" OD x 6" depth tenon

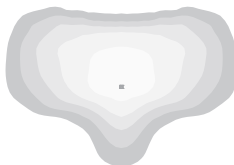
- PTF3-1-90-(F)** 1 luminaire at 90°
PTF3-2-90-(F) 2 luminaires at 90°
PTF3-3-90-(F) 3 luminaires at 90°
PTF3-4-90-(F) 4 luminaires at 90°
PTF3-2-180-(F) 2 luminaires at 180°
PTF3-3-120-(F) 3 luminaires at 120°

Optical Distributions

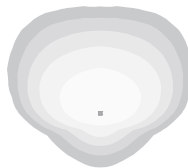
Type 2 Medium



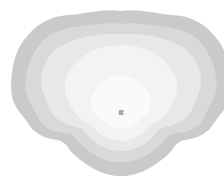
Type 3 Medium



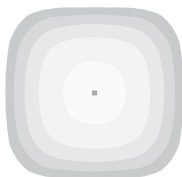
Type 4 Medium



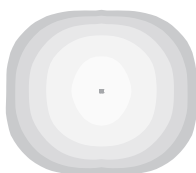
Type 4 Wide



Type 5 Medium



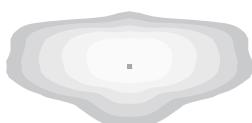
Type 5 Narrow



Type 5 Wide



Autofront Row



Back Light Control



LCL



LCR



OPF-M OptiForm medium

Site & area luminaire

OPF-M Lumen values

3000K, 70CRI

Ordering Code	Color Temp	Average System Wattage (W)	Type 2M			Type 3M			Type 4M			Type 5M		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
OPF-M-A08-730-x	3000	74	12994	B3-U0-G3	175	12890	B3-U0-G3	173	13064	B2-U0-G2	176	13465	B4-U0-G2	181
OPF-M-A09-730-x	3000	93	16158	B3-U0-G3	174	16029	B3-U0-G3	173	16245	B2-U0-G3	175	16744	B4-U0-G2	180
OPF-M-A10-730-x	3000	112	19256	B3-U0-G3	173	19102	B3-U0-G3	171	19359	B2-U0-G3	174	19954	B4-U0-G2	179
OPF-M-A11-730-x	3000	131	22348	B3-U0-G3	171	22169	B3-U0-G3	169	22468	B3-U0-G3	172	23158	B4-U0-G2	177
OPF-M-A12-730-x	3000	150	25049	B3-U0-G3	167	24849	B3-U0-G3	165	25183	B3-U0-G4	168	25957	B5-U0-G3	173
OPF-M-A13-730-x	3000	176	28766	B3-U0-G3	163	28536	B3-U0-G4	162	28920	B3-U0-G4	164	29809	B5-U0-G3	169
OPF-M-A14-730-x	3000	190	30449	B4-U0-G4	161	30206	B3-U0-G4	159	30612	B3-U0-G4	161	31553	B5-U0-G3	166
OPF-M-A15-730-x	3000	202	31896	B4-U0-G4	158	31641	B3-U0-G4	157	32067	B3-U0-G4	159	33052	B5-U0-G3	164

3000K, 70CRI (cont'd)

Ordering Code	Color Temp	Average System Wattage (W)	AFR			Type 4W			Type 5N			Type 5W		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
OPF-M-A08-730-x	3000	74	13458	B3-U0-G3	181	12438	B2-U0-G3	167	13370	B4-U0-G2	180	12873	B4-U0-G2	173
OPF-M-A09-730-x	3000	93	16736	B3-U0-G3	180	15467	B2-U0-G3	167	16626	B4-U0-G2	179	16008	B4-U0-G3	172
OPF-M-A10-730-x	3000	112	19944	B3-U0-G3	179	18432	B3-U0-G3	165	19813	B4-U0-G2	178	19077	B4-U0-G3	171
OPF-M-A11-730-x	3000	131	23146	B3-U0-G3	177	21392	B3-U0-G4	163	22995	B4-U0-G2	176	22140	B5-U0-G3	169
OPF-M-A12-730-x	3000	150	25944	B3-U0-G3	173	23978	B3-U0-G4	160	25775	B4-U0-G2	172	24816	B5-U0-G3	165
OPF-M-A13-730-x	3000	176	29794	B4-U0-G4	169	27536	B3-U0-G4	156	29599	B5-U0-G3	168	28499	B5-U0-G3	162
OPF-M-A14-730-x	3000	190	31537	B4-U0-G4	166	29147	B3-U0-G4	154	31331	B5-U0-G3	165	30166	B5-U0-G4	159
OPF-M-A15-730-x	3000	202	33035	B4-U0-G4	164	30532	B3-U0-G4	151	32820	B5-U0-G3	163	31600	B5-U0-G4	157

4000K, 70CRI

Ordering Code	Color Temp	Average System Wattage (W)	Type 2M			Type 3M			Type 4M			Type 5M		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
OPF-M-A08-740-x	4000	74	13738	B3-U0-G3	185	13628	B3-U0-G3	183	13811	B2-U0-G2	186	14236	B4-U0-G2	191
OPF-M-A09-740-x	4000	93	17083	B3-U0-G3	184	16947	B3-U0-G3	183	17175	B2-U0-G3	185	17703	B4-U0-G2	191
OPF-M-A10-740-x	4000	112	20357	B3-U0-G3	183	20195	B3-U0-G3	181	20467	B3-U0-G3	184	21096	B4-U0-G2	189
OPF-M-A11-740-x	4000	131	23626	B3-U0-G3	180	23438	B3-U0-G3	179	23753	B3-U0-G3	181	24483	B4-U0-G2	187
OPF-M-A12-740-x	4000	150	26482	B3-U0-G3	176	26271	B3-U0-G3	175	26625	B3-U0-G4	177	27443	B5-U0-G3	183
OPF-M-A13-740-x	4000	176	30412	B3-U0-G3	173	30169	B3-U0-G4	171	30575	B3-U0-G4	173	31515	B5-U0-G3	179
OPF-M-A14-740-x	4000	190	32191	B4-U0-G4	170	31934	B3-U0-G4	168	32364	B3-U0-G4	171	33359	B5-U0-G3	176
OPF-M-A15-740-x	4000	202	33721	B4-U0-G4	167	33452	B4-U0-G4	166	33902	B3-U0-G4	168	34944	B5-U0-G3	173

4000K, 70CRI (cont'd)

Ordering Code	Color Temp	Average System Wattage (W)	AFR			Type 4W			Type 5N			Type 5W		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
OPF-M-A08-740-x	4000	74	14228	B3-U0-G3	191	13150	B2-U0-G3	177	14136	B4-U0-G2	190	13610	B4-U0-G2	183
OPF-M-A09-740-x	4000	93	17693	B3-U0-G3	191	16352	B2-U0-G3	176	17578	B4-U0-G2	189	16924	B4-U0-G3	182
OPF-M-A10-740-x	4000	112	21085	B3-U0-G3	189	19487	B3-U0-G3	175	20947	B4-U0-G2	188	20169	B5-U0-G3	181
OPF-M-A11-740-x	4000	131	24471	B3-U0-G3	187	22616	B3-U0-G4	173	24311	B4-U0-G2	186	23407	B5-U0-G3	179
OPF-M-A12-740-x	4000	150	27429	B3-U0-G3	183	25350	B3-U0-G4	169	27250	B4-U0-G2	181	26237	B5-U0-G3	175
OPF-M-A13-740-x	4000	176	31499	B4-U0-G4	179	29111	B3-U0-G4	165	31293	B5-U0-G3	177	30130	B5-U0-G3	171
OPF-M-A14-740-x	4000	190	33342	B4-U0-G4	176	30815	B3-U0-G4	163	33124	B5-U0-G3	175	31892	B5-U0-G4	168
OPF-M-A15-740-x	4000	202	34926	B4-U0-G4	173	32279	B3-U0-G5	160	34698	B5-U0-G3	172	33408	B5-U0-G4	166

OPF-M OptiForm medium

Site & area luminaire

OPF-M Lumen values (cont'd)

5000K, 70CRI

Ordering Code	Color Temp	Average System Wattage (W)	Type 2M			Type 3M			Type 4M			Type 5M		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
OPF-M-A08-750-x	5000	74	13738	B3-U0-G3	185	13628	B3-U0-G3	183	13811	B2-U0-G2	186	14236	B4-U0-G2	191
OPF-M-A09-750-x	5000	93	17083	B3-U0-G3	184	16947	B3-U0-G3	183	17175	B2-U0-G3	185	17703	B4-U0-G2	191
OPF-M-A10-750-x	5000	112	20357	B3-U0-G3	183	20195	B3-U0-G3	181	20467	B3-U0-G3	184	21096	B4-U0-G2	189
OPF-M-A11-750-x	5000	131	23626	B3-U0-G3	180	23438	B3-U0-G3	179	23753	B3-U0-G3	181	24483	B4-U0-G2	187
OPF-M-A12-750-x	5000	150	26482	B3-U0-G3	176	26271	B3-U0-G3	175	26625	B3-U0-G4	177	27443	B5-U0-G3	183
OPF-M-A13-750-x	5000	176	30412	B3-U0-G3	173	30169	B3-U0-G4	171	30575	B3-U0-G4	173	31515	B5-U0-G3	179
OPF-M-A14-750-x	5000	190	32191	B4-U0-G4	170	31934	B3-U0-G4	168	32364	B3-U0-G4	171	33359	B5-U0-G3	176
OPF-M-A15-750-x	5000	202	33721	B4-U0-G4	167	33452	B4-U0-G4	166	33902	B3-U0-G4	168	34944	B5-U0-G3	173

5000K, 70CRI (cont'd)

Ordering Code	Color Temp	Average System Wattage (W)	AFR			Type 4W			Type 5N			Type 5W		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
OPF-M-A08-750-x	5000	74	14228	B3-U0-G3	191	13150	B2-U0-G3	177	14136	B4-U0-G2	190	13610	B4-U0-G2	183
OPF-M-A09-750-x	5000	93	17693	B3-U0-G3	191	16352	B2-U0-G3	176	17578	B4-U0-G2	189	16924	B4-U0-G3	182
OPF-M-A10-750-x	5000	112	21085	B3-U0-G3	189	19487	B3-U0-G3	175	20947	B4-U0-G2	188	20169	B5-U0-G3	181
OPF-M-A11-750-x	5000	131	24471	B3-U0-G3	187	22616	B3-U0-G4	173	24311	B4-U0-G2	186	23407	B5-U0-G3	179
OPF-M-A12-750-x	5000	150	27429	B3-U0-G3	183	25350	B3-U0-G4	169	27250	B4-U0-G2	181	26237	B5-U0-G3	175
OPF-M-A13-750-x	5000	176	31499	B4-U0-G4	179	29111	B3-U0-G4	165	31293	B5-U0-G3	177	30130	B5-U0-G3	171
OPF-M-A14-750-x	5000	190	33342	B4-U0-G4	176	30815	B3-U0-G4	163	33124	B5-U0-G3	175	31892	B5-U0-G4	168
OPF-M-A15-750-x	5000	202	34926	B4-U0-G4	173	32279	B3-U0-G5	160	34698	B5-U0-G3	172	33408	B5-U0-G4	166

Predicted Lumen Depreciation Data

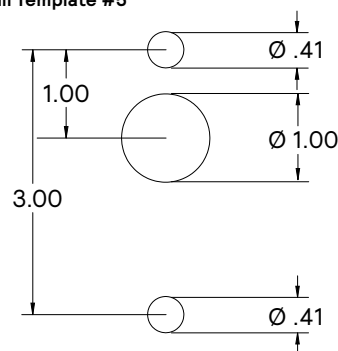
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA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

Ambient Temp °C	Calculated L70 Hours	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	>100,000 hours	>102,000 hours	96%

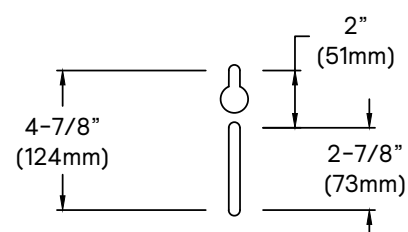
Dimensions

Standard Drill Pattern

Drill Template #5



Standard Arm Mounting Hole Pattern



OPF-M OptiForm medium

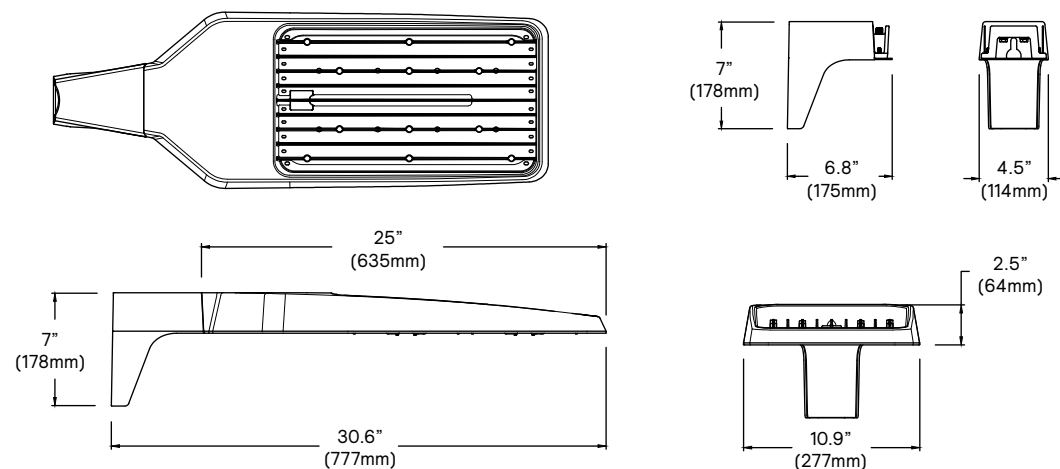
Site & area luminaire

Dimensions

OptiForm Standard Arm

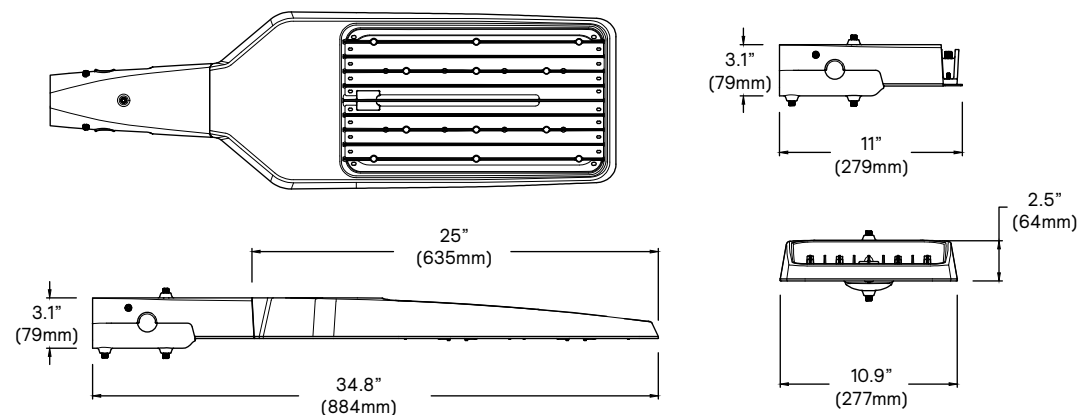
Weight: 13 lb (5.9 kg)

EPA: 0.15 ft² (0.014 m²)



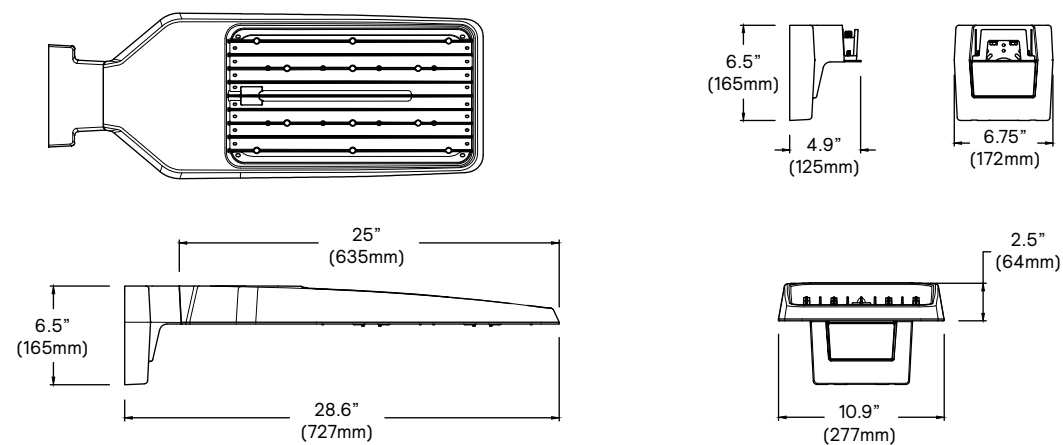
OptiForm Mast Arm

Weight: 14.6 lb (6.6 kg)



OptiForm Wall Mount

Weight: 13.5lb (6.1 kg)



OPF-M OptiForm medium

Site & area luminaire

Specifications

Housing

Housing and door constructed of low copper die cast Aluminum alloy (A360) with detachable arms for quick mounting. Heatsink is integral to the housing providing passive cooling of LEDs to maintain long LED life. Luminaire housing rated to IP65, LED Modules rated IP66, tested in accordance to Section 9 of IEC 60598-1

Vibration resistance

OptiForm is tested and rated to standards set forth in ANSI C136.31-2018 Level 2 for Bridge and Overpass applications.

Light engine

Light engine comprises of a module of 40-LED aluminum metal clad board fully sealed with optics: Medium = 2 Modules with 80 LEDs, Large = 4 modules with 160 LEDs. Module is RoHS compliant. Color temperature as per ANSI/NEMA bin 2700 Kelvin nominal (2725 \pm 145K), 3000 Kelvin nominal (3045K \pm 175K) or 4000 Kelvin nominal (3985K \pm 275K), CRI 70 Min. 75 Typical. Other CCT/CRI also available, consult factory. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 191 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2M, 3M, 4M, 4W, 5, 5M, 5W, AFR, LCL, LCR, and BLC distributions available. Internal shield option mounts to LED optics and is available with Type 2M, 3M, and 4M distributions, including a dedicated BLC and L/R Corner optics to provide the best backlight control possible for stringent requirements around property lines. Types 2M, 3M and 4M when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (UO per IESNA TM-15).

Mounting

Standard luminaire arm mounts to square poles with knock-out on the arm to allow for mounting to 4" O.D. round poles. Standard arm casting can accommodate existing bolt spacing from 2" to 4-7/8". It is recommended to use the bolster plate kit OPF RMB when it's not a new installation or if the mounting holes are larger than 0.41" (10mm).

OptiForm features a Mast Arm for Mounting to 2-3/8x4" tenon as well as wall mount casting for exterior building mount applications.

Control options

Dimming Leads Externally Accessible (DLEA): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be specified with other control options.

Sensor Ready Zhaga Socket Connector (SRDR): Product is D4i Certified and equipped with Sensor Ready drivers connected to 4-pin Zhaga Book 18 compliant receptacle designed for sensor and other control system applications. Receptacle is rated IP66 assembly in a compact design that provides a sealed electrical interface and rated UV resistance, mounted on underside of the luminaire, protective dust cap included. When a controller not provided by Signify is used with Sensor Ready Zhaga socket connector, the controller must be certified to work with the Xitanium SR LED drivers as part of the SR certified program. SRDR can be used with NEMA 7-pin twist lock receptacle, which is mounted on top of the luminaire.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM - 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM - 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output	FAWS Position	Percent of Typical Lumen Output
1	25%	6	80%
2	50%	7	85%
3	55%	8	90%
4	65%	9	95%
5	75%	10	100%

Note: Typical value accuracy \pm 5%

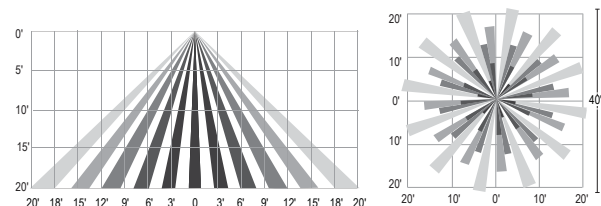
Motion response options

Bi-Level Infrared Motion Response (BL50): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL50 is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required (contact Technical Support for details).

Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

Infrared Motion Response Lenses (MR3): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #2 is designed for mounting heights 8' to 15'. Lens #3 is designed for higher mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

MR3 Luminaire or remote mount controller with #3 lens



Electrical

Twist-Lock Receptacle (TR7/TLP): Twist-Lock Receptacle with 7 pins enabling dimming with additional functionality (by others) can be used with a twist-lock photoelectric cell or a shorting cap. Dimming Receptacle Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire arm. When specifying receptacle with twist-lock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TR7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When

OPF-M OptiForm medium

Site & area luminaire

Specifications (cont'd)

ordering a twist-lock receptacle with a photocell (TLP), the receptacle used is a 7-pin receptacle, with pins 6 and 7 connected to SR DALI driver. 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

Twist-Lock Receptacle (TR5/TR7): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TR7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When ordering a twist-lock receptacle with a photocell (TLP), the receptacle used is a 7-pin receptacle, with pins 6 and 7 connected to SR DALI driver. 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. All drivers are 0-10V dimming to 10% power standard, except when using Sensor Ready (SR) drivers, which uses DALI protocol (options CS50/CM50/CS30/CM30, SRDR, and TR7). Drivers are RoHS and FCC Title 47 CFR Part 15 compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground,

and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). All Optiform configurations are qualified under Design Lights Consortium Premium classification. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Compliant.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult Factory for specs on optional, custom colors, and marine grade paint.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: [signify.com](https://www.signify.com)

Warranty

OptiForm luminaires feature a 5-year limited warranty
See [signify.com/warranties](https://www.signify.com/warranties) for complete details and exclusions.

Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.

