



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-L-A16-840-T4M-AR1-240-BL50-L3-TR7-BZ

Luminaire	Configuration (nom. lumens)				Color Temperature		Distribution				Mounting		Voltage		
OPF-L															
OPF-L OptiForm Large Area Light	A16	35,000 lumens	A24	50,000 lumens	827'	80CRI 2700K	AFR	Autofront row	LCL	LEED corner optic left	AR1 ^{2,13}	Arm mount (standard)	120	120V	
	A17	36,000 lumens	A25	52,000 lumens	830	80CRI 3000K	T2M	Type 2 medium	LCL	LEED corner optic right			208	208V	
	A18	38,000 lumens	A26	54,000 lumens	840	80CRI 4000K	T3M	Type 3 medium	BLC	Back light control	MAR ³	Mast arm	240	240V	
	A19	40,000 lumens	A27	56,000 lumens	727'	70CRI 2700K	T4M	Type 4 medium	2RL	Type 2 rotated left 90°	WAL	Wall mount	277	277V	
	A20	42,000 lumens	A28	58,000 lumens	730	70CRI 3000K	T4W	Type 4 wide	2RR	Type 2 rotated right 270°			MOS ⁴	Mounting ordered separately	347
	A21	44,000 lumens	A29	61,000 lumens	740	70CRI 4000K	T5M	Type 5 medium	3RL	Type 3 rotated left 90°	UNV	120-277V	480	480V	
	A22	46,000 lumens	A30	63,000 lumens	750	70CRI 5000K	T5N	Type 5 narrow	3RR	Type 3 rotated right 270°			HVU	347-480V	
	A23	48,000 lumens					T5W	Type 5 wide	4RL ¹	Type 4 rotated left 90°					
								4RR ¹	Type 4 rotated right 270°						
Dimming Controls					Sensing		Options (electrical, mechanical, etc)				Finish				
The following options include 0-10V Driver					L3 L7	PIR sensor, #3 lens (Required if BL50 is selected) PIR sensor, #7 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			
							TR7	7-pin twist lock receptacle connected to D4i compliant driver							
							TLP ¹¹	7-pin twist lock receptacle connected to D4i compliant driver w/ 3-pin Photocell			Customer specified				
The following options include SR/DALI Driver															
SRDR ^{5,8}	SR driver connected to Zhaga socket (D4i)														
OMSR ^{5,8}	Outdoor multi-sensor														
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 leadtime 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.
- 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-L OptiForm large

Site & area luminaire

Shielding Accessories (order separately)

- OPF -L-HIS-4 Internal house side shield, Qty 4
- OPF-L-HIS-T4-2 Internal house side shield, Type 4 only, Qty 4

Luminaire Accessories (order separately)

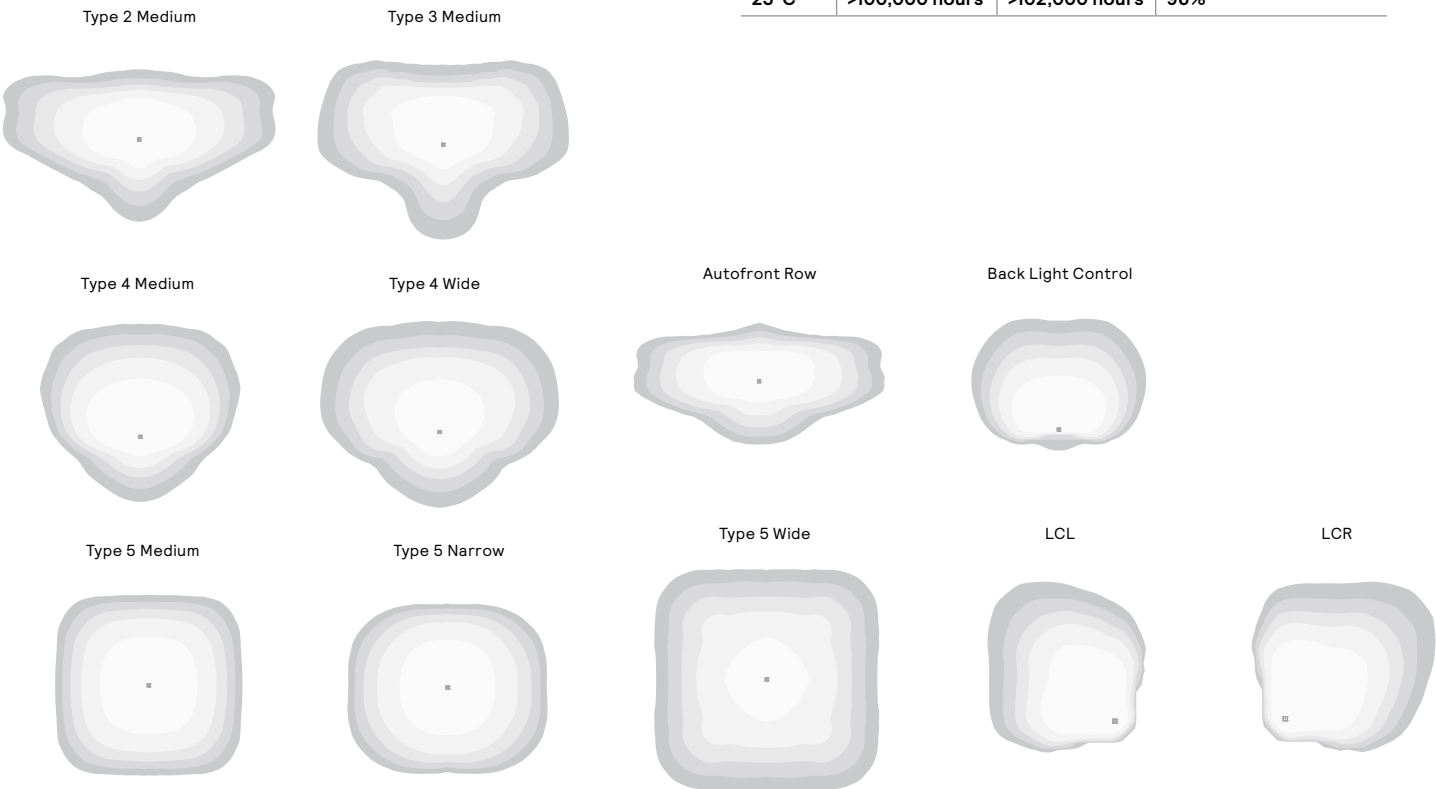
Pole Mount Fusing	
FP1 ¹¹	Pole mount single fuse (120V, 277V, or 347V)
FP2 ¹¹	Pole mount double fuse (208V, 240V, or 480V)
FP3 ¹¹	Pole mount double fuse canadian double pull (208V, 240V, or 480V)
Photocell Accessories	
P400S	Shorting cap

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

Optical Distributions



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°

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%

OPF-L OptiForm large

Site & area luminaire

OPF-L 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-L-A16-730-x	3000	195	34055	B4-U0-G4	175	33783	B4-U0-G4	174	34238	B3-U0-G4	176	35290	B5-U0-G3	181
OPF-L-A17-730-x	3000	210	35876	B4-U0-G4	171	35590	B4-U0-G4	169	36068	B3-U0-G4	171	37177	B5-U0-G3	177
OPF-L-A18-730-x	3000	223	37982	B4-U0-G4	170	37679	B4-U0-G4	169	38185	B3-U0-G5	171	39359	B5-U0-G4	176
OPF-L-A19-730-x	3000	235	39792	B4-U0-G4	169	39474	B4-U0-G4	168	40005	B3-U0-G5	170	41235	B5-U0-G4	175
OPF-L-A20-730-x	3000	247	41679	B4-U0-G4	168	41347	B4-U0-G4	167	41903	B3-U0-G5	169	43191	B5-U0-G4	175
OPF-L-A21-730-x	3000	260	43501	B4-U0-G4	167	43154	B4-U0-G5	166	43735	B3-U0-G5	168	45079	B5-U0-G4	174
OPF-L-A22-730-x	3000	273	45438	B4-U0-G4	167	45075	B4-U0-G5	165	45682	B3-U0-G5	168	47086	B5-U0-G4	173
OPF-L-A23-730-x	3000	286	47490	B4-U0-G4	166	47111	B4-U0-G5	165	47745	B4-U0-G5	167	49213	B5-U0-G4	172
OPF-L-A24-730-x	3000	298	49218	B4-U0-G4	165	48825	B4-U0-G5	164	49482	B4-U0-G5	166	51003	B5-U0-G4	171
OPF-L-A25-730-x	3000	311	51001	B5-U0-G4	164	50594	B4-U0-G5	163	51275	B4-U0-G5	165	52851	B5-U0-G4	170
OPF-L-A26-730-x	3000	324	52814	B5-U0-G4	163	52393	B4-U0-G5	162	53098	B4-U0-G5	164	54730	B5-U0-G4	169
OPF-L-A27-730-x	3000	337	54641	B5-U0-G4	162	54205	B4-U0-G5	161	54935	B4-U0-G5	163	56623	B5-U0-G4	168
OPF-L-A28-730-x	3000	350	56342	B5-U0-G5	161	55892	B4-U0-G5	160	56644	B4-U0-G5	162	58385	B5-U0-G4	167
OPF-L-A29-730-x	3000	378	59894	B5-U0-G5	159	59416	B4-U0-G5	157	60216	B4-U0-G5	159	62066	B5-U0-G5	164
OPF-L-A30-730-x	3000	393	61735	B5-U0-G5	157	61243	B4-U0-G5	156	62066	B4-U0-G5	158	63974	B5-U0-G5	163

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-L-A16-730-x	3000	195	35272	B4-U0-G4	181	32598	B3-U0-G5	167	35041	B5-U0-G3	180	33739	B5-U0-G4	173
OPF-L-A17-730-x	3000	210	37158	B4-U0-G4	177	34342	B3-U0-G5	163	36915	B5-U0-G3	176	35543	B5-U0-G4	169
OPF-L-A18-730-x	3000	223	39339	B4-U0-G4	176	36357	B3-U0-G5	163	39082	B5-U0-G3	175	37629	B5-U0-G4	169
OPF-L-A19-730-x	3000	235	41214	B4-U0-G4	175	38090	B3-U0-G5	162	40945	B5-U0-G4	174	39422	B5-U0-G4	168
OPF-L-A20-730-x	3000	247	43169	B4-U0-G4	174	39897	B4-U0-G5	161	42887	B5-U0-G4	173	41292	B5-U0-G4	167
OPF-L-A21-730-x	3000	260	45056	B4-U0-G4	173	41641	B4-U0-G5	160	44762	B5-U0-G4	172	43097	B5-U0-G4	166
OPF-L-A22-730-x	3000	273	47062	B4-U0-G4	173	43495	B4-U0-G5	160	46754	B5-U0-G4	172	45016	B5-U0-G5	165
OPF-L-A23-730-x	3000	286	49187	B4-U0-G4	172	45459	B4-U0-G5	159	48866	B5-U0-G4	171	47049	B5-U0-G5	165
OPF-L-A24-730-x	3000	298	50976	B5-U0-G4	171	47113	B4-U0-G5	158	50644	B5-U0-G4	170	48761	B5-U0-G5	164
OPF-L-A25-730-x	3000	311	52824	B5-U0-G4	170	48820	B4-U0-G5	157	52479	B5-U0-G4	169	50528	B5-U0-G5	162
OPF-L-A26-730-x	3000	324	54702	B5-U0-G4	169	50556	B4-U0-G5	156	54344	B5-U0-G4	168	52324	B5-U0-G5	161
OPF-L-A27-730-x	3000	337	56594	B5-U0-G5	168	52305	B4-U0-G5	155	56224	B5-U0-G4	167	54134	B5-U0-G5	160
OPF-L-A28-730-x	3000	350	58355	B5-U0-G5	167	53933	B4-U0-G5	154	57974	B5-U0-G4	165	55819	B5-U0-G5	159
OPF-L-A29-730-x	3000	378	62034	B5-U0-G5	164	57333	B4-U0-G5	152	61629	B5-U0-G4	163	59338	B5-U0-G5	157
OPF-L-A30-730-x	3000	393	63941	B5-U0-G5	163	59095	B4-U0-G5	150	63524	B5-U0-G5	162	61162	B5-U0-G5	156

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-L-A16-740-x	4000	195	36004	B4-U0-G4	185	35716	B4-U0-G4	184	36197	B3-U0-G4	186	37309	B5-U0-G3	192
OPF-L-A17-740-x	4000	210	37929	B4-U0-G4	180	37626	B4-U0-G4	179	38133	B3-U0-G4	181	39305	B5-U0-G4	187
OPF-L-A18-740-x	4000	223	40155	B4-U0-G4	180	39835	B4-U0-G4	178	40371	B3-U0-G5	181	41612	B5-U0-G4	186
OPF-L-A19-740-x	4000	235	42069	B4-U0-G4	179	41733	B4-U0-G4	177	42295	B3-U0-G5	180	43595	B5-U0-G4	185
OPF-L-A20-740-x	4000	247	44064	B4-U0-G4	178	43713	B4-U0-G4	177	44301	B3-U0-G5	179	45662	B5-U0-G4	185
OPF-L-A21-740-x	4000	260	45991	B4-U0-G4	177	45624	B4-U0-G5	176	46238	B3-U0-G5	178	47659	B5-U0-G4	183
OPF-L-A22-740-x	4000	273	48038	B4-U0-G4	176	47655	B4-U0-G5	175	48296	B3-U0-G5	177	49781	B5-U0-G4	183
OPF-L-A23-740-x	4000	286	50208	B4-U0-G4	176	49808	B4-U0-G5	174	50478	B4-U0-G5	177	52029	B5-U0-G4	182
OPF-L-A24-740-x	4000	298	52034	B4-U0-G4	175	51619	B4-U0-G5	173	52313	B4-U0-G5	175	53921	B5-U0-G4	181
OPF-L-A25-740-x	4000	311	53920	B5-U0-G4	173	53490	B4-U0-G5	172	54209	B4-U0-G5	174	55875	B5-U0-G4	180
OPF-L-A26-740-x	4000	324	55837	B5-U0-G4	172	55391	B4-U0-G5	171	56136	B4-U0-G5	173	57862	B5-U0-G4	178
OPF-L-A27-740-x	4000	337	57768	B5-U0-G5	171	57308	B4-U0-G5	170	58078	B4-U0-G5	172	59864	B5-U0-G4	177
OPF-L-A28-740-x	4000	350	59566	B5-U0-G5	170	59091	B4-U0-G5	169	59886	B4-U0-G5	171	61727	B5-U0-G4	176
OPF-L-A29-740-x	4000	378	63322	B5-U0-G5	168	62817	B4-U0-G5	166	63662	B4-U0-G5	169	65618	B5-U0-G5	174
OPF-L-A30-740-x	4000	393	65268	B5-U0-G5	166	64747	B4-U0-G5	165	65618	B4-U0-G5	167	67635	B5-U0-G5	172

OPF-L OptiForm large

Site & area luminaire

OPF-L Lumen values (cont'd)

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-L-A16-740-x	4000	195	37290	B4-U0-G4	192	34464	B3-U0-G5	177	37047	B5-U0-G3	190	35669	B5-U0-G4	183
OPF-L-A17-740-x	4000	210	39284	B4-U0-G4	187	36307	B3-U0-G5	173	39028	B5-U0-G3	186	37577	B5-U0-G4	179
OPF-L-A18-740-x	4000	223	41590	B4-U0-G4	186	38438	B3-U0-G5	172	41319	B5-U0-G3	185	39782	B5-U0-G4	178
OPF-L-A19-740-x	4000	235	43572	B4-U0-G4	185	40270	B3-U0-G5	171	43288	B5-U0-G4	184	41679	B5-U0-G4	177
OPF-L-A20-740-x	4000	247	45639	B4-U0-G4	184	42180	B4-U0-G5	170	45341	B5-U0-G4	183	43655	B5-U0-G4	176
OPF-L-A21-740-x	4000	260	47634	B4-U0-G4	183	44024	B4-U0-G5	169	47323	B5-U0-G4	182	45564	B5-U0-G4	175
OPF-L-A22-740-x	4000	273	49755	B4-U0-G4	183	45984	B4-U0-G5	169	49430	B5-U0-G4	181	47592	B5-U0-G5	175
OPF-L-A23-740-x	4000	286	52002	B4-U0-G4	182	48061	B4-U0-G5	168	51663	B5-U0-G4	181	49742	B5-U0-G5	174
OPF-L-A24-740-x	4000	298	53894	B5-U0-G4	181	49809	B4-U0-G5	167	53542	B5-U0-G4	180	51551	B5-U0-G5	173
OPF-L-A25-740-x	4000	311	55847	B5-U0-G4	179	51614	B4-U0-G5	166	55482	B5-U0-G4	178	53419	B5-U0-G5	172
OPF-L-A26-740-x	4000	324	57832	B5-U0-G5	178	53449	B4-U0-G5	165	57455	B5-U0-G4	177	55318	B5-U0-G5	171
OPF-L-A27-740-x	4000	337	59833	B5-U0-G5	177	55298	B4-U0-G5	164	59442	B5-U0-G4	176	57232	B5-U0-G5	170
OPF-L-A28-740-x	4000	350	61695	B5-U0-G5	176	57019	B4-U0-G5	163	61292	B5-U0-G4	175	59013	B5-U0-G5	168
OPF-L-A29-740-x	4000	378	65585	B5-U0-G5	174	60614	B4-U0-G5	161	65156	B5-U0-G4	173	62734	B5-U0-G5	166
OPF-L-A30-740-x	4000	393	67600	B5-U0-G5	172	62477	B4-U0-G5	159	67159	B5-U0-G5	171	64662	B5-U0-G5	165

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-L-A16-750-x	5000	195	36004	B4-U0-G4	185	35716	B4-U0-G4	184	36197	B3-U0-G4	186	37309	B5-U0-G3	192
OPF-L-A17-750-x	5000	210	37929	B4-U0-G4	180	37626	B4-U0-G4	179	38133	B3-U0-G4	181	39305	B5-U0-G4	187
OPF-L-A18-750-x	5000	223	40155	B4-U0-G4	180	39835	B4-U0-G4	178	40371	B3-U0-G5	181	41612	B5-U0-G4	186
OPF-L-A19-750-x	5000	235	42069	B4-U0-G4	179	41733	B4-U0-G4	177	42295	B3-U0-G5	180	43595	B5-U0-G4	185
OPF-L-A20-750-x	5000	247	44064	B4-U0-G4	178	43713	B4-U0-G4	177	44301	B3-U0-G5	179	45662	B5-U0-G4	185
OPF-L-A21-750-x	5000	260	45991	B4-U0-G4	177	45624	B4-U0-G5	176	46238	B3-U0-G5	178	47659	B5-U0-G4	183
OPF-L-A22-750-x	5000	273	48038	B4-U0-G4	176	47655	B4-U0-G5	175	48296	B3-U0-G5	177	49781	B5-U0-G4	183
OPF-L-A23-750-x	5000	286	50208	B4-U0-G4	176	49808	B4-U0-G5	174	50478	B4-U0-G5	177	52029	B5-U0-G4	182
OPF-L-A24-750-x	5000	298	52034	B4-U0-G4	175	51619	B4-U0-G5	173	52313	B4-U0-G5	175	53921	B5-U0-G4	181
OPF-L-A25-750-x	5000	311	53920	B5-U0-G4	173	53490	B4-U0-G5	172	54209	B4-U0-G5	174	55875	B5-U0-G4	180
OPF-L-A26-750-x	5000	324	55837	B5-U0-G4	172	55391	B4-U0-G5	171	56136	B4-U0-G5	173	57862	B5-U0-G4	178
OPF-L-A27-750-x	5000	337	57768	B5-U0-G5	171	57308	B4-U0-G5	170	58078	B4-U0-G5	172	59864	B5-U0-G4	177
OPF-L-A28-750-x	5000	350	59566	B5-U0-G5	170	59091	B4-U0-G5	169	59886	B4-U0-G5	171	61727	B5-U0-G4	176
OPF-L-A29-750-x	5000	378	63322	B5-U0-G5	168	62817	B4-U0-G5	166	63662	B4-U0-G5	169	65618	B5-U0-G5	174
OPF-L-A30-750-x	5000	393	65268	B5-U0-G5	166	64747	B4-U0-G5	165	65618	B4-U0-G5	167	67635	B5-U0-G5	172

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-L-A16-750-x	5000	195	37290	B4-U0-G4	192	34464	B3-U0-G5	177	37047	B5-U0-G3	190	35669	B5-U0-G4	183
OPF-L-A17-750-x	5000	210	39284	B4-U0-G4	187	36307	B3-U0-G5	173	39028	B5-U0-G3	186	37577	B5-U0-G4	179
OPF-L-A18-750-x	5000	223	41590	B4-U0-G4	186	38438	B3-U0-G5	172	41319	B5-U0-G3	185	39782	B5-U0-G4	178
OPF-L-A19-750-x	5000	235	43572	B4-U0-G4	185	40270	B3-U0-G5	171	43288	B5-U0-G4	184	41679	B5-U0-G4	177
OPF-L-A20-750-x	5000	247	45639	B4-U0-G4	184	42180	B4-U0-G5	170	45341	B5-U0-G4	183	43655	B5-U0-G4	176
OPF-L-A21-750-x	5000	260	47634	B4-U0-G4	183	44024	B4-U0-G5	169	47323	B5-U0-G4	182	45564	B5-U0-G4	175
OPF-L-A22-750-x	5000	273	49755	B4-U0-G4	183	45984	B4-U0-G5	169	49430	B5-U0-G4	181	47592	B5-U0-G5	175
OPF-L-A23-750-x	5000	286	52002	B4-U0-G4	182	48061	B4-U0-G5	168	51663	B5-U0-G4	181	49742	B5-U0-G5	174
OPF-L-A24-750-x	5000	298	53894	B5-U0-G4	181	49809	B4-U0-G5	167	53542	B5-U0-G4	180	51551	B5-U0-G5	173
OPF-L-A25-750-x	5000	311	55847	B5-U0-G4	179	51614	B4-U0-G5	166	55482	B5-U0-G4	178	53419	B5-U0-G5	172
OPF-L-A26-750-x	5000	324	57832	B5-U0-G5	178	53449	B4-U0-G5	165	57455	B5-U0-G4	177	55318	B5-U0-G5	171
OPF-L-A27-750-x	5000	337	59833	B5-U0-G5	177	55298	B4-U0-G5	164	59442	B5-U0-G4	176	57232	B5-U0-G5	170
OPF-L-A28-750-x	5000	350	61695	B5-U0-G5	176	57019	B4-U0-G5	163	61292	B5-U0-G4	175	59013	B5-U0-G5	168
OPF-L-A29-750-x	5000	378	65585	B5-U0-G5	174	60614	B4-U0-G5	161	65156	B5-U0-G4	173	62734	B5-U0-G5	166
OPF-L-A30-750-x	5000	393	67600	B5-U0-G5	172	62477	B4-U0-G5	159	67159	B5-U0-G5	171	64662	B5-U0-G5	165

OPF-L OptiForm large

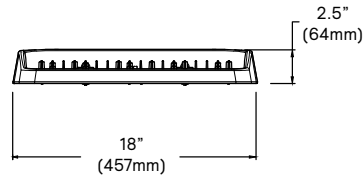
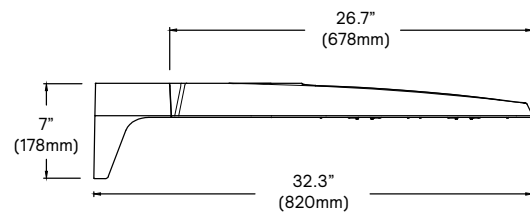
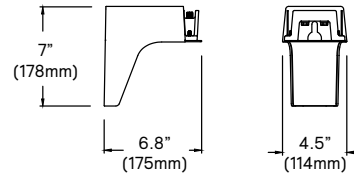
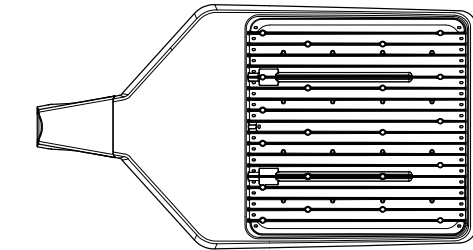
Site & area luminaire

Dimensions

OptiForm Standard Arm

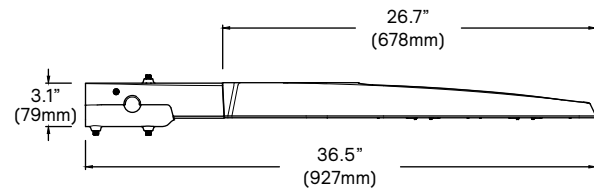
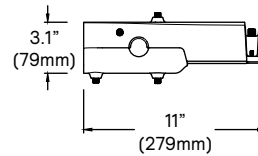
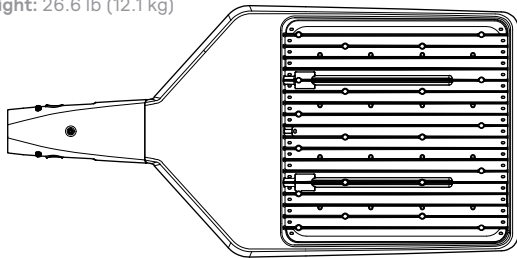
Weight: 25 lb (11.3 kg)

EPA: 0.15 ft² (0.014 m²)



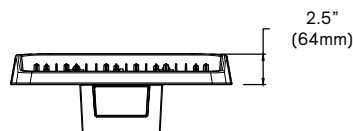
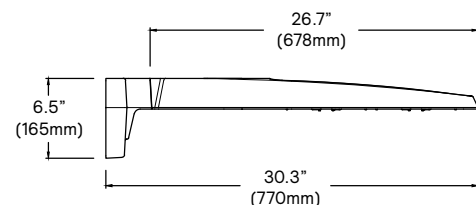
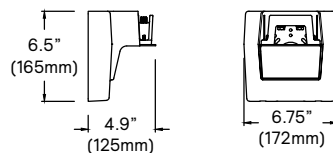
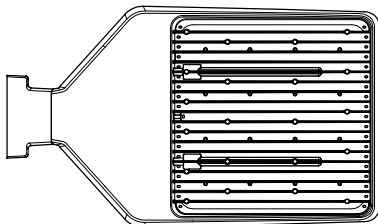
OptiForm Mast Arm

Weight: 26.6 lb (12.1 kg)



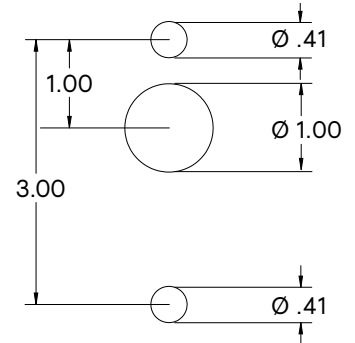
OptiForm Wall Mount

Weight: 25.5 lb (11.6 kg)

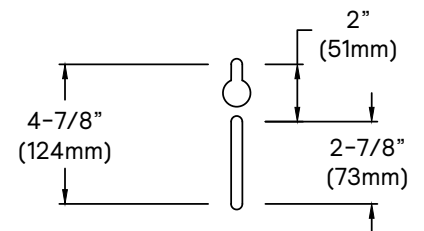


Standard Drill Pattern

Drill Template #5



Standard Arm Mounting Hole Pattern



OPF-L OptiForm large

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 192 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 (U0 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 used with other dimming control options.

Sensor Ready Zhaga Socket Connector (SRDR): Product utilizes D4i Certified components and is 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 D4i certified to guarantee proper functionality at system level. 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 not programmed 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%

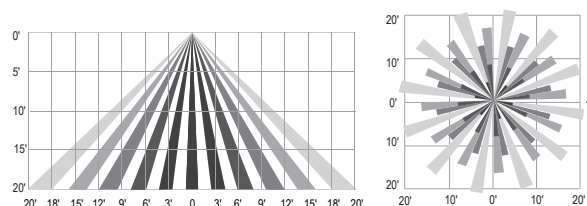
Motion response options

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).

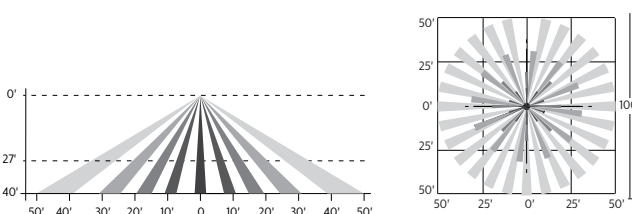
Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response 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/MR7): 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. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

MR3 Luminaire or remote mount controller with #3 lens



MR7 Luminaire or remote mount controller with #7 lens



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Site & area luminaire

Specifications (cont'd)

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 ordering a twist-lock receptacle with a photocell (TLP), the receptacle used is a 7-pin receptacle, but pins 6 and 7 are not connected (no SR 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 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 ordering a twist-lock receptacle with a photocell (TRP), the receptacle used is a 7-pin receptacle, but pins 6 and 7 are not connected (no SR 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.

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.

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, triglycidic isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DG), and medium gray (MG). 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

Warranty

OptiForm luminaires feature a 5-year limited warranty
See signify.com/warranties for complete details and exclusions.

