



Gardco PureForm LED area small round features a sleek, low profile design and is available with two light engines. ComfortEdge optics provide a unique and lower glare lighting solution designed to enhance visual comfort for pedestrian applications, while precision optics maximize efficiency and spacing. PureForm P20 is available with multiple optical distributions with output up to 17,000 lumens. A full range of control options provides additional energy savings.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lumens: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

Example: P20-P-A05-740-T3M-HIS-AR1-UNV-DALI-WIAPHW-MG

Prefix	Catalog Code	Lumens	CCT/CRI	Distribution	Shielding	Mounting	Voltage
<b>P20</b>							
P20 PureForm area small round	P Precision optics	A01 <sup>4</sup> 2500 A02 <sup>4</sup> 3500 A03 <sup>4</sup> 5000 A04 7000 A05 9000 A06 11000 A07 13500 A08 16000 A09 17000 A10 19000	730 70CRI, 3000K 740 70CRI, 4000K 750 70CRI, 5000K 830 80CRI, 3000K 840 80CRI, 4000K 827 <sup>8</sup> 80CRI, 2700K (ETor)	AFR Auto front row AFR-90 AFR rotated left 90° AFR-270 AFR rotated left 270° T2M Type 2 Medium T2M-90 T2M rotated left 90° T2M-270 T2M rotated left 270° T3M Type 3 Medium T3M-90 T3M rotated left 90° T3M-270 T3M rotated left 270° T4M Type 4 Medium T4M-90 T4M rotated left 90° T4M-270 T4M rotated left 270°	T4W Type 4 Wide T4W-90 T4W rotated left 90° T4W-270 T4W rotated left 270° T5N Type 5 Narrow T5M Type 5 Medium T5W Type 5 Wide LCL LEED corner optic left LCR LEED corner optic right BLC Back light control BLC-90 BLC rotated left 90° BLC-270 BLC rotated left 270°	None - Internal house side shield (clip-on)	AR1 <sup>12</sup> Arm mount (standard) UNV 120-277V 480 480V HVU 374-480V
	C Comfort optics	A01 <sup>4</sup> 2000 A02 3500 A03 5000 A04 7000 A05 9000 A06 11000 A07 13500 A08 <sup>11</sup> 16000 A09 <sup>11</sup> 17000	830 80CRI, 3000K 840 80CRI, 4000K 827 <sup>8</sup> 80CRI, 2700K (ETor) 835 <sup>8</sup> 80CRI, 3500K (ETor) 750 <sup>1</sup> 70CRI, 5000K (ETor)	T2 Type 2 T3 Type 3 T4 Type 4 T5 Type 5	None - EHS Luminaire drilled for external house shield <small>(must be accompanied by P20-EHS-BK accessory, ordered separately)</small>	RAM Retrofit arm mount kit WAL Wall mount	

Driver type	Dimming Controls (only one may be selected)	Lighting controls <sup>8</sup> (only one may be selected)	Emergency	Finish
0-10V				Standard textured finish
010V 0-10V	None - Dimming leads externally accessible (controls by others) FAWS Field adjustable wattage selector BL50L2 <sup>2</sup> PIR motion response dim to 50% L2 lens BL50L3 <sup>2</sup> PIR motion response dim to 50% L3 lens BL30MW <sup>3</sup> Microwave motion sensor factory set at 30% dimming BL50MW <sup>3</sup> Microwave motion sensor factory set at 50% dimming	None - Photocontrol button PCB <sup>4,10</sup> 5-pin twist lock w/ 0-10v driver TLR5 7-pin twist lock w/ 0-10v driver (non-D4i) TLR7 7-pin twist lock w/ 0-10v driver (non-D4i) TLRPC <sup>4,10</sup> 7-pin twist lock w/ 0-10v driver (non-D4i) & on/off photocell	None - Emergency battery backup (0°C to +40°C/32°F to +104°F) EM <sup>4,13</sup> EMC <sup>4,7,9,13</sup> Emergency battery pack, cold rated (-20°C to +40°C/-4°F to +104°F) <b>Fusing</b> None - F1 <sup>10</sup> Single Fuse (120V, 277V, or 347V) F2 <sup>10,11</sup> Double Fuse (208V, 240V, or 480V) F3 <sup>10,11</sup> Double Fuse Canadian double pole (208V, 240V, or 480V) <b>Surge Protection</b> None SP1 Surge Protector 10kV / 10kA (standard) SP2 Surge Protector 20kV/ 10kA (option)	BK Black WH White BZ Bronze DG Dark gray MG Medium gray  <b>Customer specified</b> OC Optional color (specify optional color or RAL, contact factory) SC Special color (must supply color chip, requires factory quote)
DALI				
DALI SR/ DALI	None - Security 50 % dimming, 7 hours CS50 <sup>5,6</sup> Median 50 % dimming, 8 hours CM50 <sup>5,6</sup> Security 30 % dimming, 7 hours CS30 <sup>5,6</sup> Median 30 % dimming, 8 hours CM30 <sup>5,6</sup> SR driver connected to Zhaga socket (D4i) SRDR <sup>5,6</sup> WIAPLW <sup>5,6</sup> Wireless Interact outdoor low mounting (7-15'), white housing WIAPLB <sup>5,6</sup> Wireless Interact outdoor low mounting (7-15'), black housing WIAPHW <sup>5,6</sup> Wireless Interact outdoor low mounting (15-40'), white housing WIAPHB <sup>5,6</sup> Wireless Interact outdoor low mounting (15-40'), black housing	None - Photocontrol button PCB <sup>4,10</sup> 5-pin twist lock SR/DALI driver TR5 <sup>5,6</sup> 7-pin twist lock SR/DALI driver (D4i) TR7 <sup>5,6</sup> 7-pin twist lock SR/DALI driver (D4i) TLP <sup>4,6,10</sup> & on/off photocell		

- Extended lead times apply. Contact factory for details.
- Available with precision optics lumen packages A09 and below only. Not allowed with comfort optics
- Available with comfort Optics only at 120-347V. Not allowed with precision optics.
- Not available at 347-480V(HVU)
- Not available at 347-480V(HVU) for precision (P-Axx) optic lumen packages A01-A05 and comfort (C-Axx) optic lumen packages A01-A09
- Not available at 120-277V(UNV) for precision (P-Axx) optic lumen packages A01-A02 and comfort (C-Axx) optic lumen packages A01-A02
- Not available with Comfort (C-Axx) optic lumen packages A07-A09
- If selected with Dimming control, DIM leads from receptacle will not be connected to driver
- Available only with Comfort Optics
- Must specify input voltage. UNV and HVU not valid.
- Not available with Emergency options
- Mounts to a 4-5" OD round pole with adapter included for square poles.
- Not available with BL50LX, BL50MW, SRDR, OMS, Or WIAP options due to mechanical conflict.
- CCTs 3000k or warmer are IDA Dark Sky Listed.



# P20 PureForm LED small round

PureForm P20 Accessories (ordered separately, field installed)

## Mounting Accessories

- P20-RAM-G2-(F) Retrofit Arm mount kit
- P20-WS-G2-(F) Wall mount with surface conduit rear entry permitted
- P20-EHS-BK <sup>1</sup> External House Side Shield, Black

(F) = Specify finish

1. EHS must also be selected in the luminaire catalog code and ships separately.

## PureForm P20 Precision optics lumen values

Perf. Package	System Watts	Dist. Type	70 CRI			70 CRI			70 CRI			80 CRI			80 CRI		
			3000K			4000K			5000K			3000K			4000K		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
A01	14	AFR	2,875	B1-U0-G1	194	3,035	B1-U0-G1	205	3,035	B1-U0-G1	205	2,544	B1-U0-G1	172	2,710	B1-U0-G1	183
		T2M	2,775	B1-U0-G1	188	2,930	B1-U0-G1	198	2,930	B1-U0-G1	198	2,456	B1-U0-G1	166	2,616	B1-U0-G1	177
		T3M	2,780	B1-U0-G1	188	2,934	B1-U0-G1	198	2,934	B1-U0-G1	198	2,460	B1-U0-G1	166	2,620	B1-U0-G1	177
		T4M	2,744	B1-U0-G1	185	2,897	B1-U0-G1	196	2,897	B1-U0-G1	196	2,429	B1-U0-G1	164	2,587	B1-U0-G1	175
		T4W	2,638	B1-U0-G1	178	2,785	B1-U0-G1	188	2,785	B1-U0-G1	188	2,334	B1-U0-G1	158	2,486	B1-U0-G1	168
		T5M	2,830	B2-U0-G1	191	2,988	B2-U0-G1	202	2,988	B2-U0-G1	202	2,504	B2-U0-G1	169	2,667	B2-U0-G1	180
		T5N	2,849	B2-U0-G0	193	3,008	B2-U0-G0	203	3,008	B2-U0-G0	203	2,521	B2-U0-G0	170	2,685	B2-U0-G0	181
		T5W	2,671	B2-U0-G1	181	2,820	B2-U0-G1	191	2,820	B2-U0-G1	191	2,364	B2-U0-G1	160	2,517	B2-U0-G1	170
		BLC	1,908	B0-U0-G1	129	2,014	B0-U0-G1	136	2,014	B0-U0-G1	136	1,688	B0-U0-G1	114	1,798	B0-U0-G1	122
LCL/LCR	1,506	B0-U0-G1	102	1,589	B0-U0-G1	107	1,589	B0-U0-G1	107	1,332	B0-U0-G1	90	1,419	B0-U0-G1	96		
A02	21	AFR	4,094	B1-U0-G1	197	4,323	B1-U0-G1	208	4,323	B1-U0-G1	208	3,623	B1-U0-G1	174	3,859	B1-U0-G1	186
		T2M	3,952	B1-U0-G1	190	4,173	B1-U0-G1	201	4,173	B1-U0-G1	201	3,498	B1-U0-G1	168	3,725	B1-U0-G1	179
		T3M	3,958	B1-U0-G1	190	4,179	B1-U0-G1	201	4,179	B1-U0-G1	201	3,503	B1-U0-G1	168	3,731	B1-U0-G1	179
		T4M	3,908	B1-U0-G1	188	4,126	B1-U0-G1	198	4,126	B1-U0-G1	198	3,459	B1-U0-G1	166	3,683	B1-U0-G1	177
		T4W	3,756	B1-U0-G2	181	3,966	B1-U0-G2	191	3,966	B1-U0-G2	191	3,324	B1-U0-G2	160	3,540	B1-U0-G2	170
		T5M	4,030	B2-U0-G1	194	4,255	B2-U0-G1	205	4,255	B2-U0-G1	205	3,567	B2-U0-G1	172	3,798	B2-U0-G1	183
		T5N	4,057	B2-U0-G1	195	4,283	B2-U0-G1	206	4,283	B2-U0-G1	206	3,590	B2-U0-G1	173	3,824	B2-U0-G1	184
		T5W	3,804	B3-U0-G2	183	4,016	B3-U0-G2	193	4,016	B3-U0-G2	193	3,366	B2-U0-G1	162	3,585	B2-U0-G2	172
		BLC	2,717	B0-U0-G1	131	2,869	B0-U0-G1	138	2,869	B0-U0-G1	138	2,405	B0-U0-G1	116	2,561	B0-U0-G1	123
LCL/LCR	2,144	B1-U0-G1	103	2,264	B1-U0-G1	109	2,264	B1-U0-G1	109	1,897	B0-U0-G1	91	2,021	B1-U0-G1	97		
A03	31	AFR	5,696	B2-U0-G1	187	6,013	B2-U0-G2	197	6,013	B2-U0-G2	197	5,040	B1-U0-G1	165	5,368	B1-U0-G1	176
		T2M	5,498	B1-U0-G1	180	5,805	B1-U0-G2	190	5,805	B1-U0-G2	190	4,866	B1-U0-G1	159	5,182	B1-U0-G1	170
		T3M	5,507	B1-U0-G2	180	5,814	B1-U0-G2	190	5,814	B1-U0-G2	190	4,873	B1-U0-G1	160	5,190	B1-U0-G1	170
		T4M	5,437	B1-U0-G2	178	5,740	B1-U0-G2	188	5,740	B1-U0-G2	188	4,812	B1-U0-G1	158	5,124	B1-U0-G1	168
		T4W	5,226	B1-U0-G2	171	5,517	B1-U0-G2	181	5,517	B1-U0-G2	181	4,625	B1-U0-G2	152	4,925	B1-U0-G2	161
		T5M	5,607	B3-U0-G1	184	5,919	B3-U0-G1	194	5,919	B3-U0-G1	194	4,962	B3-U0-G1	163	5,284	B3-U0-G1	173
		T5N	5,644	B3-U0-G1	185	5,959	B3-U0-G1	195	5,959	B3-U0-G1	195	4,995	B2-U0-G1	164	5,319	B3-U0-G1	174
		T5W	5,292	B3-U0-G2	173	5,587	B3-U0-G2	183	5,587	B3-U0-G2	183	4,683	B3-U0-G2	153	4,988	B3-U0-G2	163
		BLC	3,780	B0-U0-G1	124	3,991	B0-U0-G1	131	3,991	B0-U0-G1	131	3,345	B0-U0-G1	110	3,562	B0-U0-G1	117
LCL/LCR	2,983	B1-U0-G1	98	3,149	B1-U0-G1	103	3,149	B1-U0-G1	103	2,640	B1-U0-G1	87	2,811	B1-U0-G1	92		
A04	44	AFR	8,079	B2-U0-G2	188	8,529	B2-U0-G2	198	8,529	B2-U0-G2	198	7,149	B2-U0-G2	166	7,614	B2-U0-G2	177
		T2M	7,799	B2-U0-G2	181	8,234	B2-U0-G2	192	8,234	B2-U0-G2	192	6,902	B2-U0-G2	161	7,350	B2-U0-G2	171
		T3M	7,811	B2-U0-G2	182	8,246	B2-U0-G2	192	8,246	B2-U0-G2	192	6,912	B2-U0-G2	161	7,361	B2-U0-G2	171
		T4M	7,712	B1-U0-G2	179	8,142	B1-U0-G2	189	8,142	B1-U0-G2	189	6,825	B1-U0-G2	159	7,268	B1-U0-G2	169
		T4W	7,412	B1-U0-G2	172	7,825	B2-U0-G3	182	7,825	B2-U0-G3	182	6,559	B1-U0-G2	153	6,986	B1-U0-G2	163
		T5M	7,953	B3-U0-G1	185	8,396	B3-U0-G2	195	8,396	B3-U0-G2	195	7,038	B3-U0-G1	164	7,495	B3-U0-G1	174
		T5N	8,005	B3-U0-G1	186	8,452	B3-U0-G1	197	8,452	B3-U0-G1	197	7,084	B3-U0-G1	165	7,545	B3-U0-G1	176
		T5W	7,506	B3-U0-G2	175	7,925	B3-U0-G2	184	7,925	B3-U0-G2	184	6,643	B3-U0-G2	155	7,074	B3-U0-G2	165
		BLC	5,361	B0-U0-G2	125	5,660	B0-U0-G2	132	5,660	B0-U0-G2	132	4,745	B0-U0-G2	110	5,053	B0-U0-G2	118
LCL/LCR	4,231	B1-U0-G1	98	4,467	B1-U0-G1	104	4,467	B1-U0-G1	104	3,744	B1-U0-G1	87	3,988	B1-U0-G1	93		

# P20 PureForm LED small round

## PureForm P20 Precision optics lumen values

Perf. Package	System Watts	Dist. Type	70 CRI			70 CRI			70 CRI			80 CRI			80 CRI		
			3000K			4000K			5000K			3000K			4000K		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
A05	53	AFR	9,573	B2-U0-G2	178	10,107	B2-U0-G2	188	10,107	B2-U0-G2	188	8,472	B2-U0-G2	157	9,022	B2-U0-G2	167
		T2M	9,241	B2-U0-G2	171	9,756	B2-U0-G2	181	9,756	B2-U0-G2	181	8,178	B2-U0-G2	152	8,710	B2-U0-G2	162
		T3M	9,255	B2-U0-G2	172	9,771	B2-U0-G2	181	9,771	B2-U0-G2	181	8,191	B2-U0-G2	152	8,723	B2-U0-G2	162
		T4M	9,138	B1-U0-G2	170	9,648	B1-U0-G2	179	9,648	B1-U0-G2	179	8,087	B1-U0-G2	150	8,613	B1-U0-G2	160
		T4W	8,783	B2-U0-G3	163	9,273	B2-U0-G3	172	9,273	B2-U0-G3	172	7,773	B2-U0-G3	144	8,278	B2-U0-G3	154
		T5M	9,423	B3-U0-G2	175	9,949	B3-U0-G2	185	9,949	B3-U0-G2	185	8,339	B3-U0-G2	155	8,881	B3-U0-G2	165
		T5N	9,486	B3-U0-G1	176	10,015	B3-U0-G2	186	10,015	B3-U0-G2	186	8,395	B3-U0-G1	156	8,940	B3-U0-G1	166
		T5W	8,895	B3-U0-G3	165	9,390	B3-U0-G3	174	9,390	B3-U0-G3	174	7,871	B3-U0-G2	146	8,383	B3-U0-G3	156
		BLC	6,353	B0-U0-G2	118	6,707	B0-U0-G2	124	6,707	B0-U0-G2	124	5,622	B0-U0-G2	104	5,988	B0-U0-G2	111
		LCL/LCR	5,013	B1-U0-G1	93	5,293	B1-U0-G1	98	5,293	B1-U0-G1	98	4,437	B1-U0-G1	82	4,725	B1-U0-G1	88
A06	69	AFR	11,828	B3-U0-G2	170	12,487	B3-U0-G3	180	12,487	B3-U0-G3	180	10,467	B2-U0-G2	151	11,148	B3-U0-G2	161
		T2M	11,418	B2-U0-G2	164	12,054	B3-U0-G3	174	12,054	B3-U0-G3	174	10,104	B2-U0-G2	146	10,761	B2-U0-G2	155
		T3M	11,435	B2-U0-G2	165	12,073	B2-U0-G3	174	12,073	B2-U0-G3	174	10,120	B2-U0-G2	146	10,778	B2-U0-G2	155
		T4M	11,291	B2-U0-G2	163	11,920	B2-U0-G2	172	11,920	B2-U0-G2	172	9,992	B1-U0-G2	144	10,641	B2-U0-G2	153
		T4W	10,852	B2-U0-G3	156	11,457	B2-U0-G3	165	11,457	B2-U0-G3	165	9,603	B2-U0-G3	138	10,228	B2-U0-G3	147
		T5M	11,643	B4-U0-G2	168	12,292	B4-U0-G2	177	12,292	B4-U0-G2	177	10,304	B3-U0-G2	148	10,973	B3-U0-G2	158
		T5N	11,721	B3-U0-G2	169	12,374	B3-U0-G2	178	12,374	B3-U0-G2	178	10,372	B3-U0-G2	149	11,046	B3-U0-G2	159
		T5W	10,990	B4-U0-G3	158	11,602	B4-U0-G3	167	11,602	B4-U0-G3	167	9,725	B4-U0-G3	140	10,357	B4-U0-G3	149
		BLC	7,849	B0-U0-G2	113	8,287	B0-U0-G2	119	8,287	B0-U0-G2	119	6,946	B0-U0-G2	100	7,398	B0-U0-G2	107
		LCL/LCR	6,194	B1-U0-G2	89	6,540	B1-U0-G2	94	6,540	B1-U0-G2	94	5,482	B1-U0-G2	79	5,838	B1-U0-G2	84
A07	89	AFR	14,894	B3-U0-G3	168	15,724	B3-U0-G3	177	15,724	B3-U0-G3	177	13,181	B3-U0-G3	148	14,037	B3-U0-G3	158
		T2M	14,378	B3-U0-G3	162	15,179	B3-U0-G3	171	15,179	B3-U0-G3	171	12,724	B3-U0-G3	143	13,551	B3-U0-G3	152
		T3M	14,400	B3-U0-G3	162	15,203	B3-U0-G3	171	15,203	B3-U0-G3	171	12,743	B3-U0-G3	143	13,572	B3-U0-G3	153
		T4M	14,218	B2-U0-G3	160	15,010	B2-U0-G3	169	15,010	B2-U0-G3	169	12,582	B2-U0-G3	142	13,400	B2-U0-G3	151
		T4W	13,665	B2-U0-G3	154	14,427	B3-U0-G3	162	14,427	B3-U0-G3	162	12,093	B2-U0-G3	136	12,879	B2-U0-G3	145
		T5M	14,661	B4-U0-G2	165	15,479	B4-U0-G2	174	15,479	B4-U0-G2	174	12,974	B4-U0-G2	146	13,818	B4-U0-G2	155
		T5N	14,759	B4-U0-G2	166	15,582	B4-U0-G2	175	15,582	B4-U0-G2	175	13,061	B3-U0-G2	147	13,910	B4-U0-G2	156
		T5W	13,838	B4-U0-G3	156	14,610	B4-U0-G3	164	14,610	B4-U0-G3	164	12,246	B4-U0-G3	138	13,042	B4-U0-G3	147
		BLC	9,884	B1-U0-G2	111	10,435	B1-U0-G2	117	10,435	B1-U0-G2	117	8,747	B1-U0-G2	98	9,316	B1-U0-G2	105
		LCL/LCR	7,800	B1-U0-G2	88	8,235	B1-U0-G2	93	8,235	B1-U0-G2	93	6,903	B1-U0-G2	78	7,351	B1-U0-G2	83
A08	105	AFR	17,449	B3-U0-G3	166	18,422	B3-U0-G3	175	18,422	B3-U0-G3	175	15,442	B3-U0-G3	147	16,445	B3-U0-G3	156
		T2M	16,844	B3-U0-G3	160	17,783	B3-U0-G3	169	17,783	B3-U0-G3	169	14,906	B3-U0-G3	142	15,875	B3-U0-G3	151
		T3M	16,870	B3-U0-G3	160	17,811	B3-U0-G3	169	17,811	B3-U0-G3	169	14,929	B3-U0-G3	142	15,900	B3-U0-G3	151
		T4M	16,657	B2-U0-G3	158	17,585	B2-U0-G3	167	17,585	B2-U0-G3	167	14,740	B2-U0-G3	140	15,699	B2-U0-G3	149
		T4W	16,009	B3-U0-G3	152	16,902	B3-U0-G4	161	16,902	B3-U0-G4	161	14,168	B2-U0-G3	135	15,088	B3-U0-G3	144
		T5M	17,176	B4-U0-G2	163	18,134	B4-U0-G2	172	18,134	B4-U0-G2	172	15,200	B4-U0-G2	145	16,188	B4-U0-G2	154
		T5N	17,291	B4-U0-G2	164	18,255	B4-U0-G2	174	18,255	B4-U0-G2	174	15,301	B4-U0-G2	146	16,296	B4-U0-G2	155
		T5W	16,212	B4-U0-G3	154	17,116	B4-U0-G3	163	17,116	B4-U0-G3	163	14,347	B4-U0-G3	136	15,280	B4-U0-G3	145
		BLC	11,580	B1-U0-G2	110	12,225	B1-U0-G2	116	12,225	B1-U0-G2	116	10,248	B1-U0-G2	97	10,914	B1-U0-G2	104
		LCL/LCR	9,138	B1-U0-G2	87	9,647	B2-U0-G2	92	9,647	B2-U0-G2	92	8,087	B1-U0-G2	77	8,612	B1-U0-G2	82

# P20 PureForm LED small round

## PureForm P20 Precision optics lumen values

Perf. Package	System Watts	Dist. Type	70 CRI			70 CRI			70 CRI			80 CRI			80 CRI		
			3000K			4000K			5000K			3000K			4000K		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
A09	112	AFR	18,289	B3-U0-G3	164	19,309	B3-U0-G3	173	19,309	B3-U0-G3	173	16,185	B3-U0-G3	145	17,237	B3-U0-G3	154
		T2M	17,655	B3-U0-G3	158	18,639	B3-U0-G3	167	18,639	B3-U0-G3	167	15,624	B3-U0-G3	140	16,640	B3-U0-G3	149
		T3M	17,682	B3-U0-G3	158	18,668	B3-U0-G3	167	18,668	B3-U0-G3	167	15,648	B3-U0-G3	140	16,665	B3-U0-G3	149
		T4M	17,459	B2-U0-G3	156	18,432	B2-U0-G3	165	18,432	B2-U0-G3	165	15,450	B2-U0-G3	138	16,454	B2-U0-G3	147
		T4W	16,780	B3-U0-G4	150	17,716	B3-U0-G4	159	17,716	B3-U0-G4	159	14,850	B3-U0-G3	133	15,815	B3-U0-G3	142
		T5M	18,003	B4-U0-G2	161	19,007	B4-U0-G2	170	19,007	B4-U0-G2	170	15,932	B4-U0-G2	143	16,968	B4-U0-G2	152
		T5N	18,123	B4-U0-G2	162	19,133	B4-U0-G2	171	19,133	B4-U0-G2	171	16,038	B4-U0-G2	144	17,081	B4-U0-G2	153
		T5W	16,993	B4-U0-G3	152	17,940	B4-U0-G4	161	17,940	B4-U0-G4	161	15,038	B4-U0-G3	135	16,016	B4-U0-G3	143
		BLC	12,137	B1-U0-G3	109	12,814	B1-U0-G3	115	12,814	B1-U0-G3	115	10,741	B1-U0-G2	96	11,439	B1-U0-G2	102
LCL/LCR	9,578	B2-U0-G2	86	10,112	B2-U0-G2	90	10,112	B2-U0-G2	90	8,476	B1-U0-G2	76	9,027	B1-U0-G2	81		
A10	121	AFR	20,004	B3-U0-G3	165	21,119	B3-U0-G3	174	21,119	B3-U0-G3	174	17,703	B3-U0-G3	146	18,853	B3-U0-G3	155
		T2M	19,311	B3-U0-G3	159	20,387	B3-U0-G3	168	20,387	B3-U0-G3	168	17,089	B3-U0-G3	141	18,200	B3-U0-G3	150
		T3M	19,340	B3-U0-G3	159	20,419	B3-U0-G3	168	20,419	B3-U0-G3	168	17,115	B3-U0-G3	141	18,228	B3-U0-G3	150
		T4M	19,096	B2-U0-G3	157	20,160	B2-U0-G3	166	20,160	B2-U0-G3	166	16,899	B2-U0-G3	139	17,997	B2-U0-G3	148
		T4W	18,354	B3-U0-G4	151	19,377	B3-U0-G4	160	19,377	B3-U0-G4	160	16,242	B3-U0-G4	134	17,298	B3-U0-G4	143
		T5M	19,691	B4-U0-G2	162	20,789	B4-U0-G2	171	20,789	B4-U0-G2	171	17,426	B4-U0-G2	144	18,559	B4-U0-G2	153
		T5N	19,822	B4-U0-G2	163	20,928	B4-U0-G2	172	20,928	B4-U0-G2	172	17,542	B4-U0-G2	145	18,682	B4-U0-G2	154
		T5W	18,587	B5-U0-G4	153	19,623	B5-U0-G4	162	19,623	B5-U0-G4	162	16,448	B4-U0-G3	136	17,517	B4-U0-G3	144
		BLC	13,276	B1-U0-G3	109	14,016	B1-U0-G3	116	14,016	B1-U0-G3	116	11,748	B1-U0-G2	97	12,512	B1-U0-G3	103
LCL/LCR	10,476	B2-U0-G2	86	11,060	B2-U0-G2	91	11,060	B2-U0-G2	91	9,271	B1-U0-G2	76	9,873	B2-U0-G2	81		

## PureForm P20 Comfort optics lumen values

Perf. Package	System Watts	Dist. Type	80 CRI			80 CRI			Perf. Package	System Watts	Dist. Type	80 CRI			80 CRI		
			3000K			4000K						3000K			4000K		
			Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)				Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
A01	13	T2	1,596	B1-U0-G1	123	1,708	B1-U0-G1	131	A06	82	T2	9,159	B3-U0-G3	112	9,800	B3-U0-G3	120
		T3	1,520	B1-U0-G1	117	1,626	B1-U0-G1	125			T3	8,721	B3-U0-G3	106	9,332	B3-U0-G3	114
		T4	1,683	B1-U0-G1	129	1,801	B1-U0-G1	139			T4	9,657	B3-U0-G3	118	10,333	B3-U0-G3	126
		T5	1,496	B1-U0-G1	115	1,601	B1-U0-G1	123			T5	8,585	B3-U0-G3	105	9,186	B3-U0-G3	112
A02	23	T2	3,053	B1-U0-G1	133	3,267	B1-U0-G1	142	A07	107	T2	11,462	B3-U0-G3	107	12,264	B3-U0-G3	115
		T3	2,907	B1-U0-G1	126	3,111	B1-U0-G1	135			T3	10,914	B3-U0-G3	102	11,678	B3-U0-G3	109
		T4	3,219	B1-U0-G2	140	3,444	B1-U0-G2	150			T4	12,086	B3-U0-G3	113	12,932	B3-U0-G3	121
		T5	2,862	B2-U0-G1	124	3,062	B2-U0-G1	133			T5	10,744	B4-U0-G3	100	11,496	B4-U0-G3	107
A03	35	T2	4,256	B2-U0-G2	122	4,553	B2-U0-G2	130	A08	137	T2	13,503	B3-U0-G3	99	14,448	B3-U0-G3	105
		T3	4,052	B2-U0-G2	116	4,336	B2-U0-G2	124			T3	12,827	B3-U0-G3	94	13,724	B3-U0-G3	100
		T4	4,487	B2-U0-G2	128	4,801	B2-U0-G2	137			T4	14,237	B3-U0-G3	104	15,234	B3-U0-G3	111
		T5	3,989	B3-U0-G2	114	4,268	B3-U0-G2	122			T5	12,656	B4-U0-G3	92	13,542	B4-U0-G3	99
A04	50	T2	5,999	B2-U0-G2	120	6,419	B2-U0-G2	128	A09	143	T2	14,569	B3-U0-G3	102	15,589	B3-U0-G3	109
		T3	5,712	B2-U0-G2	114	6,112	B2-U0-G2	122			T3	13,872	B3-U0-G3	97	14,843	B3-U0-G3	104
		T4	6,325	B2-U0-G2	127	6,768	B2-U0-G2	135			T4	15,361	B3-U0-G3	107	16,436	B3-U0-G4	115
		T5	5,623	B3-U0-G2	112	6,016	B3-U0-G2	120			T5	13,655	B4-U0-G3	95	14,611	B4-U0-G3	102
A05	67	T2	7,713	B3-U0-G3	115	8,253	B3-U0-G3	123									
		T3	7,344	B3-U0-G3	110	7,858	B3-U0-G3	117									
		T4	8,132	B3-U0-G3	121	8,702	B3-U0-G3	130									
		T5	7,229	B3-U0-G3	108	7,735	B3-U0-G3	115									

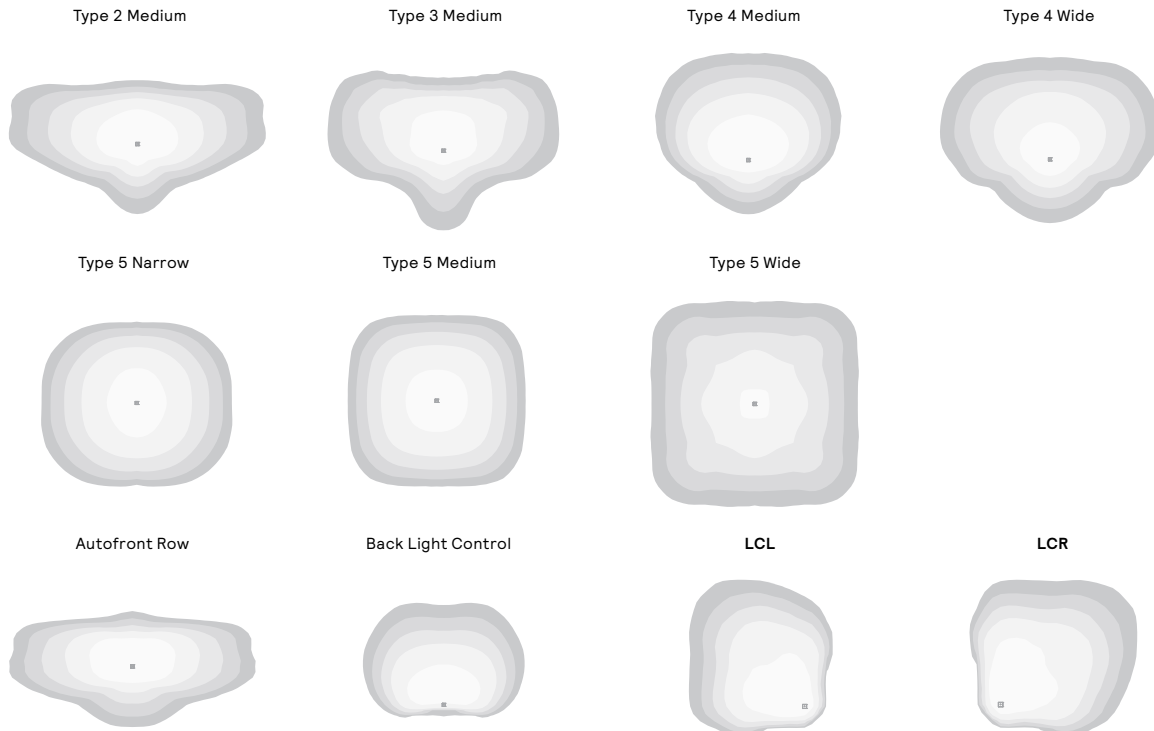
# P20 PureForm LED small round

## 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

Optic type	Ambient Temperature °C	Calculated L <sub>70</sub> Hours	L <sub>70</sub> reported per TM-21	Lumen Maintenance % at 60,000 hrs
Precision (A01-A10)	25°C	>100,000 hours	>72,000 hours	95.60%
Comfort (A01-A09)	25°C	>100,000 hours	>100,000 hours	89.10%

## Precision Optical Distributions



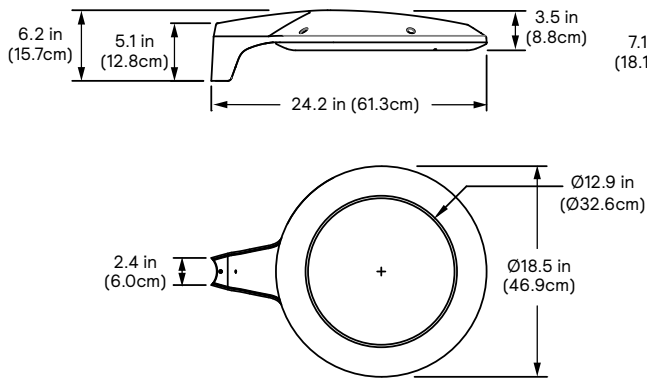
## Comfort Optical Distributions



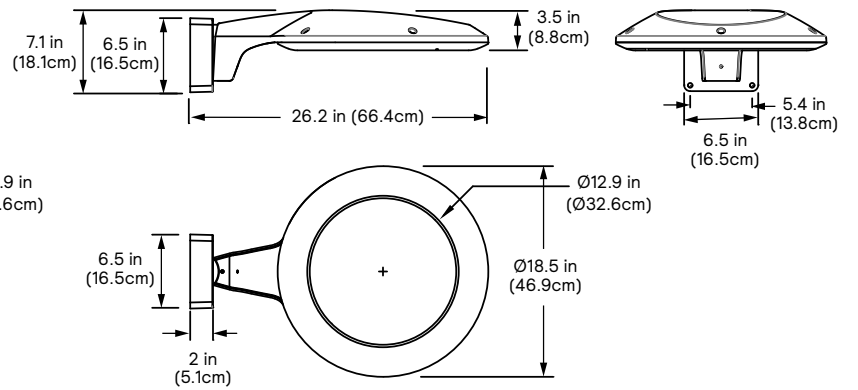
# P20 PureForm LED small round

## Dimensions

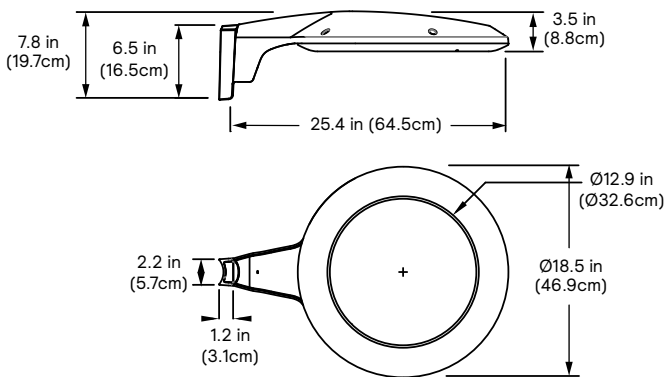
### Standard Arm (AR1)



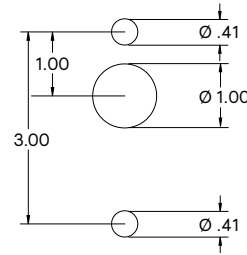
### Wall Mount (WAL)



### Retrofit Arm (RAM)



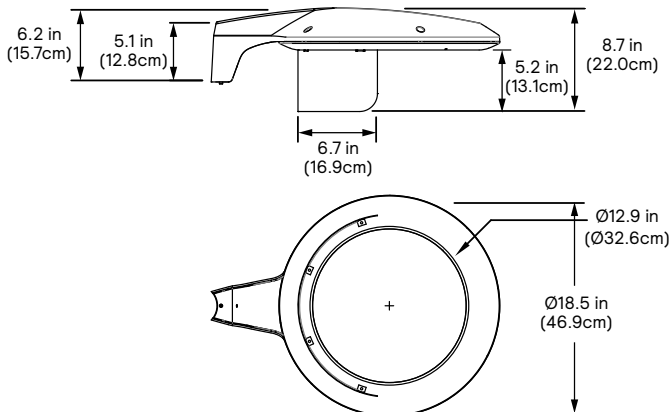
### Mounting Hole Pattern



Weight: 18 Lbs (8.0 kg)

EPA: .26ft<sup>2</sup> (.02m<sup>2</sup>)

### With External House Shield option (EHS)



# P20 PureForm LED small round

## Specifications

### Housing

One-piece cast aluminum housing with integral arm and die cast light engine frame. All die-cast parts are made of low-copper, die-cast aluminum alloy for a high resistance to corrosion. Luminaire housing rated to IP66, tested in accordance to Section 9 of IEC 60598-1.

### Vibration resistance

Luminaire is tested and rated Level 2 for Bridge and Overpass application (formerly 3G) cycles conforming to standards set forth by ANSI C136.31-2023. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

### Light engine

Comfort Edge technology provides low-glare, uniform illumination. Composed of LEDs strategically positioned on the edge of the optical plate. Light engine luminous opening size optimized to best achieve a balance between lumen output and optical performance with the need to provide visual comfort. LEDs are mounted directly to the housing to provide heat conduction and ensure maximized LED lifetime and performance. Light engine is RoHS compliant and available in 4 IES distribution options. Standard color temperatures: 3000K +/- 130K, 4000K +/- 130K, 5000K +/- 225K. Minimum CRI of 70. Also available in 2700K and 3500K color temperatures with extended leadtimes. Contact factory for details.

Precision LED Modules are comprised of 40 count LEDs mounted to metal clad printed circuit board and sealed to a polymer optic plate to meet IP66 rating.

### Energy saving benefits

System efficacy up to 215 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

### Optical systems

ComfortEdge technology provides a unique and lower perceived glare lighting solution designed to enhance visual comfort for pedestrian applications. Available in IES distribution types 2, 3, 4, and 5 available up to 17,000 lumens.

Precision optics are available in type 2, 3, 4, 5 and Backlight Control (BLC) distributions available. Internal shield option mounts to LED optics to provide additional cutoff, and dedicated BLC optics provide the most stringent cutoff to meet requirements around property lines. 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 4" round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. PureForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, PureForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are wall mounting accessories.

### Emergency Battery Backup (EM)

Emergency battery pack included integral to the luminaire, allowing for a consistent look between emergency and non-emergency luminaires. EM suitable for use in ambient temperature conditions from 0°C (+32°F) to +40°C (+104°F). EMC suitable for use in ambient temperatures from -20°C (-4°F) to +40°C (+104°F). The system is designed to have a secondary driver with relay to immediately detect AC power loss to power luminaire for a minimum of 90 minutes from the time power is lost. Available with 120-277V, or 'UNV' only.

### Controls

#### 0-10V Dimming Control Options

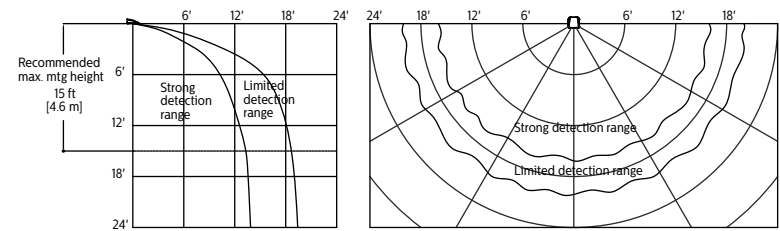
**DLEA:** Access to 0-10V dimming leads supplied through the yoke of the luminaire (for secondary dimming controls by others). Cannot be used with other control options.

**BL50L2/BL50L3:** Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL50Lx options are set/operate 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 Lenses (BL50L2/BL50L3):** 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.

**Microwave Motion Response (BL30MW/BL50MW):** Motion response luminaires include a high frequency microwave sensor, 5.8GHz +/- 75MHz microwave ISM continuous wave band with 360° coverage area, <0.5 mW transmitting power and <1 W standby power. Factory programmed settings dim fixture to 50% or 30% with time delay of 5 minutes with no stand-by period. When motion is detected, the luminaire returns to 100% full light output and will remain on full power for 5 minutes.



**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 of 10 output positions. Consult factory for specific dimming settings for each position.

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 +/- 5%

#### 0-10V Lighting Control Options

**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.

**Twist-Lock Receptacle (TLR5/TLR7/TLRPC):** TLR options come with 5 pin or with 7 pins connected to 0-10V driver and not all pins will be connected. 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 specified with receptacle and photoelectric cell (TLRPC), 7-pin receptacle is supplier and voltage must be specified. When ordering Twist-lock receptacle (TLR5 or TLR7), photocell or shorting cap is not included. If Twistlock receptacle option is ordered with Dimming Control option, then dimming leads from driver will not be connected to TLR but consumed by selected device. Devices installed to NEMA twist-lock Receptacle must be IPX6 rated.

#### Sensor Ready(SR)/DALI Control Options

**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. Time clock or photocell is required for on/off functionality to allow for midpoint calculation. Cannot be used with other dimming control options.

# P20 PureForm LED small round

## Specifications (cont'd)

**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. D4i certification validates compliance with specifications for data exchange in connected lighting systems, ensuring interoperability, compatibility, and efficient operation. It also assures customers that the device meets industry standards.

### Outdoor Interact:

Scalable connected sensor with integral occupancy and daylight sensing, supports wireless mesh connectivity. Sensor works in the Foundation mode when configured without a gateway or in an Interact Advanced mode if a compatible gateway (can be added later) is used. Interact offers an app, a portal and a broad portfolio of Interact ready Indoor and Outdoor luminaires, lamps and retrofit kits all working on the same system. Startup is implemented via Interact Pro App (available in iOS® or Android®) and Bluetooth® connectivity. The app provides flexibility to choose between a gateway or non gateway mode for setup. Setup with the gateway requires wired Internet access to the gateway. Prepare project configuration steps remotely and use IRT9015 remote accessory (ordered separately) or the App on-site to identify and group devices together. WIAP includes SR driver and SR receptacle. Daylight harvesting supported through dimming – activated via the Interact app. Sensors are available in black or white finish and high or low mounting height lenses. IP66 rated.

For more information on Interact visit:

[www.interact-lighting.com/interactproscalablesystem](http://www.interact-lighting.com/interactproscalablesystem)

### SR/DALI Lighting Control Options

**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.

**Twist-Lock Receptacle (TR5/TR7/ TLP):** TLR5 includes with 5 pin (Type B) receptacle connected to SR/DALI driver all applicable connections made to driver and is not D4i compliant. TR7 includes (Type D-24) connected to SR/DALI driver with all leads connected for use of 3rd party control systems. Receptacles are in accordance to ANSI C136.41. Receptacle located on top of luminaire housing. When specified with receptacle and photoelectric cell (TRPC), 7-pin receptacle is supplied and voltage must be specified. When ordering Twist-lock receptacle (TR5 or TR7), photocell or shorting cap is not included.

## 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). Most PureForm P20 comfort configurations are qualified under Standard DesignLights Consortium® category. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

## Finish

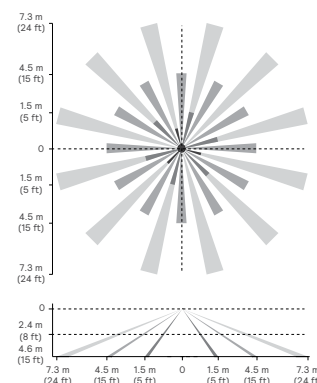
Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidic isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DG), and medium gray (MG). Consult factory for specs on optional or custom colors.

## Warranty

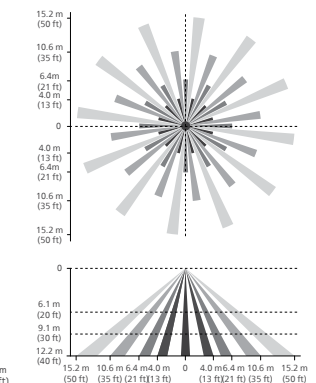
PureForm luminaires feature a 5-year limited warranty.

See [signify.com/warranties](http://signify.com/warranties) for complete details and exclusions.

LW low sensor



HW high sensor



**Note:** The beam patterns shown are intended solely as a general guide and are not to scale. Sensing capabilities and coverage area depend on many factors including the size, speed and direction of travel of persons and vehicles; sensor mounting height; environmental and site conditions; etc.