

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

TT TopTier

Parking Garage Luminaire

Product Features



Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Optical Configurations [page 2](#)
- Mounting Details [page 3](#)
- Energy and Performance Data [page 4](#)
- Control Options [page 6](#)

Product Certifications



Quick Facts

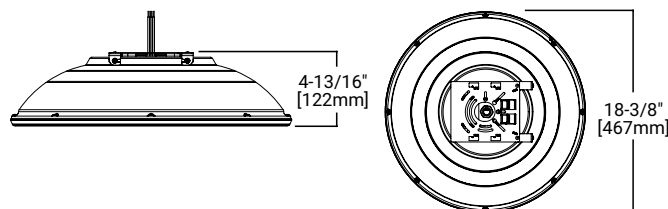
- Lumen packages range from 2,757 - 22,831
- Efficacies up to 146 lumens per watt
- Utilizes patented waveguide technology for maximum visual comfort
- Surface, pendant, trunion, wall and direct conduit mount options

Connected Systems

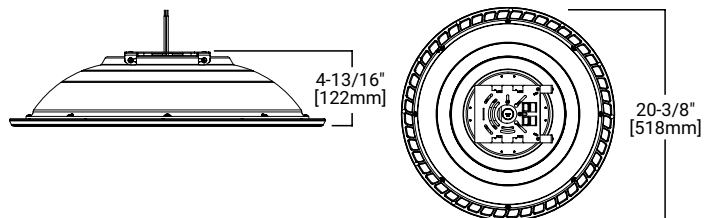
- WaveLinx Lite
- Synapse

Dimensional Details

SURFACE MOUNT
 CQ, MQ, WQ and RW: D1-D6
 DL: D1-D4
 Base luminaire weight: 18.2 lbs (8.3 kg)



SURFACE MOUNT
 CQ, MQ, WQ and RW: D7+
 DL: D5+
 Base luminaire weight: 20.1 lbs (9.1 kg)



NOTES:
 1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
 2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: TT-D3-740-U-WQ-STM-30L-AP

Product Family	Configuration	Color Temperature	Voltage	Distribution	Mounting ³¹	Lead Length ⁷	Finish
TT =TopTier ¹ BAA-TT =TopTier, Buy American Act Compliant ²⁷ TAA-TT =TopTier, Trade Agreements Act Compliant ²⁷	D1 =4,000 Nominal Lumens D2 =5,500 Nominal Lumens D3 =6,500 Nominal Lumens D4 =8,000 Nominal Lumens D5 =10,000 Nominal Lumens D6 =13,000 Nominal Lumens D7 =15,000 Nominal Lumens D8 =18,000 Nominal Lumens D9 =20,000 Nominal Lumens D10 =22,000 Nominal Lumens	735 =70 CRI, 3500K CCT 740 =70 CRI, 4000K CCT 750 =70 CRI, 5000K CCT 830 =80 CRI, 3000K CCT AMB =Amber 590nm ²⁹	U =120-277V H =347-480V ^{22, 26} 1 =120V 2 =208V 3 =240V 4 =277V 8 =480V 9 =347V	CQ =Concentrated MQ =Medium WQ =Wide RW =Rectangular Wide ³⁰ DL =Drive Lane / Type 4 ³⁰	[Blank] =Surface Mount ¹⁶ TMB =Trunnion Mount with Connection Box DPM =Decorative Pendant Mount ⁴ WM =Wall Mount STM =Stem Mount to 1/2" conduit ¹⁶	[Blank] =6" 30L =30" 36L =36" 48L =48" 72L =72" 108L =108" 120L =120" 144L =144"	NW =White AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic

Options (Add as Suffix)			Accessories (Order Separately) ²⁸	
F =Single Fuse (120, 277 or 347V Specify Voltage) FF =Double Fuse (208, 240 or 480V Specify Voltage) IBP =Integral Battery Pack ^{5, 24} IBP-CEC =Integral Battery Pack, CEC compliant ⁵ ITS =Integral Transfer Switch ⁴ 924 =UL924 listed luminaire ¹⁹ CG =Clear Glass ⁹ SG =Solite® Glass ⁹ UPL =Uplight ⁶ TR =Tamper Resistant Hardware NAT =Natatorium finish DALI =DALI Driver ¹⁵ MS/DIM-L08 =Dimming Occupancy Sensor (<9' Mounting) ^{11, 17} MS/DIM-L20 =Dimming Occupancy Sensor (9' - 20' Mounting) ^{11, 17} SPB1 =Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting ^{11, 21} SPB2 =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting ^{11, 21}	ZW =WaveLinx-enabled 4-PIN Twistlock Receptacle ^{22, 23} ZD =SR Driver-enabled 4-PIN Twistlock Receptacle ^{22, 23} ZW-WOBWH =WaveLinx Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{22, 23} ZW-WOFWH =WaveLinx Lite, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{22, 23} ZD-WOBWH =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{22, 23} ZD-WOFWH =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{22, 23} ZW-SWPD4WH =WaveLinx Pro, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{22, 23} ZW-SWPD5WH =WaveLinx Pro, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{22, 23} ZD-SWPD4WH =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{22, 23} ZD-SWPD5WH =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{22, 23} LWR-LW =Enlighted Wireless Sensor, Wide Lens 8' - 16' Mounting Height ^{11, 18} LWR-LN =Enlighted Wireless Sensor, Narrow Lens 16' - 40' Mounting Height ^{11, 18} DIM10-L08 =Synapse occupancy sensor (<8' Mounting) ²² DIM10-L20 =Synapse occupancy sensor (8'-20' Mounting) ²²	MA1252 =Replacement 10kV Surge Module TT/WG =Wire Guard ²⁵ TT/BG-UP-XX =Bird Guard ^{12, 13} TT/HSS-XX =House Side Shield ²⁵ DPMS36-XX =36" Pendant Mount Stem ^{12, 14} DPMS48-XX =48" Pendant Mount Stem ^{12, 14} DPMS96-XX =96" Pendant Mount Stem ^{12, 14} DPMST36-XX =36" Pendant Mount Stem with Tether ^{12, 14, 31} DPMST48-XX =48" Pendant Mount Stem with Tether ^{12, 14, 31} DPMST96-XX =96" Pendant Mount Stem with Tether ^{12, 14, 31} FSIR-100 =Wireless Configuration Tool for Occupancy Sensor ¹⁷ WOB-WH =WaveLinx Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{20, 22} WOF-WH =WaveLinx Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{20, 22} SWPD4-WH =WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{20, 22, 23} SWPD5-WH =WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{20, 22, 23} SPB4 =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 20' - 40' Mounting ^{11, 21}		

- NOTES:**
- DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
 - Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
 - Not available with D7 - D10 configurations.
 - Order Pendant Mount Stem accessory.
 - IBP ambient operating temperature: -20°C to 35°C (D1-D3), -20°C to 25°C (D4-D6). Not available with D7-D10 configurations, DALI, or ZD options.
 - Additional 8.0W. Provides 920 lumens. Not available with D10 configuration.
 - Choose lead length for Surface Mount and Stem Mount only. TMB, DPM and WM lengths predetermined.
 - Not available with CQ.
 - Standard with CQ, option available with WQ only.
 - U voltage only. Ambient operating temperature: -20°C to 50°C (D1-D4) or -20°C to 40°C (D5-D6). UL924 listed component.
 - Includes integral photocell.
 - Specify color in place of XX.
 - Designed for use with Stem Mount and Decorative Pendant Mount only.
 - Designed for use with Decorative Pendant Mount only.
 - Not available with H voltage or IBP. Not compatible with MS/DIM or LWR sensors.
 - Specify Lead Length for wire harness length.
 - The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay and more.
 - Enlighted wireless sensors are factory installed only, and require network components in appropriate quantities.
 - 924 option provides luminaire UL924 listing, used in conjunction with ITS or IBP-CEC.
 - Requires ZW or ZD receptacle.
 - Sensor configuration mobile application required for configuration. See controls page for details.
 - Cannot be used with other control options.
 - For WaveLinx applications, WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. Not required for WaveLinx Lite Commercial (LC) applications.
 - Specify 120V or 277V.
 - TT/WG and TT/HSS cannot be installed together. TT/HSS & TT/WG not available on D7-D10 configurations.
 - D4-D10 only. Not compatible with battery.
 - Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC.PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
 - Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
 - Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose lumen package D1.
 - Not available in D10 configuration.
 - For installations in locations such as gymnasiums, arenas, sports complexes, multi-purpose rooms, and any other locations where the fixture potentially will be subject to impacts from external sources, DPM mounting is required, utilizing the stem kit with tether (DPMST*). Surface Mount, Trunnion Mount (TMB), Wall Mount (WM) and Stem Mount (STM) are prohibited in these applications.

Product Specifications

Construction

- Low profile, die-cast aluminum housing provides a clean, symmetric aesthetic

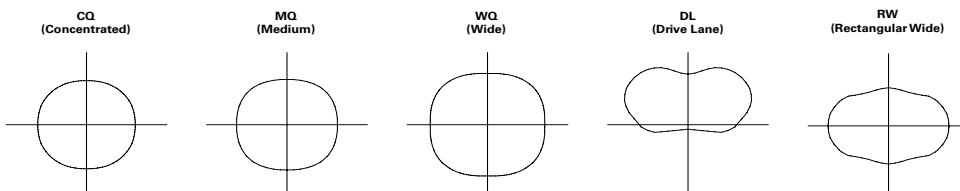
Optics

- Five optical distributions utilizing visual comfort waveguide technology
- 10 lumen packages, ranging from 2,757 to 22,831
- Integral uplight option utilizes a dedicated, 8W light engine, producing 920 lumens for reduced visual contrast and cave effect
- IDA Certified for 3000k CCT and warmer only. Not available with uplight option.

Electrical

- D1-D6: -40C - 50C operating temperature
- D7-D10: -40C - 40C operating temperature

Optical Distributions



- Greater than 90% lumen maintenance at 50,000 hours
- IP66 rated
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- 10kV surge module standard
- 0-10V dimming standard

Mounting

- Surface mount directly to square or octagonal 4" surface or recessed junction box using quick mount bracket
- Optional stem mount bracket with set screw for direct 1/2" NPS conduit mounting
- Trunnion, decorative pendant, and wall mount options also available
- For installations in locations such as

gymnasiums, arenas, sports complexes, multipurpose rooms, and any other locations where the fixture potentially will be subject to impacts from external sources, the stem kit with tether (DPMST*) is required.

Finish

- 2.5 mil nominal TGIC powder coat thickness
- Finishes include white, black, bronze, gray, dark platinum and graphite metallic
- RAL and custom color matches available
- Natatorium option (NAT) available, providing 5,000 hour salt spray rating per ASTM B117, with a scribe rating of 9 per ASTM D1654

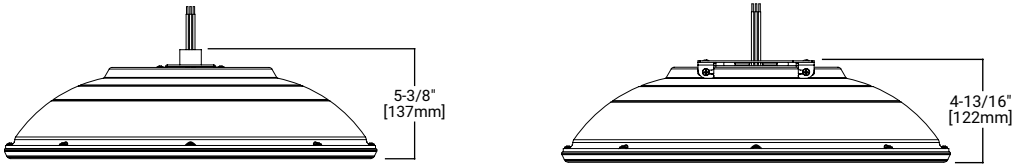
Warranty

- Five-year warranty

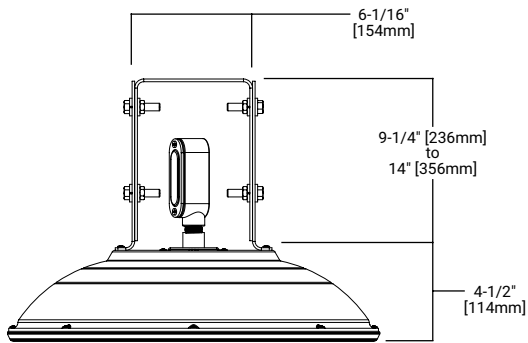
Mounting Details

*D1-D6 configuration shown (D1-D4 for DL distribution)

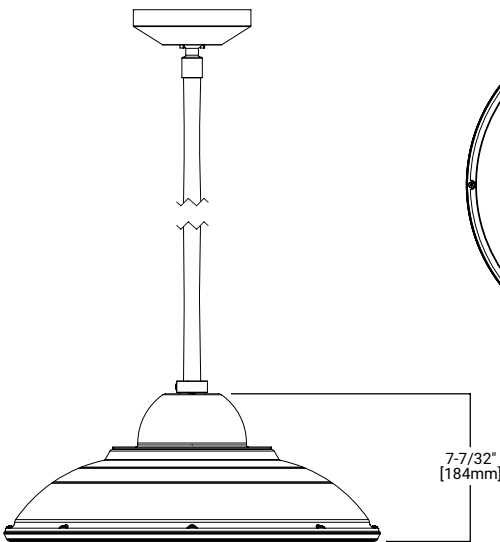
Stem Mount



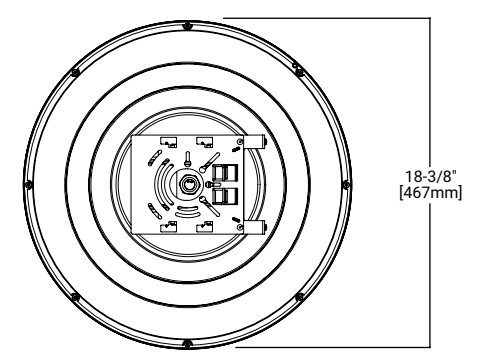
Trunnion Mount



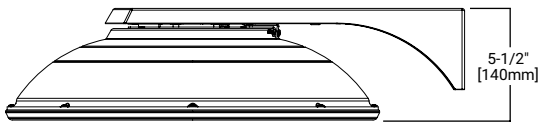
Decorative Pendant Mount



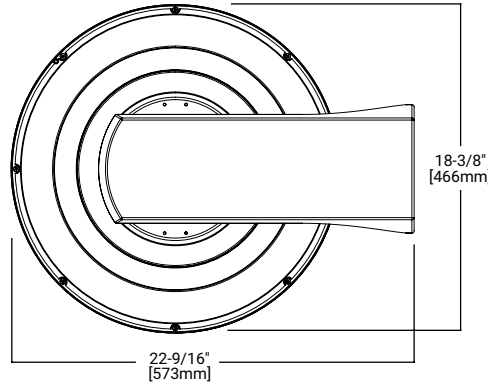
Top View



Wall Mount

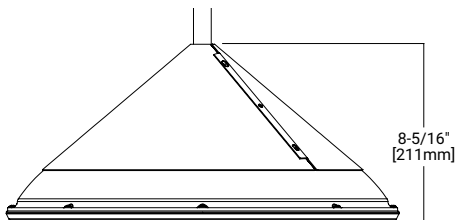


Top View - Wall Mount

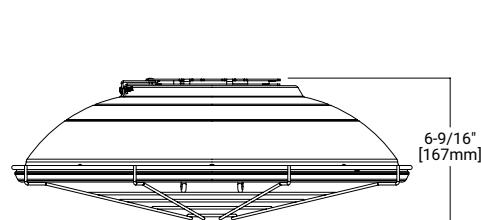


Accessories

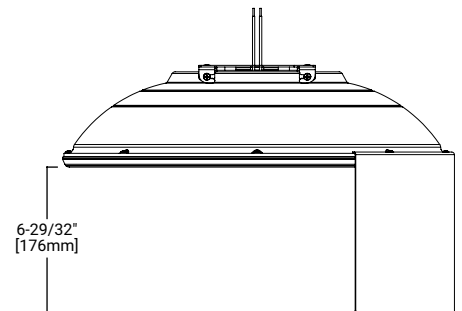
Bird Guard (TT/BG-UP-XX)



Wire Guard (TT/WG)



House Side Shield (TT/HSS-XX)



Energy and Performance Data

[View TopTier IES files](#)

Power and Lumens (3000K/3500K/4000K/5000K)

Lumen Package		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10		
Power (Wattage) CQ, MQ, WQ		28.0	39.2	47.2	57.6	74.7	105.2	124.7	148.7	173.1	193.8		
Power (Wattage) RW Only		28.0	39.2	47.2	57.6	74.7	105.2	127.1	152.6	178.0	--		
Power (Wattage) DL Only		28.8	40.5	48.8	59.8	62.3	97.4	127.1	152.6	178.0	--		
Distribution													
3000K CCT 80 CRI	CQ Concentrated	Lumens	3,409	4,640	5,595	6,660	8,383	11,030	12,307	14,411	16,430	18,001	
		BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2
		Lumens per Watt	122	118	119	116	112	105	99	97	95	93	
	MQ Medium	Lumens	3,647	4,964	5,986	7,125	8,969	11,800	12,854	15,053	17,161	18,802	
		BUG Rating	B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	130	127	127	124	120	112	103	101	99	97	
	WQ Wide	Lumens	3,449	4,695	5,662	6,740	8,483	11,161	12,350	14,463	16,489	18,065	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	123	120	120	117	114	106	99	97	95	93	
	RW Rectangular Wide	Lumens	2,757	3,753	4,526	5,387	6,781	8,922	11,977	13,619	15,122	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	98	96	96	94	91	85	94	89	85	--	
	DL Drive Lane / Type 4	Lumens	2,959	3,985	4,762	5,622	6,537	8,771	11,834	13,337	14,768	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	--	
		Lumens per Watt	103	98	98	94	105	90	93	87	83	--	
	3500K CCT 70 CRI	CQ Concentrated	Lumens	3,618	4,925	5,940	7,070	8,899	11,708	14,944	17,500	19,951	21,858
			BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
			Lumens per Watt	129	126	126	123	119	111	120	118	115	113
MQ Medium		Lumens	3,872	5,270	6,355	7,564	9,520	12,527	15,609	18,279	20,839	22,831	
		BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	138	134	135	131	127	119	125	123	120	118	
WQ Wide		Lumens	3,662	4,984	6,011	7,154	9,005	11,848	14,997	17,562	20,022	21,936	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4	
		Lumens per Watt	131	127	127	124	121	113	120	118	116	113	
RW Rectangular Wide		Lumens	2,927	3,984	4,805	5,719	7,198	9,471	14,544	16,537	18,363	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	105	102	102	99	96	90	114	108	103	--	
DL Drive Lane / Type 4		Lumens	3,141	4,230	5,055	5,968	7,938	10,650	14,370	16,195	17,933	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	--	
		Lumens per Watt	109	104	104	100	127	109	113	106	101	--	
4000K/ 5000K CCT 70 CRI		CQ Concentrated	Lumens	3,828	5,211	6,284	7,480	9,415	12,387	14,944	17,500	19,951	21,858
			BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
			Lumens per Watt	137	133	133	130	126	118	120	118	115	113
	MQ Medium	Lumens	4,096	5,575	6,723	8,002	10,072	13,253	15,609	18,279	20,839	22,831	
		BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	
		Lumens per Watt	146	142	142	139	135	126	125	123	120	118	
	WQ Wide	Lumens	3,874	5,273	6,359	7,569	9,527	12,535	14,997	17,562	20,022	21,936	
		BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4	
		Lumens per Watt	138	135	135	131	128	119	120	118	116	113	
	RW Rectangular Wide	Lumens	3,097	4,215	5,083	6,050	7,615	10,020	14,544	16,537	18,363	--	
		BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	--	
		Lumens per Watt	111	108	108	105	102	95	114	108	103	--	
	DL Drive Lane / Type 4	Lumens	3,323	4,475	5,348	6,314	7,938	10,650	14,370	16,195	17,933	--	
		BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	--	
		Lumens per Watt	115	110	110	106	127	109	113	106	101	--	

Energy and Performance Data

CQ, MQ and WQ Distributions

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
Power (Wattage)	28.0	39.2	47.2	57.6	74.7	105.2	124.7	148.7	173.1	193.8
Input Current @ 120V (A)	0.23	0.33	0.39	0.48	0.62	0.88	1.09	1.31	1.53	1.72
Input Current @ 208V (A)	0.13	0.19	0.23	0.28	0.36	0.51	0.57	0.67	0.78	0.88
Input Current @ 240V (A)	0.12	0.16	0.20	0.24	0.31	0.44	0.56	0.66	0.76	0.85
Input Current @ 277V (A)	0.10	0.14	0.17	0.21	0.27	0.38	0.49	0.58	0.67	0.74
Input Current @ 347V (A)	0.08	0.11	0.14	0.17	0.22	0.30	0.40	0.47	0.55	0.62
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.16	0.22	0.30	0.35	0.41	0.45

RW Distribution

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9
Power (Wattage)	28.0	39.2	47.2	57.6	74.7	105.2	127.1	152.6	178.0
Input Current @ 120V (A)	0.23	0.33	0.39	0.48	0.62	0.88	1.11	1.34	1.58
Input Current @ 208V (A)	0.13	0.19	0.23	0.28	0.36	0.51	0.58	0.69	0.81
Input Current @ 240V (A)	0.12	0.16	0.20	0.24	0.31	0.44	0.56	0.67	0.78
Input Current @ 277V (A)	0.10	0.14	0.17	0.21	0.27	0.38	0.50	0.59	0.68
Input Current @ 347V (A)	0.08	0.11	0.14	0.17	0.22	0.30	0.41	0.48	0.57
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.16	0.22	0.30	0.36	0.42

DL Distribution

Lumen Package	D1	D2	D3	D4	D5	D6	D7	D8	D9
Power (Wattage)	28.8	40.5	48.8	59.8	62.3	97.4	127.1	152.6	178.0
Input Current @ 120V (A)	0.24	0.34	0.41	0.50	0.55	0.86	1.11	1.34	1.58
Input Current @ 208V (A)	0.14	0.19	0.23	0.29	0.28	0.44	0.58	0.69	0.81
Input Current @ 240V (A)	0.12	0.17	0.20	0.25	0.28	0.43	0.56	0.67	0.78
Input Current @ 277V (A)	0.10	0.15	0.18	0.22	0.24	0.37	0.50	0.59	0.68
Input Current @ 347V (A)	0.08	0.12	0.14	0.17	0.21	0.31	0.41	0.48	0.57
Input Current @ 480V (A)	0.06	0.08	0.10	0.12	0.15	0.23	0.30	0.36	0.42

Lumen Maintenance

Lumen Package	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
D1-D6 (D1 - D4 DL/T4)	25°C	98.0%	95.2%	94.1%	89.8%	> 300,000
	40°C	97.9%	94.8%	93.6%	89.0%	> 290,000
	50°C	97.7%	94.5%	93.2%	88.4%	> 270,000
D7 - D10 (D5+ DL/T4)	25°C	95.8%	93.2%	92.2%	88.2%	> 300,000
	40°C	93.9%	89.7%	88.1%	81.9%	> 180,000

* Supported by IES TM-21 standards

**Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

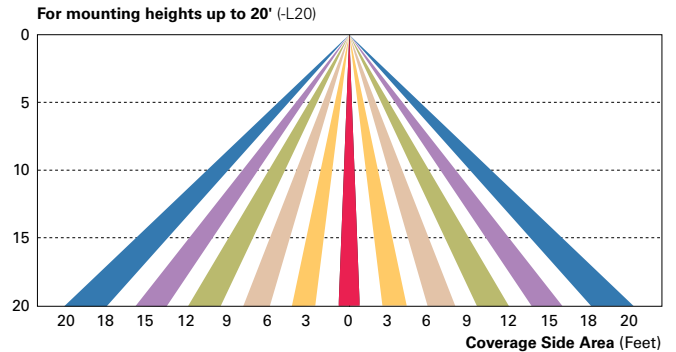
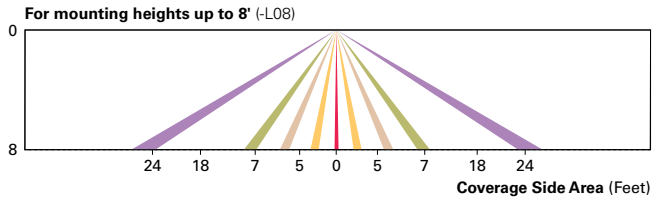
Lumen Multiplier

Ambient Temperature	Multiplier
0°C	1.03
10C	1.02
25°C	1.00
40°C	0.98
50°C	0.97

Control Options

0-10V (D) 0-10V dimming comes standard on all TopTier configurations for use with integrated or external lighting controls.

Dimming Occupancy Sensor (MS/DIM) These sensors are factory installed in the luminaire, dimming to 50% after five minutes of no motion detected. When motion is detected, the luminaire output is 100%. Includes an integral photocell that can be programmed for “dusk-to-dawn” operation. The FSIR-100 programming tool can be utilized to adjust dimming level, time delay, sensitivity and other parameters. Two lens options provide optimal coverage patterns up to 20’ mounting height.



Dimming Occupancy Sensor (SPB)

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for “dusk-to-dawn” control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8’-40’. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

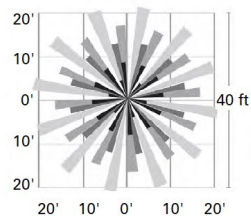
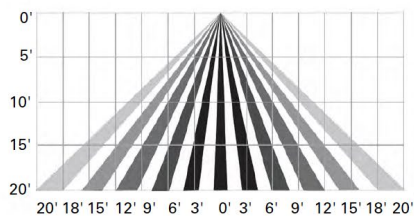
SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

WaveLinx Wireless Control and Monitoring System

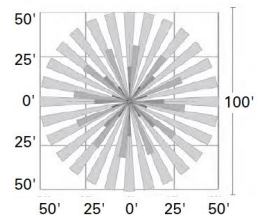
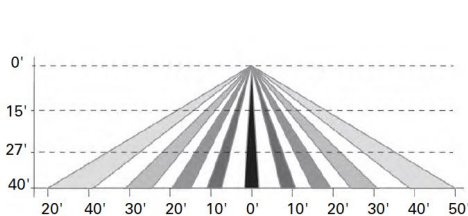
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx and WaveLinx Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WOLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinx sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinx sensors, power monitoring, and advanced functionality. WaveLinx (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down

to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7’ to 40’. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7’ to 40’. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15’ (SWPD4 and WOB)

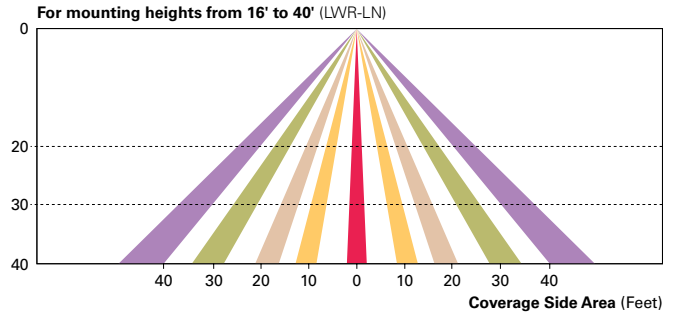
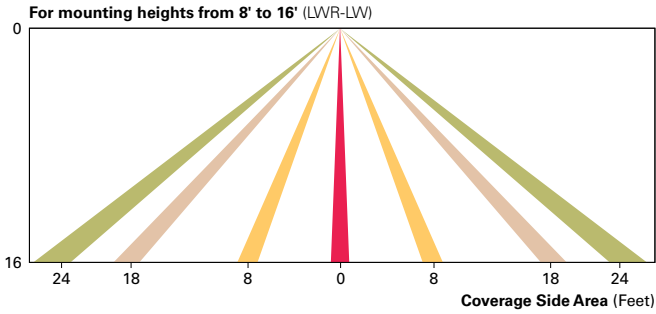


For mounting heights up to 40’ (SWPD5 and WOF)



WaveLinx-Ready 4-PIN Twistlock Receptacle (ZW) Includes the WaveLinx control module, integrated 4-Pin receptacle, and standard 0-10V dimming driver, enabling the subsequent addition of a WaveLinx sensor.

Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN) The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.



Synapse (DIM10) SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 control module and FSP-20 motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty, and terms and conditions.

