

Project		Catalog #		Type	
Prepared by		Notes		Date	



# McGraw-Edison

## TT TopTier

Visual Comfort Luminaire

### Product Features



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### Product Certifications



### Quick Facts

- Lumen packages range from 2,757 - 22,831
- Efficacies up to 146 LPW
- Patented waveguide technology for maximum visual comfort
- Mount options: surface, pendant, trunnion, wall, and direct conduit

### Connected Systems

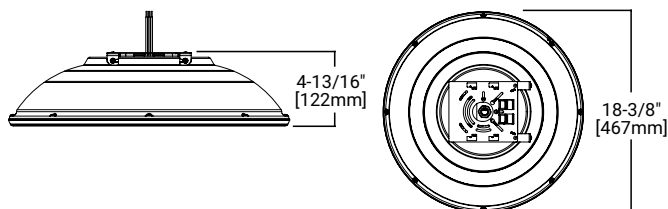
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless
- AirMesh

### Dimensional Details

#### SURFACE MOUNT

CQ, MQ, WQ and RW: D1-D6  
DL: D1-D4

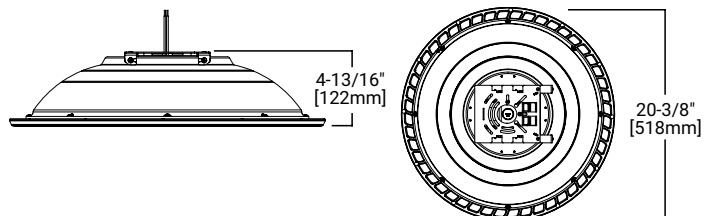
Base luminaire weight: 18.2 lbs (8.3 kg)



#### SURFACE MOUNT

CQ, MQ, WQ and RW: D7+  
DL: D5+

Base luminaire weight: 20.1 lbs (9.1 kg)



## Ordering Information

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

Product Family	Configuration	Color Temperature	Voltage	Distribution	Mounting <sup>30</sup>	Lead Length <sup>7</sup>	Finish
<b>TT</b> =TopTier <sup>1</sup> <b>BAA-TT</b> =TopTier, Buy American Act Compliant <sup>26</sup> <b>TAA-TT</b> =TopTier, Trade Agreements Act Compliant <sup>26</sup>	<b>D1</b> =4,000 Nominal Lumens <b>D2</b> =5,500 Nominal Lumens <b>D3</b> =6,500 Nominal Lumens <b>D4</b> =8,000 Nominal Lumens <b>D5</b> =10,000 Nominal Lumens <b>D6</b> =13,000 Nominal Lumens <b>D7</b> =15,000 Nominal Lumens <b>D8</b> =18,000 Nominal Lumens <b>D9</b> =20,000 Nominal Lumens <b>D10</b> =22,000 Nominal Lumens	<b>735</b> =70 CRI, 3500K CCT <b>740</b> =70 CRI, 4000K CCT <b>750</b> =70 CRI, 5000K CCT <b>830</b> =80 CRI, 3000K CCT <b>AMB</b> =Amber 590nm <sup>28</sup>	<b>U</b> =120-277V <b>H</b> =347-480V <sup>21, 25</sup> <b>1</b> =120V <b>2</b> =208V <b>3</b> =240V <b>4</b> =277V <b>8</b> =480V <b>9</b> =347V	<b>CQ</b> =Concentrated <b>MQ</b> =Medium <b>WQ</b> =Wide <b>RW</b> =Rectangular Wide <sup>29</sup> <b>DL</b> =Drive Lane / Type 4 <sup>29</sup>	<b>[Blank]</b> =Surface Mount <sup>16</sup> <b>TMB</b> =Trunnion Mount with Connection Box <b>DPM</b> =Decorative Pendant Mount <sup>4</sup> <b>WM</b> =Wall Mount <b>STM</b> =Stem Mount to 1/2" conduit <sup>16</sup> <b>STM3</b> =Stem Mount to 3/4" conduit <sup>16</sup>	<b>[Blank]</b> =6" <b>30L</b> =30" <b>36L</b> =36" <b>48L</b> =48" <b>72L</b> =72" <b>108L</b> =108" <b>120L</b> =120" <b>144L</b> =144"	<b>NW</b> =White <b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic
Options (Add as Suffix)					Accessories (Order Separately) <sup>27</sup>		
<b>F</b> =Single Fuse (120, 277 or 347V Specify Voltage) <b>FF</b> =Double Fuse (208, 240 or 480V Specify Voltage) <b>IBP</b> =Integral Battery Pack <sup>5, 23</sup> <b>IBP-CEC</b> =Integral Battery Pack, CEC compliant <sup>5</sup> <b>ITS</b> =Integral Transfer Switch <sup>3, 10</sup> <b>924</b> =UL924 listed luminaire <sup>19</sup> <b>CG</b> =Clear Glass <sup>9</sup> <b>SG</b> =Solite® Glass <sup>9</sup> <b>TC</b> =TotalComfort Trim Ring <sup>9</sup> <b>UPL</b> =Uplight <sup>6</sup> <b>TR</b> =Tamper Resistant Hardware <b>NAT</b> =Natatorium finish <b>DALI</b> =DALI Driver <sup>15</sup> <b>MS/DIM-L08</b> =Dimming Occupancy Sensor (<9' Mounting) <sup>11, 17</sup> <b>MS/DIM-L20</b> =Dimming Occupancy Sensor (9' - 20' Mounting) <sup>11, 17</sup> <b>SPB1</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting <sup>11, 28</sup> <b>SPB2</b> =Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting <sup>11, 28</sup>		<b>WLS2WH</b> =WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting <sup>21, 22</sup> <b>WLS4WH</b> =WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting <sup>21, 22</sup> <b>WPS2WH</b> =WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting <sup>21, 22</sup> <b>WPS4WH</b> =WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable 15' - 40' Mounting <sup>21, 22</sup> <b>LWR-LW</b> =Enlighted Wireless Sensor, Wide Lens 8' - 16' Mounting Height <sup>11, 18</sup> <b>LWR-LN</b> =Enlighted Wireless Sensor, Narrow Lens 16' - 40' Mounting Height <sup>11, 18</sup> <b>DIM10-L08</b> =AirMesh occupancy sensor (<8' Mounting) <sup>21</sup> <b>DIM10-L20</b> =AirMesh occupancy sensor (8'-20' Mounting) <sup>21</sup>			<b>MA1252</b> =Replacement 10kV Surge Module <b>TT/WG</b> =Wire Guard <sup>24</sup> <b>TT/BG-UP-XX</b> =Bird Guard <sup>12, 13</sup> <b>TT/HSS-XX</b> =House Side Shield <sup>24</sup> <b>DPMS36-XX</b> =36" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS48-XX</b> =48" Pendant Mount Stem <sup>12, 14</sup> <b>DPMS96-XX</b> =96" Pendant Mount Stem <sup>12, 14</sup> <b>DPMST36-XX</b> =36" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>DPMST48-XX</b> =48" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>DPMST96-XX</b> =96" Pendant Mount Stem with Tether <sup>12, 14, 30</sup> <b>FSIR-100</b> =Wireless Configuration Tool for Occupancy Sensor <sup>17</sup>		

- NOTES:**
- DesignLights Consortium® Qualified. Refer to [www.designlights.org](http://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 or DALI 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.
  - 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](http://www.designlights.org) 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

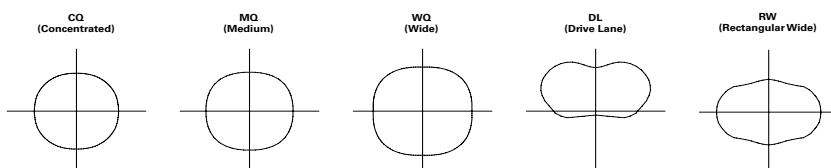
## Optics

- 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
- TC TotalComfort trim ring option occludes high angle light for maximum visual comfort. Peak angle and max vertical reduced by 5°

## Electrical

- D1-D6: -40C - 50C operating temperature
- D7-D10: -40C - 40C operating temperature
- Greater than 90% lumen maintenance at 50,000 hours
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- 10kV surge module standard
- 0-10V dimming standard

## Optical Distributions



## 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" or 3/4" 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 colors also available. Additional charges and lead time apply.
- Natatorium option (NAT) available, providing 5,000 hour salt spray rating per ASTM B117, with a scribe rating of 9 per ASTM D1654

## Compliance

- Visit [www.designlights.org](http://www.designlights.org) to confirm qualification. Not all product variations are DLC qualified
- IDA Darksky approved
- IP66 rated

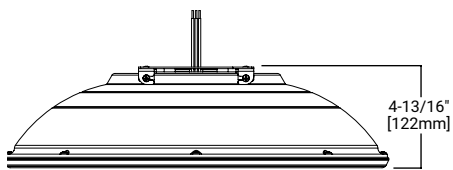
## Warranty

- Five year limited warranty, consult website for details [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

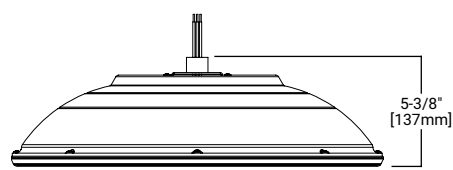
## Mounting Details

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

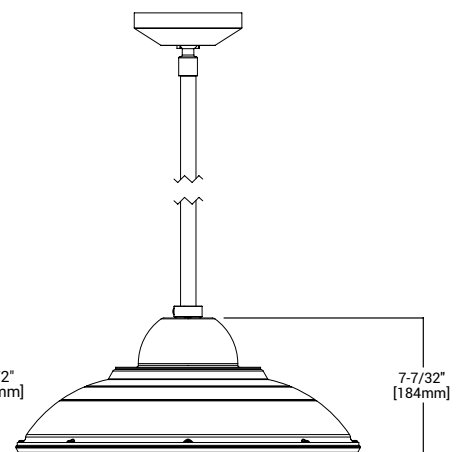
Side View (Surface Mount)



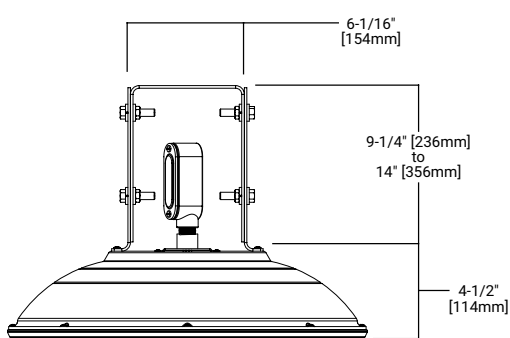
Stem Mount



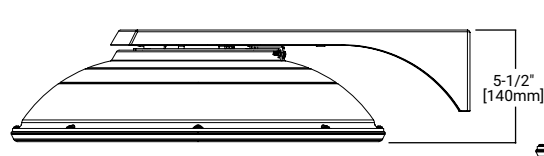
Decorative Pendant Mount



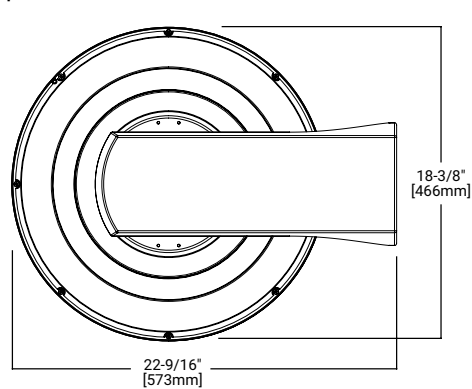
Trunnion Mount



Wall Mount

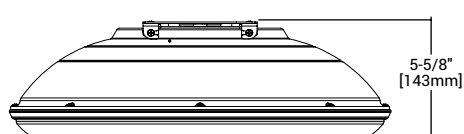


Top View - Wall Mount

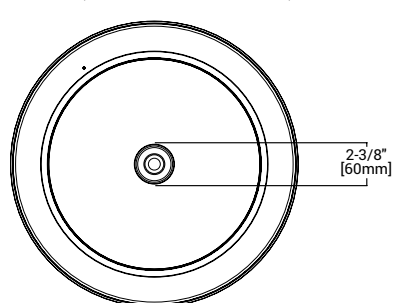


## Options Details

TotalComfort (TC) Trim Ring

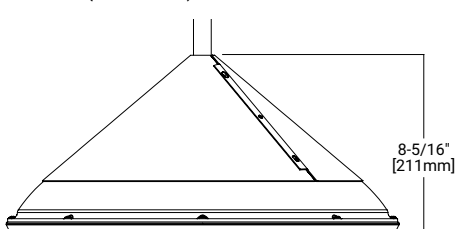


Bottom View (with MS/DIM Motion Sensor)

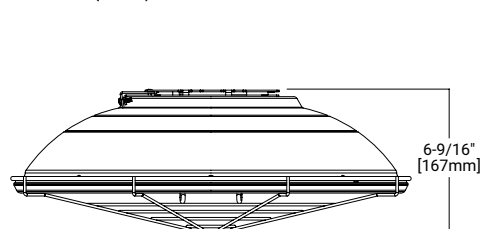


## Accessories

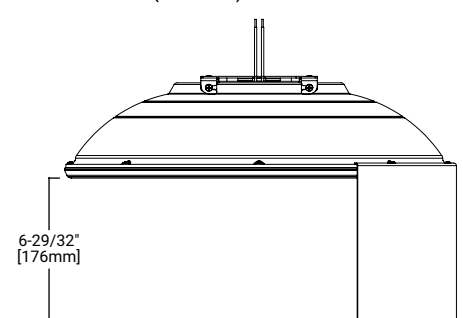
Bird Guard (TT/BG-UP-XX)



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
		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.

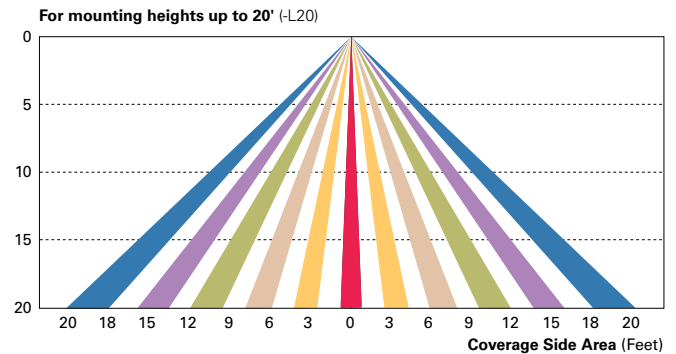
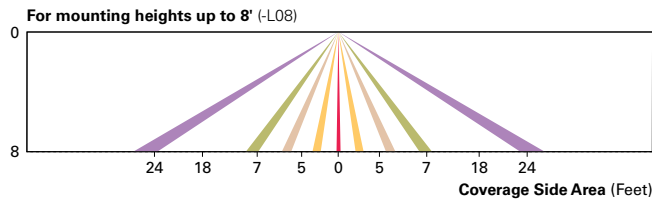
## Lumen Multiplier

Ambient Temperature	Multiplier
0°C	1.03
10°C	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.

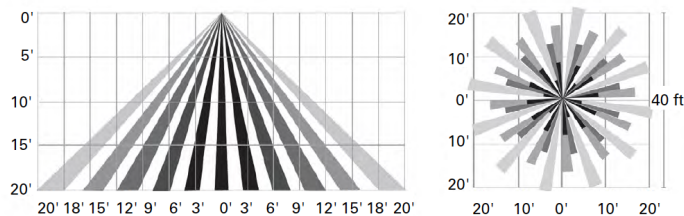
SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

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

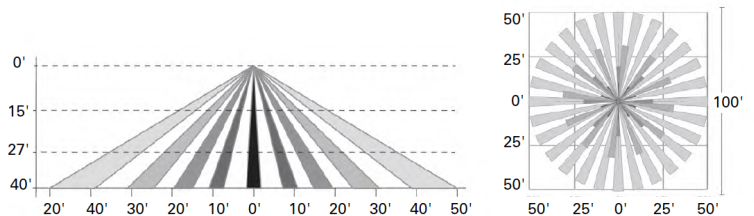
### WaveLinX Wireless Control and Monitoring System

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinX Pro (WPS2 to WPS4) 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 (WLS4 and WLS2) 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.

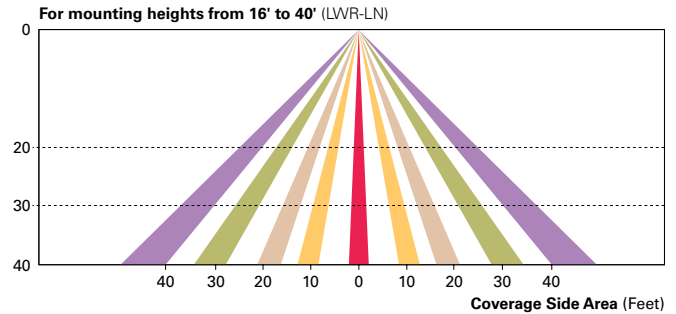
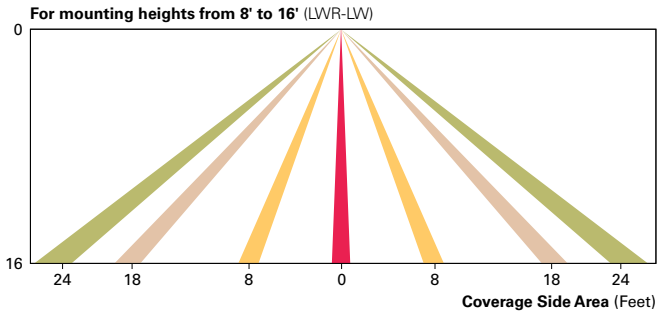
### For mounting heights up to 15' (WPS2 and WLS2)



### For mounting heights up to 40' (WPS4 and WLS4)



**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.



#### AirMesh (DIM10)

AirMesh integrated wireless controls system includes factory installed DIM10 Synapse control module and FSP-201 motion sensor; requires additional AirMesh components for operation. Contact Synapse at [www.synapsewireless.com](http://www.synapsewireless.com) for product support, warranty, and terms and conditions.

