

## FEATURES

- Integral Battery Backup Option
- 360° Light Distribution
- RGBW or Static White Luminous Front Option
- Multiple Fascia Options and Finishes
- 4G Vibration Tested



## CONTROL TECHNOLOGY



## SPECIFICATIONS

### CONSTRUCTION

- Main housing shroud is made of fabricated 5052-H32 aluminum alloy
- Housing mounting interface has a stamped silicone gasket
- Luminaire housing is free of any visible heat fins, hardware or fasteners
- Bracketry and hardware is stainless steel
- Luminaire finish consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish
- Luminaire finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance

### LED/OPTICS

- LEDs are mounted to a metal printed circuit board assembly (MCPCB) with a uniform conformal coating over the panel surface and electrical features
- Optical lenses is clear injection molded PMMA acrylic
- Optical array is recessed in order to shield each LED optic across the length of the aperture
- Optical array is sealed for IP66 rating
- Secondary lens is impact resistant 5/32" tempered glass

### INSTALLATION

- JUNCTION BOX: Standard with zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box
- Mounting plate features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates

### INSTALLATION (CONTINUED)

- Fixture attaches by two Allen-head hidden fasteners for tamper resistance
- Optional mounting arrangements utilize a die-cast mounting adaptor to allow for surface conduit and through branch wiring
- Housing is able to hang freely in an open service position for inspection of internal wire connections. Once in service position, the housing shall be able to be removed for service by lifting the assembly up off the rear mounting plate and disconnecting the wiring plugs
- Driver assembly is mounted to a prewired internal tray with quick disconnects for removal

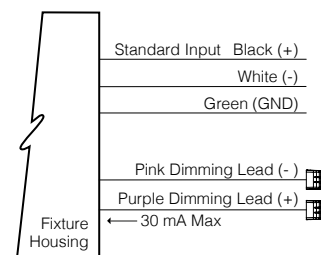
### ELECTRICAL

- Drivers are in direct contact with the die-cast aluminum housing across the entire surface area of the widest face for maximum thermal transfer
- "Thermal Shield", primary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaires have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J. Surge protection device shall be wired in series
- Drivers are 0-10V dimming control with a dimming range of 100%-10%. Drivers are U.L. listed. All luminaires shall accept 120-277 volt input and have integral surge protection. "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components

## CYPHER™



Cypher Small



### ELECTRICAL (CONTINUED)

- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for -20°C ambient environments
- Luminaire are capable of operating at 100% brightness in a 40°C environment. Both driver and optical array shall have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C

### CONTROLS

- Button photocontrol for dusk to dawn energy savings
- •PC12 for 120V, PC20 for 208V, PC24 for 240V, PC27 for 277V
- Photocell is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others. Photocell adapter shall include an internal twist lock receptacle. Photocell by others

continued on page 3

KEY DATA	
LUMEN RANGE	1,906–5,083
WATTAGE RANGE	26–52
EFFICACY RANGE (LPW)	67–109
WEIGHT	Refer to page 5

## ORDERING GUIDE

Example: CY2-35-3K7-1-2D-UNV-BLS-F-RGBW-FPP-PCU-SF

CATALOG #

Series-Output (Base)	CCT-CRI	Model (Light Engine) <sup>1</sup>	Main Distribution (Down)	Secondary Distribution (Up, Sides)	Voltage
<b>CY2-25</b> 25W, 2500 nominal lumens	<b>27K8</b> 2700K, 80CRI	<b>1</b> DownLight Only	<b>1</b> IES Type I	<b>1</b> IES Type I	<b>UNV</b> 120-277V
<b>CY2-35</b> 40W, 3500 nominal lumens	<b>3K7</b> 3000K, 70CRI	<b>2</b> 50/50 Down/Up, <b>Down/Up distributions must match</b>	<b>2</b> IES Type II	<b>2</b> IES Type II	<b>347</b> 347V
<b>CY2-45</b> 50W, 4500 nominal lumens	<b>3K8</b> 3000K, 80CRI	<b>3</b> 90/10 Down/Up	<b>3</b> IES Type III	<b>3</b> IES Type III	<b>480</b> 480V
	<b>4K7</b> 4000K, 70CRI	<b>4</b> 25/25/25/25 Split, <b>Down/Up/Side Distributions must match</b>	<b>4</b> IES Type IV	<b>4</b> IES Type IV	
	<b>4K8</b> 4000K, 80CRI	<b>5</b> 70/10/10/10 Split, <b>Top/Side distributions must match</b>	<b>SP</b> 15° Spot/Column	<b>SP</b> 15° Spot/Column	
	<b>5K7</b> 5000K, 70CRI		<b>WG</b> 60° Wall Graze	<b>WG</b> 60° Wall Graze	
			<b>1D</b> Type 1 Diffused	<b>PB</b> Pencil Beam <sup>2</sup>	
			<b>2D</b> Type 2 Diffused	<b>1D</b> Type 1 Diffused	
			<b>3D</b> Type 3 Diffused	<b>2D</b> Type 2 Diffused	
			<b>4D</b> Type 4 Diffused	<b>3D</b> Type 3 Diffused	
				<b>4D</b> Type 4 Diffused	

Base Housing Finish	Fascia Form <sup>1</sup>	Luminous Front <sup>4</sup>	Fascia Panel <sup>5</sup>	Control Options <sup>6</sup>	Options
<b>BLS</b> Black Gloss Smooth	<b>F</b> Flat	<b>Blank</b> Standard None	<b>FPP</b> Full Panel Painted	<b>PCU</b> Universal Button Photocell (120-277V)	<b>EM</b> Battery Backup Unit -20° C <sup>8</sup>
<b>BLT</b> Black Matte Textured	<b>R</b> Radius/Curved	<b>RGBW</b> RGBW Luminous Front	<b>FPS</b> Full Panel Stainless Steel	<b>SCP</b> Programmable Occupancy Sensor	<b>SF</b> Single Fuse (120, 277, 347)
<b>DBS</b> Dark Bronze Gloss Smooth	<b>T</b> Triangle/Wedge	<b>LFSW</b> Static White Luminous Front	<b>FPC</b> Full Panel Copper	<b>WIR</b> wiSCAPE	<b>DF</b> Double Fuse (208, 240, 480)
<b>DBT</b> Dark Bronze Matte Textured	<b>E</b> Rounded/Edge		<b>OPP</b> Open Panel Painted <sup>7</sup>	<b>WIRC</b> wiSCAPE w/ Occupancy Sensor	<b>SCB</b> Surface Conduit Box
<b>GTT</b> Graphite Matte Textured	<b>C</b> Circle/Curved		<b>OPS</b> Open Panel Stainless Steel <sup>7</sup>		
<b>LGS</b> Light Gray Gloss Smooth	<b>CB</b> Cylinder Balanced		<b>OPC</b> Open Panel Copper <sup>7</sup>		
<b>LGT</b> Light Gray Matte Textured	<b>CT</b> Cylinder Tall		<b>4PP</b> 4-Square Panel Painted <sup>7</sup>		
<b>PSS</b> Platinum Silver Gloss Smooth	<b>CBM</b> Custom Building Material Mount Ghost Fascia <sup>9</sup>		<b>4PS</b> 4-Square Panel Stainless Steel <sup>7</sup>		
<b>VGT</b> Verde Green Matte Textured			<b>4PC</b> 4-Square Panel Copper <sup>7</sup>		
<b>WHS</b> White Gloss Smooth			<b>PPP</b> Perforated Panel Painted <sup>7</sup>		
<b>WHT</b> White Matte Textured			<b>PPS</b> Perforated Panel Stainless Steel		
<b>Color Options</b>			<b>PPC</b> Perforated Panel Copper		
<b>CC</b> Custom Color <sup>3</sup>					

### Notes:

- Consult factory for custom distributions. See Distribution Matrix on page 4 restrictions
- PB distribution is available for 90/10 and 70/10/10/10 models only. Not all combinations are recommended. See Distribution Matrix on page 2 for restrictions.
- Consult factory for custom color, marine and corrosive finish
- RGBW and LFSW luminous fronts are only available with open, four square and perforated fascia panels
- Flat and Radius Fascia forms only. Painted panels by default match base housing finish/color. Consult factory for custom panel finishes.
- Occupancy sensors not available with CB, T, E or C fascia forms
- Luminous front is required to select the Open Panel and 4-Square Panel fascia panels.
- Consult factory for information on specific configurations with different fascia forms.
- Custom Building Material Mount Ghost Fascia option allows the Cypher to blend seamlessly into the building architecture by matching the finish of the architectural background. See page 5 for dimensions and contact factory for additional information.

## SPECIFICATIONS (CONTINUED)

### CONTROL (CONTINUED)

- Each fixture comes equipment with a dual control driver that supports Bluetooth® operation of individual fixtures or DMX control of an entire system of fixtures.

### BLUETOOTH®:

- Free Bluetooth® Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the Internet at Apple App Store or Google Play.
- Modular wiring harness in the service area provides user access to the dimming circuitry via DMX.

### DMX:

- Fully DMX/RDM Compatible
- Utilizes 4 DMX Channels per fixture

### DMX MAP

- Start Address – Red
- Start Address +1 – Green
- Start Address +2 – Blue
- Start Address +3 – White

**DMX Addressing** is performed by using a compatible RDM handheld unit or via the Bluetooth® App.

- Performed by using a compatible RDM handheld unit or via the Bluetooth® App

### DMX WIRING COLOR CODE

- Red Wire – DMX +
- Brown Wire – DMX-
- Yellow Wire – Shield/Ground
- DMX termination must be achieved by adding a DMX terminator to the last fixture in a Daisy-Chain. Fixture does not auto terminate.
- Kim Lighting is proud to offer the Pharos Architectural Controls DMX Controllers and Touch screens. See Pharos Spec Sheet for more details.
- See the Pharos® Spec Sheet for more details.

### MOBILE APP:

- Mobile App specification in additional information section.
- Mobile App. dimming range from 0% to 100% through the use of Current RGBW app (available on IOS and Android).
- Color selection and adjustment.
- Camera function for color matching.
- Intensity slider for dimming/ramping up.
- Save and rename up to 10 presets.
- Group and rename fixtures.
- Fixture is password protected, refer to instructions to set unique password.

### CERTIFICATIONS

- Luminaire is listed with UL for outdoor, wet location use, UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250
- IP66 rated assembly
- IDA approved, 3000K and warmer CCTs only
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at [www.designlights.org](http://www.designlights.org)
- ANSI C136.31-2010 4G Vibration tested and compliant
- Complies with "Americans with Disabilities Act" or "ADA" on select versions for low mounting height applications (fixtures extend maximum of 4 inches from wall for mounting heights of 80 inches or less)
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020

### WARRANTY



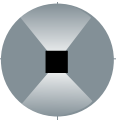

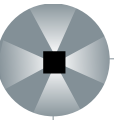
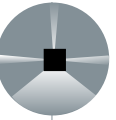




































- 5 year warranty



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## DISTRIBUTION MATRIX

FASCIA FORM	DISTRIBUTION				
	Down Only	50 Down/50 Up	90 Down/10 Up	25/25/25/25 Split	70 Down 10/10/10 Split
 Flat* F	 I, II, III, IV, SP, WG	 I, II, III, IV, SP, WG	 I, II, III, IV, SP, WG	 SP/WG SP/WG SP/WG	 SP/WG/PB SP/WG/PB I, II, III, IV, SP, WG
 Radius Curve R	 SP/WG	 SP/WG	 SP/WG/PB SP/WG	 SP/WG SP/WG	 SP/WG/PB SP/WG/PB I, II, III, IV, SP, WG
 Cylinder Balanced CB	 SP/WG	 SP/WG	 SP/WG/PB SP/WG	 SP/WG SP/WG	 SP/WG/PB SP/WG/PB SP/WG
 Cylinder Tall CT	 I, II, III, IV, SP, WG	 SP/WG	 SP/WG/PB I, II, III, IV, SP, WG	 SP/WG SP/WG	 SP/WG/PB SP/WG/PB I, II, III, IV, SP, WG
 Triangle Wedge* T	 I, II, III, IV, SP, WG	 I, II, III, IV, SP, WG	 SP/WG/PB I, II, III, IV, SP, WG		
 Rounded Edge* E	 I, II, III, IV, SP, WG	 I, II, III, IV, SP, WG	 SP/WG/PB I, II, III, IV, SP, WG		
 Circle/ Curved C	 SP, WG	 SP, WG	 SP/WG/PB SP, WG		
 Ghost CBM	 I, II, III, IV, SP, WG	 I, II, III, IV, SP, WG	 SP/WG/PB I, II, III, IV, SP, WG	 SP/WG SP/WG	 SP/WG/PB SP/WG/PB I, II, III, IV, SP, WG

\* ADA compliant for use in low mounting height applications (80 inches or less)

2 Down/Up distributions must match

4 Down/Up/Side distributions must match

5 Top/Side distributions must match

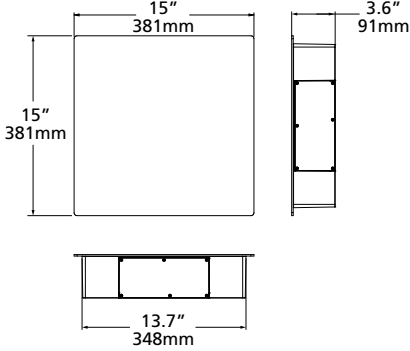
Contact factory for custom distributions

Dimensions available on page 5

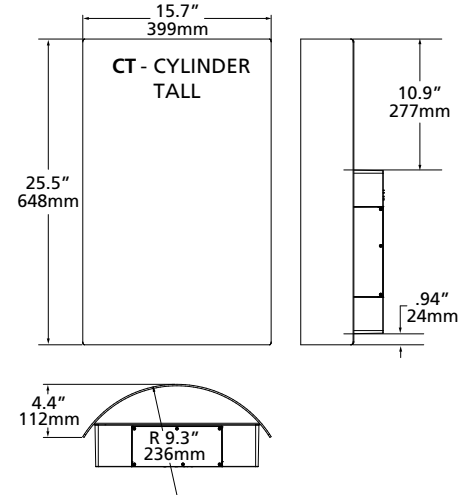
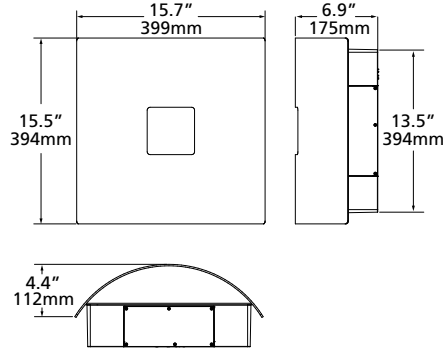
## DIMENSIONS

### F - FLAT

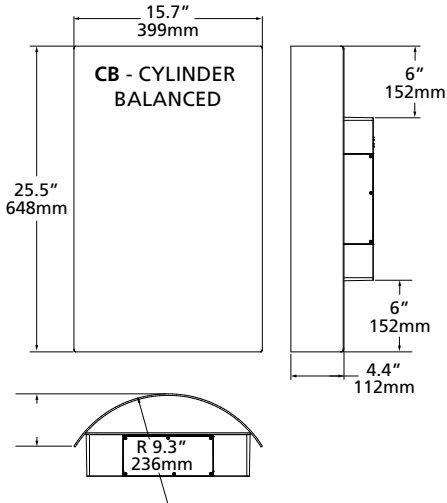
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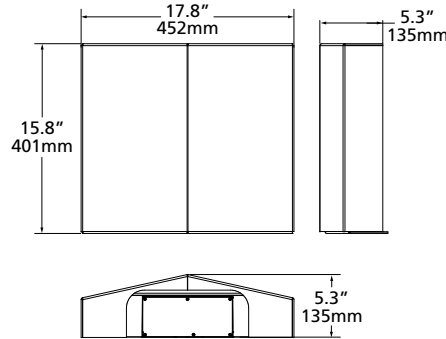
### R - RADIUS/CURVED



### CB - CYLINDER BALANCED

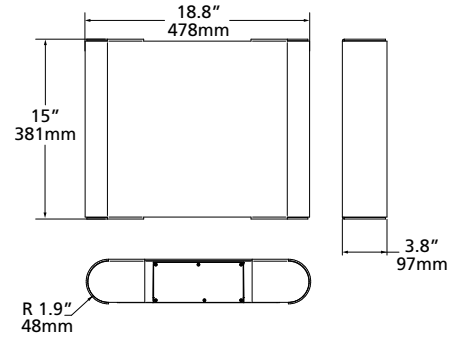


### T - TRIANGLE/WEDGE

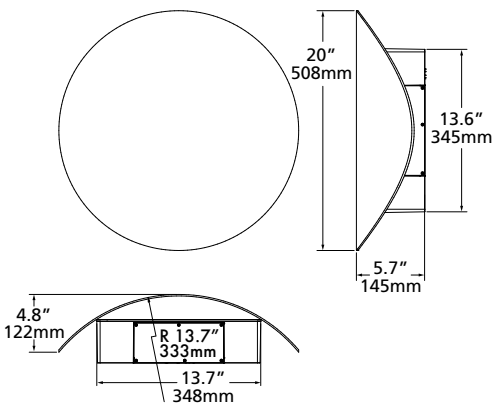


### E - ROUNDED EDGE

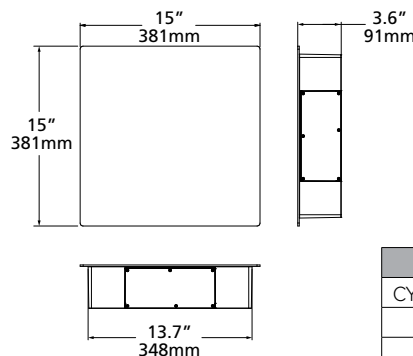
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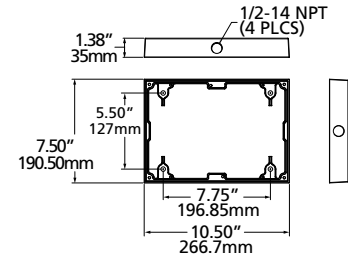
### C - CIRCLE/CURVED



### CBM - CUSTOM BUILD MATERIAL MOUNT GHOST FASCIA



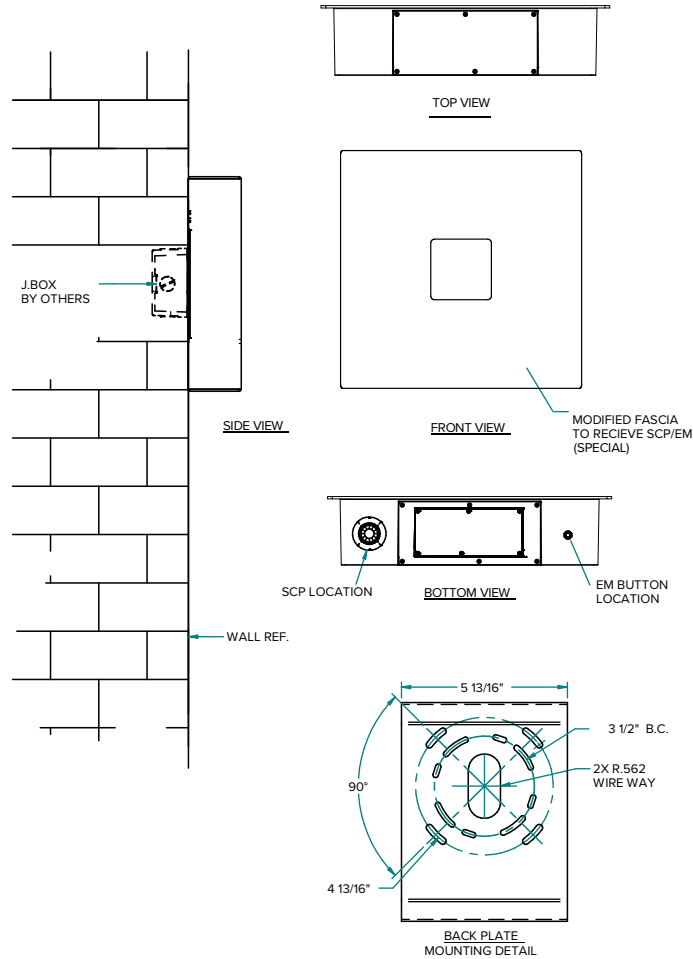
### SCB - SURFACE CONDUIT BOX



CY2 WEIGHT		FIXTURE + FASCIA WEIGHT	
CY2 base fixture	20 lb		
F	2.5 lb	CY2 + F	22.5 lb
R	2.5 lb	CY2 + R	22.5 lb
CB	3.5 lb	CY2 + CB	23.5 lb
CT	3.5 lb	CY2 + CT	23.5 lb
T	3.5 lb	CY2 + T	23.5 lb
E	3.5 lb	CY2 + E	23.5 lb
C	2.5 lb	CY2 + C	22.5 lb

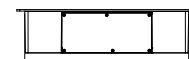
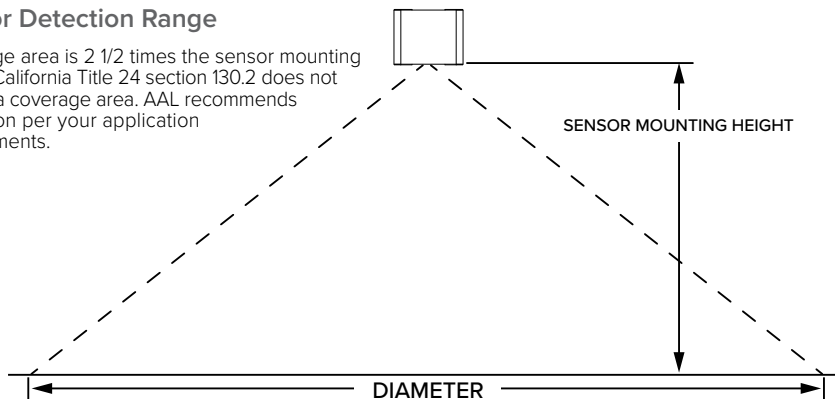
## DIMENSIONS (CONTINUED)

### Flat Sensor Location



### Sensor Detection Range

Coverage area is 2 1/2 times the sensor mounting height. California Title 24 section 130.2 does not specify a coverage area. AAL recommends discretion per your application requirements.



## DELIVERED LUMENS

Nominal Output (Lm)	System Watts	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
			Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
				B	U	G			B	U	G			B	U	G	
2,500	26	Type 1	2499	0	0	0	96	2596	0	0	0	100	2836	0	0	0	109
		Type 2	2265	1	0	1	87	2353	1	0	1	90	2570	1	0	1	99
		Type 3	2413	1	0	1	93	2507	1	0	1	96	2739	1	0	1	107
		Type 4	2213	0	0	1	85	2299	0	0	1	88	2512	0	0	1	97
		Wall Graze	2462	2	0	0	95	2558	2	0	0	98	2795	2	0	0	107
		Spot/Column	2089	2	0	0	80	2171	2	0	0	83	2371	2	0	0	91
		Type 1 Diffused	2193	1	0	1	84	2278	1	0	1	88	2488	1	0	1	96
		Type 2 Diffused	2004	1	0	1	77	2082	1	0	1	80	2274	1	0	1	87
		Type 3 Diffused	1906	1	0	1	73	1980	1	0	1	76	2163	1	0	1	83
		Type 4 Diffused	1936	1	0	1	74	2011	1	0	1	77	2197	1	0	1	84
3,500	40	Type 1	3534	1	0	0	88	3672	1	0	0	92	4011	88	1	0	100
		Type 2	3203	1	0	0	80	3328	1	0	1	83	3635	80	1	0	91
		Type 3	3413	1	0	1	85	3546	1	0	1	89	3874	85	1	0	97
		Type 4	3131	1	0	1	78	3252	1	0	1	81	3553	78	1	0	89
		Wall Graze	3483	2	0	0	87	3618	2	0	0	90	3953	87	2	0	99
		Spot/Column	2955	3	0	0	74	3070	3	0	0	77	3354	74	3	0	84
		Type 1 Diffused	3101	1	0	1	78	3222	1	0	1	81	3519	78	1	0	88
		Type 2 Diffused	2835	1	0	1	71	2945	1	0	1	74	3217	71	1	0	80
		Type 3 Diffused	2695	1	0	1	67	2800	1	0	1	70	3059	67	1	0	76
		Type 4 Diffused	2738	1	0	1	68	2844	1	0	1	71	3107	68	1	0	78
4,500	52	Type 1	4390	1	0	0	84	4561	1	0	0	88	4982	1	0	1	97
		Type 2	4119	1	0	1	79	4280	1	0	1	82	4675	1	0	1	90
		Type 3	4240	1	0	1	82	4405	1	0	1	86	4812	1	0	1	95
		Type 4	4026	1	0	1	77	4183	1	0	1	80	4569	1	0	1	88
		Wall Graze	4479	3	0	0	86	4653	3	0	0	89	5083	3	0	0	99
		Spot/Column	3800	3	0	0	73	3948	3	0	0	76	4313	3	0	0	84
		Type 1 Diffused	3988	1	0	1	77	4143	1	0	1	80	4526	2	0	1	88
		Type 2 Diffused	3645	1	0	1	70	3787	1	0	1	73	4137	1	0	1	80
		Type 3 Diffused	3466	1	0	1	67	3601	1	0	1	69	3934	1	0	1	76
		Type 4 Diffused	3521	1	0	1	68	3658	1	0	1	70	3996	1	0	1	77

## ELECTRICAL CHARACTERISTICS

LUMEN PACKAGE	SYSTEM WATTAGE (W)	LINE VOLTAGE		INPUT				MIN. POWER FACTOR	MAX THD (%)	DIMMING RANGE	SOURCE/SINK CURRENT (mA)		ABSOLUTE VOLTAGE RANGE ON 0-10V (+) PURPLE	
		VAC	HZ	120	277	347	480				MIN.	MAX.	MIN.	MAX.
2,500	26	120	50/60	0.2	0.1	0.1	0.1	>0.9	20	10% to 100%	0 mA	1 mA	0V	10V
3,500	40			0.3	0.1	0.1	0.1							
4,500	52			0.4	0.2	0.1	0.1							

### TM-21 LIFETIME CALCULATION (500mA)

LUMEN PACKAGE	AMBIENT ENVIRONMENT °C	PROJECTED LUMEN MAINTENANCE (KHRS)						REPORTED L70
		15	25	50	60 (TM-21)	100		
4,500	25	95%	94%	90%	89%	83%		>60Khrs.
	40	93%	91%	84%	82%	73%		