

AREA & ROADWAY LIGHTING

SIGMA® - PLED

TRANSITIONAL LED LANTERN

Luminaire

Cast Aluminum Struts and Housing are heavy wall, low copper aluminum alloy (A356 alloy, <0.2% copper). Traditional styling of the housing provided with hinged top for easy access.

PLED™ Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side, maximizing usable light. Optional house side shields are available that cover each individual optic. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments. Quick-disconnects are provided above each panel for fast field replacement. All fixture optical options will provide a "U0" no uplight optical package and is are dark sky friendly.

Ambience Low Luminance Lens

Optional Ambience Lens (AL) provides low luminance reduced glare distributions. Lens diffuses the PLED Optics and provides a more uniform luminance across the aperture reducing glare at all angles. Lens is provided with an aluminum frame and is sealed to the housing with high temp gasketing.

LED Emitters

High Power White LED's are driven between 350mA and 875mA for a maximum output of 2.5 Watts nominal. LED's are available in standard Neutral White (4000K), Cool White (5000K), or Warm White (2700K & 3000K). All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of L94 at 60,000 hours (TM-21 calculated at 6x Test Time).

True Amber LED's TRA-True Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

LED Driver

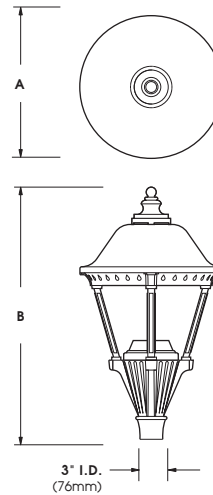
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field installation.)

Finish

Polyester powder coat incorporates four step iron phosphate process to pretreat metal surface for maximum adhesion. Top coat is baked at 400°F for maximum hardness and exterior durability.

PROJECT NAME: _____

PROJECT TYPE: _____

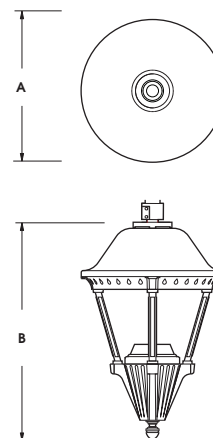


SIG-T

(SIG23 shown)

Fitter supplied to fit over 2 7/8" X 3" (73mm X 76mm) fennon.

Fixture	A	B
SIG23-T	23.5" 597mm	41.75" 1060mm
SIG18-T	18.5" 470mm	32" 813mm



SIG-P

(SIG23 Pendant Mount shown)

Fixture	A	B
SIG23-P	23.5" 597mm	35.5" 911mm
SIG18-P	18.5" 470mm	27.5" 696mm



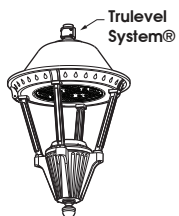
2023101

SIG SERIES - PLED

PRODUCT CONFIGURATIONS

EPA & WEIGHT

No Lens

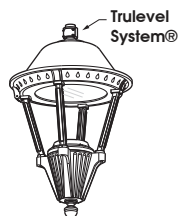


SIG23-P
Max Weight = 56 lbs
Max EPA = 1.74
48 LED Max



SIG23T
Max Weight = 57 lbs
Max EPA = 1.83
48 LED Max

w/ Ambience Low Luminance Lens



SIG23-P-AL
Max Weight = 56 lbs
Max EPA = 1.74
48 LED Max



SIG23-T-AL
Max Weight = 57 lbs
Max EPA = 1.83
48 LED Max



SIG18-P
Max Weight = 28 lbs
Max EPA = 1.08
36 LED Max



SIG18-P
Max Weight = 28.5 lbs
Max EPA = 1.14
36 LED Max



SIG18-P-AL
Max Weight = 28 lbs
Max EPA = 1.08
36 LED Max



SIG18-P-AL
Max Weight = 28.5 lbs
Max EPA = 1.14
36 LED Max

SIG SERIES - PLED

PLED™ MODULES



48 LED Module






















36 LED Module



20 LED Module

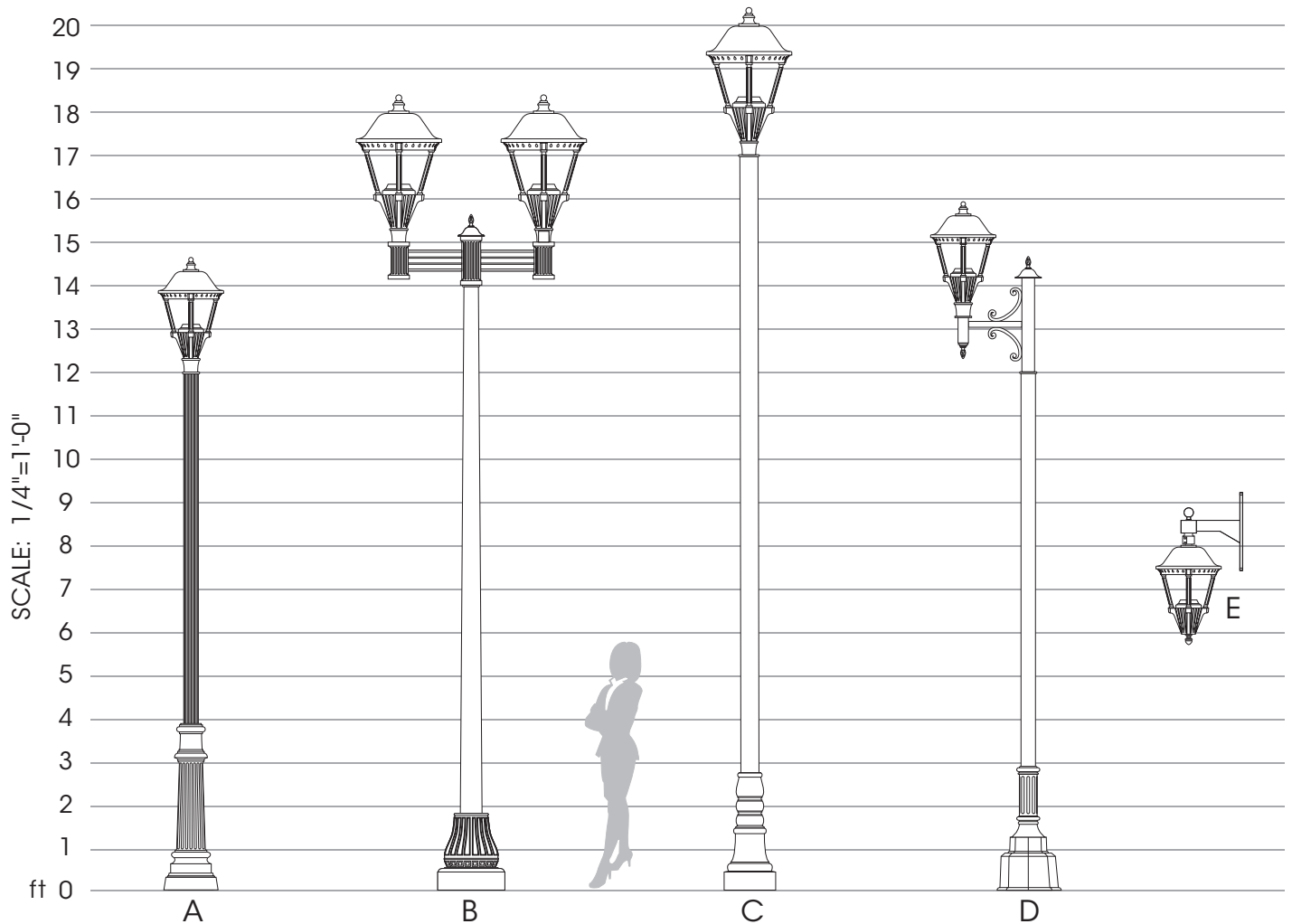
ORDERING INFORMATION

Spec/Order Example: SIG18-P/PLED-III/20LED-525mA/40K/240/PM-WM/RAL-6005-S/NL

Luminaire	Optics	LED Mode			Voltage	Mounting	Finish	Options
Luminaire	Optics	LED			Voltage	Mounting	Finish	Options
Tenon Mount: <input type="checkbox"/> SIG23-T <input type="checkbox"/> SIG18-T Pendant Mount: <input type="checkbox"/> SIG23-P <input type="checkbox"/> SIG18-P	PLED™ Distribution Type For NL Options: <input type="checkbox"/> PLED-II  <input type="checkbox"/> PLED-II-FR  <input type="checkbox"/> PLED-III  <input type="checkbox"/> PLED-III-W  <input type="checkbox"/> PLED-IV  <input type="checkbox"/> PLED-IV-FT  <input type="checkbox"/> PLED-V-SQ-N  <input type="checkbox"/> PLED-V-SQ-M  <input type="checkbox"/> PLED-V-SQ-W  Ambience™ Lens Option ³ : <input type="checkbox"/> AL-ASY <input type="checkbox"/> AL-ASY-HS <input type="checkbox"/> AL-SYM	# of LEDs <input type="checkbox"/> 48LED ¹ <input type="checkbox"/> 36LED <input type="checkbox"/> 20LED	Drive Current <input type="checkbox"/> 875mA <input type="checkbox"/> 700mA <input type="checkbox"/> 525mA <input type="checkbox"/> 350mA <input type="checkbox"/> 175mA	Color Temp - CCT <input type="checkbox"/> 27K (2700K) <input type="checkbox"/> 30K (3000K) <input type="checkbox"/> 40K (4000K) <input type="checkbox"/> 50K (5000K) <input type="checkbox"/> TRA True Amber ²	<input type="checkbox"/> 120 <input type="checkbox"/> 208 <input type="checkbox"/> 240 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> 480	Post Top <input type="checkbox"/> PT23  (To fit 2 3/8" O.D.) <input type="checkbox"/> PT27  (To fit 2 7/8" O.D.) Pendant Mount <input type="checkbox"/> PM  Arm Mount <input type="checkbox"/> 1  <input type="checkbox"/> 2-180  <input type="checkbox"/> 2-90  <input type="checkbox"/> 3-90  <input type="checkbox"/> 3-120  <input type="checkbox"/> 4-90  Wall Mount <input type="checkbox"/> WM 	Standard Textured Finish <input type="checkbox"/> Black RAL-9005-T <input type="checkbox"/> White RAL-9003-T <input type="checkbox"/> Grey RAL-7004-T <input type="checkbox"/> Dark Bronze RAL-8019-T <input type="checkbox"/> Green RAL-6005-T Premium Finishes <input type="checkbox"/> Rust <input type="checkbox"/> Patina Copper PC For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S) Consult factor for custom colors	<input type="checkbox"/> Catenary Mount (Cable Box/Clamp Bracket) CCB <input type="checkbox"/> Stem Mount + Length(in) (48" Max) SM+L <input type="checkbox"/> Chain Mount + Length(in) (48" Max) CM+L <input type="checkbox"/> Internal House Side Shield incl. LED Count (Example: HS-PLED/48) HS-PLED <input type="checkbox"/> Twist Lock Receptable Only TPR <input type="checkbox"/> 7-Pin Twist Lock Receptable Only TPR7 <input type="checkbox"/> High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) HLSW <input type="checkbox"/> Twist Lock Photocell + Voltage (Example: TPC347V) TPC+V <input type="checkbox"/> Photocell + Voltage (Example: PC120V) PC+V <input type="checkbox"/> Single Fuse (Example: DF277V) SF+V <input type="checkbox"/> Double Fuse (Example: DF240V) DF+V <input type="checkbox"/> Blue-Tooth Programmable Photo/Motion Sensor (Factory - Motion 50/100; Photo 75(c)) MS-F311

SIG SERIES - PLED

SAMPLE ASSEMBLIES

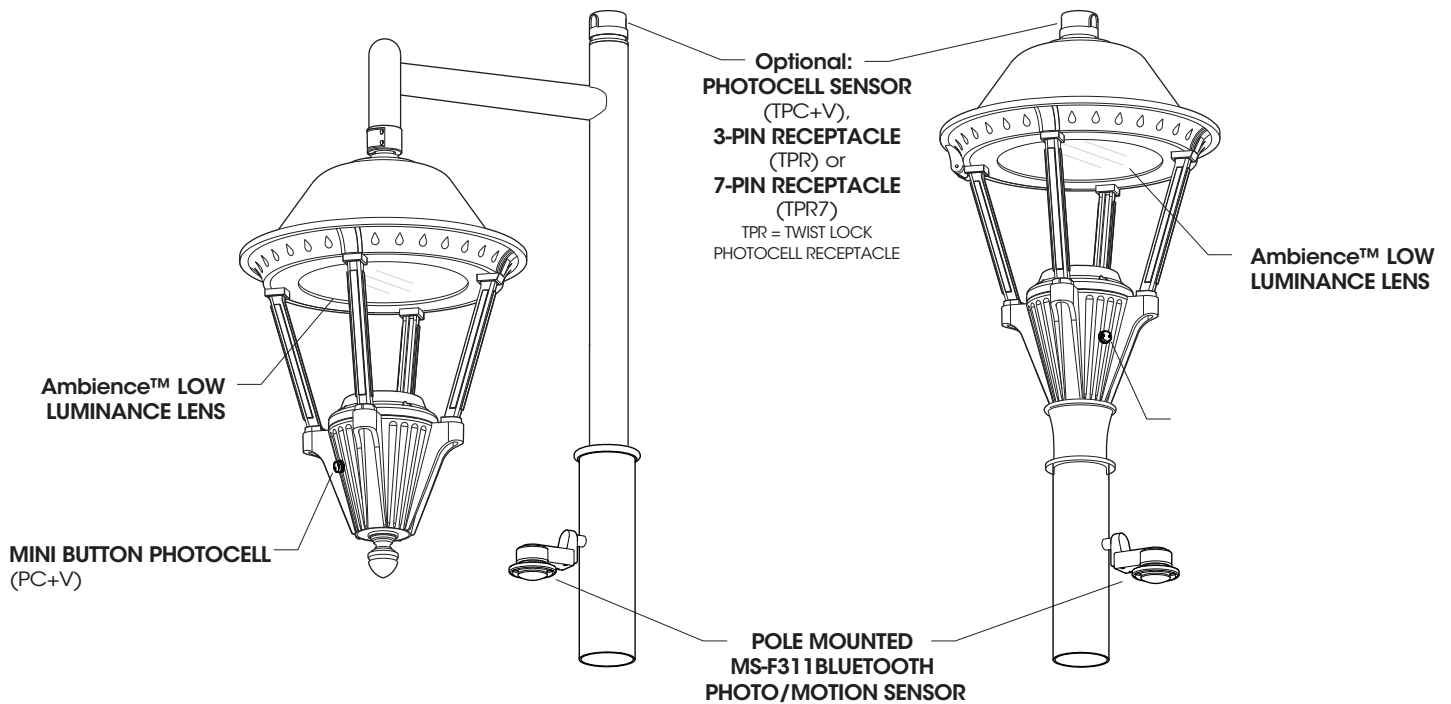


- A. 54-CBC-1060-12'/PT/SIG18/LED/ACCESSORIES/FINISH
- B. 17M-1046T-14'/XAX-2-180/SIG23/LED/ACCESSORIES/FINISH
- C. 40SB-1050-17'/PT/SIG23/LED/ACCESSORIES/FINISH
- D. 51-1040-12'/XAE-1/SIG18/LED/ACCESSORIES/FINISH
- E. WM-XBY-PM/SIG18/LED/ACCESSORIES/FINISH

Sample Assemblies show a small offering of the Sun Valley Line of Poles, Bases, Shafts, Arms, & Luminaires. Please visit usalitg.com for the full product offering.

SIG SERIES - PLED

OPTIONS



Factory Settings:
No Motion - 50%
Motion - 100%
Delay - 15 min.
Photocell - 75fc

Sensors can be Field
Programmed With
Bluetooth App

Coupling Provided
on Pole to Secure
Motion Sensor.

High Low Dimming For Switches (HLSW)

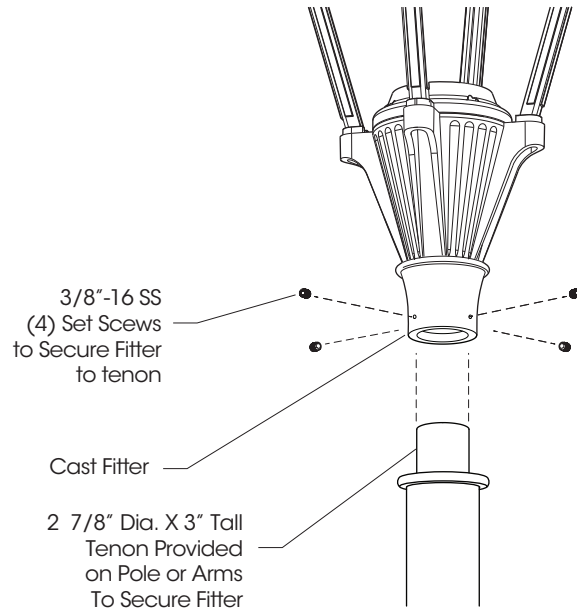
The HLSW is a Small Electronic Switch which Provides High Low Dimming Control Through the LED Driver's 0-10V Control. Switching is Done by Adding a Secondary AC Switched Hot Trigger Line to the HLSW in Addition to the Normal AC Power Line. When the Secondary Trigger Line is Powered, the Fixture will go to 100% Dimming. With no Power to the Trigger, the Fixture will operate at 50% or 25% Dimming. Switches for the Trigger Line can be a Normal AC Switch/Breaker or Timed Switch/Breaker.

Wireless and Other Fixture Controls

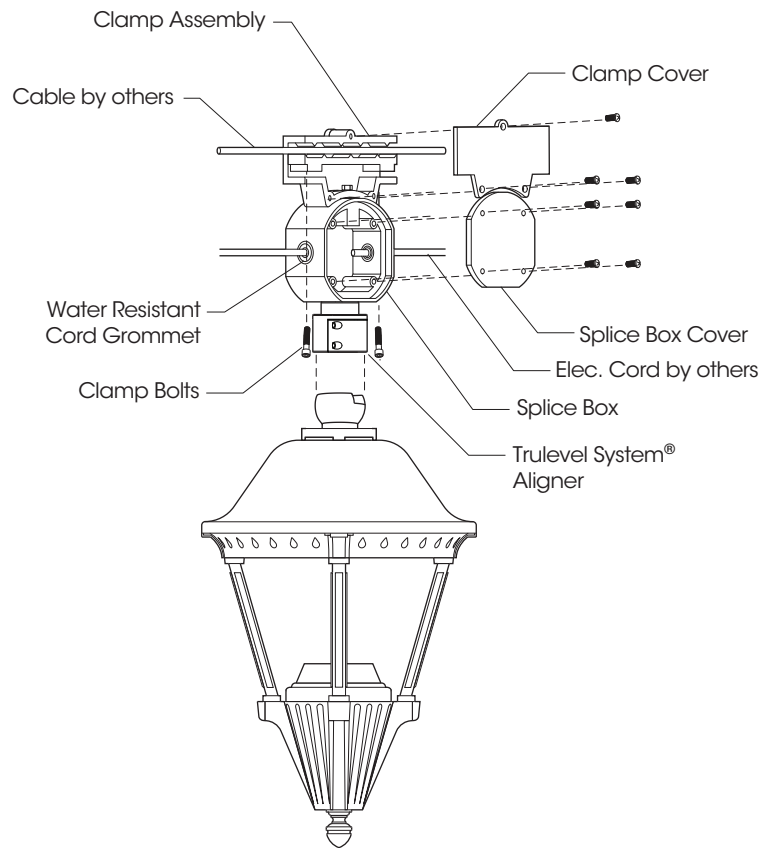
Contact Factory for Wireless and Other Fixture Controls and Recommendations. Most Controls Can be Integrated and Factory Installed.

SIG SERIES - PLED

INSTALLATION DETAIL



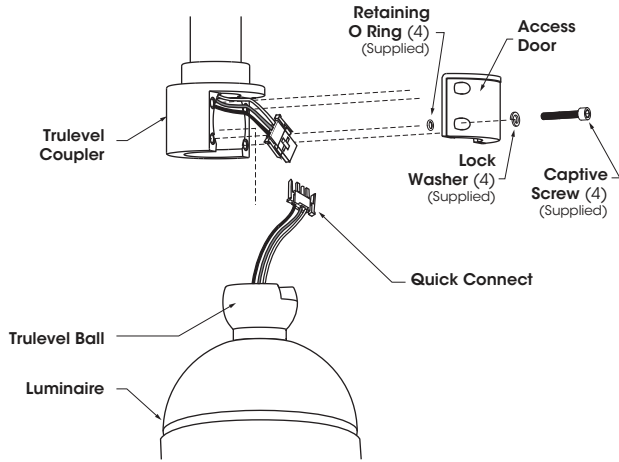
SIG Post Top Installation



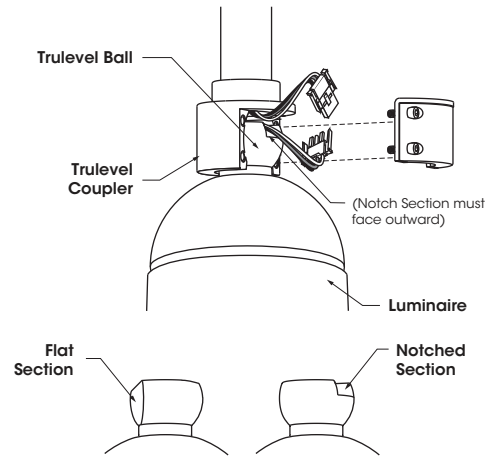
SIG Catenary Installation

SIG SERIES - PLED

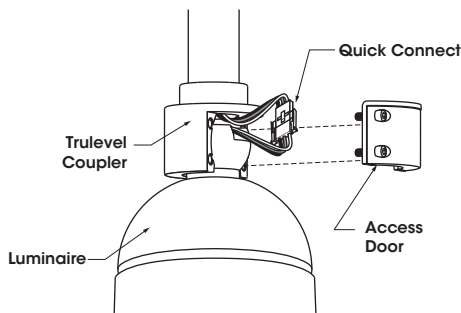
Trulevel System® Assembly



1. Loosen (4) Captive Screws and remove Access Door from Trulevel Coupler, pull out Quick Connect from Trulevel Coupler and Trulevel Ball.

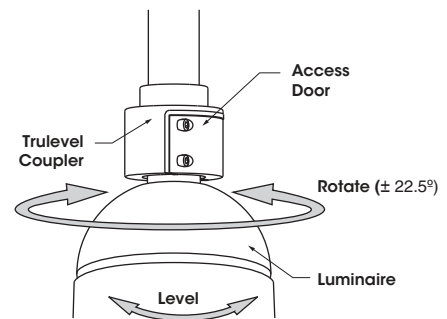


2. Place Trulevel Ball inside of Trulevel Coupler as illustrated.
 - A - Notched Section of Trulevel Ball must face outward as illustrated.
 - B - Flat Section of Trulevel Ball must face inward.



3. Connect Quick Connect components, push components inside of Trulevel Coupler cavity, replace Access Door and loosely secure, do not tighten.

Fixture will suspend without Access Door during installation.



4. Rotate (left to right $\pm 22.5^\circ$) and level Luminaire to desired position. Tighten Access Door.

(Tighten each bolt to recommended torque: **10 ft-lb, foot-pound**)

Trulevel Pendant Mount is intended to allow for fixture leveling, but is not intended to be "free-swinging" upon proper installation.

SIG SERIES - LED

ELECTRICAL DATA GUIDE - AMPERAGE CHART

LED System			CURRENT (A)				
# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
20	175	11.0	0.09	0.05	0.04	0.03	0.02
20	350	22.0	0.18	0.11	0.08	0.06	0.05
20	525	33.0	0.28	0.16	0.12	0.10	0.07
20	700	44.0	0.37	0.21	0.16	0.13	0.09
20	875	55.0	0.46	0.26	0.20	0.16	0.11
36	175	19.8	0.17	0.10	0.07	0.06	0.04
36	350	39.6	0.33	0.19	0.14	0.11	0.08
36	525	59.4	0.50	0.29	0.21	0.17	0.12
36	700	79.2	0.66	0.38	0.29	0.23	0.17
36	875	99.0	0.83	0.48	0.36	0.29	0.21
48	175	26.4	0.22	0.13	0.10	0.08	0.06
48	350	52.8	0.44	0.25	0.19	0.15	0.11
48	525	79.2	0.66	0.38	0.29	0.23	0.17
48	700	105.6	0.88	0.51	0.38	0.30	0.22
48	875	132.0	1.10	0.63	0.48	0.38	0.28

PHOTOMETRIC DATA GUIDE - LM-80 LUMEN MAINTENANCE

LED Life / Operating Hours	Lumen Depreciation	Lumen Depreciation Scale Factor
60,000 (10x Test Time Calculated)	L94	0.94x
100,000 (Theoretical Calculated)	L92	0.92x
150,000 (Theoretical Calculated)	L89	0.89x

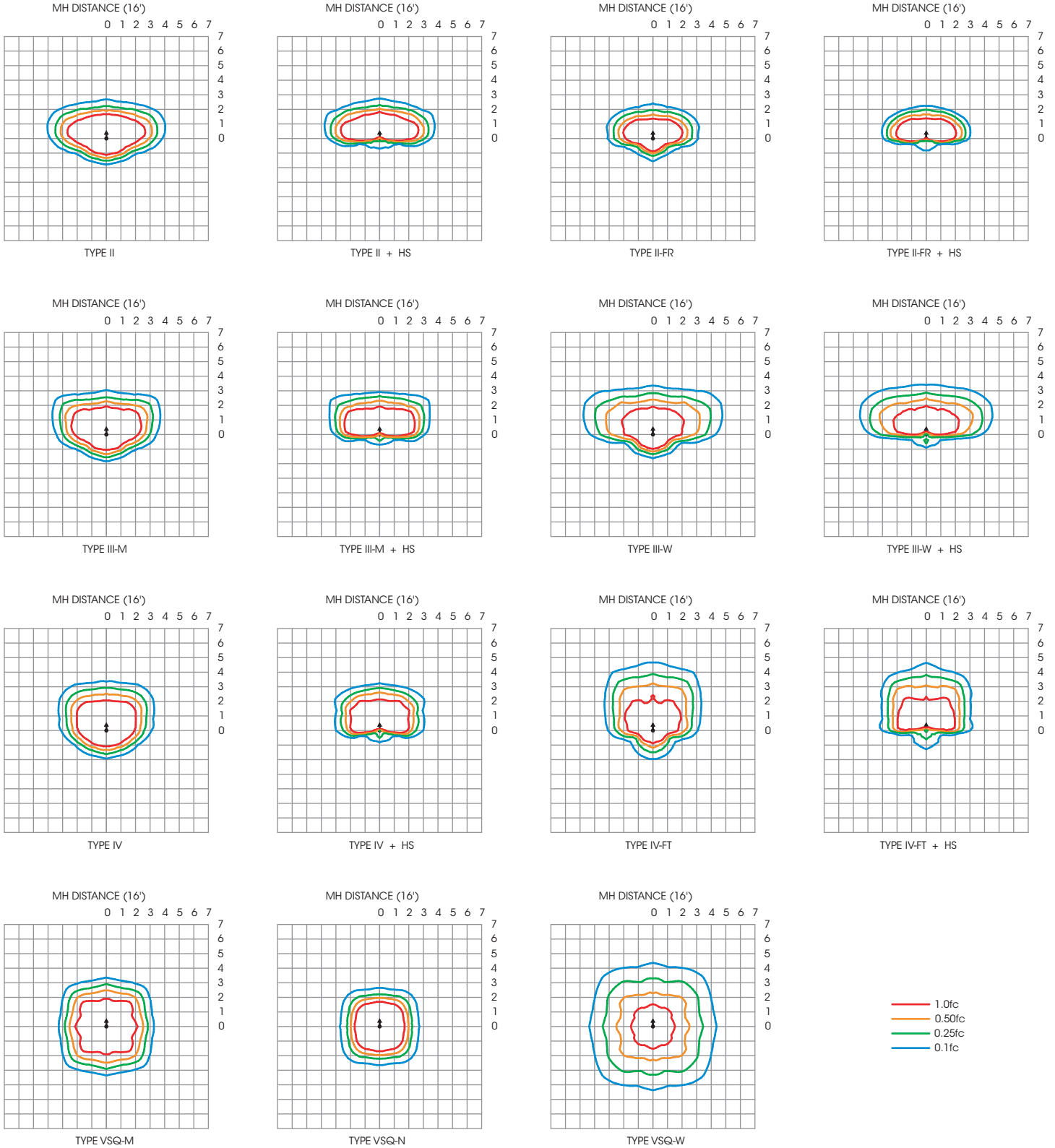
Lumen Depreciation Calculations Done in Accordance With IESNA TM-21 & LM-80 (25°C Ambient)

TM-21 6x Test Time Dictates that L94 > 60,000 Hours.

SIG SERIES - LED

PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE TEMPLATES

SIG18-PLED-36LED-700mA-40K - 16' Height (14' Pole)

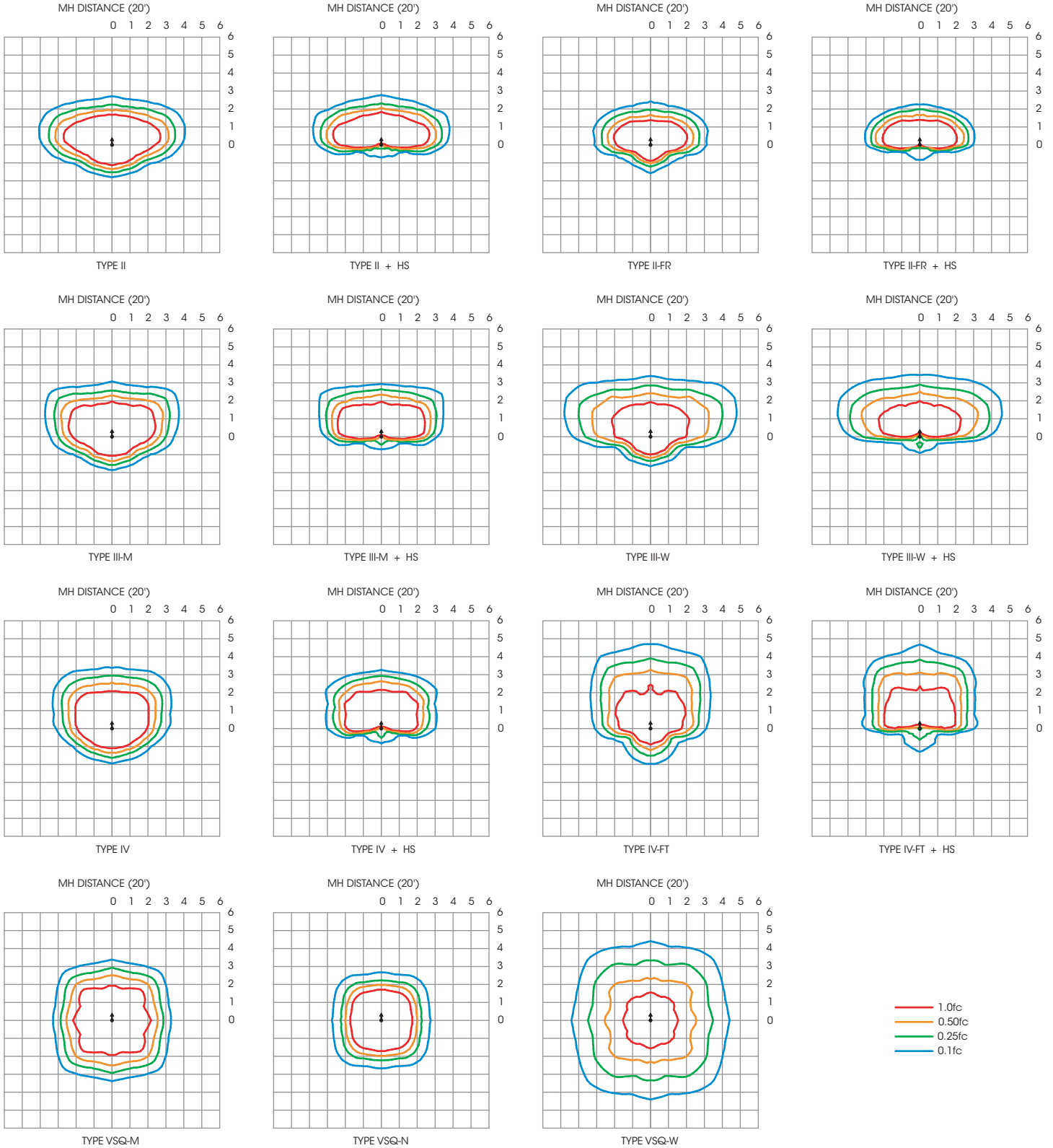


IES File downloads for this product can be found at www.usaltg.com/downloads/asr.html

SIG SERIES - LED

PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE TEMPLATES

SIG23-PLED-48LED-875mA-40K - 20' Height (18' Pole)

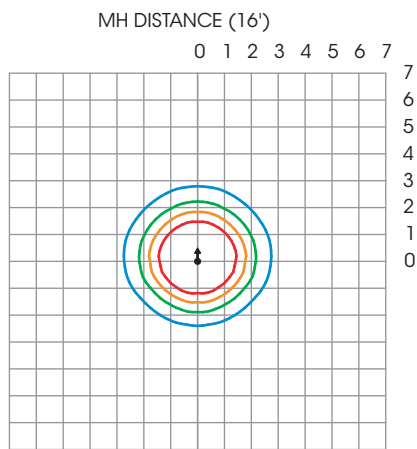


IES File downloads for this product can be found at www.usaltg.com/downloads/asr.html

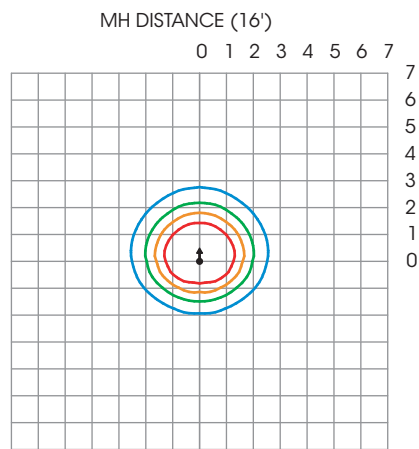
SIG SERIES - LED

PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE TEMPLATES

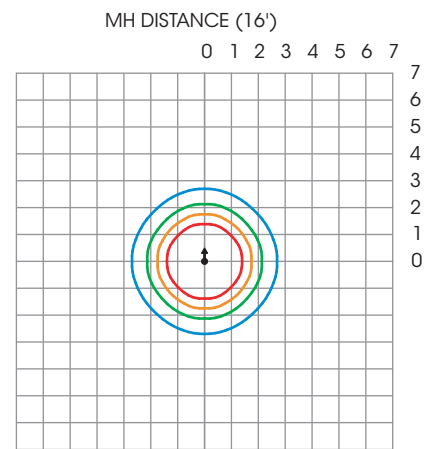
SIG18-PLED-AL-36LED-700mA-40K - 16' Height (14' Pole)



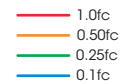
TYPE AL-ASY



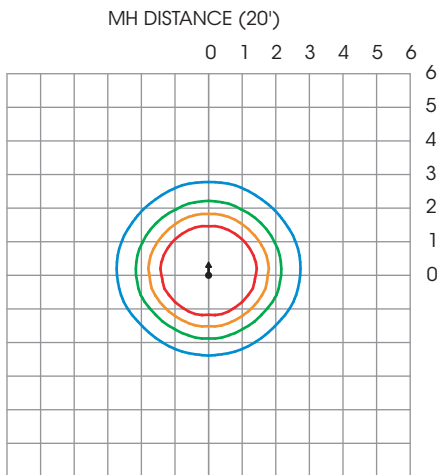
TYPE AL-ASY + HS



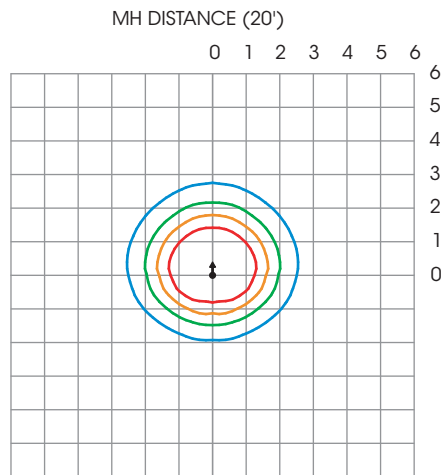
TYPE AL-SYM



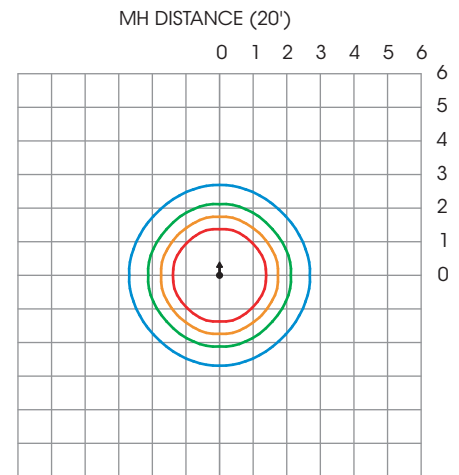
SIG23-PLED-AL-48LED-875mA-40K - 20' Height (18' Pole)



TYPE AL-ASY



TYPE AL-ASY + HS



TYPE AL-SYM



IES File downloads for this product can be found at www.usaltg.com/downloads/asr.html

SIG SERIES - LED

PHOTOMETRIC DATA GUIDE - LUMEN TABLES (SIG18-PLED-AL)

SIG18-PLED-AL																			
LED Count	Drive Current (mA)	System Watts	Dist'n Type	27K (2700K - 70CRI)			30K (3000K - 70CRI)			40K (4000K - 70CRI)			50K (5000K - 70CRI)			System Watts	TRA (590nm)		
				LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING		LUMENS	LPW	BUG RATING
36	175	19.8	ASY	1492	75	B1-U0-G1	1610	81	B1-U0-G1	1695	86	B1-U0-G1	1780	90	B1-U0-G1	16.0	610	38	B0-U0-G0
			SYM	1489	75	B1-U0-G0	1608	81	B1-U0-G0	1692	85	B1-U0-G0	1777	90	B1-U0-G1		609	38	B0-U0-G0
			ASY-HS	1077	54	B0-U0-G0	1162	59	B1-U0-G0	1224	62	B1-U0-G0	1285	65	B1-U0-G0		440	28	B0-U0-G0
36	350	39.6	ASY	2712	68	B1-U0-G1	2928	74	B1-U0-G1	3082	78	B1-U0-G1	3236	82	B1-U0-G1	30.8	1005	33	B1-U0-G0
			SYM	2708	68	B1-U0-G1	2923	74	B1-U0-G1	3077	78	B1-U0-G1	3231	82	B1-U0-G1		1003	33	B1-U0-G0
			ASY-HS	1958	49	B1-U0-G1	2114	53	B1-U0-G1	2225	56	B1-U0-G1	2336	59	B1-U0-G1		725	24	B0-U0-G0
36	525	59.4	ASY	3906	66	B1-U0-G1	4216	71	B2-U0-G1	4438	75	B2-U0-G1	4660	78	B2-U0-G1	46.5	1181	25	B1-U0-G0
			SYM	3899	66	B2-U0-G1	4209	71	B2-U0-G1	4431	75	B2-U0-G1	4652	78	B2-U0-G1		1179	25	B1-U0-G0
			ASY-HS	2819	47	B1-U0-G1	3043	51	B1-U0-G1	3203	54	B1-U0-G1	3364	57	B1-U0-G1		852	18	B0-U0-G0
36	700	79.2	ASY	4953	63	B2-U0-G1	5346	68	B2-U0-G1	5628	71	B2-U0-G1	5909	75	B2-U0-G1	N/A	N/A		
			SYM	4944	62	B2-U0-G1	5337	67	B2-U0-G1	5618	71	B2-U0-G1	5899	74	B2-U0-G1		N/A		
			ASY-HS	3575	45	B1-U0-G1	3859	49	B1-U0-G1	4063	51	B1-U0-G1	4265	54	B1-U0-G1		N/A		
36	875	99.0	ASY	5671	57	B2-U0-G1	6122	62	B2-U0-G2	6445	65	B2-U0-G2	6767	68	B2-U0-G2	N/A	N/A		
			SYM	5662	57	B2-U0-G1	6112	62	B2-U0-G1	6434	65	B2-U0-G1	6755	68	B2-U0-G1		N/A		
			ASY-HS	4094	41	B1-U0-G1	4419	45	B1-U0-G1	4652	47	B1-U0-G1	4884	49	B1-U0-G1		N/A		

PHOTOMETRIC DATA GUIDE - LUMEN TABLES (SIG23-PLED-AL)

SIG23-PLED-AL																			
LED Count	Drive Current (mA)	System Watts	Dist'n Type	27K (2700K - 70CRI)			30K (3000K - 70CRI)			40K (4000K - 70CRI)			50K (5000K - 70CRI)			System Watts	TRA (590nm)		
				LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING		LUMENS	LPW	BUG RATING
48	175	27.0	ASY	1989	74	B1-U0-G1	2147	80	B1-U0-G1	2260	84	B1-U0-G1	2373	88	B1-U0-G1	21.0	814	39	B0-U0-G0
			SYM	1986	74	B1-U0-G1	2144	79	B1-U0-G1	2257	84	B1-U0-G1	2369	88	B1-U0-G1		812	39	B1-U0-G0
			ASY-HS	1436	53	B1-U0-G1	1550	57	B1-U0-G1	1631	60	B1-U0-G1	1713	63	B1-U0-G1		587	28	B0-U0-G0
48	350	52.5	ASY	3616	69	B1-U0-G1	3904	74	B1-U0-G1	4109	78	B2-U0-G1	4315	82	B2-U0-G1	41.0	1340	33	B1-U0-G1
			SYM	3610	69	B2-U0-G1	3897	74	B2-U0-G1	4103	78	B2-U0-G1	4308	82	B2-U0-G1		1337	33	B1-U0-G0
			ASY-HS	2610	50	B1-U0-G1	2818	54	B1-U0-G1	2966	56	B1-U0-G1	3114	59	B1-U0-G1		967	24	B0-U0-G0
48	525	79.0	ASY	5208	66	B2-U0-G1	5622	71	B2-U0-G1	5918	75	B2-U0-G2	6213	79	B2-U0-G2	62.0	1574	25	B1-U0-G1
			SYM	5199	66	B2-U0-G1	5612	71	B2-U0-G1	5907	75	B2-U0-G1	6203	79	B2-U0-G1		1571	25	B1-U0-G0
			ASY-HS	3759	48	B1-U0-G1	4058	51	B1-U0-G1	4271	54	B1-U0-G1	4485	57	B1-U0-G1		1136	18	B0-U0-G0
48	700	105.1	ASY	6603	63	B2-U0-G2	7128	68	B2-U0-G2	7504	71	B2-U0-G2	7879	75	B2-U0-G2	N/A	N/A		
			SYM	6592	63	B2-U0-G1	7116	68	B2-U0-G1	7491	71	B2-U0-G1	7866	75	B2-U0-G1		N/A		
			ASY-HS	4767	45	B1-U0-G1	5146	49	B1-U0-G1	5417	52	B2-U0-G1	5687	54	B2-U0-G1		N/A		
48	875	131.8	ASY	7562	57	B2-U0-G2	8163	62	B2-U0-G2	8593	65	B2-U0-G2	9023	68	B2-U0-G2	N/A	N/A		
			SYM	7549	57	B2-U0-G1	8149	62	B2-U0-G1	8578	65	B3-U0-G1	9007	68	B3-U0-G1		N/A		
			ASY-HS	5458	41	B2-U0-G1	5892	45	B2-U0-G1	6203	47	B2-U0-G1	6512	49	B2-U0-G1		N/A		

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