

AREA & ROADWAY LIGHTING

PROJECT NAME: _____

PROJECT TYPE: _____



Luminaire

Heavy cast low copper aluminum assembly (A356 alloy, <0.2% copper). Housing attaches to pole via a one piece, extruded aluminum arm with centering guides for internal draw bolts. Housing/pole junction is gasketed. All exposed hardware is stainless steel. Internal protected hardware is electro-zinc plated.

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 and functions as a house side shielding element. Refractors are injection molded optical 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 and specialized street, site, and area distributions. All distributions are Zero Uplight (U0), Full-Cutoff dark sky friendly. Panels are field replaceable and field rotatable in 90° increments.

LED Emitters

High Power White LED's are driven between 350mA and 1050mA for a maximum output of 3 Watts nominal each. 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

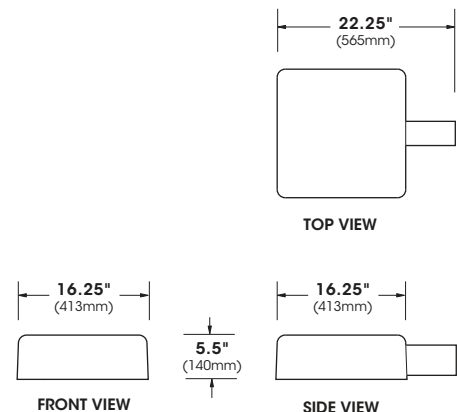
Constant current electronic with a power factor of >0.90, THD less than 10% and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50/60Hz. 0-10V dimmable driver is standard. Driver has a minimum of 3KV internal 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.



LUM PLED

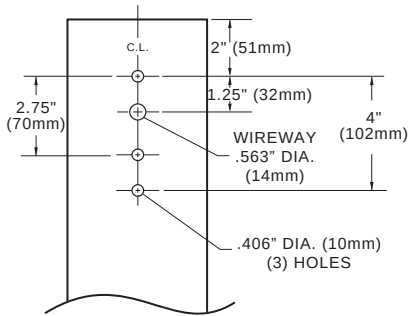


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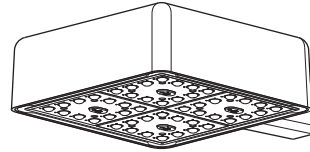
LUM SERIES - LED

SPECIFICATIONS

POLE DRILLING TEMPLATE

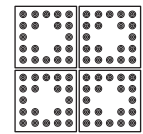


EPA & WEIGHT

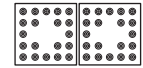


LUM
Max Weight = 35 lbs
Max EPA = 1.12
80 LED Max

PLED™ MODULES



80 LED Module



40 LED Module

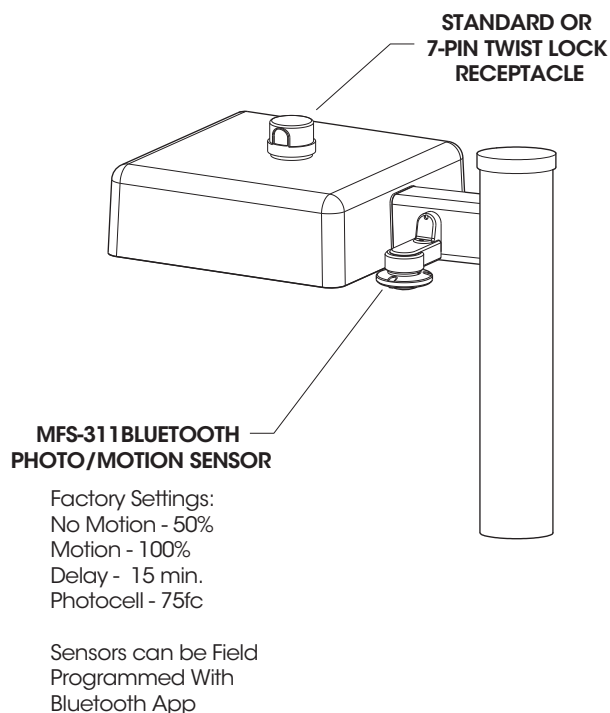
ORDERING INFORMATION

Spec/Order Example: LUM/PLED-II-ML/80LED-700mA/40K/347/4-90/RAL-8019-S

Luminaire	Optics	LED Mode	Voltage	Mounting	Finish	Options
Luminaire	Optics	LED	Voltage	Mounting	Finish	Options
☐ LUM	PLED™ Distribution Type ☐ Type II PLED-II ☐ Type II Front Row PLED-II-FR ☐ Type III Median Illuminator PLED-II-ML ☐ Type III Med. PLED-III-M ☐ Type III Wide PLED-III-W ☐ Type IV PLED-IV ☐ Type IV PLED-IV-FT ☐ Type V Narrow PLED-VSQ-N ☐ Type V Med. PLED-V-SQ-M ☐ Type V Wide PLED-V-SQ-W	# of LEDs ☐ 80LED ☐ 40LED Drive Current ☐ 1050mA¹ ☐ 875mA¹ ☐ 700mA ☐ 525mA ☐ 350mA Color Temp - CCT ☐ 27K (2700K) ☐ 30K (3000K) ☐ 40K (4000K) ☐ 50K (5000K) ☐ TRA² True Amber Consult Factory for Other LED Color, CCT, & CRI Options NOTES: 1 - 1050mA and 875mA for use with 40LED only 2 - TRA available in 350mA and 525mA Drive Currents only Consult Factory for Other Drive Currents	☐ UNV (120-277) ☐ 347 ☐ 480	Arm Mount ☐ 1 ☐ 2-180 ☐ 2-90 ☐ 3-90 ☐ 3-120 ☐ 4-90 ☐ Universal Pole Adaptor UPA Wall Mount ☐ WM WM - Wall Mount provided with mounting bracket and cover.	Standard Textured Finish ☐ Black RAL-9005-T ☐ White RAL-9003-T ☐ Grey RAL-7004-T ☐ Dark Bronze RAL-8019-T ☐ Green RAL-6005-T For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S) Consult factor for custom colors	☐ Internal House Side Shield inc. LED Count (Example: HS-PLED/48) ☐ External Glare Shield 4 Sided ☐ External Glare Shield 3 Sided Rear Wedge ☐ Twist Lock Receptacle Only ☐ 7-Pin Twist Lock Receptacle Only ☐ High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) ☐ Photo Cell + Voltage (Example: PC120V) ☐ Single Fuse (120V, 277V) ☐ Double Fuse (208V, 240V) ☐ Blue-Tooth Programmable Photo/Motion Sensor (Factory - Motion 50/100; Photo 75/c) HS-PLED EGS4 EGS3W TPR TPR7 HLSW PC+V SF DF MS-F311

LUM SERIES - LED

OPTIONS



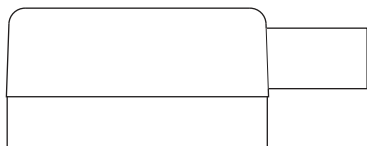
High Low Dimming For Switches (HLSW)

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

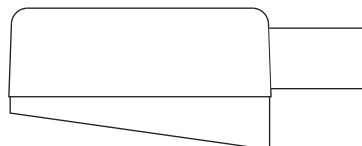
Contact Factory for Wireless and Other Fixture Controls and Recommendations. Most Controls Can be Integrated and Factory Installed.

EXTERNAL GLARE SHIELDS



EGS4 - 4 Sided Shield

Minimum Cutoff = 12°
Average Cutoff = 23°



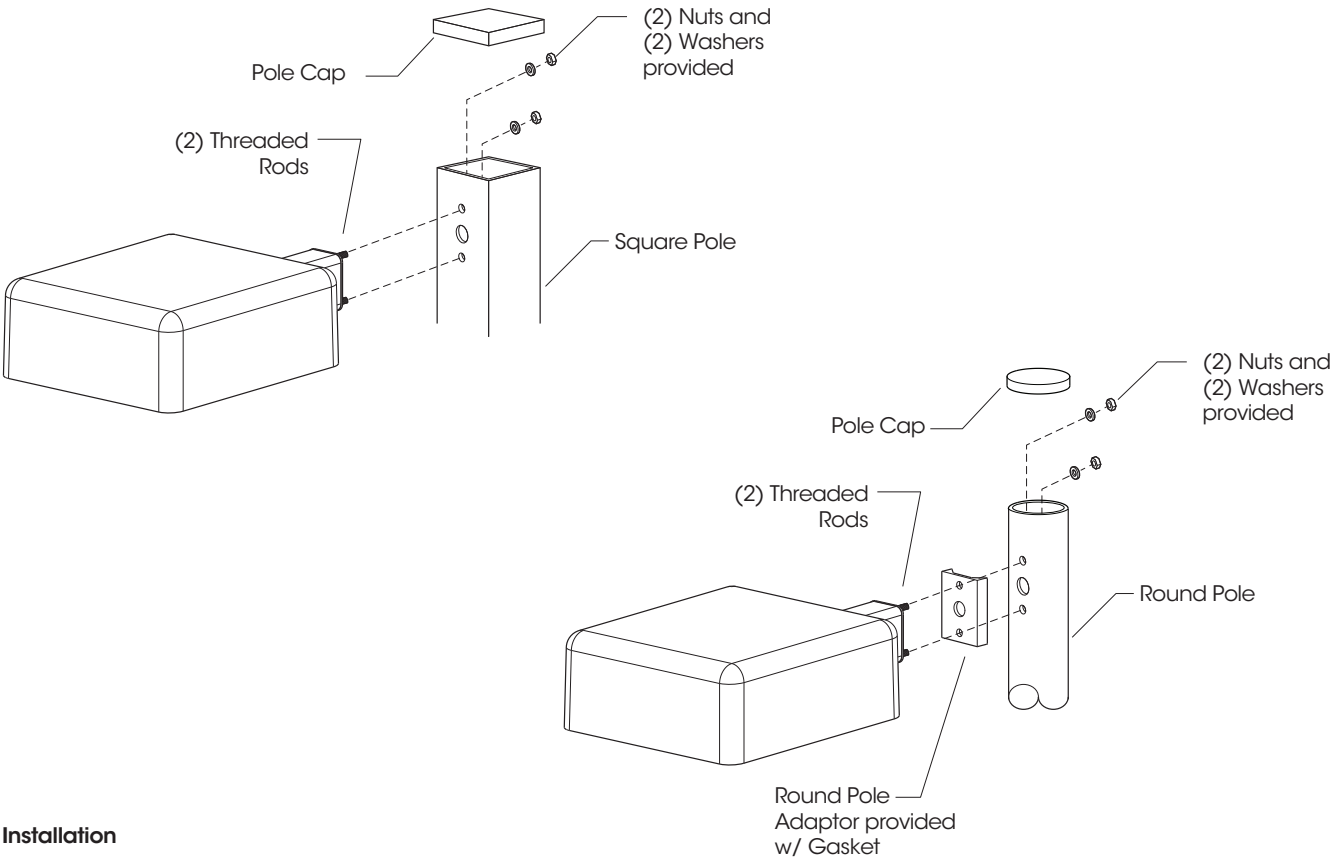
EGS3W - 3 Sided Shield

Minimum Rear Cutoff = 12°
Average Rear Cutoff = 23°
Minimum Side Cutoff = 4°
Average Side Cutoff = 16°

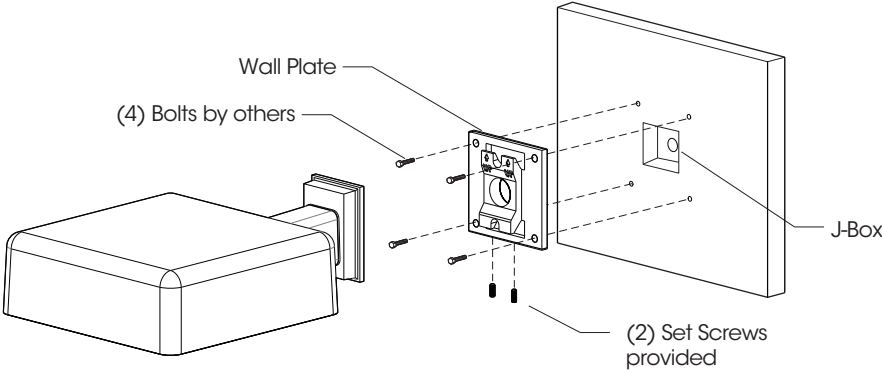
Glare Shields are rotatable. Consult factory for custom applications.

LUM SERIES - LED

INSTALLATION DETAIL



LUM Installation



LUM-WM Installation

LUM SERIES - PLED

PHOTOMETRIC DATA GUIDE - LM80 LUMENS 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 Hour

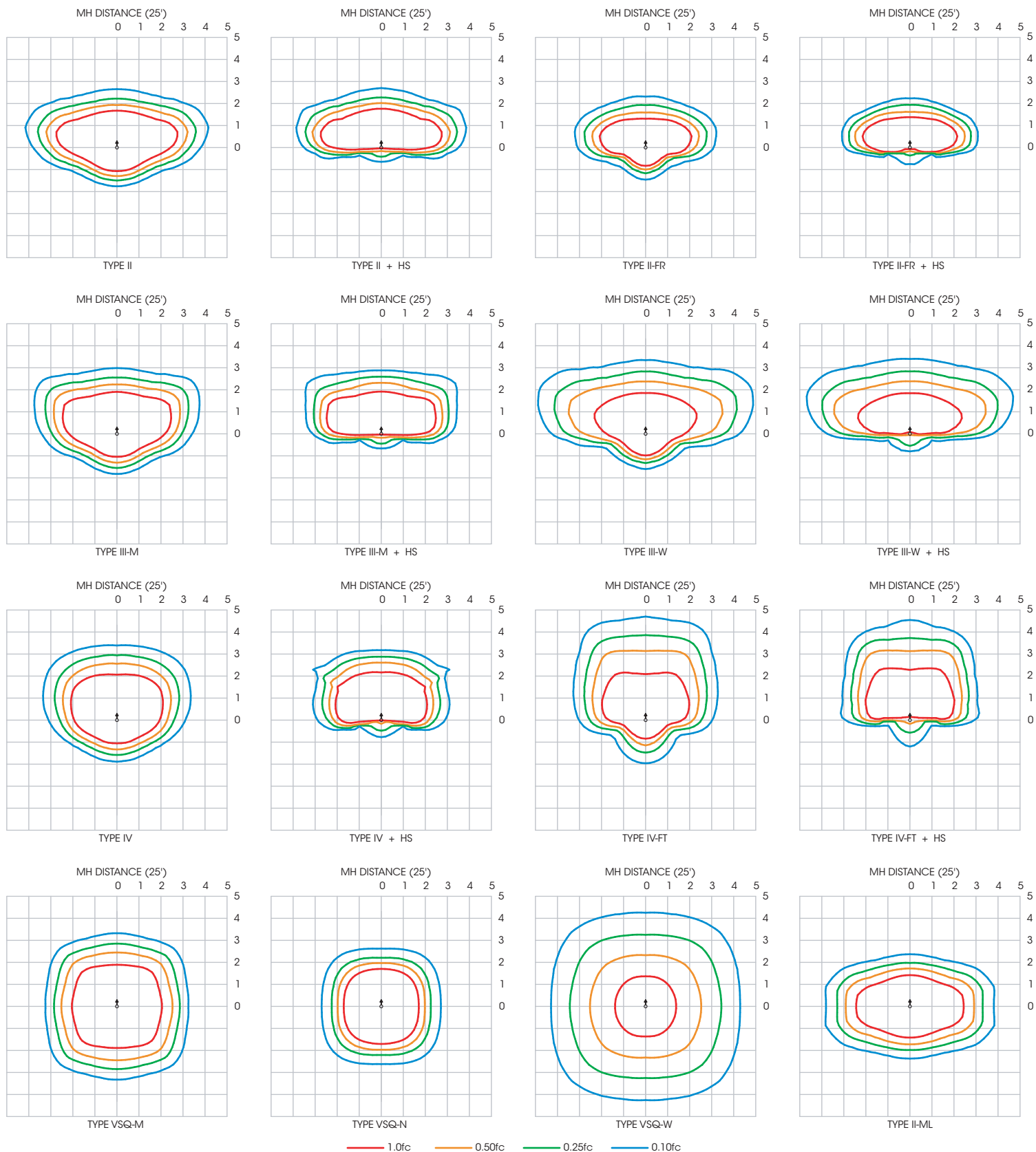
ELECTRICAL DATA GUIDE - AMPERAGE CHARTS

# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
40	350	43	0.36	0.21	0.15	0.12	0.09
40	525	65	0.54	0.31	0.23	0.19	0.13
40	700	87	0.72	0.42	0.31	0.25	0.18
40	875	108	0.90	0.52	0.39	0.31	0.23
40	1050	128	1.07	0.62	0.46	0.37	0.27
80	350	85	0.71	0.41	0.31	0.25	0.18
80	525	129	1.08	0.62	0.47	0.37	0.27
80	700	174	1.45	0.83	0.63	0.50	0.36

LUM SERIES - PLED

PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE PLOTS

LUM-PLED-80LED-700mA-40K - 25' Pole Height



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

LUM SERIES - PLED

PHOTOMETRIC DATA GUIDE - LUMEN TABLES

LUM-PLED																										
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	LUMENS	LPW	BUG RATING				
40	350	42.7	II	5470	128	B1-U0-G1	5904	138	B2-U0-G1	6215	146	B2-U0-G1	6526	153	B2-U0-G2	33.0	2170	66	B1-U0-G1							
			II-FR	5506	129	B1-U0-G1	5944	139	B2-U0-G1	6257	147	B2-U0-G1	6570	154	B2-U0-G1		2185	66	B1-U0-G0							
			II-ML	5469	128	B2-U0-G2	5905	138	B3-U0-G3	6215	146	B3-U0-G3	6526	153	B3-U0-G3		2170	66	B1-U0-G1							
			III-M	5566	130	B1-U0-G1	6008	141	B1-U0-G2	6325	148	B2-U0-G2	6641	156	B2-U0-G2		2208	67	B1-U0-G1							
			III-W	5167	121	B1-U0-G2	5579	131	B1-U0-G2	5872	138	B1-U0-G2	6166	144	B1-U0-G2		2051	62	B1-U0-G1							
			IV	5524	129	B1-U0-G1	5963	140	B1-U0-G2	6277	147	B2-U0-G2	6590	154	B2-U0-G2		2192	66	B1-U0-G1							
			IV-FT	5031	118	B1-U0-G2	5432	127	B1-U0-G2	5718	134	B1-U0-G2	6004	141	B1-U0-G2		1996	60	B1-U0-G1							
			VSQ-N	5773	135	B2-U0-G1	6232	146	B2-U0-G1	6560	154	B2-U0-G1	6888	161	B2-U0-G1		2291	69	B1-U0-G0							
			VSQ-M	5661	133	B3-U0-G1	6112	143	B3-U0-G1	6433	151	B3-U0-G1	6755	158	B3-U0-G1		2247	68	B2-U0-G1							
			VSQ-W	5526	129	B3-U0-G2	5966	140	B3-U0-G2	6280	147	B3-U0-G2	6594	154	B3-U0-G2		2193	66	B2-U0-G1							
			II-HS	4000	94	B0-U0-G1	4318	101	B0-U0-G1	4546	106	B0-U0-G1	4773	112	B1-U0-G2		1587	48	B0-U0-G0							
			II-FR-HS	4069	95	B0-U0-G1	4393	103	B0-U0-G1	4624	108	B0-U0-G1	4856	114	B0-U0-G1		1615	49	B0-U0-G0							
			III-M-HS	4047	95	B0-U0-G1	4369	102	B0-U0-G2	4599	108	B0-U0-G2	4829	113	B0-U0-G2		1606	49	B0-U0-G1							
			III-W-HS	3961	93	B0-U0-G2	4277	100	B0-U0-G2	4501	105	B0-U0-G2	4727	111	B0-U0-G2		1572	48	B0-U0-G1							
			IV-HS	4181	98	B0-U0-G1	4513	106	B0-U0-G1	4750	111	B0-U0-G2	4988	117	B0-U0-G2		1658	50	B0-U0-G0							
			IV-FT-HS	3950	93	B0-U0-G2	4264	100	B0-U0-G2	4489	105	B0-U0-G2	4714	110	B0-U0-G2		1568	48	B0-U0-G1							
			40	525	64.7	II	7892	122	B2-U0-G2	8520	132	B2-U0-G2	8968	139	B2-U0-G2		9416	146	B2-U0-G2	51.0	2552	50	B1-U0-G1			
						II-FR	7945	123	B2-U0-G1	8577	133	B2-U0-G1	9029	140	B2-U0-G1		9480	147	B2-U0-G1		2569	50	B1-U0-G1			
						II-ML	7892	122	B3-U0-G3	8520	132	B3-U0-G3	8969	139	B3-U0-G3		9417	146	B3-U0-G3		2552	50	B1-U0-G1			
						III-M	8031	124	B2-U0-G2	8669	134	B2-U0-G2	9126	141	B2-U0-G2		9582	148	B2-U0-G2		2596	51	B1-U0-G1			
III-W	7456	115				B1-U0-G2	8049	124	B2-U0-G2	8473	131	B2-U0-G2	8896	137	B2-U0-G3	2411	47	B1-U0-G1								
IV	7970	123				B2-U0-G2	8603	133	B2-U0-G2	9056	140	B2-U0-G2	9509	147	B2-U0-G2	2577	51	B1-U0-G1								
IV-FT	7260	112				B1-U0-G3	7838	121	B2-U0-G3	8250	128	B2-U0-G3	8663	134	B2-U0-G3	2347	46	B1-U0-G1								
VSQ-N	8329	129				B3-U0-G1	8992	139	B3-U0-G1	9465	146	B3-U0-G1	9939	154	B3-U0-G1	2694	53	B1-U0-G0								
VSQ-M	8169	126				B3-U0-G2	8818	136	B3-U0-G2	9282	143	B3-U0-G2	9747	151	B3-U0-G2	2641	52	B2-U0-G1								
VSQ-W	7974	123				B3-U0-G2	8608	133	B4-U0-G2	9061	140	B4-U0-G2	9514	147	B4-U0-G3	2578	51	B2-U0-G1								
II-HS	5772	89				B1-U0-G2	6231	96	B1-U0-G2	6559	101	B1-U0-G2	6887	106	B1-U0-G2	1866	37	B0-U0-G1								
II-FR-HS	5871	91				B1-U0-G1	6338	98	B1-U0-G1	6672	103	B1-U0-G1	7005	108	B1-U0-G1	1899	37	B0-U0-G0								
III-M-HS	5840	90				B0-U0-G2	6304	97	B0-U0-G2	6636	103	B0-U0-G2	6968	108	B0-U0-G2	1888	37	B0-U0-G1								
III-W-HS	5716	88				B0-U0-G2	6170	95	B0-U0-G2	6495	100	B0-U0-G2	6820	105	B0-U0-G2	1848	36	B0-U0-G1								
IV-HS	6032	93				B0-U0-G2	6511	101	B0-U0-G2	6854	106	B0-U0-G2	7197	111	B0-U0-G2	1951	38	B0-U0-G1								
IV-FT-HS	5700	88				B0-U0-G2	6153	95	B0-U0-G2	6477	100	B0-U0-G2	6801	105	B1-U0-G2	1843	36	B0-U0-G1								
40	700	86.8				II	10029	116	B2-U0-G2	10827	125	B2-U0-G2	11396	131	B2-U0-G2	11966	138	B2-U0-G2	N/A		N/A					
						II-FR	10096	116	B2-U0-G1	10899	126	B2-U0-G1	11472	132	B3-U0-G1	12046	139	B3-U0-G1								
						II-ML	10029	116	B3-U0-G3	10827	125	B3-U0-G3	11397	131	B3-U0-G3	11967	138	B3-U0-G3								
						III-M	10204	118	B2-U0-G2	11016	127	B2-U0-G2	11596	134	B2-U0-G2	12175	140	B2-U0-G2								
			III-W	9474	109	B2-U0-G3	10228	118	B2-U0-G3	10766	124	B2-U0-G3	11304	130	B2-U0-G3											
			IV	10127	117	B2-U0-G2	10933	126	B2-U0-G2	11508	133	B2-U0-G2	12084	139	B2-U0-G2											
			IV-FT	9225	106	B2-U0-G3	9959	115	B2-U0-G3	10483	121	B2-U0-G3	11008	127	B2-U0-G3											
			VSQ-N	10585	122	B3-U0-G1	11427	132	B3-U0-G1	12028	139	B3-U0-G1	12629	145	B3-U0-G1											
			VSQ-M	10379	120	B3-U0-G2	11205	129	B4-U0-G2	11795	136	B4-U0-G2	12385	143	B4-U0-G2											
			VSQ-W	10132	117	B4-U0-G3	10937	126	B4-U0-G3	11513	133	B4-U0-G3	12089	139	B4-U0-G3											
			II-HS	7335	84	B1-U0-G2	7918	91	B1-U0-G2	8335	96	B1-U0-G2	8751	101	B1-U0-G2											
			II-FR-HS	7461	86	B1-U0-G1	8054	93	B1-U0-G1	8478	98	B1-U0-G1	8902	103	B1-U0-G1											
			III-M-HS	7420	85	B0-U0-G2	8010	92	B1-U0-G2	8432	97	B1-U0-G2	8853	102	B1-U0-G2											
			III-W-HS	7262	84	B0-U0-G2	7840	90	B0-U0-G2	8253	95	B1-U0-G2	8665	100	B1-U0-G2											
			IV-HS	7664	88	B1-U0-G2	8274	95	B1-U0-G2	8709	100	B1-U0-G2	9145	105	B1-U0-G2											
			IV-FT-HS	7243	83	B1-U0-G3	7819	90	B1-U0-G3	8231	95	B1-U0-G3	8642	100	B1-U0-G3											
			40	875	108.0	II	11624	108	B2-U0-G2	12548	116	B2-U0-G2	13209	122	B2-U0-G2	13869	128	B2-U0-G2		N/A				N/A		
						II-FR	11701	108	B3-U0-G1	12632	117	B3-U0-G1	13297	123	B3-U0-G1	13962	129	B3-U0-G1								
						II-ML	11624	108	B3-U0-G3	12548	116	B3-U0-G3	13209	122	B3-U0-G3	13869	128	B3-U0-G3								
						III-M	11826	110	B2-U0-G2	12767	118	B2-U0-G2	13439	124	B2-U0-G2	14111	131	B2-U0-G2								
III-W	10981	102				B2-U0-G3	11854	110	B2-U0-G3	12478	116	B2-U0-G3	13102	121	B2-U0-G3											
IV	11737	109				B2-U0-G2	12671	117	B2-U0-G2	13338	123	B2-U0-G2	14005	130	B2-U0-G2											
IV-FT	10692	99				B2-U0-G3	11543	107	B2-U0-G3	12150	113	B2-U0-G3	12758	118	B2-U0-G3											
VSQ-N	12268	114				B3-U0-G1	13243	123	B3-U0-G1	13941	129	B3-U0-G1	14638	136	B3-U0-G1											
VSQ-M	12030	111				B4-U0-G2	12987	120	B4-U0-G2	13670	127	B4-U0-G2	14354	133	B4-U0-G2											
VSQ-W	11743	109				B4-U0-G3	12677	117	B4-U0-G3	13344	124	B4-U0-G3	14010	130	B4-U0-G3											
II-HS	8501	79				B1-U0-G2	9177	85	B1-U0-G2	9660	89	B1-U0-G2	10143	94	B1-U0-G2											
II-FR-HS	8647	80				B1-U0-G1	9334	86	B1-U0-G1	9826	91	B1-U0-G1	10317	96	B1-U0-G1											
III-M-HS	8600	80				B1-U0-G2	9284	86	B1-U0-G2	9772	90	B1-U0-G2	10261	95	B1-U0-G2											
III-W-HS	8418	78				B1-U0-G2	9087	84	B1-U0-G2	9565	89	B1-U0-G3	10044	93	B1-U0-G3											
IV-HS	8883	82				B1-U0-G2	9589	89	B1-U0-G2	10094	93	B1-U0-G2	10599	98	B1-U0-G2											
IV-FT-HS	8395	78				B1-U0-G3	9063	84	B1-U0-G3	9540	88	B1-U0-G3	10017	93	B1-U0-G3											
40	1050	128.2				II	13360	104	B2-U0-G2	14423	113	B3-U0-G2	15182	118	B3-U0-G2	15941	124	B3-U0-G2	N/A		N/A					
						II-FR	13450	105	B3-U0-G1	14520	113	B3-U0-G1	15284	119	B3-U0-G2	16048	125	B3-U0-G2								
						II-ML	13361	104	B3-U0-G3	14423	113	B4-U0-G4	15183	118	B4-U0-G4	15942	124	B4-U0-G4								
						III-M	13594	106	B2-U0-G2	14675	114	B2-U0-G2	15447	120	B3-U0-G2	16220	127	B3-U0-G3								
			III-W	12622	98	B2-U0-G3	13626	106	B2-U0-G3	14343	112	B2-U0-G3	15060	117	B2-U0-G3											
			IV	13491	105	B2-U0-G2	14564	114	B2-U0-G2	15331	120	B3-U0-G2	16097	126	B3-U0-G2											
			IV-FT	12290	96	B2-U0-G3	13268	103	B2-U0-G3	13966	109	B2-U0-G3	14665	114	B2-U0-G3											
			VSQ-N	14101	110	B3-U0-G1	15223	119	B3-U0-G1	16024	125	B4-U0-G1	16825	131	B4-U0-G2											
			VSQ-M	13827	108	B4-U0-G2	14927	116	B4-U0-G2	15712	123	B4-U0-G2	16499	129	B4-U0-G2											
			VSQ-W	13497	105	B4-U0-G3	14571	114	B4-U0-G3	15338	120	B4-U0-G3	16104	126	B4-U0-G3											
			II-HS	9771	76	B1-U0-G2	10549	82	B1-U0-G2	11104	87	B1-U0-G2	11659	91	B1-U0-G2											
			II-FR-HS	9939	78	B1-U0-G1	10729	84	B1-U0-G1	11294	88	B1-U0-G2	11859	93	B1-U0-G2											
			III-M-HS	9885	77	B1-U0-G2	10671	83	B1-U0-G2	11232	88	B1-U0-G2	11794	92	B1-U0-G3											
			III-W-HS	9675	75	B1-U0-G3	10445	81	B1-U0-G3	10994	86	B1-U0-G3	11544	90	B1-U0-G3											
			IV-HS	10210	80	B1-U0-G2	11022	86	B1-U0-G2	11602	91	B1-U0-G2	12182	95	B1-U0-G2											
			IV-FT-HS	9650	75	B1-U0-G3	10417	81	B1-U0-G3	10965	86	B1-U0-G3	11513	90	B1-U0-G3											

LUM SERIES - PLED

PHOTOMETRIC DATA GUIDE - LUMEN TABLES

LUM-PLED																			
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
80	350	85.4	II	10600	124	B2-U0-G2	11443	134	B2-U0-G2	12046	141	B2-U0-G2	12648	148	B2-U0-G2	67.0	4207	63	B1-U0-G1
			II-FR	10671	125	B2-U0-G1	11520	135	B3-U0-G1	12126	142	B3-U0-G1	12733	149	B3-U0-G1		4234	63	B1-U0-G1
			II-ML	10600	124	B3-U0-G3	11444	134	B3-U0-G3	12046	141	B3-U0-G3	12648	148	B3-U0-G3		4207	63	B2-U0-G2
			III-M	10785	126	B2-U0-G2	11643	136	B2-U0-G2	12256	144	B2-U0-G2	12869	151	B2-U0-G2		4280	64	B1-U0-G1
			III-W	10014	117	B2-U0-G3	10811	127	B2-U0-G3	11380	133	B2-U0-G3	11949	140	B2-U0-G3		3974	59	B1-U0-G2
			IV	10705	125	B2-U0-G2	11556	135	B2-U0-G2	12164	142	B2-U0-G2	12772	150	B2-U0-G2		4247	63	B1-U0-G1
			IV-FT	9751	114	B2-U0-G3	10527	123	B2-U0-G3	11081	130	B2-U0-G3	11635	136	B2-U0-G3		3870	58	B1-U0-G1
			VSQ-N	11188	131	B3-U0-G1	12078	141	B3-U0-G1	12714	149	B3-U0-G1	13350	156	B3-U0-G1		4440	66	B2-U0-G1
			VSQ-M	10971	128	B4-U0-G2	11844	139	B4-U0-G2	12467	146	B4-U0-G2	13091	153	B4-U0-G2		4353	65	B3-U0-G1
			VSQ-W	10709	125	B4-U0-G3	11561	135	B4-U0-G3	12169	142	B4-U0-G3	12778	150	B4-U0-G3		4249	63	B3-U0-G2
			II-HS	7752	91	B1-U0-G2	8369	98	B1-U0-G2	8809	103	B1-U0-G2	9250	108	B1-U0-G2		3076	46	B0-U0-G1
			II-FR-HS	7886	92	B1-U0-G1	8513	100	B1-U0-G1	8961	105	B1-U0-G1	9409	110	B1-U0-G1		3129	47	B0-U0-G0
			III-M-HS	7843	92	B1-U0-G2	8467	99	B1-U0-G2	8913	104	B1-U0-G2	9358	110	B1-U0-G2		3113	46	B0-U0-G1
			III-W-HS	7677	90	B0-U0-G2	8288	97	B1-U0-G2	8724	102	B1-U0-G2	9160	107	B1-U0-G2		3046	45	B0-U0-G1
			IV-HS	8101	95	B1-U0-G2	8745	102	B1-U0-G2	9206	108	B1-U0-G2	9666	113	B1-U0-G2		3215	48	B0-U0-G1
			IV-FT-HS	7656	90	B1-U0-G3	8265	97	B1-U0-G3	8700	102	B1-U0-G3	9135	107	B1-U0-G3		3038	45	B0-U0-G1
80	525	129.4	II	15265	118	B3-U0-G2	16479	127	B3-U0-G3	17347	134	B3-U0-G3	18214	141	B3-U0-G3	101.0	4936	49	B1-U0-G1
			II-FR	15367	119	B3-U0-G2	16589	128	B3-U0-G2	17462	135	B3-U0-G2	18335	142	B3-U0-G2		4968	49	B1-U0-G1
			II-ML	15265	118	B4-U0-G4	16480	127	B4-U0-G4	17347	134	B4-U0-G4	18214	141	B4-U0-G4		4936	49	B2-U0-G2
			III-M	15532	120	B3-U0-G2	16767	130	B3-U0-G3	17649	136	B3-U0-G3	18532	143	B3-U0-G3		5022	50	B1-U0-G1
			III-W	14421	111	B2-U0-G3	15568	120	B2-U0-G3	16387	127	B3-U0-G3	17206	133	B3-U0-G3		4663	46	B1-U0-G2
			IV	15414	119	B3-U0-G2	16640	129	B3-U0-G3	17516	135	B3-U0-G3	18392	142	B3-U0-G3		4984	49	B1-U0-G1
			IV-FT	14042	109	B2-U0-G3	15159	117	B3-U0-G3	15957	123	B3-U0-G4	16754	129	B3-U0-G4		4541	45	B1-U0-G2
			VSQ-N	16112	125	B4-U0-G1	17394	134	B4-U0-G2	18309	141	B4-U0-G2	19224	149	B4-U0-G2		5210	52	B2-U0-G1
			VSQ-M	15799	122	B4-U0-G2	17055	132	B4-U0-G2	17952	139	B4-U0-G2	18850	146	B4-U0-G2		5108	51	B3-U0-G1
			VSQ-W	15422	119	B4-U0-G3	16648	129	B4-U0-G3	17525	135	B5-U0-G3	18401	142	B5-U0-G3		4986	49	B3-U0-G2
			II-HS	11164	86	B1-U0-G2	12052	93	B1-U0-G2	12687	98	B1-U0-G2	13321	103	B1-U0-G3		3610	36	B0-U0-G1
			II-FR-HS	11356	88	B1-U0-G2	12259	95	B1-U0-G2	12905	100	B1-U0-G2	13550	105	B1-U0-G2		3672	36	B0-U0-G1
			III-M-HS	11295	87	B1-U0-G2	12193	94	B1-U0-G3	12835	99	B1-U0-G3	13477	104	B1-U0-G3		3652	36	B0-U0-G1
			III-W-HS	11054	85	B1-U0-G3	11934	92	B1-U0-G3	12562	97	B1-U0-G3	13190	102	B1-U0-G3		3575	35	B0-U0-G2
			IV-HS	11666	90	B1-U0-G2	12594	97	B1-U0-G2	13257	102	B1-U0-G3	13920	108	B1-U0-G3		3772	37	B0-U0-G1
			IV-FT-HS	11025	85	B1-U0-G3	11902	92	B1-U0-G3	12529	97	B1-U0-G3	13155	102	B1-U0-G3		3565	35	B0-U0-G2
80	700	173.6	II	19359	112	B3-U0-G3	20898	120	B3-U0-G3	21998	127	B3-U0-G3	23098	133	B3-U0-G3	N/A	N/A		
			II-FR	19487	112	B3-U0-G2	21038	121	B3-U0-G2	22145	128	B3-U0-G2	23252	134	B3-U0-G2				
			II-ML	19359	112	B4-U0-G4	20899	120	B4-U0-G4	21999	127	B4-U0-G4	23099	133	B4-U0-G4				
			III-M	19697	113	B3-U0-G3	21264	122	B3-U0-G3	22383	129	B3-U0-G3	23502	135	B3-U0-G3				
			III-W	18289	105	B3-U0-G3	19743	114	B3-U0-G4	20782	120	B3-U0-G4	21821	126	B3-U0-G4				
			IV	19549	113	B3-U0-G3	21104	122	B3-U0-G3	22215	128	B3-U0-G3	23325	134	B3-U0-G3				
			IV-FT	17808	103	B3-U0-G4	19224	111	B3-U0-G4	20236	117	B3-U0-G4	21248	122	B3-U0-G4				
			VSQ-N	20432	118	B4-U0-G2	22058	127	B4-U0-G2	23219	134	B4-U0-G2	24380	140	B4-U0-G2				
			VSQ-M	20035	115	B4-U0-G2	21629	125	B5-U0-G3	22767	131	B5-U0-G3	23906	138	B5-U0-G3				
			VSQ-W	19558	113	B5-U0-G3	21113	122	B5-U0-G4	22225	128	B5-U0-G4	23336	134	B5-U0-G4				
			II-HS	14158	82	B1-U0-G3	15284	88	B1-U0-G3	16088	93	B1-U0-G3	16893	97	B1-U0-G3				
			II-FR-HS	14401	83	B1-U0-G2	15547	90	B1-U0-G2	16365	94	B1-U0-G2	17183	99	B1-U0-G2				
			III-M-HS	14323	83	B1-U0-G3	15463	89	B1-U0-G3	16276	94	B1-U0-G3	17090	98	B1-U0-G3				
			III-W-HS	14020	81	B1-U0-G3	15135	87	B1-U0-G4	15932	92	B1-U0-G4	16728	96	B1-U0-G4				
			IV-HS	14795	85	B1-U0-G3	15972	92	B1-U0-G3	16812	97	B1-U0-G3	17653	102	B1-U0-G3				
			IV-FT-HS	13982	81	B1-U0-G4	15094	87	B1-U0-G4	15889	92	B1-U0-G4	16683	96	B1-U0-G4				

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