

SQUARE CONTEMPORARY COLUMN BOLLARD

AXIM SQUARE BOLLARD

Luminaire Head and Column Shaft

Luminaire Head is comprised of heavy cast aluminum (A356 alloy, <0.2% copper) heatsink, base, and top cover. Four 316 stainless steel struts secure the top of the head to the base. Struts are a brushed finish to accent the luminaire or can be optionally color matched powdercoated. Luminaire head secures to the shaft using hidden mounting screws. No hardware is visible for the mounting of the luminaire head to the column shaft. Driver is accessible through a cover at the base of the luminaire head. Shaft is 3/16" wall T6063-T6 aluminum. Internal mounting mechanism is integrated at top of column shaft for mounting luminaire head. 4" x 6" Integrated Hand Hole. Hardware is Stainless Steel.

Anchorage

Integrated 3/4" thick baseplate is circumferentially welded into shaft for internal mounting of column anchorage. Four 3/4" x 24" x 4" galvanized steel anchor bolts and hardware provided.

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. No lens (NL) and all flat lens options will provide "U0" no uplight optical packages that are Dark Sky friendly.

Lenses

No lens - Open Frame is standard for highest efficacy and U0 optics. Optional Clear Acrylic Lens (CA) provides high efficacy. Optional White Acrylic Lens (WA) provides glare control and general diffused lighting. Lenses are impact resistant, UV stable acrylic.

LED Emitters

LED thermal management is designed to maintain LED operating temperature below 90 °C, well below the manufacturers thermal max of 150 °C for long life, high lumen maintenance and color stabilit. 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 2700K & 3000K, 4000K, or 5000K. 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).

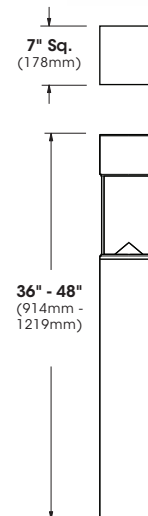
True Amber LED's TRA-True Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

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

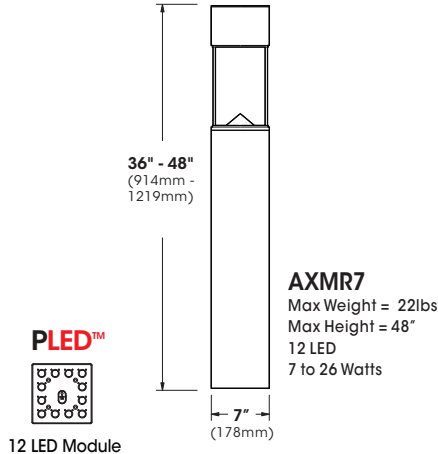
Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.


AXMSB


2024295

SPECIFICATIONS

OPTIONS



LENS OPTIONS

Standard No Lens
 Open Frame
 Highest Efficacy
 U0 Optics
 Area & Roadway



Clear Acrylic - CA
 High Efficacy
 Some Uplight
 Area & Roadway



White Acrylic - WA
 Lower Efficacy
 Higher Uplight
 General Diffused
 Low Glare



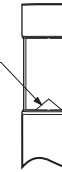
STRUT OPTIONS

Standard Struts
 are Brushed
 316 Stainless Steel
 Option to Match Struts to
 Shaft and Head
 Powdercoat Color - PS



BOTTOM CAP OPTIONS

Standard Pyramid
 Bottom Cap



Optional Flat
 Bottom Cap - FBC

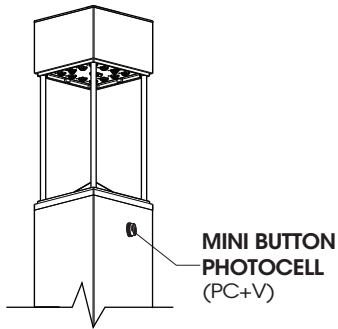


ORDERING INFORMATION

Spec/Order Example: AXMSB-42/PLED-II/12LED-350mA/27K/347/9005-T/CA/PS

Luminaire	Optics	# of LED's	Drive Current	CCT	Voltage	Finish	Options
Luminaire	Optics	LED			Voltage	Finish	Options
AXMSB	Area & Roadway (Clear Patterned Lenses)	# of LED's	Drive Current	Color Temp-CCT	Voltage	Standard Textured Finish	Lens Options: (No Lens Open Frame is Standard)
<input type="checkbox"/> 36" <input type="checkbox"/> 42" <input type="checkbox"/> 48"	For No Lens and CA Lens Option: <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-VSQ-N <input type="checkbox"/> PLED-VSQ-M <input type="checkbox"/> PLED-VSQ-W For WA Lens Option: <input type="checkbox"/> PLED-ASY <input type="checkbox"/> PLED-ASY-HS (Internal HS) <input type="checkbox"/> PLED-SYM	<input type="checkbox"/> 12LED	<input type="checkbox"/> 175mA <input type="checkbox"/> 350mA <input type="checkbox"/> 525mA <input type="checkbox"/> 700mA	<input type="checkbox"/> 27K (2700K) <input type="checkbox"/> 30K (3000K) <input type="checkbox"/> 40K (4000K) <input type="checkbox"/> 50K (5000K) Consult Factory for Other LED Color, CCT, & CRI Options <input type="checkbox"/> TRA True Amber* *TRA Available only in 350mA and 525mA Drive Currents	<input type="checkbox"/> UNV (120-277) <input type="checkbox"/> 347 <input type="checkbox"/> 480	<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"/> Clear Acrylic CA <input type="checkbox"/> Opal Acrylic WA Strut Options: (Brushed Stainless Steel is Standard) <input type="checkbox"/> Powdercoated Struts (Matched to Shaft) PS Bottom Cap Options: (Conical Cap is Standard) <input type="checkbox"/> Flat Bottom Cap FBC <input type="checkbox"/> Internal House Side Shield incl. LED Count (Example: HS-PLED/48) HS-PLED <input type="checkbox"/> High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) HLSW <input type="checkbox"/> Single Fuse (Example: DF277V) SF+V <input type="checkbox"/> Double Fuse (Example: DF240V) DF+V

OPTIONS (cont.)



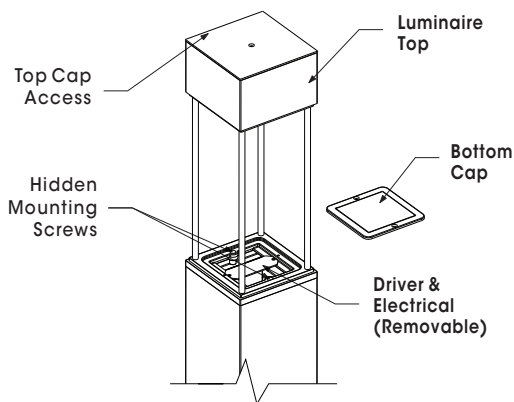
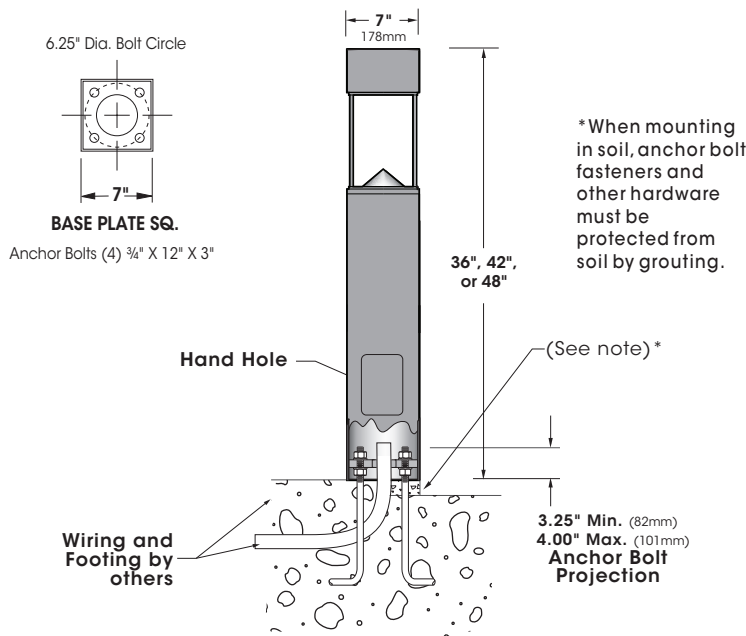
High Low Dimming For Switches (HLSW)

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.

INSTALLATION AND ACCESS DETAILS



Luminaire Head is mounted to shaft by interting head by placing the mounting screws through cutouts on the internal shaft ring. Luminaire Head is then rotated into alignment. Proper alignment should be verified by way of the LED Module alignment and struts. The Mounting Screws are then tightened. Captive Track Nuts on the Mounting Screws retain the head to the internal ring.

Electrical connections can be before or after mounting the head by removing the Driver and Electrical Bracket.

Bottom Cap is screwed in place to seal the Luminaire and Electrical.

For Lensed versions, the Top Cap, Luminaire Top, and Lens are disassembled prior to mounting the top and to access electrical.

ELECTRICAL DATA GUIDE - AMPERAGE CHART

ELECTRICAL LOAD			CURRENT (A)				
# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
12	175	6.5	0.05	0.03	0.02	0.02	0.01
12	350	13.0	0.11	0.06	0.05	0.04	0.03
12	525	20.0	0.17	0.10	0.07	0.06	0.04
12	700	26.0	0.22	0.13	0.09	0.07	0.05

PHOTOMETRIC DATA GUIDE - LM-80 LUMEN MAINTENANCE

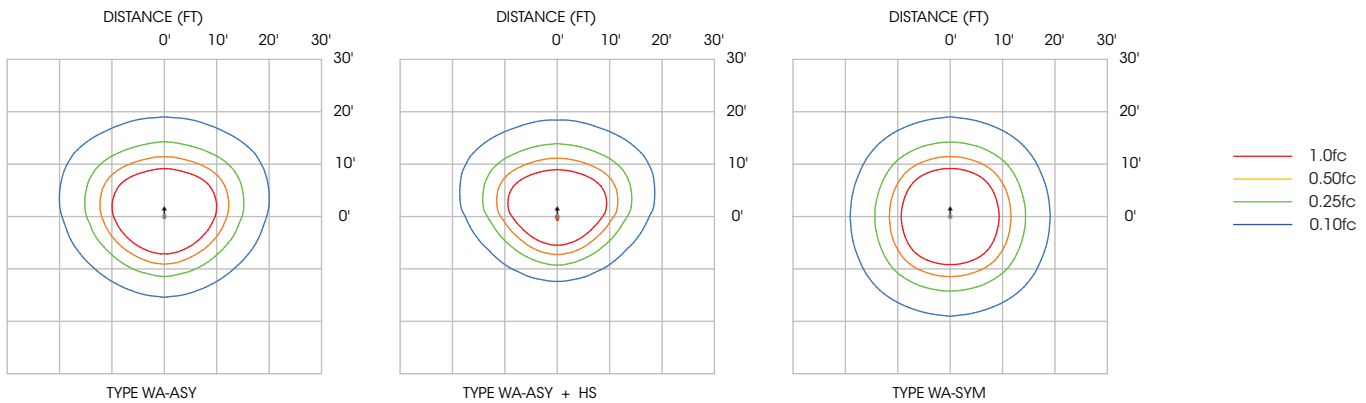
LED LUMEN MAINTENANCE (350mA to 1050mA)		
LED Life / Operating Hours	Lumen Depreciation	Lumen Depreciation Scale Factor
60,000	L96	0.96x
100,000 (6X LED Test Hrs)	L93	0.93x
150,000 (Theoretical)	L89	0.90x
200,000 (Theoretical)	L86	0.87x

TM-21 6x Test Time Dictates that L93 > 100,000 Hours.

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

PHOTOMETRIC GUIDE - ISOFOOTCANDLE PLOTS (AXMSB)

AXMSB-PLED-WA-12LED-525mA-40K - 42"



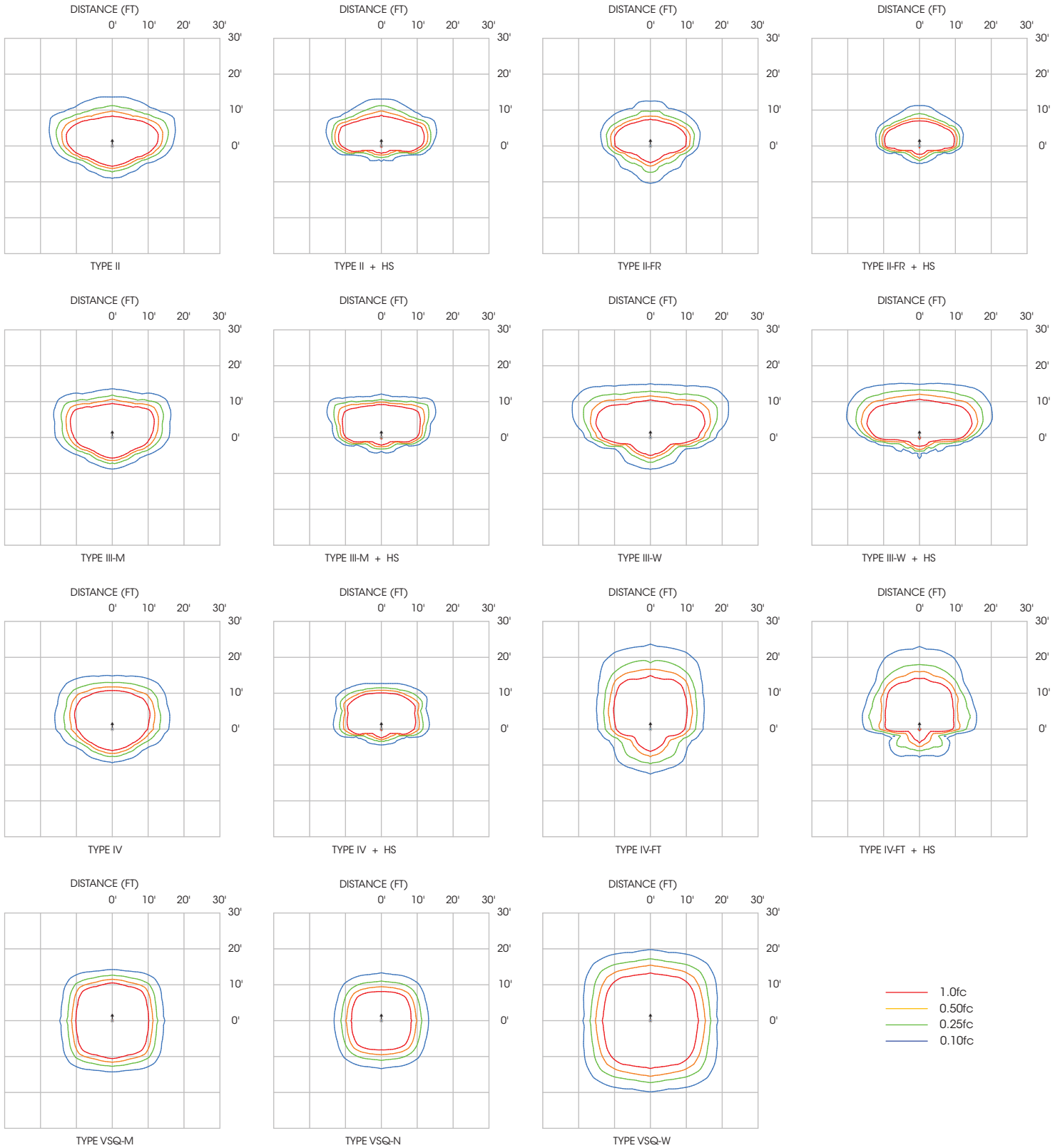
PHOTOMETRIC GUIDE - LUMEN TABLES (AXMSB)

AXMSB-PLED-WA (White Acrylic Lens)																			
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
12	175	6.5	ASY	734	108	B0-U3-G1	734	113	B0-U3-G1	764	118	B0-U3-G1	794	122	B0-U3-G1	5.0	275	55	B0-U3-G1
			SYM	741	114	B0-U3-G1	773	119	B1-U3-G1	805	124	B1-U3-G1	837	129	B1-U3-G1		290	58	B0-U3-G1
			ASY-HS	530	82	B0-U3-G1	554	85	B0-U3-G1	577	89	B0-U3-G1	599	92	B0-U3-G1		207	41	B0-U2-G1
12	350	13.0	ASY	1278	98	B1-U3-G1	1333	103	B1-U3-G1	1389	107	B1-U3-G1	1444	111	B1-U3-G1	10.0	445	44	B0-U3-G1
			SYM	1347	104	B1-U3-G1	1406	108	B1-U3-G1	1464	113	B1-U3-G1	1523	117	B1-U3-G1		469	47	B0-U3-G1
			ASY-HS	965	74	B0-U3-G1	1006	77	B0-U3-G1	1048	81	B0-U3-G1	1090	84	B0-U3-G1		336	34	B0-U3-G1
12	525	20.0	ASY	1836	92	B1-U3-G2	1916	96	B1-U3-G2	1996	100	B1-U3-G2	2076	104	B1-U3-G2	15.0	519	35	B0-U3-G1
			SYM	1935	97	B1-U3-G2	2019	101	B1-U3-G2	2104	105	B1-U3-G2	2188	109	B1-U3-G2		547	36	B0-U3-G1
			ASY-HS	1386	69	B0-U3-G1	1446	72	B0-U3-G2	1507	75	B0-U3-G2	1567	78	B1-U3-G2		391	26	B0-U3-G1
12	700	26.0	ASY	2325	89	B1-U4-G2	2425	93	B1-U4-G2	2527	97	B1-U4-G2	2628	101	B1-U4-G2	N/A	N/A		
			SYM	2450	94	B1-U4-G2	2555	98	B1-U4-G2	2663	102	B1-U4-G2	2770	107	B1-U4-G2		N/A		
			ASY-HS	1754	67	B1-U3-G2	1831	70	B1-U3-G2	1907	73	B1-U3-G2	1983	76	B1-U3-G2		N/A		

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

PHOTOMETRIC GUIDE - ISOFOOTCANDLE PLOTS (AXMSB)

AXMSB-PLD-NL-12LED-525mA-40K - 42" Height



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

PHOTOMETRIC GUIDE - LUMEN TABLES (AXMSB)

AXMSB-PLED-NL (No Lens Open Frame)																			
LED Count	Drive Current (mA)	System Watts	Dist'n Typ	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
12	175	6.5	II	924	142	B0-U0-G0	965	148	B0-U0-G0	1005	155	B0-U0-G0	1045	161	B0-U0-G0	5.0	362	72	B0-U0-G0
			II-FR	917	141	B0-U0-G0	957	147	B0-U0-G0	996	153	B0-U0-G0	1036	159	B0-U0-G0		359	72	B0-U0-G0
			III-M	925	142	B0-U0-G0	965	149	B0-U0-G0	1005	155	B0-U0-G0	1045	161	B0-U0-G0		362	72	B0-U0-G0
			III-W	842	129	B0-U0-G1	878	135	B0-U0-G1	915	141	B0-U0-G1	951	146	B0-U0-G1		329	66	B0-U0-G0
			IV	936	144	B0-U0-G0	977	150	B0-U0-G0	1018	157	B0-U0-G0	1058	163	B0-U0-G0		366	73	B0-U0-G0
			IV-FT	840	129	B0-U0-G1	877	135	B0-U0-G1	913	141	B0-U0-G1	950	146	B0-U0-G1		329	66	B0-U0-G0
			VSQ-N	961	148	B1-U0-G0	1003	154	B1-U0-G0	1045	161	B1-U0-G0	1086	167	B1-U0-G0		376	75	B0-U0-G0
			VSQ-M	961	148	B1-U0-G0	1002	154	B1-U0-G0	1044	161	B1-U0-G0	1086	167	B1-U0-G0		376	75	B0-U0-G0
			VSQ-W	940	145	B1-U0-G1	981	151	B1-U0-G1	1022	157	B1-U0-G1	1062	163	B1-U0-G1		368	74	B1-U0-G0
			II-HS	670	103	B0-U0-G0	700	108	B0-U0-G0	729	112	B0-U0-G0	757	116	B0-U0-G0		262	52	B0-U0-G0
			II-FR-HS	691	106	B0-U0-G0	721	111	B0-U0-G0	751	115	B0-U0-G0	780	120	B0-U0-G0		270	54	B0-U0-G0
			III-M-HS	672	103	B0-U0-G0	701	108	B0-U0-G0	730	112	B0-U0-G0	759	117	B0-U0-G0		263	53	B0-U0-G0
			III-W-HS	669	103	B0-U0-G1	699	107	B0-U0-G1	727	112	B0-U0-G1	756	116	B0-U0-G1		262	52	B0-U0-G0
			IV-HS	696	107	B0-U0-G0	726	112	B0-U0-G0	756	116	B0-U0-G0	786	121	B0-U0-G0		272	54	B0-U0-G0
			IV-FT-HS	664	102	B0-U0-G1	694	107	B0-U0-G1	722	111	B0-U0-G1	751	115	B0-U0-G1		260	52	B0-U0-G0
			II	1680	129	B1-U0-G1	1754	135	B1-U0-G1	1826	140	B1-U0-G1	1899	146	B1-U0-G1		584	58	B0-U0-G0
			II-FR	1666	128	B1-U0-G0	1739	134	B1-U0-G0	1812	139	B1-U0-G0	1884	145	B1-U0-G0		580	58	B0-U0-G0
			III-M	1680	129	B1-U0-G1	1753	135	B1-U0-G1	1826	140	B1-U0-G1	1899	146	B1-U0-G1		584	58	B0-U0-G0
			III-W	1530	118	B0-U0-G1	1596	123	B0-U0-G1	1663	128	B0-U0-G1	1729	133	B0-U0-G1		532	53	B0-U0-G1
			IV	1702	131	B1-U0-G1	1776	137	B1-U0-G1	1850	142	B1-U0-G1	1924	148	B1-U0-G1		592	59	B0-U0-G0
IV-FT	1527	117	B0-U0-G1	1594	123	B0-U0-G1	1660	128	B0-U0-G1	1726	133	B0-U0-G1	531	53	B0-U0-G1				
VSQ-N	1748	134	B1-U0-G0	1824	140	B1-U0-G0	1899	146	B1-U0-G0	1975	152	B1-U0-G0	608	61	B0-U0-G0				
VSQ-M	1746	134	B1-U0-G0	1822	140	B1-U0-G0	1898	146	B1-U0-G0	1974	152	B1-U0-G0	607	61	B0-U0-G0				
VSQ-W	1708	131	B2-U0-G1	1782	137	B2-U0-G1	1857	143	B2-U0-G1	1931	149	B2-U0-G1	594	59	B1-U0-G1				
II-HS	1218	94	B0-U0-G0	1271	98	B0-U0-G0	1324	102	B0-U0-G0	1377	106	B0-U0-G0	424	42	B0-U0-G0				
II-FR-HS	1255	97	B0-U0-G0	1309	101	B0-U0-G0	1364	105	B0-U0-G0	1418	109	B0-U0-G0	437	44	B0-U0-G0				
III-M-HS	1221	94	B0-U0-G0	1274	98	B0-U0-G0	1327	102	B0-U0-G0	1379	106	B0-U0-G0	424	42	B0-U0-G0				
III-W-HS	1216	94	B0-U0-G1	1270	98	B0-U0-G1	1322	102	B0-U0-G1	1375	106	B0-U0-G1	423	42	B0-U0-G0				
IV-HS	1264	97	B0-U0-G0	1319	101	B0-U0-G0	1374	106	B0-U0-G0	1429	110	B0-U0-G0	439	44	B0-U0-G0				
IV-FT-HS	1208	93	B0-U0-G1	1260	97	B0-U0-G1	1312	101	B0-U0-G1	1365	105	B0-U0-G1	420	42	B0-U0-G1				
II	2414	121	B1-U0-G1	2520	126	B1-U0-G1	2624	131	B1-U0-G1	2729	136	B1-U0-G1	682	45	B0-U0-G0				
II-FR	2394	120	B1-U0-G0	2499	125	B1-U0-G0	2603	130	B1-U0-G0	2707	135	B1-U0-G0	677	45	B0-U0-G0				
III-M	2414	121	B1-U0-G1	2519	126	B1-U0-G1	2624	131	B1-U0-G1	2729	136	B1-U0-G1	682	45	B0-U0-G0				
III-W	2198	110	B1-U0-G1	2294	115	B1-U0-G1	2389	119	B1-U0-G1	2485	124	B1-U0-G1	621	41	B0-U0-G1				
IV	2446	122	B1-U0-G1	2553	128	B1-U0-G1	2659	133	B1-U0-G1	2765	138	B1-U0-G1	691	46	B0-U0-G0				
IV-FT	2194	110	B1-U0-G1	2290	115	B1-U0-G1	2385	119	B1-U0-G1	2481	124	B1-U0-G1	620	41	B0-U0-G1				
VSQ-N	2511	126	B1-U0-G0	2620	131	B1-U0-G0	2730	136	B1-U0-G0	2839	142	B1-U0-G0	710	47	B1-U0-G0				
VSQ-M	2509	125	B2-U0-G1	2619	131	B2-U0-G1	2728	136	B2-U0-G1	2836	142	B2-U0-G1	709	47	B1-U0-G0				
VSQ-W	2455	123	B2-U0-G1	2561	128	B2-U0-G1	2668	133	B2-U0-G1	2775	139	B2-U0-G1	694	46	B1-U0-G1				
II-HS	1751	88	B0-U0-G1	1827	91	B0-U0-G1	1903	95	B0-U0-G1	1979	99	B0-U0-G1	495	33	B0-U0-G0				
II-FR-HS	1803	90	B0-U0-G0	1882	94	B0-U0-G0	1960	98	B0-U0-G0	2038	102	B0-U0-G0	510	34	B0-U0-G0				
III-M-HS	1754	88	B0-U0-G1	1830	92	B0-U0-G1	1906	95	B0-U0-G1	1982	99	B0-U0-G1	496	33	B0-U0-G0				
III-W-HS	1748	87	B0-U0-G1	1825	91	B0-U0-G1	1900	95	B0-U0-G1	1976	99	B0-U0-G1	494	33	B0-U0-G1				
IV-HS	1816	91	B0-U0-G1	1896	95	B0-U0-G1	1975	99	B0-U0-G1	2053	103	B0-U0-G1	513	34	B0-U0-G0				
IV-FT-HS	1735	87	B0-U0-G1	1811	91	B0-U0-G1	1886	94	B0-U0-G1	1961	98	B0-U0-G1	490	33	B0-U0-G1				
II	3056	118	B1-U0-G1	3189	123	B1-U0-G1	3322	128	B1-U0-G1	3455	133	B1-U0-G1	N/A	N/A					
II-FR	3032	117	B1-U0-G1	3163	122	B1-U0-G1	3295	127	B1-U0-G1	3427	132	B1-U0-G1							
III-M	3056	118	B1-U0-G1	3190	123	B1-U0-G1	3322	128	B1-U0-G1	3455	133	B1-U0-G1							
III-W	2783	107	B1-U0-G1	2903	112	B1-U0-G1	3024	116	B1-U0-G1	3145	121	B1-U0-G1							
IV	3097	119	B1-U0-G1	3231	124	B1-U0-G1	3366	129	B1-U0-G1	3500	135	B1-U0-G1							
IV-FT	2778	107	B1-U0-G1	2899	111	B1-U0-G1	3020	116	B1-U0-G1	3140	121	B1-U0-G1							
VSQ-N	3179	122	B2-U0-G0	3317	128	B2-U0-G0	3455	133	B2-U0-G0	3594	138	B2-U0-G0							
VSQ-M	3177	122	B2-U0-G1	3315	127	B2-U0-G1	3453	133	B2-U0-G1	3591	138	B2-U0-G1							
VSQ-W	3107	120	B2-U0-G1	3242	125	B2-U0-G1	3378	130	B3-U0-G1	3513	135	B3-U0-G1							
II-HS	2216	85	B0-U0-G1	2313	89	B0-U0-G1	2409	93	B0-U0-G1	2505	96	B0-U0-G1							
II-FR-HS	2283	88	B0-U0-G0	2382	92	B0-U0-G0	2481	95	B0-U0-G0	2580	99	B0-U0-G0							
III-M-HS	2220	85	B0-U0-G1	2317	89	B0-U0-G1	2413	93	B0-U0-G1	2510	97	B0-U0-G1							
III-W-HS	2213	85	B0-U0-G1	2310	89	B0-U0-G1	2405	93	B0-U0-G1	2501	96	B0-U0-G1							
IV-HS	2300	88	B0-U0-G1	2400	92	B0-U0-G1	2500	96	B0-U0-G1	2599	100	B0-U0-G1							
IV-FT-HS	2197	84	B0-U0-G1	2292	88	B0-U0-G1	2388	92	B0-U0-G1	2483	95	B0-U0-G1							

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PHOTOMETRIC GUIDE - LUMEN TABLES (AXMSB)

AXMSB-PLED-CA (Clear Acrylic Lens)																			
LED Count	Drive Current (mA)	System Watts	Dist'n Typ	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
12	175	6.5	II	895	138	B0-U1-G0	934	144	B0-U1-G0	972	150	B0-U1-G0	1011	156	B0-U1-G0	5.0	348	70	B0-U0-G0
			II-FR	875	135	B0-U1-G0	912	140	B0-U1-G0	950	146	B0-U1-G0	988	152	B0-U1-G0		340	68	B0-U0-G0
			III-M	872	134	B0-U1-G0	910	140	B0-U1-G0	948	146	B0-U1-G0	985	152	B0-U1-G0		339	68	B0-U0-G0
			III-W	779	120	B0-U1-G1	813	125	B0-U1-G1	846	130	B0-U1-G1	879	135	B0-U1-G1		303	61	B0-U0-G0
			IV	909	140	B0-U1-G0	948	146	B0-U1-G0	987	152	B0-U1-G0	1026	158	B0-U1-G0		353	71	B0-U0-G0
			IV-FT	804	124	B0-U1-G1	839	129	B0-U1-G1	873	134	B0-U1-G1	908	140	B0-U1-G1		312	62	B0-U0-G0
			VSQ-N	922	142	B1-U1-G0	962	148	B1-U1-G0	1001	154	B1-U1-G0	1041	160	B1-U1-G0		358	72	B0-U0-G0
			VSQ-M	937	144	B1-U1-G0	977	150	B1-U1-G0	1018	157	B1-U1-G0	1058	163	B1-U1-G0		364	73	B0-U0-G0
			VSQ-W	907	140	B1-U1-G1	946	146	B1-U1-G1	985	152	B1-U1-G1	1024	158	B1-U1-G1		353	71	B0-U0-G0
			II-HS	645	99	B0-U1-G0	673	104	B0-U1-G0	701	108	B0-U1-G0	728	112	B0-U1-G0		250	50	B0-U0-G0
			II-FR-HS	675	104	B0-U1-G0	704	108	B0-U1-G0	733	113	B0-U1-G0	762	117	B0-U1-G0		262	52	B0-U0-G0
			III-M-HS	645	99	B0-U1-G0	673	103	B0-U1-G0	700	108	B0-U1-G0	728	112	B0-U1-G0		250	50	B0-U0-G0
			III-W-HS	647	100	B0-U1-G1	676	104	B0-U1-G1	704	108	B0-U1-G1	732	113	B0-U1-G1		252	50	B0-U0-G0
			IV-HS	661	102	B0-U1-G0	690	106	B0-U1-G0	718	111	B0-U1-G0	746	115	B0-U1-G0		257	51	B0-U0-G0
			IV-FT-HS	647	100	B0-U1-G1	675	104	B0-U1-G1	703	108	B0-U1-G1	731	112	B0-U1-G1		252	50	B0-U0-G0
			II	1622	125	B1-U1-G1	1693	130	B1-U1-G1	1763	136	B1-U1-G1	1833	141	B1-U1-G1		562	56	B0-U0-G0
			II-FR	1585	122	B1-U1-G0	1654	127	B1-U1-G0	1722	132	B1-U1-G0	1791	138	B1-U1-G0		549	55	B0-U0-G0
			III-M	1581	122	B1-U1-G1	1649	127	B1-U1-G1	1718	132	B1-U1-G1	1786	137	B1-U1-G1		548	55	B0-U0-G0
			III-W	1411	109	B0-U1-G1	1472	113	B0-U1-G1	1533	118	B0-U1-G1	1594	123	B0-U1-G1		489	49	B0-U0-G1
			IV	1647	127	B1-U1-G1	1719	132	B1-U1-G1	1790	138	B1-U1-G1	1861	143	B1-U1-G1		571	57	B0-U0-G0
IV-FT	1456	112	B0-U1-G1	1519	117	B0-U1-G1	1582	122	B0-U1-G1	1645	127	B0-U1-G1	504	50	B0-U0-G1				
VSQ-N	1670	128	B1-U1-G0	1743	134	B1-U1-G0	1815	140	B1-U1-G0	1887	145	B1-U1-G0	579	58	B0-U0-G0				
VSQ-M	1698	131	B1-U1-G0	1772	136	B1-U1-G0	1846	142	B1-U1-G0	1919	148	B1-U1-G0	589	59	B1-U0-G0				
VSQ-W	1644	126	B2-U1-G1	1716	132	B2-U1-G1	1787	137	B2-U1-G1	1858	143	B2-U1-G1	570	57	B1-U0-G1				
II-HS	1168	90	B0-U1-G0	1219	94	B0-U1-G0	1269	98	B0-U1-G0	1320	102	B0-U1-G0	404	40	B0-U0-G0				
II-FR-HS	1223	94	B0-U1-G0	1276	98	B0-U1-G0	1329	102	B0-U1-G0	1381	106	B0-U1-G0	424	42	B0-U1-G0				
III-M-HS	1167	90	B0-U1-G0	1218	94	B0-U1-G0	1268	98	B0-U1-G0	1319	101	B0-U1-G0	404	40	B0-U0-G0				
III-W-HS	1174	90	B0-U1-G1	1225	94	B0-U1-G1	1276	98	B0-U1-G1	1327	102	B0-U1-G1	407	41	B0-U1-G0				
IV-HS	1198	92	B0-U1-G0	1250	96	B0-U1-G0	1301	100	B0-U1-G0	1353	104	B0-U1-G0	415	41	B0-U0-G0				
IV-FT-HS	1174	90	B0-U1-G1	1225	94	B0-U1-G1	1276	98	B0-U1-G1	1327	102	B0-U1-G1	408	41	B0-U1-G1				
II	2328	116	B1-U1-G1	2429	121	B1-U1-G1	2530	127	B1-U1-G1	2631	132	B1-U1-G1	656	44	B0-U0-G0				
II-FR	2275	114	B1-U1-G0	2373	119	B1-U1-G0	2472	124	B1-U1-G0	2570	129	B1-U1-G0	641	43	B0-U0-G0				
III-M	2269	113	B1-U1-G1	2368	118	B1-U1-G1	2466	123	B1-U1-G1	2564	128	B1-U1-G1	640	43	B0-U0-G0				
III-W	2025	101	B1-U1-G1	2113	106	B1-U1-G1	2200	110	B1-U1-G1	2288	114	B1-U1-G1	570	38	B0-U0-G1				
IV	2364	118	B1-U1-G1	2467	123	B1-U1-G1	2569	128	B1-U1-G1	2672	134	B1-U1-G1	666	44	B0-U0-G0				
IV-FT	2090	104	B1-U1-G1	2181	109	B1-U1-G1	2271	114	B1-U1-G1	2362	118	B1-U1-G1	589	39	B0-U0-G1				
VSQ-N	2397	120	B1-U1-G0	2502	125	B1-U1-G0	2605	130	B1-U1-G0	2709	135	B1-U1-G0	676	45	B1-U0-G0				
VSQ-M	2438	122	B2-U1-G1	2544	127	B2-U1-G1	2649	132	B2-U1-G1	2755	138	B2-U1-G1	687	46	B1-U0-G0				
VSQ-W	2361	118	B2-U1-G1	2463	123	B2-U1-G1	2566	128	B2-U1-G1	2668	133	B2-U1-G1	666	44	B1-U0-G1				
II-HS	1676	84	B0-U1-G0	1749	87	B0-U1-G0	1821	91	B0-U1-G0	1894	95	B0-U1-G0	472	31	B0-U0-G0				
II-FR-HS	1755	88	B0-U1-G0	1831	92	B0-U1-G0	1907	95	B0-U1-G0	1983	99	B0-U1-G0	495	33	B0-U1-G0				
III-M-HS	1675	84	B0-U1-G1	1748	87	B0-U1-G1	1820	91	B0-U1-G1	1893	95	B0-U1-G1	472	31	B0-U0-G0				
III-W-HS	1686	84	B0-U1-G1	1760	88	B0-U1-G1	1833	92	B0-U1-G1	1905	95	B0-U1-G1	476	32	B0-U1-G0				
IV-HS	1719	86	B0-U1-G0	1794	90	B0-U1-G0	1868	93	B0-U1-G0	1942	97	B0-U1-G0	484	32	B0-U0-G0				
IV-FT-HS	1685	84	B0-U1-G1	1759	88	B0-U1-G1	1832	92	B0-U1-G1	1905	95	B0-U1-G1	476	32	B0-U1-G1				
II	2952	114	B1-U1-G1	3079	118	B1-U1-G1	3207	123	B1-U1-G1	3335	128	B1-U1-G1	N/A	N/A	N/A				
II-FR	2884	111	B1-U2-G1	3009	116	B1-U2-G1	3134	121	B1-U2-G1	3258	125	B1-U2-G1	N/A	N/A	N/A				
III-M	2877	111	B1-U1-G1	3001	115	B1-U1-G1	3126	120	B1-U1-G1	3251	125	B1-U1-G1	N/A	N/A	N/A				
III-W	2567	99	B1-U1-G1	2678	103	B1-U1-G1	2789	107	B1-U1-G1	2900	112	B1-U1-G1	N/A	N/A	N/A				
IV	2997	115	B1-U1-G1	3127	120	B1-U1-G1	3256	125	B1-U1-G1	3386	130	B1-U1-G1	N/A	N/A	N/A				
IV-FT	2650	102	B1-U1-G1	2765	106	B1-U1-G1	2879	111	B1-U1-G1	2994	115	B1-U1-G1	N/A	N/A	N/A				
VSQ-N	3039	117	B2-U1-G0	3171	122	B2-U1-G0	3303	127	B2-U1-G0	3434	132	B2-U1-G0	N/A	N/A	N/A				
VSQ-M	3090	119	B2-U1-G1	3224	124	B2-U1-G1	3358	129	B2-U1-G1	3492	134	B2-U1-G1	N/A	N/A	N/A				
VSQ-W	2992	115	B2-U1-G1	3122	120	B2-U1-G1	3252	125	B2-U1-G1	3381	130	B3-U1-G1	N/A	N/A	N/A				
II-HS	2126	82	B0-U1-G1	2218	85	B0-U1-G1	2310	89	B0-U1-G1	2401	92	B0-U1-G1	N/A	N/A	N/A				
II-FR-HS	2226	86	B0-U2-G0	2322	89	B0-U2-G0	2418	93	B0-U2-G0	2514	97	B0-U2-G0	N/A	N/A	N/A				
III-M-HS	2124	82	B0-U1-G1	2216	85	B0-U1-G1	2308	89	B0-U1-G1	2400	92	B0-U1-G1	N/A	N/A	N/A				
III-W-HS	2137	82	B0-U1-G1	2230	86	B0-U1-G1	2323	89	B0-U1-G1	2415	93	B0-U1-G1	N/A	N/A	N/A				
IV-HS	2180	84	B0-U1-G1	2274	87	B0-U1-G1	2368	91	B0-U1-G1	2463	95	B0-U1-G1	N/A	N/A	N/A				
IV-FT-HS	2136	82	B0-U1-G1	2228	86	B0-U1-G1	2321	89	B0-U1-G1	2414	93	B1-U1-G1	N/A	N/A	N/A				

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