

AREA & ROADWAY LIGHTING

LCLS SERIES - PA2 LED

Luminaire

Prismatic borosilicate glass diffusing lens provided with durable corrosion resistant cast aluminum housing. Top and bottom are hinged for access with separate driver and led compartments. Pendant Mount using Tru-Level™ ball aligner coupling mount. All hardware is stainless steel.

LED Power Array™

Array of individual LED Tubes fastened to retaining plates. Each LED Tube consists of circuit board populated with a multiple of LED's covered with a gasketed acrylic lens and mechanically fastened to an extruded aluminum heatsink. Tubes are sealed to a an IP65 Standard.

Area and Roadway Distributions: Acrylic Tube Lenses have individual molded-in refractive optics for each LED and provides concisely tailored beam patterns. LED Tubes are uniquely aimed horizontally and beam patterns combine to produce wide throw, highly efficient IES Distribution Types II, III, IV and V with minimal uplight. Used in conjunction with a clear prismatic lenses only.

General Diffused Lighting: Acrylic Tube Lense provides diffusion of the raw LED distributions. Tubes are combined to produce uniform luminance of the outer globe. Used in conjunction with opal lenses only.

Glass Refractor - GRV

LED Tubes are aligned vertically and arranged radially to produce an even raw light distribution that simulates standard light sources. Array is secured within a 6" Prismatic Glass Refractor which provides the optical control. Used in conjunction with clear patterned lenses only.

LED Emitters

High Power White LED's are driven between 350mA and 700mA for a maximum output of 2 Watts nominal. LED's are available in standard Warm White (2700K & 3000K), Neutral White (4000K), or Cool White (5000K) . All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of L93 at 100,000 hours (TM-21 calculated at 6x Test Time).

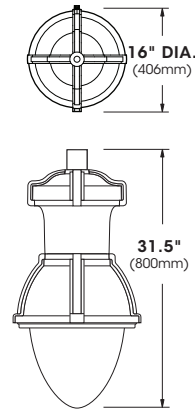
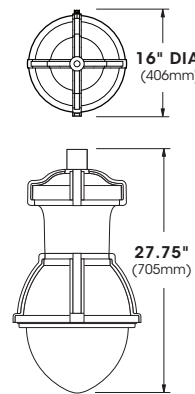
LED Driver

Constant current electronic with a power factor of >0.90 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.

True Amber LED's: TRA-True Amber LED's emit light in the amber spectral bandwidth centered on 585-595nm. True Amber has negligible blue light and is suitable for wildlife.

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.


LCLS-D

LCLS-S

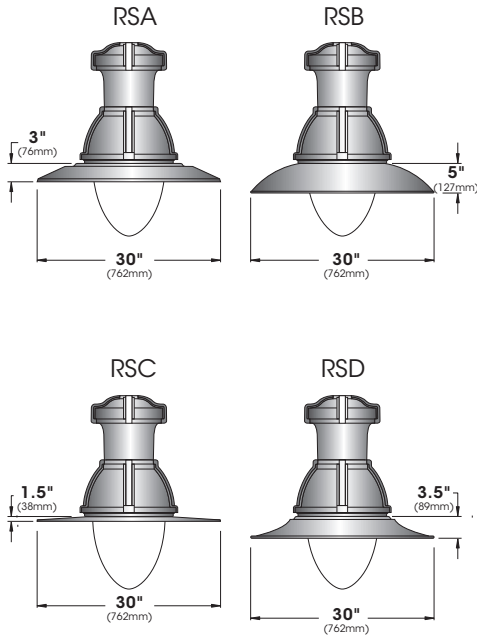
(Shown with -RSD option)



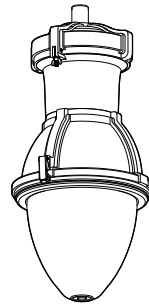
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SPECIFICATIONS

REFLECTOR SHADE OPTIONS



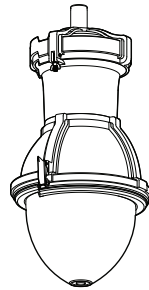
EPA & WEIGHT



LCLS-D
 Max Weight = 52 lbs
 Max EPA = 1.63
 64 LED Max

Reflector Shade Max EPA

LCLS-D-RSA = 1.82
 LCLS-D-RSB = 1.93
 LCLS-D-RSC = 1.68
 LCLS-D-RSD = 1.80



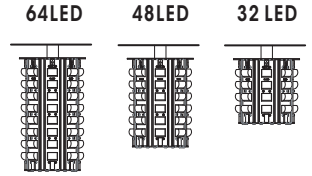
LCLS-S
 Max Weight = 50 lbs
 Max EPA = 1.45
 64 LED Max

Reflector Shade Max EPA

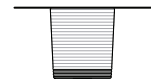
LCLS-D-RSA = 1.64
 LCLS-D-RSB = 1.75
 LCLS-D-RSC = 1.50
 LCLS-D-RSD = 1.62

POWER ARRAY™ MODULES

POWER ARRAY™ 8 Tube Array



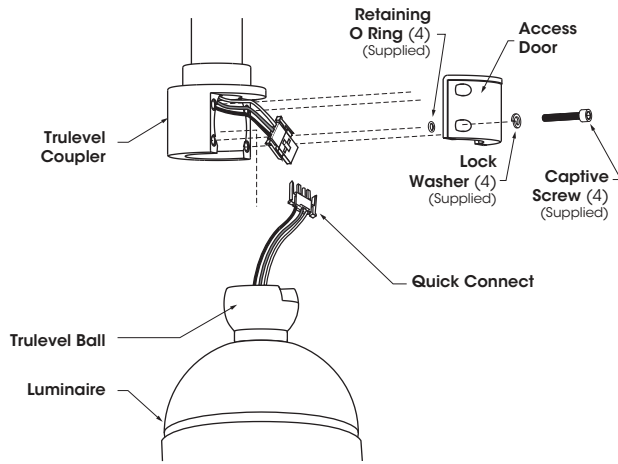
GRV - Glass Refractor



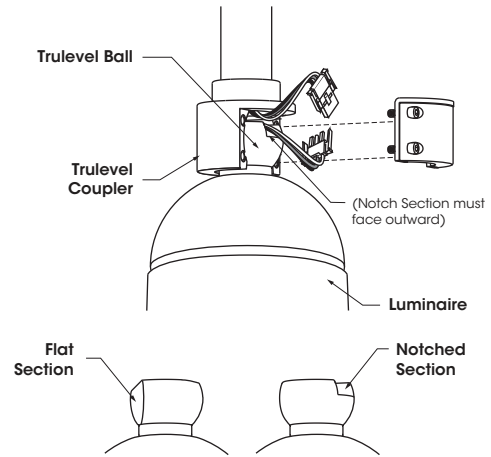
ORDERING INFORMATION

Spec/Order Example: LCLS-S/GRV-V/64LED/525mA/50K/480/4-90/PC/WA/RSA/HS

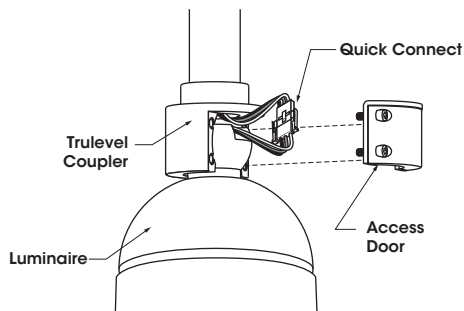
Luminaire	Optics	# of LED's	Drive Current	CCT	Voltage	Mounting	Finish	Options
<input type="checkbox"/> LCLS-D	<input type="checkbox"/> PA - II	<input type="checkbox"/> 64LED	<input type="checkbox"/> 175mA	<input type="checkbox"/> 27K (2700K)	<input type="checkbox"/> UNV (120-277)	<input type="checkbox"/> 1	<input type="checkbox"/> Black RAL-9005-T	<input type="checkbox"/> Clear Prismatic Acrylic CPA
<input type="checkbox"/> LCLS-S	<input type="checkbox"/> PA - III	<input type="checkbox"/> 48LED	<input type="checkbox"/> 350mA	<input type="checkbox"/> 30K (3000K)	<input type="checkbox"/> 347	<input type="checkbox"/> 2-180	<input type="checkbox"/> White RAL-9003-T	<input type="checkbox"/> Opal Smooth Acrylic WA
	<input type="checkbox"/> PA - IV	<input type="checkbox"/> 32LED ¹	<input type="checkbox"/> 525mA	<input type="checkbox"/> 40K (4000K)	<input type="checkbox"/> 480	<input type="checkbox"/> 2-90	<input type="checkbox"/> Grey RAL-7004-T	Reflector Shade:
	<input type="checkbox"/> PA - V		<input type="checkbox"/> 700mA	<input type="checkbox"/> 50K (5000K)		<input type="checkbox"/> 3-90	<input type="checkbox"/> Dark Bronze RAL-8019-T	<input type="checkbox"/> RSA <input type="checkbox"/> RSB
	General Diffuse (White-Opal Lenses)			Consult Factory for Other LED Color, CCT, & CRI Options		<input type="checkbox"/> 3-120	<input type="checkbox"/> Green RAL-6005-T	<input type="checkbox"/> RSC <input type="checkbox"/> RSD
	<input type="checkbox"/> PA - SYM	Note: 1- LCLS-S is 32LED PA Max		<input type="checkbox"/> TRA True Amber*		<input type="checkbox"/> 4-90	Premium Finishes	<input type="checkbox"/> House Side Shield HS
	GLASS REFRACTOR (Clear Prismatic Lens)			*TRA Available only in 350mA and 525mA Drive Currents		Wall Mount	<input type="checkbox"/> Rust	<input type="checkbox"/> High-Low Dimming for Switch (BY OTHERS) Select 25/100 Or 50/100 (EX HLSW25) HLSW**
	<input type="checkbox"/> GRV - III	<input type="checkbox"/> 36LED	<input type="checkbox"/> 175mA			<input type="checkbox"/> WM	<input type="checkbox"/> Patina Copper PC	<input type="checkbox"/> Pole Mounted Bluetooth Photo/Motion Sensor. (Factory 50/100 Motion Photo 75 fc) MS-F311
	<input type="checkbox"/> GRV - V		<input type="checkbox"/> 350mA			Post Top	For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)	<input type="checkbox"/> Mini-Button Photocell + Voltage PC+V
			<input type="checkbox"/> 525mA			<input type="checkbox"/> PT	Consult factor for custom colors	<input type="checkbox"/> Std. Twist Lock Photocell Receptacle TPR
								<input type="checkbox"/> 7 Pin Twist Lock Photocell Receptacle TPR7
								<input type="checkbox"/> Single Fuse SF
								<input type="checkbox"/> Double Fuse DF

INSTALLATION DETAIL
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.

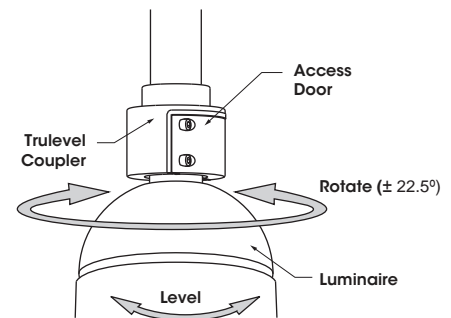


2. Place Trulevel Ball inside of Trulevel Coupler as illustrated.
 - A - Notched Section of Trulevel Ball must face outward as illustrated.
 - B - Flat Section of Trulevel Ball must face inward.



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.

ELECTRICAL DATA GUIDE - AMPERAGE CHART

# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
32	175	18.0	0.15	0.09	0.06	0.05	0.04
32	350	35.0	0.29	0.17	0.13	0.10	0.07
32	525	52.0	0.43	0.25	0.19	0.15	0.11
32	700	69.0	0.58	0.33	0.25	0.20	0.14
36	175	21.0	0.18	0.10	0.08	0.06	0.04
36	350	40.0	0.33	0.19	0.14	0.12	0.08
48	175	27.0	0.23	0.13	0.10	0.08	0.06
48	350	52.0	0.43	0.25	0.19	0.15	0.11
48	525	78.0	0.65	0.38	0.28	0.22	0.16
48	700	104.0	0.87	0.50	0.38	0.30	0.22
64	175	36.0	0.30	0.17	0.13	0.10	0.08
64	350	70.0	0.58	0.34	0.25	0.20	0.15
64	525	103.0	0.86	0.50	0.37	0.30	0.21
64	700	138.0	1.15	0.66	0.50	0.40	0.29

PHOTOMETRIC DATA GUIDE - LM-80 LUMEN MAINTENANCE

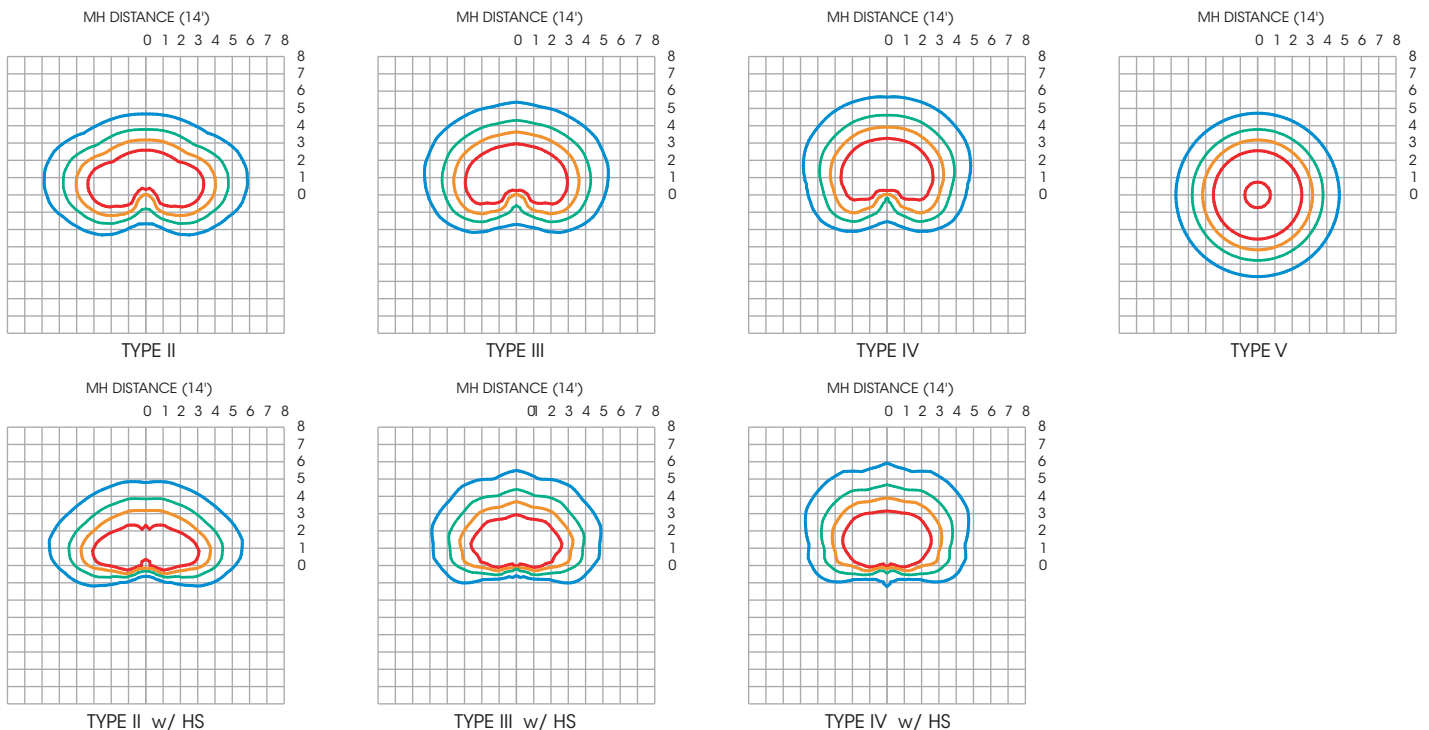
LED LUMEN MAINTENANCE		
LED Life / Operating Hours	Lumen Depreciation	Lumen Depreciation Scale Factor
60,000	L96	0.96x
100,000 (6X LED Test Hrs)	L93	0.93x
150,000 (Theoretical)	L89	0.90x
200,000 (Theoretical)	L86	0.87x

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 DATA GUIDE - ISOFOOTCANDLE TEMPLATES

LAA1-PA2-CPA-48LED-700mA-4000K - 14' Mounting Height



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

PHOTOMETRIC DATA GUIDE - LUMEN TABLES

PA-CPA (Area & Roadway)																			
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
32	175	18.0	II	2338	130	B1-U3-G2	2440	136	B1-U3-G2	2542	141	B1-U3-G2	2643	147	B1-U3-G2	14.0	847	60	B1-U3-G1
			III	2325	129	B1-U3-G2	2426	135	B1-U3-G2	2527	140	B1-U3-G2	2629	146	B1-U3-G2		842	60	B0-U3-G1
			IV	2321	129	B1-U3-G2	2422	135	B1-U3-G2	2523	140	B1-U3-G2	2624	146	B1-U3-G2		841	60	B0-U3-G1
			V	2372	132	B2-U3-G2	2475	137	B2-U3-G2	2578	143	B2-U3-G2	2682	149	B2-U3-G2		859	61	B1-U3-G1
			II-HS	1873	104	B0-U3-G2	1955	109	B0-U3-G2	2036	113	B0-U3-G2	2118	118	B0-U3-G2		678	48	B0-U2-G1
			III-HS	1831	102	B0-U3-G2	1911	106	B0-U3-G2	1991	111	B0-U3-G2	2071	115	B0-U3-G2		663	47	B0-U2-G1
			IV-HS	2153	120	B0-U3-G2	2248	125	B0-U3-G2	2341	130	B0-U3-G2	2435	135	B0-U3-G2		780	56	B0-U3-G1
32	350	35.0	II	4251	121	B2-U3-G3	4436	127	B2-U3-G3	4621	132	B2-U3-G3	4806	137	B2-U3-G3	27.0	1386	51	B1-U3-G2
			III	4227	121	B1-U3-G3	4411	126	B1-U3-G3	4595	131	B1-U3-G3	4778	137	B1-U3-G3		1379	51	B1-U3-G2
			IV	4220	121	B1-U3-G3	4403	126	B1-U3-G3	4587	131	B1-U3-G3	4770	136	B1-U3-G3		1376	51	B1-U3-G2
			V	4312	123	B3-U3-G2	4500	129	B3-U3-G2	4688	134	B3-U3-G2	4875	139	B3-U3-G2		1407	52	B1-U3-G1
			II-HS	3405	97	B1-U3-G3	3553	102	B1-U3-G3	3701	106	B1-U3-G3	3849	110	B1-U3-G3		1111	41	B0-U3-G1
			III-HS	3329	95	B1-U3-G3	3474	99	B1-U3-G3	3619	103	B1-U3-G3	3763	108	B1-U3-G3		1086	40	B0-U3-G1
			IV-HS	3915	112	B1-U3-G3	4085	117	B1-U3-G3	4256	122	B1-U3-G3	4427	126	B1-U3-G3		1277	47	B0-U3-G2
32	525	52.0	II	5865	113	B2-U3-G3	6120	118	B2-U4-G3	6375	123	B2-U4-G3	6630	127	B2-U4-G3	41.0	1785	44	B1-U3-G2
			III	5831	112	B2-U3-G3	6085	117	B2-U4-G3	6338	122	B2-U4-G3	6592	127	B2-U4-G3		1775	43	B1-U3-G2
			IV	5822	112	B1-U3-G3	6075	117	B1-U3-G3	6328	122	B2-U4-G3	6581	127	B2-U4-G3		1772	43	B1-U3-G2
			V	5951	114	B3-U3-G3	6210	119	B3-U3-G3	6468	124	B3-U3-G3	6727	129	B3-U4-G3		1811	44	B2-U3-G1
			II-HS	4697	90	B1-U3-G3	4901	94	B1-U3-G3	5105	98	B1-U3-G3	5310	102	B1-U3-G3		1429	35	B0-U3-G2
			III-HS	4592	88	B1-U3-G3	4791	92	B1-U3-G3	4991	96	B1-U3-G3	5191	100	B1-U3-G3		1398	34	B0-U3-G2
			IV-HS	5401	104	B1-U3-G3	5636	108	B1-U3-G3	5871	113	B1-U3-G4	6106	117	B1-U3-G4		1644	40	B0-U3-G2
32	700	69.0	II	7368	107	B2-U4-G4	7688	111	B3-U4-G4	8008	116	B3-U4-G4	8329	121	B3-U4-G4	N/A	N/A		
			III	7326	106	B2-U4-G4	7644	111	B2-U4-G4	7963	115	B2-U4-G4	8281	120	B2-U4-G4		N/A		
			IV	7314	106	B2-U4-G4	7632	111	B2-U4-G4	7950	115	B2-U4-G4	8268	120	B2-U4-G4		N/A		
			V	7477	108	B3-U4-G3	7802	113	B3-U4-G3	8127	118	B3-U4-G3	8452	122	B3-U4-G3		N/A		
			II-HS	5901	86	B1-U3-G3	6158	89	B1-U3-G4	6414	93	B1-U3-G4	6670	97	B1-U3-G4		N/A		
			III-HS	5769	84	B1-U3-G3	6020	87	B1-U3-G4	6271	91	B1-U3-G4	6522	95	B1-U3-G4		N/A		
			IV-HS	6786	98	B1-U3-G4	7081	103	B1-U4-G4	7376	107	B1-U4-G4	7671	111	B1-U4-G4		N/A		
48	175	27.0	II	3508	130	B1-U3-G3	3660	136	B1-U3-G3	3812	141	B1-U3-G3	3965	147	B2-U3-G3	21.0	1270	60	B1-U3-G1
			III	3488	129	B1-U3-G3	3639	135	B1-U3-G3	3791	140	B1-U3-G3	3942	146	B1-U3-G3		1263	60	B1-U3-G1
			IV	3482	129	B1-U3-G3	3633	135	B1-U3-G3	3785	140	B1-U3-G3	3936	146	B1-U3-G3		1260	60	B0-U3-G1
			V	3558	132	B3-U3-G2	3713	138	B3-U3-G2	3868	143	B3-U3-G2	4023	149	B3-U3-G2		1288	61	B1-U3-G1
			II-HS	2809	104	B1-U3-G3	2931	109	B1-U3-G3	3053	113	B1-U3-G3	3175	118	B1-U3-G3		1017	48	B0-U3-G1
			III-HS	2746	102	B0-U3-G3	2866	106	B0-U3-G3	2986	111	B0-U3-G3	3105	115	B1-U3-G3		994	47	B0-U3-G1
			IV-HS	3230	120	B0-U3-G3	3370	125	B0-U3-G3	3511	130	B0-U3-G3	3652	135	B1-U3-G3		1169	56	B0-U3-G2
48	350	52.0	II	6377	123	B2-U4-G3	6654	128	B2-U4-G3	6931	133	B2-U4-G4	7208	139	B2-U4-G4	40.0	2080	52	B1-U3-G2
			III	6340	122	B2-U4-G3	6616	127	B2-U4-G3	6892	133	B2-U4-G4	7167	138	B2-U4-G4		2068	52	B1-U3-G2
			IV	6330	122	B2-U4-G3	6605	127	B2-U4-G4	6881	132	B2-U4-G4	7156	138	B2-U4-G4		2065	52	B1-U3-G2
			V	6471	124	B3-U3-G3	6753	130	B3-U4-G3	7034	135	B3-U4-G3	7314	141	B3-U4-G3		2110	53	B2-U3-G1
			II-HS	5108	98	B1-U3-G3	5329	102	B1-U3-G3	5552	107	B1-U3-G3	5774	111	B1-U3-G3		1666	42	B0-U3-G2
			III-HS	4993	96	B1-U3-G3	5210	100	B1-U3-G3	5428	104	B1-U3-G3	5645	109	B1-U3-G3		1629	41	B0-U3-G2
			IV-HS	5872	113	B1-U3-G4	6128	118	B1-U3-G4	6383	123	B1-U3-G4	6639	128	B1-U3-G4		1916	48	B0-U3-G2
48	525	78.0	II	8797	113	B3-U4-G4	9179	118	B3-U4-G4	9562	123	B3-U4-G4	9944	127	B3-U4-G4	61.0	2677	44	B1-U3-G2
			III	8747	112	B2-U4-G4	9127	117	B2-U4-G4	9508	122	B2-U4-G4	9888	127	B3-U4-G4		2662	44	B1-U3-G2
			IV	8733	112	B2-U4-G4	9112	117	B2-U4-G4	9492	122	B2-U4-G4	9872	127	B2-U4-G4		2658	44	B1-U3-G2
			V	8926	114	B4-U4-G3	9315	119	B4-U4-G3	9702	124	B4-U4-G3	10090	129	B4-U4-G3		2717	45	B2-U3-G2
			II-HS	7046	90	B1-U4-G4	7352	94	B1-U4-G4	7658	98	B1-U4-G4	7965	102	B1-U4-G4		2144	35	B1-U3-G2
			III-HS	6888	88	B1-U3-G4	7188	92	B1-U3-G4	7487	96	B1-U4-G4	7787	100	B1-U4-G4		2096	34	B0-U3-G2
			IV-HS	8102	104	B1-U4-G4	8454	108	B1-U4-G4	8806	113	B1-U4-G5	9159	117	B1-U4-G5		2466	40	B0-U3-G2
48	700	104.0	II	11052	106	B3-U4-G5	11532	111	B3-U4-G5	12012	116	B3-U4-G5	12493	120	B3-U5-G5	N/A	N/A		
			III	10988	106	B3-U4-G5	11466	110	B3-U4-G5	11944	115	B3-U4-G5	12422	119	B3-U5-G5		N/A		
			IV	10970	105	B2-U4-G5	11447	110	B2-U4-G5	11924	115	B2-U4-G5	12401	119	B3-U4-G5		N/A		
			V	11213	108	B4-U4-G4	11700	112	B4-U4-G4	12188	117	B4-U4-G4	12676	122	B4-U4-G4		N/A		
			II-HS	8852	85	B1-U4-G4	9237	89	B1-U4-G5	9622	93	B1-U4-G5	10007	96	B2-U4-G5		N/A		
			III-HS	8654	83	B1-U4-G4	9030	87	B1-U4-G5	9406	90	B1-U4-G5	9783	94	B1-U4-G5		N/A		
			IV-HS	10178	98	B1-U4-G5	10621	102	B1-U4-G5	11063	106	B1-U4-G5	11506	111	B1-U4-G5		N/A		

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

PHOTOMETRIC DATA GUIDE - LUMEN TABLES

PA-CPA (Area & Roadway)																			
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
64	175	36.0	II	4677	130	B2-U3-G3	4880	136	B2-U3-G3	5083	141	B2-U3-G3	5287	147	B2-U3-G3	27.0	1693	63	B1-U3-G2
			III	4650	129	B1-U3-G3	4852	135	B1-U3-G3	5054	140	B2-U3-G3	5256	146	B2-U3-G3		1683	62	B1-U3-G2
			IV	4642	129	B1-U3-G3	4844	135	B1-U3-G3	5046	140	B1-U3-G3	5248	146	B1-U3-G3		1681	62	B1-U3-G2
			V	4745	132	B3-U3-G2	4951	138	B3-U3-G2	5158	143	B3-U3-G3	5364	149	B3-U3-G3		1718	64	B1-U3-G1
			II-HS	3746	104	B1-U3-G3	3909	109	B1-U3-G3	4071	113	B1-U3-G3	4234	118	B1-U3-G3		1356	50	B0-U3-G2
			III-HS	3662	102	B1-U3-G3	3821	106	B1-U3-G3	3981	111	B1-U3-G3	4140	115	B1-U3-G3		1326	49	B0-U3-G2
			IV-HS	4307	120	B1-U3-G3	4494	126	B1-U3-G3	4682	130	B1-U3-G3	4869	135	B1-U3-G3		1559	58	B0-U3-G2
64	350	70.0	II	8502	121	B3-U4-G4	8872	127	B3-U4-G4	9241	132	B3-U4-G4	9611	137	B3-U4-G4	53.0	2773	52	B1-U3-G2
			III	8454	121	B2-U4-G4	8821	126	B2-U4-G4	9189	131	B2-U4-G4	9556	137	B2-U4-G4		2757	52	B1-U3-G2
			IV	8440	121	B2-U4-G4	8807	126	B2-U4-G4	9174	131	B2-U4-G4	9541	136	B2-U4-G4		2753	52	B1-U3-G2
			V	8626	123	B3-U4-G3	9001	129	B4-U4-G3	9377	134	B4-U4-G3	9752	139	B4-U4-G3		2814	53	B2-U3-G2
			II-HS	6810	97	B1-U3-G4	7106	102	B1-U4-G4	7402	106	B1-U4-G4	7698	110	B1-U4-G4		2221	42	B1-U3-G2
			III-HS	6658	95	B1-U3-G4	6947	99	B1-U3-G4	7237	103	B1-U3-G4	7526	108	B1-U4-G4		2171	41	B0-U3-G2
			IV-HS	7830	112	B1-U4-G4	8171	117	B1-U4-G4	8511	122	B1-U4-G4	8852	126	B1-U4-G5		2554	48	B0-U3-G2
64	525	103.0	II	11729	114	B3-U4-G5	12239	119	B3-U5-G5	12749	124	B3-U5-G5	13259	129	B3-U5-G5	81.0	3570	44	B1-U3-G3
			III	11663	113	B3-U4-G5	12170	118	B3-U5-G5	12677	123	B3-U5-G5	13184	128	B3-U5-G5		3549	44	B1-U3-G3
			IV	11643	113	B2-U4-G5	12150	118	B2-U4-G5	12656	123	B3-U5-G5	13162	128	B3-U5-G5		3544	44	B1-U3-G3
			V	11902	116	B4-U4-G4	12419	121	B4-U4-G4	12937	126	B4-U4-G4	13455	131	B4-U5-G4		3623	45	B3-U3-G2
			II-HS	9394	91	B1-U4-G5	9803	95	B2-U4-G5	10211	99	B2-U4-G5	10620	103	B2-U4-G5		2859	35	B1-U3-G3
			III-HS	9184	89	B1-U4-G5	9584	93	B1-U4-G5	9983	97	B1-U4-G5	10382	101	B1-U4-G5		2795	35	B0-U3-G3
			IV-HS	10802	105	B1-U4-G5	11272	109	B1-U4-G5	11742	114	B1-U4-G5	12211	119	B1-U4-G5		3288	41	B0-U3-G3
64	700	138.0	II	14735	107	B3-U5-G5	15376	111	B3-U5-G5	16016	116	B3-U5-G5	16657	121	B3-U5-G5	N/A	N/A	N/A	N/A
			III	14651	106	B3-U5-G5	15288	111	B3-U5-G5	15925	115	B3-U5-G5	16562	120	B3-U5-G5				
			IV	14628	106	B3-U5-G5	15264	111	B3-U5-G5	15899	115	B3-U5-G5	16535	120	B3-U5-G5				
			V	14952	108	B4-U5-G4	15601	113	B4-U5-G4	16251	118	B4-U5-G4	16901	122	B4-U5-G5				
			II-HS	11802	86	B2-U4-G5	12315	89	B2-U4-G5	12828	93	B2-U4-G5	13342	97	B2-U4-G5				
			III-HS	11538	84	B1-U4-G5	12040	87	B1-U4-G5	12542	91	B1-U4-G5	13044	95	B1-U4-G5				
			IV-HS	13571	98	B1-U4-G5	14161	103	B1-U5-G5	14751	107	B1-U5-G5	15341	111	B1-U5-G5				

PA-SYM-WA (General Diffuse)																			
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
32	175	18.0	SYM	1988	110	B1-U4-G2	2073	115	B1-U4-G2	2160	120	B1-U4-G2	2243	125	B1-U4-G2	14.0	721	51	B0-U3-G1
	350	35.0	SYM	3520	101	B1-U5-G2	3673	105	B1-U5-G2	3826	109	B1-U5-G2	3980	114	B1-U5-G2	27.0	1148	43	B1-U3-G1
	525	52.0	SYM	4855	93	B1-U5-G3	5067	97	B1-U5-G3	5277	101	B2-U5-G3	5487	106	B2-U5-G3	41.0	1479	36	B1-U4-G1
	700	69.0	SYM	6099	88	B2-U5-G3	6364	92	B2-U5-G3	6630	96	B2-U5-G3	6896	100	B2-U5-G3	N/A	#N/A		
48	175	27.0	SYM	2980	110	B1-U5-G2	3107	115	B1-U5-G2	3238	120	B1-U5-G2	3370	125	B1-U5-G2	21.0	1080	51	B0-U3-G1
	350	52.0	SYM	5278	102	B2-U5-G3	5509	106	B2-U5-G3	5739	110	B2-U5-G3	5968	115	B2-U5-G3	40.0	1723	43	B1-U4-G1
	525	78.0	SYM	7282	93	B2-U5-G3	7598	97	B2-U5-G3	7914	101	B2-U5-G3	8230	106	B2-U5-G3	61.0	2215	36	B1-U4-G2
	700	104.0	SYM	9147	88	B2-U5-G3	9546	92	B2-U5-G4	9943	96	B2-U5-G4	10341	99	B3-U5-G4	N/A	#N/A		
64	175	36.0	SYM	3972	110	B1-U5-G2	4145	115	B1-U5-G3	4317	120	B1-U5-G3	4493	125	B1-U5-G3	27.0	1439	53	B1-U4-G1
	350	70.0	SYM	7041	101	B2-U5-G3	7346	105	B2-U5-G3	7653	109	B2-U5-G3	7959	114	B2-U5-G3	53.0	2297	43	B1-U4-G2
	525	103.0	SYM	9710	94	B2-U5-G4	10131	98	B2-U5-G4	10554	102	B3-U5-G4	10976	107	B3-U5-G4	81.0	2955	36	B1-U5-G2
	700	138.0	SYM	12200	88	B3-U5-G4	12729	92	B3-U5-G4	13260	96	B3-U5-G4	13791	100	B3-U5-G4	N/A	#N/A		

GRV (Glass Refractor)																			
LED Count	Drive Current (mA)	System Watts	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	21.0	III	1986	95	B1-U4-G2	2072	99	B1-U4-G2	2159	103	B1-U4-G2	2245	107	B1-U4-G2	16.0	701	44	B0-U3-G1
		21.0	V	1941	92	B1-U4-G2	2025	96	B1-U4-G2	2110	100	B1-U4-G2	2194	104	B1-U4-G2	16.0	686	43	B0-U3-G1
	350	40.0	III	3546	89	B1-U5-G3	3701	93	B1-U5-G3	3855	96	B1-U5-G3	4009	100	B1-U5-G3	31.0	1157	37	B1-U3-G1
		40.0	V	3465	87	B1-U5-G3	3614	90	B1-U5-G3	3766	94	B1-U5-G3	3918	98	B1-U5-G3	31.0	1131	36	B1-U3-G1

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

AREA & ROADWAY LIGHTING

LCLS SERIES - APA LED

Luminaire

Prismatic borosilicate glass diffusing lens provided with durable corrosion resistant cast aluminum housing. Top and bottom are hinged for access with separate driver and led compartments. Pendant Mount using Tru-Level™ ball aligner coupling mount. All hardware is stainless steel.

LED Power Array™

Three-dimensional array of individual LED Tubes fastened to a retaining plate. Each LED Tube consists of circuit board populated with a multiple of LED's and is mechanically fastened to a radial aluminum heat sink. An acrylic Lens and end cap protects the LED Tube's internal components.

Angled Power Array™: Micro-Reflectors mounted around each LED control the raw light output. LED Tubes are uniquely aimed horizontally and vertically and combined to produce highly efficient IES Distribution Types II, III, IV and V.

LED Emitters

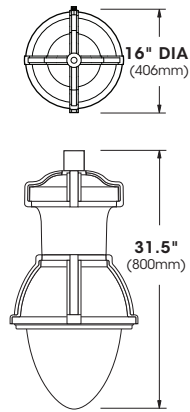
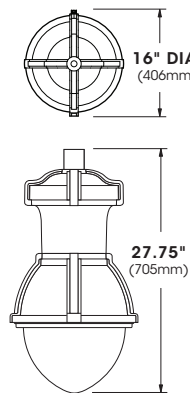
High Output LED's are driven at 350mA for nominal 1 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

LED Driver

UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

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.


LCLS-D

LCLS-S

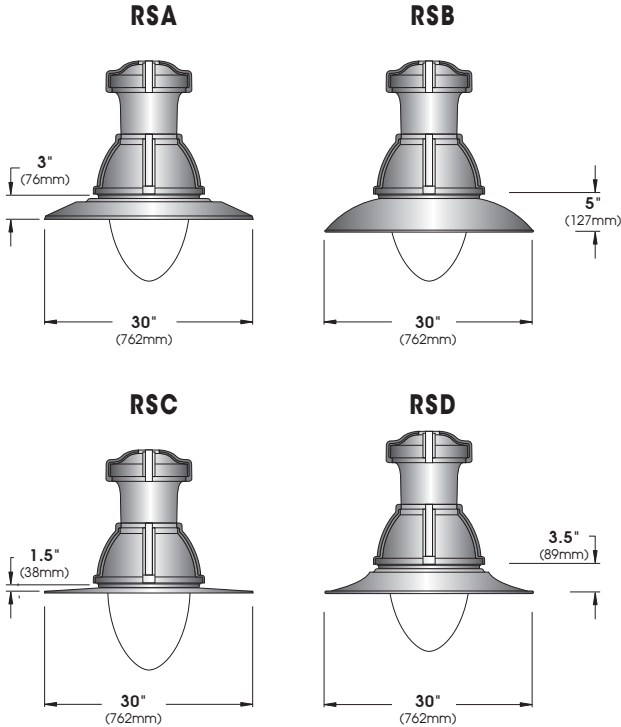
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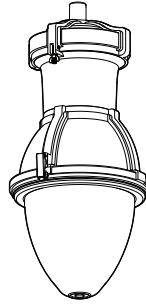
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SPECIFICATIONS

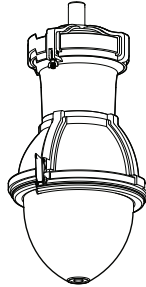
REFLECTOR SHADE OPTIONS



EPA & WEIGHT

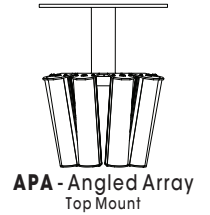


LCLS-D
 Max Weight = 52 lbs
 Max EPA = 1.63
 80 LED Max















LCLS-S
 Max Weight = 50 lbs
 Max EPA = 1.45
 80 LED Max

POWER ARRAY™ MODULE



ORDERING INFORMATION

Spec/Order Example: LCLS-S/GRV-V/64LED/525mA/50K/480/4-90/PC/WA/RSA/HS

Luminaire	Optics	# of LED's	CCT	Voltage	Mounting	Finish	Options
Luminaire	Optics	LED		Voltage	Mounting	Finish	Options
<input type="checkbox"/> LCLS-D <input type="checkbox"/> LCLS-S	Area & Roadway (Clear Prismatic Lenses) <input type="checkbox"/> APA - II  <input type="checkbox"/> APA - III  <input type="checkbox"/> APA - IV  <input type="checkbox"/> APA - V 	# of LED's <input type="checkbox"/> 80LED <input type="checkbox"/> 60LED <input type="checkbox"/> 40LED	Color Temp-CCT <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	Voltage <input type="checkbox"/> UNV (120-277) <input type="checkbox"/> 347 <input type="checkbox"/> 480	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  Post Top <input type="checkbox"/> PT 	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	Lens Options: <input type="checkbox"/> Prismatic Glass (Standard) GR <input type="checkbox"/> Prismatic Acrylic AR Reflector Shade: <input type="checkbox"/> RSA <input type="checkbox"/> RSB <input type="checkbox"/> RSC <input type="checkbox"/> RSD <input type="checkbox"/> House Side Shield HS <input type="checkbox"/> Dimmable Driver(s) (0-10V) DIM <input type="checkbox"/> High-Low Dimming for Switch (BY OTHERS) Select 25/100 Or 50/100 (EX HLSW25) HLSW <input type="checkbox"/> Mini-Button Photocell + Voltage PC+V <input type="checkbox"/> 10KV Surge Protector 10SP <input type="checkbox"/> 20KV Surge Protector (277V & 480V only) 20SP <input type="checkbox"/> Stem Mount + Length (in) (Example: SM48) SM+L <input type="checkbox"/> Chain Mount + Length (in) (Example: CM36) CM+L