

RLX-1 ARRAY LED Specifications



Project Name:

Catalog Number:

Type:

The **RLX-1 Array** series improves on the classic "Cobrahead" luminaire design by introducing the next generation of LED green technology with energy savings of up to fifty percent over traditional light sources, and LED lamp life well beyond 10 years of operations.

The **RLX-1 Array** housing and door are die cast aluminum with integral heat sink, making the entire housing part of the thermal management solution for long life of the LEDs and driver(s).

The fixture is easily and securely mounted with four bolt mounting to 1 1/4" to 2 3/8" diameter mast arms and supplied with a terminal block for easy power connection and a universal bubble level for ease of leveling.

A 10 kV surge protector is supplied as standard. Maintenance, when required, is tool-less; with stainless steel pinch latches; accessing a removable power tray door holding the LED driver. LEDs and driver compartment are both IP65 rated.

Choose from 48 to 80 LED Arrays with multiple drive currents of 350, 530, 700, 1000, 1200 or 1400mA; 3000, 4000 or 5000 Kelvin, and ten (10) optical distribution patterns for complete design flexibility for street and roadway lighting.

Consider the **RLX-1 Array** series, the new standard for roadway and street lighting, bringing LED technology with long life and low maintenance to your world.

Ordering Information

MODEL	OPTICS	LUMENS	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS	OPTIONS
RLX-1	T1 Type 1	15L	3K 3000K	UNV 120-277V	MAF Mast Arm Fitter	BZ Bronze	PCR-120 Photocell & Receptacle	ROT-R Rotated Optics Right Side
	T2 Type 2	20L	4K 4000K	8 347V		BK Black	PCR-208 Photocell & Receptacle	ROT-L Rotated Optics Left Side
	T3 Type 3	25L	5K 5000K	5 480V		SBK Smooth Black	PCR-240 Photocell & Receptacle	CLS Back Side Cutoff Louver Shield
	T3L Type 3 Long	30L				WH White	PCR-277 Photocell & Receptacle	UMAP Universal Mast Arm Fitter
	T4 Type 4	35L				SWH Smooth White	PCR-347 Photocell & Receptacle	20kV 20 kV Surge Protection
	T4L Type 4 Long	40L				GP Graphite	PCR-480 Photocell & Receptacle	DIM 0-10v Dimming Driver
	T4A Type 4 Automotive					GY Grey	PER 3 Pin Photo Receptacle w/shorting cap	VWC Visionaire Wireless Controls Consult Factory
	T5SR Type 5 Short Round					SL Silver Metallic	5PINPER 5 Pin Photo Receptacle w/shorting cap Requires Dimming Driver	UWL Utility Wattage Label
	T5LR Type 5 Long Round					CC Custom Color	7PINPER 7 Pin Photo Receptacle w/shorting cap Requires Dimming Driver	
	T5LS Type 5 Long Square							

Features & Specifications

RLX-1 ARRAY

Housing

The RLX-1 Array housing is constructed from durable, corrosion resistant, die cast aluminum. The integral heat sink is cast as part of the fixture housing. The electrical compartment is separated from the LED array/heat sink structure, and sealed allowing for IP 66 rating of the complete fixture. A molded silicone grommet seals the incoming power leads. Supplied with a bubble level for ease of mounting alignment, and a terminal block for easy power connection.

Door Assembly

The removable die cast aluminum door assembly is sealed with a one-piece silicone gasket. Access to the electrical compartment is tool-less, with sealed, stainless steel pinch latches, making the Roadway LX Array very user friendly. The LED driver(s) are mounted directly to the door assembly, and supplied with quick disconnects for ease of installation and maintenance.

Thermal Management

The housing includes the integral heat sink making the entire housing part of the thermal management solution. The RLX-1 Array is suitable for higher ambient temperatures and drive currents without degrading lamp life.

- Calculated L70 Hours > 125,000 Hours
- L70 Per TM-21 >60,000 Hours
- Lumen Maintenance % at 100,000 hours >92%

Optical System

The highest lumen output LEDs are utilized in the RLX-1 Array series. The Type 3 injection molded Roadway optic is designed specifically for roadway applications. Additional distribution types include Types I, II, III, IIIL, IV, IVL, IVA, VS and VL. The optical system qualifies at IES full cutoff to restrict light trespass, glare and light pollution for neighborhood friendly lighting.

CRI values are 70. RLX-1 Array fixture is tested in accordance with IESNA LM-79 testing procedures.

New LED Array Technology

- 4 Diodes now replace a single Led chip and operate at 25% of the drive current allowing for higher efficiency, less heat and longer life. (10 Year Warranty)
- More LEDs at a lower drive current provides a more comfortable visual effect.

Quali-Guard Finish

Fixture components are chemically pretreated through a multi stage wash system. The finish is an electrostatically applied, thermoset super polyester powder coat paint which is oven-baked at 400 °F for maximum adherence and finish hardness. Available in Silver Metallic finish and custom colors. The finish is guaranteed for five (5) years.

- Salt spray test per ASTM B1117 Standard for 3,000 hours

Mounting

The RLX-1 Array slip fits directly on to roadway mast arms and horizontal tenons with an outside diameter ranging from 1 1/4" to 2 3/8" and is adjustable in three incremental positions (0°, 2 1/2° and 5°). An internal four-bolt clamp bracket attaches the fixture securely to the mounting arm with four stainless steel bolts.

Electrical Assembly

- The RLX-1 Array Series is supplied with a choice of 350 to 1200 mA high-performance LED drivers that accept 120 V thru 480 V, 50 Hz to 60 Hz, input. Power factor of 95%. Rated for -40 °C operations.
- 10 kV surge protector supplied as standard.

Warranty

- Ten (10) year Limited Warranty on electrical components, Five (5) year on finish. For full warranty information, please visit visionairelighting.com.

Options

- Photocell & Receptacle
- Photocell receptacle w/shorting cap
- Utility wattage label
- Dimming/Controls
- 0-10 V dimming driver
- Rotated Optics
- Universal Mast Arm Fitter
- 20 kV Surge protection

Listings

- RLX-1 Series is cUL listed, suitable for wet locations.
- LM79 and LM80.
- Meets ANSI C136.31-2001 3G vibration standards.
- RoHS compliant.
- IP66 listed
- Powder Coated Tough™.



3000K must be selected for IDA certification.

RLX-1 ARRAY - Electrical Load (A)							
Ordering Nomenclature	System Watts	120	208	240	277	347	480
RLX-1-TX-15L-4K-UNV	114	0.95	0.55	0.48	0.41	0.33	0.24
RLX-1-TX-20L-4K-UNV	149	1.24	0.72	0.62	0.54	0.43	0.31
RLX-1-TX-25L-4K-UNV	172	1.43	0.83	0.72	0.62	0.50	0.36
RLX-1-TX-30L-4K-UNV	230	1.92	1.11	0.96	0.83	0.66	0.48
RLX-1-TX-35L-4K-UNV	241	2.01	1.16	1.00	0.87	0.69	0.50
RLX-1-TX-40L-4K-UNV	276	2.30	1.33	1.15	1.00	0.80	0.58

RLX-1 ARRAY LED Array Specifications

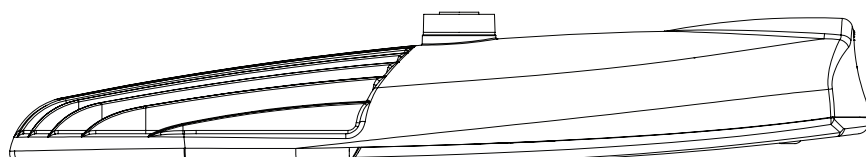
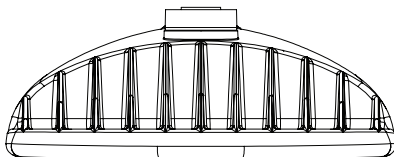
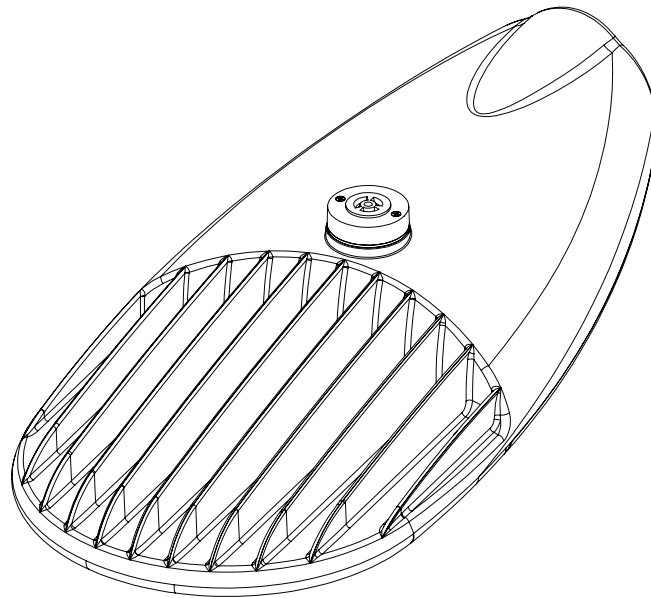
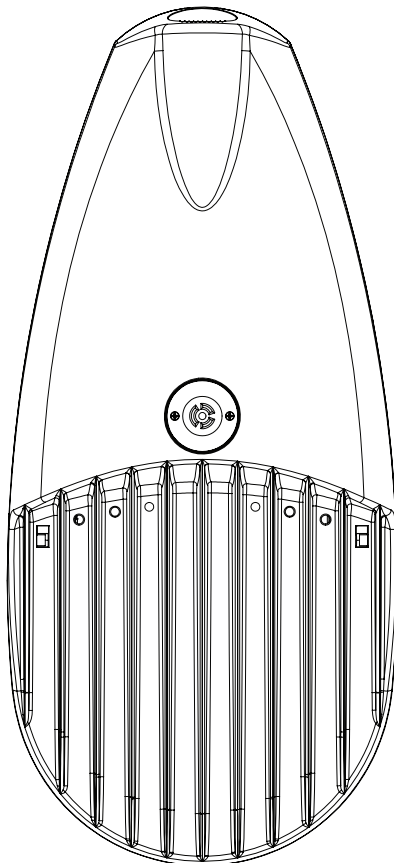
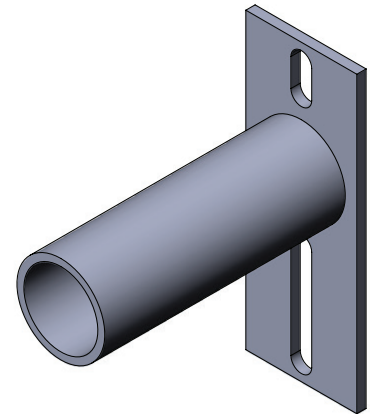
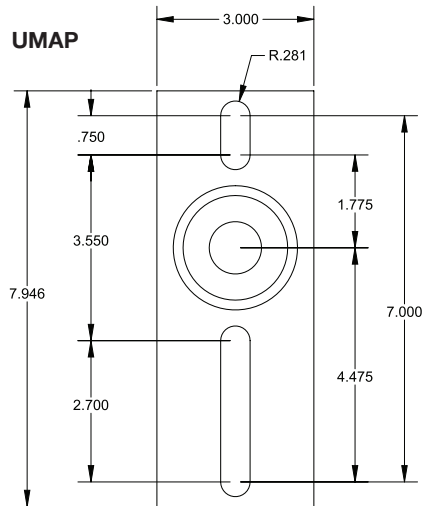
Photometric Optical Summary



EPA Data				
	.85	1.7	2.1	2.1

Dimensions

Width:	RLX-1 14"
Height:	RLX-1 4"
Depth:	RLX-1 31"
Weight:	31 LBS



LED Specifications **RLX-1 ARRAY**

RLX-1 ARRAY 3K LUMEN DATA													
Lumens	Current	LEDs	T1	T2	T3	T3L	T4	T4L	T4A	T5SR	T5LR	T5LS	Watts
15L	1200	32AR	15104	15178	14791	14540	14542	14538	14901	15074	14764	14577	114
20L	1050	48AR	20036	20134	19621	19288	19290	19290	19286	19996	19584	19337	149
25L	1400	48AR	22558	22668	22091	21717	21719	21719	21715	22514	22050	21772	172
30L	1200	64AR	29924	30071	29305	28809	28811	28811	28807	29866	29250	28881	230
35L	1050	80AR	32462	32621	31790	31253	31255	31251	31251	32399	31731	31330	241
40L	1200	80AR	36369	36547	35616	35015	35017	35013	35881	36298	35550	35101	276

RLX-1 ARRAY 4K LUMEN DATA													
Lumens	Current	LEDs	T1	T2	T3	T3L	T4	T4L	T4A	T5SR	T5LR	T5LS	Watts
15L	1200	32AR	16726	16808	16380	16102	16104	16100	16502	16693	16350	16143	114
20L	1050	48AR	22188	22296	21728	21361	21363	21359	21890	22144	21688	21414	149
25L	1400	48AR	24981	25103	24464	24050	24052	24048	24646	24932	24419	24110	172
30L	1200	64AR	33139	33301	32453	31904	31906	32694	32694	33074	32393	31983	230
35L	1050	80AR	35949	36125	35205	34610	34612	35467	35467	35879	35140	34696	241
40L	1200	80AR	40276	40473	39442	38776	38778	39736	39736	40197	39369	38872	276

RLX-1 ARRAY 5K LUMEN DATA													
Lumens	Current	LEDs	T1	T2	T3	T3L	T4	T4L	T4A	T5SR	T5LR	T5LS	Watts
15L	1200	32AR	16726	16808	16380	16102	16104	16100	16502	16693	16350	16143	114
20L	1050	48AR	22188	22296	21728	21361	21363	21359	21890	22144	21688	21414	149
25L	1400	48AR	24981	25103	24464	24050	24052	24048	24646	24932	24419	24110	172
30L	1200	64AR	33139	33301	32453	31904	31906	31902	32694	33074	32393	31983	230
35L	1050	80AR	35949	36125	35205	34610	34612	34608	35467	35879	35140	34696	241
40L	1200	80AR	40276	40473	39442	38776	38778	38774	39736	40197	39369	38872	276

RLX-1 ARRAY 3K LPW DATA													
Lumens	Current	LEDs	T1	T2	T3	T3L	T4	T4L	T4A	T5SR	T5LR	T5LS	Watts
15L	1200	32AR	133	133	130	128	128	128	131	132	130	128	114
20L	1050	48AR	134	135	131	129	129	129	132	134	131	130	149
25L	1400	48AR	131	132	129	127	127	127	130	131	128	127	172
30L	1200	64AR	130	131	127	125	125	125	128	130	127	126	230
35L	1050	80AR	135	135	132	130	130	130	133	135	132	130	241
40L	1200	80AR	132	132	129	127	127	127	130	131	129	127	276

RLX-1 ARRAY 4K LPW DATA													
Lumens	Current	LEDs	T1	T2	T3	T3L	T4	T4L	T4A	T5SR	T5LR	T5LS	Watts
15L	1200	32AR	147	148	144	141	141	141	145	147	144	142	114
20L	1050	48AR	149	149	146	143	143	143	147	148	145	143	149
25L	1400	48AR	146	146	143	140	140	140	144	145	142	141	172
30L	1200	64AR	144	145	141	139	139	139	142	144	141	139	230
35L	1050	80AR	149	150	146	144	144	144	147	149	146	144	241
40L	1200	80AR	146	146	143	140	140	140	144	145	142	141	276

RLX-1 ARRAY 5K LPW DATA													
Lumens	Current	LEDs	T1	T2	T3	T3L	T4	T4L	T4A	T5SR	T5LR	T5LS	Watts
15L	1200	32AR	147	148	144	141	141	141	145	147	144	142	114
20L	1050	48AR	149	149	146	143	143	143	147	148	145	143	149
25L	1400	48AR	146	146	143	140	140	140	144	145	142	141	172
30L	1200	64AR	144	145	141	139	139	139	142	144	141	139	230
35L	1050	80AR	149	150	146	144	144	144	147	149	146	144	241
40L	1200	80AR	146	146	143	140	140	140	144	145	142	141	276

RLX-1 ARRAY LED Array Specifications

RLX-1 ARRAY 3K BUG DATA																																	
Lumens	Current	LEDs	T1			T2			T3			T3L			T4			T4L			T4A			T5SR			T5LR			T5LS			Watts
			B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G				
15L	1200	32AR	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	114
20L	1050	48AR	4	0	4	3	0	3	3	0	3	3	0	4	3	0	3	3	0	4	3	0	3	4	0	2	4	0	3	4	0	3	149
25L	1400	48AR	4	0	4	3	0	3	3	0	3	4	0	4	3	0	3	3	0	4	3	0	3	4	0	2	5	0	3	5	0	3	172
30L	1200	64AR	5	0	5	4	0	4	3	0	4	4	0	5	4	0	4	4	0	5	4	0	3	5	0	3	5	0	4	5	0	3	230
35L	1050	80AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	3	5	0	3	5	0	4	5	0	4	241
40L	1200	80AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	3	5	0	5	5	0	4	276

RLX-1 ARRAY 4K BUG DATA																																	
Lumens	Current	LEDs	T1			T2			T3			T3L			T4			T4L			T4A			T5SR			T5LR			T5LS			Watts
			B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G				
15L	1200	32AR	4	0	4	3	0	3	3	0	3	3	0	4	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	114
20L	1050	48AR	4	0	4	3	0	3	3	0	3	4	0	4	3	0	3	3	0	4	3	0	3	4	0	2	5	0	3	5	0	3	149
25L	1400	48AR	4	0	4	3	0	3	3	0	3	4	0	5	3	0	3	3	0	4	3	0	3	4	0	2	5	0	4	5	0	3	172
30L	1200	64AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	3	5	0	4	5	0	4	230
35L	1050	80AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	3	5	0	5	5	0	4	241
40L	1200	80AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	4	5	0	5	5	0	4	276

RLX-1 ARRAY 5K BUG DATA																																	
Lumens	Current	LEDs	T1			T2			T3			T3L			T4			T4L			T4A			T5SR			T5LR			T5LS			Watts
			B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G				
15L	1200	32AR	4	0	4	3	0	3	3	0	3	3	0	4	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	114
20L	1050	48AR	4	0	4	3	0	3	3	0	3	4	0	4	3	0	3	3	0	4	3	0	3	4	0	2	5	0	3	5	0	3	149
25L	1400	48AR	4	0	4	3	0	3	3	0	3	4	0	5	3	0	3	3	0	4	3	0	3	4	0	2	5	0	4	5	0	3	172
30L	1200	64AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	3	5	0	4	5	0	4	230
35L	1050	80AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	3	5	0	5	5	0	4	241
40L	1200	80AR	5	0	5	4	0	4	4	0	4	4	0	5	4	0	4	4	0	5	4	0	4	5	0	4	5	0	5	5	0	4	276