

# RLX-3 ARRAY LED Specifications



Project Name:

Catalog Number:

Type:

The new **RLX-3 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-3 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 toolless; with stainless steel pinch latches; accessing a removable power tray door holding the LED driver. LEDs and driver compartment are both IP66 rated.

Choose from 20-125 Watts; 3000, 4000 or 5000 Kelvin, and five (5) optical distribution patterns for complete design flexibility for street and roadway lighting.

Consider the **RLX-3 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	WATTAGE	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS	OPTIONS
RLX-3	T2 Type 2	20W	3K 3000K	UNV 120-277V	MAF Mast Arm Fitter	BZ Bronze	PCR-120	ROT-R
		30W					PCR-208	Rotated Optics Right Side
	T3 Type 3	40W	4K 4000K	8 347V	BK Black	PCR-240	ROT-L	
		50W				PCR-277	Rotated Optics Left Side	
	T3L Type 3 Long	60W	5K 5000K	5 480V	WH White	PCR-347	UMAP	
		70W				PCR-480	Universal Mast Arm Fitter	
	T4 Type 4	80W	GP Graphite	PER	GY Grey	5PINPER	20kV	
		90W				7PINPER	20 kV Surge Protection	
	T4L Type 4 Long	100W	SL Silver Metallic	Photo Receptacle w/shorting cap Requires Dimming Driver	CC Custom Color	DIM	0-10v Dimming Driver	
		110W						VWC
	T5SR Type 5 Short Round	120W	SF Single Fuse	DF Double Fuse	HS House Shield	UWL	Utility Wattage Label	
		125W						EBL
	T5LR Type 5 Long Round	CLS Cutoff Louver Shield						

# Features & Specifications

## RLX-3 ARRAY

### Housing

The RLX-3 Array housing is constructed from durable, corrosion resistant, die cast aluminum. The integrated 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 RLX-3 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-3 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-3 Array series. The Type 3 Long optic is designed specifically for roadway applications. Additional optical distribution types include Types II, III, IV, IV-L, V-SR, V-LR, V-LS. 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-3 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-3 Array mounts directly to roadway mast arms with an outside diameter ranging from 1 1/4" to 2 3/8" and has a level pad 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-3 Array Series is supplied with high-performance LED drivers that accept 120 V thru 480 V, 50 Hz to 60 Hz, input. Power factor of 95%. Rated for -40 to 40 °C operations.
- Power Supply rated for 100,000 hours @ 25 °C
- 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](http://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
- House Shield
- Cutoff Louver Shield
- Visionaire Wireless Control
  - Enables high end trim
  - Based on Zigbee wireless communication protocol

### Listings

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



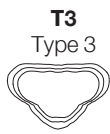
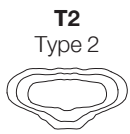
\*3000K must be selected for IDA certification.

RLX-3 ARRAY - Electrical Load (A)

Ordering Nomenclature	System Watts	120	208	240	277	347	480
RLX-3-TX-20W-5K	19	0.16	0.09	0.08	0.07	0.05	0.04
RLX-3-TX-30W-5K	28	0.23	0.13	0.12	0.10	0.08	0.06
RLX-3-TX-40W-5K	39	0.33	0.19	0.16	0.14	0.11	0.08
RLX-3-TX-50W-5K	48	0.40	0.23	0.20	0.17	0.14	0.10
RLX-3-TX-60W-5K	57	0.48	0.27	0.24	0.21	0.16	0.12
RLX-3-TX-70W-5K	66	0.55	0.32	0.28	0.24	0.19	0.14
RLX-3-TX-80W-5K	78	0.65	0.38	0.33	0.28	0.22	0.16
RLX-3-TX-90W-5K	87	0.73	0.42	0.36	0.31	0.25	0.18
RLX-3-TX-100W-5K	96	0.80	0.46	0.40	0.35	0.28	0.20
RLX-3-TX-110W-5K	105	0.88	0.50	0.44	0.38	0.30	0.22
RLX-3-TX-120W-5K	114	0.95	0.55	0.48	0.41	0.33	0.24
RLX-3-TX-125W-5K	129	1.08	0.62	0.54	0.47	0.37	0.27

# RLX-3 ARRAY LED Array Specifications

## Photometric Optical Summary

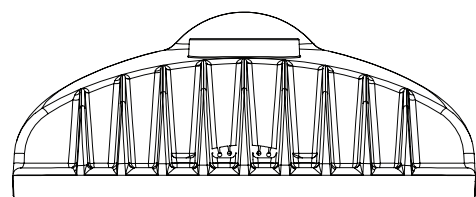
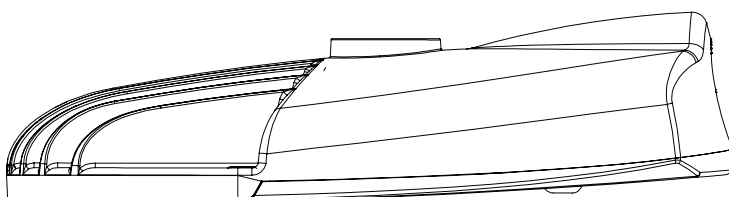
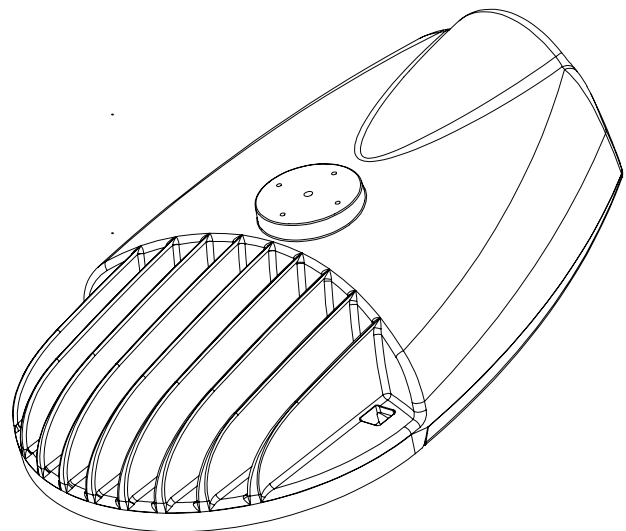
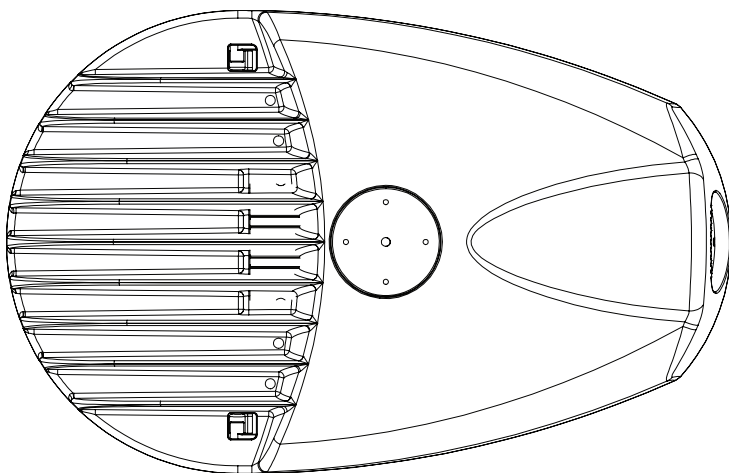
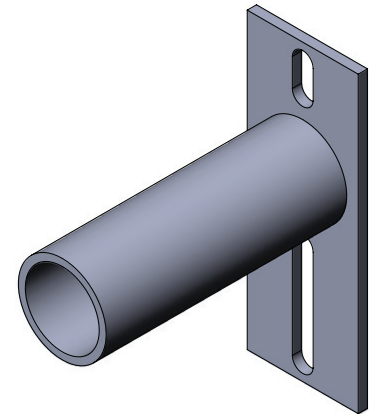
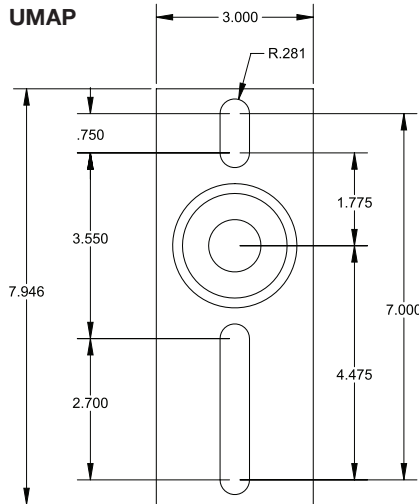


**EPA Data**



## Dimensions

<b>Width:</b>	RLX-3 11"
<b>Height:</b>	RLX-3 4.625"
<b>Depth:</b>	RLX-3 18"
<b>Weight:</b>	18 LBS



LED Specifications **RLX-3 ARRAY**

RLX-3 ARRAY LUMEN DATA - 3K											
# LEDs	Current (mA)	Wattage	T2	T3	T3L	T4	T4L	T5SR	T5LR	T5LS	Watts
24AR	280	20W	2604	2534	2264	2492	2290	2613	2221	2506	22
	400	30W	3746	3646	3257	3585	3295	3760	3195	3606	30
	560	40W	5227	5087	4545	5003	4598	5246	4459	5031	41
	680	50W	6304	6135	5481	6033	5545	6327	5377	6067	50
	800	60W	7364	7167	6403	7048	6477	7391	6282	7088	58
	920	70W	8354	8131	7264	7995	7348	8385	7127	8041	67
	1080	80W	9663	9405	8402	9248	8500	9698	8243	9301	78
	1200	90W	10604	10320	9220	10148	9327	10643	9046	10207	86
	1320	100W	11487	11180	9988	10993	10104	11529	9799	11057	94
	1440	110W	12446	12113	10822	11911	10948	12492	10617	11980	105
	1560	120W	13401	13042	11652	12825	11787	13450	11432	12899	114
1750	125W	13732	13365	11940	13142	12079	13783	11714	13218	128	
RLX-3 ARRAY LUMEN DATA - 4K											
# LEDs	Current (mA)	Wattage	T2	T3	T3L	T4	T4L	T5SR	T5LR	T5LS	Watts
24AR	280	20W	2747	2674	2389	2629	2417	2758	2344	2645	22
	400	30W	3952	3847	3437	3783	3477	3967	3372	3804	30
	560	40W	5516	5368	4796	5279	4851	5536	4705	5309	41
	680	50W	6651	6474	5783	6366	5851	6676	5674	6402	50
	800	60W	7770	7562	6756	7436	6835	7799	6629	7479	58
	920	70W	8815	8579	7665	8436	7754	8848	7520	8485	67
	1080	80W	10196	9923	8866	9758	8969	10234	8698	9814	78
	1200	90W	11189	10890	9729	10708	9842	11230	9545	10770	86
	1320	100W	12121	11797	10539	11600	10662	12165	10340	11667	94
	1440	110W	13133	12782	11419	12569	11552	13181	11203	12641	105
	1560	120W	14140	13762	12295	13533	12438	14192	12062	13611	114
1750	125W	14490	14103	12599	13868	12745	14543	12361	13947	128	
RLX-3 ARRAY LUMEN DATA - 5K											
# LEDs	Current (mA)	Wattage	T2	T3	T3L	T4	T4L	T5SR	T5LR	T5LS	Watts
24AR	280	20W	2747	2674	2389	2629	2417	2758	2344	2645	22
	400	30W	3952	3847	3437	3783	3477	3967	3372	3804	30
	560	40W	5516	5368	4796	5279	4851	5536	4705	5309	41
	680	50W	6651	6474	5783	6366	5851	6676	5674	6402	50
	800	60W	7770	7562	6756	7436	6835	7799	6629	7479	58
	920	70W	8815	8579	7665	8436	7754	8848	7520	8485	67
	1080	80W	10196	9923	8866	9758	8969	10234	8698	9814	78
	1200	90W	11189	10890	9729	10708	9842	11230	9545	10770	86
	1320	100W	12121	11797	10539	11600	10662	12165	10340	11667	94
	1440	110W	13133	12782	11419	12569	11552	13181	11203	12641	105
	1560	120W	14140	13762	12295	13533	12438	14192	12062	13611	114
1750	125W	14490	14103	12599	13868	12745	14543	12361	13947	128	

# RLX-3 ARRAY LED Array Specifications

RLX-3 ARRAY LUMEN PER WATT DATA - 3K											
# LEDs	Current (mA)	Wattage	T2	T3	T3L	T4	T4L	T5SR	T5LR	T5LS	Watts
24AR	280	20W	119	116	104	114	105	119	102	115	22
	400	30W	125	121	108	119	110	125	106	120	30
	560	40W	127	124	111	122	112	128	109	123	41
	680	50W	127	123	110	121	112	127	108	122	50
	800	60W	127	123	110	121	111	127	108	122	58
	920	70W	125	122	109	120	110	126	107	121	67
	1080	80W	125	121	108	119	110	125	106	120	78
	1200	90W	123	119	107	117	108	123	105	118	86
	1320	100W	122	118	106	116	107	122	104	117	94
	1440	110W	119	116	103	114	105	119	101	114	105
	1560	120W	117	114	102	112	103	118	100	113	114
1750	125W	108	105	94	103	95	108	92	104	128	
RLX-3 ARRAY LUMEN PER WATT DATA - 4K											
# LEDs	Current (mA)	Wattage	T2	T3	T3L	T4	T4L	T5SR	T5LR	T5LS	Watts
24AR	280	20W	126	122	109	120	111	126	107	121	22
	400	30W	131	128	114	126	116	132	112	126	30
	560	40W	134	131	117	129	118	135	115	129	41
	680	50W	134	130	116	128	118	134	114	129	50
	800	60W	133	130	116	128	117	134	114	128	58
	920	70W	132	129	115	127	116	133	113	127	67
	1080	80W	131	128	114	126	116	132	112	127	78
	1200	90W	129	126	113	124	114	130	110	125	86
	1320	100W	128	125	112	123	113	129	109	123	94
	1440	110W	125	122	109	120	110	126	107	121	105
	1560	120W	124	121	108	119	109	124	106	119	114
1750	125W	114	111	99	109	100	114	97	109	128	
RLX-3 ARRAY LUMEN PER WATT DATA - 5K											
# LEDs	Current (mA)	Wattage	T2	T3	T3L	T4	T4L	T5SR	T5LR	T5LS	Watts
24AR	280	20W	126	122	109	120	111	126	107	121	22
	400	30W	131	128	114	126	116	132	112	126	30
	560	40W	134	131	117	129	118	135	115	129	41
	680	50W	134	130	116	128	118	134	114	129	50
	800	60W	133	130	116	128	117	134	114	128	58
	920	70W	132	129	115	127	116	133	113	127	67
	1080	80W	131	128	114	126	116	132	112	127	78
	1200	90W	129	126	113	124	114	130	110	125	86
	1320	100W	128	125	112	123	113	129	109	123	94
	1440	110W	125	122	109	120	110	126	107	121	105
	1560	120W	124	121	108	119	109	124	106	119	114
1750	125W	114	111	99	109	100	114	97	109	128	

LED Specifications **RLX-3 ARRAY**

RLX-3 ARRAY LUMEN PER WATT DATA - 3K																											
# LEDs	Current (mA)	Wattage	T2			T3			T3L			T4			T4L			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	
24AR	280	20W	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	2	0	1	2	0	1	22
	400	30W	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	2	0	1	2	0	1	30
	560	40W	1	0	1	1	0	1	2	0	2	1	0	1	1	0	1	3	0	1	3	0	1	3	0	1	41
	680	50W	2	0	2	1	0	1	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	1	50
	800	60W	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	58
	920	70W	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	67
	1080	80W	2	0	2	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	3	0	2	3	0	2	78
	1200	90W	2	0	2	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	3	0	2	3	0	2	86
	1320	100W	2	0	2	2	0	2	3	0	3	2	0	2	3	0	3	3	0	2	3	0	2	4	0	2	94
	1440	110W	3	0	3	2	0	2	3	0	3	3	0	3	3	0	3	3	0	2	4	0	2	4	0	2	105
	1560	120W	3	0	3	2	0	2	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	114
	1750	125W	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	128
RLX-3 ARRAY LUMEN PER WATT DATA - 4K																											
# LEDs	Current (mA)	Wattage	T2			T3			T3L			T4			T4L			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	
24AR	280	20W	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	2	0	1	2	0	1	22
	400	30W	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	2	0	1	2	0	1	30
	560	40W	1	0	1	1	0	1	2	0	2	1	0	1	2	0	2	3	0	1	3	0	1	3	0	1	41
	680	50W	2	0	2	2	0	1	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	50
	800	60W	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	58
	920	70W	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	67
	1080	80W	2	0	2	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	3	0	2	3	0	2	78
	1200	90W	2	0	2	2	0	2	3	0	3	2	0	2	3	0	3	3	0	2	3	0	2	4	0	2	86
	1320	100W	3	0	3	2	0	2	3	0	3	3	0	2	3	0	3	3	0	2	4	0	2	4	0	2	94
	1440	110W	3	0	3	2	0	2	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	105
	1560	120W	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
	1750	125W	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	3	128
RLX-3 ARRAY LUMEN PER WATT DATA - 5K																											
# LEDs	Current (mA)	Wattage	T2			T3			T3L			T4			T4L			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	
24AR	280	20W	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	2	0	1	2	0	1	22
	400	30W	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	2	0	1	2	0	1	30
	560	40W	1	0	1	1	0	1	2	0	2	1	0	1	2	0	2	3	0	1	3	0	1	3	0	1	41
	680	50W	2	0	2	2	0	1	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	50
	800	60W	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	58
	920	70W	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	67
	1080	80W	2	0	2	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	3	0	2	3	0	2	78
	1200	90W	2	0	2	2	0	2	3	0	3	2	0	2	3	0	3	3	0	2	3	0	2	4	0	2	86
	1320	100W	3	0	3	2	0	2	3	0	3	3	0	2	3	0	3	3	0	2	4	0	2	4	0	2	94
	1440	110W	3	0	3	2	0	2	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	2	105
	1560	120W	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
	1750	125W	3	0	3	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	3	4	0	3	128