

# RLX-1 LED Specifications



Project Name:

Catalog Number:

Type:

The **RLX-1** 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 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 32 to 80 LEDs with multiple drive currents of 350, 530, 700 1000 mA; 3000, 4000 or 5000 Kelvin, and seven (7) optical distribution patterns for complete design flexibility for street and roadway lighting.

Consider the **RLX-1** 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	LEDs	CURRENT	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS	OPTIONS
RLX-1	<b>T1</b> Type 1	<b>32LC</b>	<b>3</b> 350mA	<b>3K</b> 3000K	<b>UNV</b> 120-277V	<b>MAF</b> Mast Arm Fitter	<b>BZ</b> Bronze	<b>PCR-120</b> Photocell & Receptacle	<b>ROT-R</b> Rotated Optics Right Side
	<b>T2</b> Type 2	<b>48LC</b>	<b>5</b> 530mA	<b>4K</b> 4000K	<b>8</b> 347V		<b>BK</b> Black	<b>PCR-208</b> Photocell & Receptacle	<b>ROT-L</b> Rotated Optics Left Side
	<b>T3</b> Type 3	<b>64LC</b>	<b>7</b> 700mA	<b>5K</b> 5000K	<b>5</b> 480V	<b>SBK</b> Smooth Black	<b>PCR-240</b> Photocell & Receptacle	<b>CLS</b> Back Side Cutoff Louver Shield	
	<b>T4</b> Type 4		<b>10</b> 1050mA			<b>WH</b> White	<b>PCR-277</b> Photocell & Receptacle	<b>DIM</b> 0-10v Dimming Driver	
	<b>T4A</b> Type 4 Automotive					<b>SWH</b> Smooth White	<b>PCR-347</b> Photocell & Receptacle	<b>VWC</b> Visionaire Wireless Controls Consult Factory	
	<b>T5</b> Type 5					<b>GP</b> Graphite	<b>PCR-480</b> Photocell & Receptacle	<b>UWL</b> Utility Wattage Label	
	<b>T5W</b> Type 5 Wide					<b>GY</b> Grey	<b>PER</b> 3 Pin Photo Receptacle w/shorting cap		
						<b>SL</b> Silver Metallic	<b>5PINPER</b> 5 Pin Photo Receptacle w/shorting cap Requires Dimming Driver		
						<b>CC</b> Custom Color	<b>7PINPER</b> 7 Pin Photo Receptacle w/shorting cap Requires Dimming Driver		

# Features & Specifications

# RLX-1

## Housing

The RLX-1 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 65 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-1 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 is suitable for higher ambient temperatures and drive currents without degrading lamp life.

## Optical System

The highest lumen output field-changeable LEDs are utilized in the RLX-1 series. The Type 3 injection molded Roadway optic is designed specifically for roadway applications. Additional distribution types include Types I, II, III, IV IV-A, V and V-W. 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 fixture is tested in accordance with IESNA LM-79 testing procedures.

## 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.

## Mounting

The RLX-1 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 Series is supplied with a choice of 350 to 1000 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

Five (5) year Limited Warranty on entire system including the paint finish and LED components. For complete Limited Warranty information please visit [VisionaireLighting.com](http://VisionaireLighting.com).

## Options

- Photocell & Receptacle
- Photocell receptacle
- Utility wattage label
- Dimming/Controls
- 0-10 V dimming driver
- Visionaire Wireless Control
  - Enables high end trim
  - Based on Zigbee wireless communication protocol

## Listings

- RLX-1 Series is ETL listed, suitable for wet locations.
- LM79 and LM80.
- Meets ANSI C136.31-2001 vibration standards.
- RoHS compliant.
- IP65 listed
- DLC Listed
- Powder Coated Tough™.

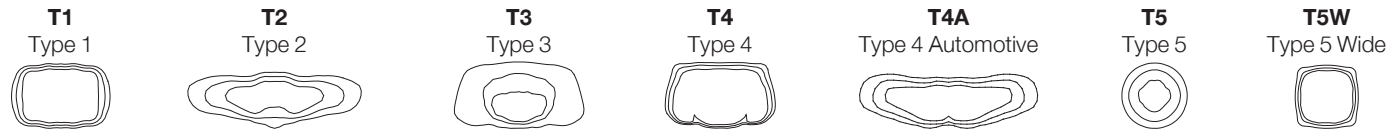


DesignLights Consortium (DLC) qualified Product. Some configurations of this product family may not be DesignLights Consortium (DLC) listed, please refer to the DLC qualified products list to confirm listed configurations. <http://www.designlights.org/> 3000K must be selected for IDA certification.

RLX-1 ARRAY - Electrical Load (A)							
Ordering Nomenclature	System Watts	120	208	240	277	347	480
RLX-1-T3-32LC-3-4K	35	0.29	0.17	0.15	0.13	0.10	0.07
RLX-1-T3-32LC-5-4K	54	0.45	0.26	0.23	0.19	0.16	0.11
RLX-1-T3-32LC-7-4K	72	0.60	0.35	0.30	0.26	0.21	0.15
RLX-1-T3-32LC-10-4K	110	0.92	0.53	0.46	0.40	0.32	0.23
RLX-1-T3-48LC-3-4K	52	0.43	0.25	0.22	0.19	0.15	0.11
RLX-1-T3-48LC-5-4K	81	0.68	0.39	0.34	0.29	0.23	0.17
RLX-1-T3-48LC-7-4K	107	0.89	0.51	0.45	0.39	0.31	0.22
RLX-1-T3-48LC-10-4K	169	1.41	0.81	0.70	0.61	0.49	0.35
RLX-1-T3-64LC-3-4K	71	0.59	0.34	0.30	0.26	0.20	0.15
RLX-1-T3-64LC-5-4K	109	0.91	0.52	0.45	0.39	0.31	0.23
RLX-1-T3-64LC-7-4K	145	1.21	0.70	0.60	0.52	0.42	0.30
RLX-1-T3-64LC-10-4K	219	1.83	1.05	0.91	0.79	0.63	0.46
RLX-1-T3-80LC-3-4K	86	0.72	0.41	0.36	0.31	0.25	0.18
RLX-1-T3-80LC-5-4K	135	1.13	0.65	0.56	0.49	0.39	0.28
RLX-1-T3-80LC-7-4K	180	1.50	0.87	0.75	0.65	0.52	0.38

# RLX-1 LED Specifications

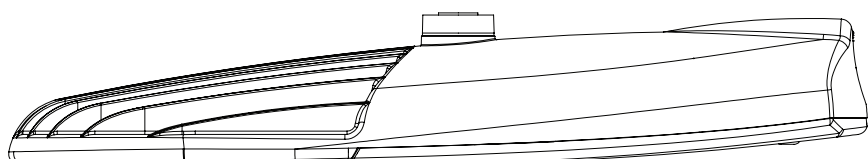
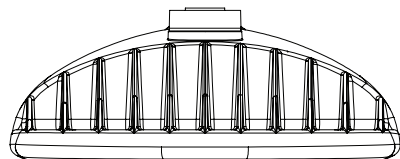
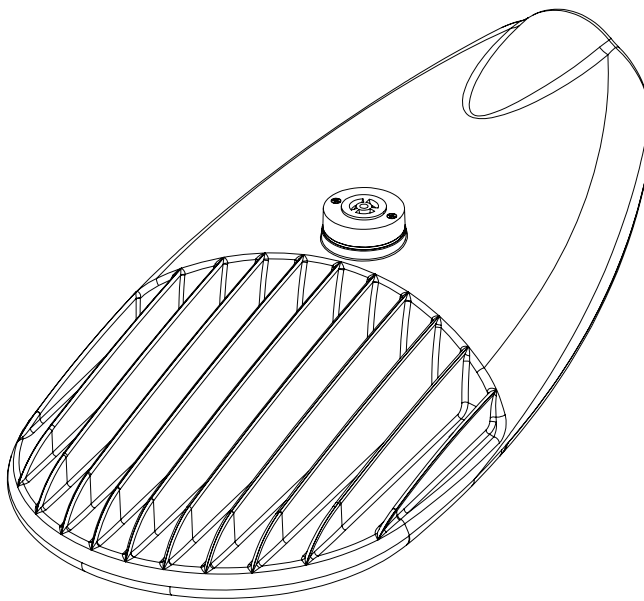
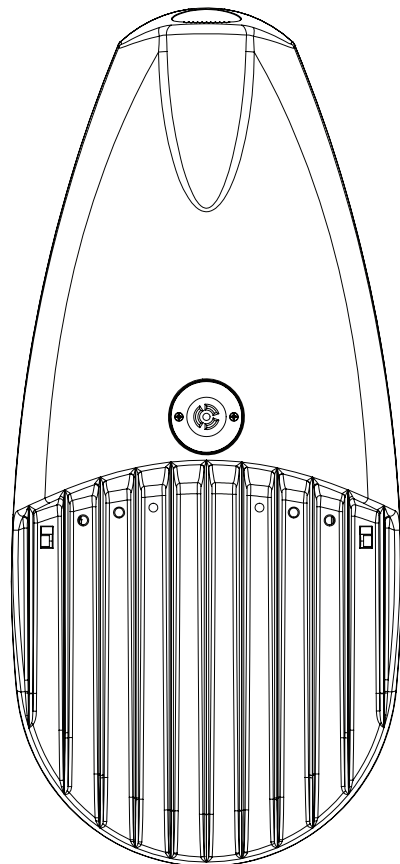
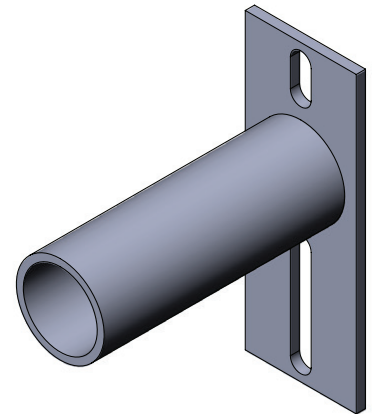
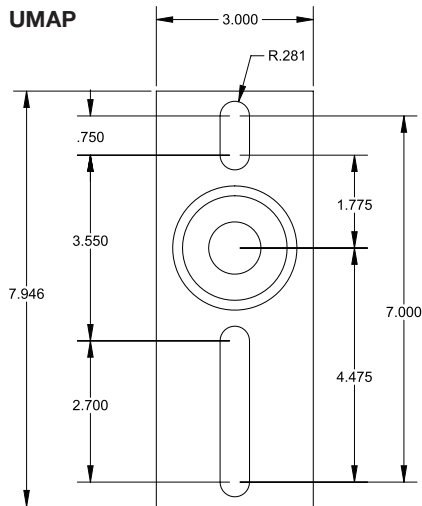
## Photometric Optical Summary



<b>EPA Data</b>					
	.85	1.7	2.1	2.1	

## Dimensions

<b>Width:</b>	RLX-1 14"
<b>Height:</b>	RLX-1 4"
<b>Depth:</b>	RLX-1 31"
<b>Weight:</b>	31 LBS



RLX 3K Lumen Data										
#LED's	Current (mA)	Type 1	Type 2	Type 3	Type 4	Type 4A	Type 5	Type 5W	Type 5WR	Watts
32	350	4852	4597	4597	4367	4869	4809	4678	4749	34
	530	7185	6808	6809	6468	7211	7123	6928	7033	53
	700	8703	8246	8247	7834	8734	8627	8392	8518	71
	1050	11678	11064	11065	10512	11719	11576	11260	11430	108
48	350	7224	6845	6846	6504	7250	7161	6966	7071	51
	530	10310	9769	9770	9281	10347	10221	9942	10092	80
	700	13013	12330	12331	11715	13060	12900	12548	12737	105
	1050	17860	16921	16923	16078	17924	17704	17221	17480	166
64	350	9529	9029	9029	8579	9563	9446	9189	9327	70
	530	13489	12780	12782	12144	13537	13371	12998	13193	107
	700	17138	16238	16240	15429	17200	16989	16525	16774	143
	1050	22482	21302	21304	20239	22563	22287	21679	22005	215
80	350	11506	10902	10902	10358	11546	11406	11094	11261	85
	530	16485	15619	15622	14840	16544	16342	15897	16135	133
	700	20507	19429	19431	18460	20580	20328	19773	20071	177
RLX 4K Lumen Data										
#LED's	Current (mA)	Type 1	Type 2	Type 3	Type 4	Type 4A	Type 5	Type 5W	Type 5WR	Watts
32	350	4901	4643	4644	4412	4918	4858	4725	4797	34
	530	7258	6876	6877	6533	7284	7195	6998	7104	53
	700	8791	8330	8330	7913	8823	8714	8476	8604	71
	1050	11796	11176	11177	10618	11838	11693	11374	11545	108
48	350	7297	6914	6915	6569	7324	7234	7037	7143	51
	530	10414	9867	9869	9375	10452	10324	10043	10194	80
	700	13145	12455	12456	11833	13192	13031	12675	12865	105
	1050	18040	17092	17094	16240	18105	17883	17395	17656	166
64	350	9625	9120	9121	8665	9659	9542	9282	9421	70
	530	13626	12909	12911	12266	13674	13506	13129	13327	107
	700	17311	16402	16404	15584	17374	17161	16692	16943	143
	1050	22709	21517	21520	20444	22791	22512	21898	22227	215
80	350	11622	11012	11013	10462	11663	11521	11206	11374	85
	530	16652	15777	15779	14990	16712	16507	16057	16298	133
	700	20714	19626	19628	18647	20788	20533	19973	20273	177
RLX 5K Lumen Data										
#LED's	Current (mA)	Type 1	Type 2	Type 3	Type 4	Type 4A	Type 5	Type 5W	Type 5WR	Watts
32	350	5107	4839	4839	4597	5125	5062	4924	4998	34
	530	7563	7166	7167	6808	7590	7497	7293	7403	53
	700	9161	8680	8681	8247	9194	9081	8833	8966	71
	1050	12292	11647	11647	11065	12336	12185	11853	12031	108
48	350	7604	7205	7206	6846	7632	7538	7333	7443	51
	530	10853	10283	10285	9770	10892	10758	10465	10623	80
	700	13698	12979	12980	12331	13747	13579	13208	13407	105
	1050	18800	17812	17814	16924	18867	18636	18127	18400	166
64	350	10031	9504	9505	9030	10066	9943	9673	9818	70
	530	14199	13453	13455	12783	14250	14075	13682	13888	107
	700	18040	17093	17094	16241	18105	17883	17395	17657	143
	1050	23665	22423	22426	21304	23751	23460	22820	23163	215
80	350	12111	11476	11476	10903	12154	12006	11678	11853	85
	530	17353	16441	16444	15621	17415	17202	16733	16985	133
	700	21586	20452	20454	19432	21663	21398	20814	21127	177

# RLX-1 LED Specifications

RLX 3K Lumen Per Watt Data										
#LED's	Current (mA)	Type 1	Type 2	Type 3	Type 4	Type 4A	Type 5	Type 5W	Type 5WR	Watts
32	350	143	135	135	128	143	141	138	140	34
	530	136	128	128	122	136	134	131	133	53
	700	123	116	116	110	123	122	118	120	71
	1050	108	102	102	97	109	107	104	106	108
48	350	142	134	134	128	142	140	137	139	51
	530	129	122	122	116	129	128	124	126	80
	700	124	117	117	112	124	123	120	121	105
	1050	108	102	102	97	108	107	104	105	166
64	350	136	129	129	123	137	135	131	133	70
	530	126	119	119	113	127	125	121	123	107
	700	120	114	114	108	120	119	116	117	143
	1050	105	99	99	94	105	104	101	102	215
80	350	135	128	128	122	136	134	131	132	85
	530	124	117	117	112	124	123	120	121	133
	700	116	110	110	104	116	115	112	113	177
RLX 4K Lumen Per Watt Data										
#LED's	Current (mA)	Type 1	Type 2	Type 3	Type 4	Type 4A	Type 5	Type 5W	Type 5WR	Watts
32	350	144	137	137	130	145	143	139	141	34
	530	137	130	130	123	137	136	132	134	53
	700	124	117	117	111	124	123	119	121	71
	1050	109	103	103	98	110	108	105	107	108
48	350	143	136	136	129	144	142	138	140	51
	530	130	123	123	117	131	129	126	127	80
	700	125	119	119	113	126	124	121	123	105
	1050	109	103	103	98	109	108	105	106	166
64	350	138	130	130	124	138	136	133	135	70
	530	127	121	121	115	128	126	123	125	107
	700	121	115	115	109	121	120	117	118	143
	1050	106	100	100	95	106	105	102	103	215
80	350	137	130	130	123	137	136	132	134	85
	530	125	119	119	113	126	124	121	123	133
	700	117	111	111	105	117	116	113	115	177
RLX 5K Lumen Per Watt Data										
#LED's	Current (mA)	Type 1	Type 2	Type 3	Type 4	Type 4A	Type 5	Type 5W	Type 5WR	Watts
32	350	150	142	142	135	151	149	145	147	34
	530	143	135	135	128	143	141	138	140	53
	700	129	122	122	116	129	128	124	126	71
	1050	114	108	108	102	114	113	110	111	108
48	350	149	141	141	134	150	148	144	146	51
	530	136	129	129	122	136	134	131	133	80
	700	130	124	124	117	131	129	126	128	105
	1050	113	107	107	102	114	112	109	111	166
64	350	143	136	136	129	144	142	138	140	70
	530	133	126	126	119	133	132	128	130	107
	700	126	120	120	114	127	125	122	123	143
	1050	110	104	104	99	110	109	106	108	215
80	350	142	135	135	128	143	141	137	139	85
	530	130	124	124	117	131	129	126	128	133
	700	122	116	116	110	122	121	118	119	177

RLX 3K Lumen Per Watt Data																													
#LED's	Current (mA)	Type 1			Type 2			Type 3			Type 4			Type 4A			Type 5			Type 5W			Type 5WR			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				
32	350	2	0	2	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	3	0	1	3	0	1	3	0	1	34
	530	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	1	3	0	2	3	0	1	53
	700	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	1	3	0	2	3	0	2	71
	1050	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	108
48	350	3	0	3	2	0	2	2	0	2	2	0	2	1	0	1	3	0	1	3	0	1	3	0	2	3	0	1	51
	530	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	4	0	2	3	0	2	80			
	700	3	0	3	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	105			
	1050	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	2	4	0	2	166			
64	350	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	4	0	2	3	0	2	3	0	2	70
	530	3	0	3	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	107			
	700	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	2	4	0	2	143			
	1050	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	5	0	3	4	0	3	215			
80	350	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	85
	530	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	2	4	0	2	133			
	700	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	5	0	3	4	0	2	177			
RLX 3K Lumen Per Watt Data																													
#LED's	Current (mA)	Type 1			Type 2			Type 3			Type 4			Type 4A			Type 5			Type 5W			Type 5WR			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				
32	350	2	0	2	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	3	0	1	3	0	1	3	0	1	34
	530	2	0	2	2	0	2	1	0	2	1	0	2	1	0	1	3	0	1	3	0	1	3	0	1	3	0	1	53
	700	3	0	3	2	0	2	1	0	2	2	0	2	2	0	1	3	0	1	3	0	2	3	0	2	3	0	2	71
	1050	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	108
48	350	2	0	2	2	0	2	1	0	2	1	0	2	2	0	1	3	0	1	3	0	1	3	0	1	3	0	1	51
	530	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	3	0	2	80
	700	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	105
	1050	4	0	3	3	0	3	2	0	2	3	0	3	3	0	2	4	0	2	4	0	2	4	0	2	4	0	2	166
64	350	3	0	3	2	0	2	1	0	2	2	0	2	2	0	2	3	0	1	3	0	2	3	0	2	3	0	2	70
	530	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	107
	700	4	0	3	3	0	3	2	0	2	3	0	2	3	0	2	4	0	2	4	0	2	4	0	2	4	0	2	143
	1050	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	2	5	0	3	4	0	3	215
80	350	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	4	0	2	4	0	2	4	0	2	85
	530	4	0	3	3	0	3	2	0	2	3	0	2	3	0	2	4	0	2	4	0	2	4	0	2	4	0	2	133
	700	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	4	0	2	4	0	2	4	0	2	177
RLX 3K Lumen Per Watt Data																													
#LED's	Current (mA)	Type 1			Type 2			Type 3			Type 4			Type 4A			Type 5			Type 5W			Type 5WR			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				
32	350	2	0	2	1	0	1	1	0	1	1	0	1	1	0	1	2	0	1	3	0	1	3	0	1	3	0	1	34
	530	3	0	3	2	0	2	2	0	2	2	0	2	2	0	1	3	0	1	3	0	2	3	0	1	3	0	1	53
	700	3	0	3	2	0	2	2	0	2	2	0	2	2	0	1	3	0	1	3	0	2	3	0	2	3	0	2	71
	1050	3	0	3	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	108
48	350	3	0	3	2	0	2	2	0	2	2	0	2	2	0	1	3	0	1	3	0	2	3	0	1	3	0	1	51
	530	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	4	0	2	3	0	2	3	0	2	80
	700	3	0	3	2	0	2	3	0	3	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	105
	1050	4	0	4	3	0	3	3	0	3	3	0	3	3	0	2	4	0	2	5	0	3	4	0	2	4	0	2	166
64	350	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	4	0	2	3	0	2	3	0	2	70
	530	3	0	3	3	0	3	3	0	3	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	107
	700	4	0	4	3	0	3	3	0	3	3	0	3	3	0	2	4	0	2	4	0	2	4	0	2	4	0	2	143
	1050	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	5	0	3	5	0	3	4	0	3	215
80	350	3	0	3	2	0	2	2	0	2	2	0	2	2	0	2	3	0	2	4	0	2	4	0	2	4	0	2	85
	530	4	0	4	3	0	3	3	0	3	3	0	3	3	0	2	4	0	2	4	0	2	4	0	2	4	0	2	133
	700	4	0	4	3	0	3	3	0	3	3	0	3	3	0	3	4	0	2	5	0	3	4	0	2	4	0	2	177