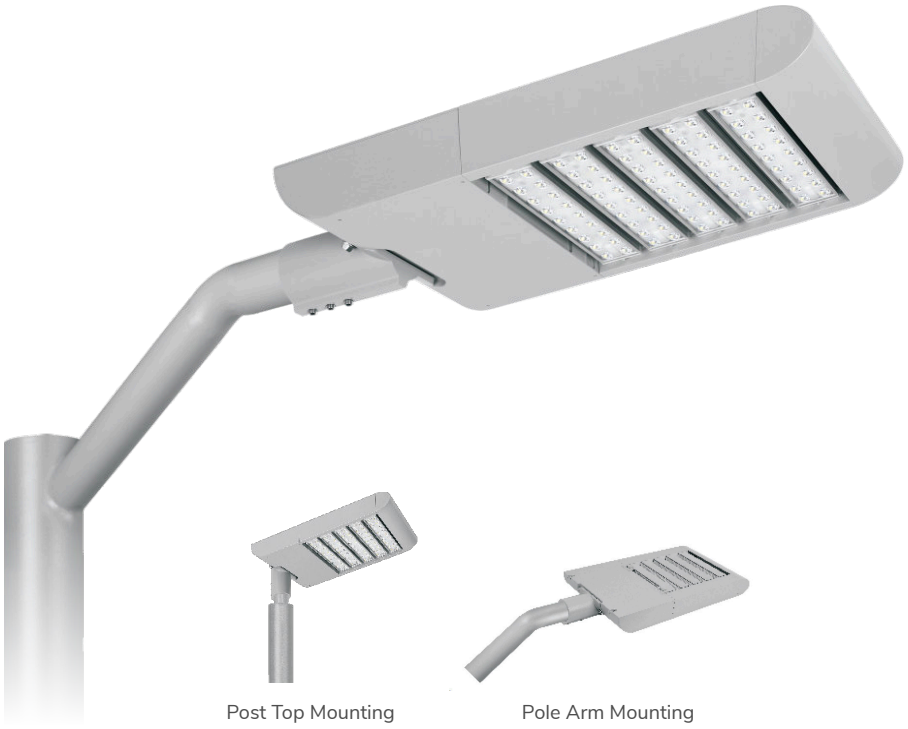
MODEL R HIGH PERFORMANCE LIGHT

LCFLDHPR-120/347V



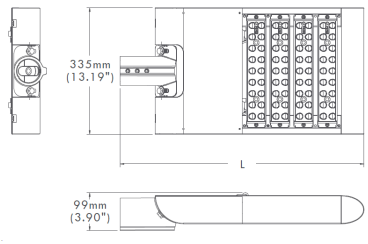
Post Top Mounting

Pole Arm Mounting

PRODUCT INTRODUCTION

The Model R is an ideal solution for street lighting, Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which enables passive heat dissipation. Available in multiple drive currents and optical distributions. Combining it with our optional motion sensor allows for even greater energy savings.

TECHNICAL DRAWING



RA*

MODEL R HIGH PERFORMANCE LIGHT

LCFLDHPR-120/347V

PERFORMANCE SUMMARY

Input Voltage	100-277VAC or 277-480VAC, 50/ 60Hz
Nominal Power	40W~600W
Efficiency	Up to 160 LPW
CRI	Ra>70(Default)/ Ra>80/ Ra>90
Power Factor	>0.9 at full load
Total Harmonic Distortion	<20% at full load
Surge Protection Device	Imax 10KA
Optic (IESNA)	Type II, Type III, Type IV, Type V
Operating Temperature	-40°C~+50°C
Accessories & Options	1-10V Dimming, PWM, DALI, Motion Sensor, Photocell, Back Light Shield, Bird Spike, Safety Cable
Color Options	Gray, Black, Bronze
L70/L90	>200,000H/ >60,000H
Limited Warranty	10 years limited warranty

IP66 IK08

Not all products are qualified on the DLC QPL. To view our DLC qualified products, please consult the DLC Qualified Products List at www.designlights.org

ORDERING INFORMATION

MODEL	INPUT VOLTAGE	~~MOUNTING~~	COMMON OPTIC	CCT	COLOR	OPTIONS
RAC40	**L** 100-277VAC		**T2S**	**19K** 1900K	**GY** Gray-RAL7004	**DIM** 1-10V Dimming
RAC80	**H** 277-480VAC		**T3S**	**22K** 2200K	**BK** Black-RAL9011	**PWM** 10V PWM Control
RAC120			**T3M**	**30K** 3000K	**BZ** Bronze-RAL8019	**DALI** DALI Control
RAC160			**T4VS**	**40K** 4000K		**MMS** Motion Sensor
RAC200			**T4S**	**50K** 5000K		**PC3** Photocell 3PIN
RAC240			**T4M**	**57K** 5700K		**PC7** Photocell 7PIN
RAC320			**T5M**			**PCM** Photocell MINI
RAD60			**T5W**			**BLS** Back Light Shield
RAD120			**T40D**			**BSP** Bird Spike
RAD180			**T60D**			**ORL** Optics Rotated Left
RAD240			**T90D**			**ORR** Optics Rotated Right
RAD300						
RAD360						
RAD480						
RAD600						

With the exception of the DIM, all options require prior confirmation with the engineer team. Option to equip with NEMA 7 Pin receptacle & Smart Lighting Node, to be compatible with wireless mesh control system.

MODEL R HIGH PERFORMANCE LIGHT

LCFLDHPR-120/347V

SPECIFICATION FEATURES

Construction:

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die cast aluminum end caps enclose housing and extruded aluminum heat sinks. A unique, patent pending inter locking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. IP66 water-proof and dust-proof rated. IK08 rated.

Optics:

Patented, high-efficiency spill light control technology. With a wide-range of optic lenses and flux options for the luminaire, it can send light exactly in the right direction and illuminate only the area of interest as efficient as possible. This will let you avoid any light waste and shine light only where is needed. With multiple spill light control options, it diminishes the light that shines towards the sky and windows of houses around the field of play to protect night preservation and biodiversity and minimize light nuisance issues.

Electrical:

100-277VAC 50/60Hz, 277-480VAC 50/60Hz Operation. The Model R is suitable for operation in -40°C to 50°C ambient environment. Available in standard 700mA and 1050mA driver current.

Mounting:

Post-top mounting allow for mounting flexibility. -6~+15 degree of titling angle adjustment. Adjustable for 1 5/8-2 3/8" (42-60mm) O.D. tenon. Brackets are available for different installations. Full cut off and Dark Sky friendly.

Finish:

Housing finished in super durable powder coat paint, corrosion resistant polyester powder painted 100µm thickness. Meets1000-hour salt spray certification per ASTM Standard B117. Standard housing color of Gray. Customized colors are available.

Certification:

- cULus Listed
- CE-LVD/CE-EMC/CB/ENEC/SAA
- DLC Premium qualified versions available
- IP66 /IK08
- RoHS compliant
- Dark Sky Friendly, IDA Approved when ordered with 3000K CCT
- Endurance tested to withstand 1,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B117
- 10kA surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Certified to ANSI C136.31-2010, 3G bridge and overpass vibration standards

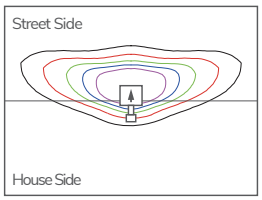
LUMINAIRE EPA

RAC40	RAC80	RAC120	RAC160	RAC200	RAC240	RAC320	RAD60	RAD120	RAD180	RAD240	RAD300	RAD360	RAD480	RAD600
0.049	0.054	0.059	0.064	0.069	0.074	0.084	0.049	0.054	0.059	0.064	0.069	0.074	0.084	0.095

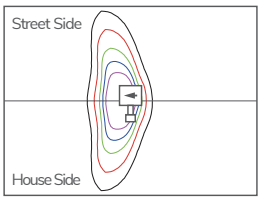
MODEL R HIGH PERFORMANCE LIGHT

LCFLDHPR-120/347V

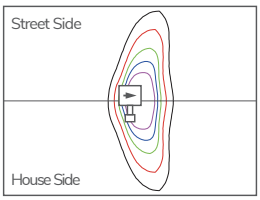
OPTIC ORIENTATION



Standard



Optics Rotated Left@90˚

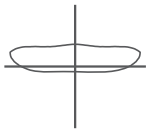


Optics Rotated Right@90˚

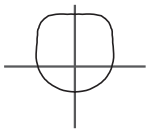
OPTICAL DISTRIBUTION

Type II Medium

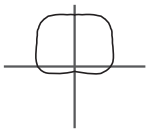
Type II Medium Spill Control



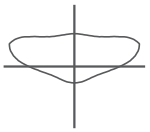
Type III Short



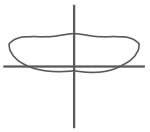
Type III Short Spill Control



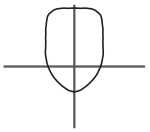
Type III Medium



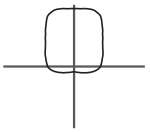
Type III Medium Spill Control



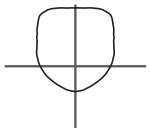
Type IV Very Short



Type IV Very Short Spill Control



Type IV Short



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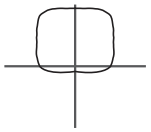
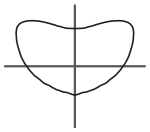
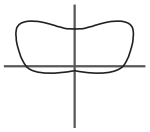


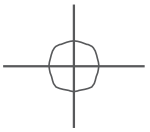
Type IV Medium



Type IV Medium Spill Control

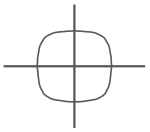


60˚ Flood

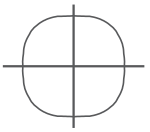


90˚ Flood

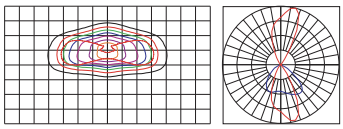
Type V Square Medium



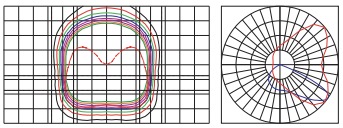
Type V Square Wide



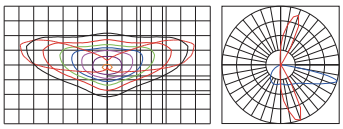
PHOTOMETRY



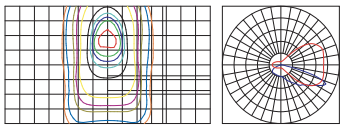
T2S Type II Short



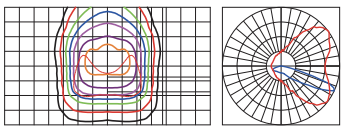
T3S Type III Short



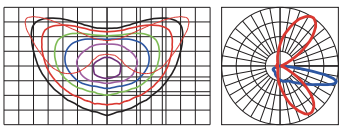
T3M Type III Medium



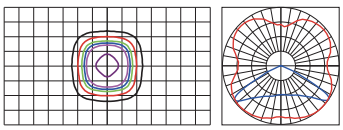
T4VS Type IV Very Short



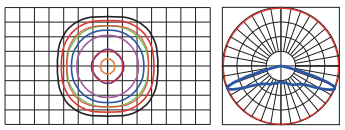
T4S Type IV Short



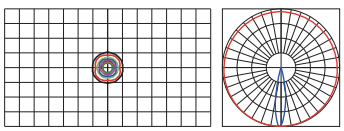
T4M Type IV Medium



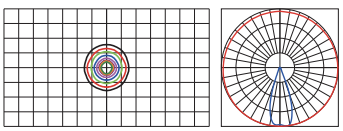
T5M Type V Square Medium



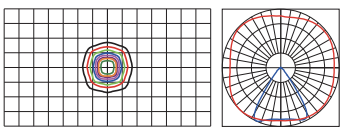
T5W Type V Square Wide



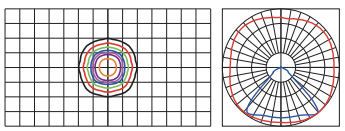
T20D 20° Flood



T40D 40° Flood



T60D 60° Flood



T90D 90° Flood

MODEL R HIGH PERFORMANCE LIGHT

LCFLDHPR-120/347V

PRODUCT IMAGE

RAC40 RAD60 | RAC80 RAD120 | RAC120 RAD180 | RAC160 RAD240 | RAC200 RAD300 | RAC240 RAD360 | RAC320 RAD480 | RAD600

BRIEF SPECIFICATIONS

Model	Nominal power	LED current	Module number	Module power	Product size L*W*H (mm/in)	Product size L*W*H (mm/in)	Net weight	Gross weight	Typical luminous flux(lm)	Typical efficiency (lm/W)
100-277VAC										
RAC40L	40W	700mA	1	40W	456(17.95)*335(13.18)*99(3.90)	535(21.06)*425(16.73)*160(6.3)	6.1KG	7.1KG	5960	149
RAC80L	80W	700mA	2	40W	519(20.43)*335(13.19)*99(3.90)	600(23.62)*425(16.73)*160(6.3)	6.8KG	8.0KG	12160	152
RAC120L	120W	700mA	3	40W	581(22.87)*335(13.19)*99(3.90)	660(25.98)*425(16.73)*160(6.3)	7.8KG	9.0KG	18240	152
RAC160L	160W	700mA	4	40W	644(25.35)*335(13.19)*99(3.90)	725(28.54)*425(16.73)*160(6.3)	8.4KG	9.7KG	24480	153
RAC200L	200W	700mA	5	40W	706(27.79)*335(13.19)*99(3.90)	785(30.90)*425(16.73)*160(6.3)	9.0KG	10.4KG	30400	152
RAC240L	240W	700mA	6	40W	769(30.28)*335(13.19)*99(3.90)	850(33.46)*425(16.73)*160(6.3)	9.6KG	11.1KG	36720	153
RAC320L	320W	700mA	8	40W	894(35.20)*335(13.19)*990(3.90)	975(38.39)*425(16.73)*160(6.3)	11.7KG	13.3KG	48960	153
RAD60L	60W	1050mA	1	60W	456(17.95)*335(13.19)*99(3.90)	535(21.06)*425(16.73)*160(6.3)	6.1KG	7.1KG	8220	137
RAD120L	120W	1050mA	2	60W	519(20.43)*335(13.19)*99(3.90)	600(23.62)*425(16.73)*160(6.3)	6.9KG	8.1KG	16680	139
RAD180L	180W	1050mA	3	60W	581(22.87)*335(13.19)*99(3.90	660(23.98)*425(16.73)*160(6.3)	7.9KG	9.1KG	25200	140
RAD240L	240W	1050mA	4	60W	644(25.35)*335(13.19)*99(3.90)	725(28.54)*425(16.73)*160(6.3)	8.5KG	9.8KG	33360	139
RAD300L	300W	1050mA	5	60W	706(27.79)*335(13.19)*99(3.90)	785(30.90)*425(16.73)*160(6.3)	9.7KG	11.1KG	42300	141
RAD360L	360W	1050mA	6	60W	769(30.28)*335(13.19)*99(3.90)	850(33.46)*425(16.73)*160(6.3)	11.4KG	12.9KG	50760	141
RAD480L	480W	1050mA	8	60W	894(35.20)*335(13.19)*99(3.90)	975(38.39)*425(16.73)*160(6.3)	12.8KG	14.4KG	67680	141
RAD600L	600W	1050mA	10	60W	1019(40.12)*335(13.19)*99(3.90)	1100(43.31)*425(16.73)*160(6.3)	14.4KG	16.0KG	85200	142
277-480VAC										
RAC80H	80W	700mA	2	40W	519(20.43)*335(13.19)*99(3.90)	600(23.62)*425(16.73)*160(6.3)	6.8KG	8.0KG	12160	152
RAC120H	120W	700mA	3	40W	581(22.87)*335(13.19)*99(3.90)	660(25.98)*425(16.73)*160(6.3)	7.8KG	9.0KG	18240	152
RAC160H	160W	700mA	4	40W	644(25.35)*335(13.19)*99(3.90)	725(28.54)*425(16.73)*160(6.3)	8.4KG	9.7KG	24480	153
RAC200H	200W	700mA	5	40W	706(27.79)*335(13.19)*99(3.90)	785(30.90)*425(16.73)*160(6.3)	9.0KG	10.4KG	30400	152
RAC240H	240W	700mA	6	40W	769(30.28)*335(13.19)*99(3.90)	850(33.46)*425(16.73)*160(6.3)	9.6KG	11.1KG	36720	153
RAC320H	320W	700mA	8	40W	894(35.20)*335(13.19)*990(3.90)	975(38.39)*425(16.73)*160(6.3)	11.7KG	13.3KG	48960	153
RAD120H	120W	1050mA	2	60W	519(20.43)*335(13.19)*99(3.90)	600(23.62)*425(16.73)*160(6.3)	6.9KG	8.1KG	16680	139
RAD180H	180W	1050mA	3	60W	581(22.87)*335(13.19)*99(3.90	660(23.98)*425(16.73)*160(6.3)	7.9KG	9.1KG	25200	140
RAD240H	240W	1050mA	4	60W	644(25.35)*335(13.19)*99(3.90)	725(28.54)*425(16.73)*160(6.3)	8.5KG	9.8KG	33360	139
RAD300H	300W	1050mA	5	60W	706(27.79)*335(13.19)*99(3.90)	785(30.90)*425(16.73)*160(6.3)	9.7KG	11.1KG	42300	141
RAD360H	360W	1050mA	6	60W	769(30.28)*335(13.19)*99(3.90)	850(33.46)*425(16.73)*160(6.3)	11.4KG	12.9KG	50760	141
RAD480H	480W	1050mA	8	60W	894(35.20)*335(13.19)*99(3.90)	975(38.39)*425(16.73)*160(6.3)	12.8KG	14.4KG	67680	141
RAD600H	600W	1050mA	10	60W	1019(40.12)*335(13.19)*99(3.90)	1100(43.31)*425(16.73)*160(6.3)	14.4KG	16.0KG	85200	142

CERTIFICATION & STANDARDS

Certification	Standards	Remark
CE-LVD Low Voltage Directive (2014/35/EC)	EN 60598-2-3/ A1:2011	Applicable for Street Light
	EN 60598-2-5:2015	Applicable for Flood Light
	EN 60598-1:2015/ A11:2018	
	EN 62471:2008	
	EN 62493:2015	
CE-EMC Electromagnetic Compatibility Directive (2014/30/EU)	EN 55015:2013/ A1:2015	
	EN 61547:2009	
	EN 61000-3-2:2014	
	EN 61000-3-3:2013	
CE-ErP Energy-Related Products Directive (2009/125/EU)	EU 1194/ 2012:2012-12-12	
	EC 244/ 2009:2009-03-18	
	EU 859/ 2009:2009-09-18	
CE-RoHS Directive (2011/65/EU)	EN 62321:2009	
CB	IEC 60598-2-3/ A1:2011	Applicable for Street Light
	IEC 60598-2-5:2015	Applicable for Flood Light
	IEC 60598-1:2014	
	IEC 62471:2006	
	IEC 62471-2:2009	
ENEC	EN 60598-2-3/ A1:2011	Applicable for Street Light
	EN 60598-2-5:2015	Applicable for Flood Light
	EN 60598-1: 2015/ A1: 2018	
	EN 62471:2008	
	EN 62493:2010	
SAA	AS/ NZS60598.2.3:2015	
	AS/ NZS60598.1:2017	
ATEX ATEX 95 Equipment Directive (94/9/EC)	EN 60079-0:12	
	EN 60079-11:12	
	EN 60529:1989+A1:1999	
UL	UL1598	
	UL8750	
	CSA C22.2 No. 250.0-08	
	CSA C22.2 No. 250.13-14	
FCC	Title 47 CFRPart 15	
PSE	Japan Electrical Appliance and Material Safety Law Ministerial Ordinance Attached Table No. 8 (Safety)	
	Japan Electrical Appliance and Material Safety Law Ministerial Ordinance Attached Table No. 10 (EMC)	
Photobiological Safety	EN 62471:2008	
	IEC 62471:2006	
Vibration test	ANSI C136.31-2010	Applicable for Street Light
	IEC/ EN 60598-2-5 clause 5.6.7	Applicable for Flood Light
Salt spray test	ISO 9227:2012	
	ASTM B117	
IK08 Impact resistance test	IEC 62262:2002	
IP65 or IP67 test	IEC/ EN 60598-1:2015 clause 9.2.2 and clause 9.2.6 or clause 9.2.8	
Photometric and Integrating Sphere test	IES LM-79-2008	
	ANSI C82.77-2002	
	ANSI C78.377-2011	
	CIE13.3-1995	
	CIE15-2004	
	IES TM-15-11	
	IES LM-63-2002	
LED Module	IEC/ EN 62031:2008+A1:2013	
LED Lamps	IES LM-80-2008	
	ANSI C78.377-2011	
	JESD22 A108	
	JESD22 A101C	
	JESD22 A105	
	JESD22 B104	
	JESD22 A114	
LED Driver	EN 61347-1:2008	
	EN 61347-2-13:2006	
	EN 62384:2006+A1:2009	
	EN 55015:2006+A1:2007+A2:2009	
	EN 61000-3-2:2006+A1:2009+A2:2009	
	EN 61000-3-3:2008	
	EN 61547:2009	
	IEC 62386 Part 102 and Part 207	Applicable for DALI
	UL1012 UL879 UL935	
	FCC Title 47 CFRPart 15 Class A	
Surge Protection Device	ANSI/ IEEEC62.41.2-2002	
	UL1449	
Receptacle	ANSI C136.10-2010	
Dimming Receptacle	ANSI C136.41-2013	