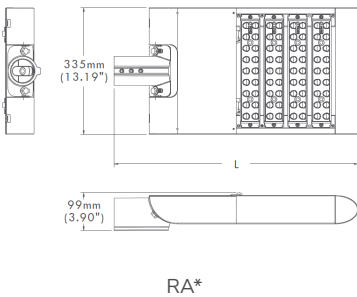


PRODUCT INTRODUCTION

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



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



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	GY	DIM 1-10V Dimming
RAC80			T3S	1900K	Gray-RAL7004	PWM 10V PWM Control
RAC120	H 277-480VAC		T3M	22K	BK	DALI DALI Control
RAC160			T4VS	2200K	Black-RAL9011	MMS Motion Sensor
RAC200			T4S	30K	BZ	PC3 Photocell 3PIN
RAC240			T4M	3000K	Bronze-RAL8019	PC7 Photocell 7PIN
RAC320			T5M	40K		PCM Photocell MINI
RAD60			T5W	4000K		BLS Back Light Shield
RAD120			T40D	50K		BSP Bird Spike
RAD180			T60D	5000K		ORL Optics Rotated Left
RAD240			T90D	57K		ORR Optics Rotated Right
RAD300				5700K		
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.

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. Meets 1000-hour salt spray certification per ASTM Standard B117. Standard housing color of Gray. Customized colors are available.

Certification:

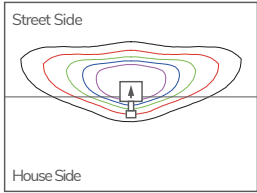
- cULus Listed
- CE-LVD/CE-EMC/CB/ENEC/SAA
- DLC Premium qualified versions available
- IP66 /IK08
- RoHS compliant
- Dark Sky Friendly, IDA Approved when ordered with 3000K CCT
- Endurance tested to withstand 1,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B117
- 10kA 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

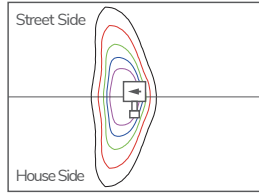


RAC40	RAC80	RAC120	RAC160	RAC200	RAC240	RAC320	RAD60	RAD120	RAD180	RAD240	RAD300	RAD360	RAD480	RAD600
0.049	0.054	0.059	0.064	0.069	0.074	0.084	0.049	0.054	0.059	0.064	0.069	0.074	0.084	0.095

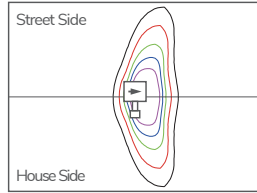
OPTIC ORIENTATION



Standard



Optics Rotated Left@90°



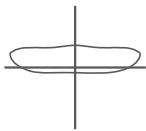
Optics Rotated Right@90°

OPTICAL DISTRIBUTION

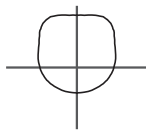
Type II Medium



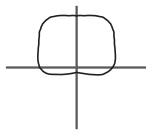
Type II Medium
Spill Control



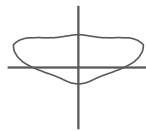
Type III Short



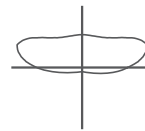
Type III Short
Spill Control



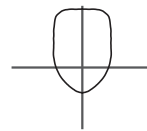
Type III Medium



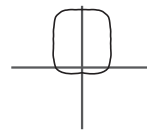
Type III Medium
Spill Control



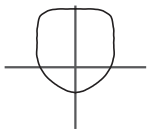
Type IV Very
Short



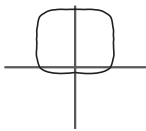
Type IV Very
Short Spill Control



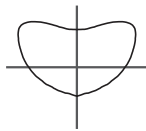
Type IV Short



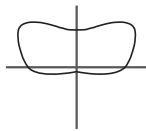
Type IV Short
Spill Control



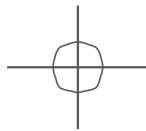
Type IV Medium



Type IV Medium
Spill Control



60° Flood



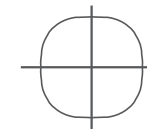
90° Flood



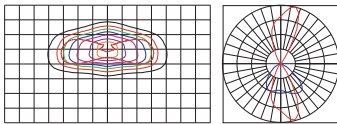
Type V Square
Medium



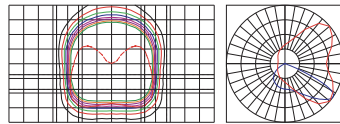
Type V Square
Wide



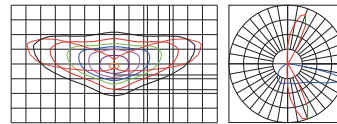
PHOTOMETRY



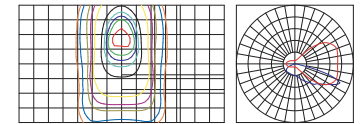
T2S Type II Short



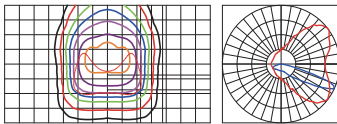
T3S Type III Short



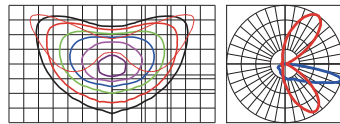
T3M Type III Medium



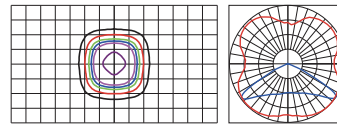
T4VS Type IV Very Short



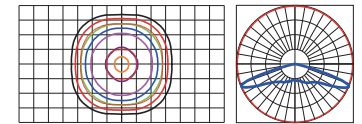
T4S Type IV Short



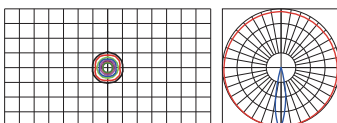
T4M Type IV Medium



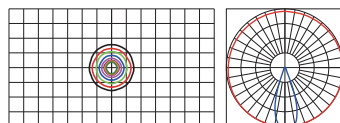
T5M Type V Square Medium



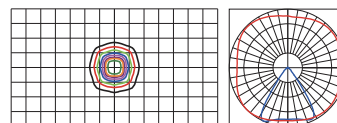
T5W Type V Square Wide



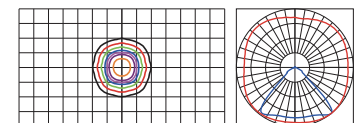
T20D 20° Flood



T40D 40° Flood

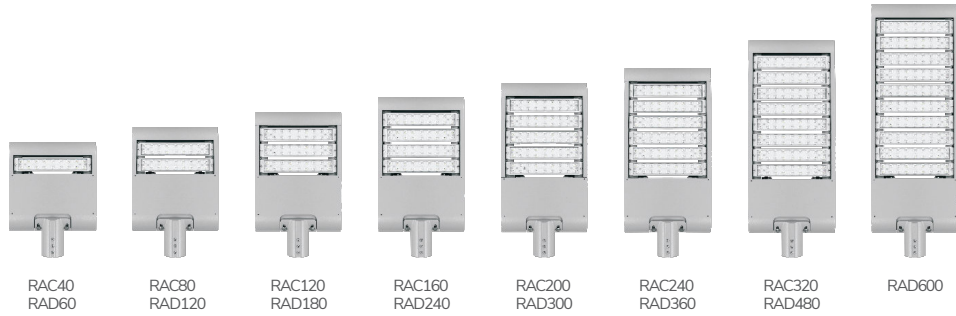


T60D 60° Flood



T90D 90° Flood

PRODUCT IMAGE



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)
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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)*99(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)*99(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 CFR Part 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	
IK08 Impact resistance test IP65 or IP67 test	ASTM B117	
	IEC 62262:2002	
Photometric and Integrating Sphere test	IEC/ EN 60598-1:2015 clause 9.2.2 and clause 9.2.6 or clause 9.2.8	
	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 CFR Part 15 Class A	
Surge Protection Device	ANSI/ IEEE C62.41.2-2002 UL1449	
Receptacle	ANSI C136.10-2010	
Dimming Receptacle	ANSI C136.41-2013	