

**PHILIPS
LIGHTOLIER**

Downlighting

LyteCaster

6" Round adjustable
1500 Lumens



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Philips Lightolier LyteCaster LED Adjustable Downlights are a low cost solution for slope ceiling and wall washing applications that features a 30° tilt. The shallow 3.5" luminaire height conserves the plenum space and is damp location listed. The modular and interchangeable light engine/trim allows for an easy future upgrade.

Complete product = Frame-in kit + Adjustable light engine / Trim Order each separately

Ordering guide: Frame-In kit

Example: L6RAE1VA

Series	Frame type	Dimming	Input voltage	Version
L6R				VA
L6R LyteCaster 6" Round	A AirSeal IC, New Construction, Screw AN AirSeal IC, New Construction, Nail	E ELV dimming	1 120V	VA Version A ¹
		Z10 0-10V	U Universal	

Ordering guide: Adjustable light engine / Trim

Example: L6RA15827WVA

Series	Lumens	CRI	CCT	Finish	Version
L6RA	15			W	VA
L6RA LyteCaster 6" Round adjustable	15 1500	8 80	27 2700K	W White (with white flange)	VA Version A ¹
			30 3000K		
35 3500K					
40 4000K					
		9 90	27 2700K	W White (with white flange)	

Note: Lumen output is calculated based on 80 CRI and 3500K CCT. Please consult adjustment factors table on page 4 for other lumen outputs.

1. Version A (VA) frames and light engines are not compatible with previous versions.

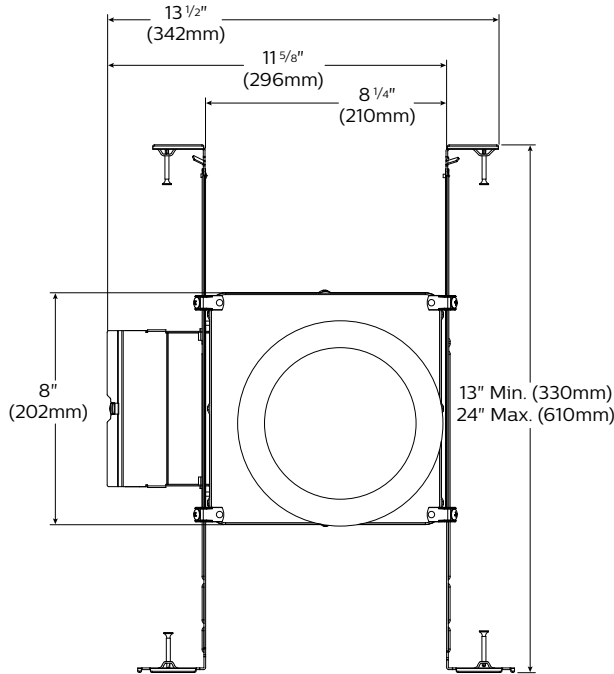


L6RA LyteCaster 6" Round adjustable

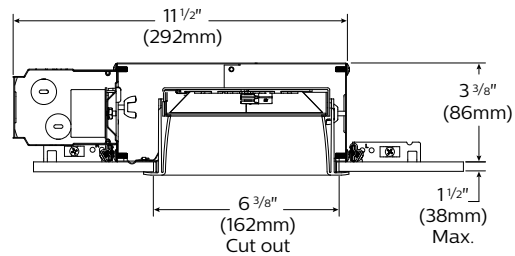
General purpose downlight, 1500 lumens

Frame-in kit

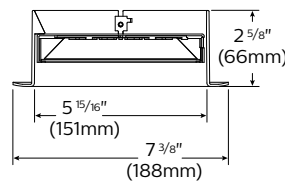
Bottom view



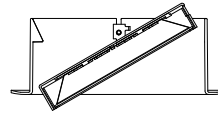
Side view



Adjustable light engine/trim



Maximum tilt: 30°



Features

- Housing:** .026" galvanized steel. UL listed for direct contact with thermal insulation. Airseal® housing minimizes air leakage to less than 2 CFM at 1.57PSF (or 75PA), which complies with Title 24, the International Energy Conservation Code, and Washington State Energy Code (Section 502.4). This reduces heat loss and condensation in ceiling. Access door for inspection of junction box.
- Lower frame and top cover:** .026" galvanized steel. Accommodates ceilings up to 1 1/2" (38mm) thick. 3/8" (9.5mm) deep integral lip with four notches at 90° apart to simplify alignment. Locks into position along length of mounting bars with locking screws.
- Junction Box:** 2.5" X 5 3/8" X 2" (27 cu. in) .032" galvanized steel. UL listed 90 ° supply conductors. Rated for branch circuit wiring supplying connected luminaires (daisy chaining).
- Retaining clips:** Permit easy and fast installation of light engine/trim.
- Mounting bars:** .059" galvanized steel. Bars pivot for easy attachment and wire-in below ceiling line. Bars extend to accommodate 16" (406mm) to 24" (610mm) O.C. joist spacing. Bars can accommodate 12" (305mm) O.C. joist spacing after a slight field modification (see Instruction sheet). Features integral self tapping phillips/square drive screws for secure attachment to wood or metal construction. Also available with integral nails. Attaches to T-bar ceilings without the need of accessories. Bars installed on shortest dimension of frame, but can be easily repositioned 90 degrees from original position.

- Driver:** ELV: 120V, 50/60Hz. RoHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class B) for EMI/ RFI (conducted & radiated). Class A sound rating. **0-10V:** 120/277V, 50/60Hz. RoHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class A) for EMI/ RFI (conducted & radiated). Class A sound rating.
- Ceiling cutout:** 6 3/8" (162mm).

Options and Accessories

For fire rated box accessory, use Fireline:

16FR2X10	16" on center 2x10 construction
16FR2X6	16" on center 2x6 construction

See Fireline spec sheets for more information.

Electrical

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty. (see Philips.com/warranties for details)

Recommended dimmers

See LED-DIM Specification Sheet.

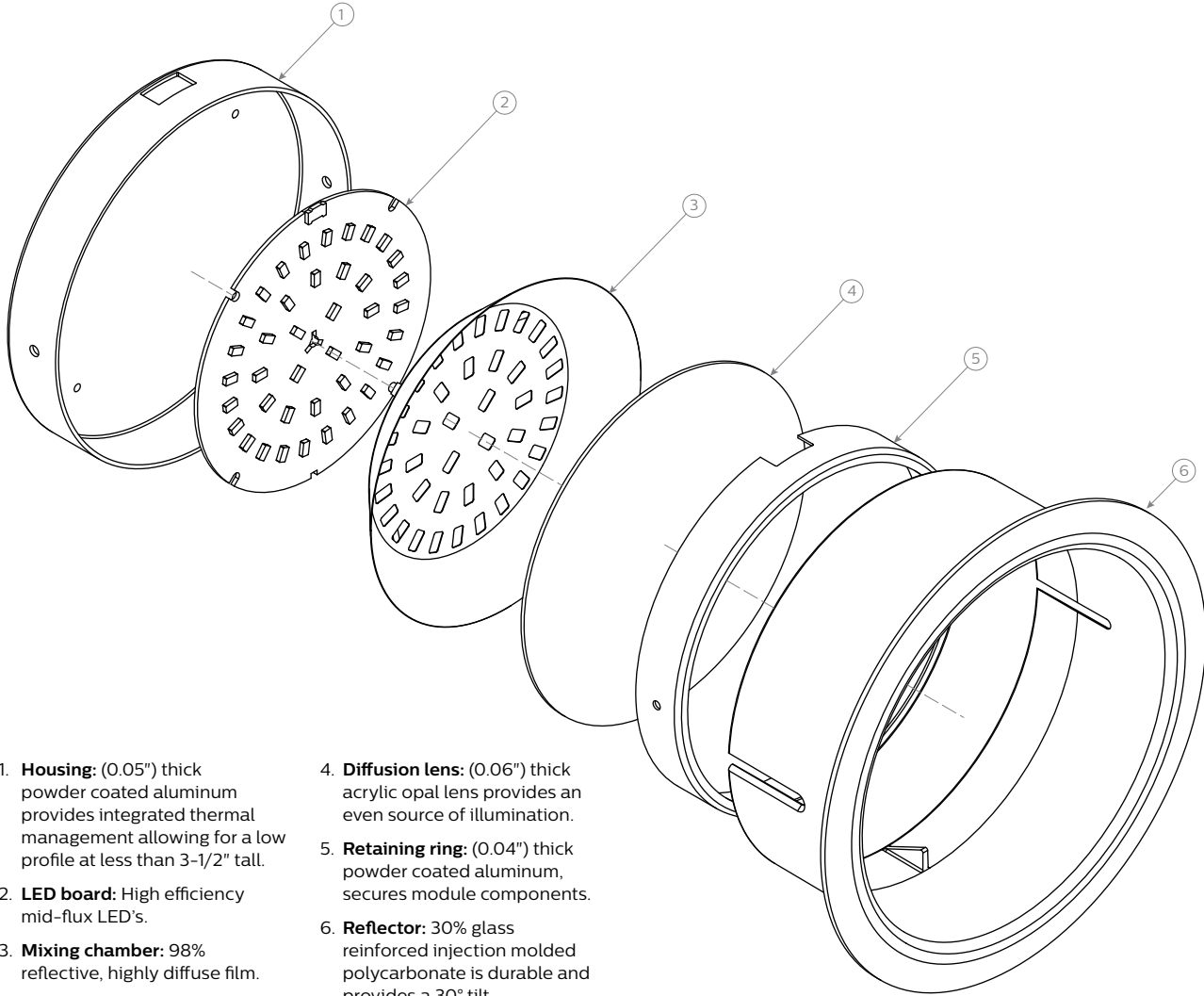
Labels

cULus Listed Type I.C., frames are suitable for damp location. Trims are cULus suitable for damp location. Complies with Air Leakage.

L6RA LyteCaster 6" Round adjustable

General purpose downlight, 1500 lumens

Reflector: Round adjustable



- 1. **Housing:** (0.05") thick powder coated aluminum provides integrated thermal management allowing for a low profile at less than 3-1/2" tall.
- 2. **LED board:** High efficiency mid-flux LED's.
- 3. **Mixing chamber:** 98% reflective, highly diffuse film.
- 4. **Diffusion lens:** (0.06") thick acrylic opal lens provides an even source of illumination.
- 5. **Retaining ring:** (0.04") thick powder coated aluminum, secures module components.
- 6. **Reflector:** 30% glass reinforced injection molded polycarbonate is durable and provides a 30° tilt.

Electrical

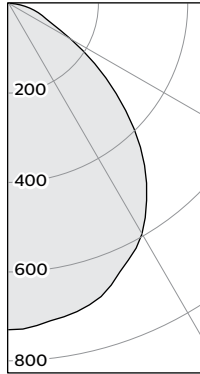
Screw / Nail Frame-in kit Electrical specifications	Input volts	Input freq.	Input current	LED drive current	Input power	LED power	THD factor	Power factor
L6RAE1VA	120V	50/60Hz	0.14A	350mA	16W	13W	<20%	>0.9
L6RAZ10UVA	120V	50/60Hz	0.14A	350mA	17W	13W	<10%	>0.9
	277V	50/60Hz	0.07A	350mA	17W	15W	<15%	>0.9

L6RA LyteCaster 6" Round adjustable

General purpose downlight, 1500 lumens

80 CRI, 1500 lumens (downlight photometry shown)

Candela Curves



Angle	Mean CP	Lumens
0	730	
5	724	
10	412	69
15	698	
20	671	197
25	634	
30	596	292
35	538	
40	473	336
45	397	
50	314	304
55	235	
60	161	210
65	107	
70	80	111
75	59	
80	37	62
85	16	
90	0	18

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	29	6.0'
6'	20	7.2'
7'	15	8.4'
8'	11	9.6'
9'	9	10.8'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5'	66.8	0.71
6'	43.8	0.47
7'	31.3	0.33
8'	26.1	0.28
9'	20.9	0.22

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	110	106	102	99	104	97	100	94	96	92	87
	2	102	94	88	83	92	82	89	80	86	79	75
	3	94	84	77	71	83	71	80	69	77	68	65
	4	86	76	68	62	74	61	72	60	70	60	57
	5	80	68	60	54	67	54	65	53	63	53	50
	6	74	62	54	48	61	48	59	47	58	47	45
	7	69	57	48	43	56	43	54	42	53	42	40
	8	65	52	44	38	51	38	50	38	49	38	36
	9	60	48	40	35	47	35	46	35	45	34	33
	10	57	44	37	32	44	32	43	32	42	31	30

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	5558	347.6%
0-40	893	55.9%
0-60	1408	88.1%
0-90	1599	100.0%

CRI and CCT adjustment factors

90CRI 2700K = 0.71
80CRI 2700K = 0.89
80CRI 3000K = 0.97
80CRI 3500K = 1.00

Frame: L6RAE1VA
Light engine: L6R15835VA
Trim: L6RDW

Report no³: 686GFR

Output lumens: 1599 lm
Input Watts: 16 W
Spacing Criterion: 1.2

Efficacy: 99.9 lm/W
CCT²: 3500 K
CRI: ≥80

1. Wattage: controlled to within ± 5%
2. Correlated Color Temperature: within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

© 2015 Koninklijke Philips N.V. All rights reserved.
Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.
philips.com/luminaires



Philips Lighting, North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008