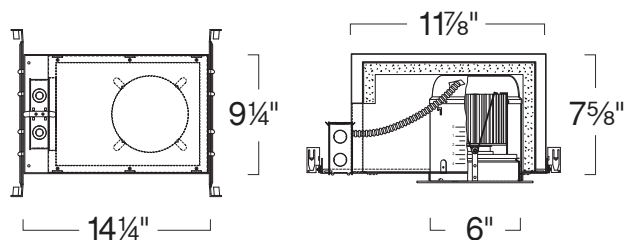


6" IC Fire-Rated LED Housing (9W/16W) w/ 6" 750/1200Lm Adjustable LED Gimbal 6" 9W/16W (1 LED SERIES)



SPECIFICATION

Ceiling cut-out: 6 1/2"

Application: This energy efficient General Purpose recessed LED housing is perfect for low to medium height ceilings in residential and light commercial applications. A variety of trim styles, finishes, beam spreads and wattages are available to achieve a desired look and lumen output.

Mounting: Housing suitable for new construction installations only, supplied with (2) 24" adjustable hanger bars with 90 degrees repositioning ability. Hanger bars equipped with nail-less install 3/4" serrated barbed studs and with captive nails, for faster and easier secure mounting in wood joists. Set-screws lock into position and prevent shifting after installation. Earthquake structural cable compatible for drop panel ceiling or any other mounting that requires direct support from structural ceilings.

Power Connection: LED heat sinked lamp module is replaceable via onboard quick exclusionary disconnect terminal. No tools required. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

Driver: Electronic Direct Current U.L. Listed driver mounted away from LED Array for cool operation and end-of-life modularity. Comes standard with 120VAC input and available with optional 120V/277V universal voltage input.

Dimming: 'DIN' dimming option smoothly dims down to 5% of initial light output with flicker-free performance. Works with standard incandescent dimmers. Factory qualified for use with Lutron brand dimmers: S600PR, DVSCCL-153P & DV600PR as well as Leviton IP106-600W. Works with standard electronic low voltage (ELV) dimmers. Factory qualified for use with Lutron brand dimmers: SELV300P, DVELV-300P, MAELV-600 and NELV-450. 'D10' dimming option works with most 0-10V DC 5-wire 120V or 277V dimming systems and wall box dimmers. 1% Dimming with S-600 Dimmer for 9W only.

Emergency Options: Emergency LED Battery Back-up available, remotely mounted adjacent to housing by installer. When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the driver to auxiliary generator power during the loss of normal AC power, (recommended for applications requiring individual circuit switching).

Junction Box : 16 gauge pre-wired galvanized steel Junction Box, 32 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (7) 3/4" and (4) Romex knock-outs. Strain clamps to install or remove covers for easy access and ground wire. Equipped with safety standard fitting for flex-conduit.

Insulation Contact: Energy Efficient LED housing comes standard with IC rating for direct contact with loosefill blown and rolled insulation.

Airflow: Airtight option is designed to restrict air flow from room into plenums in compliance to the WSEC - Washington State Energy Code, (Less than 2.0 CFM -Cubic Feet per Minute). Complies to Title24 air flow requirements (Air-tight).

FEATURE:



Application: This Adjustable Gimbal LED Trim provides directional adjustability not commonly found in LED fixtures, allowing it to function as both a downlight and an accent light. Powerful 750/1200 lumen output is suitable for any downlight application.

Mounting: Steel pressure springs mounted on trim to ensure positive retention inside housing.

Power Connection: LED heat sinked lamp module is replaceable via onboard quick exclusionary disconnect terminal. No tools required. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

Lumen Maintenance: 9W: Minimum 75,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results. 16W: Minimum 40,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results.

Thermal Management: Effective thermal dissipation facilitated by integral cast-aluminum, finned heat sink design for maximum heat rejection to provide long LED life.

Lumen Output: Wattage of housing determines lumen output of trim. 9W/750Lm 16W/1200Lm

Color Temperature: Comes standard with 3500K Cool White LED's binned according to ANSI C78 377A for color temperature and chromaticity ranges.

Warranty: Covered by a 3 Year Warranty to be free of defects in materials and craftsmanship. Recommended for applications where ambient temperatures do not exceed 35°C, installations exceeding this temperature will result in reduced LED lamp life and a voided warranty.

Label: cETL Listed

Assembled in USA

6" IC FIRE-RATED LED HOUSING (9W/16W) LHFRD6 9W/16W LED

WATTAGE	DRIVER TYPE	OPTIONS
LHFRD609C25 :9W	Blank :120V	Blank :None
LHFRD616C35 :16W	-DIN :Incandescent/ELV Dimming	-EM :Emergency Backup (6W)**
	UE :120V/277V*	
	UE-D10 :0-10V Dimming (120V/277V)*	
	UE-DHL :Hilume Dimming (120V/277V)*	
	-347-D10 :0-10V 10% Dimming	

* Not available for 9W option. ** Access above ceiling required

6" 750/1200LM ADJUSTABLE LED GIMBAL LRLDH678 9W/16W LED

FINISH	BEAM SPREAD
LRLDH678W :White	-B08:Spot*
LRLDH678BB :Black	-B25:Narrow Flood
LRLDH678N :Natural	-B45:Flood
	-B60:Wide Flood

Ordering example: LHFRD616C35/LRLDH678W-B08

6" Adjustable LED Gimbal
 Test Procedure: LM-79-08
 Total Rated Fixture Lumen :1153
 Total Luminaire Efficacy :75 Lm/W
 Luminous Diameter :0.50"

Report File#
 LM-63-2002
 By:
 Light Laboratory, Inc.
 16W LRLDH678

LED DETAILS

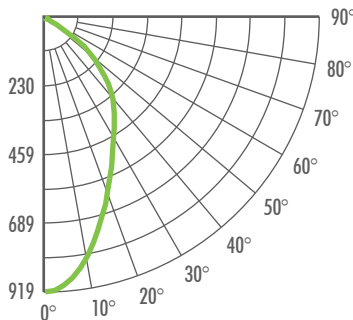
Light Source Specification

Input Power (W) :15.47W
 Color Rendering Index (CRI) :88
 Color Temperature :3,000K

ZONAL LUMEN SUMMARY

CD./SQ.M (FOOTLAMBERTS)

Zone	Lumens
0 - 10	82.39
10 - 20	199.54
20 - 30	245.05
30 - 40	253.53
40 - 50	223.33
50 - 60	120.48
60 - 70	18.88
70 - 80	6.48
80 - 90	3.01
90 - 100	0.00
100 - 110	0.00
110 - 120	0.00
130 - 140	0.00
140 - 150	0.00
150 - 160	0.00
160 - 170	0.00
170 - 180	0.00



ZONAL LUMENS SUMMARY

Zone	Lumens	% Fixt
0 - 30	526.98	24.50
0 - 40	780.51	67.70
0 - 60	1124.32	97.50
0 - 90	1152.69	100.00
10 - 90	1070.3	92.90
20 - 40	498.58	43.30
40 - 70	362.69	31.50
60 - 80	25.35	2.20
0 - 180	1152.69	100.00

HORIZONTAL FOOT CANDLES: FC VALUES

Height (ft.)	Beam Diameter	Foot Candle
4.0'	26.0'	57.43 fc
6.0'	34.0'	25.52 fc
8.0'	39.0'	14.36 fc
10.0'	46.0'	9.19 fc

CANDELA TABULATION

CD./SQ.M (FOOTLAMBERTS)

Angle	Luminance
0	918.88
2	914.38
4	899.82
6	876.79
8	847.15
10	811.39
12	772.73
14	733.27
16	694.33
18	655.84
20	617.11
22	580.84
24	547.22
26	516.19
28	487.38
30	460.64
32	436.60
34	415.00
36	394.92
38	374.95
40	353.17
42	331.73
44	306.52
46	278.28

LUMINANCE SUMMARY CD./SQ.M.

LUMINANCE DATA (CD./SQ.M)

Angle	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	22648	22648	22648
55	13417	13417	13417
65	2058	2058	2058
75	1151	1151	1151
85	1967	1967	1967

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	62	70	65	61	68	64	60	59
6	80	69	61	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37