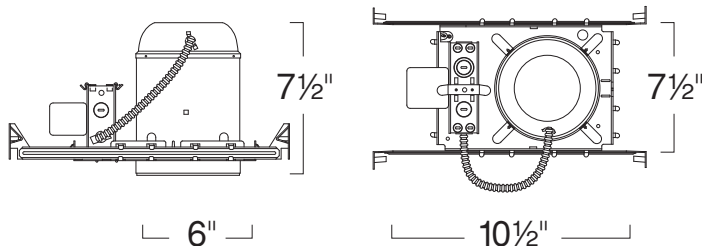


6" LED Housing (10W/15W) w/ 6" Adjustable LED Gimbal 6" (10W/15W) (6 LED SERIES)



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: Dimming option smoothly dims down as low as 10% of initial light output with flicker-free operation. *Incandescent* dimming option (-DIN) works with standard Incandescent dimmers. Factory qualified for use with LUTRON Brand Dimmers: S600PR, DVSCCL-153P & DV600PR as well as Leviton# IP106-600W. *Low Voltage* dimming option (-DLV) works with standard Electronic Low Voltage Dimmers. Factory qualified for use with LUTRON Brand Dimmers: SELV-300P, DVELV-300P, NELV-450 along with 3-Way versions. (-DLV) Dimming Option also compatible with Grafik Eye and Home Works Dimming Interfaces.

Emergency Option: 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, plate cover and junction box 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:



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: Minimum 35,000 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.

Color Temperature: Comes standard with 3,000K Warm White LED's binned according to ANSI C78 377A for color temperature and chromaticity ranges. Available with other color temperatures with ANSI binning of 2,700K, 3,500K & 4,000K. To order use "-T" Suffix followed by color temperature. Example 4000K= T40. Consult factory as extended lead times and minimum order quantities apply.

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.

Certification: This LED product is certified as compliant with California's Title 24 Energy Code by the California Energy Commission.

Ceiling Type: Suitable for flat and sloped ceilings.

Label: cETL Listed

Assembled in USA

6" LED HOUSING (10W/15W) LHLD6 10W/15W LED

WATTAGE	DRIVER TYPE	OPTIONS
LHLD610C50 :10W	Blank :120V	Blank :None
LHLD615C70 :15W	-DHL :(120V/277V) Hilume Dimming*	-EM :Emergency Back-Up (6W)
	-DLV :ELV Dimming	-EM2 :Emergency Back-Up (10W)
	UE :120V/277V*	
	UE-D10 :(120V/277V) 0-10V Dimming*	

* Not available for 10W option

6" ADJUSTABLE LED GIMBAL LRLD678 10W/15W LED

Ordering example: LHLD610C50-DHL-EM2/LRLD678BB-B120

FINISH	BEAM SPREAD	COLOR TEMP
LRLD678W :White	-B08 :Narrow Spot	Blank :3000K
LRLD678BB :Black	-B120 :Super Wide Flood (SOL Lens)	
LRLD678MO :Mocha	-B25 :Narrow Flood	
LRLD678N :Natural	-B45 :Flood	
	-B61 :Wide Flood	

Lamp: (6)LED w/40° Optics Lens
 Total Rated Fixture Lumen :490.85
 Total Luminaire Efficacy :44.10 Lm/W
 Luminous Diameter :2.76"
 Input Power (W) :11.13
 Input Current (Amp) :0.10
 Color Rendering Index (CRI) :83.77
 Color Temperature :2,933K

6" LED Downlight
 Luminaire
 IESNA Standard
 LM-79-2008
 Test # LO9111703
 By:
 Light Laboratory, Inc.
 10W LRLD6

Lamp: (6)LED w/60° Optics Lens
 Total Rated Fixture Lumen :493.28
 Total Luminaire Efficacy :41.70 Lm/W
 Luminous Diameter :2.76"
 Input Power (W) :11.83
 Input Current (Amp) :0.11
 Color Rendering Index (CRI) :85.35
 Color Temperature :2,820K

6" LED Downlight
 Luminaire
 IESNA Standard
 LM-79-2008
 Test # LO9111704
 By:
 Light Laboratory, Inc.
 10W LRLD6

ZONAL LUMEN SUMMARY

Zone	Lumens Beam Spread	
	40°	60°
0 - 10	174.15	90.10
10 - 20	182.76	201.40
20 - 30	48.04	107.24
30 - 40	19.42	36.12
40 - 50	17.32	18.90
50 - 60	12.18	10.90
60 - 70	15.18	12.33
70 - 80	12.35	9.26
80 - 90	9.46	7.03

Zone	Beam Spread: 40°		Beam Spread: 60°	
	Lumens	% Fixt	Lumens	% Fixt
0 - 30	404.95	82.50	398.74	80.80
0 - 40	424.37	86.50	434.86	88.20
0 - 60	453.86	92.50	464.66	94.20
0 - 90	490.85	100.00	493.28	100.00

HORIZONTAL FOOT CANDLES: FC VALUES

Distance	Beam Spread		Beam Spread		Beam Spread	
	FC 25°	∅	FC 40°	∅	FC 60°	∅
3.0'	305.9	1.3'	154.0	2.2'	144.0	3.3'
6.0'	76.3	2.7'	58.0	4.4'	36.0	6.6'
9.0'	34.3	4.0'	29.0	6.6'	16.0	9.9'
12.0'	18.9	5.3'	11.0	8.7'	9.0	13.2'
19.0'	10.0	6.5'				

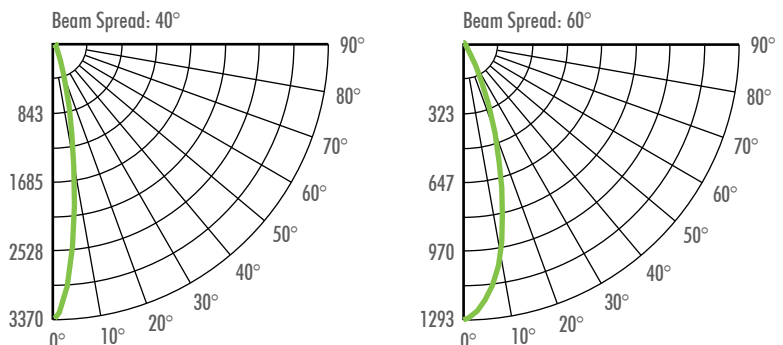
CANDELA TABULATION

Zone	Luminance (CD) Beam Spread	
	40°	60°
0.0	3370	1293
1.0	3301	1286
3.0	2974	1253
5.0	2501	1204
7.0	1992	1139
9.0	1518	1056
11.0	1115	946
13.0	790	821
15.0	546	698
17.0	373	581
19.5	232	445
22.5	134	307
25.5	83	204
29.0	53	123
33.0	37	67
37.5	28	36
42.5	23	24
47.5	20	19
55.0	18	15
65.0	14	11
75.0	10	7
85.0	5	4
90.0	0	0

LUMINANCE DATA (CD./SQ.M.)

Angle	Beam Spread: 40°		
	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	7870	7870	7870
55	8123	8123	8123
65	8574	8574	8574
75	10000	10000	10000
85	14849	14849	14849

Angle	Beam Spread: 60°		
	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	7870	7870	7870
55	6769	6769	6769
65	6737	6737	6737
75	7000	7000	7000
85	11879	11879	11879



Lamp: (6)LED w/40° Optics Lens	6" LED Downlight Luminaire
Total Rated Fixture Lumen :614.52	IESNA Standard LM-79-2008
Total Luminaire Efficacy :36.06 Lm/W	Test # L09111701
Luminous Diameter :2.76"	By: Light Laboratory, Inc.
Input Power (W) :17.04	15W LRLD6
Input Current (Amp) :0.15	
Color Rendering Index (CRI) :85.20	
Color Temperature :2,870K	

Lamp: (6)LED w/60° Optics Lens	6" LED Downlight Luminaire
Total Rated Fixture Lumen :634.80	IESNA Standard LM-79-2008
Total Luminaire Efficacy :36.38 Lm/W	Test # L09111702
Luminous Diameter :2.76"	By: Light Laboratory, Inc.
Input Power (W) :17.34	15W LRLD6
Input Current (Amp) :0.15	
Color Rendering Index (CRI) :85.13	
Color Temperature :2,854K	

ZONAL LUMEN SUMMARY

Zone	Lumens Beam Spread	
	40°	60°
0 - 10	218.91	115.61
10 - 20	224.39	260.89
20 - 30	61.56	137.08
30 - 40	25.80	45.24
40 - 50	22.66	23.11
50 - 60	15.38	13.14
60 - 70	18.50	14.70
70 - 80	15.44	11.32
80 - 90	11.89	9.73

Zone	Beam Spread: 40°		Beam Spread: 60°	
	Lumens	% Fixt	Lumens	% Fixt
0 - 30	504.86	82.20	513.58	81.40
0 - 40	530.66	86.40	558.83	88.60
0 - 60	568.70	92.50	595.08	94.30
0 - 90	614.52	100.00	630.84	100.00

HORIZONTAL FOOT CANDLES: FC VALUES

Distance	Beam Spread FC 25°		Beam Spread FC 40°		Beam Spread FC 60°	
	FC 25°	∅	FC 40°	∅	FC 60°	∅
3.0'	527.1	1.3'	328.0	2.2'	184.0	3.3'
6.0'	131.6	2.7'	70.0	4.4'	46.0	6.5'
9.0'	58.8	4.0'	30.1	6.6'	20.0	9.8'
12.0'	32.9	5.3'	16.8	8.7'	12.0	13.1'
14.0'	20.0	5.5'				
14.0'	10.0	5.9'				

CANDELA TABULATION

Zone	Luminance (CD) Beam Spread	
	40°	60°
0.0	4318	1656
1.0	4218	1647
3.0	3783	1608
5.0	3157	1544
7.0	2481	1461
9.0	1876	1358
11.0	1368	1224
13.0	964	1067
15.0	667	906
17.0	459	753
19.5	290	575
22.5	171	394
25.5	108	259
29.0	71	154
33.0	49	84
37.5	37	45
42.5	30	29
47.5	26	23
55.0	22	18
65.0	17	13
75.0	13	9
85.0	6	6
90.0	0	0

LUMINANCE DATA (CD./SQ.M.)

Angle	Beam Spread: 40°		
	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	10249	10249	10249
55	9928	9928	9928
65	10412	10412	10412
75	13001	13001	13001
85	17819	17819	17819

Angle	Beam Spread: 60°		
	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	9517	9517	9517
55	8123	8123	8123
65	7962	7962	7962
75	9000	9000	9000
85	17819	17819	17819

