

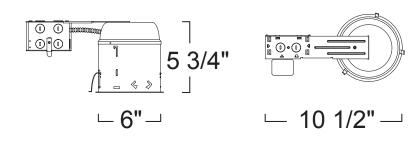
TYPE

PROJECT

CATALOG#

# 6" Remodel Shallow Housing (9W/16W) w/ 6" Open Heat Sink LED Gimbal

6" (10W/15W) (6 LED SERIES)





### **SPECIFICATION**

Ceiling cut-out: 6 1/4"

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

Housing: Pre-wired housing adjusts up to 1 1/4"ceiling thickness. This housing has torsion remodeling clips for secure installation. Integral thermal protector to guard against improper lamping and installation. Housing provides an adjustable socket plate which allows for use of different lamp types. Trim is secured with torsion wing springs/standard coil springs. Designed to be installed in existing sheet rock ceilings via ceiling cut out (above ceiling access is not required).

**Mounting:** Housing suitable for existing or new construction installations, supplied with high tension remodeling clips, designed to secure the housing to an existing sheetrock ceiling for fast and easy installation.

**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 LED driver integrally mounted in electric junction box.

**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.

**Safety Labels:** ETL/CETL listed. Suitable for damp locations. NYC approved: Calendar #41937.

**Caution:** LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty.

**OPTIONS** 

-EM :Emergency Back-Up (

Blank :None

UE-DUN :UniDim<sup>™</sup> 120V/277V \_\_-EM2 :Emergency Back-Up (

Ceiling Type: Suitable for flat and sloped ceilings.

Label: cETL Listed

Assembled in USA

WATTAGE

LSHLD6R10C50 :10W Blank

LSHLD6R15C70 :15W -DLV

UE

Application: This adjustable LED trim is perfect for low to high height ceilings in residential and light commercial applications. This LED trim provides directional adjustability not commonly found in LED fixtures, allowing it to function as both a downlight and an accent light. A variety of finishes and beam spreads are available to achieve a desired look and lumen output.

**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.

Adjustability Lamp can be titled  $35^\circ$  degrees vertically and rotated  $90^\circ$  degrees horizontally.

Label: cETL Listed

Assembled in USA

·120V

DRIVER TYPE

:ELV Dimming

:120V/277V\*

#### 6" OPEN HEAT SINK LED GIMBAL LRLD677 10W/15W IFD Ordering example: LSHLD6R10C50-EM/LRLD677BM0-B120

		,						
	REFLECTO	R FINISH	RING	FINISH		BEAM SPREAD		COLOR TEMP
	LRLD677W	:White	Blank	:White	-B61	:Wide Flood		Blank :3000K
(6W)	LRLD677B	:Black	B	:Black	-B120	:Super Wide Flood (SO	L Lens)	
(10W)	LRLD677N	:All Natural	N	:Natural	- <b>B25</b>	:Narrow Flood		
			MO	:Mocha	-B45	:Flood		

Not available for 10W option



File Located online www.liton.com/spec

ID#:2151 2106

Lamp: (6)LED w/40° Optics	6" LED Downlight	
Total Rated Fixture Lumen	:490.85	Luminaire
Total Luminaire Efficacy	:44.10 Lm/W	IESNA Standard
Luminous Diameter	:2.76"	LM-79-2008
Input Power (W)	:11.13	Test # L09111703
Input Current (Amp)	:0.10	By:
Color Rendering Index (CRI)	:83.77	Light Laboratory, Inc.
Color Temperature	:2,933K	10W LRLD6

Lamp: (6)LED w/60° Optics	6" LED Downlight	
Total Rated Fixture Lumen	:493.28	Luminaire
Total Luminaire Efficacy	:41.70 Lm/W	IESNA Standard
Luminous Diameter	:2.76"	LM-79-2008
Input Power (W)	:11.83	Test # L09111704
Input Current (Amp)	:0.11	By:
Color Rendering Index (CRI)	:85.35	Light Laboratory, Inc.
Color Temperature	:2,820K	10W LRLD6

### ZONAL LUMEN SUMMARY

Zone	Lum Beam S	
	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

	Beam Sp	Beam Spread: 40°		read: 60°
Zone	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**

	Beam Spread		Beam Spread		Beam Spread	
Distance	FC 25°	ø	FC 40°	Ø	FC 60°	ø
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	Luminar Beam S	nce (CD) 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

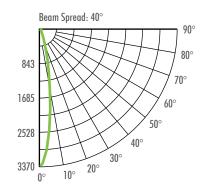
### LUMINANCE DATA (CD./SQ.M.)

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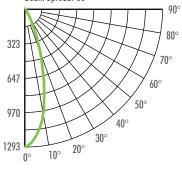
Angle	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	7870	7870	7870
55	8123	8123	8123
65	8574	8574	8574
75	10000	10000	10000
85	14849	14849	14849

#### Beam Spread: 60°

45	7870	7870	7870
55	6769	6769	6769
65	6737	6737	6737
75	7000	7000	7000
85	11879	11879	11879



Beam Spread: 60°



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

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

### 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	

	Beam Spread: 40°		Beam Spread: 60°	
Zone	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**

	Beam Spread		Beam Spread		Beam Spread	
Distance	FC 25°	ø	FC 40°	ø	FC 60°	ø
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	Lumina Beam	nce (CD) 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.)

Beam	Spread: 40°	

Angle	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

### Beam Spread: 60°

Bouin Sprouu. or	·		
45	9517	9517	9517
55	8123	8123	8123
65	7962	7962	7962
75	9000	9000	9000
85	17819	17819	17819



