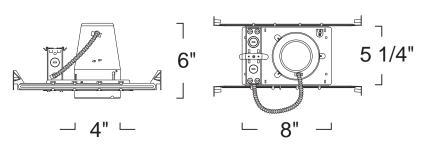


**TYPE** CATALOG#

# Standard E26 Housing w/ 4" 120V Low Profile LED Trim Retrofit

LH99 SERIES - 4" LINE VOLTAGE RECESSED LIGHTING (PAR20/PAR30)





### SPECIFICATION

Ceiling cut-out: 4 1/2"

Application: General purpose recessed downlight housing for low to medium height ceilings for residential and light commercial applications. A variety of trims, compatible styles and finishes are available to achieve the desired décor and illumination.

**Housing:** Pre-wired housing adjusts up to a  $1\ 1/4''$  ceiling thickness. 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.

**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.

Socket: Standard porcelain medium screw base socket with high temperature leads.

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: Non-IC rated housing must be kept 3" from insulation.

**Airflow:** Airflight 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).

Safety Labels: UL/CUL listed for through-branch wiring (8) No.12 AWG 90°C and suitable for damp locations. NYC approved: Calendar #41937

Label: UL Listed, cETL Listed

## **FEATURE:**





**Retrofit:** Designed for use with existing 4" Line Voltage housings like LITON Brand LH99, LH99R and LH99ICA

Application:Easily convert existing line voltage (120V) recessed housings to energy efficient LED housings. Designed for use with Liton LH99 series housings and most similar line voltage housings from other manufacturers. LED Driver and module connect directly to existing line voltage medium base sockets.

Gasket: Supplied with gasket to prevent light leakage and unsightly heat streaks on ceiling surface.

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.

Driver: 10W Electronic Direct Current Driver mounted on LED Module with medium base socket for direct 120 VAC input.

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.

Label: cETL Listed Assembled in USA

#### **STANDARD E26 HOUSING** I H99

120V 75W Max PAR30/PAR20 MED E26, 40W A19

Tel: 323.904.0200

RATING LH99A:Airtight

## 4" 120V LOW PROFILE LED TRIM RETROFIT

I RI D400 120V 10W I FD

FINISH	BEAM SPREAD	DIMMING
LRLD400B :Black	-B120-R10V120 :Super Wide Flood	Blank :Non-Dimming
LRLD400CO :Copper	-B25-R10V120 :Narrow Flood	-DIN :Incandescent Dimming
LRLD400N :Natural	-B45-R10V120 :Flood	
LRLD400W :White		

Ordering example: LH99A/LRLD400CO-B120-R10V120



1/1155 //00 0	
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

4" LED Downlight
Luminaire
IESNA Standard
LM-79-2008
Test # L09111703
By:
Light Laboratory, Inc.
10W LRLD4

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

4" LED Downlight
Luminaire
IESNA Standard
LM-79-2008
Test # L09111704
By:
Light Laboratory, Inc.
10W LRLD4

## **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	

	Beam Spread: 40°		Beam Spread: 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	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.)

Beam Spread: 40°

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
	i	i -	

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:  $40^{\circ}$ 

