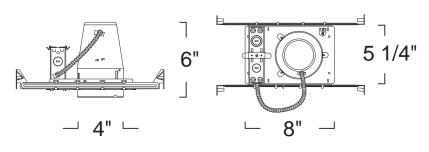


TYPE CATALOG#

Ceiling cut-out: 4 1/2"

PROJECT

Standard E26 Housing w/ 4" 12V LED Retrofit Low Profile Trim LH99 SERIES - 4" LINE VOLTAGE RECESSED LIGHTING (PAR20/PAR30)



SPECIFICATION



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" servated 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: 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).

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

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

Driver: 10W Electronic Direct Current Driver mounted on LED Module with bi-pin socket for direct 12VAC input.

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.

Retrofit: Designed for use with existing 4" Low Voltage housings like LITON Brand LH1499, LH1499R and LH1499ICA

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

Limitation: Not for use w/Shallow Housings.

Assembled in USA

RATING

LH99A:Airtight

4" 12V LED RETROFIT LOW PROFILE TRIM

LKLD4UU 12VAL	IOW LED	
FINISH	BEAM SPREAD	
LRLD400B :Black	-B120-R10V12:Super Wide Flood	
LRLD400CO : Copper	-B25-R10V12 :Narrow Flood	
LRLD400N :Natural	-B45-R10V12 :Flood	
LRLD400W : White		

Ordering example: LH99A/LRLD400W-B45-R10V12



Lamp: (6)LED w/40° Optics	Lens	4" 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 LRLD4

Lamp: (6)LED w/60° Optics	Lens	4" 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 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	

"The Complete Lighting Solution"

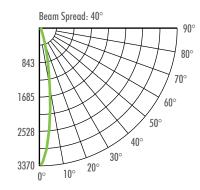
LUMINANCE DATA (CD./SQ.M.)

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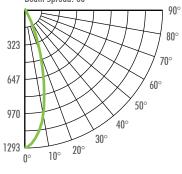
Angle	Avg. O-Deg	Avg. 45-Deg	Avg. 90-Deg
45	7870	7870	7870
55	8123	8123	8123
65	8574	8574	8574
75	10000	10000	10000
85	14849	14849	14849

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°



10.13.2011

