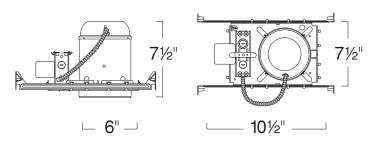
6" IC LED Housing (9W/16W) w/ 6" 750/1200Lm Adjustable LED Gimbal

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 required direct purpositions. 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.

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: \$600PR, DVSCCL-153P & DV600PR as well as Leviton 19106-600W. 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: 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: ETL/CETL listed. Suitable for damp locations. NYC approved: Calendar #41937.

FEATURE:







Application: This Adjustable Gimbal LED Trim 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.

www.liton.com

Label: cETL Listed

Assembled in USA

6" IC LED HOUSING (9W/16W) LHLDH6 9W/16W LED

| WATTAGE | | DRIVER TYPE | | OPTIONS |
|-----------------|----------|------------------------------|-------|-------------------------|
| LHLDH609C25:9W | Blank | :None | Blank | :None |
| LHLDH616C35:16W | -DIN | :Incandescent/ELV Dimming | -EM | :Emergency Back-up (6W) |
| | UE | :120V/277* | | |
| | UE-D10 | :0-10V Dimming (120V/277V)* | | |
| | UE-DHL | :Hilume Dimming (120V/277V)* | | |
| | -347-D10 | :0-10V 10% Dimming | | |

Tel: 323.904.0200

* Not available for 9W option.

6" 750/1200LM ADJUSTABLE LED GIMBAL Ordering example: LHLDH616C35/LRLDH678W-B08

LRLDH678 9W/16W LED

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



6" Adjustable LED Gimbal

Test Procedure: LM-79-08

Total Rated Fixture Lumen :1153

Total Luminaire Efficacy Luminous Diameter B) B)

:75 Lm/W Ligh :0.50" 16V

Light Laboratory, Inc. 16W LRLDH678

Report File# LM-6<u>3-2002</u>

LED DETAILS

| Light Source Sp | ecification |
|-----------------|-------------|
|-----------------|-------------|

Input Power (W) :15.47W
Color Rendering Index (CRI) :88

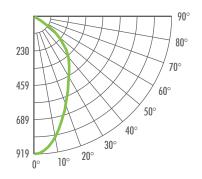
Color Temperature :3,000K

ZONAL LUMEN SUMMARY

CD./SQ.M (FOOTLAMBERTS)

| CD./ SQ.III (1 GOTEAIIIDER15) | | |
|-------------------------------|--------|--|
| 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 | |
| | 1 | |

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 |

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