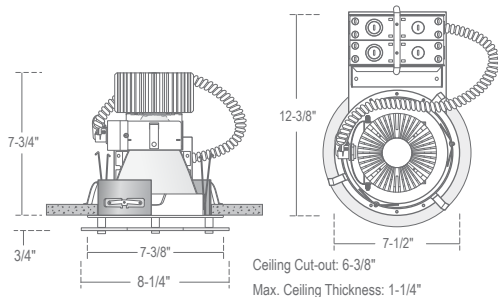


## 6" Architectural Remodel LED Frame-Kit (1900/2000/3000 Lumen) w/ 6" Architectural LED Glass Deco Full (2000/3000 Lumen) 6" LED ARCHITECTURAL DOWNLIGHT



### SPECIFICATION

**Application:** Architectural-grade recessed LED downlight housing for medium to high ceilings in commercial and architectural spaces.

**Housing Frame:** 16 gauge galvanized plaster ring with black powder coat finish, friction or V-Spring clips secure trim to housing.

**Mounting:** Housing suitable for existing or new construction installations, supplied with 4 high tension remodeling clips, designed to secure the housing to an existing sheetrock ceiling up to 1" thick for fast and easy installation from below the ceiling line.

**Driver:** 120V/277V AC 50/60Hz Electronic Direct Current Class 2 driver integrally mounted on large access Junction Box. Power Factor > 0.90. Operating Temperature: -10°C to +80°C. Accessible from above or below ceiling. Consult Factory for dimming options and compatible dimmers.

**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, 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 double Junction Box, 64 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (10) 3/4", (2) 1" and (8) Romex knock-outs. Strain clamps to install or remove covers for easy access and ground wire. Equipped with safety standard die-cast aluminum fitting for flex-conduit.

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

**Dimming:** 0-10V dimming option (-D10) works with most 5-Wire 0-10V dimmers. Available with 1% Deep Dimming Option. Factory qualified for use with Leviton IP710-DLX and Lutron NTFTV-WH. The Lutron Hi-Lume (-DHL) and Ecosystem (-DEC) option designed for use with LUTRON Ecosystem Controls. Uni-Dim™ (-DUN) option is a universal dimming system that works with most 3-Wire ELV, 2-Wire Incandescent and 5-Wire 0-10V fluorescent dimmers.

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

**Label:** cETL Listed

**Assembled in USA**

### FEATURE:



**Application:** Architectural-grade recessed downlight reflector for low to medium height ceilings for commercial and architectural installations. Reflector designed for minimal glare from lamp without sacrificing lumen output. Decorative glass accent brings style and elegance to any decor. Reduces lamp image while adding a subtle decorative element to architecture.

**"Reflector Construction:** One piece, self-flanged dual-reflector LED design enables a clean trim finish, without the need for a secondary trim ring. Heavy-gauge aluminum reflector prevents ugly dents during shipping and installation. Deeply mounted singular LED provides 50 degree visual cutoff for a glare-free appearance. Held in place with two steel pressure v-springs for a tight fit and easy scratch-less removal. -B60 option includes Impact-Resistant Polycarbonate lens."

**Power Connection:** LED lamp array is replaceable via on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

**Lumen Maintenance:** Minimum 50,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results.

**Thermal Management:** Effective thermal dissipation facilitated by integral cast-aluminum, heat sink design for maximum heat rejection to provide long LED life.

**Thermal Temperature:** Heat dissipation facilitated by exposed integral aluminum heat sink to maximize heat rejection in an open air environment. Recommended ambient temperature is below 35 degree celsius to achieve minimum L70 life of 50,000 hours according to LM80 standard.

**Warranty:** Covered by a 5 Year Warranty to be free of defects in materials and craftsmanship. Fixture should not be installed in applications with ambient temperature above 60 degrees C. Doing so will result in reduced lamp life and voided warranty.

**Safety Labels:** ETL/cETL listed to UL1598 and UL8750. Suitable for damp and wet locations. NYC approved: Calendar #41937.

### 6" ARCHITECTURAL REMODEL LED FRAME-KIT

**LHALD6R25** 25W LED, Ceiling Cut Out: 6 3/4"

| DRIVER TYPE                                         | OPTION                          |
|-----------------------------------------------------|---------------------------------|
| LHALD6R25C071UE :Non-Dimming (120V/277V)            | Blank :None                     |
| LHALD6R25C071UE-D10 :0-10V 10% Dimming (120V/277V)  | -EM2 :Emergency (10W)           |
| LHALD6R25C071UE-DHL :HiLume 1% Dimming (120V/277V)  | -GTD :Generator Transfer Device |
| LHALD6R25C071UE-DUN :UniDim™ Dimming (120V/277V)    |                                 |
| LHALD6R25C071UE-D10P1 :0-10V 1% Dimming (120V/277V) |                                 |
| LHALD6R25C071UE-DLI :DALI Dimming (120V/277V)       |                                 |
| LHALD6R25C071UE-DEC :Lutron Ecosystem (120V/277V)   |                                 |
| LHALD6R25C071-DINPZ :2-Wire 0% (120V)               |                                 |
| LHALD6R25C071-347-D10 :347V 0-10V 10% Dimming       |                                 |

### 6" ARCHITECTURAL LED GLASS DECO FULL (2000/3000 LUMEN)

**LRALD6031** 25W LED

Ordering example: LHALD6R25C071UE-DHL-EM2/LRALD6031SWF151-T27-FR

| FINISH                                     | LUMEN PACKAGE | BEAM             | LED                      |
|--------------------------------------------|---------------|------------------|--------------------------|
| LRALD6031SWF :Satin Reflector/White Flange | 151 :2000 Lm  | Blank :Flood     | Blank :3000K             |
| LRALD6031WWF :White Reflector & Flange     | 240 :3000 Lm  | -B60 :Wide Flood | -C97 :3000K, 97CRI**     |
|                                            |               |                  | -T17 :1700K*             |
|                                            |               |                  | -T25 :2500K*             |
|                                            |               |                  | -T27 :2700K              |
|                                            |               |                  | -T27-C90 :2700K 90+ CRI* |
|                                            |               |                  | -T27-C97 :2700K, 97CRI** |
|                                            |               |                  | -T35 :3500K              |
|                                            |               |                  | -T40 :4000K              |

\* Extended Lead Time may apply. Consult Factory.  
\*\*Only available in 2700K and 3000K.

## LRALD6SWF240: 6" LED Downlight

Lamp: (1) LED

Total Rated Fixture Lumen :2345 Lm

Total Luminaire Efficacy :85 Lm/W

Luminous Diameter :5.64"

Color Rendering Index (CRI) :80 +

Color Temperature :3000K

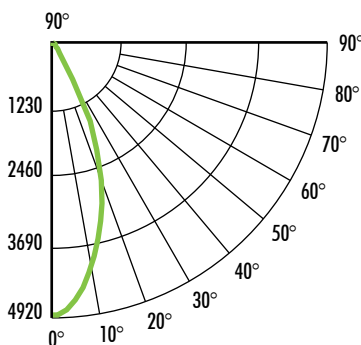
Estimated Life :45,000 hrs. L70

## Fixture Data

|         | LED Module Lumen | Fixture Lumen | Input Wattage |
|---------|------------------|---------------|---------------|
| @ 3000K | 1400             | 1136.0        | 19W           |
|         | 2000             | 1623.0        | 25W           |
|         | 3000             | 2345.0        | 28W           |
| @ 4000K | 1442             | 1170.0        | 19W           |
|         | 2060             | 1671.0        | 25W           |
|         | 3090             | 2415.0        | 28W           |

## ZONAL LUMENS SUMMARY

| Zone    | Lumens  | % Fixt |
|---------|---------|--------|
| 0 - 20  | 1299.57 | 55.40  |
| 0 - 30  | 2025.47 | 86.40  |
| 0 - 40  | 2183.46 | 93.10  |
| 0 - 60  | 2295.81 | 97.90  |
| 0 - 80  | 2334.24 | 99.50  |
| 0 - 90  | 2345.33 | 100.00 |
| 10 - 90 | 1993.61 | 85.00  |
| 20 - 40 | 883.89  | 37.70  |
| 20 - 50 | 959.38  | 40.90  |
| 40 - 70 | 138.43  | 5.90   |
| 60 - 80 | 38.43   | 1.60   |
| 70 - 80 | 12.35   | 0.50   |
| 80 - 90 | 11.08   | 0.50   |



## CANDELA TABULATION

### CD./SQ.M (FOOTLAMBERTS)

| Angle | 0      |
|-------|--------|
| 0.0   | 4920.0 |
| 1.0   | 4916.0 |
| 3.0   | 4832.0 |
| 9.0   | 4208.0 |
| 13.0  | 3632.0 |
| 15.0  | 3334.0 |
| 22.5  | 2089.0 |
| 29.0  | 745.0  |
| 33.0  | 214.0  |
| 42.5  | 101.0  |
| 55.0  | 41.0   |
| 65.0  | 14.0   |
| 75.0  | 10.0   |

## 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  | 20  | 0   |
| 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1  | 114 | 111 | 111 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |
| 2  | 109 | 104 | 104 | 97  | 107 | 102 | 99  | 96  | 99  | 96  | 94  | 96  | 94  | 92  | 94  | 92  | 90  | 89  |
| 3  | 104 | 98  | 98  | 90  | 102 | 97  | 92  | 89  | 94  | 91  | 88  | 92  | 89  | 86  | 89  | 87  | 85  | 84  |
| 4  | 99  | 93  | 93  | 84  | 98  | 91  | 87  | 83  | 89  | 85  | 82  | 87  | 84  | 81  | 86  | 83  | 80  | 79  |
| 5  | 95  | 88  | 88  | 79  | 94  | 87  | 82  | 78  | 85  | 81  | 78  | 83  | 80  | 77  | 82  | 79  | 76  | 75  |
| 6  | 91  | 83  | 83  | 74  | 90  | 83  | 77  | 74  | 81  | 77  | 73  | 80  | 76  | 73  | 78  | 75  | 72  | 71  |
| 7  | 88  | 79  | 79  | 70  | 86  | 79  | 74  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 75  | 72  | 69  | 68  |
| 8  | 84  | 76  | 76  | 67  | 83  | 75  | 70  | 66  | 74  | 69  | 66  | 73  | 69  | 66  | 72  | 68  | 66  | 64  |
| 9  | 81  | 72  | 72  | 63  | 80  | 72  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 63  | 69  | 65  | 63  | 61  |
| 10 | 78  | 69  | 69  | 60  | 77  | 69  | 64  | 60  | 68  | 63  | 60  | 67  | 63  | 60  | 66  | 63  | 60  | 59  |

## LUMINANCE DATA

### CD./SQ.M (FOOTLAMBERTS)

| Angle | Avg. 0-Deg | Avg. 45-Deg | Avg. 90-Deg |
|-------|------------|-------------|-------------|
| 45    | 7670       | 7670        | 7670        |
| 55    | 4431       | 4431        | 4431        |
| 65    | 2053       | 2053        | 2053        |
| 75    | 2395       | 2395        | 2395        |
| 85    | 4978       | 4978        | 4978        |

## ZONAL LUMINANCE SUMMARY

### CD./SQ.M (FOOTLAMBERTS)

| Zone   | Lumens |
|--------|--------|
| 0-10   | 351.72 |
| 10-20  | 947.85 |
| 20-30  | 725.90 |
| 30-40  | 157.99 |
| 40-50  | 75.49  |
| 50-60  | 36.86  |
| 60-70  | 26.08  |
| 70-80  | 12.35  |
| 80-90  | 11.08  |
| 90-100 | 0.00   |

## MULTIPLIERS

### LED LUMENS

|        |      |
|--------|------|
| 3,000K | 1.00 |
| 2,000K | 0.67 |
| 1,400K | 0.47 |

### FINISHES

|            |     |
|------------|-----|
| Satin Haze | 1.0 |
| White      | 0.9 |

### COLOR TEMP

|        |      |
|--------|------|
| 2,700K | 0.97 |
| 3,000K | 1.00 |
| 3,500K | 1.01 |
| 4,000K | 1.03 |

### LRALD6SWF240-B60: 6" LED 60° Downlight

Lamp: (1) LED, 28W 1785Lm

Total Rated Fixture Lumen : 1785 Lm

Total Luminaire Efficacy : 64 Lm/W

Luminous Diameter : 5.64"

Color Rendering Index (CRI) : 80 +

Color Temperature : 3050K

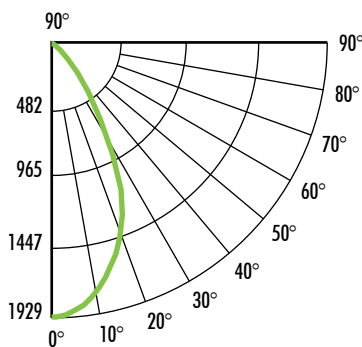
Estimated Life : 45,000 hrs. L70

### Fixture Data

|         | LED Module Lumen | Fixture Lumen | Input Wattage |
|---------|------------------|---------------|---------------|
| @ 3000K | 1400             | 838.0         | 19W           |
|         | 2000             | 1195.0        | 25W           |
|         | 3000             | 1785.0        | 28W           |
| @ 4000K | 1442             | 863.0         | 19W           |
|         | 2060             | 1230.0        | 25W           |
|         | 3090             | 1838.0        | 28W           |

### ZONAL LUMENS SUMMARY

| Zone    | Lumens  | % Fixt |
|---------|---------|--------|
| 0 - 20  | 604.11  | 33.80  |
| 0 - 30  | 1109.79 | 62.60  |
| 0 - 40  | 1432.93 | 80.30  |
| 0 - 60  | 1712.00 | 95.90  |
| 0 - 80  | 1774.47 | 99.40  |
| 0 - 90  | 1785.28 | 100.00 |
| 10 - 90 | 1640.61 | 91.90  |
| 20 - 40 | 828.82  | 46.40  |
| 20 - 50 | 1034.50 | 57.90  |
| 40 - 70 | 325.07  | 18.20  |
| 60 - 80 | 62.47   | 3.50   |
| 70 - 80 | 16.47   | 0.90   |
| 80 - 90 | 10.81   | 0.60   |



### CANDELA TABULATION

#### CD./SQ.M (FOOTLAMBERTS)

| Angle | 0      |
|-------|--------|
| 0.0   | 1929.0 |
| 1.0   | 1927.0 |
| 3.0   | 1916.0 |
| 9.0   | 1812.0 |
| 13.0  | 1693.0 |
| 15.0  | 1624.0 |
| 22.5  | 1308.0 |
| 29.0  | 893.0  |
| 33.0  | 632.0  |
| 42.5  | 272.0  |
| 55.0  | 76.0   |
| 65.0  | 21.0   |
| 75.0  | 11.0   |

### MULTIPLE FIXTURE SPACING BASED ON 25' x 25' ROOM

B60 OPTION

| Ceiling Height | Recommended Fixture | Fixture Spacing | Average FC's | Min : Max |
|----------------|---------------------|-----------------|--------------|-----------|
| 9'             | 19W / 1400 Lumens   | 6.25' x 6.25'   | 13.4         | 1.6 : 1   |
| 12'            | 25W / 2000 Lumens   | 8.50' x 8.50'   | 17.6         | 1.4 : 1   |
| 15'            | 28W / 3000 Lumens   | 8.25' x 8.25'   | 22.8         | 1.7 : 1   |
| 20'            | 28W / 3000 Lumens   | 8.25' x 8.25'   | 20.6         | 1.4 : 1   |

Note: SWF finish, 3000K, 80 CRI used in calculation

### LUMINANCE DATA

#### CD./SQ.M (FOOTLAMBERTS)

| Angle | Avg. 0-Deg | Avg. 45-Deg | Avg. 90-Deg |
|-------|------------|-------------|-------------|
| 45    | 18627      | 18627       | 18627       |
| 55    | 8213       | 8213        | 8213        |
| 65    | 3080       | 3080        | 3080        |
| 75    | 2634       | 2634        | 2634        |
| 85    | 4267       | 4267        | 4267        |

### MULTIPLIERS

| LED LUMENS |      | FINISHES   |     | COLOR TEMP |      |
|------------|------|------------|-----|------------|------|
| 3,000K     | 1.00 | Satin Haze | 1.0 | 2,700K     | 0.97 |
| 2,000K     | 0.67 | White      | 0.9 | 3,000K     | 1.00 |
| 1,400K     | 0.47 |            |     | 3,500K     | 1.01 |
|            |      |            |     | 4,000K     | 1.03 |

### ZONAL LUMINANCE SUMMARY

#### CD./SQ.M (FOOTLAMBERTS)

| Zone   | Lumens |
|--------|--------|
| 0-10   | 144.67 |
| 10-20  | 459.44 |
| 20-30  | 505.68 |
| 30-40  | 323.14 |
| 40-50  | 205.68 |
| 50-60  | 73.39  |
| 60-70  | 46.00  |
| 70-80  | 16.47  |
| 80-90  | 10.81  |
| 90-100 | 0.00   |