

PROJECT \_\_\_\_\_ DATE \_\_\_\_\_

COMMENTS \_\_\_\_\_



**IN STOCK**



**ENERGY CHART**

| OUTPUT | WATTAGE | DELIVERED LUMENS | EFFICACY<br>lm/w |
|--------|---------|------------------|------------------|
| FS1*   | 10      | 750              | 75               |
|        | 15      | 1125             | 75               |
|        | 20      | 1500             | 75               |
| FS2    | 27      | 2160             | 80               |
|        | 34      | 2720             | 80               |
|        | 40      | 3200             | 80               |

\* IC RATED

**CDLSQ COMMERCIAL DOWNLIGHT SQUARE LED**

CDLSQ is a cost effective commercial grade round downlight with integral junction box, available in 4" or 6" trims with general open or wall wash distribution. For new construction, a frame kit is available. For remodel applications, CDLSQ can be installed from below the ceiling without a new construction frame kit.

- Residential
- Commercial
- Hospitality

**PHYSICAL**

|                  |  |
|------------------|--|
| Housing Material | Aluminum   |
| Reflector        | Spun Aluminum Haze Finish                            |
| Mounting         | Recessed: Spring Clips or New Construction Frame Kit |
| Trim Finish      | White  |
| Trim Shapes      | Square Trim, Square Wall Wash Trim                   |

**PERFORMANCE**

|                |  |
|----------------|--|
| Warranty       | 5 years                                    |
| Certifications | Damp Location, UL, Energy Star             |
| IC Rated       | FS1 Only                                   |
| Rated Life     | >50,000 hours                              |
| CCT            | Field Selectable 3CCT: 3000K, 3500K, 4000K |
| CRI            | 80+  |

**ELECTRICAL**

|              |  |
|--------------|--|
| Wattage      | Field Selectable: 10/15/20W, 27/34/40W |
| Voltage      | 120-347V                               |
| Power Factor | >0.9                                   |
| Dimmable     | 0-10V, 1-10V                           |

**ORDERING LOGIC**

EX: CDLSQ-4-SO-FS1

| FAMILY | SIZE | TRIM                | OUTPUT                       | CCT                       | ORDERING NOTES                     |
|--------|------|---------------------|------------------------------|---------------------------|------------------------------------|
| CDLSQ  | 4 4" | SO Square Open      | FS1 <sup>1</sup> 10W/15W/20W | (blank) 3000K/3500K/4000K | 1 IC Rated<br>2 1-10V Dimming Only |
|        | 6 6" | SW Square Wall Wash | FS2 <sup>2</sup> 27W/34W/40W |                           |                                    |

SEE NEXT PAGE FOR ACCESSORIES

ACCESSORIES ORDERING LOGIC (ORDER SEPARATELY)

EX: CDLSQ-4FK

| FAMILY       | ACCESSORIES                                |
|--------------|--|
| <b>CDLSQ</b> |  |
| <b>4FK</b>   | 4" New Construction Frame Kit              |
| <b>6FK</b>   | 6" New Construction Frame Kit              |
| <b>EM</b>    | 120-277V Emergency LED Driver: 120 Minutes |

SPECIFICATIONS

**STRUCTURE**

Spun aluminum shadow-free reflector integrated with haze finish and white trim ring.

**TRIM OPTIONS**

- Square Trim: 4", 6"
- Square Wall Wash Trim: 4", 6"

**ELECTRICAL**

Class 2, high efficiency, 0-10V/1-10V driver with continuous dimming down to 10%.

Confirmed compatibility with (but not limited to) the following dimmers:

1. Leviton IP710-DL
2. Leviton IP710-LF
3. Lutron PowPak 0-10V Dimming Module
4. Lutron Diva-Dvtv
5. Hubbell NX Distributed Room Controller
6. Cooper Greengate Room Controller
7. nLight nPP16D
8. Wattstopper DLM

**LED SYSTEM**

CRI: Minimum 80 color rendering index

CCT: 3000K, 3500K, and 4000K

Thermal Management: Aluminum housing act as a heat sink to maximize life.

**MOUNTING**

Durable spring clips allow for fast and easy flush installation. New construction frame kit can be ordered separately.

**APPROVALS**

- cULus listed for damp locations
- Energy Star Listed
- Tested to IESNA LM-79 and LM-80

**WARRANTY**

5-year limited warranty on LED and driver.

**ADDITIONAL OPTIONS**

Emergency Option: Optional high power 120-277V emergency LED driver for lighting up to 120 minutes in event of power failure.

ADDITIONAL IMAGERY

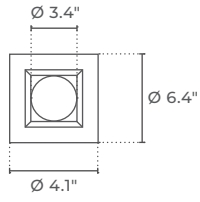
AVAILABLE TRIMS



DIMENSIONS

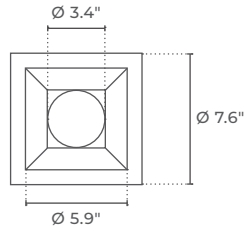
SQUARE TRIMS

4"



Ceiling Opening: 5.3"-6"

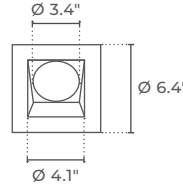
6"



Ceiling Opening: 6"-7.3"

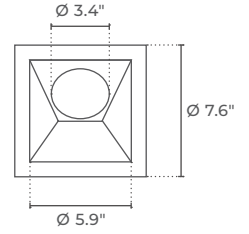
SQUARE WALL WASH TRIMS

4"



Tilt: 15-20°  
Ceiling Opening: 5.3"-6"

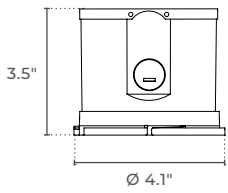
6"



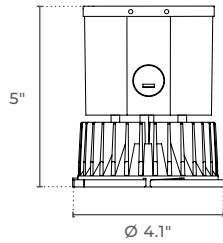
Tilt: 15-20°  
Ceiling Opening: 6"-7.3"

ENGINE

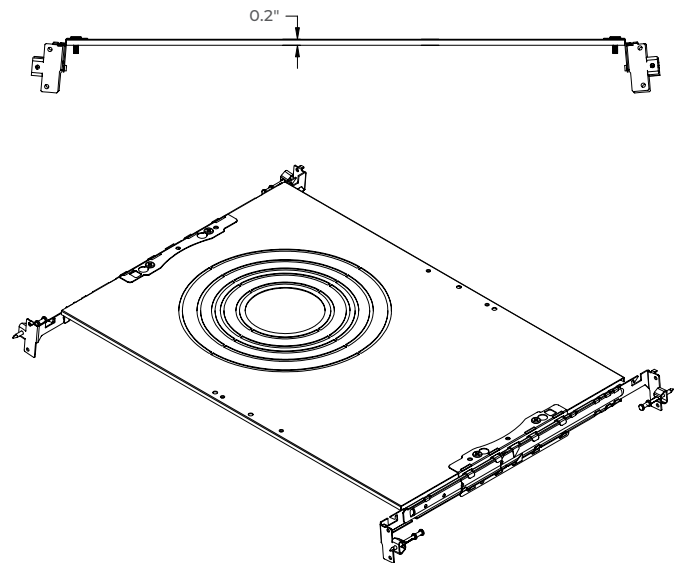
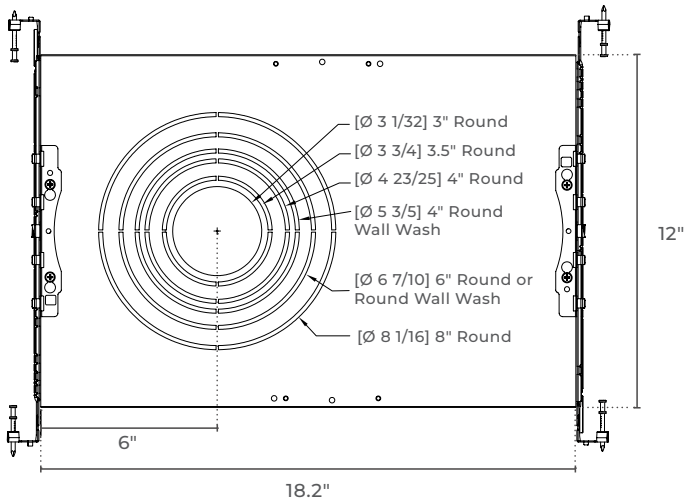
FS1



FS2



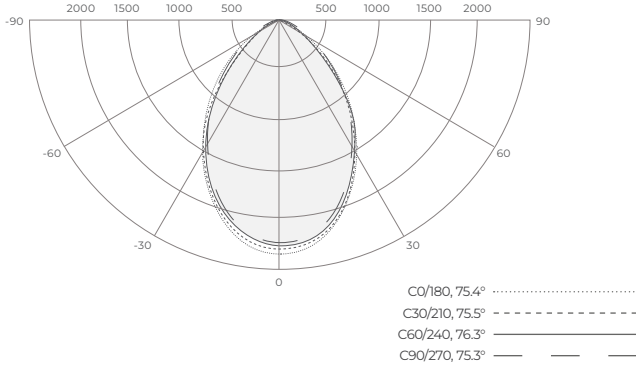
NEW CONSTRUCTION FRAME KIT



**PHOTOMETRICS - 6"-40W-SQUARE TRIM**

Luminaire photometry has been conducted by accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%. Result may vary according to component tolerances and ambient environment.

**AVERAGE BEAM ANGLE (50%): 75.7°**

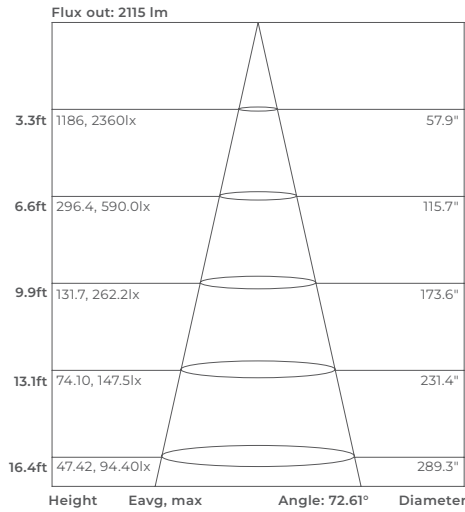


**ZONAL FLUX DIAGRAM**

| T   | C0     | C45    | C90    | C135   | C180   | C225   | C270  | C315   |
|-----|--------|--------|--------|--------|--------|--------|-------|--------|
| 10° | 2261   | 2210   | 2153   | 2112   | 2251   | 2186   | 2141  | 2108   |
| 20° | 1961   | 1938   | 1872   | 1833   | 1958   | 1913   | 1857  | 1821   |
| 30° | 1527   | 1523   | 1458   | 1440   | 1541   | 1505   | 1450  | 1422   |
| 40° | 1069   | 1040   | 1029   | 989.3  | 1088   | 1020   | 1024  | 967.2  |
| 50° | 610.2  | 476.4  | 642.7  | 451.9  | 634.2  | 457.1  | 637.9 | 439.4  |
| 60° | 138.1  | 98.62  | 196.9  | 95.56  | 147.8  | 95.34  | 198.5 | 90.87  |
| 70° | 10.20  | 7.550  | 11.30  | 5.999  | 9.294  | 6.717  | 12.18 | 6.998  |
| 80° | 5.189  | 4.341  | 5.442  | 3.213  | 4.520  | 4.015  | 5.773 | 3.727  |
| 90° | 0.2393 | 0.3240 | 0.4220 | 0.4175 | 0.5400 | 0.1953 | 1.041 | 0.1559 |

LUMINOUS INTENSITY: cd

**Average Illuminance Curve**



**ZONAL LUMEN SUMMARY**

| T     | φ ZONE | φ TOTAL | LUMEN/LAMP percentage |
|-------|--------|---------|-----------------------|
| 0-10  | 211.2  | 211.2   | 6.43, 6.43            |
| 10-20 | 572.9  | 784.1   | 23.9, 23.9            |
| 20-30 | 773.9  | 1558    | 47.4, 47.4            |
| 30-40 | 781.9  | 2340    | 71.2, 71.2            |
| 40-50 | 603.2  | 2943    | 89.6, 89.6            |
| 50-60 | 275.6  | 3219    | 98, 98                |
| 60-70 | 46.10  | 3265    | 99.4, 99.4            |
| 70-80 | 6.612  | 3271    | 99.6, 99.6            |
| 80-90 | 4.014  | 3275    | 99.7, 99.7            |

UNIT: lm

**NOTE**

The curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

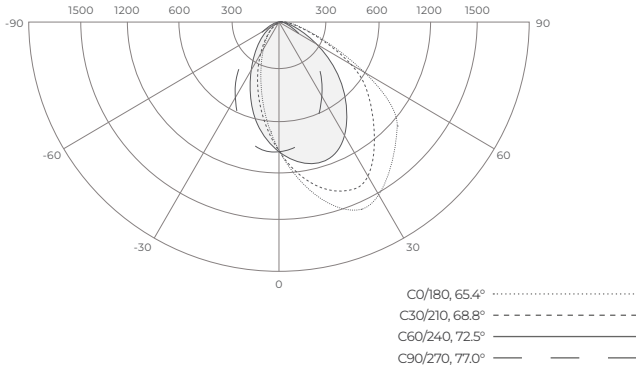
**COEFFICIENTS OF UTILIZATION**

| ppc  | 80%                         |     |     | 70% |     |     | 50% |     |     | 30% |     |     | 10% |     |     | 0  |
|------|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
|      | 50%                         | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% |    |
| pw   |                             |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 0  |
| pfc  | 20%                         |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 0  |
| RCR  | RCR: Room Cavlty Ratio (CU) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0.0  | 119                         | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 0  |
| 1.0  | 109                         | 106 | 103 | 107 | 104 | 102 | 103 | 100 | 98  | 99  | 97  | 95  | 95  | 94  | 93  | 91 |
| 2.0  | 99                          | 94  | 90  | 97  | 93  | 89  | 94  | 90  | 87  | 91  | 88  | 85  | 88  | 86  | 83  | 82 |
| 3.0  | 91                          | 84  | 80  | 89  | 83  | 79  | 86  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73 |
| 4.0  | 83                          | 76  | 71  | 81  | 75  | 70  | 79  | 74  | 70  | 77  | 72  | 69  | 75  | 71  | 68  | 66 |
| 5.0  | 76                          | 69  | 64  | 75  | 68  | 63  | 73  | 67  | 63  | 71  | 66  | 62  | 69  | 65  | 61  | 60 |
| 6.0  | 70                          | 62  | 57  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 59  | 56  | 54 |
| 7.0  | 64                          | 57  | 52  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 55  | 51  | 60  | 55  | 51  | 49 |
| 8.0  | 60                          | 52  | 48  | 59  | 52  | 47  | 58  | 52  | 47  | 57  | 51  | 47  | 55  | 50  | 47  | 45 |
| 9.0  | 55                          | 48  | 44  | 55  | 48  | 44  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 41 |
| 10.0 | 52                          | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 48  | 43  | 48  | 40  | 38 |

**PHOTOMETRICS - 6"-20W-SQUARE WALL WASH TRIM**

Luminaire photometry has been conducted by accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%. Result may vary according to component tolerances and ambient environment.

**AVERAGE BEAM ANGLE (50%): 71.0°**

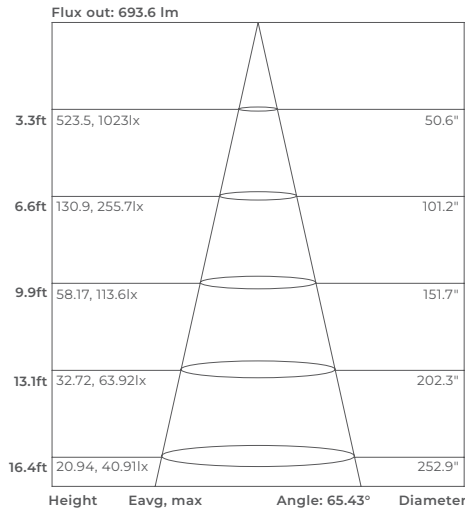


**ZONAL FLUX DIAGRAM**

| T   | C0     | C45    | C90    | C135   | C180   | C225   | C270   | C315   |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 10° | 1038   | 919.6  | 732.9  | 585.3  | 554.5  | 616.2  | 769.8  | 942.8  |
| 20° | 1209   | 984.8  | 638.0  | 411.7  | 535.7  | 439.8  | 680.2  | 1037   |
| 30° | 1192   | 930.7  | 494.7  | 267.4  | 210.7  | 287.2  | 535.8  | 993.1  |
| 40° | 1053   | 743.2  | 354.7  | 155.9  | 97.27  | 170.7  | 388.6  | 789.6  |
| 50° | 896.8  | 548.9  | 205.7  | 66.71  | 21.28  | 79.17  | 231.3  | 587.6  |
| 60° | 526.2  | 310.4  | 73.90  | 12.46  | 5.292  | 14.93  | 82.68  | 371.6  |
| 70° | 136.0  | 73.16  | 14.65  | 4.282  | 4.094  | 4.888  | 15.92  | 99.23  |
| 80° | 12.17  | 4.784  | 1.600  | 3.400  | 3.395  | 3.294  | 2.004  | 8.560  |
| 90° | 0.1674 | 0.0925 | 0.0768 | 0.1779 | 0.0947 | 0.0635 | 0.1183 | 0.1624 |

LUMINOUS INTENSITY: cd

**Average Illuminance Curve**



**ZONAL LUMEN SUMMARY**

| T     | φ ZONE | φ TOTAL | LUMEN/LAMP percentage |
|-------|--------|---------|-----------------------|
| 0-10  | 73.89  | 73.89   | 4.65, 4.65            |
| 10-20 | 210.5  | 284.3   | 17.9, 17.9            |
| 20-30 | 307.9  | 592.3   | 37.2, 37.2            |
| 30-40 | 336.9  | 929.2   | 58.4, 58.4            |
| 40-50 | 305.6  | 1235    | 77.6, 77.6            |
| 50-60 | 226.0  | 1461    | 91.8, 91.8            |
| 60-70 | 102.0  | 1563    | 98.3, 98.3            |
| 70-80 | 21.16  | 1584    | 99.6, 99.6            |
| 80-90 | 2.195  | 1586    | 99.7, 99.7            |

UNIT: lm

**NOTE**

The curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**COEFFICIENTS OF UTILIZATION**

| ppc  | 80%                         |     |     | 70% |     |     | 50% |     |     | 30% |     |     | 10% |     |     | 0  |
|------|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
|      | 50%                         | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% |    |
| pw   |                             |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 0  |
| pfc  | 20%                         |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 0  |
| RCR  | RCR: Room Cavlty Ratio (CU) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0.0  | 119                         | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 0  |
| 1.0  | 107                         | 104 | 101 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 93  | 92  | 90  | 88 |
| 2.0  | 96                          | 90  | 86  | 94  | 89  | 85  | 91  | 86  | 83  | 88  | 84  | 81  | 85  | 82  | 79  | 77 |
| 3.0  | 86                          | 79  | 74  | 85  | 78  | 73  | 82  | 76  | 72  | 79  | 74  | 71  | 77  | 73  | 69  | 67 |
| 4.0  | 77                          | 70  | 64  | 76  | 69  | 64  | 74  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59 |
| 5.0  | 70                          | 62  | 56  | 69  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  | 52 |
| 6.0  | 64                          | 56  | 50  | 63  | 55  | 50  | 61  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 48  | 47 |
| 7.0  | 58                          | 50  | 45  | 57  | 50  | 45  | 56  | 49  | 44  | 55  | 48  | 44  | 53  | 48  | 44  | 49 |
| 8.0  | 53                          | 46  | 40  | 53  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 49  | 44  | 39  | 38 |
| 9.0  | 49                          | 42  | 37  | 49  | 41  | 36  | 48  | 41  | 36  | 47  | 40  | 36  | 46  | 40  | 36  | 34 |
| 10.0 | 46                          | 38  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 43  | 37  | 33  | 42  | 37  | 33  | 31 |