

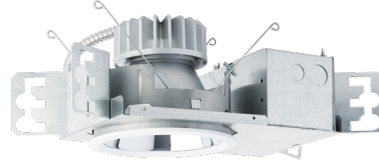
SIMPLESEAL DOWNLIGHT

Luminaires for Cleanroom Applications

CDL SERIES

PRODUCT FEATURES:

- » 6" sealed, recessed downlight with flush lens trim
- » High-output, high CRI LED lamp sources with 2700K-6500K white tuning capability



PROJECT INFORMATION

Job Name _____

Fixture Type _____

Catalog Number _____

Approved by _____

SPECIFICATIONS

HEAT SINK: Die-cast aluminum with external radial fins for natural convection.

ROUGH-IN FRAME: 18-gauge die-formed, corrosion-resistant steel. Vertically adjustable collar accommodates ceiling thicknesses up to 2", adjustable post-installation. Universal mounting brackets accept 3/4" and 1-1/2" lathers channel, 1/2" EMT conduit and hanger bars. Quick-access junction box accessible post-installation from above and below ceiling. Includes (4) 1/2" and (2) 3/4" knock-outs to allow straight conduit runs. Listed for (4) 12AWG, 90°C conductors and feed-thru branch wiring. Provided with FMC with electrical quick-connect to Trim Section.

TRIM/HOUSING SECTION: IP-rated housing section incorporates the heat sink, LED module, optics and lower trim. Configurable with an IP64-rated Flush lens trim that is secured to the Rough-In frame with hidden torsion springs, and an IP65 Flush lens trim secured with four (4) Phillips-head, captive fasteners. See trim ordering information for available options.

OPTICAL: High-efficiency mixing chamber design producing uniform light output. Clear flush-mounted outer lens. Available with various reflector distribution patterns, finishes and lens materials—see Ordering Information for available options.

LED MODULE: Tunable-white LED array provides 2700K through 6500K CCT range with a two-point path. 3-step MacAdam variation allowance on each CCT. Minimum 82 CRI (R9 >20).

DRIVER: 120-277VAC, 50/60Hz electrical input (PF ≥ 0.9, THD < 20%). Minimum 85% electrical efficiency. Serviceable, constant-current multi-channel programmable driver with dual analog (0-10V) control inputs for intensity and CCT. Optional DALI (Type 8) driver. Logarithmic intensity profile with 0.1-100% range, with dim-to-dark capabilities. Linear profile on CCT adjustment. Refer to charts on page 2 for further details.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric information, go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratory for non-IC and Wet Location installations. IP64 and IP65 rating per IEC60598. NSF2 Splash/Non-Food Zone. Optional CCEA compliance. Meets FED-STD-209E/Class 100 (ISO 5) Cleanrooms.



ORDERING INFORMATION (EX: CDL6-FF-2FW-22T-27/65K8-W-CSS-T-RIG6-DV-DTW-LEL)

TRIM

| Model | Trim Style | Trim Finish | Lamp Power | Lamp Color | Distribution | Reflector Finish | Flush Lens Type |
|-------------|------------|-------------|------------|----------------|--------------|------------------|-----------------|
| CDL6 | | | | 27/65K8 | | | T |

Trim Style

| | |
|-----------|---------------------------------------|
| FF | Flush Lens (With Fasteners - IP65) |
| NF | Flush Lens (Without Fasteners - IP64) |

Trim Finish

| | |
|------------|---|
| 2FW | Cold-Rolled Steel in Flat White |
| 5BR | Type 304 Stainless Steel with 4B Brushed Finish |
| 5FW | Type 304 Stainless Steel in Flat White |

Lamp Power

| | |
|------------|-----------------------|
| 22T | 22W Tunable White LED |
| 28T | 28W Tunable White LED |

Lamp Color

| | |
|----------------|-----------------------------------|
| 27/65K8 | 2700-6500K CCT Range (82 CRI min) |
|----------------|-----------------------------------|

Distribution

| | |
|----------|--------|
| M | Medium |
| W | Wide |

Reflector Finish

| | |
|------------|---------------------|
| FW | Flat White |
| CS | Clear Specular |
| CSS | Clear Semi-Specular |

Flush Lens Type

| | |
|----------|--------------------------------|
| T | 1/8" Clear High-Impact Acrylic |
|----------|--------------------------------|

ROUGH-IN

| Rough-In | Input Voltage | Driver Type | Options |
|-------------|---------------|-------------|---------|
| RIG6 | | | |

Rough-In

| | |
|-------------|-------------|
| RIG6 | 6" Rough-In |
|-------------|-------------|

Input Voltage

| | |
|------------|-------------------|
| DV | 120-277V, 50/60Hz |
| 120 | 120VAC, 60Hz |
| 277 | 277VAC, 60Hz |

Driver Type

| | |
|------------|---|
| ATW | Analog (0-10V) Dimming Tunable White Driver |
| DTW | DALI Tunable White Driver |
| DMX | DMX Tunable White Driver (Consult Factory) |

Options

| | |
|-------------|--|
| LEL | Emergency Battery Backup with Remote Test Switch |
| FS | Fuse & Holder |
| CCEA | CCEA Approved (specified voltage required) |



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CDL6-TW-052121

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PERFORMANCE

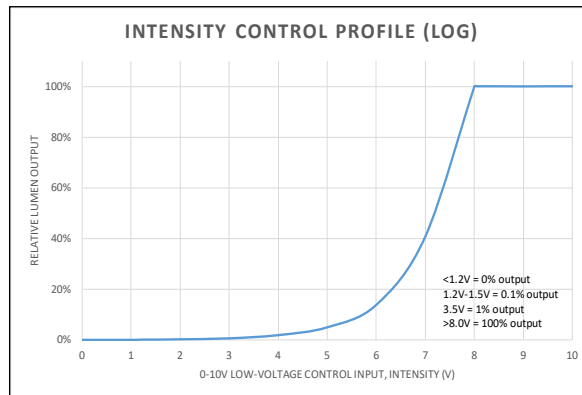
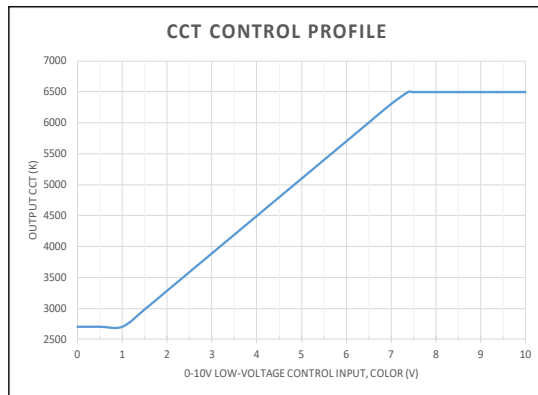
| Optic | | Lamp Code | Delivered Performance at 4000K | | | Estd. L70 LED Life (hrs) |
|--------------|------------------|-------------|--------------------------------|-----------------|-----------------|--------------------------|
| Distribution | Reflector Finish | | Lumen Output (lm) | Efficacy (lm/W) | Input Power (W) | |
| M | CS | 22T-27/65K8 | 1,356 | 57 | 24 | 75,000 |
| | | 28T-27/65K8 | 2,170 | 72 | 30 | 60,000 |
| | CSS | 22T-27/65K8 | 1,273 | 54 | 24 | 75,000 |
| | | 28T-27/65K8 | 2,037 | 68 | 30 | 60,000 |
| | FW | 22T-27/65K8 | 1,257 | 53 | 24 | 75,000 |
| | | 28T-27/65K8 | 2,012 | 67 | 30 | 60,000 |
| W | CS | 22T-27/65K8 | 1,526 | 64 | 24 | 75,000 |
| | | 28T-27/65K8 | 2,442 | 81 | 30 | 60,000 |
| | CSS | 22T-27/65K8 | 1,295 | 55 | 24 | 75,000 |
| | | 28T-27/65K8 | 2,073 | 69 | 30 | 60,000 |
| | FW | 22T-27/65K8 | 1,435 | 60 | 24 | 75,000 |
| | | 28T-27/65K8 | 2,297 | 77 | 30 | 60,000 |

Subject to change without notice. Visit www.kenall.com for ies files and additional information.

PERFORMANCE SCALING, BY LAMP COLOR

| CCT (K) | 27/65K8 | | | | | 27/65K9 | | | | |
|---------|--------------------|----|----|----|----|--------------------|----|----|----|-----|
| | LUMEN SCALE FACTOR | Ra | R9 | Rf | Rg | LUMEN SCALE FACTOR | Ra | R9 | Rf | Rg |
| 2700 | 0.92 | 83 | 10 | 83 | 97 | 0.95 | 92 | 57 | 89 | 98 |
| 3000 | 0.95 | 84 | 15 | 83 | 98 | 0.97 | 94 | 70 | 91 | 99 |
| 3500 | 0.99 | 86 | 23 | 84 | 98 | 0.99 | 95 | 77 | 92 | 99 |
| 4000 | 1.00 | 86 | 26 | 84 | 98 | 1.00 | 96 | 83 | 92 | 99 |
| 4600 | 1.00 | 86 | 28 | 84 | 98 | 1.00 | 96 | 90 | 92 | 100 |
| 5000 | 1.01 | 86 | 25 | 83 | 98 | 1.01 | 96 | 96 | 91 | 101 |
| 5700 | 0.99 | 85 | 23 | 82 | 98 | 0.99 | 96 | 96 | 91 | 100 |
| 6500 | 0.99 | 84 | 16 | 82 | 96 | 0.99 | 96 | 96 | 90 | 100 |

CCT AND INTENSITY ADJUSTMENT PROFILE - ATW DRIVER TYPE



NOTE: The provided information is the typical expected performance of a single luminaire. Additional luminaires on the same 0-10V line may result in different control profiles. Fine tuning of system performance should be completed after installation is complete. To avoid CCT shift between luminaires, care should be taken to minimize voltage drop on the CCT Control line. It is recommended to limit the load on the CCT control circuit to twenty (20) luminaires or less.



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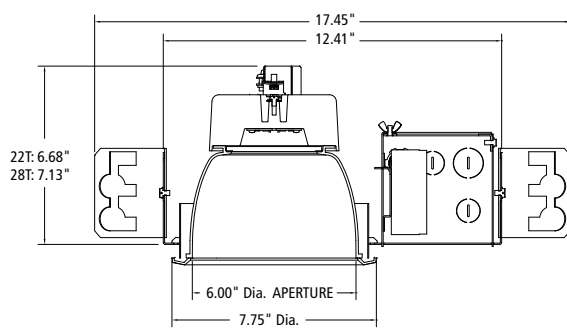
PERFORMANCE

| Wide Distribution Candela Curve | CDL6-FF-22T-27/65K8-W-CS-T | | Distance to illuminated plane (ft) | CDL6-FF-22T-27/65K8-M-CS-T | | Medium Distribution Candela Curve |
|------------------------------------|--|-----------------------|---------------------------------------|--|------------------------|--------------------------------------|
| | Initial center beam foot-candles | Beam diameter (ft) | | Initial center beam foot-candles | Beam diameter (ft) | |
| | 35.4 | 7.2 | 5' | 107.4 | 3.2 | |
| | 28.0 | 7.5 | 6' | 74.6 | 3.5 | |
| | 20.5 | 9.2 | 7' | 54.8 | 4.0 | |
| | 15.7 | 10.5 | 8' | 42.0 | 4.6 | |
| | 12.5 | 11.5 | 9' | 33.2 | 5.3 | |
| | 10.1 | 12.5 | 10' | 26.9 | 5.8 | |
| Spacing Criteria: 1.4 | Delivered performance at 4000K. See "Performance Scaling, By Lamp Color" chart for foot-candle multipliers at alternate CCTs | | | | Spacing Criteria: 0.62 | |
| Beam Angle: 59° | Beam diameter is where foot-candles drop to 50% of maximum | | | | Beam Angle: 34° | |

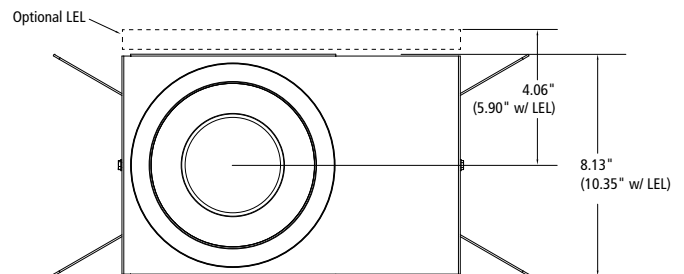
| Wide Distribution Candela Curve | CDL6-FF-28T-27/65K8-W-CS-T | | Distance to illuminated plane (ft) | CDL6-FF-28T-27/65K8-M-CS-T | | Medium Distribution Candela Curve |
|------------------------------------|--|-----------------------|---------------------------------------|--|------------------------|--------------------------------------|
| | Initial center beam foot-candles | Beam diameter (ft) | | Initial center beam foot-candles | Beam diameter (ft) | |
| | 59.5 | 6.9 | 5' | 339.1 | 2.9 | |
| | 52.8 | 7.0 | 6' | 235.5 | 3.0 | |
| | 38.9 | 8.2 | 7' | 173.0 | 3.4 | |
| | 29.7 | 9.4 | 8' | 132.4 | 3.8 | |
| | 23.4 | 10.6 | 9' | 104.7 | 4.4 | |
| | 19.0 | 11.6 | 10' | 84.8 | 4.8 | |
| Spacing Criteria: 1.36 | Delivered performance at 4000K. See "Performance Scaling, By Lamp Color" chart for foot-candle multipliers at alternate CCTs | | | | Spacing Criteria: 0.36 | |
| Beam Angle: 54° | Beam diameter is where foot-candles drop to 50% of maximum | | | | Beam Angle: 21° | |

DIMENSIONAL DATA

CROSS SECTION



BOTTOM VIEW



RECOMMENDED CEILING CUT-OUT

NF Trims: 7.13" Dia.
FF Trims: 7.38" Dia.



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