

Features

LineLED Warm Dim Series Double Row is a small profile high performance LED strip. LineLED WD60X2 follows the incandescent dimming curve from 2700K at full brightness down to 1900K at the lowest dim levels. Compatibility with MLV, ELV, and Incandescent dimmers simplifies installation for residential or hospitality applications. It is easily installed directly onto the mounting surface with double sided tape or within discrete aluminum extrusions to seamlessly blend into any space. Industry-best color consistency with single-binned LEDs, 120 LEDs per foot. This High Color Quality LED strip boasts CRIs and R9 values up to 97. The durable, but flexible products feature a heavier copper board core for better heat dissipation and even illumination over long runs.



Mounting

LED strip is equipped with 3M™ self-adhesive tape.

Operating voltage

24 VDC

Applications

Indoor only - millwork, cove, architectural reveals, undercabinet, display case, handrail, accent lighting.

Average Life (L70)

50,000 hours

Warranty

5 years



Warm Dimming



Technical Information

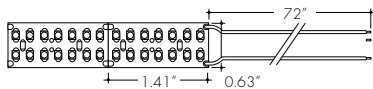
| | |
|--|----------------------|
| TYPE | LLWD60X2 |
| OUTPUT OPTIONS | VHO (19K-27K) |
| Lumens Output (all channels full on) | 657 lm/ft (27K) |
| Average Power Consumption (for a 4' section) | 10.1 W/ft |
| Efficacy (all on) | 65 lm/W |
| Cutting Increment (in) | 1.41" |
| Pitch Length | 0.2" |
| Max Run Length (in series) | 12 ft |
| Dimensions | 0.63"W x 0.09" H |

| CCT | TM-30 | | | |
|-------|-------|----------------|----------------|----------------|
| | CRI | R _f | R _g | R ₉ |
| 1900K | 97 | 94 | 98 | 95 |
| 2700K | 96 | 95 | 105 | 96 |

Section Start/End Options

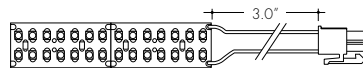
SL

Soldered lead wires (72")



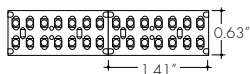
LF

Lead Female 3" cable



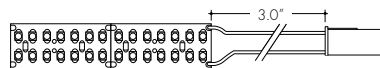
NC

No connector



LM

Lead Male 3" cable

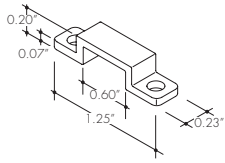


Ordering code

| MODEL | OUTPUT | COLOR TEMPERATURE | SECTION START | SECTION END | LENGTH |
|----------------------------------|---------------|-----------------------|---|---|---|
| LLWD60X2-LineLED WD60X2 Warm Dim | VHO-Very High | 19K-27K-1900K - 2700K | SL-Soldered lead wires (72") LF-Female Quick Connect LM-Male Quick Connect NC-No Connector | SL-Soldered lead wires (72") LF-Female Quick Connect LM-Male Quick Connect NC-No Connector | Ordered in one foot increments. See chart above for max run length. |

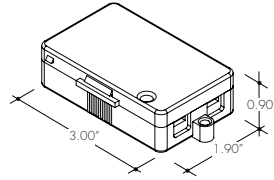
Accessories

CL2
Mounting Clip



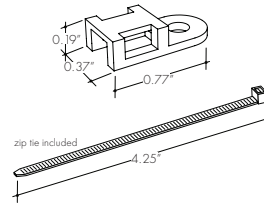
recommended at every 12" when lineLED strip is facing down.

LVSP-4T-BK
Splice Box



low voltage, 4 terminal splice box, black.

LL.ZIP
Cable/Wire Strain Relief Clip



Lens Options / Light Transmission



Clear



Half (50%)
Frosted



Graze



Frosted



Flat
Frosted



Raised



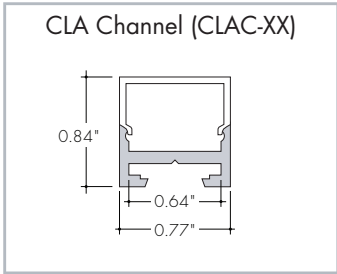
Square
Frosted



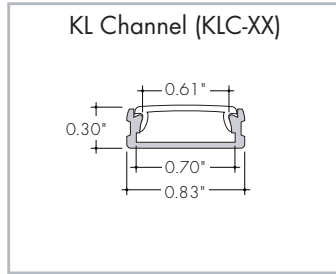
Round Square
Frosted



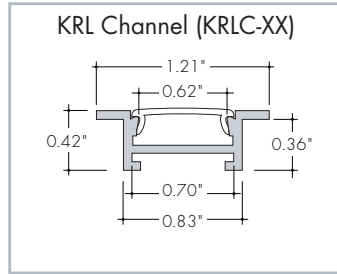
13°
Semi-Frosted



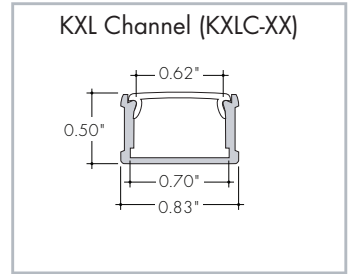
S **Q**
62% 65%



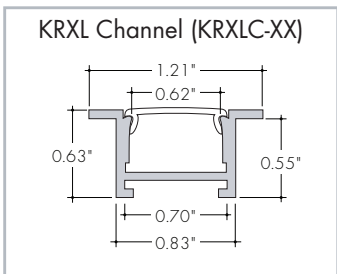
C **HF** **F**
81% 67% 51%



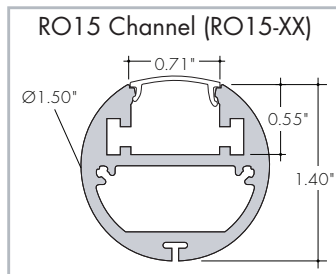
C **HF** **F**
81% 67% 51%



C **HF** **F**
79% 66% 49%



C **HF** **F**
79% 66% 49%



C **F**
65% 41%

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

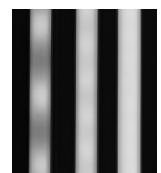
Ordering

Extrusions are sold separately. View respective specsheets for details on ordering extrusions and their accessories (endcaps, mounting brackets, etc).

Led Dotting per Extrusion

using the frosted lens option

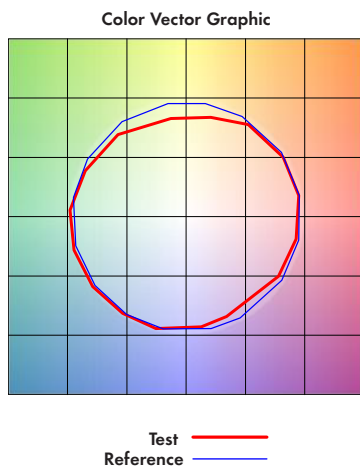
| Extrusion | LED Models | |
|-------------|----------------|----------------|
| | LLWD60X2 (27K) | LLWD60X2 (19K) |
| KL | SD | CD |
| KXL | ND | SD |
| CLA | ND | ND |
| KRL | SD | CD |
| KRXL | ND | SD |
| RO15 | ND | ND |



CD **SD** **ND**
CD - Clear Dotting
SD - Slight Dotting
ND - No Dotting

TM-30 Color Vector Graphics

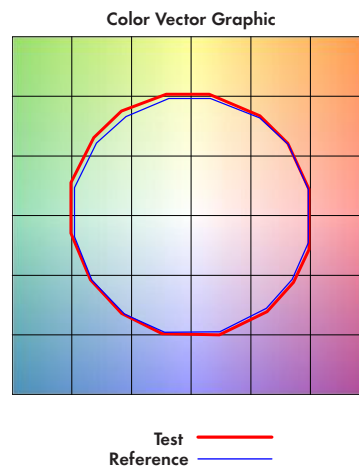
1900K



Graphic Shifts (%)

| Hue Bin | Rf | Chroma | Hue |
|---------|------|--------|-------|
| 1 | 95.5 | -0.4% | 0.4% |
| 2 | 90.3 | -1.0% | -4.3% |
| 3 | 82.5 | -2.9% | -8.0% |
| 4 | 82.8 | -10.8% | -7.2% |
| 5 | 86.6 | -13.5% | -0.1% |
| 6 | 84.3 | -7.3% | 9.4% |
| 7 | 83.1 | -4.1% | 9.7% |
| 8 | 83.3 | 0.8% | 11.4% |
| 9 | 91.8 | 2.1% | 3.4% |
| 10 | 95.6 | 2.1% | -0.4% |
| 11 | 92.6 | 1.2% | -4.0% |
| 12 | 88.9 | 1.0% | -6.1% |
| 13 | 90.6 | -3.1% | -7.8% |
| 14 | 84.8 | -7.7% | -9.2% |
| 15 | 91.2 | -4.4% | 1.0% |
| 16 | 92.5 | -2.4% | 0.2% |

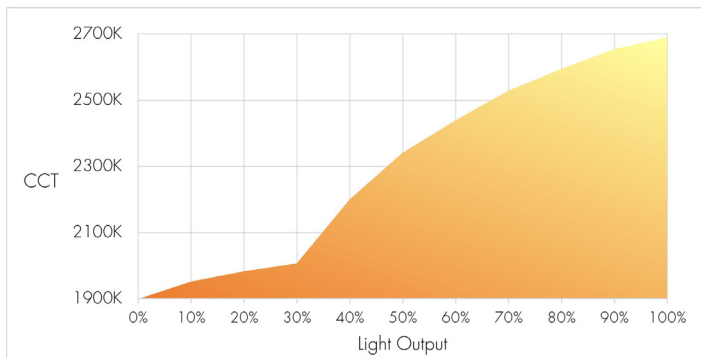
2700K



Graphic Shifts (%)

| Hue Bin | Rf | Chroma | Hue |
|---------|------|--------|-------|
| 1 | 95.4 | 0.8% | -1.5% |
| 2 | 96.2 | 1.1% | -0.1% |
| 3 | 94.4 | 1.8% | 1.2% |
| 4 | 93.8 | 3.1% | 1.2% |
| 5 | 94.4 | 4.0% | 1.8% |
| 6 | 90.9 | 6.1% | 1.0% |
| 7 | 90.3 | 5.0% | -2.4% |
| 8 | 90.5 | 4.4% | -3.6% |
| 9 | 91.3 | 2.0% | -4.2% |
| 10 | 93.2 | 0.6% | -3.7% |
| 11 | 95.9 | 0.8% | -1.8% |
| 12 | 92.9 | 1.7% | -2.4% |
| 13 | 94.4 | 2.9% | -2.7% |
| 14 | 94.3 | 3.0% | -2.7% |
| 15 | 94.0 | 2.1% | -2.4% |
| 16 | 93.2 | 2.0% | -4.3% |

Warm Dim Curve



| Brand | Model Part Number | Dimming Type | Dimming Range |
|---------|-------------------------------|------------------|---------------|
| Lutron | DIVA DVLV-603P | MLV | 0 – 100 |
| Lutron | DIVA DVLV-153P | MLV | 0 – 100 |
| Lutron | MRF2-6ELV-120 | MLV | 0 – 100 |
| Lutron | MAESTRO WIRELESS MRF2-6ND-120 | MLV | 0 – 100 |
| Lutron | SKYLARK CTCL-153P CFL/LED | MLV | 0 – 100 |
| Lutron | NOVA NVL-1000 | MLV | 0 – 100 |
| Lutron | SKYLARK SLV-600P | MLV | 0 – 100 |
| Lutron | LUTRON PD-10NXD | ELV, INCAND, MLV | 0 – 100 |
| Leviton | LEVITON DECORA LED, CFL, INC | ELV, INCAND, MLV | 0 – 100 |
| Leviton | IP106-112 INCANDESCENT | | 0 – 100 |
| Leviton | LEVITON AWSMT-MAW INC | MLV | 0 – 100 |

Dimming Table

| Voltage (V) | Dim % | Flux (lm) | CCT (K) | R9 |
|-------------|-------|-----------|---------|----|
| 18.2 | 1% | 27 | 1933 | 92 |
| 19.0 | 10% | 268 | 1932 | 93 |
| 19.8 | 20% | 535 | 1977 | 94 |
| 20.6 | 30% | 803 | 2062 | 97 |
| 21.4 | 40% | 1070 | 2171 | 98 |
| 22.1 | 50% | 1338 | 2294 | 98 |
| 22.7 | 60% | 1606 | 2418 | 96 |
| 23.3 | 70% | 1873 | 2531 | 96 |
| 23.8 | 80% | 2141 | 2619 | 96 |
| 24.3 | 90% | 2408 | 2671 | 96 |
| 24.8 | 100% | 2676 | 2673 | 96 |

Power Consumption

Tested at full power with PDC Series power supplies.

LLWD60X2-VHO

| Nominal Length | W/ft | Total Wattage |
|----------------|------|---------------|
| 1 | 11.3 | 12.1 |
| 2 | 10.3 | 20.5 |
| 3 | 10.4 | 32.1 |
| 4 | 10.1 | 40.5 |
| 5 | 10.1 | 50.3 |
| 6 | 9.6 | 57.4 |
| 7 | 9.5 | 66.3 |
| 8 | 9.1 | 72.9 |
| 9 | 9.0 | 80.8 |
| 10 | 8.8 | 87.5 |
| 11 | 8.7 | 96.0 |
| 12 | 8.0 | 95.6 |

Voltage Drop Calculator

The below chart assumes nominal voltage of 24 Volts and a Voltage Drop Allowance of 3% through the wire

| Wattage [W] | Maximum Wire Length From Power Supply to Start of Run [ft] | | | | | | |
|-------------|--|--------|--------|--------|--------|--------|--------|
| | 12 AWG | 14 AWG | 16 AWG | 18 AWG | 20 AWG | 22 AWG | 24 AWG |
| 5 | 1088.2 | 684.4 | 430.3 | 270.6 | 170.2 | 107.1 | 67.3 |
| 10 | 544.1 | 342.2 | 215.1 | 135.3 | 85.1 | 53.5 | 33.7 |
| 15 | 362.7 | 228.1 | 143.4 | 90.2 | 56.7 | 35.7 | 22.4 |
| 20 | 272.0 | 171.1 | 107.6 | 67.7 | 42.6 | 26.8 | 16.8 |
| 25 | 217.6 | 136.9 | 86.1 | 54.1 | 34.0 | 21.4 | 13.5 |
| 30 | 181.4 | 114.1 | 71.7 | 45.1 | 28.4 | 17.8 | 11.2 |
| 35 | 155.5 | 97.8 | 61.5 | 38.7 | 24.3 | 15.3 | 9.6 |
| 40 | 136.0 | 85.5 | 53.8 | 33.8 | 21.3 | 13.4 | 8.4 |
| 45 | 120.9 | 76.0 | 47.8 | 30.1 | 18.9 | 11.9 | 7.5 |
| 50 | 108.8 | 68.4 | 43.0 | 27.1 | 17.0 | 10.7 | 6.7 |
| 55 | 98.9 | 62.2 | 39.1 | 24.6 | 15.5 | 9.7 | 6.1 |
| 60 | 90.7 | 57.0 | 35.9 | 22.6 | 14.2 | 8.9 | 5.6 |
| 65 | 83.7 | 52.6 | 33.1 | 20.8 | 13.1 | 8.2 | 5.2 |
| 70 | 77.7 | 48.9 | 30.7 | 19.3 | 12.2 | 7.6 | 4.8 |
| 75 | 72.5 | 45.6 | 28.7 | 18.0 | 11.3 | 7.1 | 4.5 |
| 80 | 68.0 | 42.8 | 26.9 | 16.9 | 10.6 | 6.7 | 4.2 |
| 85 | 64.0 | 40.3 | 25.3 | 15.9 | 10.0 | 6.3 | 4.0 |
| 90 | 60.5 | 38.0 | 23.9 | 15.0 | 9.5 | 5.9 | 3.7 |
| 96 | 56.7 | 35.6 | 22.4 | 14.1 | 8.9 | 5.6 | 3.5 |

Power Supplies

See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

Triac, MLV, ELV Compatible Dimmers

| MODEL | POWER | OUTPUT |
|---------------------------|---------------|-------------|
| PDC - (IP20) Power Supply | 96 - 96 Watts | 24 - 24 VDC |

| MODELS | 96W |
|--------|-------|
| Length | 8.25" |
| Width | 4.10" |
| Depth | 1.56" |

