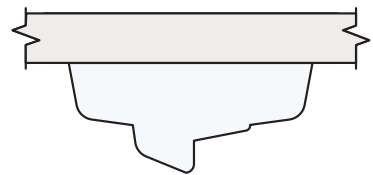
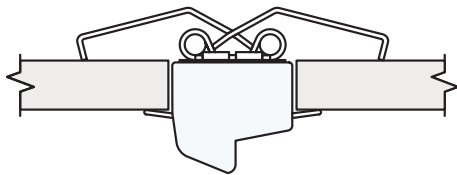
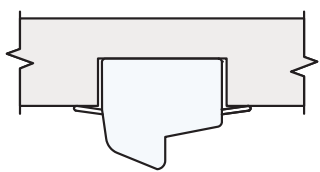


TOKISTAR Light Veil Series



TOKISTAR LIGHTING

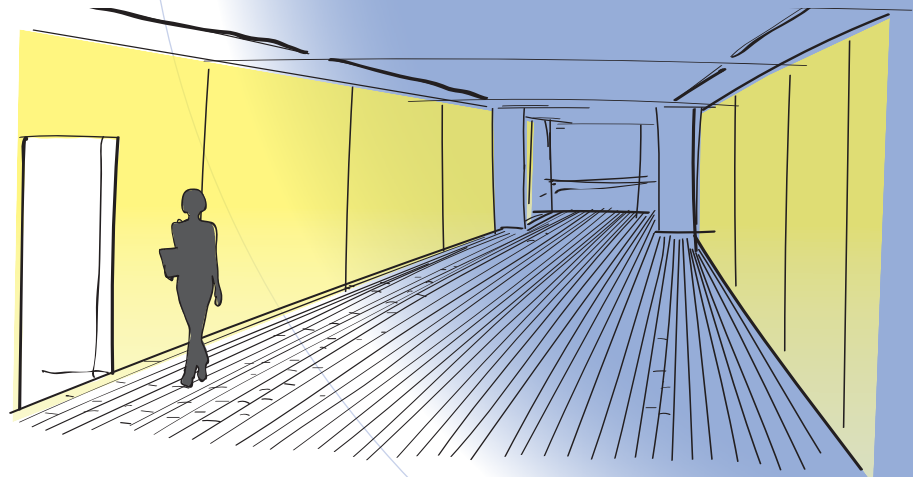


Light Veil™ Series

Tokistar's Light Veil is a highly efficient LED wall-grazing fixture with asymmetrical light distribution. The unique multi-faceted reflectors deliver scallop-free light evenly from the very top of a wall to the floor beneath.



This application demonstrates Light Veil's unique abilities. Instead of placing a fixture under each shelf, a single luminaire on the ceiling evenly illuminates every shelf, top to bottom. This reduces costs and complexity, adding to the system's efficiency.



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Fixtures are typically recessed or surface mounted on the ceiling 8-24" from the wall. Light is cast across the ceiling then makes the turn to graze the wall. It delivers a powerful amount of light similar to a downlight, yet has the soft and even appearance of a wall washer.

Light Veil comes in three configurations:



LVRH Series with hinges for installations on ceilings with open air space behind



LVRS Series for direct attachment into a recessed space

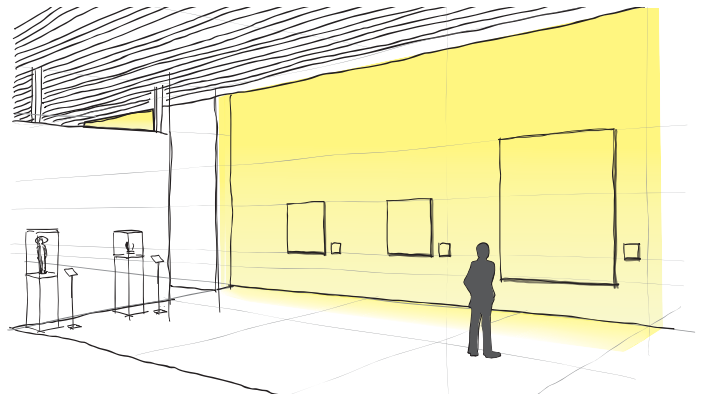


LVSM Series a surface mount version where no recess exists



Light Veil™ Series

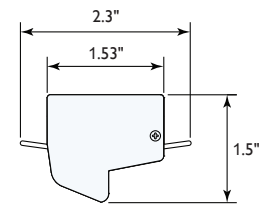
Typical wall washers have a brighter concentration of light directly under the fixture. Light Veil evenly illuminates the entire surface without casting shadows. When used on surfaces with unsightly construction lines, the reflector optics mask and minimize the seams.



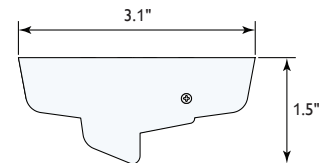
Specify by Catalog Number

LVRS - 2700

Extrusion Style		LED				
Code	Style	Code	Lumens Per Watt	Lumens Per Foot	CRI Value	Kelvin
LVRS	Recessed in Surface	2700	42.5	255 Lm	85	2700K
		3000	44.0	263 Lm	85	3000K
LVSM	Surface Mount	4000	47.5	285 Lm	85	4000K
LVRH	Recessed with Hinge					



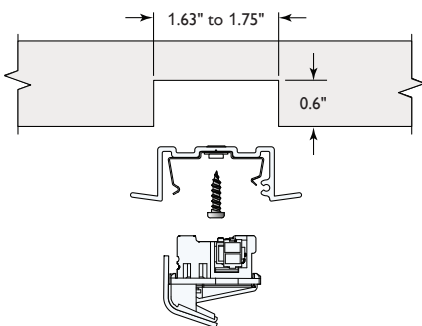
LVRS Series
w/End Cap



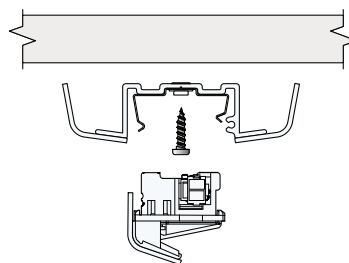
LVSM Series
w/End Cap

Mounting Methods

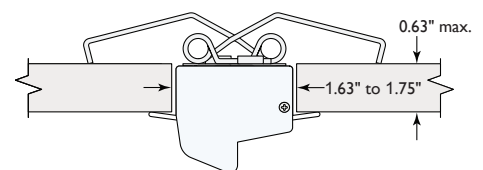
Recessed in Surface



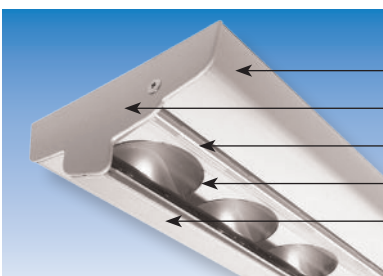
Surface Mount



Recessed with Hinge



Specifications



Extrusion is Powder Coated Aluminum

End Caps are Powder Coated Aluminum

Light Bars are Rigid Polycarbonate 8" (200 mm) long

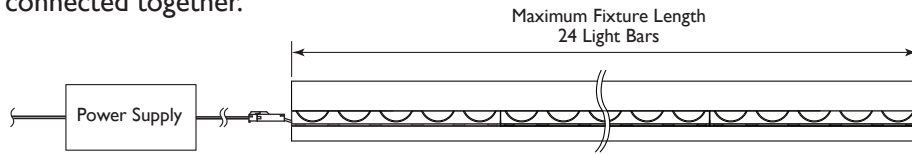
Light Sources are 0.80 Watt LEDs (5 per Light Bar)

Baffle is Powder Coated Aluminum



Design Guidelines

Light Veil may be specified in different configurations. All versions include a track fitted with Light Bars. A single fixture can range from 1-12 Light Bars. Each Light Bar consumes 4 watts. Up to 24 Light Bars (96 watts) may be connected together.



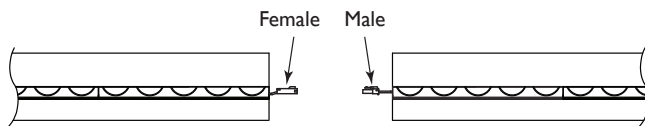
Since fixtures have an asymmetrical shape, all feed wires originate from the left as shown.

Fixture Lengths

Fixtures cannot be trimmed on site, so the overall length is based upon the number of Light Bars included. Check the sizes and lengths chart for precise measurements.

Multiple Length Assembly

Light Veil fixtures are provided with male & female connectors and end caps. For ease in connecting runs exceeding 12 Light Bars remove end caps.



Light Veil System			
Part Number	Bars	Length	
LV-(Ordering Code)-1	1	8.25"	210 mm
LV-(Ordering Code)-2	2	16.125"	410 mm
LV-(Ordering Code)-3	3	24"	610 mm
LV-(Ordering Code)-4	4	31.875"	810 mm
LV-(Ordering Code)-5	5	39.75"	1,010 mm
LV-(Ordering Code)-6	6	47.625"	1,210 mm
LV-(Ordering Code)-7	7	55.5"	1,410 mm
LV-(Ordering Code)-8	8	63.375"	1,610 mm
LV-(Ordering Code)-9	9	71.25"	1,810 mm
LV-(Ordering Code)-10	10	79.125"	2,010 mm
LV-(Ordering Code)-11	11	87"	2,210 mm
LV-(Ordering Code)-12	12	94.875"	2,410 mm

Photometrics

Footcandle Summaries

Test Criteria:

Lamp: 0.8 Watt/35 Lm/3000K

Optics: Asymmetrical Lens

LED Spacing: 1.6" O.C. (40 mm)

Length: 120" (3 M)

Reflectance Values: Ceiling: 80% / Wall 50% / Floor 20%

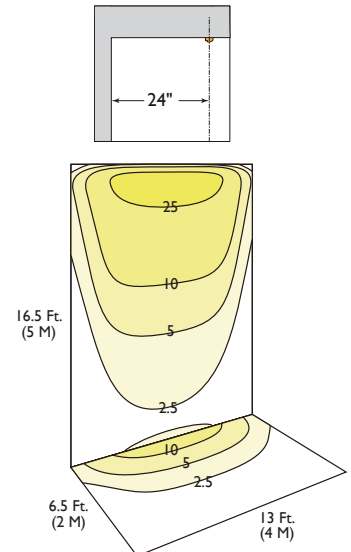
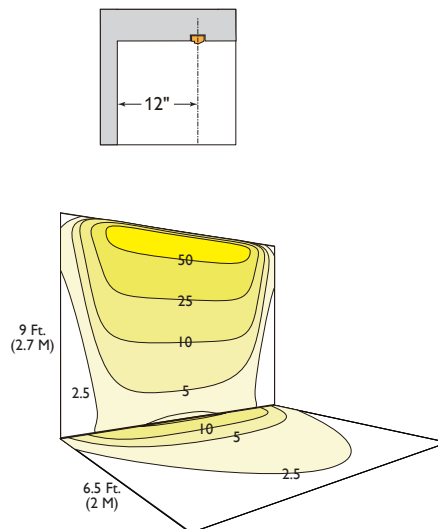
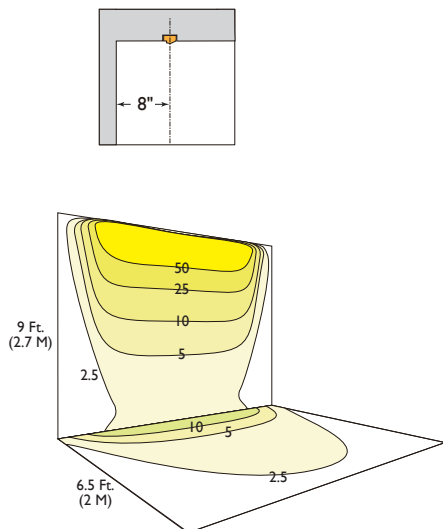
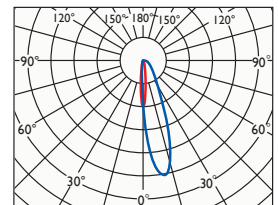
Conversion Factors:

Lamp: Multiply by .97 for 0.8 Watt/34 Lm/2700K

Lamp: Multiply by 1.09 for 0.8 Watt/38 Lm/4000K

Lux Value: Multiply Footcandle Value by 10.764 to Determine Lux Value

Light Distribution





Secondary Lead Wire

Leads on feed connectors are 18" long. Additional lead wire may be spliced on by the installer in order to reach remote LED driver locations. The distance from the fixture to the power supply and the load of the fixture will determine the proper size of secondary wire. This chart provides recommended distance of the secondary circuit using #12 AWG based upon the loads shown.

Load / Amps	Wire Length
24 watts / 1 amp	130' (40 M)
48 watts / 2 amps	98' (30 M)
72 watts / 3 amps	65' (20 M)
96 watts / 4 amps	32' (10 M)

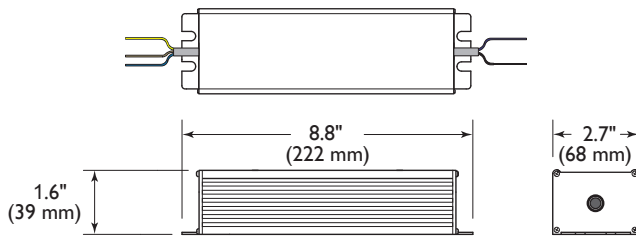
Power Supply

24 VDC LED Drivers

Light Veil Systems are operated from Tokistar's 24VDC LED Drivers. These Class 2 power supplies have a single or dual outputs limited to 96 watts/4 amps. The input is universal ranging from 100 to 277VAC 50/60 Hz.

Part#: LDR24-96

Tokistar's LDR24-96 is a 96 Watt Class 2 LED Driver used to convert an AC input into a 24VDC output. It may be operated from a wide range of input voltages.



LDR24-96 Specifications

Input Range: 100~277 VAC
Frequency Range: 50/60 Hz
Output: 24VDC (+/- 3%)
Max. Output Current: 4.0A
Max. Output Power: 96W
Protection: Overload, Over voltage, Short Circuit, Over Temperature
Working Temperature: -30°C~+50°C

Mechanical Specifications

Dimensions: 2.7" x 8.8" x 1.6"
Weight: 998g / 2.2 lbs
Enclosure Rating: Suitable for use in Dry, Damp and Wet Locations/IP67 Rated
Mounting: Flange Mount

Safety Standards

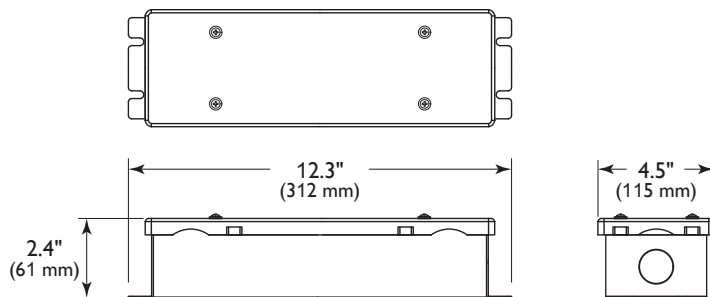
UL 879, UL 8750, UL 1310 Class 2, TUV EN60950-1, EN61347-1, EN61347-2-3 ind. CAN/CSA C22.2 No. 223-M91, IP67 Rated

LED Capacity

4.Watt Light Bars: 24 each

Part#: LDR24-192

Tokistar's LDR24-192 has two independent 96 watt outputs. The unit has wiring compartments for splicing on input and output leads, and can be connected directly to conduit. The enclosure is suitable for wet locations and rated IP65.



LDR24-192 Specifications

Input Range: 100~277 VAC
Frequency Range: 50/60 Hz
Output: 24VDC (Adjustable +5% / -30%)
Max. Output Current: 8.0A (2 @ 4.0A)
Max. Output Power: 192W (2 @ 96W)
Protection: Overload, Overcurrent, Short Circuit
Operating Temperature: -25°C to +60°C

Mechanical Specifications

Dimensions: 4.5" x 12.3" x 2.4"
Weight: 2.55Kg / 6 lbs
Enclosure Rating: Nema 3/IP65
Mounting: Flange Mount
Connection: Knockouts for 1/2" Conduit

Safety Standards

UL 1012/1585, UL8750, UL Class 2 Wet locations, UL 48,cUL, CE, UL #: E342485

LED Capacity

4.Watt Light Bars: 48 each / 24 per output

Dimming

LC-1CH-MULTI Dimming System/24 VDC

Tokistar's LC-1CH-MULTI Dimmer Pack is compatible with industry-standard dimmers working on DMX or 0/1-10VDC protocol. In the manual mode, a preset light level can be set without the use of an external dimmer.



Part #: LC-1CH-MULTI

Technical Specifications:
 Max. Load: 96 Watts @ 24VDC
 Environmental Rating: Dry Location/IP20
 Dimensions: 3/4" x 1-3/4" x 3-1/2"
 Weight: 50g / 0.11 lbs
 Listing: ETL Listed/CE Certified
 Operating Temperature: 0~+50°C

DMX Mode

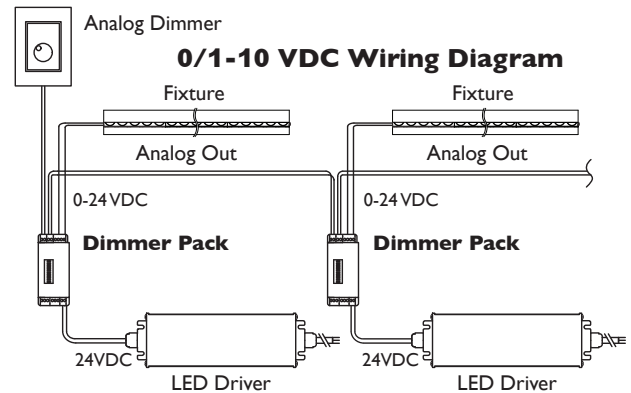
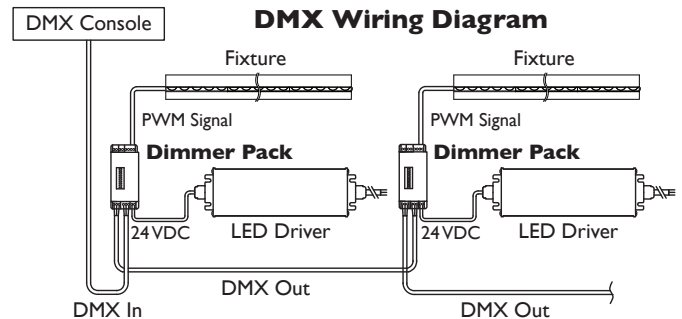
In this mode, dimmer packs are addressable and may be used with any controller working on DMX protocol. Up to 36 dimmer packs may be connected in series. For applications exceeding 36 dimmer packs, a splitter is required. Consult factory on details of DMX Splitters.

Analog Mode 0/1-10 VDC

For operation from devices using 0/1-10VDC protocol, up to 10 dimmer packs may be connected in series. For applications exceeding 10 dimmer packs, an additional feed from the analog dimming device is required.

Manual Mode

You may select a light intensity at which the fixtures operate. In this case, no external dimming device is required.



Dual output LED drivers require a dimmer pack for each output.

LC Dimming System/24 VDC

This proprietary dimming system provides full-range dimming of LEDs from our LED Drivers. The system components connect with CAT5 cable. Up to 25 dimmer packs may be connected in series if the total length of all CAT5 cable does not exceed 165 feet from the wall dimmer to the last dimmer pack. CAT5 cables are included with units.



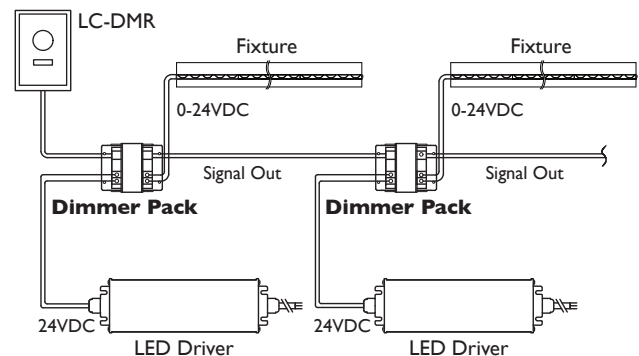
Part #: LC-DMR

The remote wall dimmer has a rotary dial and on/off switch. Power to the wall dimmer is provided from the LED Driver powering the first dimmer pack. The unit installs in a single-gang box.



Part #: LC-1CH-DP

Each dimmer pack receives a 24VDC input from an LED Driver and sends a PWM output to the fixture. Logic input and output is communicated through CAT5 cable. Max. Load: 96 Watts @ 24VDC
 Dimensions: 1-1/2" x 3-1/2" x 4-1/16"





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