LUMENWERX | 2017 COLLECTION

LUMENWERX

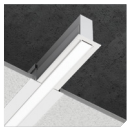
LumenWerx designs, develops, produces, and markets architectural luminaires in North America for commercial and institutional markets. Our in-house capabilities include industrial product design, engineering, electronic, optical, and manufacturing.
The LumenWerx team is incredibly creative, motivated and hardworking, representing some of the most talented and imaginative people in the industry.
Since our founding in 2014, LumenWerx has built a distinctive and ever-growing portfolio of high quality luminaires. Our products have been recognized by the Next Generation Luminaires Design Competition and the Progress Report of the IESNA for design, performance, and engineering ingenuity.
A growing number of our luminaires are showcased in multiple high profile projects, and are recurrently specified by the industry leading lighting designers, architects and engineers.

In this publication, we present several fresh designs, new optical treatments, ChromaWerx color-changing capability, and a range of Connected controls options.

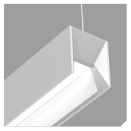
RECESSED

CAVA-T (Pg. 82)

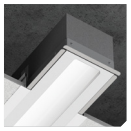
MIKRO (Pg. 56)



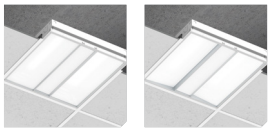
SHALO (Pg. 54)



CAVA (Pg. 31)

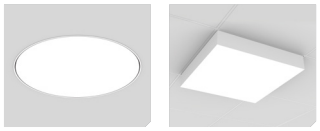


NOVA (Pg. 93)
FLAT & SLOPE



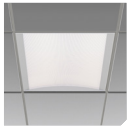
VEGA (Pg. 92)

POP (Pg. 105)
ROUND & SQUARE



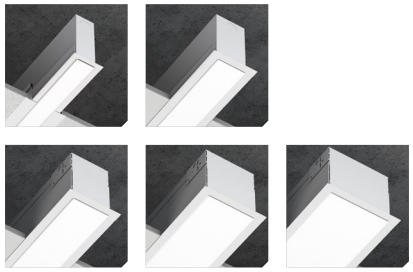
PRIMO (Pg. 87)

SIDEVIEW (Pg. 94)



VIA SPLASH (Pg. 75)

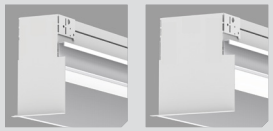
VIA (Pg. 64)
1.5, 2, 3, 4 & 5



VIA WET (Pg. 79)

PERIMETER

PERIMETER (Pg. 72)
3 & 5



SKIM (Pg. 73)

COVE

ALCOVE (Pg. 50)

ALCOVE RAMP

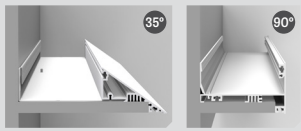


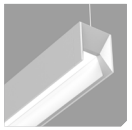
Image - Steve Hall, Hedrich Blessing

PENDANT

REVO (Pg. 22)

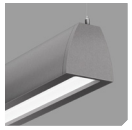
MIKRO (Pg. 56)
MIKRO PLUS

SELKA (Pg. 25)



AXLE (Pg. 47)

CAVA (Pg. 31)
CURVE & SQUARE



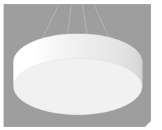
CAMBER (Pg. 38)

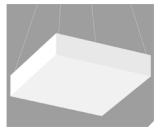
REVEN (Pg. 38)

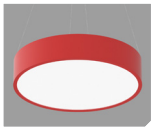
SMILE (Pg. 36)

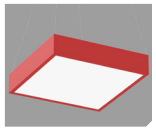
CANYON (Pg. 40)

POP (Pg. 105)
ROUND & SQUARE



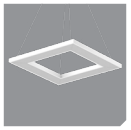






QUAD (Pg. 43)
NARROW & WIDE

FORTEX (Pg. 98)



VIA (Pg. 64)
1.5, 2, 3, 4 & 5

VIA SPLASH (Pg. 75)

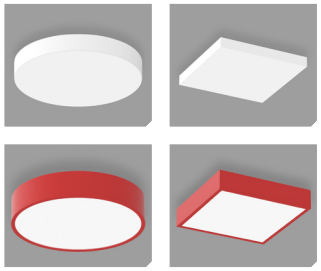
VIA WET (Pg. 79)

SURFACE

MIKRO (Pg. 56)
MIKRO PLUS

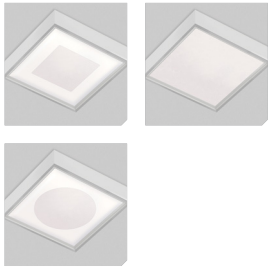
WALO (Pg. 45)

POP (Pg. 105)
ROUND & SQUARE

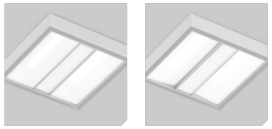


QUAD (Pg. 43)
NARROW & WIDE

PRIMO (Pg. 87)

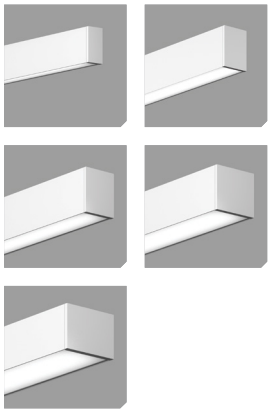


NOVA (Pg. 93)
FLAT & SLOPE



VEGA (Pg. 92)

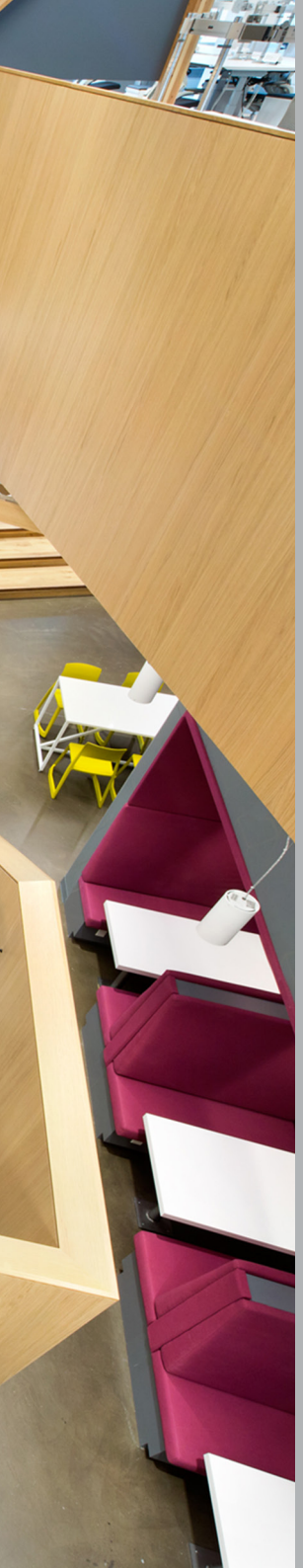
VIA (Pg. 64)
1.5, 2, 3, 4 & 5



VIA SPLASH (Pg. 75)

VIA WET (Pg. 79)

Image - Courtesy of Clive Wilkinson Architects



WALL

WALO (Pg. 45)

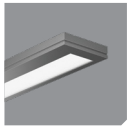
MIKRO (Pg. 56)
MIKRO PLUS

AXLE (Pg. 47)

FORTEX (Pg. 98)

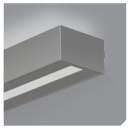
POP (Pg. 105)
ROUND & SQUARE

REVEN (Pg. 38)



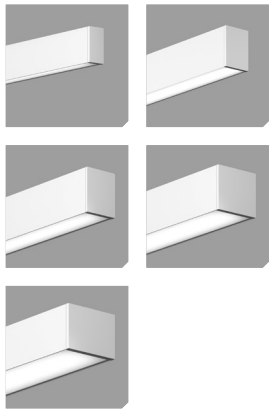
SMILE (Pg. 36)

CANYON (Pg. 40)

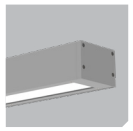


QUAD (Pg. 43)
NARROW & WIDE

VIA (Pg. 64)
1.5, 2, 3, 4 & 5



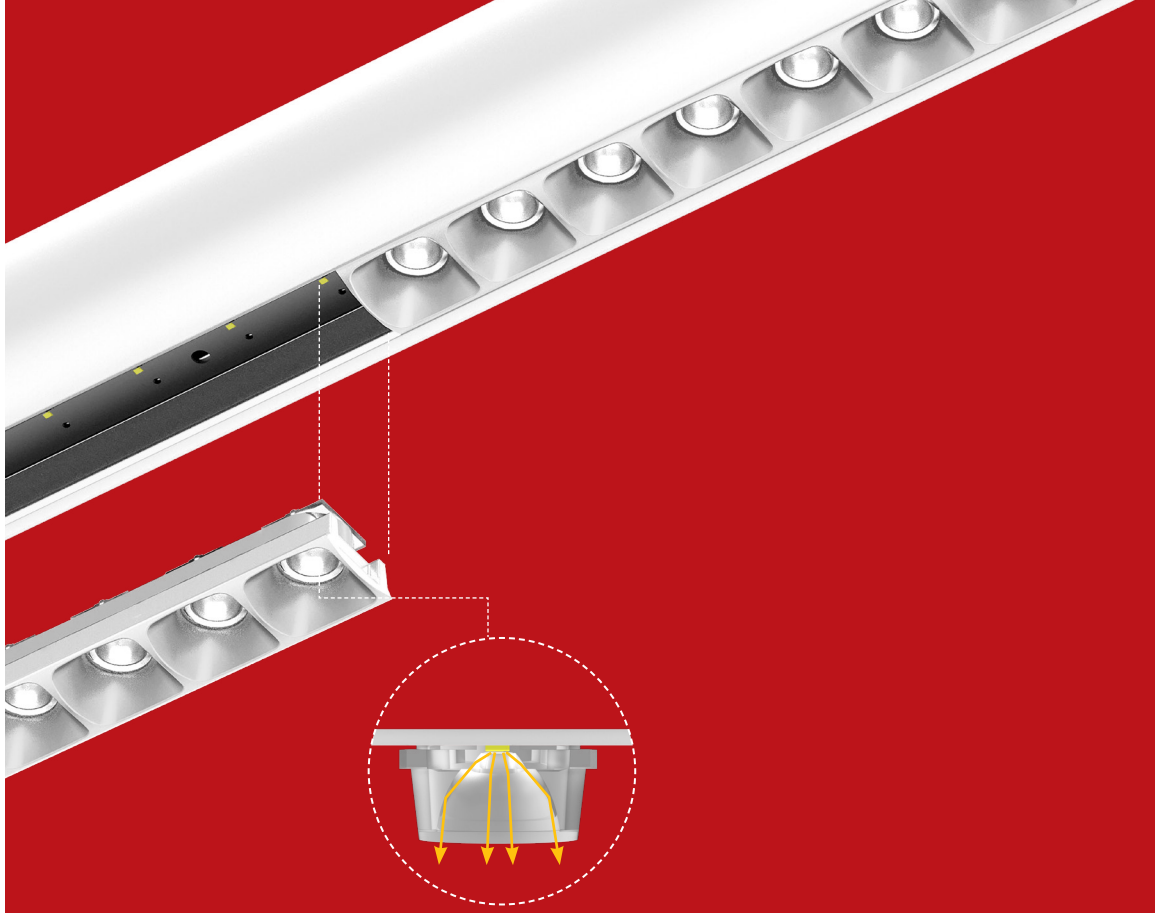
VIA SPLASH (Pg. 75)



VIA WET (Pg. 79)

OpticWerx

The compact size of LED sources generates high luminous density and presents serious issues for glare control and brightness uniformity. LumenWerx takes up the challenge with the fresh ideas and considerable technical expertise of our design and engineering team. The following examples illustrate our approach. Each has been developed on a proprietary basis, using internal and external resources, each finding its optimal application in different luminaires.

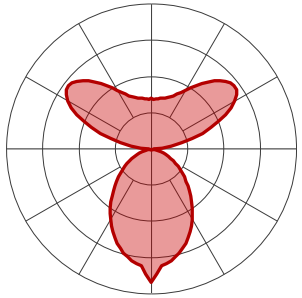


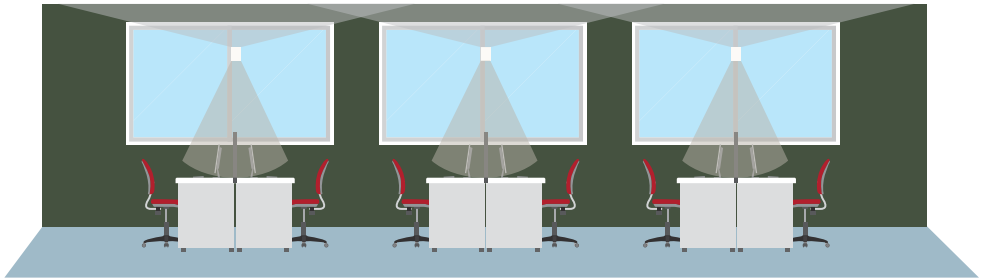
Miniature Reflector Optic - MRO

The LumenWerx Miniature Reflector Optic (MRO) locates an individual, precisely molded TIR elements over each LED emitter, and further shield the source with precise parabolic reflectors. The result, developed specifically for the new Revo pendant, is a comfortable, fresh looking luminaire with intriguing visual texture.

Widespread Indirect Optics - WIO

To achieve widespread indirect light distribution from an attractively narrow luminaire presents a serious optical challenge. The LumenWerx Widespread Indirect Optic (WIO) uses two vertically oriented LED arrays that couple light into the edges of a linear light guide. A specially designed TIR/microstructure extracts light into the desired “batwing” distribution. Peak intensity hits at 120° while suppressing direct uplight. Peak-to-zenith intensity ratio is 2:1, outstanding for a narrow luminaire. The Widespread Indirect Optic produces noticeably smoother ceiling brightness than a typical lambertian uplight distribution, permitting generally wider spacing as well.

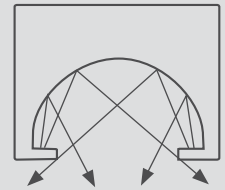




Reduced Luminance Optics - RLO

The LumenWerx Reduced Luminance Optic consists of indirectly mounted LED's illuminating a vaulted reflector with a matte white finish of high reflectivity. Taking advantage of the small light source, the LED arrays are completely concealed from view.

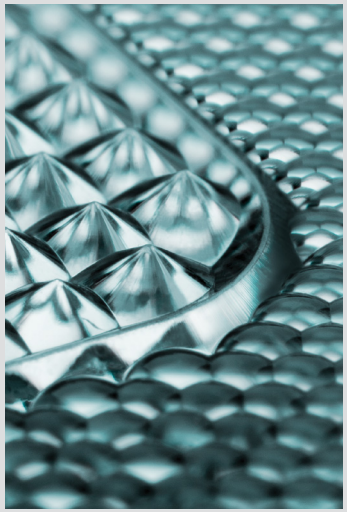
Since light is spread over a reflecting surface larger than the aperture, both visual comfort and source uniformity are better than from a directly illuminated diffuser sized to the aperture.



Equally important, the open aperture creates a luminaire with a distinctive and slightly mysterious appearance.

Precision Micro Prism Optics - PMO

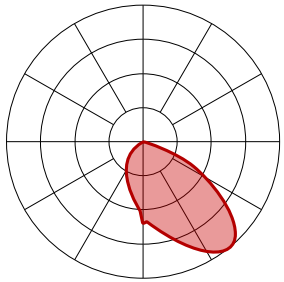
Micro Prism Optics apply catadioptric principles, which combine refraction and internal reflection, on a scale appropriate to the size of the LED source. This offers a much better optical control than lenses designed around much larger conventional sources. High purity acrylic with 94% transmission is formed into square-based prisms, just 0.04" on each side. For direct light distributions, in both recessed and pendant luminaires, this results in a highly efficient lens that also assures outstanding visual comfort.



Lighting for Vertical Surfaces

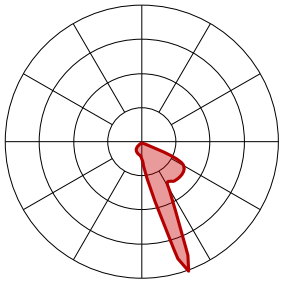
Creating bright and pleasant working spaces has never been more important than it is today. Paradoxically, ever-tighter energy codes make the lighting of vertical surfaces both more critical and more difficult. Thus, we see a clear need for a kit of energy efficient, attractive, and flexible tools for lighting walls. The LumenWerx Via family can show the way with four distinctive linear systems for wall washing, perimeter lighting, and wall grazing.

Via Asymmetric



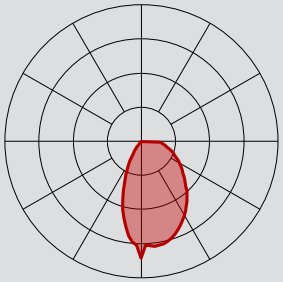
Via Asymmetric is designed to fine tune illumination across horizontal or vertical surfaces. The Asymmetric Reflector Optic (ARO) provides a split light distribution: a modified lambertian downlight with peak intensity at nadir on one side and a batwing with peak intensity at 40° on the other. A “visor” shields the luminaire hardware from lateral viewing angles. An indirect version is also available.

Via Wall Wash

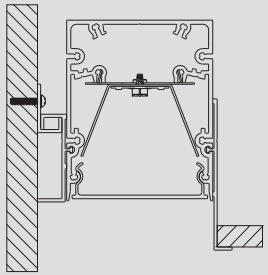


The LumenWerx Wallwash Refractive Optic (WRO) delivers smooth vertical illumination with a gentle gradient and soft visual cut off. With peak intensity at 22° above nadir, the precise WRO lens creates a strong downward component without shadows or hot spots. No external shielding is required. Microstructure material applied to the snap-in lens provides the precise refractive power and visual comfort, while achieving high luminous efficacy of 110 lumens per watt.

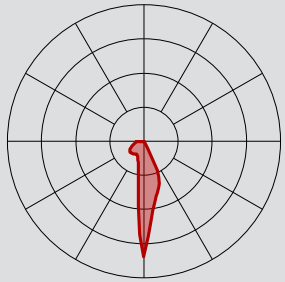
Via Perimeter



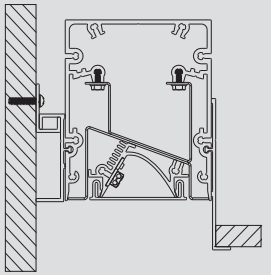
Via Perimeter creates a compact and continuously illuminated “slot” at the wall/ceiling intersection. Lighted corners with an adjustable end and mid sleeves are available. Via Perimeter installs in grid or drywall ceilings in a choice of three arrangements: level, shallow 1", and deep 3".



Via Skim



Via Skim is designed to illuminate textured or polished vertical surfaces with grazing light at the wall/intersection. Via Skim is not recommended to illuminate drywall surface applications. Via Skim provides continuous illumination across the wall surface, including fully luminous corners. However module lengths do not telescope. The intense grazing light distribution is achieved with our Grazing Reflector Optic (GRO) oriented to project light with maximum luminous intensity at 5 degrees from nadir.

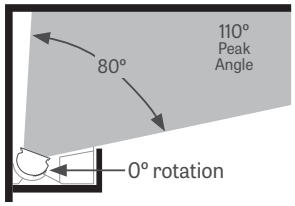


Lighting for Luminous Planes

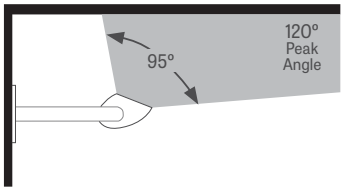
Lighting a ceiling from the edge of a room provides soft, pleasant brightness without the intrusion of pendant luminaires. Whether from a cove or a visible luminaire, this type of asymmetric illumination is particularly important in conference rooms, lobbies, circulation spaces, and other areas where a relaxing atmosphere is intended. LumenWerx offers three approaches using our high-performance Asymmetric Projecting Optic (APO).

ALCove – just 1 13⁄16" high by 3 7⁄8" deep – installs in site-built coves and other architectural enclosures, either as individual luminaires or in continuous runs with quick-connect wiring. Driver and LED boards are accessible without removing the luminaire. With our Asymmetric Projecting Optic, 350 to 1200 lumens per foot, and efficacy up to 122 LPW, ALCove can provide generous ceiling lighting across a wide ceiling expanse.

ALCove Ramp is a self-contained luminaire that includes its own enclosure, eliminating the need for a site-built cove. The sloping fascia with its knife-edge detail is designed for site finishing. ALCove Ramp can be installed as individual luminaires, in continuous runs, or patterns with inside and outside corners. Performance, adjustment, and serviceability match that of ALCove.

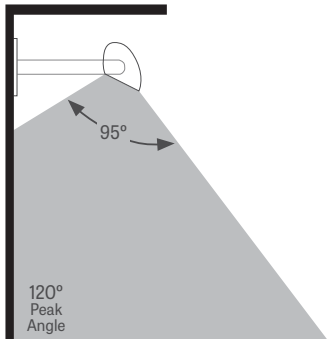


ALCove



Axle indirect

Axle provides asymmetric illumination from a compact and subtly curved luminaire. Axle can be pendant mounted from the ceiling or arm-mounted to the wall as individual luminaires or in continuous runs. The housing can be field rotated in 20° increments for precise aiming. With peak-to-zenith intensity of 5.2:1, light output up to 1200 lumens per foot, and efficacy up to 126 LPW, Axle delivers very effective illumination to graphics and artwork, as well as ceilings and walls.

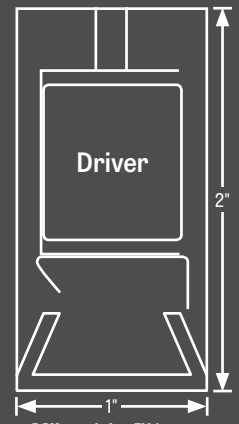


Axle direct

INTEGRATED™ MIKRODRIVE

Sometimes the most important aspect of luminaire appearance is itself invisible. LumenWerx new **Mikrodrive™** is a defining example. **Mikrodrive™** is the ultra-slim, fully integrated electronic package that permits the design of practical, small scale luminaires such as Mikro and Revo, without the need for the remote drivers typical of very small cross-section products.

A co-development project, LumenWerx set the specifications, found the right source, and vetted the result. With its 0.72" x 0.83" profile, **Mikrodrive™** is about half the size of the typical LED driver. **Mikrodrive™** features factory-adjustable drive current, universal (120-277V) and 347V input, and "dim to off" with 0-10V control. Thorough engineering and high quality components provide long life with over 100,000 hours Mean Time Between Failures (MTBF), high efficiency and high power quality.



Mikrodrive™ in a Mikro - actual size

CHROMAWERX

ChromaWerx is our broad program of adjustable color, encompassing one-channel, two-channel, and four-channel color-changing options. Custom LED arrays and digital drivers make ChromaWerx adjustable color simple, reliable, and practical for the general lighting systems critical for office, healthcare, and education applications.

2700k

3500k

4000k

5000k

ChromaWerx offers three adjustable-color options: Sola coordinates the dimming of light output with warming of color temperature, emulating the effect of dimming filament sources. This filament source emulation can be particularly useful in our cove, wall and POP luminaires for hospitality and social spaces.

Duo provides independent control of color temperature and light output enabling the diverse settings for circadian lighting strategies developed to enhance performance and wellness in education, healthcare, and work environments. Duo control is available with the widest range of LumenWerx troffers, linear, and pendants, as well as companion cove, wall, and POP luminaires.

Quadro paints in full color introducing different hues of light from subtle pastels to richly saturated tones, as well as a range of whites . . . all from a palette of architecturally integrated luminaires. With its broad, full-color, Quadro serves a wide range of applications from hospitality and entertainment to transportation and healthcare.

CHROMAWERX SOLA

ChromaWerx Sola is single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple digital or analog control sends a common signal to dual output digital drivers, which are programmed to adjust a specially populated LED array to emulate the effect of dimming a filament source. Dimming range is programmable but the default option runs from 3500K at 100% of full power to 2700K at 5% of full power. CRI is maintained above 80 throughout the dimming range.

CHROMAWERX DUO - TUNABLE WHITE

ChromaWerx Duo is two-channel control. It uses analog or digital protocols for synchronous control of both warm and cool LED arrays, enabling the user to set color temperature and light output. Commonly called “tunable white”, ChromaWerx two-channel control provides the range of warm (2700K) to cool (6500K) color that is useful for helping to entrain circadian rhythms, stimulate alertness for improved educational and work productivity, and compensate for jet lag, among other applications. The ChromaWerx drivers are programmed to limit maximum light output and power usage across all color temperatures. CRI is maintained above 80. In addition to the ChromaWerx Duo controller, third-party interfaces can be as simple as pair of 0-10v-compatible dimmers or part of a more elaborate DALI system.

Aimed at providing appropriate signals to support different activities or coordinate with the cycles of daylight, ChromaWerx Duo can provide a full range of output with color from 2700K to 6500K.

CHROMAWERX QUADRO - RGBW

ChromaWerx Quadro is a four-channel control that operates an RGBW LED array and addresses the need for more expressive color in architectural applications. The DMX driver supports familiar programming tools for both dynamic multi-hued color and precise white color point control. While a typical user interface will be a DMX controller by others, LumenWerx also offers a simple control station for stand-alone color changing applications.

Luminaires available with Chromawerx technology. Please note that Chromawerx Linear fixture can be specified at 2' increments only.

Luminaires				Page
Alcove	x	x		50
Cava	x	x		31
Cava-T	x	x	x	82
Nova	x	x	x	93
POP	x	x		105
Primo 2x2	x	x		87
Quad	x	x	x	43
Vega	x	x	x	92
Via 1.5/Via 1.5 plus	x	x	x	66
Via 2/Via 2 plus	x	x	x	66
Via 3	x	x	x	68
Via 4	x	x	x	69
Via 5	x	x	x	69
Via perimeter 3	x	x	x	72
Via perimeter 5	x	x	x	72
Walo	x	x	x	45

Image - Courtesy of Clive Wilkinson Architects

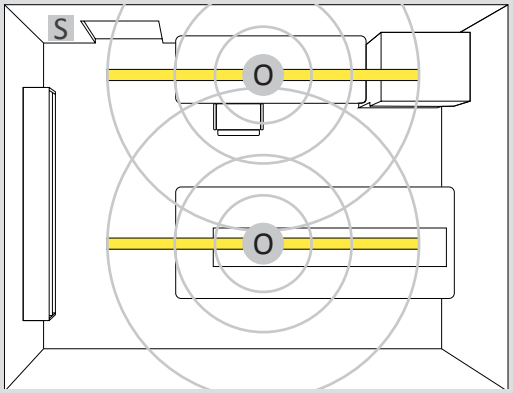
LUMENWERX CONNECTED

All LumenWerx luminaires include dimmable drivers with a wide choice of control protocols. Most also provide for integrated presence and daylight sensors, in three broad approaches; stand-alone controls, local networked wireless controls, and fully connected wireless networks. The broad assortment of LumenWerx Connected options enable lighting designs to comply with energy codes, deliver energy savings, and tune lighting to specific tasks or user requirements.

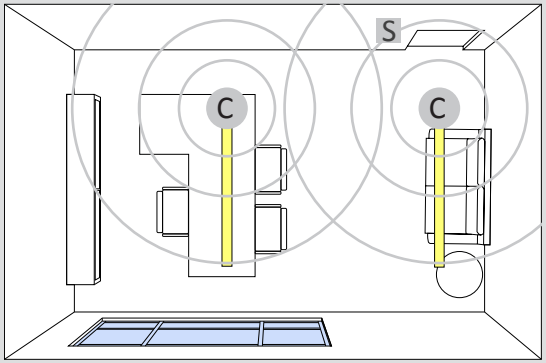
Individual Luminaire Control

Simple Plug and Play

For Individual Luminaire Control, LumenWerx provides and installs presence, daylight and combination sensors that control only the luminaire in which they are installed. Sensors perform according to factory defaults. Vacancy control is typically provided by conventional wall switches. Field adjustment, if required, can be accomplished by the sensor manufacturer's configuration tools (by others). Individual Luminaire Control is well suited to individual offices and other small areas, where networked approaches are not needed.



O - Occupancy
Room size: 15'x12'
2 sensors



C - Occupancy & Daylight harvesting
Room size: 16'x12'
2 sensors

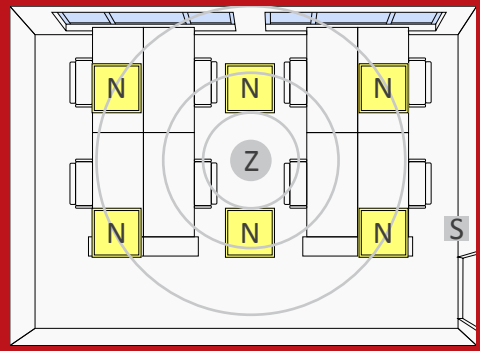
Local Control System

Preplanned Plug and Play

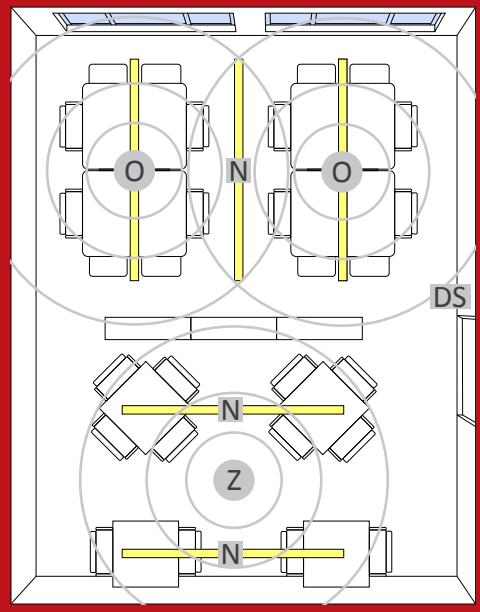
For Local Network Control, Lumenwerx embeds intelligent, wireless "nodes" that provide presence and daylight control. With the local network, luminaires can communicate external controls such as LumenWerx furnished wireless switches and dimmers. The LumenWerx Local Network System can be factory configured for vacancy or occupancy operation, multiple zones (overlapping if required) high-end trim, emergency operation, and manual dimming, among other options.

Based on project requirements, LumenWerx pre-programs and labels all connected luminaires and system components so that site installation is plug-and-play. Local Network Control is well suited to small-to-medium sized projects, such as tenant fitted offices, and others where external connectivity is not required.

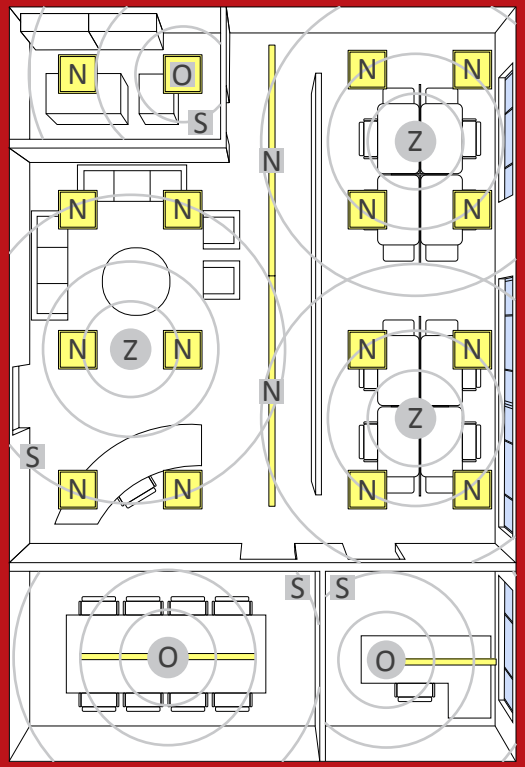
N- Wireless Node
Z - Presence and daylight control
O - On fixture presence and daylight control
S - Wireless wall switch
DS - Dual Wireless wall switch



Single control one zone



Single control multiple zones



Multiple controls multiple zones

Connected Network System

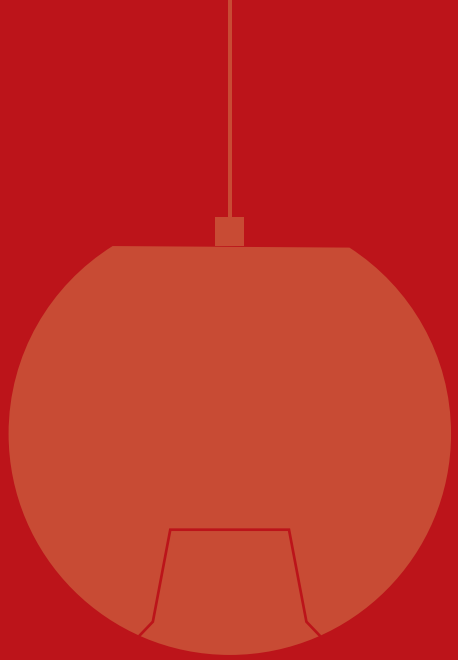
Site Commissioned Third-party Control

Lumenwerx partners with Lutron, Enlighted, Wattstopper and Magnum Energy Solutions to provide control systems with a wide range of capabilities, system scale, and connectivity. In addition to the functionality of our Local Network System, LumenWerx Connected Network Systems offer the ability to provide demand response, real time energy reporting, and BMS integration.
System specification and site commissioning are typically provided by the controls manufacturer. LumenWerx installs and ships the luminaire-integrated components; external components are maybe provided through the controls manufacturer. A LumenWerx Connected Network System is well suited for projects where different lighting systems need to be tightly integrated into the controls program and external connectivity is required.

LUMINAIRE FEATURES AT A GLANCE

		MOUNTING					LIGHT DISTRIBUTION					CHROMAWERX			ADA COMPLIANT
	Page	Recessed	Pendant	Wall	Surface	Cove	Direct	Indirect	Direct/Indirect	Asymmetric	Wall Wash	Sola	Duo	Quadro	
ALCOVE	50					●		●		●		●	●	●	
ALCOVE RAMP	50					●									
AXLE	47		●	●			●	●		●					
CAMBER	38		●				●		●						
CANYON	40		●	●					●						
CAVA	31	●	●				●		●			●	●		
CAVA-T	82	●					●					●	●	●	
FORTEX	98		●	●	●		●	●	●						●
MIKRO	56	●	●	●	●		●	●	●						●
MIKRO PLUS	56		●	●	●		●	●							●
NOVA	93	●			●		●					●	●	●	
POP	105	●	●	●	●		●		●			●	●		
PRIMO	87	●			●		●					●	●		
QUAD	43		●	●	●		●					●	●	●	●
REVEN	38		●	●			●		●						
REVO	22		●						●						

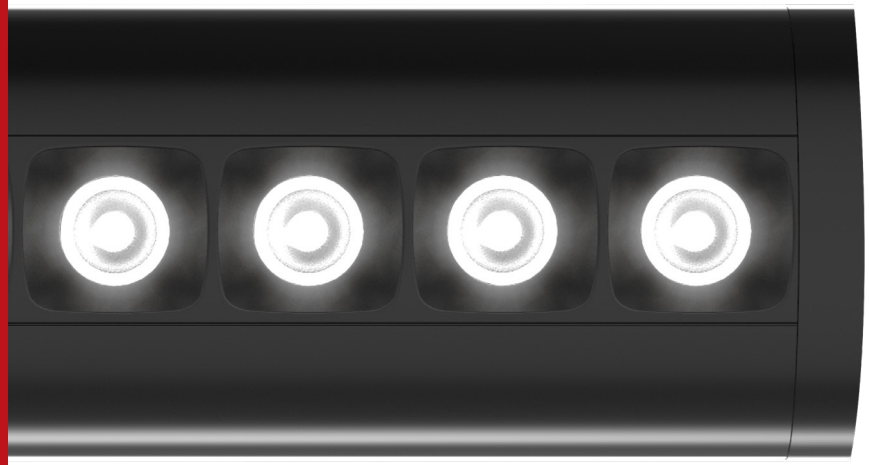
		MOUNTING				LIGHT DISTRIBUTION						CHROMAWERX			ADA COMPLIANT
	Page	Recessed	Pendant	Wall	Surface	Direct	Indirect	Direct/Indirect	Asymmetric	Wall Wash	Perimeter	Sola	Duo	Quadro	
SELKA	25		●			●		●							
SHALO	54	●													
SIDEVIEW	94	●				●									
SMILE	36		●	●		●		●							
VEGA	92	●			●	●						●	●	●	
VIA 1.5	66	●	●	●	●	●	●	●	●	●		●	●	●	●
VIA 1.5 PLUS	66	●	●	●	●	●						●	●	●	●
VIA 2	66	●	●	●	●	●	●	●	●	●		●	●	●	●
VIA 2 PLUS	66	●				●						●	●	●	
VIA 3	68	●	●	●	●	●	●	●	●	●		●	●	●	●
VIA 4	68	●	●	●	●	●	●	●	●	●		●	●	●	
VIA 5	68	●	●	●	●	●	●		●	●		●	●	●	
VIA PERIMETER	72	●									●	●	●	●	
VIA SKIM	73	●									●				
VIA SPLASH	75	●	●	●	●	●		●	●						
VIA WET	79	●	●	●	●	●			●						
WALO	45			●	●			●				●	●	●	●



REVO

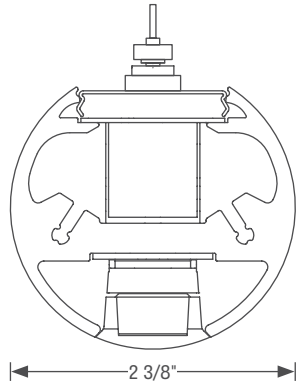
A task luminaire that's easy on your eyes

REVO



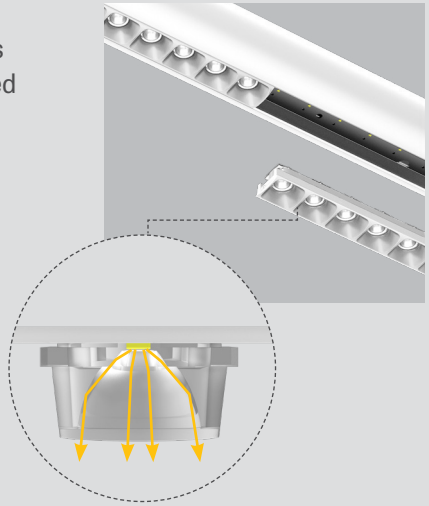
ACTUAL SIZE

The Revo direct/indirect pendant offers a fresh interpretation of a classic shape, both attractive and functional. Just 2 ⅜" in diameter, Revo delivers precise and well shielded illumination to task surfaces, such as counters, desks and conference tables. Miniature, low brightness reflectors and onboard **MikroDrive™** electronics achieve Revo's small scale. Revo can be used as an individual luminaire or combined into continuous runs. The Miniature Reflector Optic, developed specifically for the Revo pendant, creates intriguing visual texture as well as very comfortable brightness.

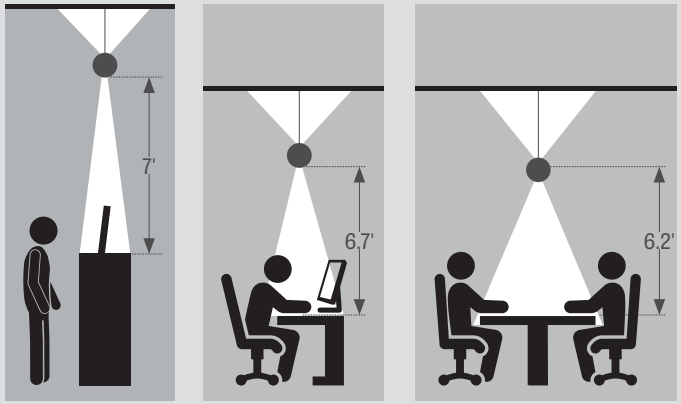


Miniature Reflector Optic - MRO

The LumenWerx Miniature Reflector Optic (MRO) locates an individual, precisely molded TIR elements over each LED emitter, and further shield the source with precise parabolic reflectors. The result, developed specifically for the new Revo pendant, is a comfortable, fresh looking luminaire with intriguing visual texture.



Unlike typical diffuser and prismatic optics, MRO offers a choice of narrow, medium, and wide downlight beams. The downlight MRO can be paired with a simple uplight optic, creating a comfortable and distinctive direct/indirect luminaire with a total of six light distribution options.



Narrow 18 degree
500lm/f - 1000lux

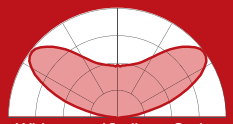
Medium 35 degree
500lm/f - 500lux

Wide 55 degree
500lm/f - 300lux

Revo pendant direct/indirect
Designed in collaboration with Gensler

INTEGRATED™ MIKRODRIVE

SELKA



Intriguing appearance with high performance

With angular end caps, deep interior channel, and pleasing aspect ratio, Selka presents a crisp, intriguing appearance. Widespread uplight, comfortable downlight, and high efficacy and light output all make Selka eminently practical.

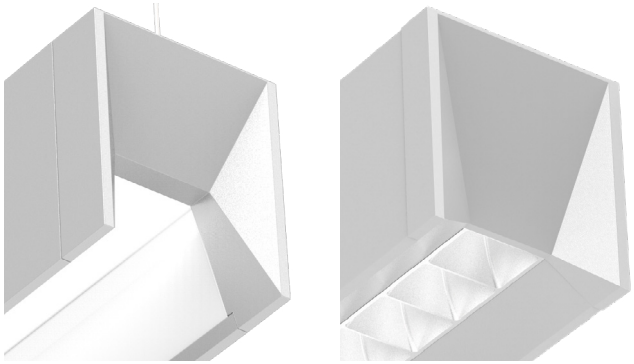
Selka offers two distinctive downlight options: the Regressed Light Guide, with a smoothly luminous effect; and the Regressed parabolic louvers Optic, with a crisp visual texture.

For direct/indirect distributions, the Widespread Indirect Optic produces smoother ceiling brightness and wide spacing.

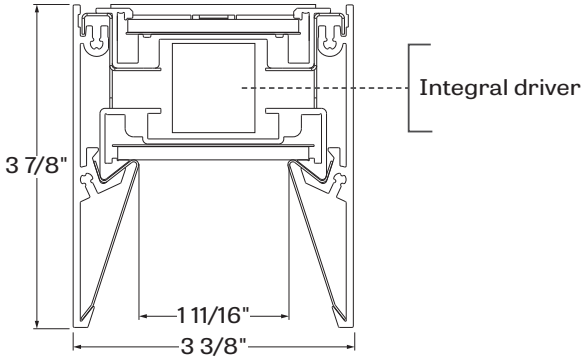
Form

The eight planes and champfered edges of the Selka end cap creates striking angular entry into the deep channel of the housing. Contrast between the brightness of the reflector panels the Regressed Lambertian Optic, and three-dimensional surfaces of the end cap enhances the effect.

Parabolic Louver Optics are offered in two finishes with excellent shielding: Matte, for a quiet glow, and specular, for sharp cut off.

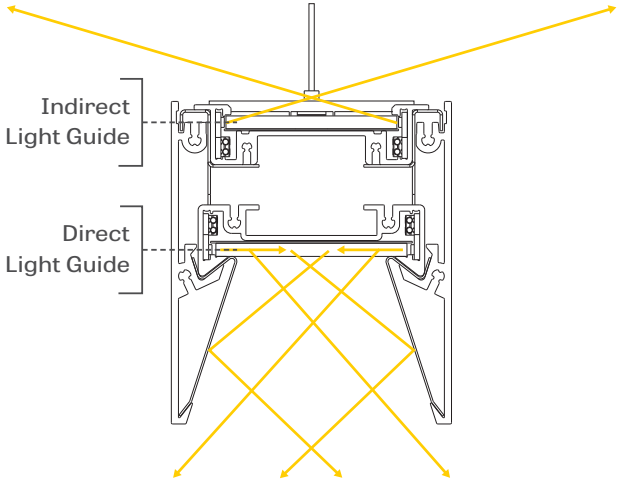


A compact 3 3/8" x 3 7/8" profile can accommodate all drivers



Light Guide

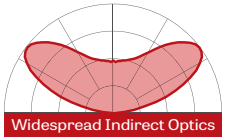
LumenWerx employs light guide technology in a variety of optics, including the Widespread Indirect Optic and Recessed Light Guide Optic used in Selka. Precise coupling of light emitted by the LED array determines the thickness of the guide. Optical grade virgin acrylic assures high total internal reflection. Nanostructures etched into the distributing surface of the guide extra light into the desired pattern. A reflector on the opposite side redirects stray light back into the beam.

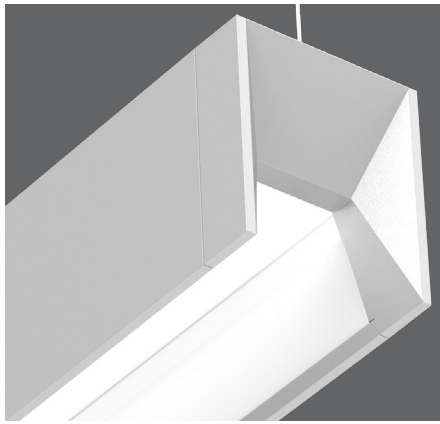


SELKA

Selka Optics

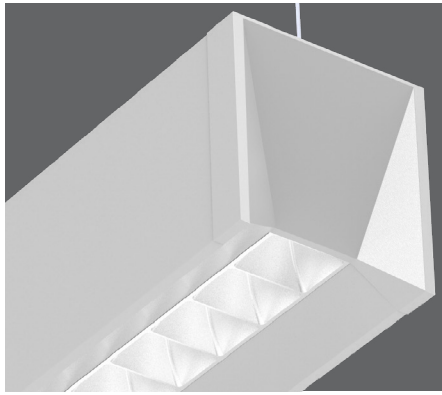
Selka pendants are available with Direct/Indirect and Direct light distributions. Lumen output up to 1200 lumens per foot is available for both uplight and downlight. Selka offers the full range of electrical options as well as separate control over direct and indirect lighting.





Regressed Light Guide - RLG

The Regressed Light Guide Optic consists of side-mounted LED arrays, coupled to an optical-grade acrylic light guide engraved with micro-structure optics that extract light into a lambertian distribution. An upper reflector of 98% reflective, diffuse aluminum enhances system efficiency.
The entire assembly is regressed 2" into the luminaire housing for deep lateral shielding. Angled side panels with a high-reflectance, matte white finish direct light into a soft and wide downlight distribution, with spacing criteria of 1.4.



Parabolic Louvers (SPL and MPL)

Selka's parabolic louvers provide excellent shielding and a pleasing crisp visual texture. The precisely molded louvers consist of 1" deep blades and side reflectors with shielding of 50° lengthwise and 45° cross wise
The entire assembly is regressed 2" into the luminaire housing for deep lateral shielding. Angled side panels with a high-reflectance, matte white finish direct light into a soft downlight distribution, with spacing criteria of 1.1. Choose from Specular (SPL) or Matte (MPL) louver finish

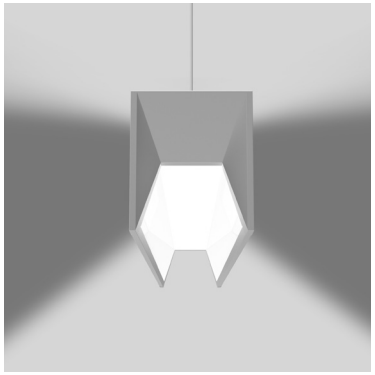
Widespread Indirect Optics - WIO

The Widespread Indirect Optic (WIO) uses two vertically oriented LED arrays that couple light into the edges of a linear light guide. A specially designed TIR/microstructure extracts light into the desired "batwing" distribution.

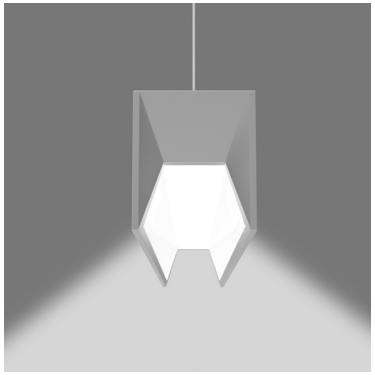
Peak intensity hits at 125° while suppressing direct uplight. Peak-to-zenith intensity ratio is 2:1, outstanding for a narrow luminaire. WIO produces noticeably smoother ceiling brightness than a typical lambertian uplight distribution, permitting generally wider spacing as well.

Distribution

Separately control indirect and direct lighting. for both regressed Light Guide and Regressed Baffle Optic

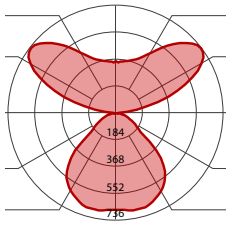


Direct/indirect



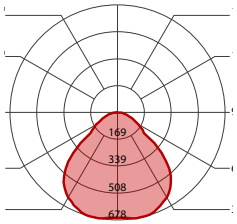
Direct

Performance



DIRECT REGRESSED LIGHT GUIDE (RLG) INDIRECT WIDESPREAD OPTICS (WIO)

LED output	Color Temp	Watts	Direct Lumens	Indirect Lumens	Total Delivered Lumens	Efficacy LPW
low output	4000K	35	2000	2000	4000	114
medium output	4000K	44.5	3000	2000	5000	112
high output	4000K	54	4000	2000	6000	111
ultra high output	4000K	62.5	4800	2000	6800	109



DIRECT REGRESSED LIGHT GUIDE (RLG)

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	17.5	2000	113
medium output	4000K	27	3000	111
high output	4000K	36.5	4000	109
ultra high output	4000K	45	4800	107

Selka Offering

- Direct/Indirect & Indirect
- 2 direct optic options
- Indirect widespread optic
- Integral driver
- Integral emergency option
- 4, 6 & 8 standard modules
- Continuous runs
- Up to 4800 lumens/4'
- standard 3000K, 3500k & 4000k
- Up to 114 LPW

Cava curve pendant
with an open end cap

CAVA

Distinctive and mysteriously luminous

CAVA

CAVA

2015 PROGRESS Report SELECTION

RECOGNIZED BY NGL

Cava square pendant with an open end cap

Light in Multiple Dimensions

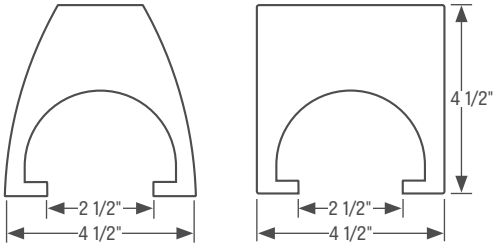
Cava is a linear LED luminaire that by using the Reduced Luminance Optic (RLO) provides a continuous sculptural source of light. With its narrow barrel-vaulted optic, Cava presents a luminous element in both two-and three-dimensions. . . simultaneously. The distinctive effect is unexpected, yet remarkably pleasant.

Completely concealed and indirect LED arrays illuminate the interior curved reflector, creating a soft, generous spread of light. The high reflectance finish and optical arrangement provide excellent brightness control, while maintaining high luminous efficacy. Cava is available for recessed or pendant installation.

Cava Profiles

Cava pendants are available with two housing profiles and two end cap designs with either direct or independently controllable direct/indirect distributions.

Cava Curve follows a modified parabolic curve, while Cava Square offers a crisp straight-edged profile. The open end cap design regresses just enough to express the counterpoint of exterior and interior forms. The brief glimpse of ceiling beyond the luminaire adds to the intrigue of the design. The closed end cap provides a conventional seal when viewed end-on but offers a reflective surface when viewed along the luminaire.



CAVA CURVE

CAVA SQUARE

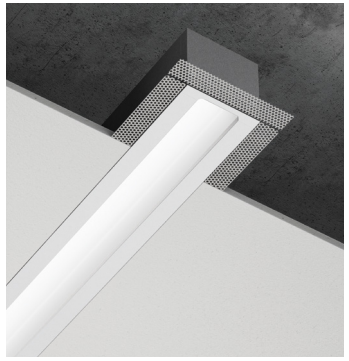
DIRECT/INDIRECT

CHROMAWERX

CAVA SQUARE PENDANT CLOSED

CAVA CURVE PENDANT CLOSED

CAVA RECESSED GRID



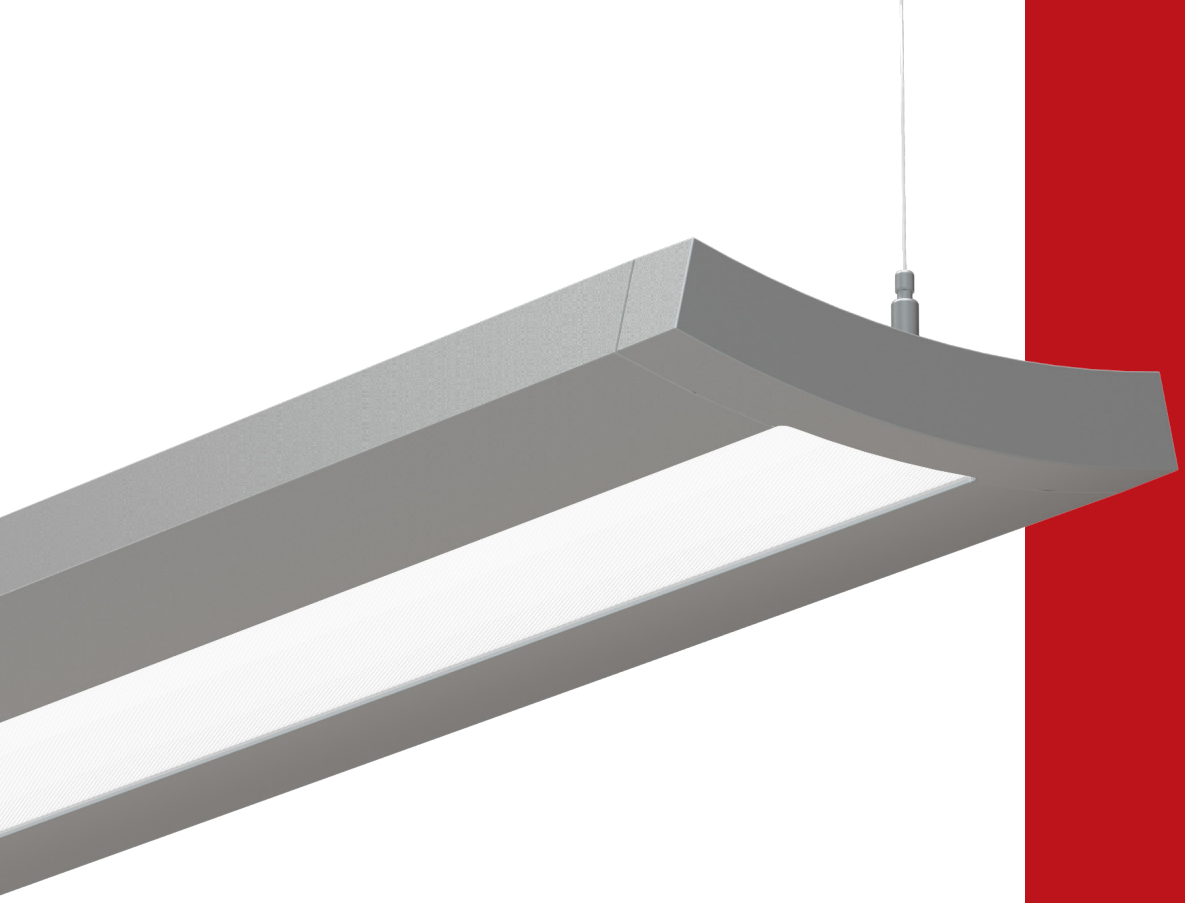
CAVA RECESSED DRYWALL

Reven pendant

DIRECT/INDIRECT LUMINAIRES

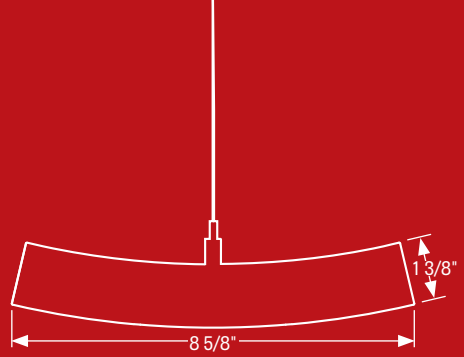
Performance and style

The luminaires presented here combine high performance optics with distinctive and pleasing industrial design. Sharing advanced linear LED light engines and a choice of light distributions, each luminaire delivers wide spread uplight and comfortable downlight. High efficacy, reliability, and a wide range of controls options make these luminaires practical, as well as attractive choices. Our four styles offer a choice of curvilinear and sharp-edged profiles, all well scaled for architectural interiors. Precise aluminum construction and clean detailing maintain the crisp appearance when luminaires are installed as pendants or wall-mounted.

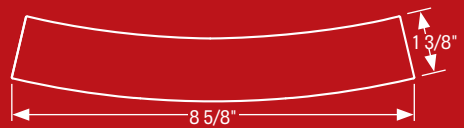


SMILE

SMILE



SMILE PENDANT



SMILE WALL

Smile is a linear LED pendant luminaire with a gently curved profile that adds a charming aspect to the clean lines of a design that is just 1 ⅜" deep and 8 ⅝" wide.

Using advanced LED engines and optical control, Smile provides wide spread uplight and well controlled downlight, delivering both efficient and comfortable illumination.

Constructed of an extruded aluminum housing, die-cast aluminum end caps, and precision connector elements, Smile installs with consistent alignment. Long-term reliability is supported by effective thermal management, as well as easy access to drivers and cartridge-mounted LED arrays.

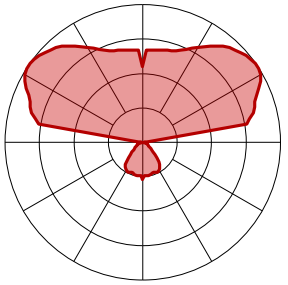
Smile is offered in a choice of light distributions, outputs, and color temperatures, together with comprehensive electrical and controls options. Companion wall luminaires are also part of the family.

Smile pendant & wall

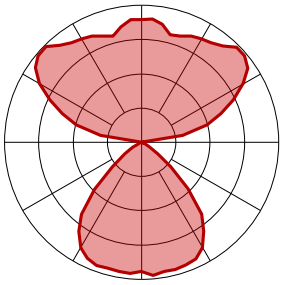
Typical Performance

Per 4ft - for 15% down and 85% up distribution

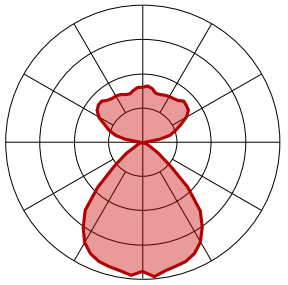
LED output	Color Temp	Watts	Nominal Lumens	Efficacy LPW
Low	4000k	27.5	3000	110
Medium	4000k	32	3500	109
High	4000k	37	4000	108



15% down - 85% up



35% down - 65% up



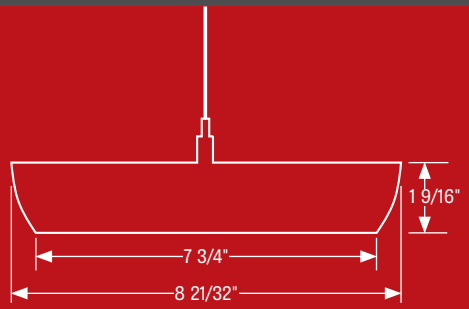
60% down - 40% up

REVEN & CAMBER

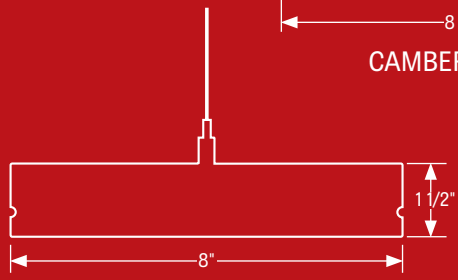
Reven and Camber are high performance LED pendant luminaires, each with an elegantly thin profile. Constructed of extruded aluminum with cast aluminum end caps, both luminaires are barely 1 ½" deep. Reven features a defining design, which articulates and minimizes the form. Camber's gently curving sides wrap organically into it's end caps, creating a flattering composition.

Using advanced LED engines and optics, both luminaires provide comfortable, wide spread, and highly efficient illumination, along with comprehensive electrical and controls options. Long-term reliability is supported by thermal management, as well as easy access to LED boards and drivers.

Optical configurations include a range of direct and indirect light distributions, together with independently controllable up and downlight. Companion wall luminaires are also part of the family.



CAMBER PENDANT



REVEN PENDANT

REVEN WALL

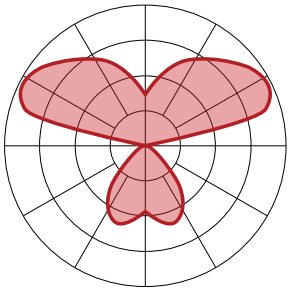
REVEN

CAMBER

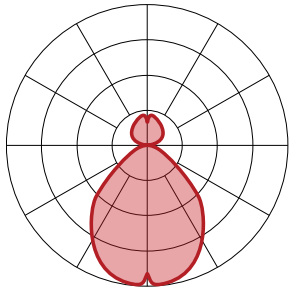
Typical Performance

Per 4ft - for 30% down and 70% up distribution

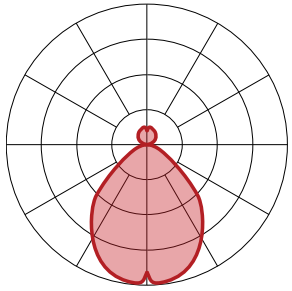
LED output	Color Temp	Watts	Nominal Lumens	Efficacy LPW
Low	4000k	28.5	3000	105
Medium	4000k	33.5	3500	105
High	4000k	38	4000	1 05



30% down - 70% up

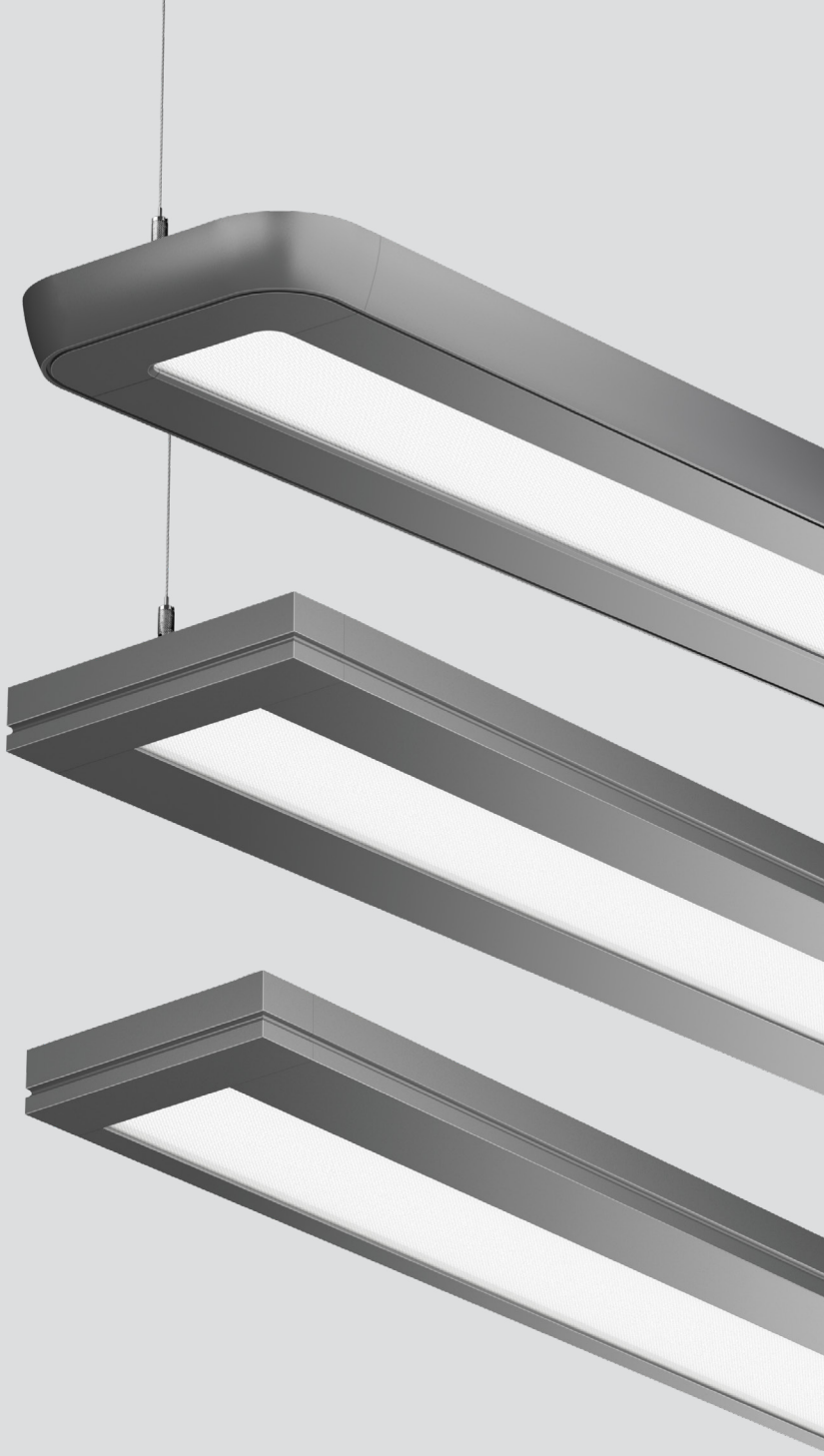


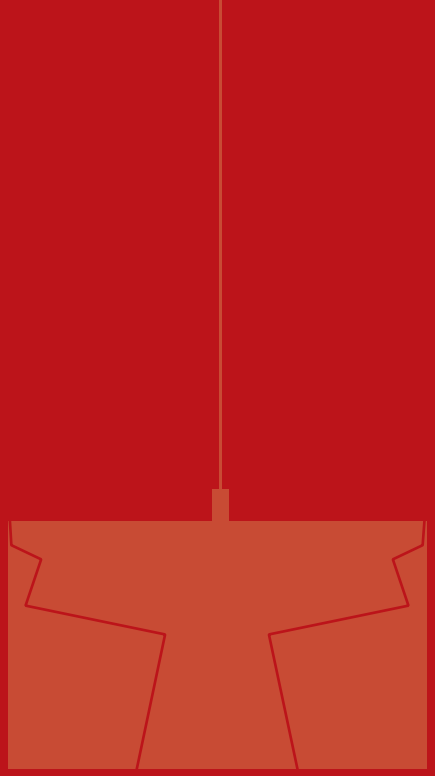
60% down - 40% up



80% down - 20% up

Also available in T5 & T5HO

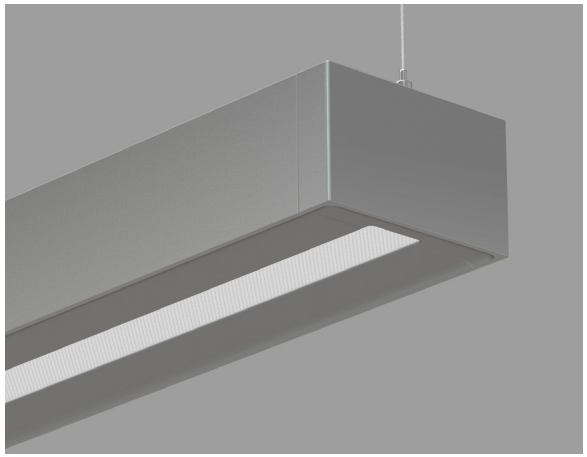


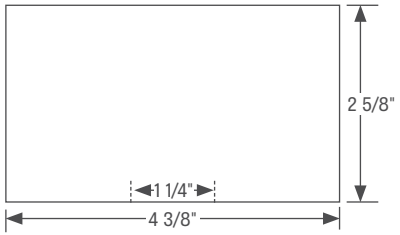


CANYON

CANYON

Canyon pendant





Also available in T5 & T5HO

Canyon is a narrow linear LED pendant luminaire with a distinctive 1 ¼" aperture running the length of the housing. Canyon itself is just 2 ⅝" high by 4 ⅜" wide.

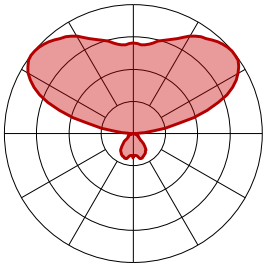
Canyon provides wide spread uplight and a gentle glow of downlight from a 90/10 indirect and direct light distribution, delivering both efficient and comfortable illumination.

Canyon is offered in a choice of light outputs, and color temperatures together with comprehensive electrical and controls options. Canyon is available for wall mounting and also with fluorescent sources.

Typical Performance

Per 4ft - for 10% down and 90% up distribution

LED output	Color Temp	Watts	Nominal Lumens	Efficacy LPW
Low	4000k	29	3000	102
Medium	4000k	34.5	3500	101
High	4000k	40	4000	100



10% down - 90% up

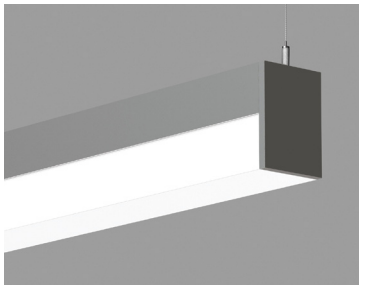
QUAD

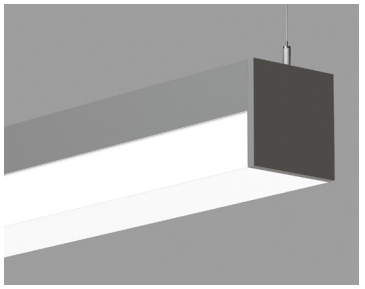
Quad narrow pendant

QUAD

Light with clarity

ada compliant

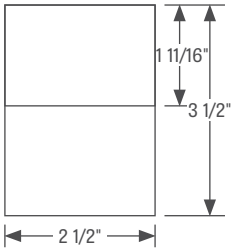




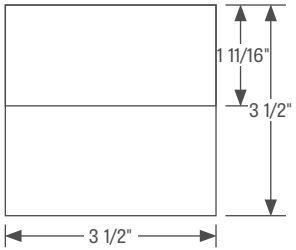
Quad is a simply designed and crisply executed linear luminaire for circulation, general, and utility applications. The High-efficiency Lambertian Optic (HLO) provides excellent luminous efficacy and uniform luminosity across the diffuser. An extruded aluminum housing, together with die-cast end caps and joining system, assure a sturdy installation.

Quad pendants are available in either a wide 3 ½" or narrow 2 ½" profile, along with surface and wall models, and can be installed in continuous runs. Notwithstanding the compact form, a full range of electrical and integrated control options is available.

QUAD NARROW



QUAD WIDE



Also available in T5 & T5HO

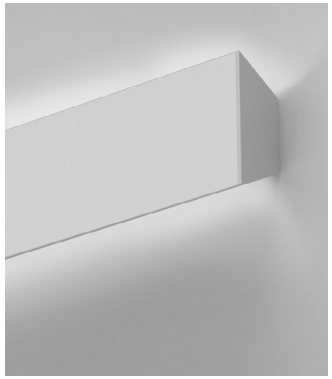
CHROMAWERX

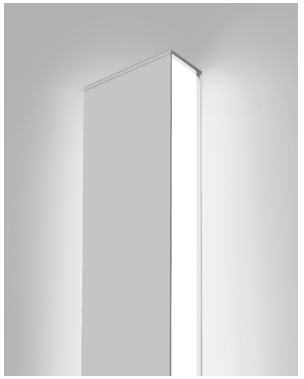
WALO

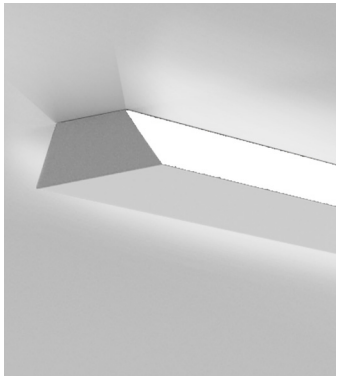
Walo wall direct indirect

WALO

Bands of light define and delineate



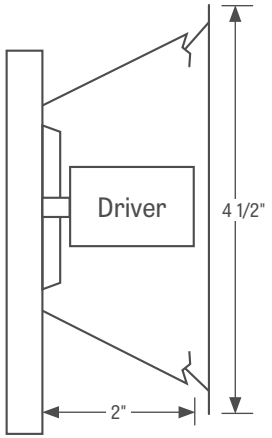




WALO is a linear luminaire that casts light to either side, reflecting off of the adjacent surface. The resulting parallel bands of brightness – whether up-and-down or side-to-side – define and delineate walls and pathways.

WALO is compact, projecting just 2", from wall or ceiling. A 4 ½" fascia and chamfered sides return light to the mounting surface and minimize the direct brightness from the luminaire.

WALO can be used individually or in patterns, installing vertically or horizontally on walls and on ceilings. Lighted joiner elements enable WALO to turn inside and outside corners. A full suite of on-board driver, battery pack and electrical options makes WALO a practical approach for lighting circulation areas.



WALO WALL

CHROMAWERX

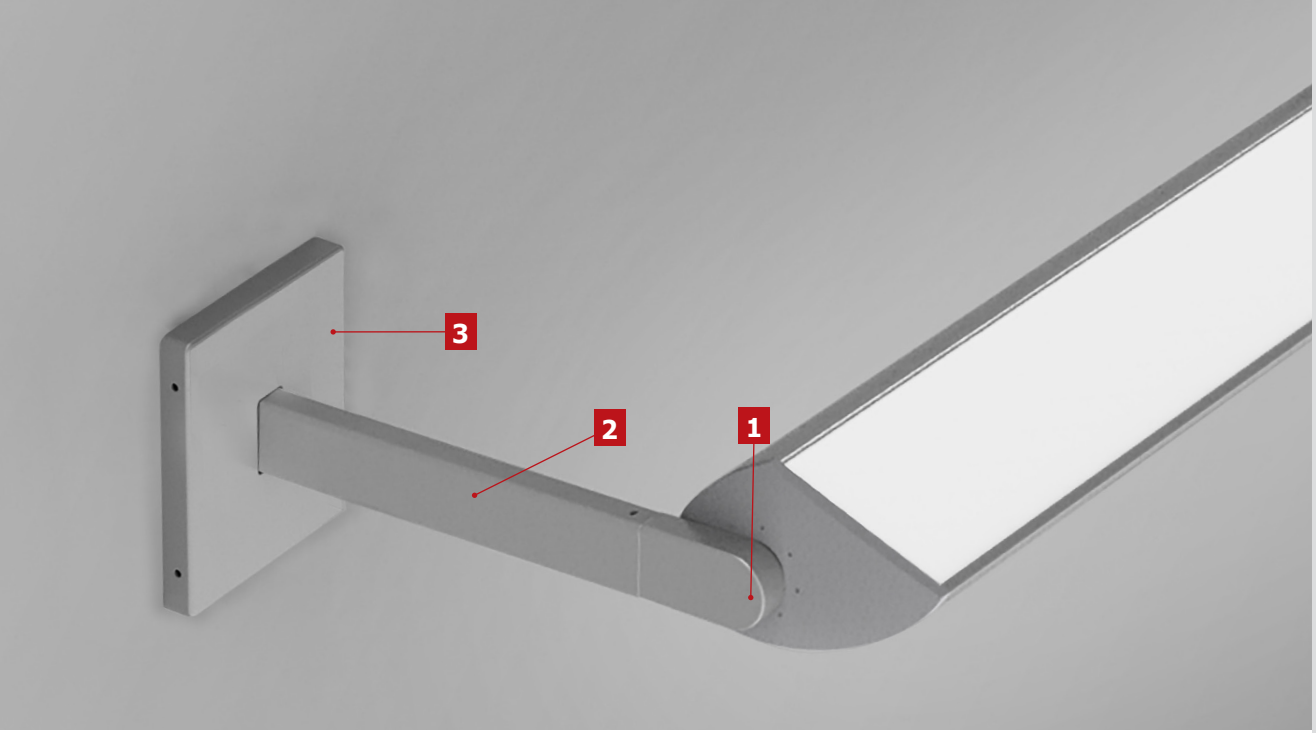
ada compliant

Axle wall asymmetric indirect

AXLE

Elegant linear accent lighting that is both flexible and efficient

Axle is an elegant and compact LED linear accent luminaire providing efficient asymmetric light distribution. Softly curved, Axle measures just 2 11⁄16" by 3 11⁄16". With adjustable optics, light output from 350 to 1200 lumens per foot (nominal) and efficacy up to 126 LPW, Axle delivers very effective illumination to graphics and artwork, as well as ceilings and walls. Highly flexible, Axle can be installed as individual luminaires (up to 8') or in continuous runs, with a choice of arm or cable suspension. LED boards and driver are accessible without removing the luminaire.



(1) ROTATION HUB

Mounting hub provides field adjustment for precise aiming.

(2) CANTILEVER ARM

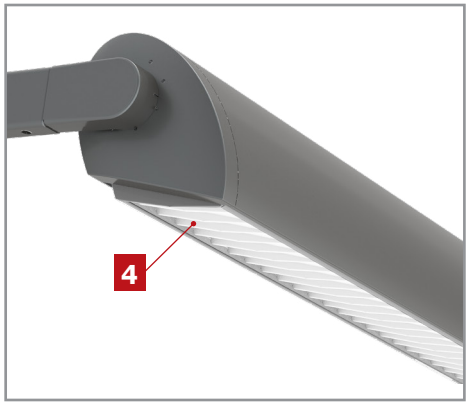
Die-formed steel provides cantilevered extension of 6", 12" or 18" and conceals wiring.

(3) MOUNTING PLATES

Arm mounting provides concealed wiring and connects to outlet boxes using 4" square and round mounting plates.

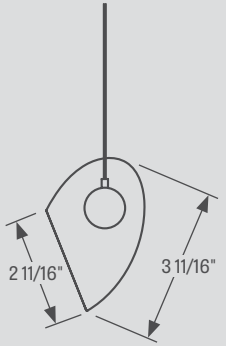
(4) WHITE BAFFLE

Optional die-formed sheet metal white baffle with blades, spaced ½" apart, provides lateral shielding and can be field installed .
The baffles are in sheet metal.

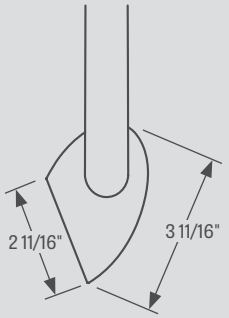


PENDANT

Axle cable direct

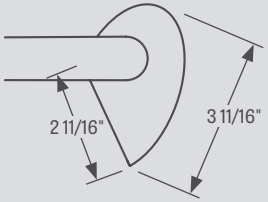


Axle arm direct

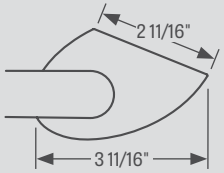


WALL

Axle arm direct

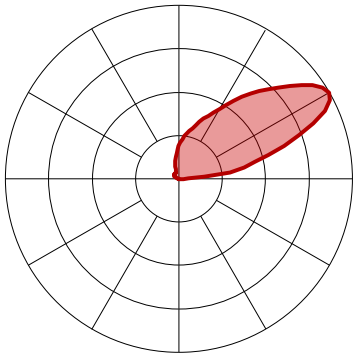


Axle arm indirect



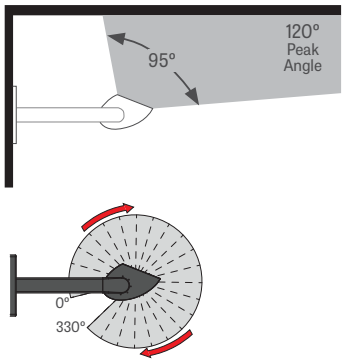
AXLE

Asymmetric Projecting Optic

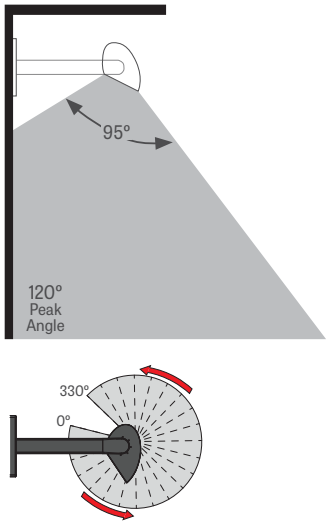


Cartridge-mounted, linear LED arrays are paired with a precisely formed semi-specular reflector for smooth light distribution and a 95° beam spread. The LED array is protected by a clear acrylic cover. In an indirect orientation, peak intensity occurs at 120° above nadir with a peak-to-zenith intensity ratio of 5.2:1. The Axle housing can be field rotated in 15° increments which permit precise aiming.

Field Adjustable Aiming



Wall asymmetric indirect



Wall asymmetric direct

Axle pendant asymmetric

ALCOVE

Smooth and efficient cove lighting

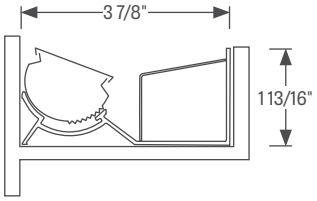
ALCove LED is a compact, high-performance luminaire providing efficient asymmetric light distribution. ALCove measures just 1 13/16" high by 3 7/8" deep. With peak intensity at 110°, adjustable optics, light output from 350 to 1200 lumens per foot, and efficacy up to 134 LPW, ALCove delivers very effective ceiling illumination.

ALCove is installed in site-built architectural coves. Alternatively, eliminate the need for a separate cove, and use ALCove Ramp with its own, attractive enclosure.

ALCove cove

ALCOVE

Highly flexible, ALCove can be installed as individual luminaires or in continuous runs with quick-connect wiring. Driver and LED boards are accessible without removing the luminaire. ALCove offers a range of dimming, emergency, and electrical options.



ALCOVE

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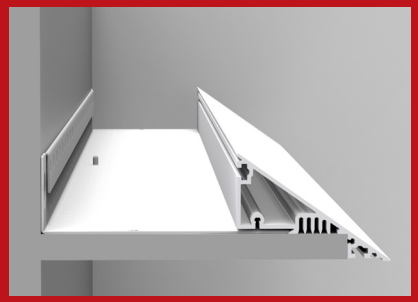
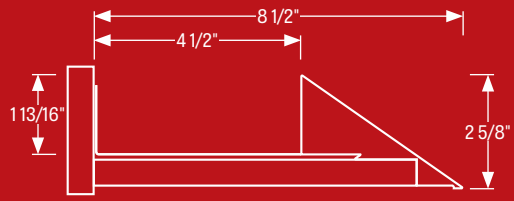
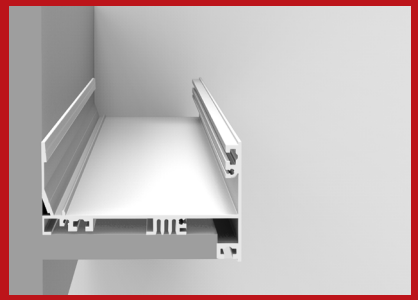
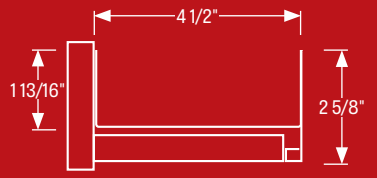
ALCOVE RAMP









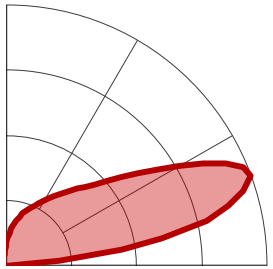
ALCove Ramp features an elegantly inclined fascia just 2 ⅝" high and a supporting bracket for wall mounting, for a total extension of 8 ½" from the wall.

We make it simple to design patterns customized for you. While our standard is a 90° corner, we can customize angles to suit your needs.

ALCOVE RAMP

ALCove cove

Asymmetric Projecting Optic - APO



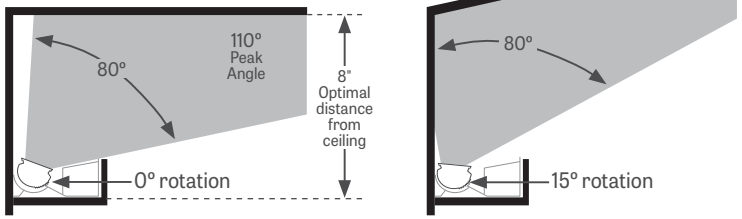
110° peak candelas

ALCove uses the LumenWerx Asymmetric Projecting Optic (APO). Cartridge-mounted, linear LED arrays are paired with precisely formed specular and matte white reflectors for smooth light distribution. The LED array is protected by a clear acrylic cover.

For maximum horizontal projection, the APO cartridge is aimed to produce peak intensity at 110° above nadir with peak-to-zenith intensity ratio of 11.8:1. Field angle coverage extends for 80°. For optimal beam spread, locate ALCove at least 8" below the ceiling.

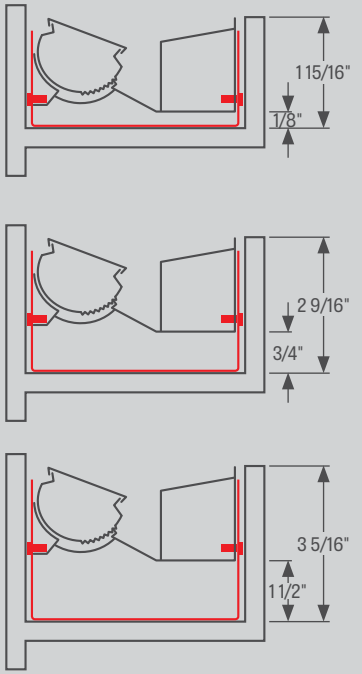
The Asymmetric Projecting Optic cartridges can be rotated upwards on site by 60° to increase vertical projection. Click-stop of 5° intervals, as well as visible aiming marks, provide 13 discrete aiming angles and simplify consistent orientation in long coves.

Field Adjustable Aiming



Adjustable Mounting Bracket

For optimal performance, ALCove should be installed flush to the top of the cove, and is furnished with a adjustable mounting bracket to help locate the luminaire in coves at different depths.



The mounting bracket help raises the luminaire up to 3 5/16" in 1/8" increments.

CHROMAWERX

SHALO

SHALO

Elegant solution for a shallow plenum

Shalo – with a depth of merely 1.75" – fits within the height of a typical ceiling grid and yet provides a uniform luminous appearance without LED pixilation. The key is our design of side-mounted LED arrays, coupled to an optical-grade acrylic light guide engraved with micro-structure optics.

Light output options range from 500-1200 lumens per foot, with efficacy up to 117 lumens per watt. Tight binning assures a high quality of light color; both 80 and 90 CRI are available.

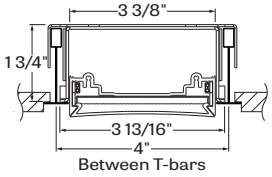
The onboard driver and cartridge-mounted optics make Shalo practical, as well as attractive. All standard electrical options, including integrated sensors, are available. And, service is performed from without access to the ceiling plenum.

2017 PROGRESS Report SELECTION

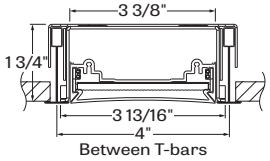
Shalo recessed

SHALLOW HOUSING

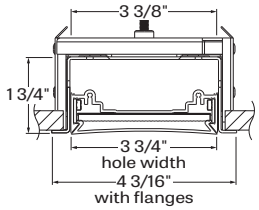
The Shalo housing is just 1.75" deep and sits entirely within the height of most ceiling grids. The lens sits flush with both flat and tegular ceiling panels. Total plenum depth of at least 5" is recommended for installation.



TG9 - tegular 9/16"



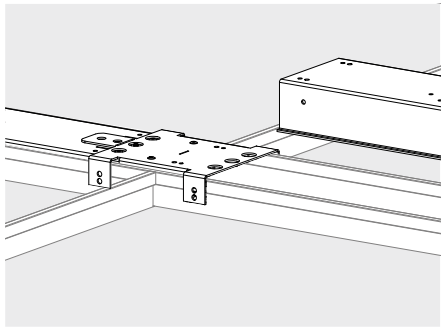
TB9 - t-bar 9/16"



DTR - drywall trim

CEILING INTEGRATION

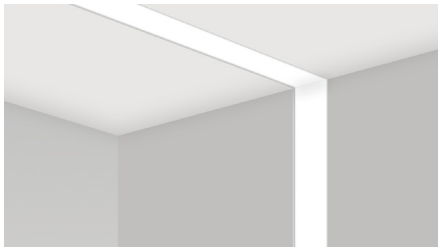
Shalo fits a variety of grid ceilings, including Armstrong TECHZONE™ and USG ceilings, as discrete luminaires or continuous runs of uninterrupted light. T-bar spacing for 9/16" runners is 4" and 4 3/8" for 15/16" runners. Shalo also installs in drywall ceilings and vertically in walls. A 6" long joiner bracket aligns Shalo modules for continuous runs. The lens sits flush with both flat and tegular ceiling tiles.

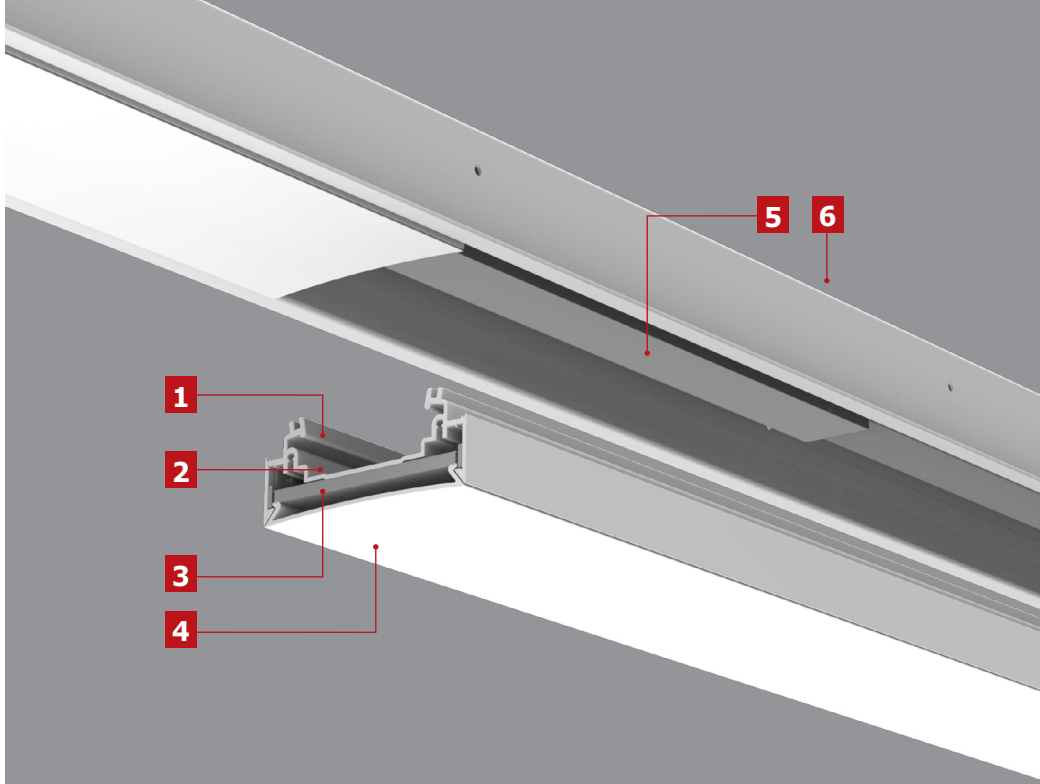


TECHZONE™ & USG
Compatible with ceiling runners 4" on center

LIGHTED CORNERS

Shalo corners permit continuous runs of light to turn from grid or drywall ceilings down to the wall.





(1) CARTRIDGE-MOUNTED OPTICS

simplify service and provide optical alignment and thermal management.

(2) LIGHT GUIDE

of optical grade acrylic with engraved micro-structure optics distributes light into a lambertian distribution.

(3) UPPER REFLECTOR

of diffuse 95% reflective aluminum enhances optical efficiency.

(4) DIFFUSER

eliminates LED imaging and improves visual comfort.

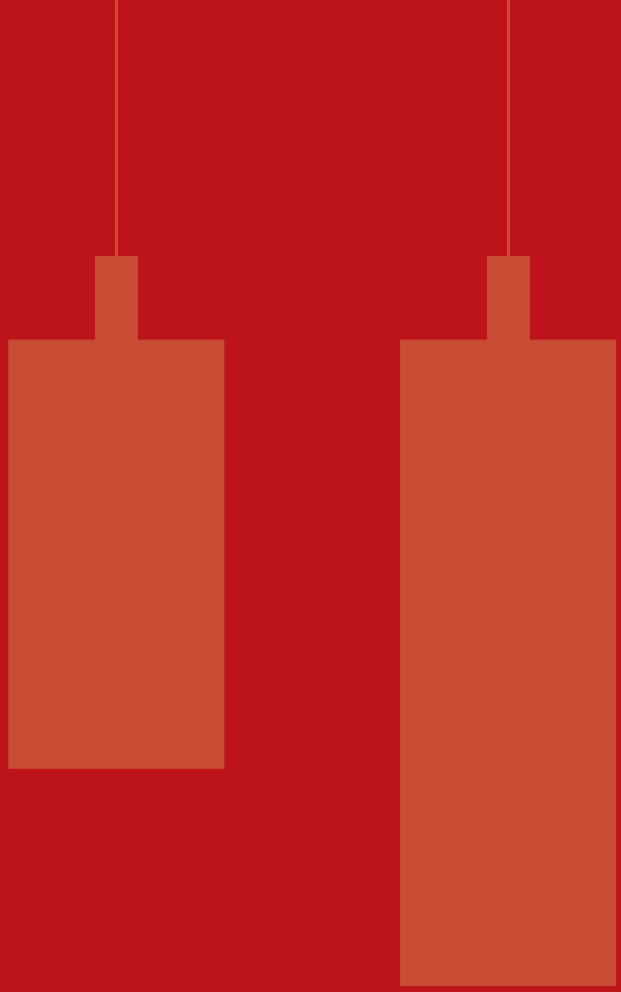
(5) ONBOARD DRIVER

provides full range of electrical and control options.

(6) HOUSING

of 1.75" high, 16 ga. formed steel sits neatly inside the ceiling.

SMALL
HAS NEVER BEEN
BIGGER



MIKRO

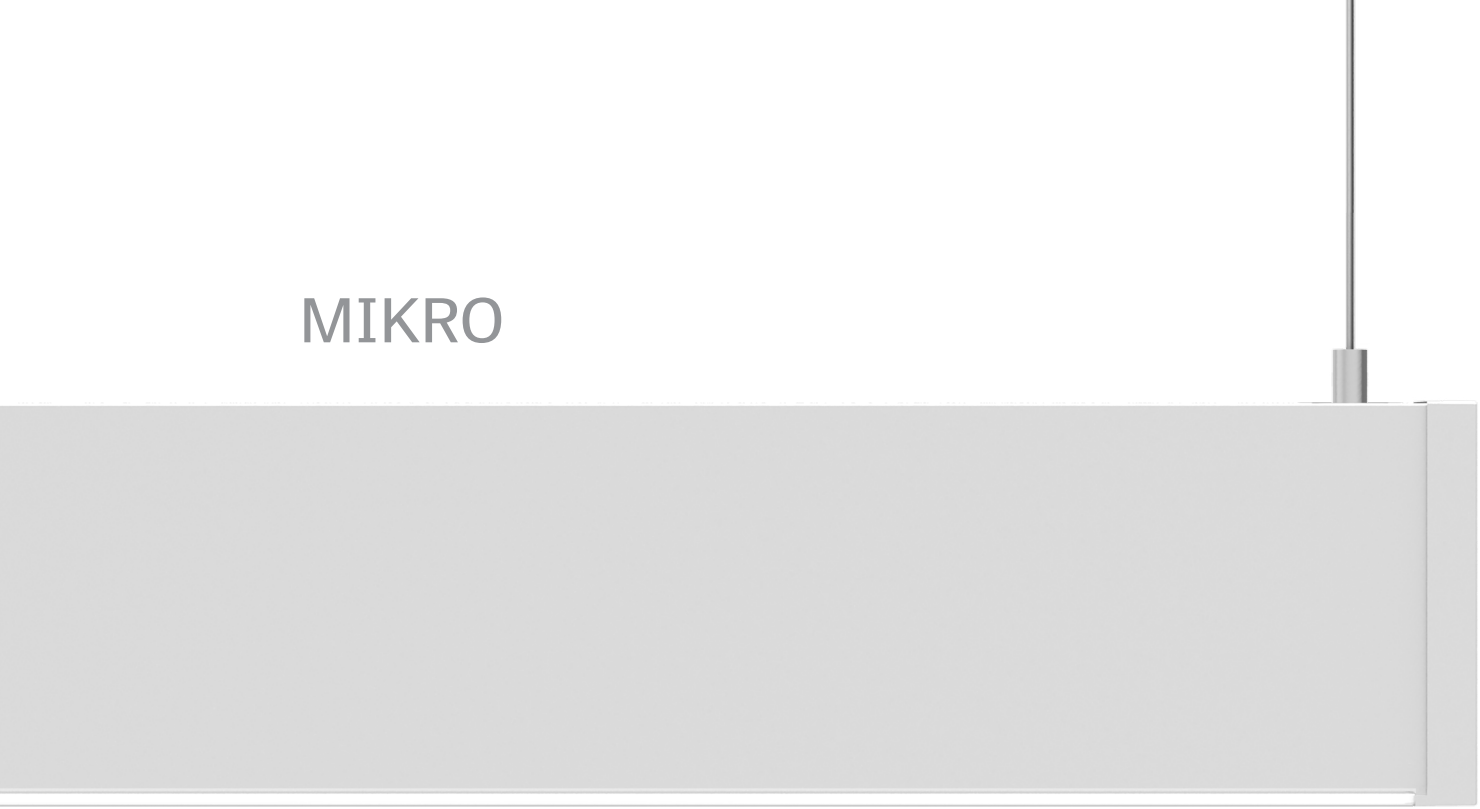
Astonishingly slim and elegant. Remarkably practical.

Mikro is to linear lighting what your fine-point marker is to a graphic line: precise, refined, elegant, defined by its very subtlety. Just 1" wide, Mikro presents a crisp, brand new scale made practical by the combination of efficient LED design (117 LPW), integral driver - **Mikrodrive™**, and a wide range of mounting options. Mikro, with its 1" X 2" profile, is offered in recessed, surface, pendant and wall configurations, including patterns. Mikro Plus adds a 1" square diffuser, creating a three-dimensional luminous form.

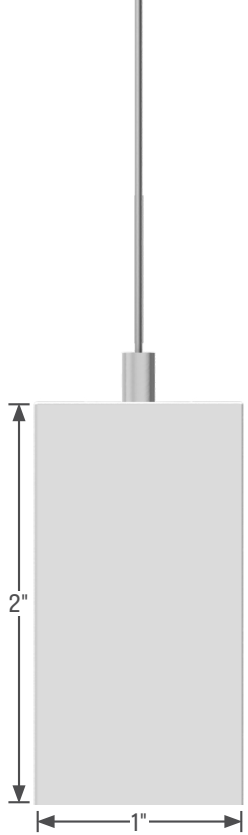
INTEGRATED™
MIKRODRIVE

Mikro pattern recessed

MIKRO



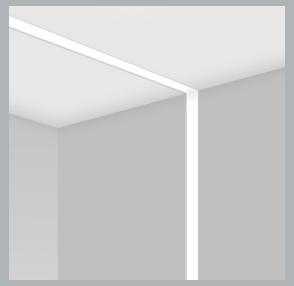
ACTUAL SIZE



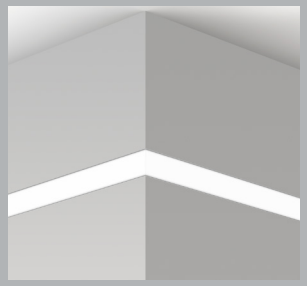
Standard Patterns

In pendant and recessed configurations, you can form patterns with Mikro in a single plane (horizontal or vertical) or turn corners across two planes (around a wall or from ceiling to wall), as illustrated here. Corners are fully lit and virtually seamless, as are continuous runs of Mikro in all configurations.

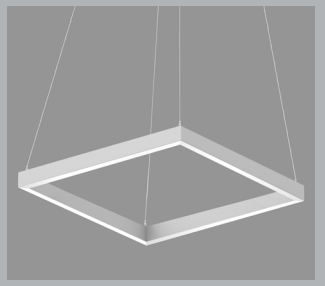
Recessed Leveled



Recessed Inner



Recessed Outer

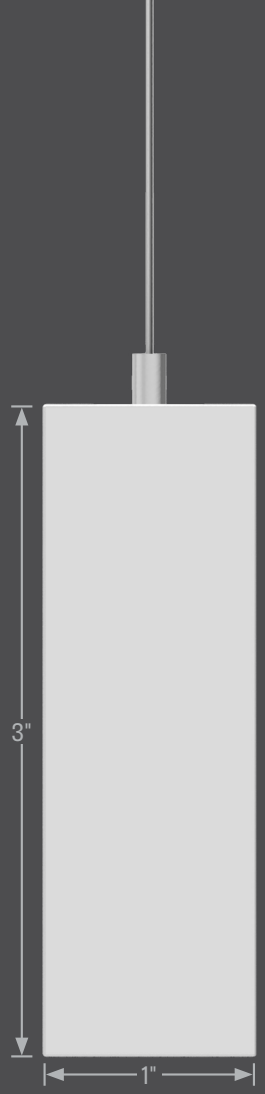


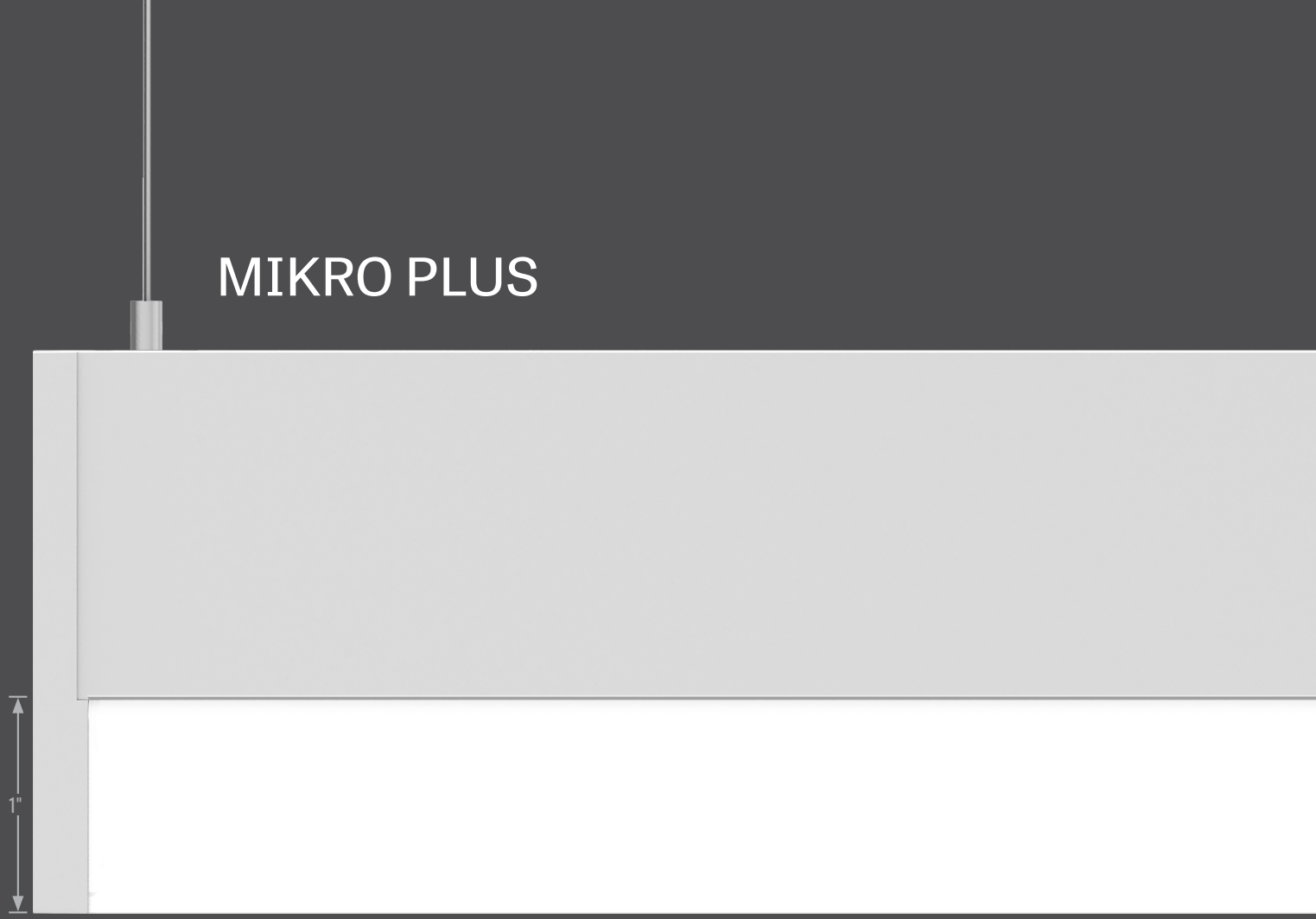
Pendant Leveled

2016 PROGRESS Report SELECTION

MIKRO

MIKRO PLUS

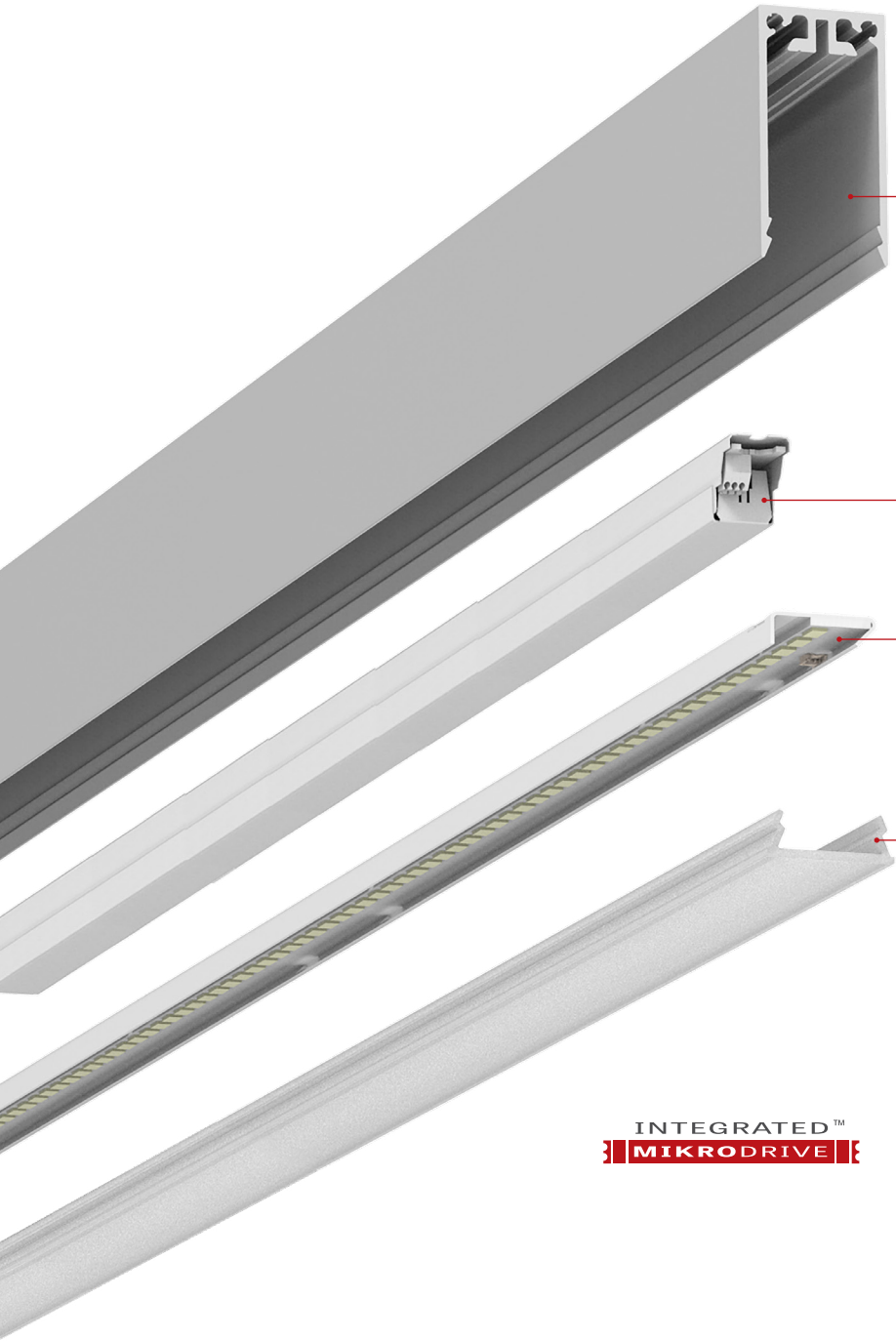




ACTUAL SIZE

ada compliant

MIKRO PLUS



HOUSING

Mikro features a 1" wide extruded aluminum housing with up to 90% recycled content, available in 3', 4', 8' and 12' lengths. End caps and joiner hardware for continuous runs are die-cast.

INTEGRATED DRIVER

The key to Mikro is the fully integrated, ultra-slim **Mikrodrive™** electronic package, which eliminates the need for the remote drivers typical of very small cross-section luminaires. The advanced **Mikrodrive™** features “dim-to-off” functionality, high electrical efficiency, factory-adjustable drive current, and both universal and 347 voltage input. With Mean Time Between Failures (MTBF) of over 100,000 hours, **Mikrodrive™** enjoys long operating life.

LIGHT ENGINE

Cartridge-mounted for easy service and effective thermal management, the Mikro light engine is available in 3000K, 3500K, and 4000K at 80 or 90 CRI. With **Mikrodrive™**, luminaire output ranges from 350-700 lumens per foot at 117 LPW.
With its 0.72" x 0.83" profile, **Mikrodrive™** is about half the size of the typical LED driver. **Mikrodrive™** features factory-adjustable drive current, universal (120-277V) and 347V input, and “dim to off” with 0-10V control. Thorough engineering and high quality components provide long life with over 100,000 hours Mean Time Between Failures (MTBF), high efficiency and high power quality.

DIFFUSER OPTIONS

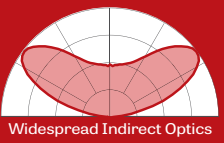
Mikro uses a High-efficiency Lambertian Optic (HLO) that sits flush to the housing. Mikro Plus uses an extended HLO optic, 1" square in profile, which creates a pleasing, three-dimensional luminous form.

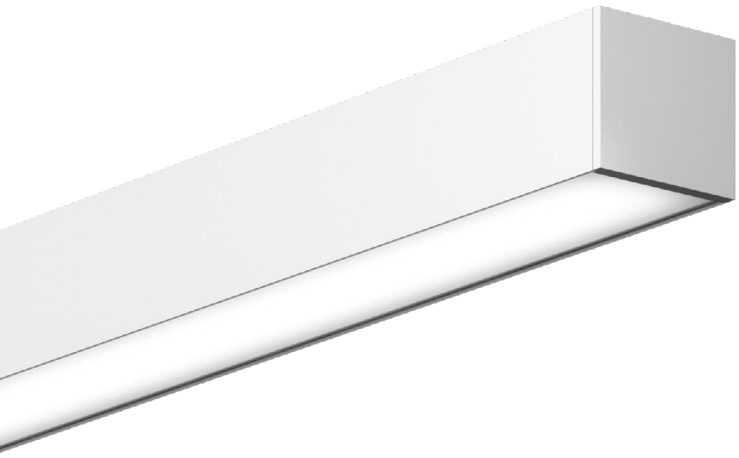
Mikro plus pendant

Via 2 Plus pendant

VIA

Unlimited expression with light





VIA

Via 4 patterns mud flange
recessed drywall

Via is a collection of elegant linear luminaires offering a wide choice of form and function. Each Via family, scaled from a width of 1.5" up to 5", presents a sleek, linear form. Precision optics provide direct, indirect, wall and accent illumination – either singly or in combination. Via modules form continuous lines of light and fully luminous patterns, whether suspended, surface mounted or recessed in the ceiling and wall.

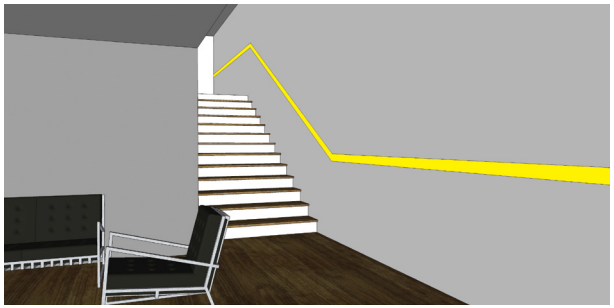
Via is constructed of extruded aluminum, with die-cast end caps and internal joiner hardware. LED cartridges provide both thermal management and easy maintenance. A broad range of installation and electrical options makes Via suitable for architectural applications of any complexity.

LumenWerx uses high-performance mid-power LED technology and has developed optics specifically for this light source, in the compact scale and specialized light distributions of the Via family. These optical elements include precision catadioptric lenses, symmetrical and asymmetrical light guides, and smooth reflectors.

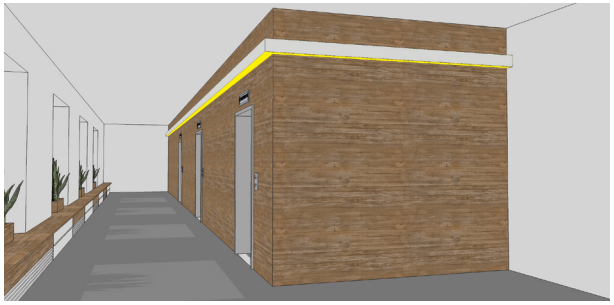
Patterns

Patterns of light transform individual luminaires into an architectural expression of intention, shape, and direction. Via offers fully luminous corners in three different configurations; together they enable Via to form lighted patterns in both two and three dimensions (consult LumenWerx for oblique lit corners).

Leveled Corners are used to form patterns in the the same plane, either ceiling or wall.



Outer Corners create a horizontal transition between two walls or vertical connection between the horizontal and vertical surfaces of a soffit.



Inner Corners create a vertical transition from a wall to the ceiling.

VIA 1.5 & 2

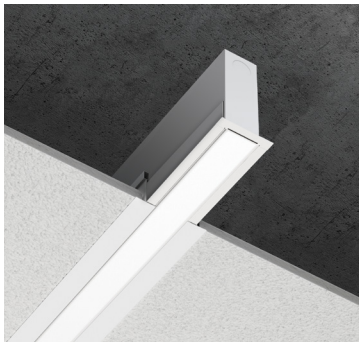
Via 1.5 & 2 are available in all mounting configurations and light distributions. Despite their slim profiles, these Via luminaires provide ample and efficient direct and indirect illumination. As with all products in the family, both Via 1.5 and Via 2 can be arranged in patterns with lit corners in two and three dimensions.

Via 2 and Via 2 plus are also available in T5 & T5HO.

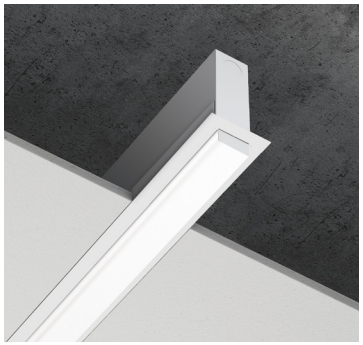
ada compliant

	Direct	Indirect	Direct/Indirect	Asymmetric	Wall Wash
Pendant	●	●	●	●	
Wall	●	●	●	●	
Recessed	●			●	●
Recessed Wall	●				
Surface	●			●	

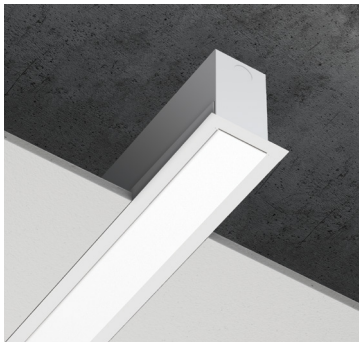
VIA 1.5



VIA 1.5 PLUS

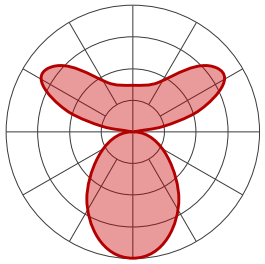


VIA 2



VIA 2 PLUS

Widespread Indirect Light Distribution



Widespread Indirect Optic (WIO) available for Via 2.
For more detailed information see page 9.

Standard Patterns

Corners	Via 1.5	Via 2
Inner	●	●
Leveled	●	●
Outer	●	●

Integrated Track

Track systems, manufactured by others, can be installed in a Via 2 direct/indirect with or without LED integrated sections. Detailed specifications of the track system must be supplied.

CHROMAWERX

Via 1.5 Plus recessed
& Via 2 Plus recessed

VIA 1.5

VIA 1.5 PLUS

VIA 2

VIA 2 PLUS

VIA 3, 4 & 5

VIA 3 (TechZone compatible)

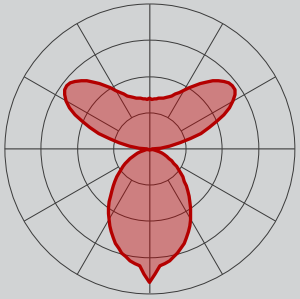
Via 3 is available for recessed ceiling, pendant, surface and wall vertical mounting. A practical luminaire for general illumination, Via 3 provides effective direct, direct/indirect and wall wash light distribution. As with all products in the family, Via 3 can be arranged in patterns with lit corners in two and three dimensions.

Via 3 is also available in T5 & T5HO.

VIA 3

compliant

CHROMAWERX

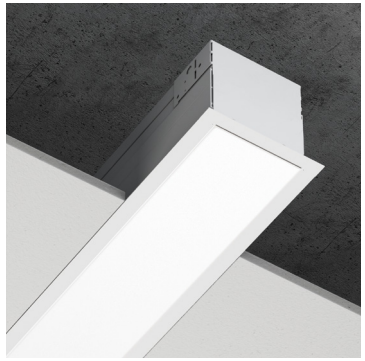


Widespread Indirect Light Distribution

The LumenWerx Widespread Indirect Optic (WIO) uses two vertically oriented LED arrays that couple light into the edges of a linear light guide. A specially designed TIR/microstructure extracts light into the desired “batwing” distribution. Peak intensity hits at 125° while suppressing direct uplight. Peak-to-zenith intensity ratio is 2:1, outstanding for a narrow luminaire. The Widespread Indirect Optic produces noticeably smoother ceiling brightness than a typical lambertian uplight distribution, permitting generally wider spacing as well.

Image - Jonathan Allen Studio, Via 4 recessed

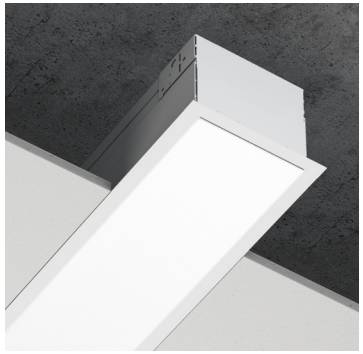
VIA 4



Via 4 is available in all mounting configurations and light distributions. Given its size, Via 4 is the choice for multiple luminaire configurations and high luminous efficacy. As with all products in the family, Via 4 can be arranged in patterns with lit corners in both two and three dimensions.

VIA 4

VIA 5 (TechZone compatible)



Via 5 is available for pendant, wall, surface, recessed ceilings, and recessed wall vertical mounting. As with all products in the family, Via 5 can be arranged in patterns with lit corners in both two and three dimensions.

VIA 5

Via 4 & 5 are also available in T5 /T5HO & T8.

VIA 3	Direct	Indirect	Direct/Indirect	Asymmetric	Wall Wash	COB/MR
Pendant	●	●	●	●		●
Recessed	●			●	●	●
Recessed Wall	●					
Wall	●	●	●	●		
Surface	●			●		●

VIA 4	Direct	Indirect	Direct/Indirect	Asymmetric	Wall Wash	COB/MR
Pendant	●	●	●	●		●
Recessed	●			●	●	●
Recessed Wall	●					
Wall	●	●	●	●		
Surface	●			●		●

VIA 5	Direct	Indirect	Asymmetric	Wall Wash	COB/MR
Pendant	●	●	●		●
Recessed	●		●	●	●
Recessed Wall	●				
Wall	●	●	●		
Surface	●		●		●

Standard Patterns

Corners	Via 3	Via 4	Via 5
Inner	●	●	●
Leveled	●	●	●
Outer	●	●	●

VIA PERIMETER & SKIM

Lighting vertical surfaces

Energy efficient, attractive, and flexible linear systems for perimeter illumination, and wall grazing.

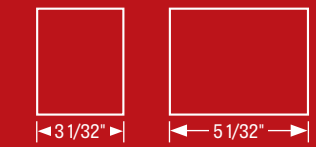
Perimeter recessed

VIA PERIMETER

2016 PROGRESS Report SELECTION

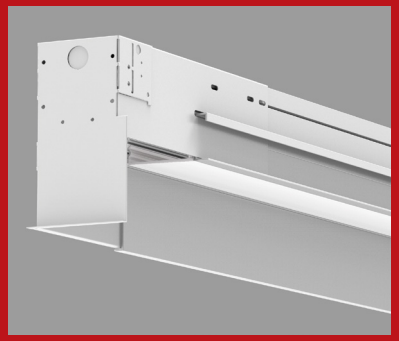
CHROMAWERX

The entirely new Via Perimeter creates a compact and continuously illuminated “slot” at the wall/ceiling intersection. Via Perimeter is available in both Via 3 and Via 5 recessed families.

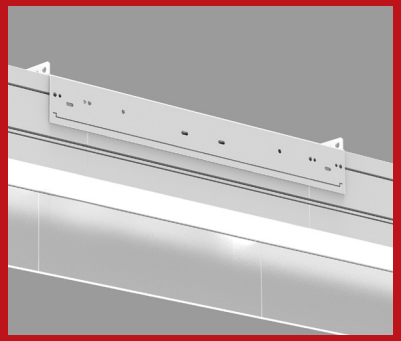


Adjustable Sleeve

Lit corners with an adjustable end and middle sleeves turn inside and outside corners and adjust to walls of any length. The Lumenwerx High-efficiency Lambertian Optic (HLO) provides a smooth and soft light distribution.

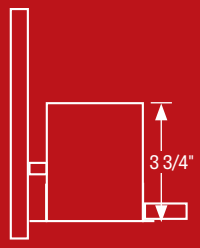


End Sleeve

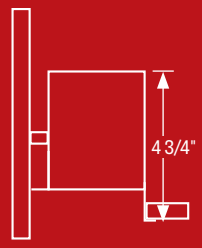


Mid Sleeve

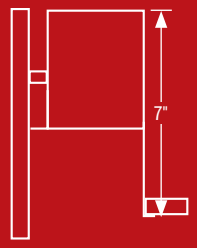
Via Perimeter installs in grid or drywall ceilings in a choice of three arrangements: level with the ceiling plane, with a shallow 1" regress above the ceiling, and with a deep 3 ¼" regress. Total recessed depth ranges from 3 ¾" to 7".



Levelled



Shallow



Deep

PERIMETER

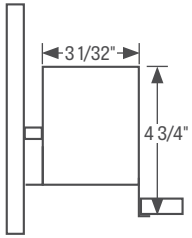
Via Skim recessed

VIA SKIM

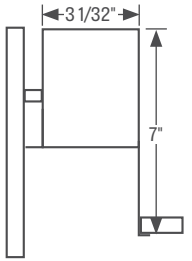
Designed to illuminate textured or polished vertical surfaces with a grazing light from the wall/ceiling intersection. Skim provides continuous illumination across the wall surface, including fully luminous corners.

The intense grazing light distribution is achieved with our Grazing Reflector Optic (GRO) oriented to project light with maximum luminous intensity at 5 degrees from nadir.

Via Skim is available in a 3" Recessed configuration with two depth options: shallow, and deep. Total recessed depth ranges from 4¾" to 7".



Shallow



Deep

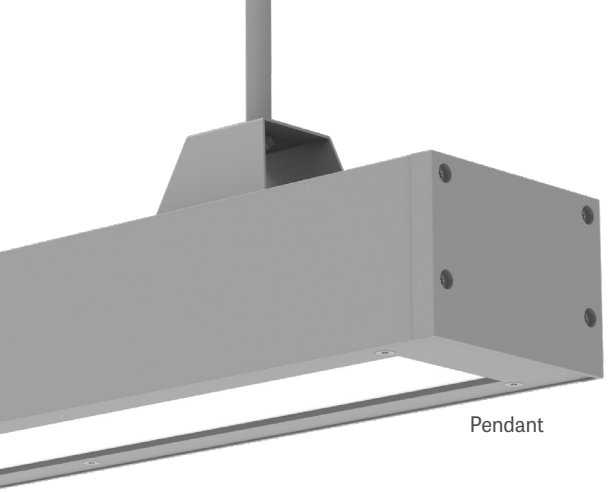
SKIM

23

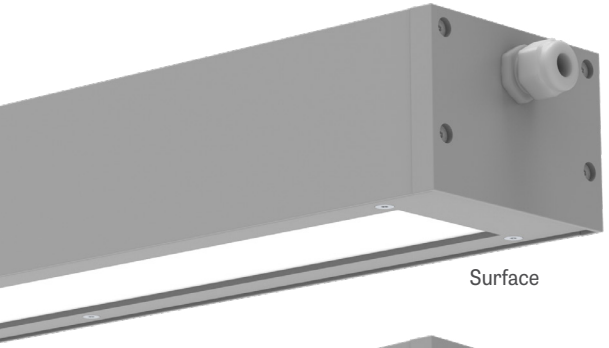
VIA SPLASH

Lighting that performs in demanding environments

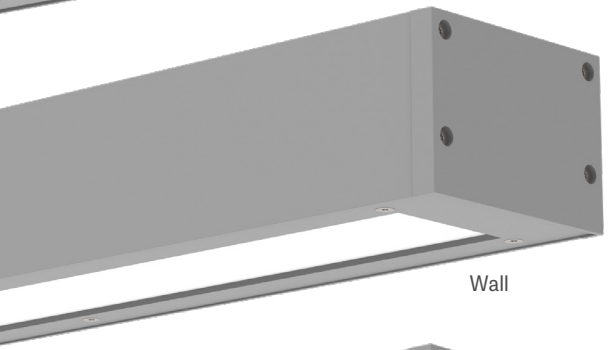
IP66
Water & Dust



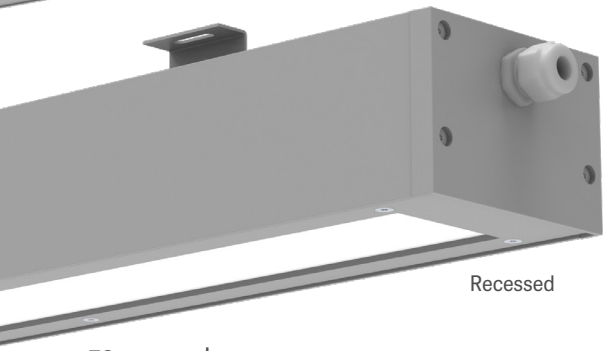
Pendant



Surface



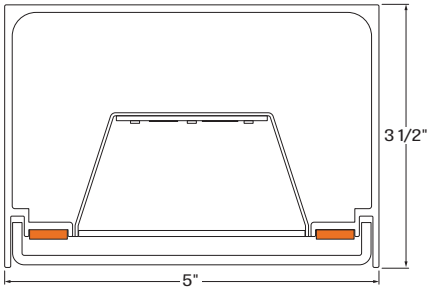
Wall



Recessed

Via Splash, with its IP66 rating, offers energy-efficient architectural lighting for demanding wet locations in both exterior and interior applications.

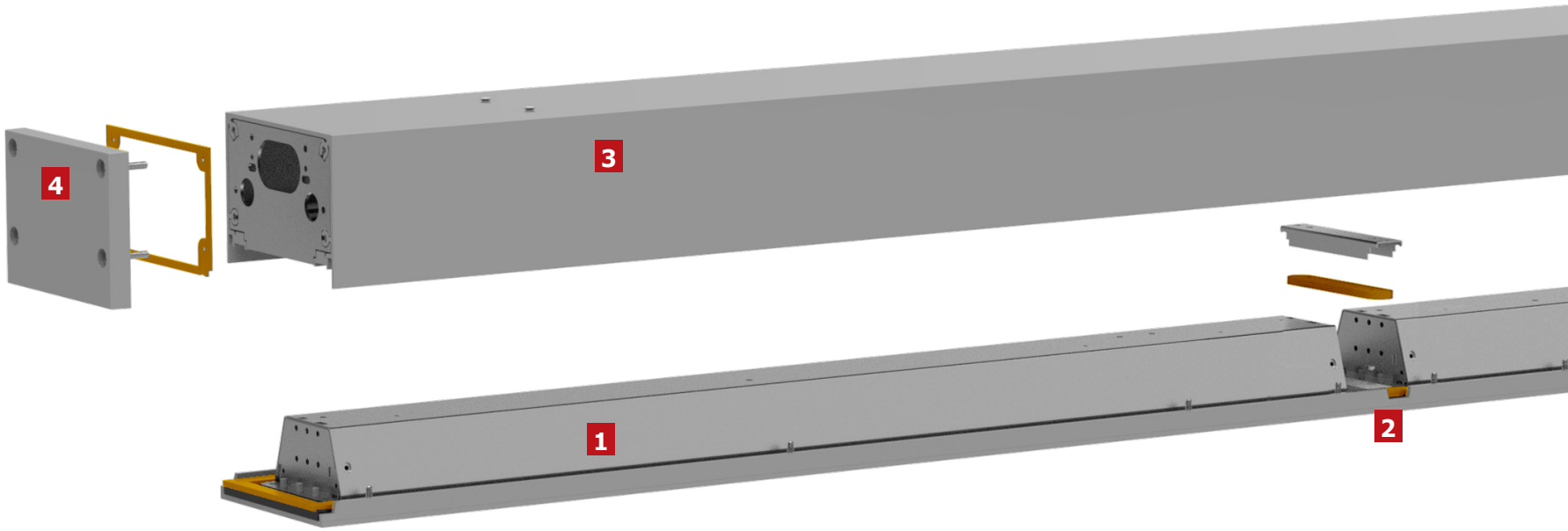
The simple 3 1/2" by 5" housing of extruded aluminum is fully sealed and available in lengths up to 12'.



Suitable for temperatures from -20°C/-4°F to 40°C/104°F, Via Splash can be installed in pendant, surface, wall and recessed applications.

Light output ranges from 500 to 1000 lumens per foot with color temperatures up to 5000K. Multiple electrical, emergency and control options are available.

VIA SPLASH



(1) LENS ENCLOSURE & LED CARTRIDGE

Removable, double-gasketed lens enclosure permits access to LED cartridge and driver for maintenance. Custom linear LED array, cartridge-mounted for easy maintenance and effective thermal management

(2) BRIDGE

Provides secure IP66 seal between 4' enclosure/optic elements in longer housings

(3) HOUSING

Fully sealed IP66 rated housing is constructed of extruded aluminum and is available in lengths up to 12'

(4) END CAPS

End caps are die-cast aluminum and fully gasketed.

Via Splash is available in two enclosures, a clear tempered glass (TMG) or a clear, UV stabilized polycarbonate (PYC) protective enclosure as well as two optics.

The Precision Micro Optic (PMO) option utilizes a special catadioptric lens with a two-dimensional array of prisms designed to eliminate glare while maintaining high efficiency and clean luminous appearance. The High efficiency Lambertian Optic (HLO) option uses a diffuser that combines 88% transmission with good source obscuration.

Via Splash optics and protective enclosures are provided in lengths up to 4'. A 12' housing, for example, contains three optic/enclosure elements; the bridge between each element assures IP66 protection.

IP66
Water & Dust

Protected against damage from dust and high-pressure jets of water. Compared to IP65, that's over three times the pressure and eight times the volume of water!

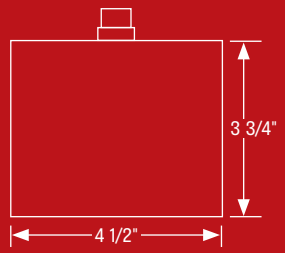
Via Wet recessed

VIA WET

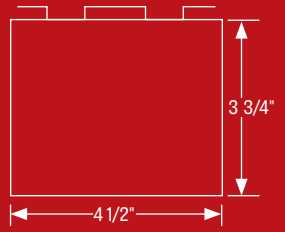
Architectural lighting for challenging applications

Via Wet extends energy efficient and attractive architectural lighting to wet locations, outdoors and indoors. With a simple 3 ¾" high by 4 ½" wide profile of extruded aluminum, Via Wet can be installed in all typical applications: recessed ceiling, wall, or pendant mounting.

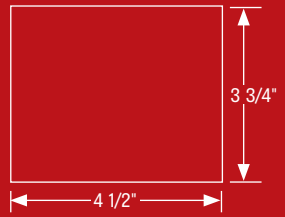
Fully sealed and listed for Wet Locations, Via Wet is suitable for extreme weather condition, from -20°C/-4°F to 40°C/104°F. A choice of LED light output options provides up to 1000 lumens per four-foot section. A full range of electrical options is available, including dimming drivers. Via Wet also supports fluorescent sources.



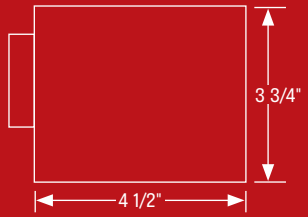
Pendant



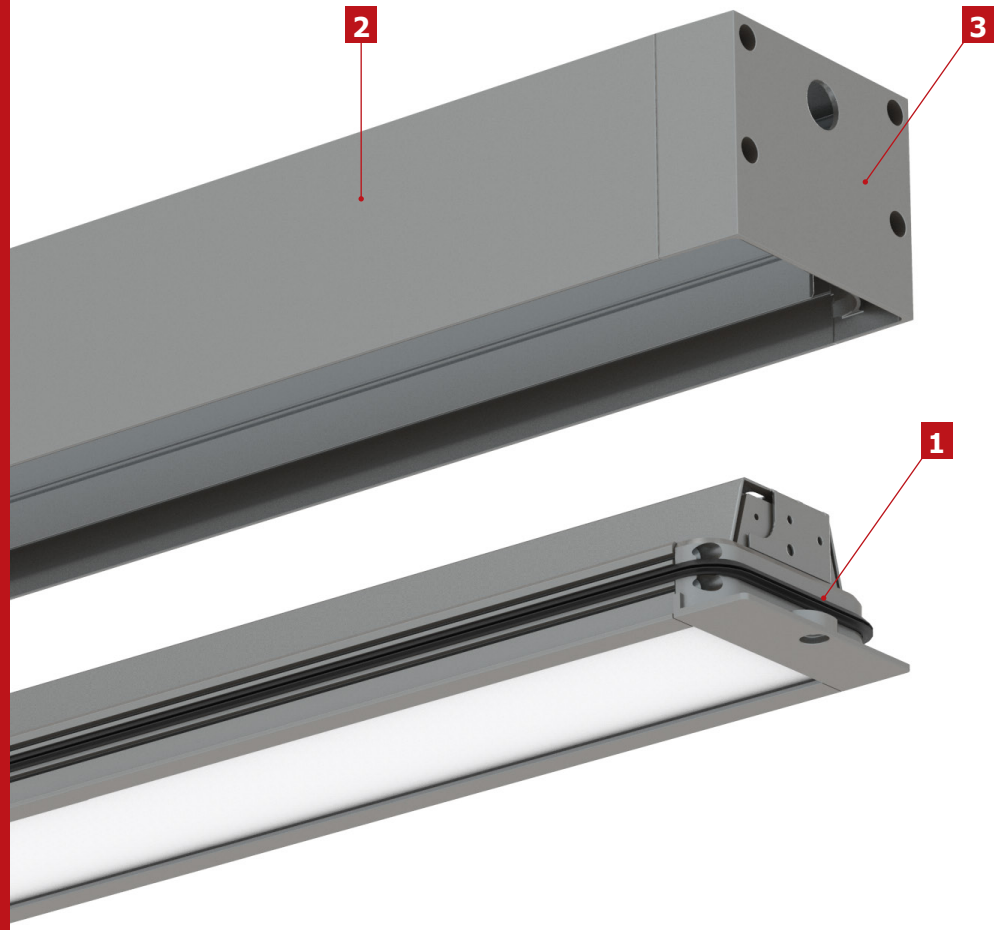
Recessed



Surface



Wall



(1) LENS & LED CARTRIDGE

Removable lens enclosure permits access to LED optical cartridge and driver for maintenance.

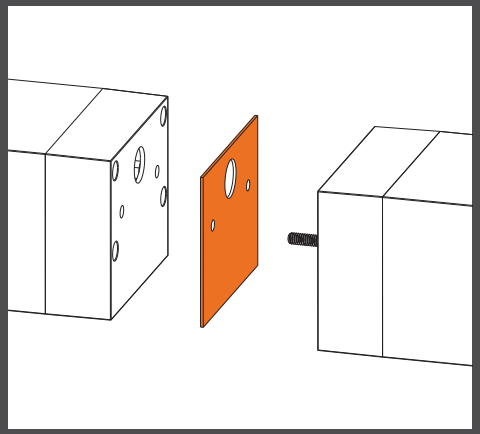
(2) HOUSING

Housing is constructed of extruded aluminum.

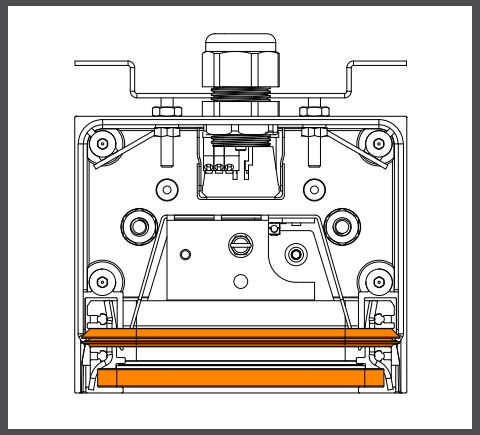
(3) END CAPS

End caps are die-cast aluminum.

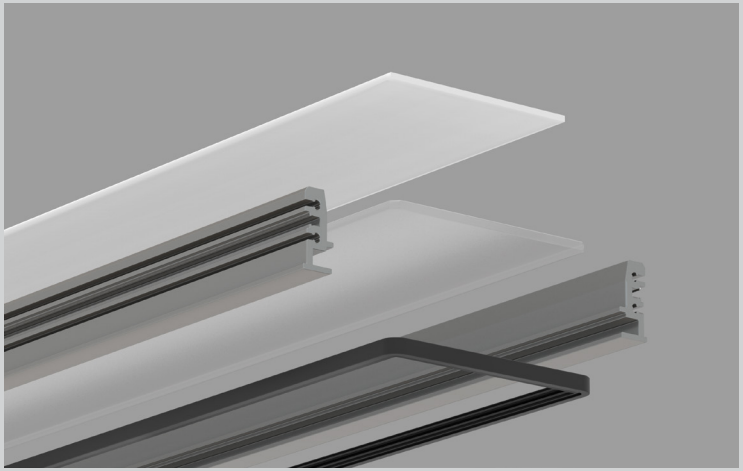
VIA WET



Via Wet modules can be joined cleanly and securely for continuous runs in all configurations.



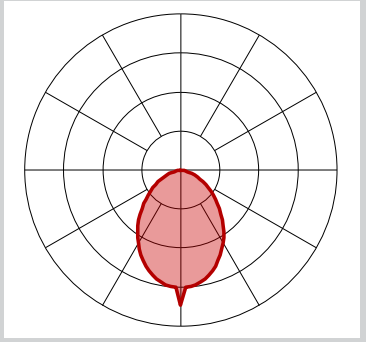
Lens and enclosure are securely sealed with inner and outer silicone gaskets.



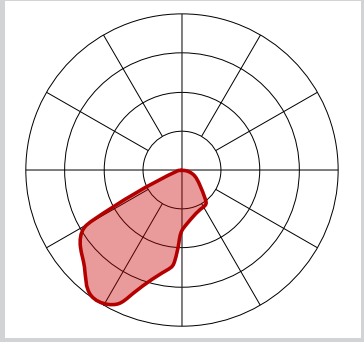
Via Wet is available with a choice of tempered clear glass (TMG) or a clear, UV stabilized polycarbonate (PYC) protective enclosure, both installed outside of the luminaire optic itself.

The Precision Micro Optic (PMO) option utilizes a special catadioptric lens with a two-dimensional array of prisms, designed to eliminate glare while maintaining high efficiency and clean luminous appearance. The High efficiency Lambertian Optic (HLO) option uses a diffuser that combines 88% transmission with good source obscuration.

Via Wet is offered in both direct and asymmtric distributions.



direct



asymmetric

CAVA-T

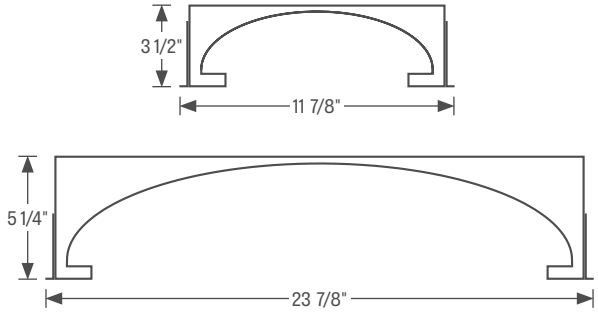
A pleasant canopy of gentle luminescence

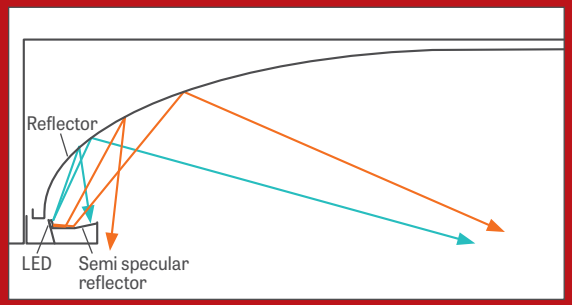
Cava-T 2'x2' recessed

Cava-T provides a pleasant canopy of gentle luminescence that brightens everyday work spaces as well as special areas, such as reception, conference rooms, and executive offices.

Cava-T is available in 1x4 and 2x2 modules for a variety of ceiling conditions. All variations are compatible with the full range of electrical and LumenWerx Connected options.

With its smooth, gently curved concave reflector and uniform luminosity, Cava-T is an ideal vehicle for ChromaWerx color tuning in education, office, and healthcare applications where modular recessed luminaires are used.





Cava-T utilizes the LumenWerx Reduced Luminance Optic with fully shielded LED arrays and a combination of direct and indirect reflectors. The direct side reflectors of semi-specular aluminum distribute light from vertically mounted LED arrays. The indirect upper reflector of matte white painted aluminum creates Cava-T's distinctive, gentle luminosity.

High reflectivity materials and advanced LED emitters achieve efficacies up to 118 lumens per watt. LED arrays and driver are both serviceable from below.

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	21	2500	118
medium output	4000K	30.5	3500	114
high output	4000K	41	4500	110
ultra high ouput	4000K	46.5	5000	107

(1) LED FRAME

Removable for access to LED arrays.

(2) LED ARRAY

Side-mounted LED arrays are precisely positioned direct light to the combination RLO optic.

(3) DUST COVER

Clear acrylic.

(4) SIDE REFLECTOR

Semi-specular 98% reflective internal reflectors distribute the light across the central domed reflector, creating uniform luminance.

(5) CENTRAL REFLECTOR

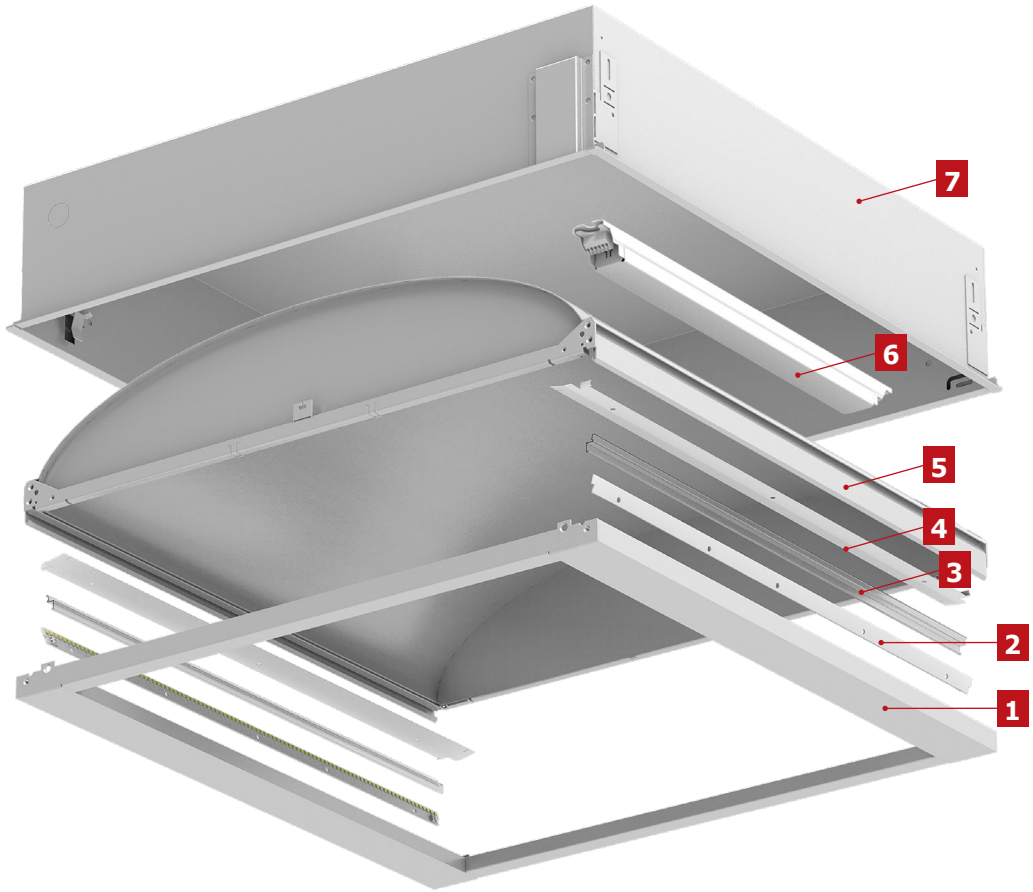
Die-formed aluminum, 98% reflective, matte white finish creates distinctively uniform luminous appearance Removable for access to driver.

(6) LED DRIVER

Factory-set, adjustable output current electronic driver with 120-277V AC line input. Dimmable from at least 100%-1% with 0-10V control.

(7) HOUSING

Die-formed 20 Ga. cold-rolled steel, matte white powder coat finish.



CHROMAWERX

CAVA-T

Primo 2'x2' recessed
CMO round & square

PRIMO

Subtle. Distintive. Practical. Sustainable

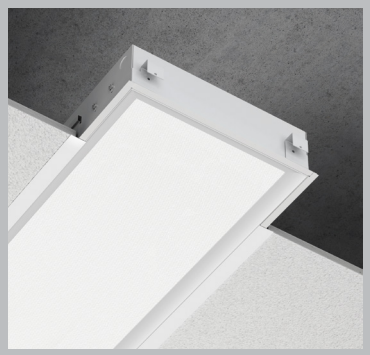
The distinguishing element of the Primo design is its unique Concentric Micro-prism Optic, achieved by precision molding of two different Micro-prism configurations. Precise optical design and molding allow the use of very high transmission acrylic. This results in luminous efficacy above 100 LPW, while maintaining excellent diffusion of the individual LED sources, gentle volumetric brightness, and overall visual comfort. Primo is practical enough to be used throughout an office, education, or healthcare facility.

PRIMO

PRIMO 2x2 PMO

PRIMO 2x2 CMO SQUARE

PRIMO 2x2 CMO ROUND



PRIMO 1x4 PMO

PRIMO 1x4 CMO

Primo's pattern stimulates and enlivens architectural spaces. It presents a subtle geometry: square within a square, circle within a square. Yet Primo is distinctive enough to create a scintillating impression. Primo recessed 2x2 and 1x4 luminaires can be installed in all ceiling types and provides effective illumination using specially developed advanced LED technology for sustainable lighting. With our ultra-precise Micro-Prism optics, Primo is both energy efficient and comfortable.

PRIMO

CHROMAWERX

(1) LENS

Concentric Micro-prism Optic (CMO), or Precision Micro-prism Optic (PMO), ⅛" thick, supported by splay edge on lens frame. See Optics for details on page 9.

(2) LENS FRAME

Extruded 0.07" thick aluminum for precise alignment and the elimination of light leaks. Integral reflectors with 95% reflective finish.

(3) RETAINER CABLE

Supports lens frame during maintenance.

(4) LED ARRAY

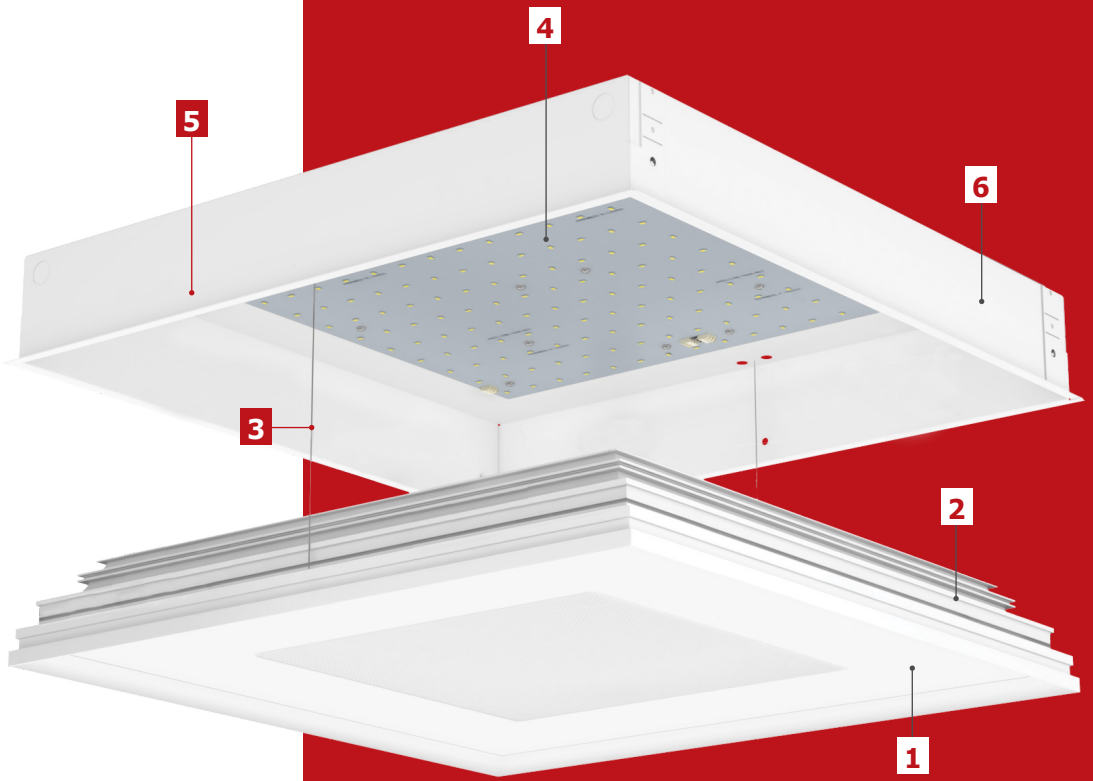
Mid-power LED's, direct-mounted to luminaire housing for thermal dissipation. Spaced for uniform illumination of the optical cavity. Replaceable, with quick-connect wiring.

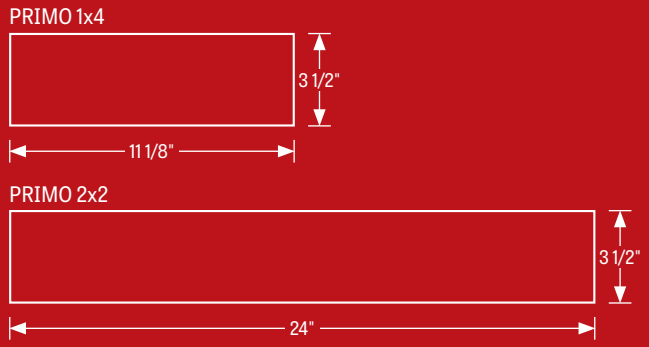
(5) LED DRIVER

High-efficiency driver with adjustable drive current, directly mounted to luminaire housing for thermal dissipation. Concealed behind the lens frame, driver is easily reached for maintenance.

(6) HOUSING

Die-formed 20 Ga. cold-rolled steel, post-painted. Quick-access plate and integral seismic hold-down fasteners. Matte white powder coat finish.





Nova Flat 2'x2' recessed

NOVA & VEGA

Performance and comfort

Nova and Vega are recessed LED luminaires designed for office, education, and healthcare facilities. They feature advanced technology and attractive optical shieldings. Using high-efficiency LED light engines, Nova and Vega provide cost-effective illumination and comprehensive ceiling, electrical, and controls options in 1x4, 2x2, and 2x4 sizes.

The key to this luminaire design is an optical system that distributes light softly around the space, while balancing luminaire brightness for a high degree of visual comfort. Carefully articulated shieldings effectively resolve the concentrated LED array without creating distinct areas of brightness and shadow on the face of the luminaire. Overall luminaire brightness is controlled by the generous shielding area-to-flux ratio and a gentle gradient from center to edge.

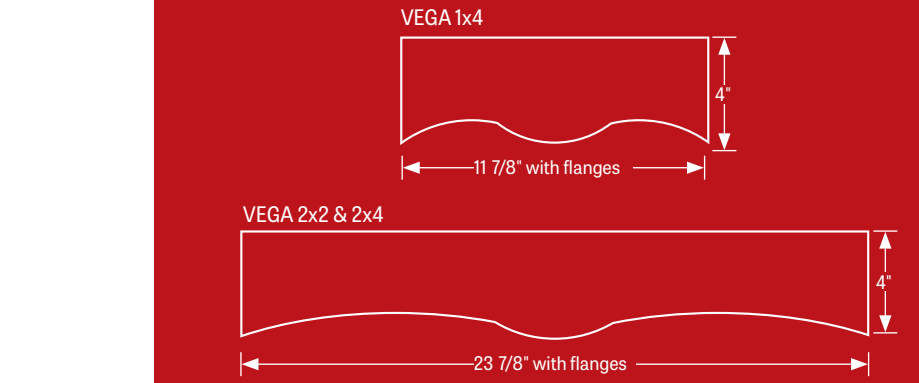
VEGA

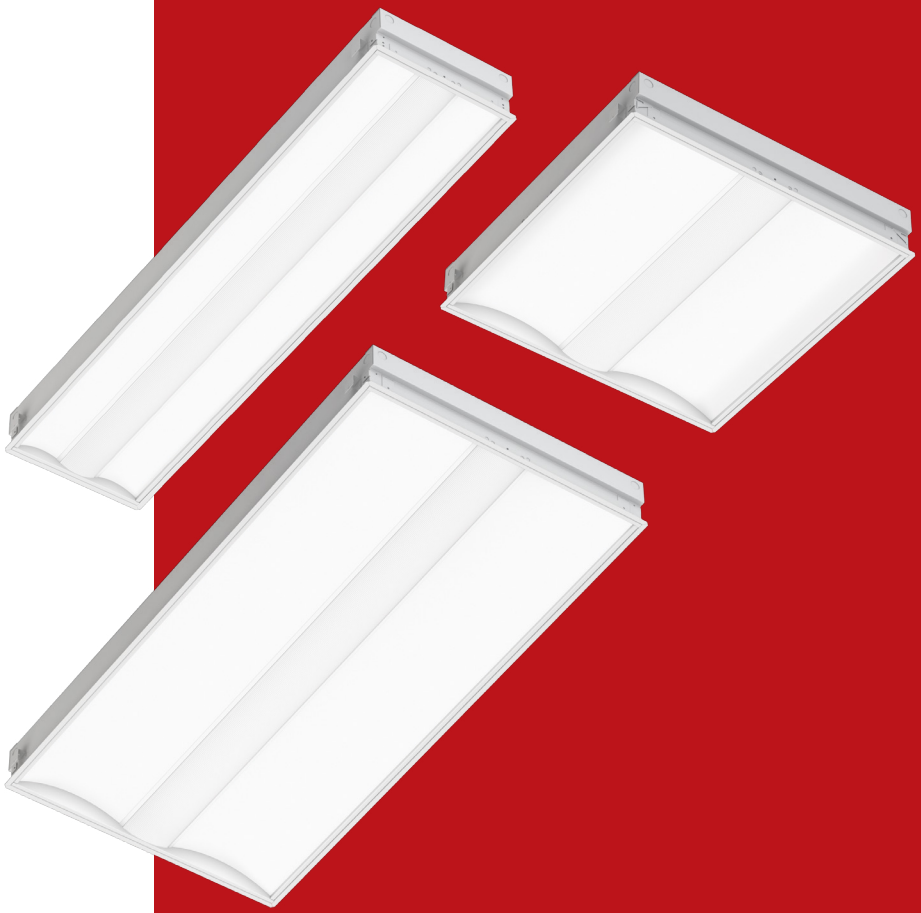
Vega features a gently curved shielding, composed of two elements. The Median Textured Optic (MTO) is a convex, ribbed diffusing element, flanked by High-efficiency Lambertian Optics (HLO). These concave side panels of diffusing 0.075" thick acrylic provide minimum 88% transmission and good source concealment. Placement of the LED arrays and shielding contours are optimized for luminaire efficacy, comfort, and visual appeal. A hinged center basket contributes to easy and time-saving maintenance.

Vega is also available in T5 /T5HO & T8.

VEGA

CHROMAWERX





Nova Slope 2'x2' recessed

NOVA

Nova features both flat and slope shielding, composed of two elements. The central Precision Micro-prism Optic (PMO) is 0.125" acrylic, molded into pyramidal prisms with a 0.04" square base. The specially designed catadioptric lens integrates refraction and internal reflection to achieve superior optical efficiency and comfort. PMO provides 94% transmission overall with outstanding high-angle brightness control. Two side elements of High-efficiency Lambertian Optic (HLO) are 0.075" thick acrylic provide minimum 88% transmission and good source concealment. A hinged center basket contributes to easy and time-saving maintenance.

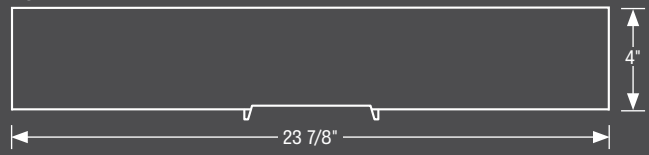
Nova is also available in T5 /T5HO & T8.

NOVA

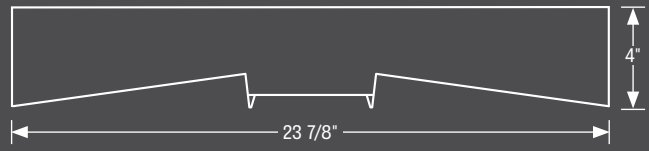
CHROMAWERX

Flat and slope diffusers are available for all Nova sizes, 1'x4', 2'x2' and 2'x4'

NOVA FLAT



NOVA SLOPE



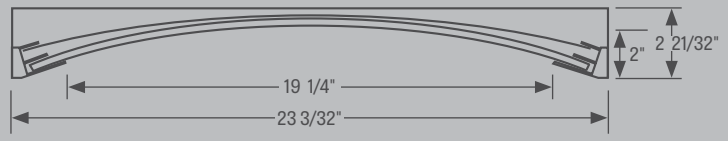
SIDEVIEW

Gracefully curved and uniformly luminous

SideView 2'x2' recessed

SIDEVIEW

Pleasing Light in Three Dimensions



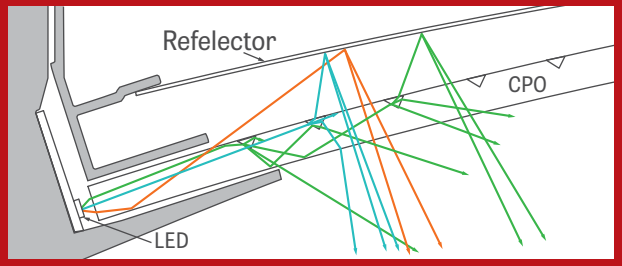
SIDEVIEW

SideView delivers visually comfortable and notably pleasant general illumination with an uncommonly even luminous surface. This attractive and comfortable lighting result comes from our innovative LumenWerx Compression Planar Optic.

With the LED flux side-coupled directly into the optical panel, the SideView housing is very shallow, less than 2 ¾" deep. Despite its minimal depth, the Sideview's gently curved concave optic seems to disappear up into the ceiling.

SideView offers three lumen packages, from 2000 to 4000 lumens, with luminaire efficacy up to 87 LPW. The custom LED arrays maintain the three color temperature options within three SDCM.

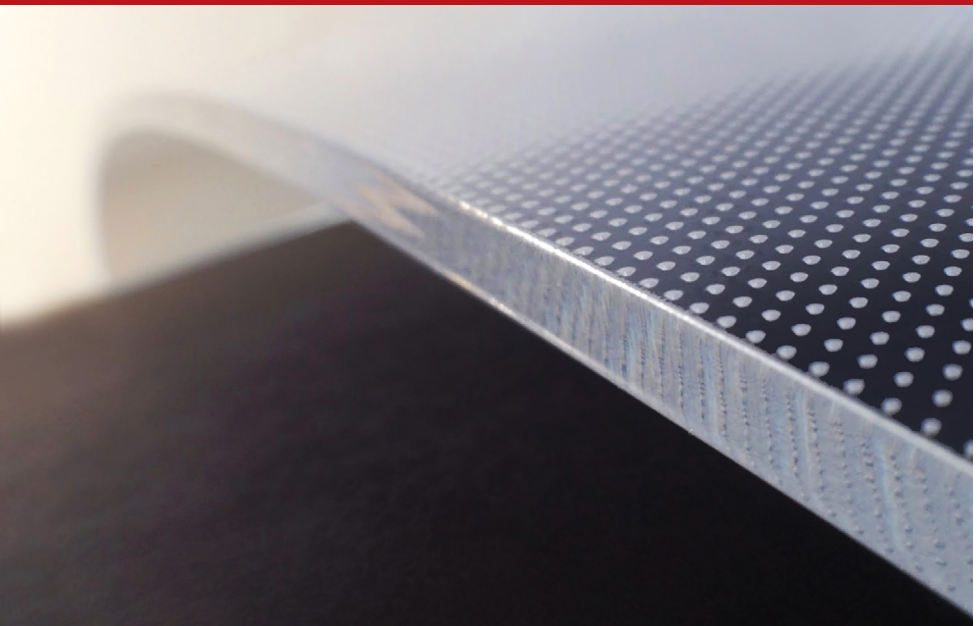
Dimmable drivers, either digital or analog, are standard. They operate the LED's at reduced temperatures, achieving L80 beyond 60,000 hours. Clean detailing assures compatibility with typical ceiling types. Both driver and LED cartridges are field-replaceable.

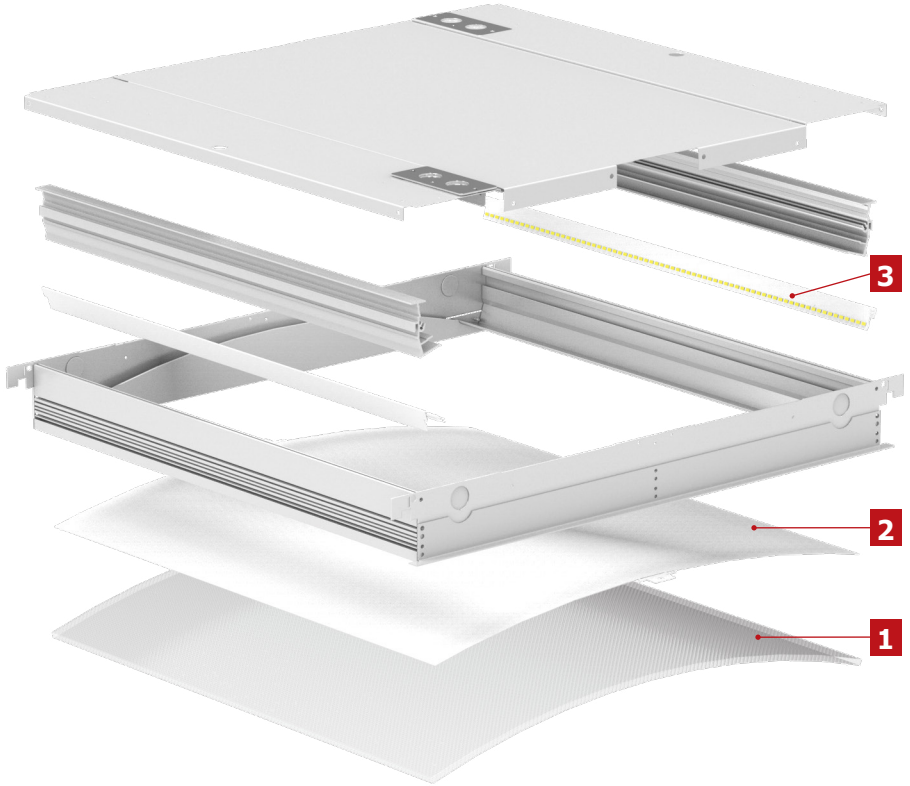


Compression Planar Optics - CPO

SideView's attractive and comfortable lighting result comes from our innovative LumenWerx Compression Planar Optic. Compression Planar Optic represents a new approach to side-lighting: a rigid frame holds the edge-lighted luminous plane into a soft curve with a precise radius. A graduated and finely textured extractive microstructure combined with a contoured upper reflector complete the optical system.

When light is coupled in from the outboard LED arrays, the specific width and curvature of the optical plane redirect light into a soft-shouldered distribution with superior luminous uniformity.





(1) OPTIC

LumenWerx Compression Planar Optic regressed 2".

(2) REFLECTOR

Contoured 20 Ga. CRS matte white finish, 95% reflective.

(3) LED ARRAY

Custom LED array, operating at reduced drive current for improved efficacy and lumen maintenance. LED arrays are concealed within optical frame, direct mounted to thermally-conductive aluminum with low-profile quick connects for continuity and maintenance.

FORTEX

Distinctive and elegantly scaled pendant and wall luminaires

Fortex provides the interesting and crisply detailed forms, ideal for spaces such as conference rooms, executive offices, break rooms, cafeterias, vestibules and lobbies. These gently luminous and elegantly scaled geometric luminaires deliver soft general illumination that is both comfortable and energy efficient. Flexible in configuration, mounting, and light output, Fortex can be easily fitted to spaces of virtually any size and shape.

Fortex 4 pendant direct/indirect

Flexible Design

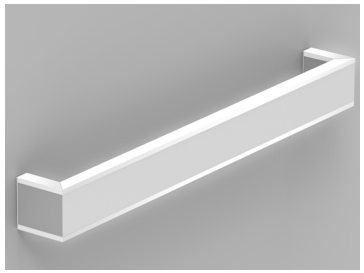
Fortex offers a large family of consistently detailed luminaires for both pendant and wall mounting in models scaled from 18" to 48".

Each luminaire consists of crisp 4 ¼" x 1 ½" extruded aluminum channels, capped by gently glowing optics that extend ½" beyond the housing. Corners are mitered and fully luminous. In addition to standard white and aluminum finishes, custom colors can be specified.

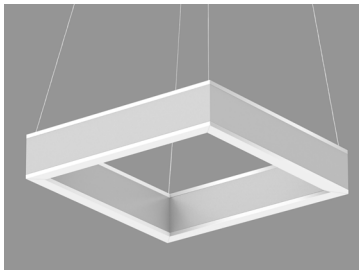
All luminaires are available with a range of light output (up to 750 lumens per foot depending on the model), color, and dimming options. Despite, their elegant dimensions, all Fortex luminaires feature integral drivers. The Fortex family coordinates with Via 1.5 Plus linear luminaires.

FORTEX

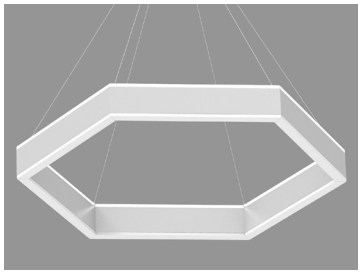
Fortex Vertical forms



Fortex 2 - Wall-mounted vertical form with direct and indirect illumination
Size: 18", 2', 3'& 4'

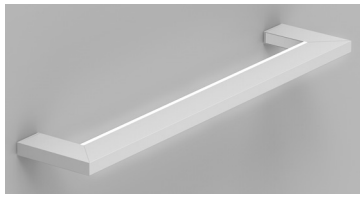


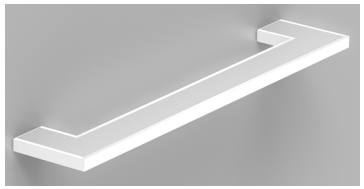
Fortex 4 - Pendant mounted vertical form with a variety of shapes and light distributions.
Size: 2'x2', 3'x3', 4'x4', 1'x4' & 2'x4'



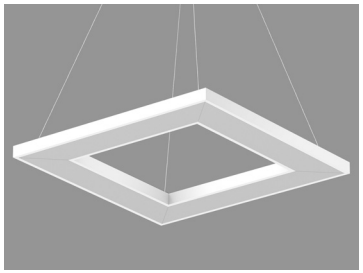
Fortex 6 -Pendant mounted vertical form with a hexagonal configuration.
Size: 50" diameter

Fortex Horizontal forms

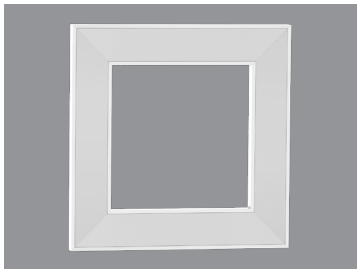




Fortex 1 - Wall-surface mounted horizontal form with inward and outward illumination
Size: 18", 2', 3'& 4'

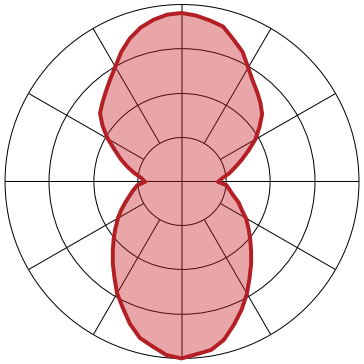


Fortex 3 - Pendant mounted horizontal form with a variety of shapes and light distributions
Size: 18", 3'x3', 4'x4', 1'x4' & 3'x4'



Fortex 5 - wall mounted horizontal form with a variety of shapes and light distributions
Size: 18", 3'x3', 4'x4', 1'x4' & 3'x4'

Light Distribution

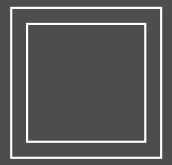


Delivering luminous efficacy as high as 90 LPW, Fortex is both visually interesting and energy efficient. Our high efficiency lambertian optic assures soft illumination, generous enough for general lighting applications.

Fortex 4 pendant direct/indirect

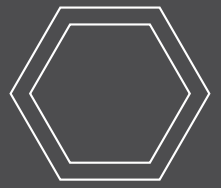
- Fortex 4 pendants offer a choice of square forms in three sizes (up to 48"x48") and two rectangles. All are available in direct, indirect, and direct/indirect light distributions. Fortex 6, with direct/indirect light distribution, provides a large hexagonal form that can be arranged in organic patterns.

All Fortex pendants are supported by aircraft cables connected to a single canopy; a white cord provides power. Fortex 4 and 5 use 5" square canopies; Fortex 6 uses a 5" round canopies. The standard cable length is easily adjusted.



Squares

Rectangles



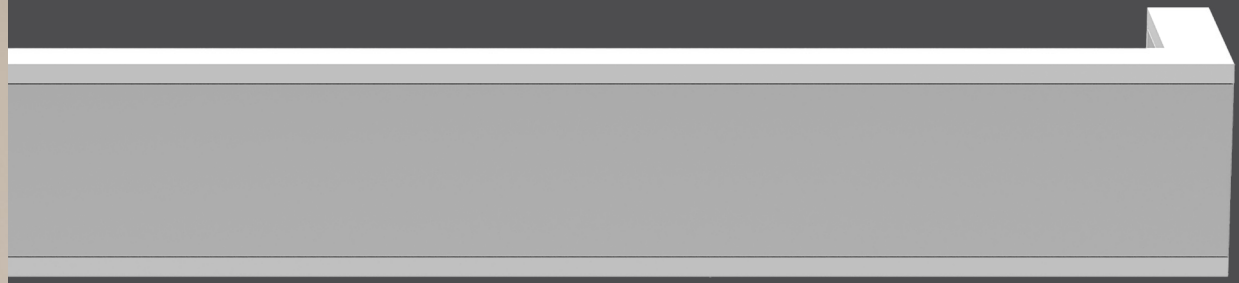
Hexagonal

Fortex 1 wall-surface

Fortex 5 wall

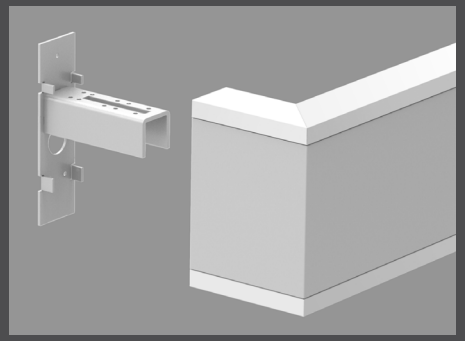
Fortex 3 pendant and Fortex 5 wall convey a fresh and dramatic, planar design. Offered are a choice of square and rectangular forms in five sizes (up to 48" x 48"), all are illuminated inward and outward.

Fortex 2 wall direct/indirect



Fortex 2 wall direct/indirect

Mounting details



Fortex wall brackets are available with either a vertical channel that meets ADA requirements, or a horizontal channel suitable for mounting above 80".

ada compliant

Pop Color round 24" pendant

POP

Fashionably functional . . . and a little fun

Enliven a space with bright, colorful, and efficient POP luminaires. POP is lighting to look at . . . as well as to see by. POP luminaires are offered in a variety of shapes, sizes, colors, and mounting options. With POP, you can easily scale and locate luminaires to fit the design of the space.

Functionally, POP provides comfortable, diffused, and efficient general illumination suitable for working, social and circulation spaces . . . together with the control capabilities required for today's construction. In addition to fixed white light in 3000, 3500, 4000, and 5000K, POP offers a tunable white capability within the range of 2700k to 6500k, adjustable from a simple wall controller.

With up to 14,000 lumens, POP provides serious illumination . . . but not too seriously.

Shapes & Sizes

POP Round offers friendly, elemental geometry in four sizes, with diameters from 12" to 48". POP round can be recessed, surface mounted to ceiling or wall, or suspended.

POP Square provides a crisp form in three sizes: 1'x1', 2'x2', and 4'x4'.

All sizes of round and square shapes are available in three basic configurations.

POP Core features a simple diffuser, that can be surface or pendant mounted.

POP Color, also surface or pendant mounted, surrounds the diffuser with a crisp housing available in a choice of nine standard colors. The diffuser can be installed flush or extending up to 4" below the housing.

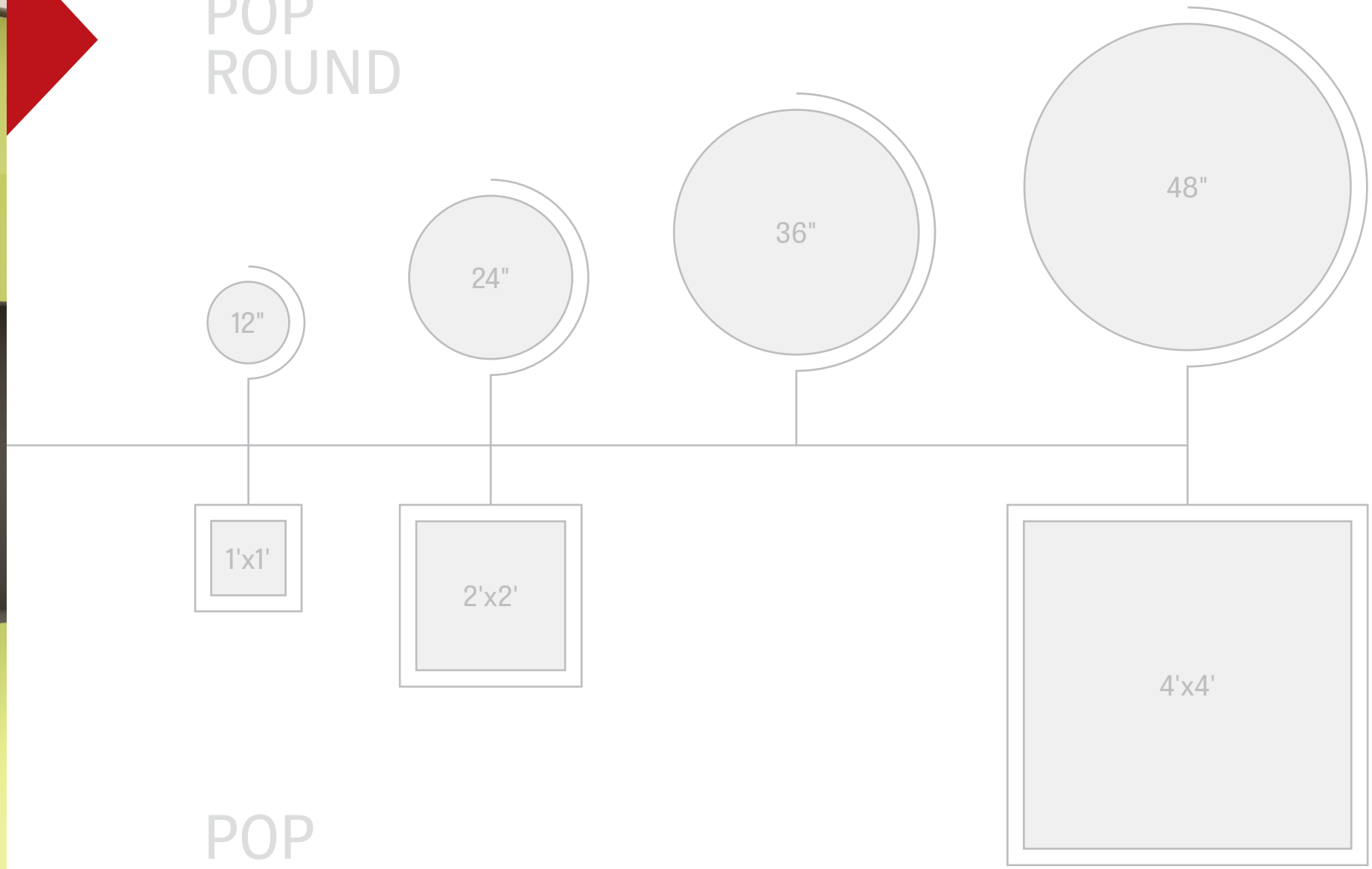
POP Square recessed is available with the diffuser flush to the ceiling or extending up to 4" below.

POP Round recessed is available with a flush diffuser.

Pop Recssed round 24" flush

Pop Core square 1'x1' surface-wall

POP ROUND



POP SQUARE

Light Engine

The fully populated mid-flux LED array fills the optical cavity, assuring uniform luminous appearance without pixilation or shadows. A choice of four color temperatures and 80 or 90 CRI. L80>60,000 hours. POP is available with four lumen outputs, each tuned to provide a consistent appearance (luminous exitance) regardless of size.

Electrical options include dimmable 0-10V and digital drivers, as well as emergency battery packs. Light engine and diffuser form a fully enclosed unit. Both LED array and driver are fully accessible.

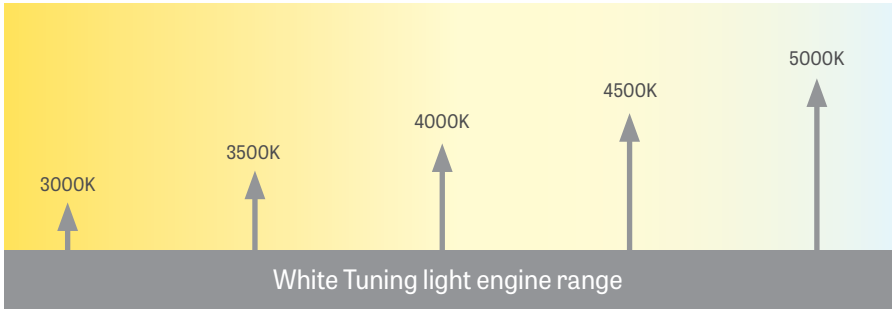
POP	LPW	Round				Square		
Output		12"	24"	36"	48"	1'x1'	2'x2'	4'x4'
Low	117	750	2500	4000	7000	750	2500	7000
Medium	114	900	3500	5500	10000	900	3500	10000
High	111	1100	4500	8000	14000	1100	4500	14000

Values shown at 4000K. Lumen output and efficacy will vary slightly at 3000K, 3500K, and 5000K

CHROMAWERX

CHROMAWERX

POP is also offered with a White Tuning light engine, using two-color LED boards and a two-channel driver that permits independent control of color (with consistent CRI) and output with standard controls.



Pop Core round 24" 3H pendant

POP CORE

Lens

POP Core offers a fully luminous diffusers. Uniformly bright and free of LED pixilation, the translucent acrylic diffuser has no visible hardware. With the light engine, the diffuser forms a fully enclosed unit.

Optics

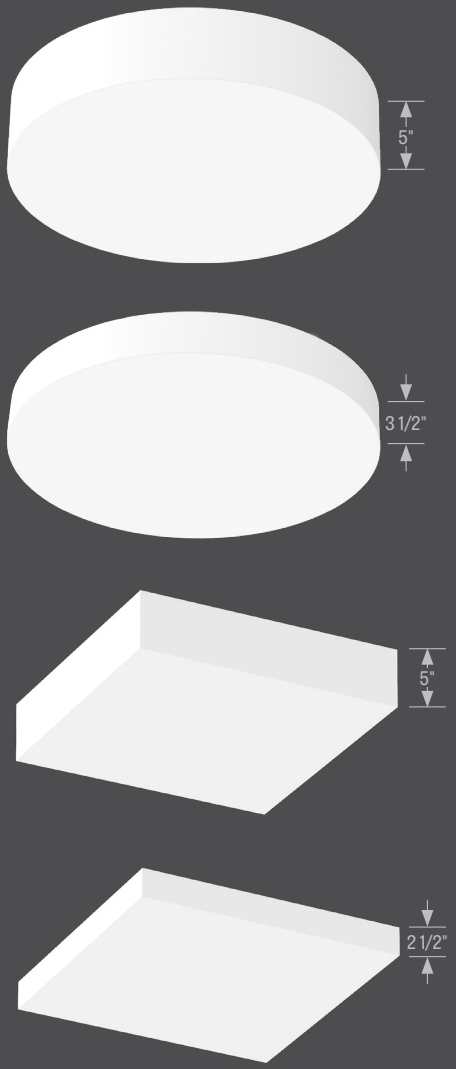
POP Core uses a Uniform Lambertian Optic (ULO) for soft, generous direct light distribution. The pendant is also available with a direct/indirect distribution.

Mounting

POP Core includes a 1 ½" deep mounting pan and is available as a pendant or for installation directly to the ceiling or wall. Pendants are supported by four easy-leveling aircraft cables attached to a single mounting canopy.

POP CORE

Fully Luminous Diffusers



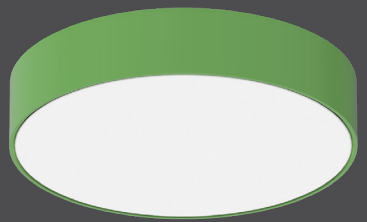
POP COLOR

In some spaces, color makes all the difference. Not the color of white light, so much a part of today's illumination, but pigmented, intriguing, and eye-catching color.

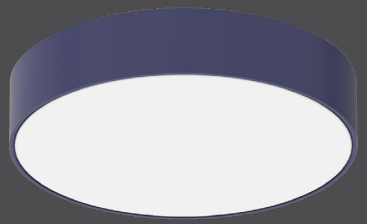
The essence of POP Color is a 4 ¾" deep housing that surrounds the diffuser and can be finished in a vibrant or neutral standard colors or customized. The diffuser can be set flush with the housing or dropped down up to four inches, creating an overall depth of up to 8 ¾", and providing additional visual possibilities of form and lighting effect.

POP Color offers all of the functional features of POP Core, including the full range of sizes, mounting arrangements, lighting and electrical options. And, of course, there's the color!

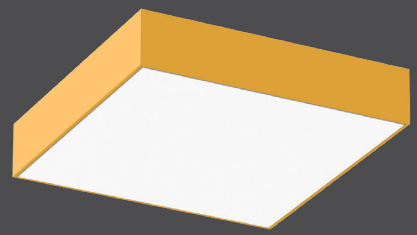
Color Options

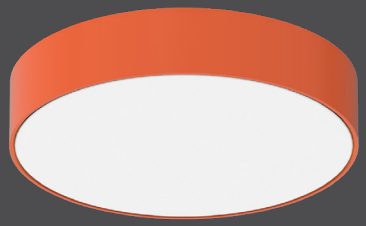


RAL 6018

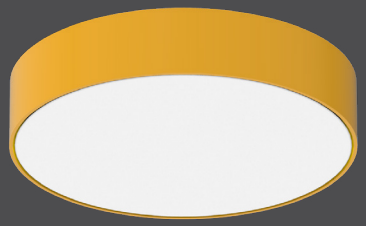


RAL 5002

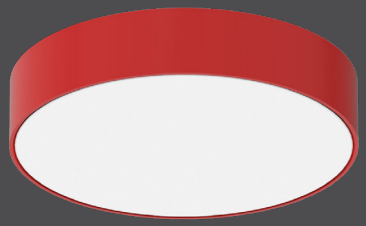




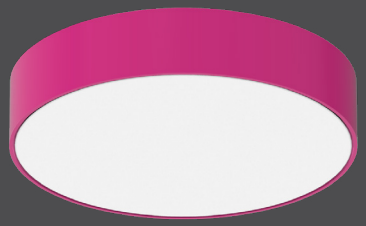
RAL 2004



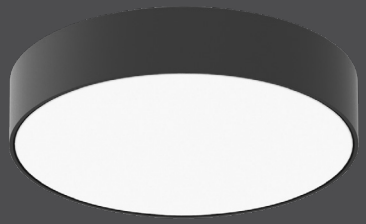
RAL 1028

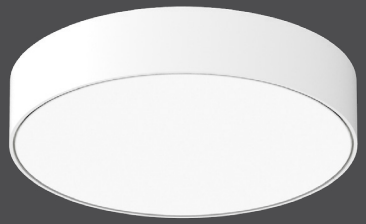


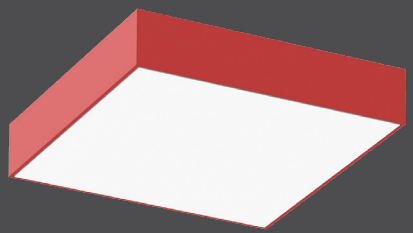
RAL 3020

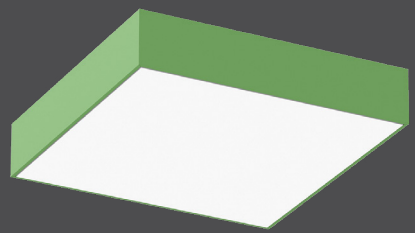


RAL 4010







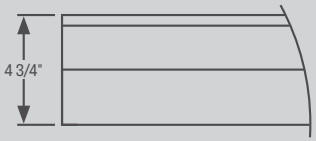


More Pop Color options are available for both Pop Round and Square

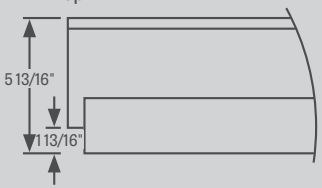
Drop Options

Diffuser location options, for both Pop Round and Square. 3" & 4" drops are only availble for Pop Round 24" & 36" and Pop Square 2'x2'.

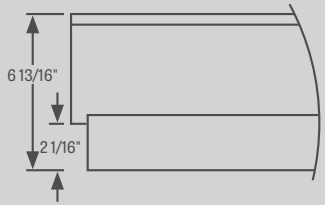
Flush



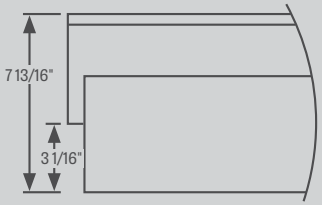
1" Drop



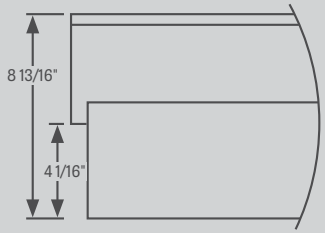
2" Drop



3" Drop

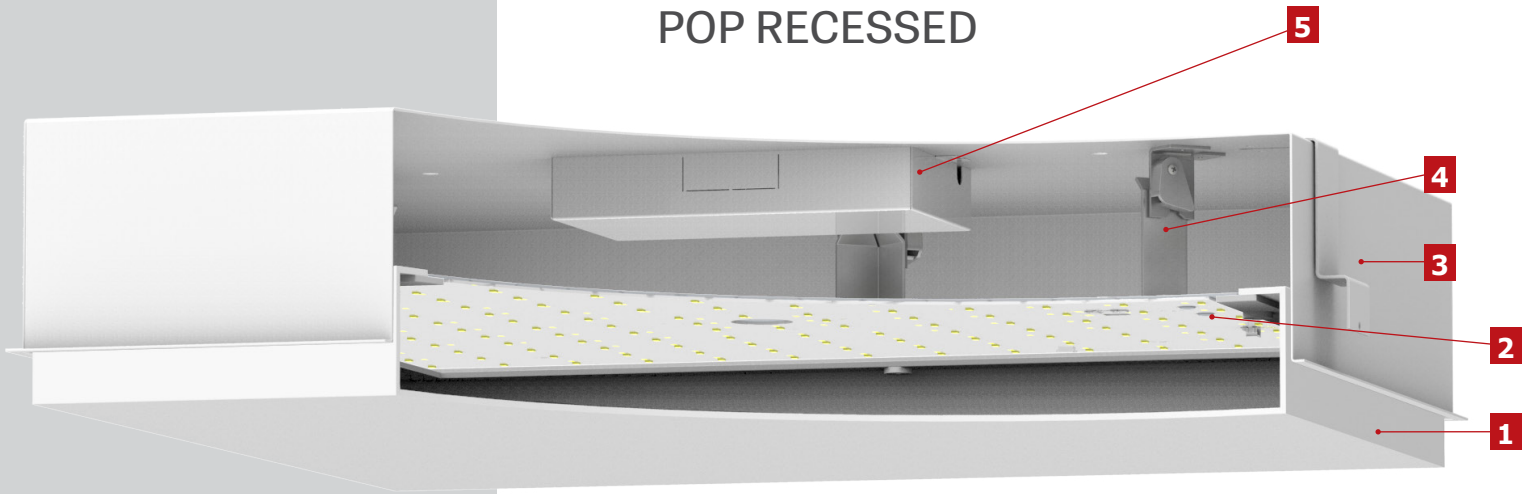


4" Drop



POP COLOR

POP RECESSED



POP recessed adds a distinctive three-dimensional character to the ceiling plane. POP recessed square includes all of the sizes, and diffuser drop configurations available in POP Core and POP color, as well as all of the same lighting and electrical options. POP recessed round is available with a flush lens in 12", 24", 36" & 48".

The vast majority of the POP recessed models can install from below into gypsum board ceilings and in the panels of mechanical ceilings. The 2x2 and 4x4 models will also fit into modular grid ceilings.

(1) OPTIC

Crisply formed acrylic diffuser with Uniform Lambertian Optic, combines efficient transmission and effective source obscuration. Attached to light engine to form a fully enclosed unit.

(2) LIGHT ENGINE

Fully populated array of mid-flux LED's. Choice of fixed white in four color temperatures or white tuning with independent control of color temperature and light output.

(3) HOUSING

Suitable for both gypsum board and grid ceilings with slide-out mounting brackets (at left) and threaded rod (not shown) to support luminaire.

(4) ADJUSTABLE DIFFUSER SUPPORT

Pop Square, retains diffuser and light engine at appropriate locations for different drop configurations, and permits service of driver and light engine without access above the ceiling.

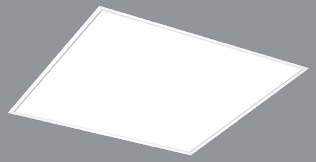
(5) DRIVER ENCLOSURE

Wired to light engine with quick-connect cable, serviceable without ceiling access.

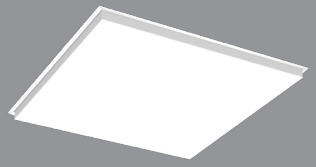
POP RECESSED

Flush

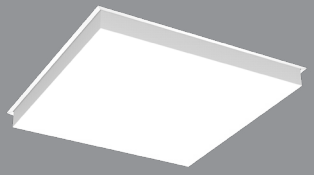
Flush



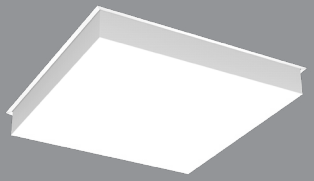
1" Drop



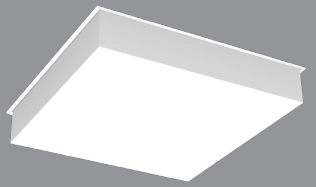
2" Drop



3" Drop



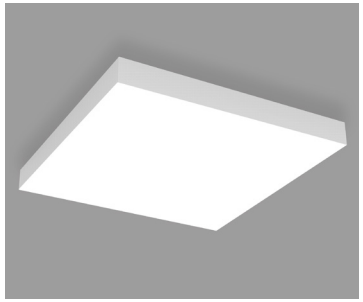
4" Drop



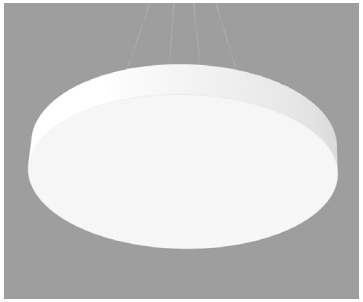
Pop Recessed square 2'x2' and 4'x4'. Pop Core square 1'x1' surface-wall

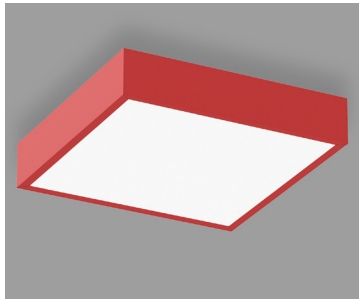
Pop Core round 24" surface-wall

POP AT A GLANCE

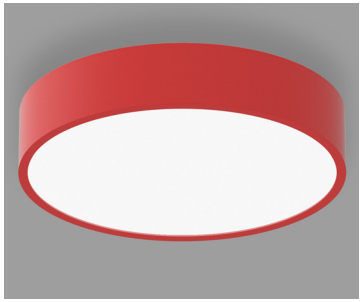


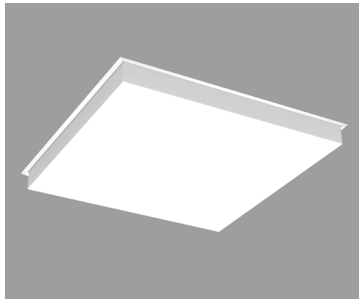
POP CORE	Size	Height		Distribution	Mounting
Round	12"	3.5"		Direct	Pendant, surface
	24"	3.5"	5"	Direct , Direct/indirect	Pendant, surface
	36"	3.5"	5"	Direct , Direct/indirect	Pendant, surface
	48"	3.5"		Direct , Direct/indirect	Pendant, surface
Square	1'x1'	2.5"		Direct	Pendant, surface
	2'x2'	2.5"	5"	Direct , Direct/indirect	Pendant, surface
	4'x4'	2.5"		Direct , Direct/indirect	Pendant, surface



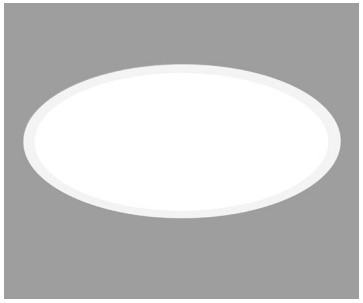


POP COLOR	Size	Drop					Distribution	Mounting
Round	12"	Flush	1"	2"			Direct	Pendant, surface
	24"	Flush	1"	2"	3"	4"	Direct , Direct/indirect	Pendant, surface
	36"	Flush	1"	2"	3"	4"	Direct , Direct/indirect	Pendant, surface
	48"	Flush					Direct , Direct/indirect	Pendant, surface
Square	1'x1'	Flush	1"	2"			Direct	Pendant, surface
	2'x2'	Flush	1"	2"	3"	4"	Direct , Direct/indirect	Pendant, surface
	4'x4'	Flush					Direct , Direct/indirect	Pendant, surface





POP RECESSED	Size	Drop					Distribution	Mounting
Round	12"	Flush					Direct	Grid & Drywall
	24"	Flush					Direct	Grid & Drywall
	36"	Flush					Direct	Grid & Drywall
	48"	Flush					Direct	Drywall only
Square	1'x1'	Flush	1"	2"			Direct	Grid & Drywall
	2'x2'	Flush	1"	2"	3"	4"	Direct	Grid & Drywall
	4'x4'	Flush					Direct	Grid only



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