All application performance results have been calculated using real luminaire photometric test data and OEM published system specifications for Ledalite factory standard components at the time of publication. Illuminance information as published are average maintained footcandle values based on predictive analyses with calculation grids centered in the respective rooms. Changes to luminaire mounting and/or workplane heights affect uniformity but have no significant impact on energy performance or light levels. Modifications to architectural conditions, luminaire components, and calculation parameters will yield different results. For further information or custom analysis for your project, please contact the Ledalite Applications Engineering Department. All other product or service names are the property of their respective owners. Luminaires use fluorescent lamps that contain small amounts of mercury. Such lamps are labeled "Contains Mercury" and/or with the symbol "Hg." Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org.

PLe-1401BR 03/14

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216

Philips Lighting Company
281 Hillmount Road
Markham ON, Canada L6C 2S3
Phone: 800-668-9008

TruGroove

Linear Recessed Luminaire

Transforming light into an element of design

PHILIPS
LEDALITE

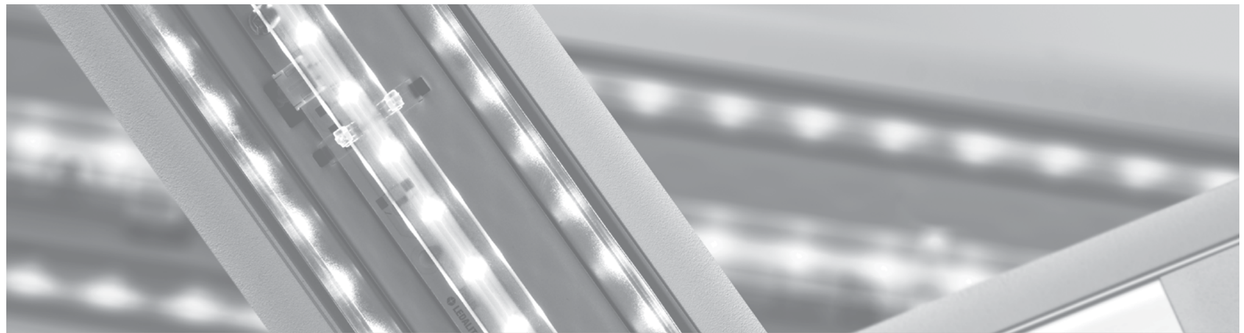
Actual size

Great design does not lower expectations to meet performance. It raises performance to meet expectations.

A luminous ribbon of light,
no longer confined to the ceiling.

The Epitome of Simple Sophistication

TruGroove delivers unrivaled performance and a truly innovative design – making a definitive statement in any architectural space. The latest addition of TruGroove corners provides endless opportunities for creative freedom with geometric patterns in walls and ceilings.



Create high performance spaces with a touch of artistic flare

TruGroove offers the best possible combination of lighting control and brightness to create a balanced luminous environment, with smooth, even gradients of light throughout the space.

TruGroove Performance vs. TruGroove Definition What's the Difference?

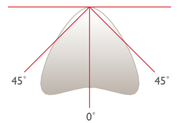
TruGroove Performance

Technology	MesoOptics w/bi-convex lens & Miro-Silver® reflectors
Photometric curve	Batwing distribution for wide row spacing
Distribution	Symmetric & Asymmetric
Efficacy	71-82 lm/W
Lens	Translucent MesoOptics lens
RP1	VDT normal: Hi and Mid lumen & VDT intensive: Low lumen
Applications	Open office general area, private office, corridors, grocery aisles, library stacks.
Price	$$$

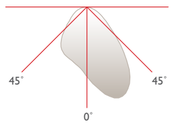
TruGroove Definition

Technology	Miro-Silver® reflectors only
Photometric curve	Lambertian distribution
Distribution	Symmetric
Efficacy	70-81 lm/W
Lens	Diffuse white Silk lens
RP1	VDT intensive: Low lumen
Applications	Decorative areas, wayfinding, high ceilings, retail/hospitality general area.
Price	$$

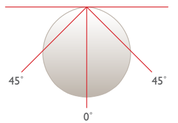
Symmetric distribution



Asymmetric distribution



Symmetric distribution*



* TruGroove Definition is available in symmetric distributions only.

Multiple design options deliver clean, understated style in any architectural environment.

Endless Design Freedom NEW

Transition to/from any corner type

Flat corner

Inside corner

Outside corner

Transition to/from any ceiling type

Wall to drywall ceiling

Wall to T-grid ceiling

Wall to wood ceiling

Armstrong Techzone™ ceiling

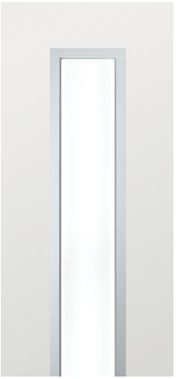
Trim and Lens options

TruGroove luminaires are available in multiple design options to deliver clean, understated style in any architectural environment.

New! Silk Lens

TruGroove Definition is offered with the lustrous 'silk lens' in LED configurations – perfect for highlighting key areas and creating visual interest in environments such as hotel and office lobbies, retail spaces, and lounge areas.

Type: MesoOptics & Silk Lens
Lens: Flush & Regressed
Trim: Trimless



Type: MesoOptics & Silk Lens
Lens: Flush & Regressed
Trim: Drywall trim

Type: MesoOptics & Silk Lens
Lens: Flush & Regressed
Trim: T-grid Trim

Length options

Available in a variety of standalone modules, or a virtually infinite range of continuous lengths.

LED/1x T5/T5HO
Specifiable up to 1/8 inch increments

2x T5/T5HO
Specifiable in 12 inch increments

Note: Total fixture length varies by trim option. Consult specification sheet for full dimension details.

Precisely controlled symmetric and asymmetric distributions create luminous continuity.

APPLICATIONS

Great design is a calculated and balanced blend of form and function.

A new paradigm in workplace lighting design

	1 x 28 W T5	LED 2200 lm*
Light Level	38 fc	36 fc
Energy Density	0.69 W/ft^2	0.64 W/ft^2
Luminaire Efficacy	71 lm/W	80 lm/W
Workplane Uniformity	2.1 :1	2.4 :1

Room: 48'L x 30'W x 12'H with Row Spacing: 12' o.c.

Based on 3500K TruGroove Performance option.

* Nominal value/4 ft luminaire

Superior performance makes narrow aperture recessed lighting a reality for office applications.

A high performance statement

	1×28 W T5	LED 1500 lm*
Light Level	65 fc	42 fc
Energy Density	1.26 W/ft^2	0.78 W/ft^2
Luminaire Efficacy	71 lm/W	82 lm/W
Workplane Uniformity	2.4 : 1	2.4 : 1

Room: 30'L x 16'W x 9'6"H with Row Spacing: 6' o.c.
Based on 3500K TruGroove Performance option.
* Nominal value/4 ft luminaire

TruGroove allows lighting designers to deliver aesthetic impact with ideal light levels, at energy densities well below industry guidelines.

Elevating the ordinary to the extraordinary

	1×28 W T5	LED 2200 lm*
Light Level	41 fc	39 fc
Energy Density	0.76 W/ft²	0.69 W/ft²
Luminaire Efficacy	71 lm/W	80 lm/W
Workplane Uniformity	4.3:1	3.6:1

Room: 29'L×22'W×14'H with Row Spacing: 6' o.c.

Based on 3500K TruGroove Performance option.

* Nominal value/4 ft luminaire

When lighting design demands a statement, TruGroove delivers both aesthetics and performance.

Best in class

	1×28 W T5	LED 2200 lm*
Light Level	45 fc	43 fc
Energy Density	0.75 W/ft²	0.69 W/ft²
Luminaire Efficacy	71 lm/W	80 lm/W
Workplane Uniformity	2.2:1	1.9:1

Room: 28'L x 26'W x 8'6"H with Row Spacing: 10' o.c.
Based on 3500K TruGroove Performance option.
* Nominal value/4 ft luminaire

Excellent lighting distribution and outstanding energy performance make TruGroove a viable option for projects where cost and energy efficiency are everything.

Works as great as it looks

	1x28 W T5	LED 2200 lm*
Light Level	37 fc	33 fc
Energy Density	0.64 W/ft^2	0.59 W/ft^2
Luminaire Efficacy	71 lm/W	80 lm/W

Room: 36' L x 17' W x 8'6" H with Row Spacing: N/A o.c.
Based on 3500K TruGroove Performance option.
* Nominal value/4 ft luminaire

Sophisticated style, exceptional color rendering and reduced energy consumption, makes TruGroove a natural fit for applications where color, ambience and structure are important.

Leading Illumination

	1×28 W T5	LED 1500 lm*
Light Level	33 fc	22 fc
Energy Density	1.42 W/ft²	0.87 W/ft²
Luminaire Efficacy	71 lm/W	82 lm/W
Workplane Uniformity	3.8:1	3.9:1

Room: 58'L x 7'W x 12'H with Row Spacing: 5' o.c.
Based on 3500K TruGroove Performance option.
* Nominal value/4 ft luminaire

With its exceptional efficacies and pure, consistent luminance – TruGroove is ideal for creating a sense of structure and direction.

High performance spaces
with powerful aesthetic impact.

Application Guide

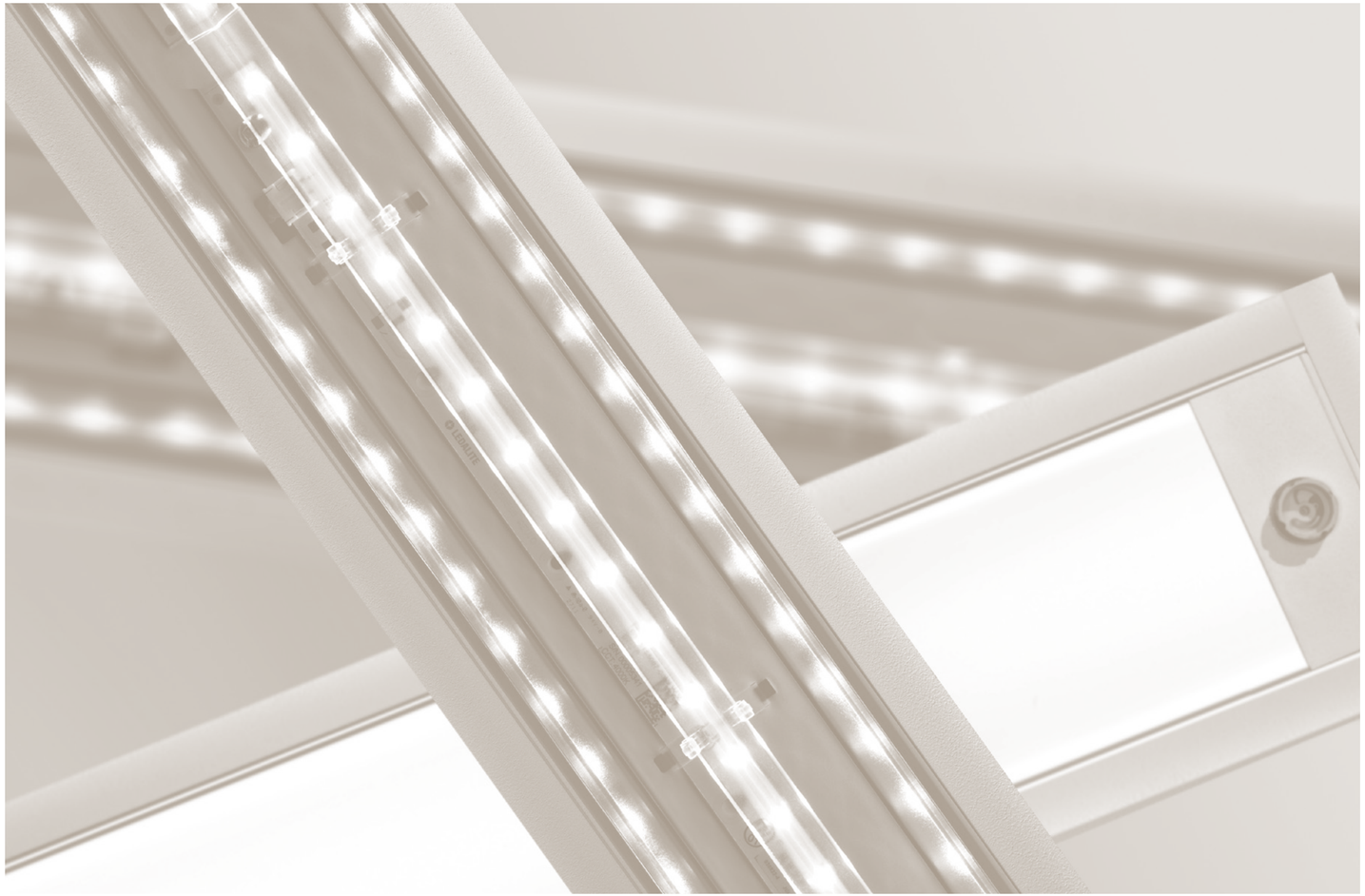
TruGroove Performance with MesoOptics Lens

Based on a 60' W x 60' L x 9' H; with room reflectances of 80/50/20 and 0.85 LLF.

4000K	3000 lm at 73 lm/W		2200 lm at 78 lm/W		1500 lm at 81 lm/W	
Spacing criterion	16' o.c.	12' o.c.	12' o.c.	8' o.c.	12' o.c.	8' o.c.
Average footcandles	41.2	51.6	37.1	57.9	25.7	39.9
Workplane uniformity	3.7:1	3.1:1	3.2:1	2.5:1	3.1:1	2.6:1
Energy Density (w/ft²)	0.65	0.81	0.54	0.87	0.36	0.58

3500K	3000 lm at 74 lm/W		2200 lm at 80 lm/W		1500 lm at 82 lm/W	
Spacing criterion	16' o.c.	12' o.c.	12' o.c.	8' o.c.	12' o.c.	8' o.c.
Average footcandles	41.5	52.1	37.5	58.3	25.9	40.2
Workplane uniformity	3.8:1	3.2:1	3.2:1	2.6:1	3.1:1	2.5:1
Energy Density (w/ft²)	0.64	0.81	0.54	0.86	0.36	0.58

3000K	3000 lm at 71 lm/W		2200 lm at 76 lm/W		1500 lm at 78 lm/W	
Spacing criterion	16' o.c.	12' o.c.	12' o.c.	8' o.c.	12' o.c.	8' o.c.
Average footcandles	39.8	50.0	36.1	56.3	25.0	39.0
Workplane uniformity	3.6:1	3.2:1	3.1:1	2.5:1	3.3:1	2.6:1
Energy Density (w/ft²)	0.65	0.81	0.54	0.87	0.37	0.59



TECHNOLOGY

True innovation makes a difference in how people live and work.

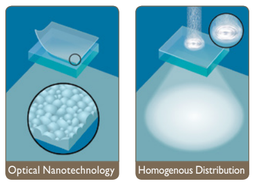
Exceptional Control and Efficiency

MesoOptics technology provides the best possible combination of control and luminance. Higher transmission efficiencies than traditional optical and control methods, means lower energy consumption. Small amounts of controlled brightness are introduced to the vertical surfaces, creating a brighter and more visually comfortable environment without unwanted glare.

ledalite.com/mesooptics

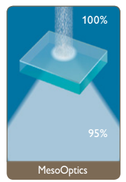
Purify

MesoOptics homogenizes color, and removes striations and hot spots from lighting sources, creating smooth gradients of pure, white light free from color shifts.



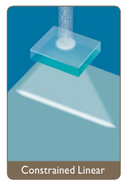
Sustain

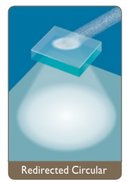
MesoOptics' highly efficient material allows up to 95% of the light to pass through, creating highly energy efficient lighting products.



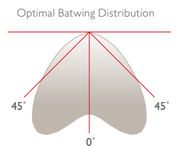
Control

MesoOptics disperses light uniformly and creates precisely controlled beam patterns to redirect light into optimum angles.





mesoOptics



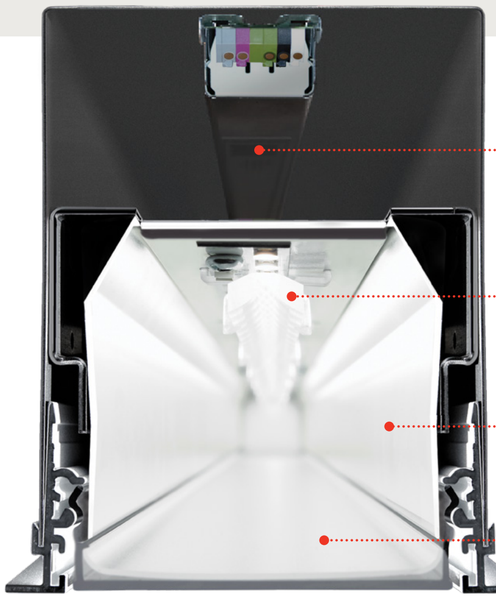
Always Moving Forward

As a leader in research, design and development, Philips Ledalite is continually advancing its LED solutions to ensure the best performance.

Visit ledalite.com/trugroove for the most up-to-date LED application data.

How it Works

Philips Ledalite's revolutionary MesoOptics is produced in a manner similar to the holographic microstructures that appear on most credit cards. Using patented processes, lighting distributions less than 5 microns in size are applied to a recyclable substrate, creating a highly efficient and unique lighting control approach.



A highly efficient 0-10V dimmable driver delivers constant current to thermally managed high-power LEDs.

White light emitted from the linear LED array, passes through a biconvex lens where it is internally reflected and laterally refocused.

Light is redirected by 98% efficient Miro Silver reflectors and then mixes inside the optical cavity.

Light passes through MesoOptics holographic film and emerges from the translucent lens in a precisely controlled batwing distribution.

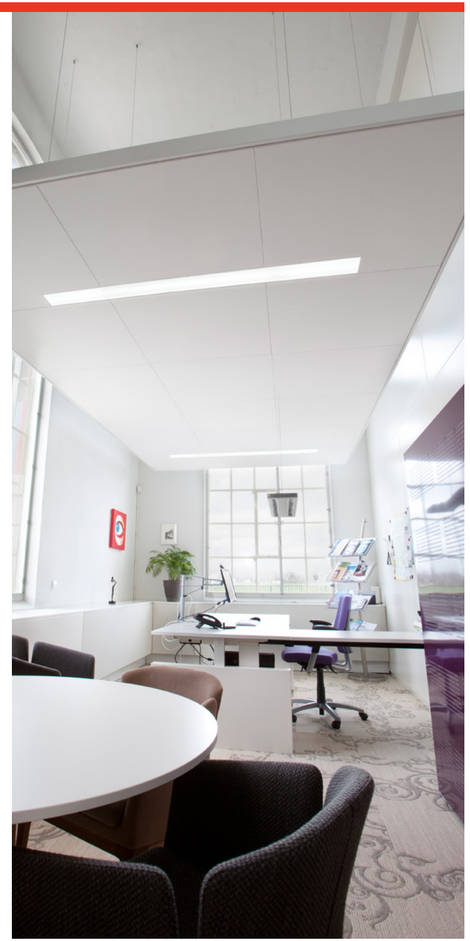
A Partner You Can Trust…

Today's rapid state of technology transformation demands an innovation partner you can trust. Philips Ledalite is a partner of the U.S. Department of Energy's Lighting Facts Program. As a part of this program, TruGroove LED configurations are independently tested to IES LM-79 industry standards to validate their performance. The Lighting Facts label provides key product performance data to ensure LED products perform as expected.

LED lighting facts
LED Product Partner

Futureproof. Period.

TruGroove solutions are field upgradable to stay current with the latest advancements in solid state lighting technology. TruGroove LED is designed with a simple plug and play platform so that field replacement and maintenance are quick and hassle-free. As a partner with the world's leading LED component suppliers, Philips Ledalite provides high quality, top performing products, and a commitment to ongoing research and development.



Maintenance Made Easy

1. Insert a flat, smooth edged object (such as a dime) between the lens & housing frame. Twist at an angle to release pressure, and remove the lens. | 2. Unscrew the entire LED assembly from the housing. | 3. Remove the LED assembly. | 4. Disconnect the LED quick-wire plugs. | 5. If required, unscrew the LED driver. | 6. Remove the LED driver and replace.

PHILIPS
LEDALITE

5 YEAR SYSTEM WARRANTY
Fixture + LED + Driver

5 Year Total System Warranty

TruGroove LED comes with a 5 year total system warranty, that covers the entire luminaire –including the LED board, driver and all fixture components – with world class support backed by Philips Ledalite.

Wireless. Batteryless. Limitless.

Airwave wireless controls represent a quantum leap forward in flexibility and sustainability. Using organic sources of renewable kinetic and solar energy, Airwave delivers wireless individual personal control, daylight harvesting, occupancy sensing, and full range dimming for spaces where the ability to control energy and lighting are essential. The simple flick of a batteryless, wireless switch creates enough kinetic energy for simple ON/OFF control or dimming. Solar powered Airwave sensors monitor ambient daylight levels or occupancy and wirelessly signal luminaires to adjust output and help save energy.

Intelligent transceiver (above ceiling)

Occupancy sensor

Solar powered photosensor

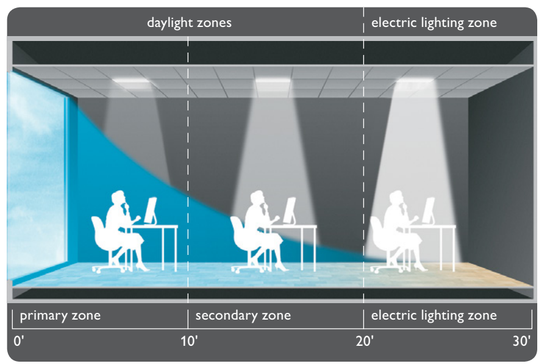
Kinetic energy switch

Kinetic handheld remote

Integrated Daylight Sensor

ledalite.com/response

TruGroove is available with Philips Ledalite Response Daylight sensors. These fully integrated sensors can provide 30-35% energy savings in window-adjacent locations – helping to reduce operating expenses and comply with new energy codes. Response Daylight sensors are factory pre-calibrated and ready to use right out of the box. Just plug in the fixture – no power packs, Standalone sensors or low-voltage wiring schemes required. The sensors adjust light output gradually with minimal distraction for occupants. A built-in delay prevents disruptions from passing clouds and occasional shadows.



How it works

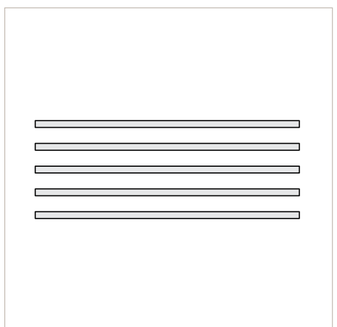
In this example, two control zones have been created where there is adequate daylight contribution, and one uncontrolled zone where daylight is minimal. As daylight contribution increases, sensors can automatically and gradually reduce electric light output to help save energy.

PRODUCT OPTIONS

Design is in the details.
Flexibility is in the result.

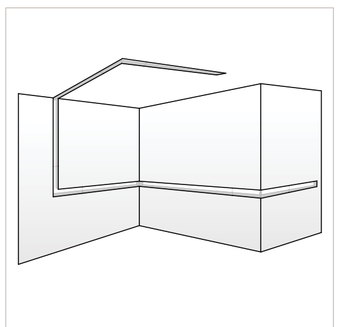
Configuration Options

TruGroove is available in an infinite range of continuous runs, any patterns, and standalone modules.
These can be installed in the ceiling, in the walls or across surfaces to create free form shapes and designs.



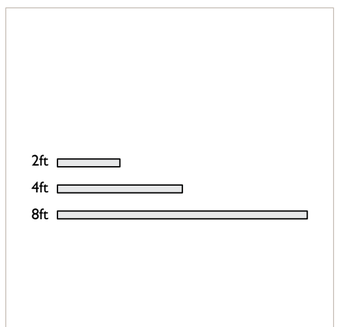
Continuous

Create an uninterrupted ribbon of light with continuous runs, specifiable up to ⅛".



Pattern

Transition from wall to ceiling seamlessly and create any pattern imaginable with 90° corners.



Standalone

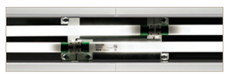
Keep it simple with standalone modules. Available in 2, 4, and 8ft lengths.

Luminance

A seamless design that offers the freedom to specify infinite lengths for pure, continuous lines of uninterrupted luminance – free of socket shadows, hot spots and glare.

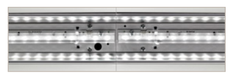
Single lamp

Standard optimum overlap



Two lamp

Standard optimum overlap



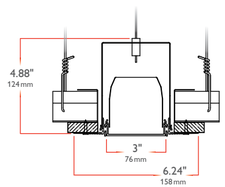
LED

Standard optimum alignment

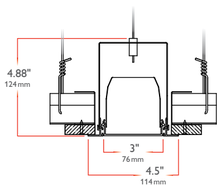
Mounting Options

TruGroove Performance & Definition luminaires are available in flush or regressed lens versions, and are designed to integrate seamlessly with any drywall or T-grid ceilings.

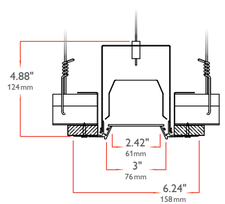
Drywall



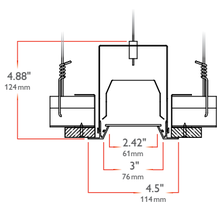
Flush lens, trimless



Flush lens with trim

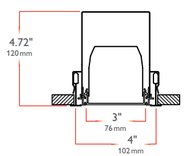


Regressed lens ,trimless

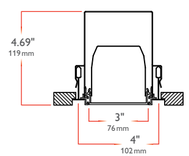


Regressed lens with trim

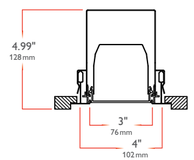
T-grid*



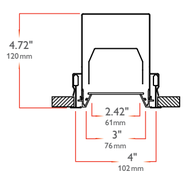
Flush lens, standard 9/16"
Flush lens, standard 15/16"



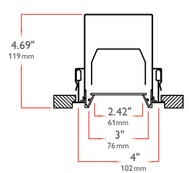
Flush lens, tegular 9/16"



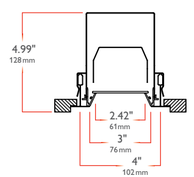
Flush lens, tegular 15/16"



Regressed lens, standard 9/16"
Regressed lens, standard 15/16"



Regressed lens, tegular 9/16"



Regressed lens, tegular 15/16"

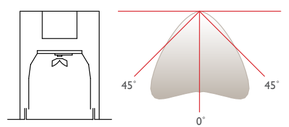
* Compatible with TechZone™ 4" Ceiling Grid

Distribution Options

With symmetric and asymmetric distribution options, TruGroove directs light exactly where you need it.

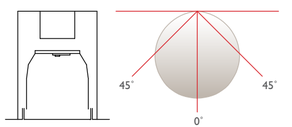
LED

Performance Symmetric



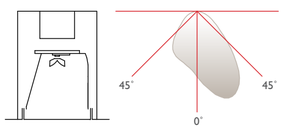
LED

Definition Symmetric



LED

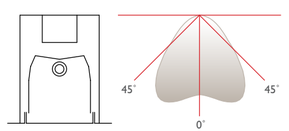
Performance Asymmetric



LED

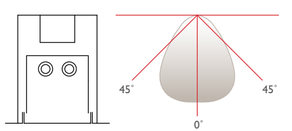
Fluorescent

1 Lamp Symmetric



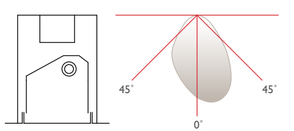
1 Lamp T5/T5HO

2 Lamp Symmetric



2 Lamp T5/T5HO

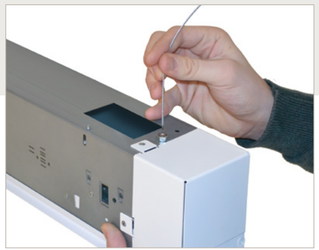
1 Lamp Asymmetric



1 Lamp T5/T5HO

A Cinch to Install

TruGroove's uniquely contractor-friendly design makes installation and maintenance as quick and easy as 1, 2, 3.



1

TruGroove's unique "cable-cinch" installation procedure, allows fixtures to be joined below the drywall ceiling.

2

Factory pre-installed quick-connects enable quick and hassle free wiring, before raising the fixtures into the drywall ceiling.

3

A snap-in lens allows for simple re-lamping, LED upgrades and easy access to the ballast or driver from below.

Specification Guide

TruGroove Performance and Definition

Product Version		Distribution	Light Source			Optics	Body			Electrical		
Series	Version	Performance	Source	Lamps		Performance	Housing	Ceiling / Trim	Run Length / Size	Wiring	Voltage	Ballast / Driver
39 TruGroove Recessed	**S** Standalone **C** Continuous Linear **A** Pattern with 90° Flat Corner* **G** Pattern with Inside Corner* **K** Pattern with Outside Corner*	**1** Symmetric **8** Asymmetric	**F** T5 **H** T5HO	**10** 1 lamp **20** 2 lamp		MesoOptics Lens **Q** Flush **R** Regressed	**S** Standard **C** Chicago	**1** T-grid **3** Drywall Trimless **4** Drywall Trim	(specified length)	**1** 1 cct **2** 2 cct **3** 1 cct w/ emergency **5** 1 cct w/ battery pack **7** 1 cct w/ dimming	**1** 120 V **2** 277 V **3** 347 V	**E** Standard
			Source	Color Temp	Lumen Package							
			L LED	**A** 4000K **B** 3500K **C** 3000K	**E** 3000 lm / 4 ft. **G** 2200 lm / 4 ft. **K** 1500 lm / 4 ft.							
		Definition	Source	Color Temp	Lumen Package	Definition						
		0 Symmetric	**L** LED	**A** 4000K **B** 3500K **C** 3000K	**E** 3000 lm / 4 ft. **G** 2200 lm / 4 ft. **K** 1500 lm / 4 ft.	Silk Lens **L** Flush **M** Regressed						

* For versions A, G, and K (patterns), please provide detailed sketch highlighting number and type of corner(s).
Some options may not be available for each configuration. Consult factory for details.