



Lutron Commercial Shading Solutions

Superior performance, beautiful
aesthetics, integrated solutions

Why Lutron shading solutions

Properly designed systems allow beneficial daylight into a space, while managing glare and heat gain, preserving view, and saving energy.

Lutron offers solutions and specification tools that add value throughout the project process by ensuring your building has the right shades, in the right place, at the right time.

- Maximize building energy performance
- Enhance occupant comfort
- Improve productivity
- Ensure a sustainable working environment

Shading is not a one-size-fits-all proposition

Lutron shading solutions can accommodate all your budget and performance needs.

Intelligent shading

Precise control from wall controls, personal controls, or a mobile device. Shades also adjust automatically in response to sensors.

Performance shading

Automated shading solutions, combined with spec grade (THEIA™ compliant) solar screen fabrics and Hyperion™ solar-adaptive technology, will have the greatest impact on building performance.

Architectural solutions

Lutron's Engineering Services team sets a new standard in design and specification support — we can help you design an architectural shading solution to make your vision a reality.

The Lutron difference

- Superior performance
- Beautiful aesthetics
- Fully integrated, total light management solutions from a single manufacturer





Table of Contents

Intelligent Shading **4-5**

Performance Shading **6-11**

Components **12-13**

Codes and Standards **14-15**

Aesthetics **16-17**

Shade Styles **18-21**

Architectural Solutions **22-23**

Intelligent shading is ideal for single rooms or smaller installations such as executive offices and conference rooms, in new or retrofit construction.

Battery-operated and wireless shades offer flexible, affordable motorized shading control, and are available in a wide variety of styles to meet the functional and aesthetic needs of the space.

Benefits

- Can be used as stand-alone shades or integrated into a Lutron lighting control system to further enhance energy savings
- Can help minimize glare, enhance views, and provide complete blackout for A/V presentations or privacy
- Seamlessly control shades and lights together — convenient control from a Lutron Pico® remote or wall control

Features

- Shades operate quietly and unobtrusively to minimize disruption
- Hundreds of sheer, translucent, and blackout options available in a wide variety of colors, textures, patterns, and styles
- Available in wired, wireless, and battery-operated options*

*Wired power options are best for spaces with many Lutron wireless sensors.



Wall-mounted
Pico



Pico remote
on pedestal



seeTouch® keypad



Sivoia® QS wireless
drapery lite



- Serena®/Sivoia QS Triathlon
battery-powered roller shades
- Sivoia QS Wireless roller shades

Overall building performance is critical to owners, facility managers, tenants, and employees. High-performance shading solutions can automatically adjust to reduce glare, maximize daylight, preserve views, and enhance energy savings.

Benefits

- Superior low-voltage technology guarantees precise movement and shade positioning for reliable performance
- Wide selection of fabrics with a patent-pending, online selection tool that recommends fabrics to achieve an ideal balance of performance and aesthetics
- Industry-leading control software automates shade movement and electric lighting levels for maximized daylight autonomy balanced with comfortable interior light levels

Features

- Performance fabrics are available in a wide variety of styles and price points, as well as environmentally friendly options
- NEW THEIA™ compliant, spec-grade fabrics are available to ensure design intent is met
- Control options include wireless remotes, wall-mounted keypads, PC-based controls, and control from any smart device to allow the right control options for both the facilities team and individual building occupants



Lutron Performance Shading Advisor



Lutron's new web-based Performance Shading Advisor transforms the complicated task of selecting a fabric based on aesthetics and performance into a simple process. The Advisor allows users to save projects, order fabric samples, generate customized specs and reports, and locate each fabric in the Performance Shading Solutions binder.

www.PerformanceShadingAdvisor.com



Lutron Performance Shading Solutions Binder



- Comprehensive and easy-to-use binder guides users to the right fabrics for their specific needs
- Features the Performance Fabric collection organized into four easy-to-use decks specifically designed to meet the performance needs of the commercial market
- Includes high-running Lutron commercial solar screen fabrics along with the new THEIA compliant spec grade fabrics and sustainable fabrics
- Brochure explains the program and directs customers to the Performance Shading Advisor website to help them select optimal fabrics based on their specific project parameters

Performance shading solutions

A performance shading solution combines the right shade fabric with the right software to achieve building design intent, maximize visual comfort, and deliver an energy-efficient, sustainable environment.



Today, the typical industry tolerance around fabric solar performance properties is large and can cause reduced visual comfort and energy savings. If fabric performance properties are not tightly controlled, you will not achieve desired daylight performance.

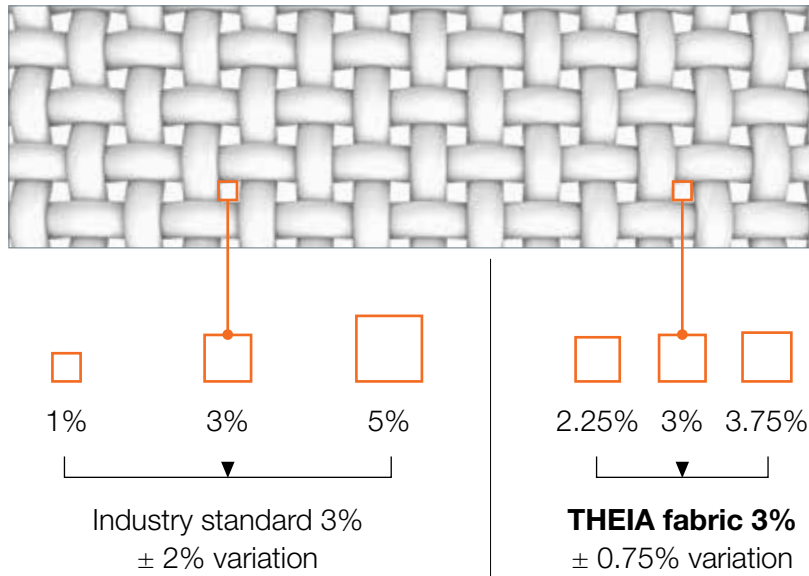
THEIA™ compliant fabrics

- Critical to ensure expected building performance
- Held to a new standard to control variations in openness and transmittance
- Ensure that the fabric is delivered as specified

THEIA performance specification

- Openness factor tolerance: (+/- 0.75%)
- Visible light transmittance (Tv) tolerance: (+/- 1%) or (+/- 20% x Tv)
- Follows Measurement Standards EN14500: 2008 and ASTM 903

Shade fabric weave openness 



Find THEIA compliant fabrics in the Performance Shading Solutions binder

Spec Grade Solar Screens



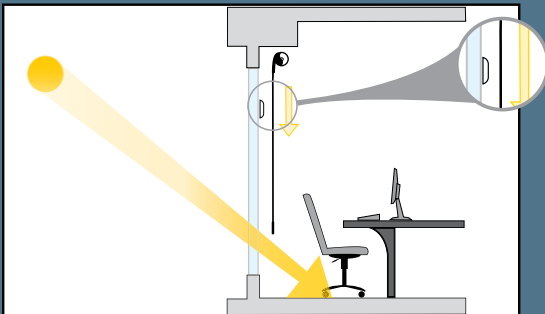
Hyperion™ solar-adaptive shading

The right shades in the right place

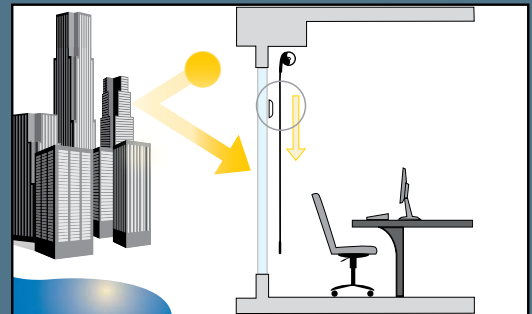
The Hyperion shade position algorithm automatically moves the shades throughout the day to limit the depth of direct sunlight entering the space. The Radio Window sensor adds further functionality to Hyperion by taking into account variable conditions such as the weather or shadows from neighboring buildings.

The sensor constantly communicates measured daylight to the Quantum® system. When the light levels drop below the established threshold for a predetermined amount of time, the sensor overrides the Hyperion programming, and the shades raise to let in more light. Conversely, when the light levels are above the established threshold, the shades lower to reduce glare and heat gain.

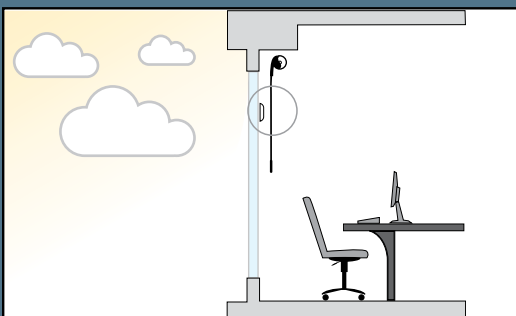
Direct Sun: Shades lower to keep the sun's rays from penetrating your work area



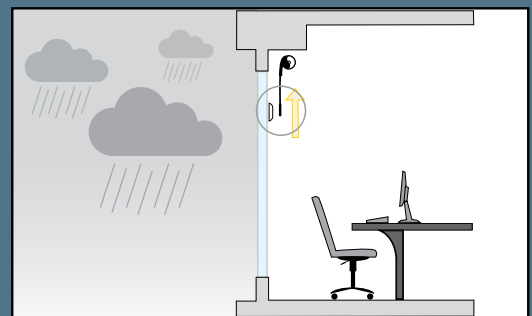
Reflected Sun: Shades close to block reflections from large surfaces



Bright Sky: Shades move to a predetermined position to minimize the contrast from the bright sky



Overcast/Dark: Shades open to maximize views and available daylight in overcast or shadowed conditions



Radio Window sensor

The Radio Window sensor works with Hyperion solar-adaptive shading technology by:

- Opening shades during cloudy conditions or in response to shadows from neighboring buildings
- Lowering them in overly bright conditions such as glare reflected from neighboring buildings



Mullion-mount sensor pair

Integrated lighting and shade control through Quantum Vue™

Quantum Vue is a new, easy-to-use facility management tool that provides full-system monitoring of electric light and daylight.



From within Quantum Vue, you can:

Control

Dynamic tiles and floorplan allow real-time adjustment and monitoring of lights and shades

Optimize

Adjust Hyperion™ automated shade settings, shade presets, and energy-saving strategies

Report

Analyze data points regarding the position and performance of Hyperion

Key



Sivoia® QS
roller shades



Palladiom™ QS keypad

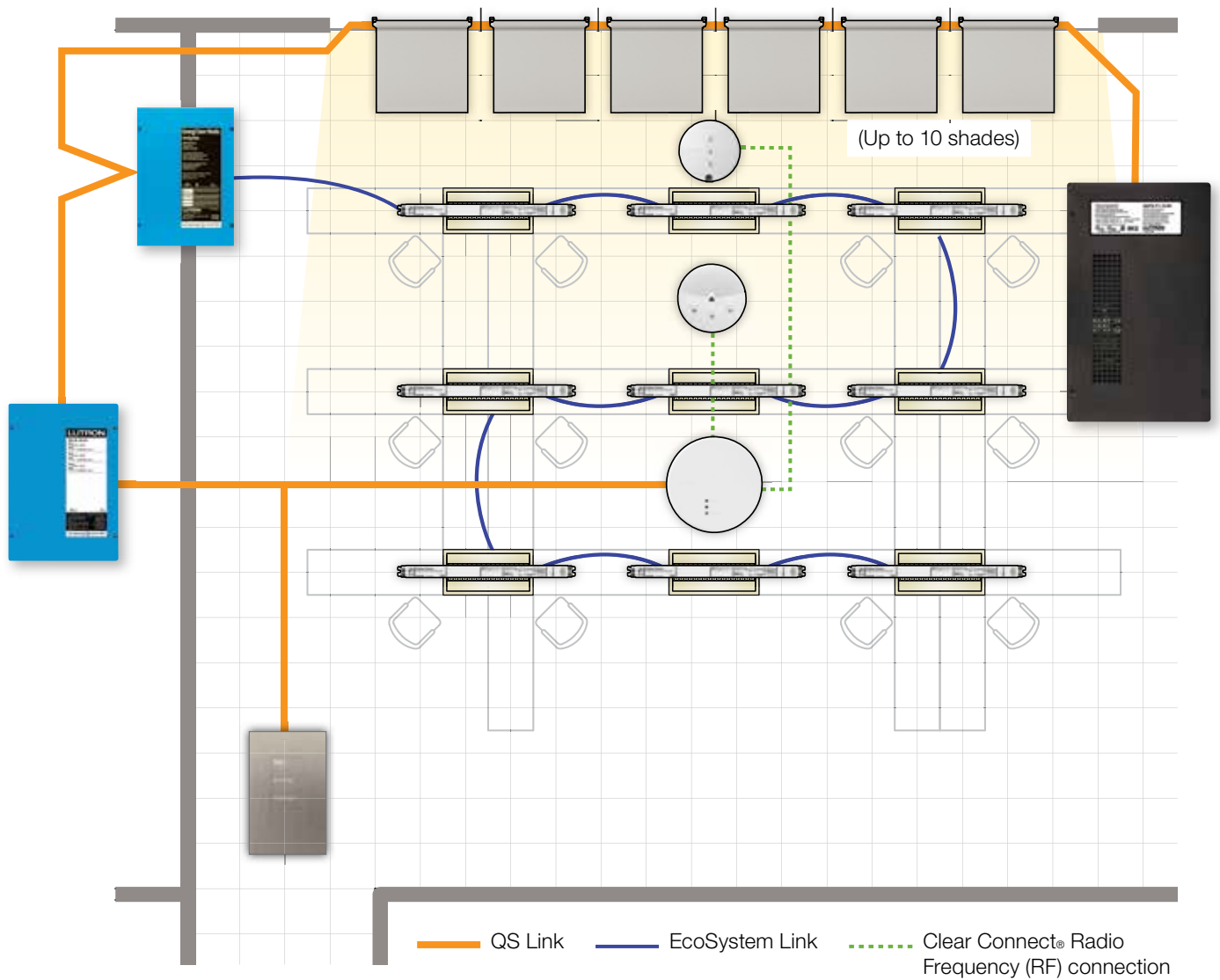


Radio Window™
sensor



Radio Powr Savr™
wireless daylight
sensor

How the components connect together



QP3 hub



QS smart panel



QS sensor module



Hi-lume® 1% EcoSystem™ LED driver



Energi Savr Node™ with EcoSystem

Fully integrated system from a single manufacturer

(One common communication link: QS link)

Sivoia® QS Shades

Sivoia QS roller shade **See page 18**



Sivoia QS cable-guided shade **See page 20**



Sivoia QS tensioned shade **See page 20**



Sivoia QS drapery track
Sivoia QS wireless drapery lite **See page 21**



Serena®/Sivoia QS Triathlon® **See page 21**
battery-powered shades



Control options

Palladiom™ keypads

Architectural keypad enables control of lights, shades, and HVAC from one location



seeTouch® QS keypads

Engraved keypad controls shades, draperies, lights, or any combination in one space



Pico® wireless control

Wireless, battery-powered remote available as a hand-held, wall-mount, or tabletop control



GRAFIK Eye® QS control

Scene and individual source control of up to 16 lighting and three shade zones in a space



Quantum Vue™

Quantum Vue provides a complete suite of facility management tools to control and monitor lights and shades from one device and from any location



Power and integration

QS smart panel power supply

Provides power and communication wiring for up to 10 Sivoia QS shades, keypads, and other devices



Hyperion™ solar-adaptive software license

Enables Hyperion control on Quantum® projects



Individual power supply

Provides power to a single shade or drapery



J-box power supply

24 V hardwired power supply used with Lutron QS lighting and shading devices



Ethernet/RS232 interface

Allows for seamless integration of lights and shades with A/V and building management systems



Input/output device

Simple, third-party interface with contact closure input



Lighting control/integration

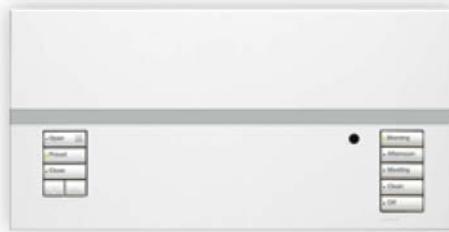
Quantum Total Light Management™

Controls electric light and daylight to improve occupant comfort and productivity, simplify building maintenance and operations, and save considerable amounts of energy within a floor, an entire building, or campus.



GRAFIK Eye QS system

Provides an easy, efficient way to control both electric light and daylight by adjusting lights and shades at the touch of a button. The system saves energy while meeting the aesthetic and functional needs of any given area or space.



HomeWorks® QS system

Integrates the control of electric light, daylight, HVAC, and A/V equipment via keypads, apps, sensors, and timeclock events for total control of the home environment.



Building codes and design trends

Advanced Lutron shading strategies help to meet or exceed increasingly stringent building codes and standards. The nation's top building energy codes and standards reflect the importance of using lighting and shading controls to conserve energy and improve building performance.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

The U.S. Department of Energy has mandated that as of October 18, 2013, all state commercial building codes must meet or exceed ASHRAE 90.1-2010 standards, which include that "daylight zone requirements" are met by using mandatory requirements for daylight harvesting technology.

IECC and Title 24

These include daylighting requirements similar to ASHRAE's in their updated recommendations.

ASHRAE 189.1-2011

This includes standards for the design of high-performance green buildings, specifically:

- Chapter 7/Energy Efficiency Section 7.4.2.5 Permanent Objects
- Chapter 8/Indoor Environmental Air Quality Section 8.4.1.2 Office Space

Lutron automated shades capitalize on your mandated investment

ASHRAE 90.1 – 2013

- Primary zone control
- Continuous dimming or 2-step on/off
- Daylight zone control (automatic) required

LEED v4

- Daylight autonomy (sDA)

ASHRAE 189.1 2011

- Controllable window shading

IECC 2015

- Continuous dimming

Title 24 2013

- Primary and secondary daylight zone control
- Demand response



Leadership in Energy and Environmental Design (LEED)

Daylight harvesting control can contribute toward LEED credits in several new construction categories. Daylight autonomy can also contribute to LEED points.



LEED New Construction v4 Green Building Rating System

Lutron automated shades can contribute to earning up to 29 out of the possible 110 LEED NC v4 points, within the following categories:

- **Energy and atmosphere** — An automated shading system works in conjunction with daylight-responsive lighting control to provide the right light at the right time. Based on sensor and environmental inputs, the system can automatically raise shades to admit useful daylight while reducing electric light levels, or increase electric light levels and close shades to block harsh glare and reduce cooling load.
- **Materials and resources** — Using Lutron shades with fabric made with recycled content and/or with Cradle-to-Cradle® certification helps with this category.
- **Indoor environmental quality** — Lutron shades help control glare while still providing daylight and access to views, and GREENGUARD® certified shade fabrics can help contribute to points in this category.
- **Innovation** — Using Hyperion™ solar-adaptive shading technology and sensors may achieve an innovation point.

As codes and standards are updated, Lutron automated shading solutions can help you capitalize on your mandated investment.



Outstanding aesthetics

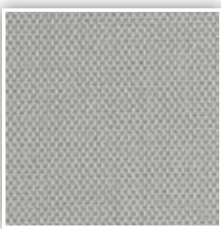
All shades in our shading systems track together and stop at programmable preset positions to within .125 inch. Our technology offers superior precision alignment that maintains the intended look of the space and provides a clean aesthetic from the building's exterior.

A wide variety of fabrics

Lutron offers a wide selection of fabrics in different colors, textures, weaves, and price points making it easy to choose the right shade for your application.

We offer numerous environmentally friendly fabrics that are GREENGUARD® certified, Oeko-Tex® Standard 100 certified, and PVC-free or Cradle-to-Cradle® certified. All commercial solar screen fabrics are fire rated.

Our fabric options also include high-performance fabrics, sustainable fabrics, dual-sided fabrics, and blackout fabrics.



E Screen – THEIA™
(shown in White/Pearl)



GreenScreen® Evolve™
(shown in Light)



T Screen with
KOOLBLACK™ – THEIA
(shown in White/Charcoal)



SilverScreen
(shown in Beige)



Basketweave 27
(shown in Oyster/Chestnut)



Blackout: Value Premiere
(shown in Graphite)

Controls to complement any décor

The aesthetics of our controls are just as important to us as the functionality of our solutions. Lutron Pico® wireless control, Palladiom™ keypad, and GRAFIK Eye® controls have a sleek, beautiful design, feature easy-to-use buttons, and are available in a variety of colors and finishes to complement the look and feel of any space.





Intelligent Hembar Alignment

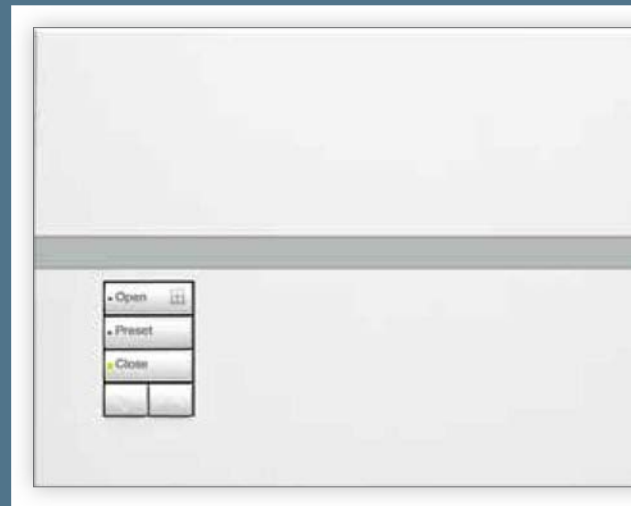
Automated shading solutions enhance the aesthetics and performance of commercial buildings, creating a uniform, attractive façade.



Pico wireless control



Palladiom keypad*



GRAFIK Eye

Contact Lutron for availability in stand-alone solutions

Roller shades

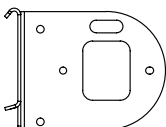
Lutron roller shades are available in different sizes to meet the needs of any space, including floor-to-ceiling windows, multi-story windows, wide windows, and curtain walls controlled on just one low-voltage drive. Fabric choices include sheer, translucent, and blackout options.



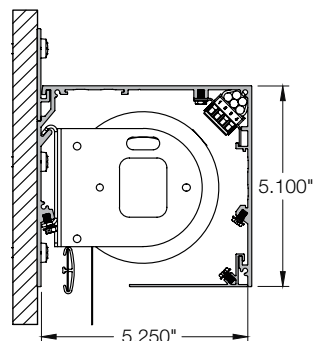
Lutron and Armstrong are now collaborating to provide an integrated pocket and shading solution that simplifies shade installation, reduces cost, and offers a clean, finished aesthetic.

This pre-engineered solution includes integrated sub-brackets to make shade installation easier and eliminate guesswork, and installs as part of a complete ceiling solution reducing time, material, and labor.

Lutron Integrated Bracket for Axiom



Complete Solution

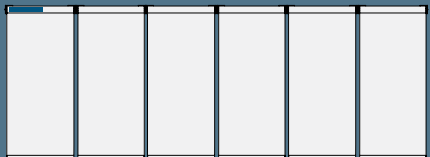




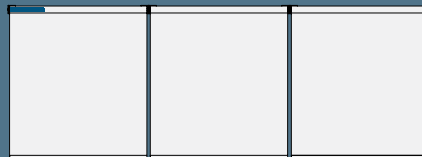
Unilever Building | London, England

Curtain walls

For an economical shading solution, couple up to six shades as a single group with a single EDU with roller 300™.

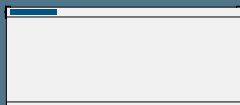


or



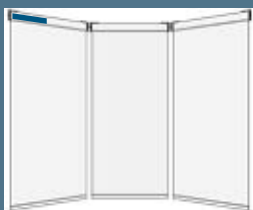
Wide windows

WIDR tube option designed to improve aesthetics, allow for tall/wide shades without cable guides, and to minimize deflection for wide windows with average height. Optional tube size for roller 100™ and roller 150™.



Angled coupled shades

Lutron shades can also be installed with an angled coupler to eliminate the need for multiple shade drives in angled applications with up to three shades. Each coupler allows up to 45° between shades.





Cable guided

Cable-guided shade systems keep roller shades at the exact angle of the window, for precise shading control in angled applications. The system is also useful in areas of high velocity airflow to prevent shades from moving.

These shades are available in the same fabrics as our standard roller shade offering — sheer, translucent, and blackout.



Tensioned shades

Lutron tensioned shades provide solutions for skylights, bottom-up applications, and angled windows.

Our innovative design keeps fabric panels taut and parallel to windows of any slope. The frames are preassembled and can be mounted inside, recessed within, or outside an opening, and can even be mounted directly to drywall.

The collection also includes the meet-in-the-middle shade, designed for larger applications.



Drapery track systems

Our drapery track systems provide daylight control in pinch pleat or ripplefold styles. Straight, curved, and long track systems are available.

We offer high-tech solutions and elegant window treatments in a variety of soft fabrics for draperies. We can also use a customer's own material.

The new Alena® pull-to-start drapery track and Sivoia® QS wireless drapery lite solutions feature Lutron's superior technology and engineering — your product works the first time, every time.



Serena® and Sivoia® QS Triathlon® battery-powered shades

Lutron battery-powered shades offer an industry-leading battery life, easy installation and simple maintenance — completely wire-free and ideal for retrofit installations.

Featuring simple power options, instant digital response, and a precision hybrid drive, these shades will work as a stand-alone solution or as part of an integrated lighting and shade control system.

Achieve your vision

Lutron shading solutions can help realize your most ambitious architectural vision. Work with Lutron to develop the perfect answer to your non-standard design questions, and to complete your signature spaces. Our team of application experts is ready to help.

Engineering Services offering

- Solution brainstorming
- Budget and performance requirement definition
- Design and documentation
- Installation instructions
- Advice on service plans

Calvert story

The beautiful, award-winning Calvert High School in Prince Frederick, Maryland celebrates the sun, inviting daylight into virtually every corner of its multi-use media center using huge skylights.

Lutron “meet-in-the-middle” tensioned roller shades are able to make the most of all the beneficial daylight in the space, while overcoming the design challenges presented by the skylights. The Lutron system offers five preset configurations that can be quickly recalled at the touch of a button, allowing the right amount of daylight into the space for any situation or activity.



Skylight shades open (above) and partially closed (right).



For more information on any of our commercial shading solutions, please contact your local Lutron representative. To experience the benefits our shading solutions provide, please schedule a tour at one of our Experience Centers.



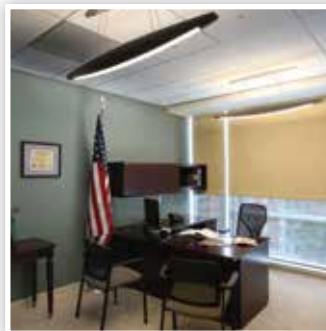
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