



WATTSTOPPER®
HUMAN CENTRIC LIGHTING

ADVANCED TUNABLE LIGHTING MADE SIMPLE

Wattstopper®

Customer Care
7 am - 6 pm CST
800.927.9287

Technical Support
8 am - 7 pm CST
800.879.8585

Service & Support
[www.legrand.us/
support/wattstopper](http://www.legrand.us/support/wattstopper)

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designed to be better.™



Legrand, North & Central America
www.legrand.us/wattstopper



designed to be better.™



A photograph of a modern interior space, likely a lobby or hallway, featuring a ceiling with a patterned texture and numerous pendant lights of varying heights and designs. The floor is highly reflective, showing the lights and the ceiling. A green overlay on the left side contains the text "BEAUTIFUL LIGHTING IS JUST THE BEGINNING".

BEAUTIFUL LIGHTING IS JUST THE BEGINNING

Introducing Wattstopper Human Centric Lighting

In the next phase of lighting innovation, light and art come together to create beautifully illuminated spaces.

Introducing Wattstopper Human Centric Lighting (HCL) from Legrand. A precision dimming and tunable lighting system with industry-leading quality of light that transforms any space.

Wattstopper combines their digital lighting control excellence in an exclusive partnership with Lumileds, a recognized leader in LED technology. This partnership enables new lighting experiences while reducing the complexity of design, installation, and operation of tunable LED lighting systems. This combination enables lighting fixture manufacturers and specifiers to reliably address new market demands for precision dimming and tunable-white applications.

Easily replicate the visual comfort of natural light with Wattstopper Human Centric Lighting: a turnkey HCL system of tunable LED light engines and accompanying HCL controls.

Tunable lighting just got simpler

Wattstopper takes the complexity out of tunable lighting projects with an integrated, turnkey system of tunable LED light engines designed to be integrated into luminaires and controlled by Wattstopper's Digital Lighting Management (DLM).

The result is a new level of simplicity of design, installation, and occupant control for tunable lighting projects.

THE WATTSTOPPER DIFFERENCE

- Light engines that deliver a higher quality of light
- Adjust color temperature to precisely follow the blackbody locus, replicating the color changes of natural daylight
- Accurate color rendering with a Color Rendering Index (CRI) of 90+ through the full range of color temperatures
- Closed loop thermal feedback ensures both color and lumen maintenance delivering consistency between fixtures over their entire life
- Precision, flicker-free dimming from 100% to 0.1%

QUICK INSTALLATION AND EASY CONTROL

- DLM's Plug n' Go™ automatic configuration eliminates the need for additional programming making installing an HCL system easier than ever before
- Simple-to-use interfaces for easy and intuitive adjustment of intensity and color temperature



INTRODUCING WATTSTOPPER HUMAN CENTRIC LIGHTING SOLUTIONS



LED Light Engines



The essential component that makes Wattstopper HCL unique is the light engines that enable fixtures from any manufacturer to deliver industry-leading quality of light. These light engines can be integrated into a broad range of fixtures to provide zone or fixture-based control and deliver a range of lighting color temperatures.

- Unparalleled consistency from any lighting manufacturer
- DLM control makes installing and controlling tunable lighting easier than ever
- Easy start up and commissioning significantly reduce the cost of HCL applications

THE WATTSTOPPER HCL LIGHT ENGINES

- **Blanco 3**
Natural Tunable White
Three-color LED tunable white
(2700K – 6500K)
Precision dimming from 100% to 0.1%
- **Blanco 2**
Tunable White
Two-color LED tunable white
(3000K – 5000K)
Precision dimming from 100% to 0.1%

A new way to deliver natural light

Not all light is created equal. High-quality electric light should replicate the characteristics of natural daylight, including:

- Dynamic intensity—daylight changes in intensity during the day and so should electric light
- Correlated color temperature (CCT)—ability to adjust the color of the white light along the blackbody locus to reproduce the same color temperatures as daylight
- High CRI—ability of a light source to reveal the true colors of various objects in a similar way to a natural light source



NATURAL SUNLIGHT

Color temperature changes

Consistent CRI of 100



LAMP

Static color temperature

Lower CRI



HCL

HUMAN CENTRIC LIGHTING

Ability to control color temperature

High CRI

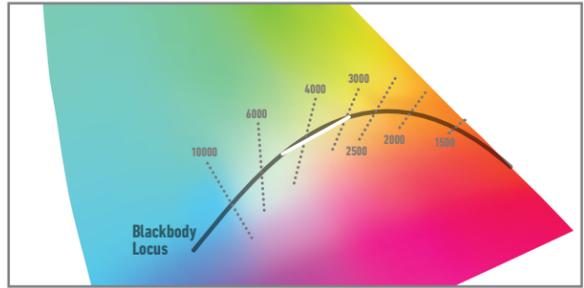


ADVANCED DRIVER TECHNOLOGY ENABLES HIGHER QUALITY TUNABLE LIGHT

The chromaticity diagram represents the mapping of human color perception. For the highest quality of color, the Blanco LED light engines follow the path of the blackbody locus as the temperature changes from a warm amber color at low temperatures to cool bluish white at very high temperatures.

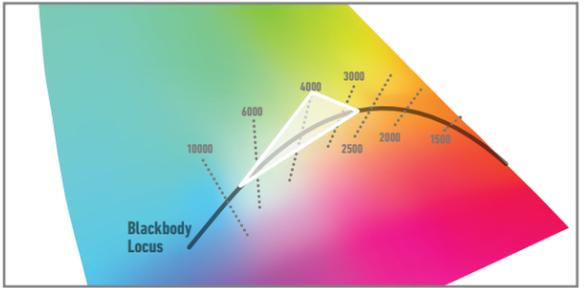
Wattstopper offers two options for light engines using two or three channels of white to provide different ranges of available color temperatures.

Regardless of which engine is selected, be assured the output will be an industry-leading quality of light.



Blanco 2
Two white LEDs
(3000K – 5000K)

Tunable range is along the white line.



Blanco 3
Three white LEDs
(2700K – 6500K)

Tunable range is within the white shaded gamut.

DLM Tunable White Control

The Wattstopper DLM system makes installation and control of tunable white SIMPLE



The Wattstopper light engines integrate seamlessly with DLM ensuring simple and intuitive control. DLM's Plug n' Go™ automatic configuration ensures these switches control the CCT channel and intensity immediately, bringing a new level of simplicity to tunable lighting projects.



COLOR CONTROL SCHEDULE SWITCH

LMTS-101-CCT

- Automated time based color temperature control
- Daylight cycling based on building's longitude and latitude
- Real time CCT display
- Easy Plug n' Go™ automatic configuration



COLOR CONTROL PRESET SWITCH

LMSW-105-CCT

- Master raise/lower paddle to adjust color temperature levels between cool and warm light
- Scene buttons to set and recall up to four preset color temperature scenes
- Easy Plug n' Go™ automatic configuration

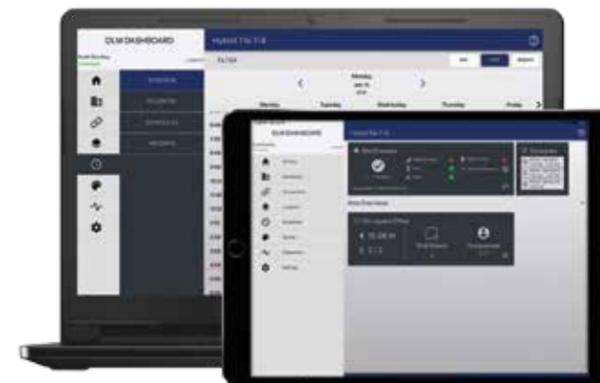


DLM TOUCHSCREEN

LMEQ-41

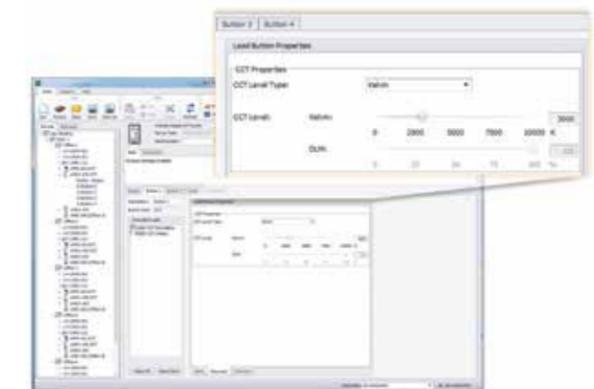
- Beautiful 4.3" glass to edge LCD touchscreen
- Designed to work seamlessly with DLM via the new LMTI touchscreen injector
- Easy to use tunable white and intensity control with intuitive sliders or customizable scenes
- Easy Plug n' Go™ automatic configuration

LMTS-101-CCT and LMSW-105-CCT control color temperature only. A separate DLM dimming switch is also needed for intensity (e.g. LMDM-101).



DLM DASHBOARD

- The DLM Dashboard is an iPad, Android tablet, or Windows 10 PC installed software environment that brings Wattstopper's industry leading networked lighting control technologies into a single, powerful platform.
- With DLM Wireless and DLM Hybrid rooms working together seamlessly, DLM Dashboard provides users with a simple and easy-to-use interface for configuring and managing the behavior of the lighting system to meet the dynamically changing needs of the building.



LMCS SOFTWARE

- Wattstopper's free LMCS Software makes it easy to build, design, document, and configure tunable white projects
- Create and edit tunable white preset buttons tailored for each room and room type
- Schedule and edit tunable white levels throughout the day

Blanco 3

Natural Tunable White

This precise, three-color solution combines precision dimming with tunable white. Blanco 3 mixes three different colors of white LEDs to precisely trace the blackbody locus while delivering a wide range of color temperatures. With the ability to replicate natural daylight, Blanco 3 appeals to lighting designers who are seeking to personalize a space with customizable white light.

CCT RANGE

- 2700K - 6500K

KEY APPLICATIONS

- Conference Rooms
- Lobbies
- Patient Rooms

TECHNICAL FEATURES

- Blackbody Dimming
- 90+ CRI
- 0.1% Dimming
- Tunable White
- Thermal Feedback

SOFTWARE TOOLS

- DLM Dashboard
- LMCS-100

EXAMPLE CONTROL OPTIONS



LMTS-101-CCT



LMSW-105-CCT



LMDM-101



LEMQ-41

EXAMPLE

- Blanco 3
- DLM control
- Controls: LMSW-105-CCT, LMDM-101



2700K

6500K

Blanco 2

Tunable White

This high-quality, two-color solution combines precision dimming with tunable white. Blanco 2 mixes two colors of white LEDs to closely approximate the blackbody locus for tunable white applications.

CCT RANGE

- 3000K - 5000K

KEY APPLICATIONS

- Classrooms
- Corridors
- Nurses Stations

TECHNICAL FEATURES

- 90+ CRI
- 0.1% Dimming
- Tunable White
- Thermal Feedback

SOFTWARE TOOLS

- DLM Dashboard
- LMCS-100

EXAMPLE CONTROL OPTIONS



LMTS-101-CCT



LMSW-105-CCT



LMDM-101



LEMQ-41

EXAMPLE

- Blanco 2
- DLM control
- Controls: LMSW-105-CCT, LMDM-101



Wattstopper Human Centric Lighting

The Ideal Solution for any Space

KEY APPLICATIONS



HEALTHCARE



EDUCATION



COMMERCIAL OFFICE

OTHER APPLICATIONS



HOSPITALITY



RETAIL



MUSEUMS

How to specify Wattstopper HCL

- 1 Choose an LED Light Engine (Blanco 2 or Blanco 3) and the array form factor (linear or round)

Sold to fixture partners & integrated into fixtures

Browse fixture partners that have integrated our solutions: legrand.us/WattstopperOEMPartners



- 2 Specify with the fixture manufacturer of choice

If the fixture cannot be found on legrand.us/wattstopper, please contact the Lighting Agent to request Legrand's Wattstopper tunable-white LED light engine.



- 3 Enabled fixtures will work seamlessly with Wattstopper controls based on the interface selected



Traditional wall switches



Glass touchscreen