



Introducing the Circadian Score Database: Product iQ[®]

Differentiate luminaires with circadian ratings

Lighting designers, architects, building owners and manufacturers have a critical role to play in the impact of indoor lighting on building occupants and their circadian rhythms. When humans are exposed to lighting conditions that provide “bright days and dim nights,” applied research has shown that sleep quality and quantity increase at night, sleepiness during the day is reduced, and negative health impacts are less prevalent. Luminaires and control systems designed for positive impacts to human health are becoming more prevalent in homes, offices, and commercial spaces.

Our circadian services measure photometric characteristics for luminaire categories such as recessed troffers, pendants, wall washers, wall sconces, downlights, desk lamps and reflective surfaces. Circadian scores are calculated for the three published methods, and this data is now available in a simple, searchable online database through the Circadian Product iQ[®] tool from UL Solutions.



Benefits of inclusion in Circadian Product iQ[®] for lighting manufacturers:

- Differentiate your products to lighting designers, architects and building owners looking for optimal healthy lighting choices
- Share your product’s circadian data through an easy-to-use parametric search
- Highlight product imagery and features of your tested products



Benefits of using Circadian Product iQ[®] for lighting designers, architects, and building owners:

- Find products with a simple parametric search by product or company
- Easily sort and compare circadian scores
- Save searches and tags (optional paid feature) to save time and work more efficiently



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[UL.com/circadian](https://www.ul.com/circadian)

Circadian scores searchable by manufacturer, product category, or wattage

The screenshot displays the UL Product iQ Circadian tool interface. On the left, there are search filters for Keyword, Company Name, Product Category, Nominal CCT, EML Score, CS Score, M-EDI Score, Vertical Illuminance, Luminance, Input wattage, and Reported Lumens. The main area shows a table of 9 results for 'Circadian Characteristics of a Luminaire'. A magnifying glass highlights the 'EML Score', 'CS Score', and 'M-EDI Score' columns. A second magnifying glass provides a detailed view of these scores for the first product.

Document Name	Product Category	Product Image	Luminaire Settings	Measured Setting	EML Score	CS Score	M-EDI Score	Vertical Illuminance	Luminance	Input wattage (W)	Reported Lumens (lm)	URL	My Tags
ABC Lighting Co Troffer	Troffer		3000K	3027K	22.1	0.059	20.1	42.4	2780	40	3810	Link to Letter Report	
DEF Lite Mfg Wall Sconce	Wall Sconce		4000K	3500K	23.3	0.02	21.1	37.9	16380	26	2400	Link to Letter Report	
GHI Light Group Desk Lamp	Desk Lamp		3000K	3000K	36.5	0.1	33	72.4	72	22	4250	Link to Letter Report	
JKL Lighting Mfg Floor Lamp	Floor Lamp		2700K - 6500K	6206K	44.3	0.086	40.1	47.5	2850	34			
MNO Optic Group Pendant	Pendant		6500K	6298K	48.2	0.095	43.7	51.3	3904				
PQR Mfg Group Chandelier	Chandelier		2700K - 4000K	4000K	75.8	0.104	68.7	82.5	8935				

EML Score ↑ **CS Score** ↓ **M-EDI Score** ↓

22.1 0.059 20.1



Easily search the circadian scores of luminaires in the database.



Why UL Solutions?

With our Circadian Product iQ[®] tool, lighting designers can explore the non-visual aspects of luminaires and help determine what products to specify in their next lighting design project. Search for circadian luminaire scores and luminaire reports and easily compare circadian test results of tested products.

UL Solutions measures the spectral power distribution (SPD) of luminaires at the vertical plane of the observer's retina in our customized laboratory space. We then use three algorithms to report the circadian score of the luminaire, which measures its circadian effectiveness, in the Circadian Product iQ[®] tool:

- **EML:** based on International WELL Building Standard
- **CS:** based on UL Design Guideline 24480
- **M-EDI:** based on DIN Technical Spec 67600

A higher circadian score indicates that the luminaire delivers more circadian effectiveness to the building occupant during the day. In other words, the luminaire more effectively supports a healthy circadian rhythm for people spending time in that building.

Lighting designers and architects can now compare the circadian score of luminaires and select the best product for their upcoming project.

Manufacturers

Contact us at performancelighting@ul.com to start a quote for circadian luminaire testing and to discuss how UL Solutions can help advance visibility of your circadian stimulus readings to your audience.

Explore the Circadian Score Database: Product iQ[®] at UL.com/CircadianIQ

More resources, on-demand webinars and videos demonstrating the power of circadian lighting are available online at UL.com/circadian



Access to view Product iQ[®] requires the one-time setup of a complimentary account, with optional paid features available.



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