

Arup and the WaveGo

Prioritizing Health and Wellness in Buildings

ARUP

Client Profile

Arup is a global engineering and consulting firm, providing engineering, design, planning, project management, and professional services for all aspects of the built environment.

The company requires easy-to-use tools to monitor its lighting for customers interested in constructing and maintaining healthy building environments.

Challenge

Employee well-being is a hot topic. Workplace wellness initiatives are linked to increased productivity and decreased medical absences. Wellness characteristics are frequently cited as a company selling point, helping employers in their efforts to attract top talent.

With increased corporate interest in wellness, the International WELL Building Institute (IWBI) has developed lighting guidelines as part of its **WELL Building Standard** (WELL, for short). They aim to quantify and standardize one aspect of employee wellness in the workplace. WELL ensures lighting has been designed to aid circadian rhythms, which regulate sleep, contributing to increased wellness for building occupants.

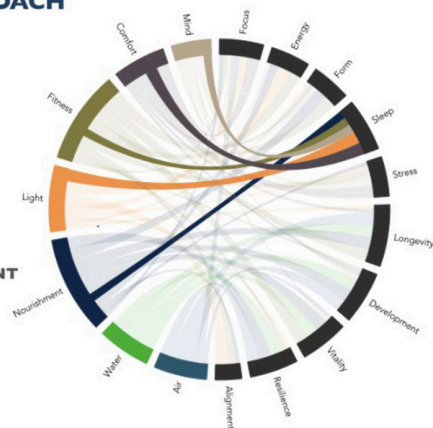
Equivalent Melanopic Lux (EML) is the key metric of the circadian lighting design section of WELL. Currently, EML measurement requires time-consuming and complicated calculations. These complex calculations, coupled with the laborious nature of commissioning individual lights (a type of quality assurance process), makes assessing the EML of lighting especially cumbersome.

The introduction of the WELL lighting guidelines has created a need for companies like Arup to be able to measure lighting installations effectively, and offer clients peace of mind that their architectural projects are in adherence with these standards set out by the IWBI.



HOLISTIC APPROACH

-  MIND
-  COMFORT
-  FITNESS
-  LIGHT
-  NOURISHMENT
-  WATER
-  AIR



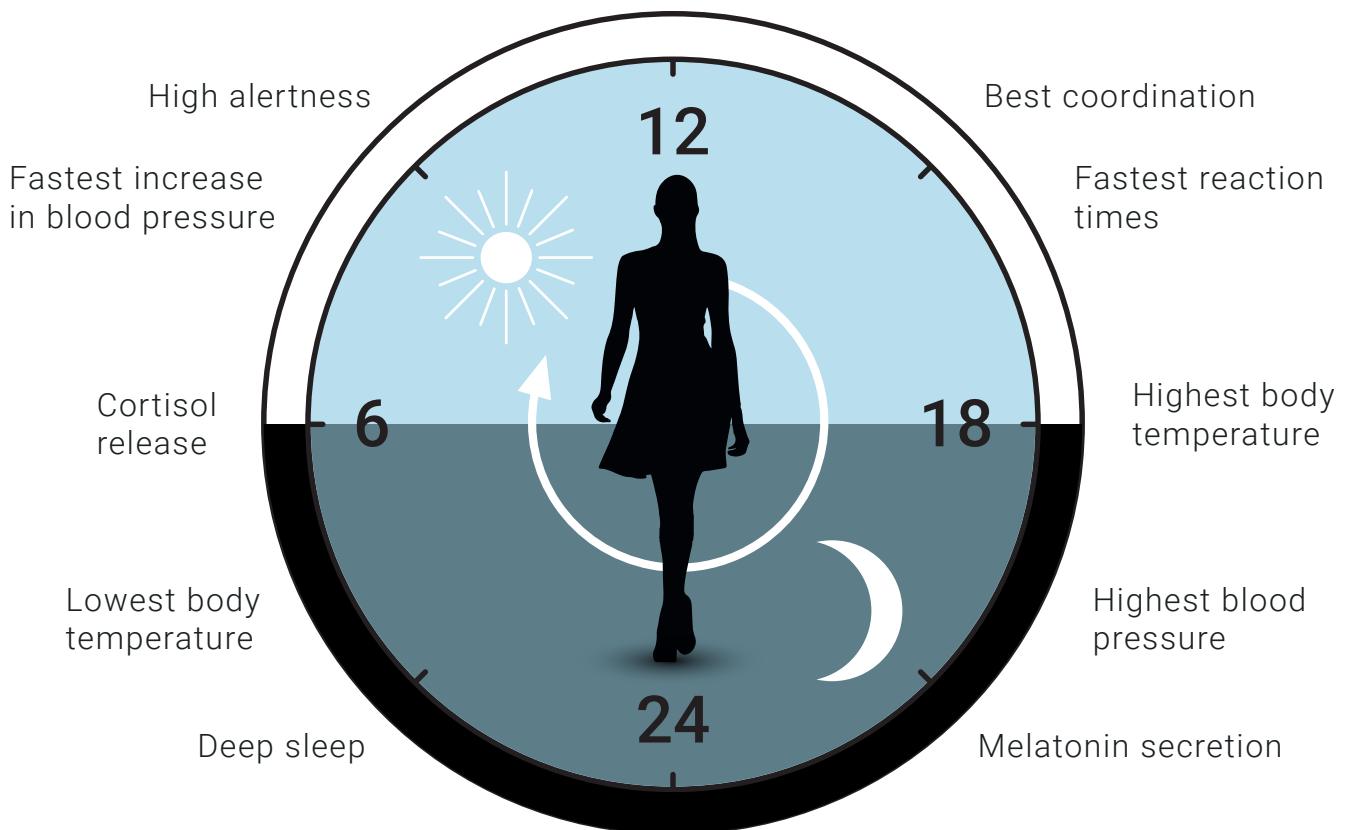
Solution

Arup frequently trials lighting innovations in their own workspace before using them in design work and recommending them to clients. This includes measuring lighting parameters that meet WELL.

The Arup office in Chicago, Ill., turned to Wave Illumination to measure the EML of newly installed lights in its office, as our WaveGo equipment captures data quickly and requires minimal background technical knowledge to operate. Additional support is available via **WaveCloud**, an integrated cloud storage platform.

Using the WaveGo, Arup could secure feedback about individual lighting installations in real-time. Their team could verify the quality and performance of their lighting solutions to ensure that the light quality and emissions were on par with WELL standards for employees.

Using the WELL Building Standard Regulations and the WaveGo, Arup are quickly and easily able to measure the wellbeing effects of both the Arup lighting in their Chicago office and customer lighting.



Impact

The new lights in question aim to meet the WELL target EML level.

Arup now have a quick commissioning tool, usable not only for this project, but for future lighting tests too. Within 10 minutes, we had assessed 10 lights for EML throughout Arup's open office space.

Currently, there are limited light measurement solutions on the market accessible to a wide range of user types. Few technologies allow engineering firms like Arup to quickly take measurements of their lighting and automatically record the results.

With a WaveGo unit of their own, Arup's users can assess any luminaire for key lighting metrics, conforming to WELL. This will aid Arup's internal product assessments and demonstrations for visiting clients in the office and in the field.

Arup were early industry adopters of the WaveGo solution. Now, WaveGo is playing a key role in helping a number of leading architectural lighting manufacturers and installers worldwide to deliver functional light. Whether managing illumination vs. preservation in an art gallery, rendering perfect colour in high-end retail, or delivering truly human centric lighting, use the Wave system to turn light measurement into value for your customers.





Unlock the value of light with WaveGo, the handheld spectrometer helping to deliver more efficient, effective lighting solutions.

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