In. Licht Ultra

Spectrum / WELL Meter

Measure light through spectrum, illuminance and frequency

The world's first human-centric light meter certified by International Well Building Institute: Works with WELL program

WORKS WITH WELL

Lighting Recipe Studio

Vision

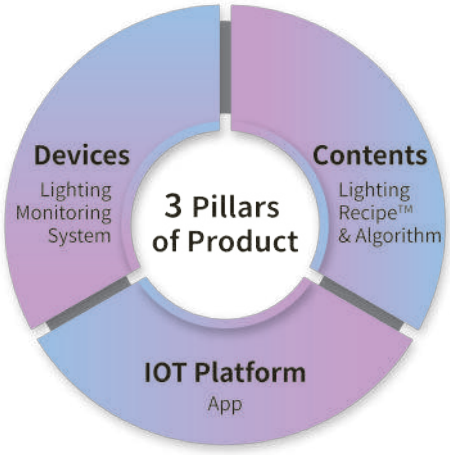
Inspiration from Light and Health Research

Lighting Recipe Studio (LRS) is a professional light research institute and also a leader in the development of forward-looking light products. We always put people first, using the science of light to build better light for life.

Mission

The Lighting Recipe™ for a Better Health

Light visualizes everything in the world, shapes human life and casts the impact on our health through spectrum and circadian rhythm. Our mission is to create a better lighting environment and construct a comfortable visual space for all human beings. We develop the Lighting Recipe™ by using the strength of science and medical studies, all in all, to improve people's health and their quality of life.



Focusing on Light Environment Health

At LRS, we have long been dedicated to human-centric lighting, focusing on the interactive effects of light and health. We are committed to using light science to create higher quality light environments for humans. Combining advanced life science research on light and its effects on mood and cognitive function with the WELL Building Standard™ from the International WELL Building Institute (IWBI), LRS has developed In. Licht Ultra and In. Licht pro. These two products proudly hold the distinction of being the first and second light measurement devices globally to receive the IWBI official Works with WELL™ certification.

We continue to collaborate with IWBI and other ecosystem partners to create life-friendly light environments for all. Our ongoing efforts aim to illuminate the path towards intelligent and healthy lighting for the lighting industry.

> “To be the game changer and the cornerstone of adaptive advanced lighting systems”

CEO, Lighting Recipe Studio

Lighting Recipe Studio
PROUD MEMBER OF
IALDLIRC

8 Key Measurement Modes
23 Precise Parameters

1. General Mode
Parameters | Illuminance, Correlated Color Temperature, Color Rendering Index (CRI)

2. Spectrum Mode
Parameters | Ambient Spectrum, Dominant Wavelength (λd), Peak Wavelength (λp), Peak Intensity (λpV), Spectral Power Distribution (SPD)

3. HCL(Human-Centric Lighting) Mode
Parameters | Circadian Action Factor (CAF), Equivalent Melanopic Lux (EML), Melanopic Equivalent Daylight Illuminance (M-EDI), Scotopic/Photopic Ratio (S/P Ratio), Blue Hazard Ranking(RG)

4. CRI Mode
Parameters | Color Rendering Index (CRI) R1- R15

5. Flicker Risk Mode
Parameters | Flicker Frequency, Flicker Percentage, Flicker Index, Flicker Risk Display

6. CIE 1931 Mode
Parameters | CIE 1931 and CIE 1976 Chromaticity Diagrams, Correlated Color Temperature (CCT), Blackbody Deviation (DUV)

7. TM-30 Mode
Parameters | TM-30 Values, Color Fidelity (Rf), Color Gamut (Rg)

8. SDCM Mode
Parameters | Standard Deviation of Color Matching (SDCM) Diagram, SDCM Steps

In.Licht ultra app

Use our exclusive **In.Licht ultra app**, easily obtain lighting environment data, lifting the technical barriers from the past

Universal Standard for Circadian Rhythm Index

Based on the research of circadian rhythm and LRS's circadian stimulus algorithm, we provide parameter detection to facilitate the creation of lighting environments that align with human circadian rhythm systems

- Melanopic EDI (CIE 2018) (M-EDI)
- Equivalent Melanopic Lux (EML)
- Circadian Action Factor (CAF)

Make it Anywhere with a Mobile Optical Lab

- Quick Bluetooth auto-pairing, compatible with ios/ android systems
- Intuitive data monitoring interface, 8 key measuring mode with customizable fields
- one-click for real-time data sharing, best efficiency for light data tracking and management

Embedded into AIoT Platforms for Intelligence Space

In. Licht Ultra has been connected to the **Welltek OS** platform. AIoT service providers may contact our customer service for system integration.

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Upgrade for More: Exciting Features Coming Soon

Fresh Lighting / Agricultural Growth Lighting / Livestock Lighting / Latest Research of Lighting Recipe ™

Measure light through spectrum,
illuminance and frequency

A Top Choice for Professionals

Lighting and Led Manufacturers

- Ultra-wide spectral detection, accurately capturing visual and non-visual photobiological effects, light environment flicker data, etc.
- Precise measurement of various mixed light sources and natural light sources (Incandescent lamp, LED, fluorescent, natural light...), providing 23 measurement parameters, with ongoing development of new features for continuous upgrades.

WELL Building Standard, ESG, Healthy Intelligent Space

- Compliant with WELL Standard and a Works with WELL certified human-centric lighting measurement device.
- Optimal tools for various light environment assessments.
- Integrated into the Welltek OS and be able to connect to other AIoT system.

Quality Control, Inspection personnel, Field Applications Engineers

- A 59g lightweight, portable design for lab-level spectrometer, make it anywhere with a mobile optical lab.
- Quick Bluetooth auto-pairing, support remote control and real-time data upload/ sharing.
- Hands-free design to unlock blind spots of lighting inspection.

Regulatory and Management Compliance Checks

- Lightweight and portable design enables on-site professional lighting inspection—lab costs and time burdens can be significantly reduced.
- Using Step-Shot recording and spectrum comparison mode for instant data analysis.

Lighting and Spatial Designers

- Enhancing lighting solutions for designers, balancing the needs of artistic and practical lighting design in scientific way.
- Pre-inspection and performance verification, resolving lighting problems in advance which may experienced from long-term occupancy.

In. Licht Ultra

The world's first Works with WELL certified human-centric health light meter

In. Licht Ultra aligns with the WELL Building Standard ™ , which has been adopted in 136 countries, covering nearly 5 billion square feet of global building space

People-oriented—International WELL Building Institute(IWBI) WELL Building Standard ™

The world's first standard focused on enhancing human health and well-being throughthe built environment, managed by the non-profit International WELL Building Institute™ (IWBI™). Developed after 7 years of research and validation by global medical and architectural science experts, it comprehensively assesses 10 key concepts: Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind, Community, which aligns with United Nation SDGs. It is the most universal recognized health building standard today.

Works with WELL™ Certified—leading guardian of HCL

As a member of IWBI, LRS embodies the science of human-centric lighting and light environment health. In. Licht Ultra certified by Works with WELL in 2024, it is the first human-centric health light spectrum meter. The program rigorously evaluates products against WELL Standard criteria to demonstrate their exceptional quality and capabilities.

In. Licht Ultra for WELL Project Performance Verification

To promote HCL and address to the light environment inspection aligns with WELL Standard, In. Licht Ultra features corresponding function for it and allows professional inspector to complete their tasks efficiently.

- Inspection tool for WELL AP
- Assessment tool for WELL project manager
- Light data collection and project improvement

WELL V2 : Light Concept

L01 Light Exposure
L02 Visual Lighting Design
L03 Circadian Lighting Design
L04 Electric Light Glare Control
L05 Daylight Design Strategies
L06 Daylight Simulation
L07 Visual Balance
L08 Electric Light Quality

In. Licht Ultra has integrated with Welltek OS by Delos that corresponds to **L09** Occupant Lighting Control in order to achieve higher PV score of Light in WELL projects.

delos

WELL V2 Light

In. Licht Series:
Optical Measurement Solutions

Applicable Scenarios	In. Licht Ultra Spectrum/WELL Meter	In. Licht pro Lighting Fact Sensor	Interactive Lighting System (Coming Soon)
			
Human-Centric Lighting	✓	✓	✓
WELL Inspection	✓	✓	
Spectrum Analysis	✓		
Sensor		✓	
Lighting Equipment Manufacture	✓	✓	
Laboratory / Quality Control	✓	✓	
Spatial / Lighting Design	✓	✓	✓
Plant and Animal Grow Light	✓		
Lighting Field Applications	✓	✓	✓
Commercial Spaces	✓	✓	✓
Residential Spaces		✓	✓

Professional Partners

delos WELLTEK® SCHIDERON 施德朗電氣 inSona LIDIght

Specifications

System Configuration	
Software	In.Licht ultra app
System Compatibility	Android / iOS
Connection Method	Bluetooth/ type C
Output File Format	Excel / JPG
Dimensions	88 (H) × 40 (W) × 22 (D) mm
Battery Life	4 hours (up to 6 hours when fully charged)
Battery	1,150 mAh Lithium Ion
Weight (including battery)	59g±5g
Operating Conditions (temperature and humidity)	0-35 °C , <70%
Storage Conditions (temperature and humidity)	-10-40 °C , <70%
Languages	English / Traditional Chinese / Simplified Chinese
Features	
Capture Function	One time / Sequential / Continuous
Operation Mode	APP
Integration Mode	Auto
Dark Calibration	Auto

Measurement Modes and Parameters	
General Mode	1. Illuminance
	2. Correlated Color Temperature (CCT)
	3. Color Rendering Index (CRI/Ra)
Spectral Chart Mode	4. Spectral Chart
	5. Dominant Wavelength (λd)
	6. Peak Wavelength (λp)
	7. Peak Intensity (λpV)
	8. Spectral Power Distribution (SPD)
Human-centric Lighting Mode	9. Blue Hazard Ranking (RG)
	10. Scotopic/Photopic Ratio (S/P ratio)
	11. EML Melanopic Irradiance (EML)
	12. m-EDI Melanopic Daylight Irradiance (m-EDI)
	13. Circadian Stimulus (CAF)
CRI Mode	14. Color Rendering (R1~R15)
Flicker Risk Mode	15. Flicker frequency
	16. Percent flicker
	17. Flicker index
	18. Flicker Risk Display
CIE1931 Mode	19. CIE 1931(x,y) Chromaticity Diagram
	20. CIE 1976(u',v') Chromaticity Diagram
	21. Correlated Color Temperature Deviation (DUV)
TM-30 Mode	22. Color Rendering (TM-30-Color Fidelity Rf, Gamut Index Rg, Color Vector Graphic)
SDCM 模式	23. Standard Deviation of Color Matching (SDCM)

Spectrum & Illuminance	
Sensor	C-MOS Linear Image Sensor
Illuminance Meter Class	Complies with JIS C 1609-1:2006 General-Purpose AA Class
Wavelength Range	380-780 nm
Wavelength Data Increment	2 nm
Spectral Bandwidth (FWHM)	10 nm
Measurement Range	5-75,000 lx
Illuminance Repeatability	1%(5-00lx), 0.5%, (100-75,000lx) @CIE1931 x,y
Color Coordinates	x,y: ±0.01(5-75,000lx)
Color Temperature Range	1000-10,000 K
Accuracy (Illuminance)	±5%(5-100lx), ±4%(100-50,000lx), ±8%(50,000-75,000lx)
Color Repeatability	x,y:±0.002(5-100lx), ±0.001(100-75,000lx)
CCT Accuracy	±3%
CRI Accuracy	±3%
Integration Time Range	1-5,000 ms
Digital Resolution	16 bits
Flicker	
Frequency Range	5-7,500 Hz
Sampling Rate	200 / 1k / 20k / 100k Sec
Frequency Resolution	0.2, 1, 20, 100 Hz
Flicker Accuracy	5% (5-7,500 Hz)

The company reserves the right to change product specifications at any time without prior notice.

Lighting Recipe Studio

www.LightingRecipe.com

Retail Information:

Global | **Amazon** |
In. Licht Ultra Spectrum/WELL Meter

Mainland China |
Taobao shop (Direct Sale)

Taiwan | **Logicled** |
www.logicled.com

For product and service requirements, please email:
service@lightingrecipe.com

We Build Light for Life

www.LightingRecipe.com

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