### Ennostar



# **Emerging Market**

## Human-Centric Lighting

Through adjustable brightness, color temperature, full-spectrum lighting, and intelligent control technology, human-centric lighting improves human health, comfort, and productivity. For example, by influencing melatonin secretion through light sources, it enhances work focus or improves sleep quality. Application areas include offices, medical institutions, educational facilities, residences, retail spaces, and nursing homes.







Power(W)	150
CRI	> 95

#### **Market Trends and Potential**

Human-Centric Lighting (HCL) mimics the characteristics of natural light by adjusting brightness and color temperature to support the human circadian rhythm, enhancing health and well-being. Modern HCL systems combine sensors and control devices to automatically adjust lighting based on ambient light and user needs, creating adaptive lighting environments. HCL can be widely applied in residences, offices, and educational settings to improve productivity, focus, and mood. As people increasingly prioritize health and quality of life, the demand for HCL continues to grow, demonstrating significant potential.

#### **Technical Highlights**

- **Comprehensive Lighting**: A combination of primary and indirect light sources ensures central room brightness reaches 850 lux.
- Automatic Dimming: Built-in ambient light sensors adjust light output in real-time, providing suitable lighting for different times of the day.
- **Day-Night Color Temperature Adjustment**: Simulates the natural light cycle, automatically adjusting color temperature to create lighting that aligns with the human circadian rhythm.
- **High Color Rendering**: With a color rendering index (CRI) of Ra95, it accurately represents the colors of objects, enhancing color fidelity in the home environment.

