

Silicone lenses for LED lighting, technological innovation or pointless?

With the rapid development of LED chip technology, the power density of light sources continues to increase, presenting both more possibilities and challenges for the lighting industry. High power density light sources enable higher brightness and wider illumination range in lighting design, yet they also pose challenges in terms of heat dissipation, optical design, and safety. Faced with this trend, the lighting industry needs to innovate constantly and explore more efficient thermal solutions.

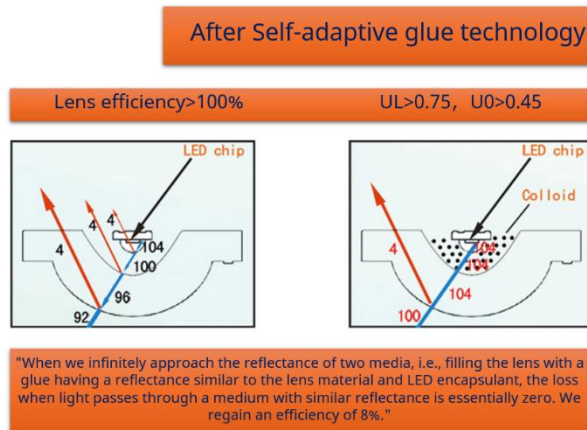


HercuLux Optics, as a professional provider of optical design solutions and optical devices, has been committed to offering customers high-quality, safe, and reliable optical components. We are soon to launch our new optical solution "Silicone lens", which will bring a fresh perspective to the industry. This lens not only boasts excellent optical performance but also exhibits extremely high heat resistance, effectively addressing the challenges posed by high power density light sources and offering more possibilities for lighting design.



As early as 10 years ago, HercuLux Optics had been involved with silicone and took the lead in introducing the adaptive colloidal technology, aimed at enhancing the light efficiency of outdoor luminaires. This technology is primarily utilized to boost the efficiency of lenses, achieving an increase of up to 107%. This has endowed

Hengkun Optoelectronics with abundant experience and unique core technology in the field of silicone material applications, accompanied by a profound accumulation of research foundations.



Small aperture luminaires not only better meet the lighting requirements, but also preserve the integrity of the ceiling, enhance interior decor aesthetics, and create a more design-oriented spatial ambiance. This trend is not only welcomed by designers. Hengkun Optoelectronics' silicone lens not only effectively addresses the heat dissipation issues of small aperture luminaires, but also provides customers with exceptionally high-quality light spot effects.



Product Features: The Silicone lens serves as a significant addition to the Kirin Optical platform, capable of seamlessly replacing any series within the Kirin Optical platform on a 1:1 basis. This will greatly enrich future lighting application scenarios, whether in smart homes or classic commercial settings. The silicone material is poised to gain wider popularity.



Non-Yellowing: In the process of formulating the silicone, we rigorously control the chloride ion content in the silicone resin, ensuring it remains below 1 ppm.

Additionally, we ensure thorough reaction of the platinum salt initiator during formulation. As a result, the degree of yellowing in our silicone lenses is almost negligible!

(* Comparison of yellowing between our silicone material and other brands of silicone material made into lenses after being placed in a 150°C environment for 500 hours).

Other brands

HercuLux



Size Specification: As lighting demands become increasingly diverse across various settings and spaces such as residential, commercial, and public facilities, the requirements for the size and shape of decorative luminaires vary accordingly. We are committed to developing a range of sizes to offer a more diversified and personalized product solution, aiding customers in better realizing their decorative design concepts and creating the desired spatial ambiance. We will be introducing a series of sizes including $\phi 25$, $\phi 30$, $\phi 35$, $\phi 40$, $\phi 45$, $\phi 50$, $\phi 55$, $\phi 62$, $\phi 68$, $\phi 75$, and $\phi 83$, with beam angles of 10 degrees, 15 degrees, 24 degrees, 36 degrees, and 50 degrees. These variations will effectively cater to the lighting needs across a wide spectrum of scenarios.

Size	$\phi 25$	$\phi 30$	$\phi 35$	$\phi 40$	$\phi 45$	$\phi 50$	$\phi 55$	$\phi 62$	$\phi 68$	$\phi 75$	$\phi 83$
Angel	LES4	LES6	LES9	LES9	LES9	LES9	LES12	LES14	LES16	LES18	LES22
10°	LES3	LES3	LES3	LES4	LES4	LES4	LES6	LES6	LES9	LES9	LES12
15°											
24°											
36°											
50°											



已经量产



待开发中

公众号 · HercuLux

Contact Alcom for more knowledge and assistance.

Geert.tyssens@alcom.be