What is Night Sky Friendly Lighting?

Night sky-friendly lighting, also known as dark sky-friendly lighting, refers to outdoor lighting fixtures and practices designed to minimise light pollution and preserve the natural darkness of the nighttime environment. The key characteristics of night sky-friendly lighting include:

1. Fully Shielded Fixtures: Night sky-friendly fixtures are designed with shields or hoods that direct light downward toward the ground and prevent upward light spillage into the sky. By containing the light within the intended area, these fixtures reduce light pollution and glare.

2. Low Glare: Night sky-friendly lighting fixtures are engineered to minimise glare, which can cause discomfort and reduce visibility. By using diffusers, lenses, or other optical features, these fixtures distribute light evenly and reduce glare for improved visual comfort.

3. Warm Colour Temperature: Night sky-friendly lighting typically utilises warm colour temperatures (e.g., 2700K to 3000K) that closely resemble the color of natural moonlight. Warm-coloured light is less disruptive to nocturnal wildlife and circadian rhythms than cooler, bluer light.

4. Directional Lighting: Night sky-friendly fixtures focus light only where it is needed, such as pathways, streets, or outdoor areas, without illuminating surrounding areas unnecessarily. This targeted approach minimises light trespass and enhances safety and security without excessive lighting.

5. Energy Efficiency: Night sky-friendly lighting prioritises energy-efficient technologies, such as Light Emitting Diodes (LEDs), that consume less electricity and have longer lifespans compared to traditional lighting sources like incandescent or high-pressure sodium lamps.

6. Timed or Motion-Activated: Night sky-friendly lighting fixtures may incorporate timers or motion sensors to activate only when needed, reducing unnecessary light pollution during periods of low activity or when no one is present.

7. Smart Lighting Controls: Advanced lighting controls, such as dimming or remote monitoring systems, allow for dynamic adjustment of light levels based on changing conditions, further optimising energy use and reducing light pollution.

By adopting night sky-friendly lighting practices and technologies, communities can mitigate the adverse effects of light pollution on human health, wildlife, and ecosystems, while preserving the beauty and wonder of the natural night sky for future generations.