

## **BINAY LED-based Eagle-Eye Pendant Outdoor Luminaire**

A maintenance-free, long-life PowerLED luminaire with low power consumption, designed particularly for conditions which are open to the outdoor environment (such as open corridors and walkways)

The BINAY PowerLED Eagle-Eye Pendant Lighting Luminaire utilises power Light Emitting Diodes (LEDs) of high efficiency (greater than 100 lumens per watt), with a life duration of 50,000 hours (to 70% lumen maintenance) and 100,000 hours (to 50% lumen maintenance). It can withstand wide variation in input voltage, and the light emitted has no infrared or ultraviolet radiation content.

On account of the 180°-directivity property of LEDs, (enabling the LEDs to be directed where required in the workspace), no reflector is required in the luminaire itself. This ensures that there is no loss of luminous energy in reflection (as happens in the case of fluorescents. HPSV and other light sources which radiate all around, thus requiring reflection downwards, resulting in lower luminaire efficiency of less than 70%). LEDs can be provided with optics, and being point source light, can be directed where it is wanted avoiding light pollution. The unique Eagle-Eye design eliminates the main problem of conventional design with LEDs (i.e., directional light output directly below the LEDs only, or 'shower' effect), and allows wide-angled, highly dispersed light output.

The BINAY PowerLED Eagle-Eye Pendant Lighting Luminaire is constructed completely with aluminium of high heat conductivity. High efficiency power LEDs are mounted on three linear LED modules, each of which has a wide emission angle, and with overlap achieves an emission of 160°. The two side modules can be rotated axially to allow adjustment of illumination to the sides as required, thus providing highly dispersed, wide-angle illumination.

Power input is by means of an integrated constant-current SMPS controlled LED driver, which allows for any input varying from 90V to 260VAC without change in life or light output. As LEDs have no catastrophic failure, and being in modules each of 1.2 watt, the possibility of total light failure is virtually eliminated - thus further contributing to safety and security.

It has been observed at various installations that occupants find that LED lighting gives better clarity and sharper vision, even when light levels are reduced. This is a unique advantage of this product, and follows from the particular combination of the following factors - the LED emission characteristic and the Scotopic vision attributes of the human eye. These two factors allow for enhanced activation of the 'Rod' cells inside the eye, enabling greater control of the eye's pupil size. Smaller pupil size provides an improved focus, leading to sharper vision and better visual clarity, and thus allowing greater visibility even at lower light levels.

The BINAY LED-Based Pendant Eagle-Eye Outdoor Lighting Luminaire is available in the following models:

**BINAY Pendant Outdoor Luminaire model BE-DX-15L** Power consumption 20W approx.; replaces 40W fluorescent tube

BINAY Pendant Outdoor Light Luminaire model BE-DX-36L Power consumption 48W approx.; replaces HPSV of 150W

BINAY Pendant Outdoor Light Luminaire model BE-DX-54L Power consumption 75W approx.; replaces HPSV of 250W

BINAY Pendant Outdoor Light Luminaire model BE-DX-90L Power consumption 125W approx.; replaces HPSV of 350W

All BINAY LED Luminaires are covered under a warranty of 5 years.



BINAY's 'Eagle-Eye' LED Pendent Luminaire has a unique arrangement for adjusting the beam pattern. which allows wide angle dispersion of light







A walkway illuminated with white scotopically enhanced LED lighting



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INVENTING NEW TECHNIQUES OF PRODUCING LIGHT