NORDLAND LIGHTING®

FLOODLIGHT • BULKHEAD • HIGHBAY

CRI – (COLOUR RENDERING INDEX)

CRI (Colour Rendering Index) is a measure of the ability of a light source to accurately render the colour of objects compared to an ideal or natural light source. It is a scale that ranges from 0 to 100, with higher numbers indicating better colour rendering.

In LED lighting, the CRI is a critical factor that affects the perceived quality of light and the appearance of objects under the light. LED lights with high CRI produce light that is similar in quality to natural light and accurately render the colour of objects, while lights with lower CRI can produce a colour cast and make objects appear unnatural.

CRI is calculated by comparing the spectral power distribution of the light source to that of a reference light source and evaluating the colour shift of eight standard colour samples. The CRI of an LED light source can be influenced by various factors, including the LED chip efficiency, the type of phosphor used (for white LEDs), and the design of the LED package and optical components.

When selecting an LED light source, it is important to consider the CRI, along with other performance metrics, such as luminous flux, colour temperature, and efficiency, in order to determine the best option for a specific application. The CRI of an LED light source can also be affected by its operating conditions, such as temperature and current, so it is important to maintain proper thermal management to ensure consistent performance over time.