

# n-line Full Spectrum LED

Emitting light across the entire visible spectrum.  
 Allowing objects to appear as they would naturally under daylight.

Chip	Toyoda Gosei
Compatible Series	TiMi/LiNi/TANA/PICO/MiMi/KKSL/MoMo/SUMO
Available Strips	504/508/P-FX
Colours	2700K/3000K
CRI	R <sub>a</sub> 97 R <sub>g</sub> 80
TM-30-15	R <sub>f</sub> 95 R <sub>g</sub> 101
Bin/Step	3 Step MacAdam ellipse

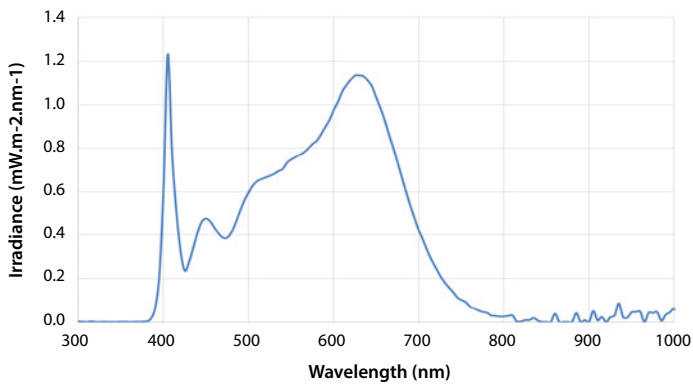


**NO UV** content above 400nm  
**NO IR** content below 780nm

Ultra violet and Infra red light can damage colour pigments, material finishes, or even skin. KKDC has carefully developed n-line Full Spectrum LED technology to ensure there is **no UV or IR** detected in the illuminated output.

Independant and recognised laboratory testing (including **Photo-Biological** tests), confirms that n-line does not contain any IR, UV, UVA or UVb, ensuring n-line Full Spectrum LED is suitable for organic pigments found in delicate Artworks and sensitive materials prone to fading.

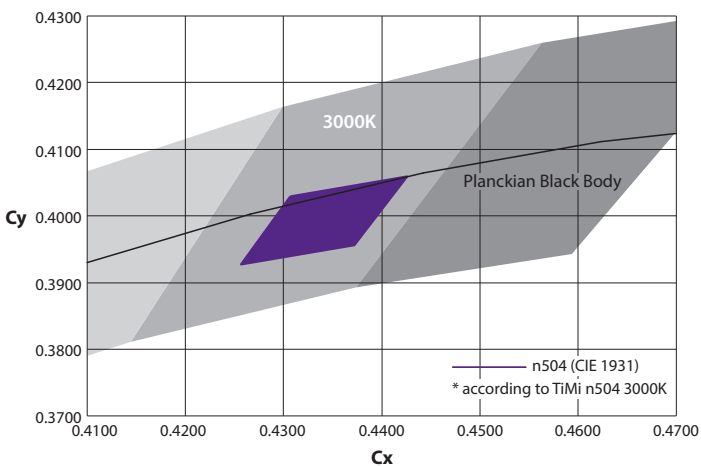
n-line Spectral irradiance



Irradiance measured at 200mm from apparent source location.

The product assessed (and any products using the same LED package or module under the same or lower conditions) is classified as: **RG1** (With report number **PBS-20794** @ Test standard **IEC TR 62778, LUX-TSI**)

### Bin Location Diagram

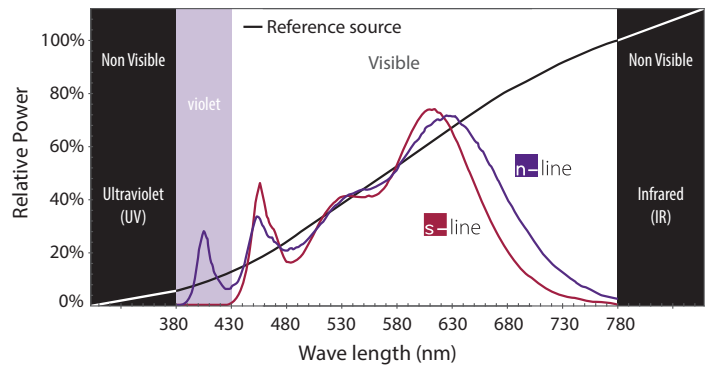


### Photo-Biological test certification



n-line technology tested to IEC/TR 62778:2014 – Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires

Spectral Power Distribution Comparison



KKDC Catalogue 3.0 cover pattern demonstrates that a full spectrum source (like daylight or n-line) shows distinction between two white hues, where standard LED's and narrow spectrum lighting makes the two whites appear the same.

In addition to the accurate illumination of whites, n-line also produces excellent results lighting colours such as yellow, brown & pink to closely match as they would appear under sunlight.



n-line



s-line

