

BIOS SkyBlue™ Circadian Lighting Technology

[PRODUCT] features BIOS SkyBlue™ technology which is designed to provide the specific circadian stimulus to improve overall sleep quality, recovery during the night and overall feelings of well-being. The non-visual light signals that stimulate our circadian system have peak intensity in the “sky blue” region. BIOS SkyBlue technology shifts the peak LED spectral intensity (460 nm) to align better with the peak response of circadian stimulus. Also note the enhanced deep-red (near 660 nm) spectrum.

BIOS™ lighting provides industry-leading LED solutions that give designers the tools they need, contributing toward satisfying Circadian Lighting Design Feature 54 under the WELL Building Standard V1 and Feature L03 under the WELL Building Standard V2. SkyBlue circadian lighting technology outperforms all traditional phosphor-converted white LEDs on the market and offers the highest melanopic to photopic lux ratio (m/p ratio) for a given color temperature. With this high m/p ratio, BIOS provides the increased melanopic content at color temperatures that designers prefer and that clients have come to expect.

WELL for Light

The WELL building standard focuses on light quality in several realms. Three categories are directly attributable to the construction and features of a luminaire. In WELL V1, Feature 54 addresses Circadian Lighting, Feature 55 deals with Glare Control and Feature 58 takes aim at Color Quality. In WELL V2, Feature L03 deals with Circadian Lighting, Feature L04 addresses Glare Control, and Feature L07 takes aim at Electric Light Quality.

When BIOS LEDs are selected, [PRODUCT] meets Feature 54, L03, 55 and L07 respectively. With [PRODUCT]’s unique ultra low UGR louver design and controlled optics, Features 55 and L04 are met. Further, Features 58 and L07 are met when Beta Calco’s ultra-high performance 90CRI chips are selected.

LED Chips

All fixtures have been tested in accordance with IESNA LM-79 and all LEDs have been tested in accordance with IESNA LM-80-08. Our high performance LED chips in conjunction with the unique luminaire design allow for very precise thermal control resulting in an exceedingly long life.

