





## LINEAR REMOTE PHOSPHOR LED INSPECTION LIGHTING SYSTEM



Typical phosphor converted LED lighting starts with a blue LED light source where phosphor is added to the LED package converting the blue light into a mixture of light that appears white. Instead of placing the phosphor directly on the LED, we use a remote phosphor technology that places the phosphor away from the LED. With numerous advantages (including longer life, higher efficacy, better color consistency and even light distribution), this creates a smooth, singular light source – no pinpoint LEDs.

We discovered that red light passes through the phosphor material with very little change in wavelength or output, enabling blending of blue and red LEDs behind the phosphor to increase the red content of the light source. This not only increases the color rendering index (CRI) of the light, but it also creates a three peak light source that slightly over saturates colors making them appear more pleasing. This technology also has a higher efficacy than phosphor-based red enhancement solutions. Inspection processes that require color recognition or inspection of red, purple or brown subjects will further benefit from the red enhanced light output. Our remote phosphor technology, coupled with red enhancement and high CRI, provides seamless, superior inspection solutions.

#### **FEATURES AND BENEFITS:**

- Dimming provides adjustability for surface color, texture, and operator preference - color and light distribution do not shift when dimmed
- Zebra/Contrast with no visible LEDs provide smooth output
- Improved operator comfort
- Industrial-based control system with more than 35 years of proven applications provides exceptional control and a wide array of communications options allowing connectivity to almost any existing control system
- High color quality with high CRI option; red enhancement remote phosphor up to 5600K 94CRI

- General high-quality light for inspection/assembly/quality control
- Tuning for brightness or color based on inspection or operator needs
- Integrated control/networking/ display
- Eliminate hazardous waste

   no lead nor mercury used
   in manufacturing; only
   highly recyclable aluminum and
   polycarbonate
- Light output does not show point sources, especially on reflection







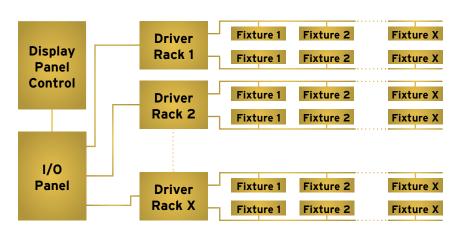






# CUSTOMIZABLE INSPECTION LIGHTING SYSTEMS

- Remote phosphor offers the power and efficacy of traditional white LEDs, but with the even distribution, customization, and aesthetic comfort of incandescent or fluorescent
- Remote phosphor linear LED lights can be used for zebra (contrast), inspection and general lighting.
- Easy to install inspection systems that allow only low voltage wiring in the production area.
- High color quality with high CRI option or red enhancement remote phosphor.
- Driver racks can be used on multiple lights to build customizable systems.



#### **CONTROL CAPABILITIES:**

- Slide dimmer to web compatibility
- Graphical touchscreen interfaces tough and water resistant
- Data logging and power monitoring
- Integration with industrial networks: Modbus TCP, Profibus, Ethernet IP, CANOpen, DeviceNet, BACnet, etc.
- Dozens of I/O solutions to connect to sensors, processes, inputs and vision systems



Fixture 1

Fixture 2

Fixture X

#### **WIRING HARNESS:**

- Standard length of harness in stock
- Custom length of harness available for special order
- Allows for low-voltage DC in production areas
- Designed for streamlined installation process

### SYSTEM COMPONENTS



#### **Linear Mounting Clips**

Mount the clips to your unistrut style frame or surface mount location



#### **Harness**

Quick connect harness to connect to remote driver



