

# REMOTE PHOSPHOR

*FOR LED LIGHTING*



INTEMATIX

## **QUALITY OF LIGHT**

*Uniform, glare free, diffuse light with consistency of lumens and color over life*

## **EFFICACY**

*Up to 30% higher lumen per watt than white LEDs*

## **SAVES TIME**

*New colors with same blue light engine*

## **LOWER COST SOLUTION**

*Less materials and lower supply chain costs with a lower power consumption and lower total cost of ownership*

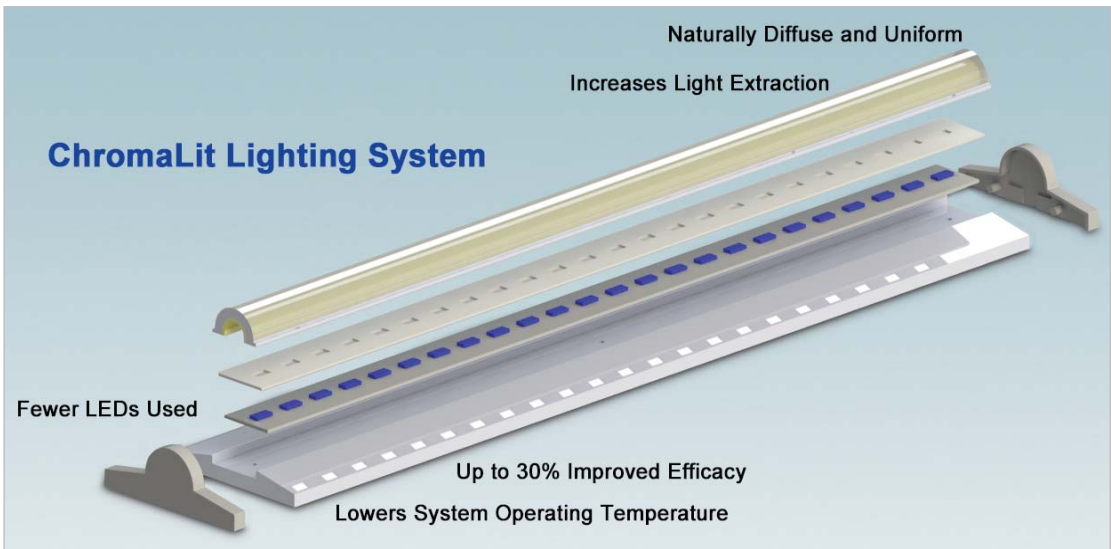
## **RELIABLE**

*Offering high volume, global production and a certified quality system*

**INTEMATIX, MAKING LIGHTING BETTER**

## Intematix ChromaLit

ChromaLit is a remote phosphor system for lighting. The phosphor is delivered in a composite material, separated from the blue LED energy source, and emits high quality white light when excited by a blue light engine. The separation of the phosphor from the energy source delivers high system efficacies and lowers costs while offering a uniform luminance and appearance with no reflections or pixelation. ChromaLit also offers unprecedented consistency of lumens and color over lifetime.



## Process Problems Solved

The interchangeability of ChromaLit eliminates the need for binning management, reduces inventory costs and protects you from the rapid evolution of LED technology. Luminaires designed with ChromaLit can deliver any CCT or CRI desired with a single blue pump light engine. ChromaLit will enable you to quickly respond to the needs of your customers without stocking a wide variety of different white LEDs, streamlining your supply chain. As blue LEDs continue to improve in efficacy, the same ChromaLit product can be easily integrated into new systems ensuring a platform for future proof luminaire consistency in both aesthetics and performance.



## Product Families

### ChromaLit Linear



ChromaLit Linear enables new and creative designs for high lumen area and decorative lighting systems. This high quality non-pixelated light source also provides a clean and familiar off state white appearance to further enhance the commercial appeal of lighting systems.

**Great for:** Troffers, mid and high bay lighting, cove lighting, architectural lighting, retail lighting, task and under cabinet lighting



### ChromaLit 360



ChromaLit 360 enables brighter and more efficient LED bulbs and fixtures with a wide angle light distribution that delivers the beam pattern required by the application.

**Great for:** LED retrofit bulbs, portable consumer lighting, sconces, pendants, chandeliers and other decorative lighting applications

### ChromaLit 360XT



ChromaLit 360XT delivers increased lumen density and thermal stability for more challenging environments. Enabling 300° emission patterns in retrofit lamps, ChromaLit 360XT will change the way you think about LED lighting.

**Great for:** LED retrofit bulbs, down lights, portable consumer lighting, sconces, pendants, chandeliers and other decorative lighting applications

### ChromaLit XT



ChromaLit XT offers powerful elegance for brilliant lighting design. Enabling up to 20,000 lumens from a 6 inch/ 150 mm round aperture, the enhanced off state white appearance improves design aesthetics.

**Great for:** Wide area lighting, high bay and industrial lighting, wall packs, spot lighting, down lights, LED modules and commercial lighting

### ChromaLit



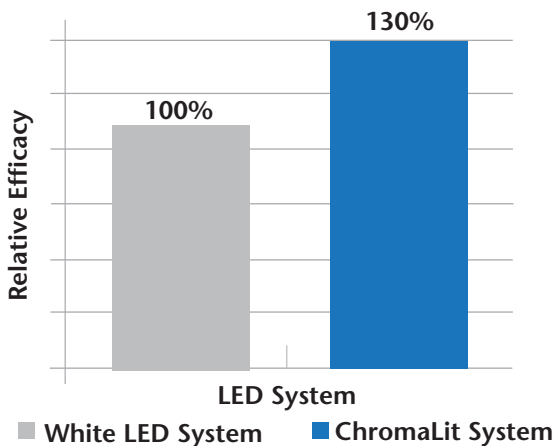
ChromaLit delivers consistent high quality color with up to 30% higher system efficacy compared to conventional LED lighting designs. Available in a variety of shapes and colors, on a rugged substrate, this line of remote phosphors has streamlined the supply chain and production process for luminaires.

**Great for:** Down lights, task lighting, under cabinet, entertainment, studio and panel lighting

## Unparalleled Lifetime and Efficacy

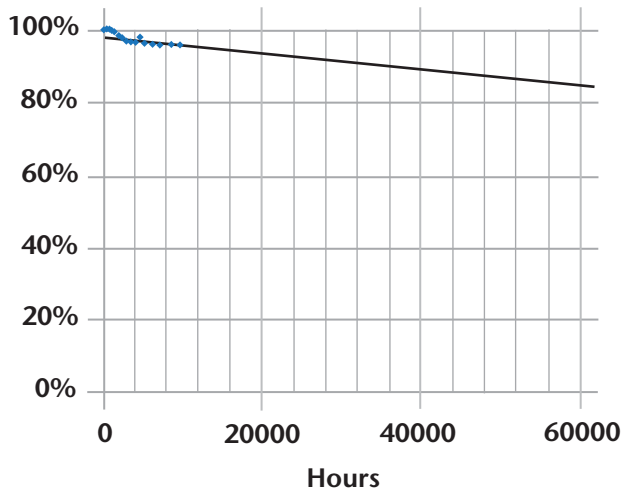
ChromaLit enables system efficacy gains of up to 30 percent compared to conventional LED lighting systems by operating at lower temperatures, maximizing photon extraction and removing the need for a diffuser. Relocating the light generating surface away from the energy source, the ChromaLit architecture produces significantly more light per input power, increases LED package lifetime and reduces the LED chip junction temperature. ChromaLit system designs require fewer LEDs, use smaller heat sinks, enable higher LED drive currents and reduce energy usage.

### System Efficacy Improvement



*\* Results vary based on reference design*

### Lumen and Chromaticity Maintenance



**Contact a sales representative to request a demonstration kit and full product details.**

## Future Possibilities

Our labs are continually developing improved processes, new materials and solutions. In the future, these advances will deliver:

- Improved optical control
- Extended color temperature and CRI options
- Enhanced environmental viability
- Innovative shapes and sizes



## Intematix Corporation

Intematix develops essential materials to drive the LED lighting revolution. The company's comprehensive range of phosphors and remote phosphor components can be used to build the foundation for the world's LED lighting products and systems including general lighting, displays, automotive and many others. A broad product selection of phosphors for LED makers and ChromaLit remote phosphors for lighting system manufacturers accelerate time-to-market, improve light quality and efficacy and reduce costs.

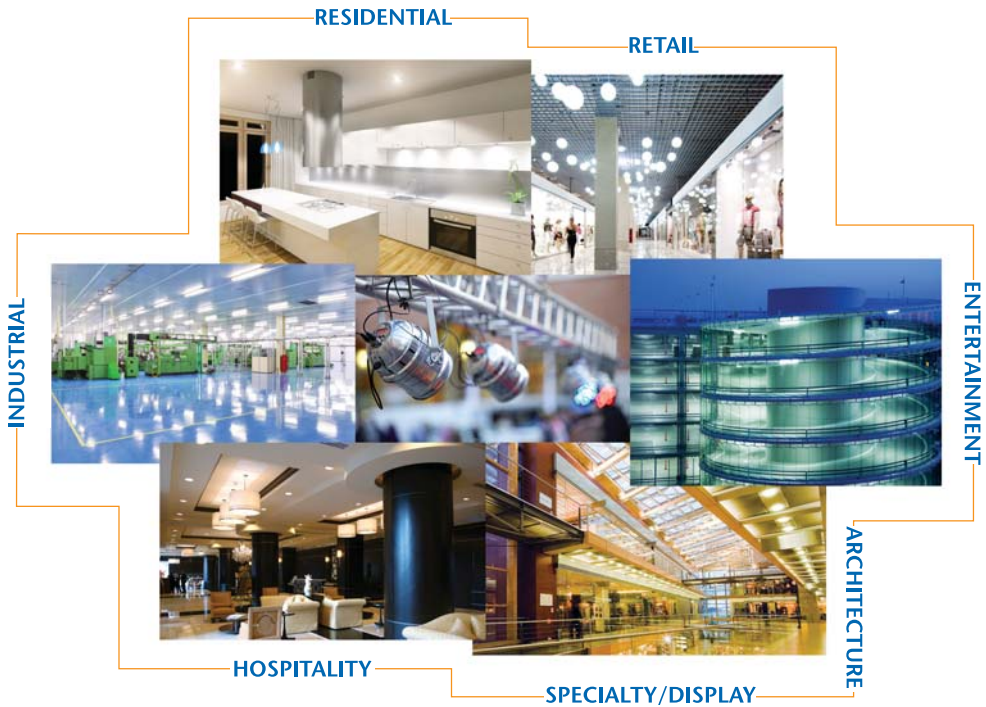
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*ChromaLit's Wide Range of Applications*