

The Fabulous
Lighting Maven
Unexpectedly Illuminating

ACTION-ORIENTED PEARLS OF WISDOM FOR INDUSTRIAL MANAGERS AND CONTRACTORS
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Dear Reader:

It should come as no surprise that some LED product lines perform at a higher quality than others, and in determining which are statistically at the higher end of the market in advance of a system purchase makes a good deal of sense. For a few extra dollars, the Facility Manager can provide his/her employees with brilliant lighting that adds to their well-being, as well as their productivity.

CRI Red R9 and Skin R13

The quality of each light fixture on the market is rated on a scale of 1 to 100, and this scale is known as the color rendering index. There are 14 shades of color within this rating system, and a rating agency assesses how well each color is rendered by the respective lighting technology for each of these shades – or at least the first 8 of them. The 8 are the least saturated of the colors in the indexing system, and the fluorescent lighting industry only concerned themselves with the rendering of these 8 shades, as fluorescents can't really render the warmer, bolder colors anyway.

In that some LED can render warmer colors well, the CRI system is radically outdated, and ripe for an industry update to their standards, and the manner in which CRI is calculated. That said, some manufacturers are publishing what the metrics are for their fixtures at the top of the CRI scale – shades 9 through 14. These are named R9 through R14, and red is R9 and skin tone is R13.

Why is it important to know this? Because the well-being of people is enhanced when the electric lighting they find themselves under more closely resembles natural sunlight. We all are, at our core, natural people, and the closer our artificial environments mimic nature the better we are.

Some forms of production require superb lighting, including accurate renderings of the colors and textures of the product being produced. Textiles, for example, undergo inspections to determine compliance with color standards, as well as to what extent blemishes are found in the product being manufactured. Printed material, be it paper or packaging, needs to convey colors that are crisp and precise, exactly to the standards required by the customer.

Foods require color accuracy as well. Red meat needs to be red, rather than the sickly pinkish tone that appears under the old fluorescents.

Several good reads on this subject are Fireflir's [What is R9 and Why Does It Matter for LED Lights](#). Or Lightology.com's [CRI, R9 & R13: What's the Difference?](#) SORAA publishes a quick mention of it on their website as well, found here: [Why Understanding R9, not Just CRI, Matters to You](#). We think you'll find each of these informative.



U.S. Power is an industrial energy services company that specializes in the reduction of energy consumption across a broad array of manufacturing and food processing facilities located in Michigan, Ohio, Indiana, Illinois and Wisconsin. In addition, the company publishes a useful curation of lighting-oriented information from the marketplace, and consolidates it into this concise, twice per month letter known as The Fabulous Lighting Maven, distributed to Facilities Managers throughout the nation.

While the company prides itself in its diversity, it owns and operates a niche lighting contracting firm as well, known as U.S. Power Vision, LLC. With a core business in and around industrial LED lighting, it keeps itself and its clients at the cutting edge of illuminating technologies, all aimed at providing – from the eyes to the fingertips – exceptional illumination, superb control and intuitive simplicity.

YOUR MORNING GRIN

Given the Choice Between
You and the Power Company,
We Choose You.

Reduce Your Energy Costs.

Ron Motsch
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*Building and Managing a Suite of
The Most Productive and Admired
LED Lighting Systems on Earth*

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