BORDEN LIGHTING

999 Montague Street
San Leandro, CA 94577
phone 510.357.0171 fax 510.357.3832

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DECORATIVE LED LIGHTING UPDATE
CF vs. LED

The advent of High Brightness LEDs has accelerated the adoption of LEDs for both ambient and task lighting. In a previous E-News (July 2013) we discussed the new Bridgelux Gen4 arrays that we are using. These arrays are Chip On-Board (COB) type arrays that are offering 100-120 lumens per watt.

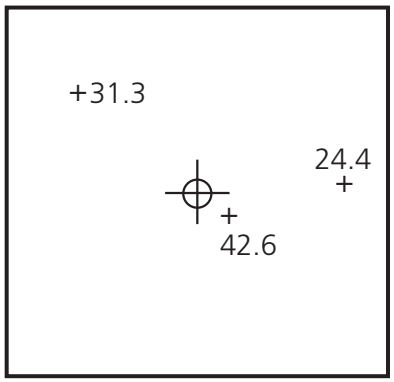
Our new family of purpose-built pendants utilize these COB arrays. Many think the best quality of light results from indirect/direct lighting, where the uplight is strong and there is some downlight to model the objects below the fixture. Our new pendants all use the same light engine which produces 94% uplight and 6% downlight. The design delivers 77 lumens per watt, which includes fixture and driver losses, resulting in a very broad, smooth and glare-free delivery of the light. All the drivers are multi-volt, 120/277V and are dimmable to 10% with 0-10V dimming controls.

For an office application, the comparison is quite dramatic. As illustrated below, the CF fixture produces 29 footcandles and uses 116 watts (the ballast loss is estimated), while the LED pendant delivers 26 FC while using only 63W (tested). That's a **46% savings in energy!** The tested 314 uses 3-15W arrays for uplight and one 7W array for downlight, but the fixture is available with 4 arrays up for 33% more light. Because the arrays operate at 55-60C, if you ran these LED pendants for 10 hours per day, they would last over 25 years.

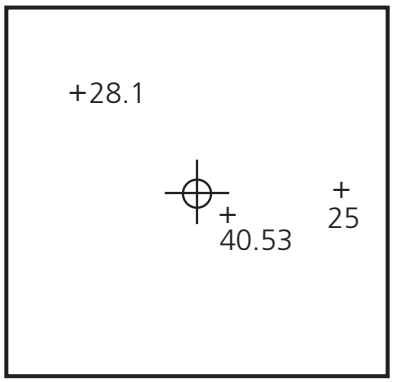
314

308

302



315-CF4/26
4-CF-26TTT Lamps,
96% uplight & 4% down.
Avg FC: 28.61



314-LED 3/15 + 1-7
3-15W arrays up (94%) &
1-7W down (6%)
Avg FC: 25.61

10ft x 10ft room; 8ft ceiling;
6' 8" mounting height.

E-mail a question or comment.

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