



Seeing the LED light

In its search for lighting that was attractive and efficient, fast-casual dining chain PDQ ultimately found that its answer all came down to one principle: *simplicity*.

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PDQ, operated by Tampa Fla.-based MVP Restaurant Partners, wanted a reliable, energy-efficient system for its location in Sarasota, Fla., one that would provide light exactly when and where it was needed, from early morning prep to the last cleanup of the evening. What it ultimately found and deployed goes well beyond, offering cost savings from installation through operation, and quality of light that far outshines its competitors.

The solution turned out to be LED lighting from St. Petersburg, Fla.-based LumaStream, specifically a turnkey system comprised of LumaStream's unique low-



voltage distribution platform, combined with driverless fixtures, integrated with a Crestron lighting control system. The remotely controlled system provides high-quality, dimmable illumination worthy of fine dining establishments. It proved ideal for PDQ, which is not your average fast-casual restaurant.

"Our building is full of glass, natural stone, real wood ceilings and unique features that provide the customer a very different feel when compared with a typical fast-casual dining experience," explained Tim Vining, president of unit development for PDQ. "The LumaStream technology was very appealing to us because of the quality of the

light and the superior life expectancy." LumaStream was recommended to Vining by a related restaurant concept that had used the system successfully.

"PDQ is focused on a great customer experience," said Jack Weisser, account and project manager for LumaStream. "They had tried LED in the past and not been impressed."

LumaStream presented its unique, dimmable LED system, in which six scenes, set automatically by astronomical clock from a central off-site server, turn on and set different levels of illumination based on the time of day and activity. The "arrive" mode illuminates the kitchen prep areas, while "open" lights the dining room, menu board and drive-through during operating hours. "Dusk" dims the light to the level of a cloudy day; "evening" darkens the room to 80% and also reduces kitchen illumination. "The slight dimming during evening hours actually makes the restaurant much more comfortable and appealing for diners," Weisser added.

After hours, "closing" brings back full illumination for cleaning. Lastly, "leave" turns off lights that aren't needed when the restaurant is unoccupied. Photocells at the restaurant also can adjust the illumination level in response to the amount of sunlight during the day.

Perhaps most important is the smooth, flicker-free dimming, which is easier on the eyes, and can dim so gradually that "the eye doesn't sense it's changing," Weisser noted.

LIGHTING QUALITY: Persuading PDQ's planners that proper dimming not only worked, but belonged, in a fast-casual concept took a full-on demonstration. When they saw the quality of the lights at 80% capacity, they were convinced.

Ambience, however, was not the only deciding factor. LED lighting is extremely efficient, now made even more so because of LumaStream's greatly simplified lamp, according to Mike Gaydos, the company's vice president of market development. Previous LED bulbs contained power conversion components that created many potential points of failure as well as life-shortening amounts of heat. However, LumaStream has created an Intelligent

LED Lighting System, a three-in-one remote solution consisting of power conversion, constant current drivers and dimming control (with built-in surge protection) that creates consistent illumination with less heat, less complexity and less staff involvement.

“LEDs have replaced Thomas Edison’s 130-year-old technology with a energy efficient solution that requires very little power and DC current. LumaStream takes full advantage of that technology by only supplying the power that is needed,” Gaydos said. The power used and the heat generated are so low that LumaStream uses speaker wire to power the fixtures.

“We have eliminated shock and fire hazard from lighting,” Gaydos stated, adding that it is unnecessary to run low-voltage LEDs on a high-voltage infrastructure. “Why water your garden with a fire hose?”

The low-voltage distribution system reduces the number of circuits required by the electrical infrastructure. The result also eliminates the need to run a conduit, and allows LumaStream to control every fixture individually, a benefit unique to the company.

“We can dim or increase light to one fixture, if needed or desired,” Weisser said.

In addition, by carrying power and control over the same Class 2 wire, the labor costs of installation are greatly reduced; a licensed electrician is not required. LED lighting is naturally cooler, reducing the temperature of the restaurant and lowering HVAC expenses.

Though PDQ’s light modes are programmed to run automatically, a manager can override them briefly in 10 individual zones to facilitate a spill cleanup, for example. In addition, LumaStream customer service is available 24/7 to troubleshoot. LumaStream also has programmed different zones within the facility, but Weisser has found that managers rarely make adjustments.

“The control system works well for our staff, and the astronomical clock makes the system virtually automatic in terms of lighting scenes throughout the day,” PDQ’s Vining said.



PDQ — an acronym for People Dedicated to Quality — combines high-quality food, memorable service and hospitality in a contemporary-looking, fast-casual dining environment.

The restaurant chain, whose specialties include fresh hand-breaded chicken tenders, made-to-order sandwiches, daily cut fries and hand-spun milkshakes, was developed by former Outback Steakhouse co-founder Bob Basham and MVP Holdings CEO Nick Reader, a former chief financial officer with the NFL’s Tampa Bay Buccaneers. The two partners spent more than two years developing the concept, which made its debut in 2011 in Tampa, Fla. As of March 1, 2014, PDQ has opened 18 locations in Alabama, Florida and North Carolina. It has upcoming expansions in those same states plus Georgia, South Carolina and Texas.

PDQ's Sarasota location opened in the summer of 2013. Pleased with the results, the restaurant chain has since gone on to specify LumaStream for units in Lakeland, Fla.; Jacksonville, Fla.; Mobile, Ala.; and all future sites.

BENEFITS: Vining estimates that PDQ will save more than 50% in energy costs over the original lighting package, which was a mix of LED, fluorescent and incandescent. Plus, due to their direct distribution model combined with savings in wire and installation, LumaStream is coming in at first cost for PDQ. But the benefits extend well beyond dollars and cents.

"The quality of the light output and capabilities of the system make it worth it even without the savings," Vining said.

Equally crucial, the system also is saving PDQ staff time and headaches, he added. "The managers do not have to worry about making manual adjustments to the system and changing out bulbs," Vining explained. "And we have had zero failures to the system to date."

LumaStream says its low-voltage system is a game-changer. Despite its recent introduction to the market, electricians and municipalities have embraced the simplicity and safety these systems offer.

“LumaStream has done a great job of communicating with the GC's and electricians so far,” Vining said. “The communication from LumaStream and their ability to adapt our architectural fixture package as promised was a refreshing surprise when compared with the typical vendor bag of promises.”

