

LED Tubes – Making Cents of Them!

Tube be or not tube be – that is the question!

Caveat emptor is a Latin term that means “let the buyer beware.” This term puts the risk on the buyer that a product may fail to meet their performance (and safety) expectations or have inherent defects. In other words, the principle of *caveat emptor* really serves as a warning that buyers have no recourse with the seller if the product they purchased does not meet their expectations. The assumption is that the buyers will take responsibility to inspect, study, and test to ensure that they are confident with the integrity of the product they are purchasing before a transaction.

Caveat Emptor in Practice

Under the principle of *caveat emptor*, for example, a consumer who purchases a coffee mug and later discovers that it has a leak, is stuck with the defective product. Had they taken the time to inspect the mug prior to the purchase, a sale may not have resulted. So goes it for LED tubes replacing T8 and T12 linear fluorescent tubes.

Does low price ever mean quality assurance?

Recently, our company was contracted to provide LED tubes for a very large underground parking structure in Chicago (did I forget to say it is large?). Before offering our products to the market, and in this particular case, our LED tubes, we do thorough lab testing where we measure thermal properties, resistance to power surge and variations, strength testing, bending measurements, and many more tests. Needless to say, the testing is stringent. Most tube manufactures do not meet our minimum standards. Two well-recognized names in lighting that also competed with us, did not meet our quality minimums with the product that they were offering. Price is only one component to consider in a purchasing decision when it comes to LED tubes. As a rule of thumb...Quality is not free, or better yet...Quality Costs! Because LED tubes have become very big business and we have a large national presence, we receive emails like this one below multiple times a day in solicitation for our business: (I often confuse them for a different kind of solicitation with these interesting names and salutations).

*Hi Dear,
I like to your our newest T8 tube, which comply LM79 require.
Do you need for this kind LED T8 tube?
Best regards,
Honey*

The true price of LED tubes

When dealing with China or any other overseas location, it is imperative to understand the risk of such a transaction. First, the price is really not the price. A low price per tube is often before the cost of overseas transportation, before duty, before overland transportation, union and handling fees, percentage of “Dead on Arrival” product, cost of prepayment of product to China, and risk of prepaying and never getting product. Don’t forget that you also have to account for servicing a long five-year warranty. That attractive low price that drew you in becomes your Achilles heel.

Are certifications important?

Do you pay more for words like: Kobe, Angus, Sushi grade, Prime, or USDA? Of course you do! Those qualities are important to you. For LED tubes, you must insist on UL, CSA, DLC (Design Lights Consortium). DLC is the standard for LED lighting and most utility providers will not provide rebate incentives unless your tube of choice is listed on the DLC. Many offshore LED manufacturers will say, we are “expecting” DLC approval soon, or “We have submitted for DLC”. That is like being nominated for a Grammy and assuming you are the winner. Just ask Kanye West if a nomination is a guarantee of a win in now two times making a fool of himself over Beyoncé...Never assume anything.

On May 28, 2009, FoxNews published an article entitled, “The Price of Cheap, When Chinese Products Fail, Americans Suffer.” In summary, even if an American company wins in court against a Chinese company for manufacturing faulty products, it is virtually impossible to collect on their legal debt. So, don’t count on collecting if a problem occurs. Cheap is sounding even riskier now.

Continued on Page 18



LED Tubes – Making Cents of Them

from Page 16

All is not doom and gloom.

Companies have accounted for risks through thorough engineering studies, solid financial relationships that include warranty coverage, and large US inventories that are easily accessible.

Am I a candidate for LED tubes?

If you have T8 or T12 tubes in your parking garage, offices, or retail spaces, in a word...YES! A typical T8 tube is rated at 32 watts. A typical LED tube is rated at 18 watts (4' length) and has a 5-year replacement warranty. Many

utilities are providing rebates from \$5 to \$20 per tube and beyond. Work with your lighting manufacture to maximize your rebates. Be careful as each utility has unique requirements for rebates and on a day-to-day basis might change the requirements of the rebate or simply eliminate it on a whim. DLC and UL are non-negotiables; they are a must to receive incentives and should

be a must for every consumer. Some utilities require you to continue to use the existing fluorescent ballast with an LED tube. Some require hard wiring and the ballast being taken out of service. Most tubes are one or the other. The ECO product is unique in that the LED tube works in three ways... 1. With the existing ballast (ballast dependent) in place. 2. Hard wired (ballast independent) two-sides hot. And 3. Hard wired (ballast independent), one-side hot. We originally thought of calling it the ECO 3 Way tube, but we wondered if clients would think we were talking about the Steak N Shake 3 Way Chili product....so we call it the ECO FlexTube LED. We don't want anyone thinking impure thoughts...about food.

You wouldn't buy a car without driving it first, so don't simply agree to replace all the tubes before you test drive them.

How do I get this done?

Companies can provide you with an APP for your smartphone (Apple and Android device). Search ECOLIT in the marketplace for the FREE APP. Use ParkingToday as your company name) to help you gather the information for a quick and free assessment. Or simply contact your favorite trustworthy lighting manufacturer for assistance.

Paybacks can be brisk and ROIs can be fantastic when considering replacing T8s with LED tubes. Don't let first cost prevent you from considering a change. Also, don't follow the route of cheap; it will cost you dearly in the long run. Let your lighting manufacturer provide you with an ROI analysis of your property to see if it Makes Cents for you.

Don't do anything before you do a demonstration.

You wouldn't buy a car without driving it first, so don't simply agree to replace all the tubes before you test drive them. We have seen fixtures that house qty: 4 – 32 watt tubes that end up only needing qty: 2- 18 watt LED tubes to match the performance. That is 128 initial tube rated watts to only 36 new tube rated watts. Also color is critical. Don't expect to put 5000k color temp tubes in your conference room and think people will be happy.

Use 3,000k or 3,500k tubes in office spaces for a warm more yellow appeal. In parking structures, go for 5000k or 4000k to enhance colors and improve visual acuity.

In conclusion, be smart, use your trusted advisors and don't fall for cheap, it can be the costliest decision of your life.

PT

Proudly serving the parking industry,

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What about 'Title 24' in California?

So, here is the quick and dirty. If you live in California and you have T8s in your facility, understand this. If you change the fixture in any way, other than replacing the existing tubes with LED tubes, you then must add motion sensors to control your fixtures. The only way to update is to use Ballast Dependent LED tubes and leave the existing ballast in place. If you bypass the ballast and go line voltage, you are out of Title 24 compliance and are subject to civil penalties. Caveat Emptor shows up often in California. Cheap tubes usually are line voltage tubes and cheap will end up costing quite a bit when you are required to add the cost of motion sensors and the labor to your project as well as penalties.