



## ROI WITH HIGHMAX HIGHPOWER CFLS

JAN 29, 2010

Answers provided by Greg Murphy (GM), MaxLite Product Manager and Webinar Presenter except where answers were provided by other attendees as noted.

- **Sue Gerhart:**        ***What about 480V applications?***  
GM:                        We do not have a 480V version yet, but many customers have either added a step-down transformer; or have hardwired the circuits to 277V. Even with the extra cost ROI can be very short.
- **Vince:**               ***How about lamp life?***  
GM:                        All HighMax models are rated for 10,000 hours. When you only look at the energy savings and rapid ROI, HighMax is the consensus choice. When you need to look at other requirements, you may have to compare the pros and cons of each system.
- **Caroline Fetter:**    ***What is the light loss compared to M.H.?***  
GM:                        MH has a 60+% of lumen depreciation while HighMax is less than 20%. The means lumens over life time are almost the same between the two.
- **Andrew**               ***What about working with photo controls?***  
GM:                        Photo controls and timers are fine! Just like with Linear T-Bay fixtures, be sure to use fluorescent compatible devices.
- **Robert Arnts:**       ***Will these work in wall packs?***  
GM:                        Yes. Simply by-pass the ballast before installing!
- **Juan Borda:**         ***What about 220V?***  
GM:                        We have made and drop-shipped 220V in South America

- **Joe Leitwein:**            ***What about 280V applications?***  
 GM:                            We are developing a model for this now. Look for announcements!
  
- **John Riddle:**            ***What is CFL product life compared to 20,000 hr Metal Halide?***  
 Leroy:                         10,000hrs  
 GM                              Leroy is correct, the life is about half that of Metal Halide. But because of the step lumen depreciation with Metal Halide, many of our retail and factory customers were group re-lamping the MH at 12,000 or 15,000 hours anyway. So lamp life is not such a big factor.
  
- **Ken Hearne:**            ***What is the temperature rating?***  
 GM                              Max Ballast temp is about 80C. Very soon MaxLite will have a thermo strip on every HighMax to ensure application compatibility. Look for announcements.
  
- **Toby Eiter:**             ***How does the CFL hold up in wallpacks for cold weather (like Minnesota)?***  
 GM:                            Only the start time is affected. MaxLite is located in NJ and although we don't have the constant cold of MN, it does get quite cold. On sub zero nights the HighMaxes start at low levels and come to full brightness at about 2 min. Still a lot faster than MV, MH and HPS; and meanwhile, you instantly have some light to work with (about 25-40%).
  
- **Sterling:**                ***Energy Star?***  
 GM:                            No Energy Star. Energy Star is a residential government program and does not have a class for this industrial grade product. The principal reason for not meeting Energy Star is that the mogul base is not allowed.
  
- **Jesse:**                    ***400W MH = 20,625 Lumens***  
                                   ***200W High CFL = ? Lumens***  
 leroy:                         200watts cfl =12,000lumes  
 GM:                            Jesse and Leroy are correct but must consider the following;  
                                   MH lamps have means lumens of less than 40% of rated lumens while HighMax has means lumens over 80%.

- **Sterling:** ***Are the Highmax lamps used for retrofit or are the wallpacks specifically designed to be used with the Highmax?***

Leroy: You can use them in most standard wall packs

GM: As Leroy stated, the HighMax fit in most standard Wall Packs but MaxLite also offers new wall packs, 1x1 surface mount fixtures and HighBay fixtures which are optimized for the HighMax.
- **Sue Gerhart:** ***6LT8 fixture...\$100 approx. cost / 21,000 lumens. Are these approved for utility rebates?***

Ed Rasinski: Contact you local power company on rebates. Here in Maryland they are not covered only because the energy savings is so great it wouldn't make sense to rebate them on top of the already huge savings

GM: There are some, such as FPL in FL and others, that have included this class of product for rebates, but most only have a category for CEE listed Linear T8/5 lamp/ballast and or Energy Star rated CFL's. But almost all have discretionary money for "other technologies" and HighMax almost always applies.
- **Ben Petry:** ***I guess if you had restraints on space inside a fixture, then these might make sense.***

GM: Limited space as well as up-light have been motivators for a customer choosing a HighMax retrofit as well.
- **Jesse:** ***If meter reads photopic, why were the foot candles the same???***

GM: Jesse- I am not sure I understand the question. Please contact me at [gmurphy@maxlite.com](mailto:gmurphy@maxlite.com) and we can continue the dialog.
- **Derek Duncan:** ***Will a copy of this PowerPoint be made available on the website?***

GM: The Q&A, PP presentation and video will all be made available. You'll receive a notice with this Q&A.
- **Jesse:** ***Is MaxLite working on higher powered CFLs to replace 1000W MH bulbs?***

GM: Maybe in the future, but not today, unless the application is very over lit.

- **Andrew:** *Will all of the Highmax lamps work with timers and or photo controls?*

GM: Photo controls and timers are fine! Just like with Linear T-Bay fixtures, be sure to use fluorescent compatible devices.
- **Marilyn Figueroa:** *What is the status of the temperature strip on the HighMax?*

GM: All the current work in process in the factory reflect the upgrade that includes the temp strip. I estimate that the inventory "state side" will reflect this in the next 30-45 days. Look for announcements!
- **Peter Gregory:** *is the light distribution spread out evenly or are they still mainly on one side of the wallpack?*

GM: Like with MV and MH the fixture is brighter on the side opposite the socket.
- **Jesse:** *What is the retro (inner reflector) light output efficiency? (0° thru °180)???*

GM: We have all the IES files and photometrics at [maxlite.com](http://maxlite.com) for download.
- **Mary Brewer:** *Are any of the lamps made in the US?*

GM: No, none that I am aware of.
- **Buzz Vance:** *ACORN FIXTURES 80 WATT WITH ADAPTER is too long Why not just have mogul base as well?*

GM: Right now the mogul based units start at 100W and are in stock. We are open to special runs if you have a special need. Contact your regional manager.
- **Juan Borda:** *Would a 277V lamp work at 220V?*

GM: Not very well, the bulb will struggle to start and the lumens will suffer. Because there has not been any extensive testing I am sure it would void the warranty.
- **Buzz Vance:** *Bill Douthitt asks does the 100 watt have fan*

GM: Yes it does... Fans in the 100W, the 150W and 200W.

- **Juan Borda:** ***Could you compare a 4 T5\*54W HighBay lamp with a 200W CFL?***

GM

We do offer lighting layouts for HighMax through our regional managers. Contact your regional manager and request a layout with both, so you can compare.

- **Dave Lakshin:** ***Can you provide the details of how to calculate the amount of green house gases beings saved and the ratio of how that relates to the number of cars off the road, and number of forest acres necessary to compensate for the gases. This was very useful information that was provided in a very short and concise manner. Greatly appreciated.***

GM

The formula is as follows;  
(Life cycle energy consumption saved (kWh)) x 1.42  
(Electricity Carbon Emission Factors, lbs CO<sub>2</sub>/kWh) source EPA 2003 /  
Either 7333 (for forest acres) lbs CO<sub>2</sub>/year/acre source EPA 2003 or  
11560 (avg passenger car) lbs CO<sub>2</sub>/year/car source EPA 2003

- **Juan Borda:** ***Can HighMaxes be used in enclosed fixtures?***

GM:

Depends on the heat buildup. We know that solid cast aluminum fixtures work well and many other enclosed fixtures work as well. Soon you will be able to self confirm that a particular enclosed fixture is a good match based on the thermal strip. Look for announcements.

**John Riddle:**

***What about applications with HighBays and photo-eyes?***

GM:

Photo controls and timers are fine! Just like with Linear T-Bay fixtures, be sure to use fluorescent compatible devices.

- **Juan Borda:** ***What would be the difference when comparing a 150W CFL with a 150W induction retrofit kit? If the life of the induction is rated at 100.000 hours and the CFL is marked 10.000 hours?***

GM

In high maintenance applications induction may make more sense but for ROI on energy, HighMax will be years sooner.