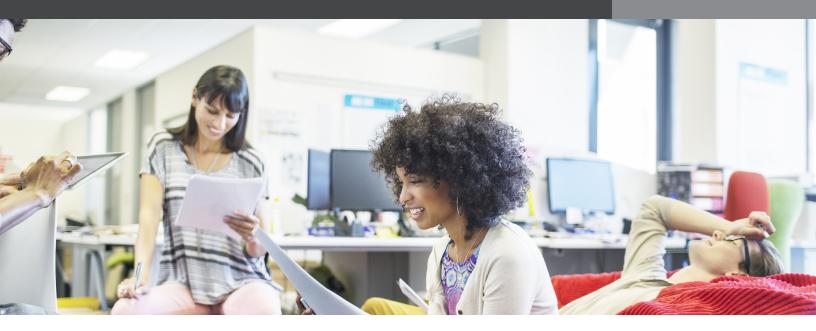
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Class P



Getting the most out of Class P

Agency testing of LED luminaries slows time to market and product refreshes for OEM manufacturers. An UL, ETL, and CSA recognized LED driver requires retesting and submittal for OEM manufacturers with every change. With the rapid pace of innovation in the LED lighting industry, changes have come faster and faster placing an increasing burden on our OEM customers to refresh their product lines and to insure the field serviceability for their customers.

Seeing a need to help our customers bring their products to market and improve field service, Philips Advance collaborated with Intertek and UL to create the Class P listing program for LED drivers. LED drivers must pass additional thermal and electrical testing to receive the new Class P listing.

This document will help to clearly summarize the benefits of the Class P program for an OEM and how to use them.

Before: Recognized

OEM luminaire

· Recognized driver

After: Class P listed

OEM luminaire

- · Class P listed driver
- All internal wiring rated to 90°C
- Initial submission for luminaire approbation

Submit fixture testing to the agency. Wait for acceptance and listing.

Luminaire refresh

(To improve dimming, add energy metering or the latest marketplace demand)

Submit luminaires for full fixture testing and wait for acceptance and listing

Spend money and time on luminaire retesting.

Luminaire refresh

(To improve dimming, add energy metering or the latest marketplace demand)

 Class P listed driver with the same or lower current and voltage as initial submission

Submit paperwork to update the luminaire file

Save time to market and money with Class P.

The advantage of using Class P Listed vs recognized components continues with each future luminaire refresh.

What are the benefits of using a Class P listed driver or light engine versus recognized?

Once a Class P driver has been qualified in a luminaire with UL, ETL or CSA, any Class P driver of the same or lower wattage can be used in that luminaire without notification.

- · Improves certification time and costs
- · Enables field serviceability of luminaries
- Simplifies upgrading to newer drivers, or switching between driver manufacturers

Can an OEM replace a "recognized" driver with a Class P listed driver?

Yes. In the this case, the luminaire will need to be submitted for approbation testing and all internal wiring must be rated for 90°C. Contact Philips for specific agency questions.

What approbation agencies offer Class P light engines?

- Currently Intertek only offers Class P listing for integrated drivers and light engines.
- Philips was the first component manufacturer to offer a Class P listed light engine: The DLM EaseSelect.

What are the requirements for an OEM to use Class P?

- · Qualify the luminaire with a Class P driver
- All luminaire wiring must be rated to 90 °C





Which approbation agencies have Class P programs?

- Intertek (ETL) LED drivers and LED light engines. http://www.intertek.com/news/2014/12-15-first-to-launch-class-p-for-led/
- UL LED drivers
 https://www.ul.com/newsroom/pressreleases/ul-announces-new-class-p-led-driver-program/
- CSA LED drivers
 http://www.csagroup.org/services-industries/product-listing/class/?3426-98

How many Class P drivers and light engines does Advance offer?

Advance offers the broadest range of Class P listed products, and is continuing to add more. Please visit www.na.easydesignintool.signify.com/calculate-driver and sort the certification by ETL Class P, UL Class P, or CSA Class P for the most up to date list.

How do I know if a driver is Class P or not?

· Recognized label markings

Class P listed label markings







For Dry and Damp Location



Check the approbation agency website for listings.

What are the uses of Class P integrated driver and light engine?

- OEM's can use the integrated driver and module to simplify field service and warranty support
- OEM's can refresh the module to gain efficiency without having to retest the luminaire, only have to update the paperwork.

For more information, contact your Signify sales representative or visit www.signify.com/Advance.









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