

XLamp® XP-E2 LED Product Change Notification

Customer Name: XP-E2 Blue, Green LED PCN Reference Number: CreeLED-PCN-5318

Customers Date Issued: June 16, 2022

Please be advised that Cree LED is updating the XLamp® XP-E2 Blue and Green LEDs with improved performance and efficacy, utilizing our latest technology platform which will result in better manufacturing flexibility and improved lead times.

Please review the additional PCN information below.

Affected Product

Table 1 provides a list of products affected by this change:

Table 1 Affected Products List

| Cree LED XLamp LED Family | Cree LED XLamp LED | Cree LED Part Number |
|---------------------------|--------------------|----------------------|
| XP-E2 | Blue | XPEBBL-L1-XXXX-XXXXX |
| | Green | XPEBGR-L1-XXXX-XXXXX |

Description of the Change

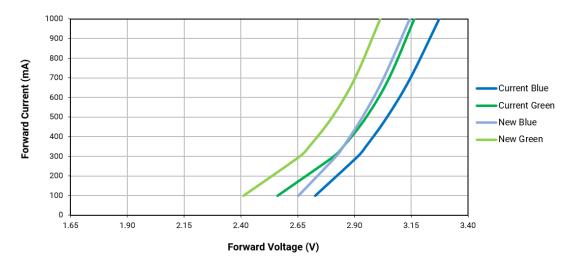
Cree LED will be changing the typical thermal resistance and typical and maximum forward voltage characteristics for the affected XP-E2 LEDs. Table 2 shows the current and new values.

Table 2 LED Product Characteristics; Current Values & Estimated New Values

| LED | Thermal Resistance, Junction to Solder Point (°C/W) | | Forward Voltage (V) @350 mA, 25 °C | |
|-------------|---|----------------|---------------------------------------|----------------|
| | Current Typical | New Typical | Current Typical | New Typical |
| XP-E2 Blue | 7 | 5.5 | 2.95 | 2.85 |
| XP-E2 Green | 11 | 9 | 2.85 | 2.7 |

The following graph shows the improved Forward Voltage vs Current curves.

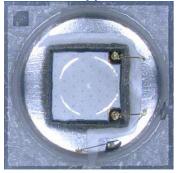




The visual appearance of the LED will change. Examples of the current and new visual appearances are shown below.

Figure 1 XP-E2 Blue Appearance Comparison





New Appearance

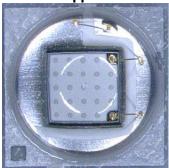
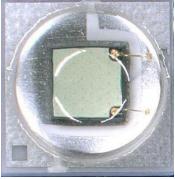
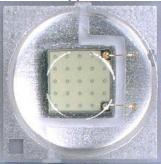


Figure 2 XP-E2 Green Appearance Comparison

Current Appearance



New Appearance





Reason for the Change

This change is being made to upgrade the performance of XLamp® XP-E2 Blue and Green LEDs utilizing our latest technology platform. Additionally, this change will result in better manufacturing flexibility and improved lead times.

Change Impact on Form, Fit, Function, or Reliability

This change has no impact on the form, fit, or reliability of these LEDs beyond the changes listed above.

Key Dates

Table 3 provides an estimated date for initial shipments of the LEDs affected by this change. Any updates to this date can be provided by the Cree LED contact listed in Table 3.

Table 3 Key PCN Estimated Dates

Estimated Initial Ship Date: August, 2022

Starting on the estimated shipment date in Table 3, customers may receive LEDs with the updated performance characteristics. Each reel will contain only LEDs with the current performance or only LEDs with the new performance characteristics. Reels of the new performance LEDs can be identified by a 'D' in the last character of the bin code. The bin code is clearly identified on each packaged reel.

Current and new performance LEDs will be contained in the same shipment. Customers purchasing through a distributor might be delayed seeing this change until the inventory with the current performance is depleted from distributor stock.

The XP-E2 LED datasheet available on the Cree LED website will be updated with changes described in this PCN on or before the Estimated Initial Ship Date in Table 3.



Cree LED Contact Information

If you have any questions regarding this PCN please contact:

Table 4 PCN Contact

| Contact: | Cree LED Customer Service | |
|-----------------|--|--|
| Contact E-Mail: | xlampsales@cree-led.com | |
| Contact Phone: | US toll free: 1-844-273-3533 Outside the US: +1 919-313-5301 | |
| Address: | CreeLED, Inc. 4400 Silicon Dr Durham, NC 27703-8475 USA | |