

XLamp® XP-E LED Product Change Notification

Customer Name: XP-E White, Blue, Green LED Customers

PCN Reference Number: CreeLED-PCN-5278
Date Issued: February 10, 2022

Please be advised that Cree LED is updating the XLamp® XP-E White, Blue and Green LED products 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

XLamp LED Family	XLamp LED Product	Cree LED Part Number
XP-E	White	XPEWHT-L1-XXXX-XXXXX
	Blue	XPEBLU-L1-XXXX-XXXXX
	Green	XPEGRN-L1-XXXX-XXXXX

Description of the Change

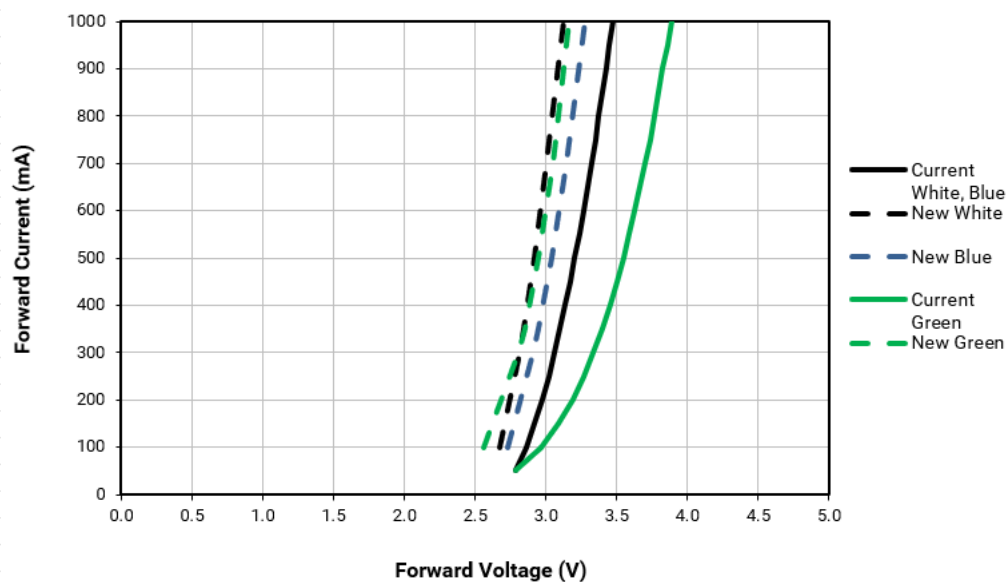
Cree LED will be changing the typical thermal resistance, typical and maximum forward voltage, and typical temperature coefficient of voltage characteristics for the affected XP-E LEDs. Table 2 shows the current and new values.

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

LED	Thermal Resistance, junction to solder point (°C/W)		Forward Voltage (V) @350mA, 25°C				Temperature Coefficient of Voltage (mV/°C)	
	Current Typical	New Typical	Current Typical	New Typical	Current Maximum	New Maximum	Current Typical	New Typical
XPEWHT	9	10	3.05	2.84	3.9	3.1	-3.0	-1.5
XPEBLU	9	7	3.1	2.95	3.9	3.4	-3.3	-1.9
XPEGRN	15	11	3.3	2.85	3.9	3.25	-3.8	-1.2

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

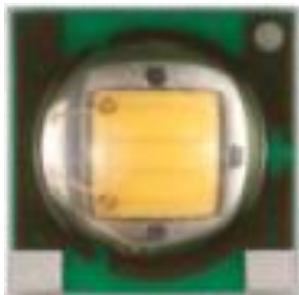
Figure 1 LED Forward Voltage vs Current Curves



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

Figure 2 XPE White appearance comparison

Current Appearance



New Appearance

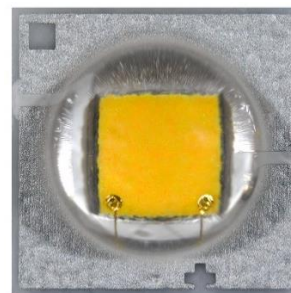
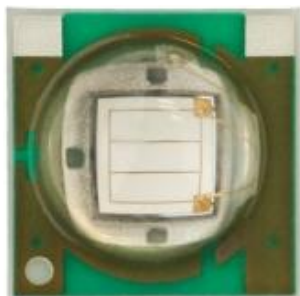
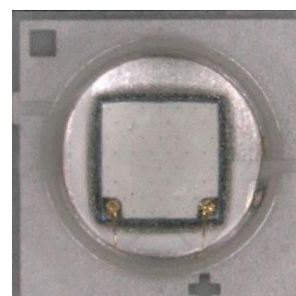


Figure 3 XPE Blue & Green appearance comparison

Current Appearance



New Appearance



Ray files for the new performance LEDs will be available on www.cree-led.com on or before May 1st, 2022 at the following address:

[XLamp XP-E LEDs \(cree-led.com\)](http://www.cree-led.com)

Reason for the Change

This change is being made to upgrade the performance and efficacy of XLamp XP-E White, 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 estimated date for initial shipments of the LEDs affected by this change. Any updates to these dates can be provided by the Cree LED contact listed in Table 4.

Table 3 Key PCN Estimated Dates

Estimated Initial Shipment Date:	May 5nd, 2022
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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 'C' in the last character of the bin code. The bin code is clearly identified on each packaged reel.

Current and new performance LEDs will not be contained in the same shipment. Current performance LEDs will be shipped until Cree LED's inventory of the current performance LEDs is depleted. Customers purchasing

through a distributor will be further delayed seeing this change until the inventory with the current performance is depleted from distributor stock.

The XP-E LED data sheet available at <https://cree-led.com/media/documents/XLampXPE.pdf> 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