

Cree® XLamp® XQ-A LED Product Change Notification

Customer Name: XQ-A LED customers

PCN Reference Number: CREE-PCN-1250

Date Issued: January 29, 2021

Please be advised that Cree is making improvements to the voltage characteristics of XLamp® XQ-A White, Blue, and Green LEDs.

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 Part Number	Cree Part Number	Cree Part Number
XQAAWT-xx-xxxx-xxxxxxxxxx	XQABLU-xx-xxxx-xxxxxxxxxx	XQAGRN-xx-xxxx-xxxxxxxxxx

Description of the Change

Cree will be changing temperature coefficient of voltage and thermal resistance characteristics for XQ-A White LEDs. Cree will be changing the typical forward voltage, temperature coefficient of voltage, and thermal resistance characteristics for XQ-A Blue and Green LEDs. Table 2 and Table 3 show the current and new values.

Table 2 XQ-A White Current & New Values

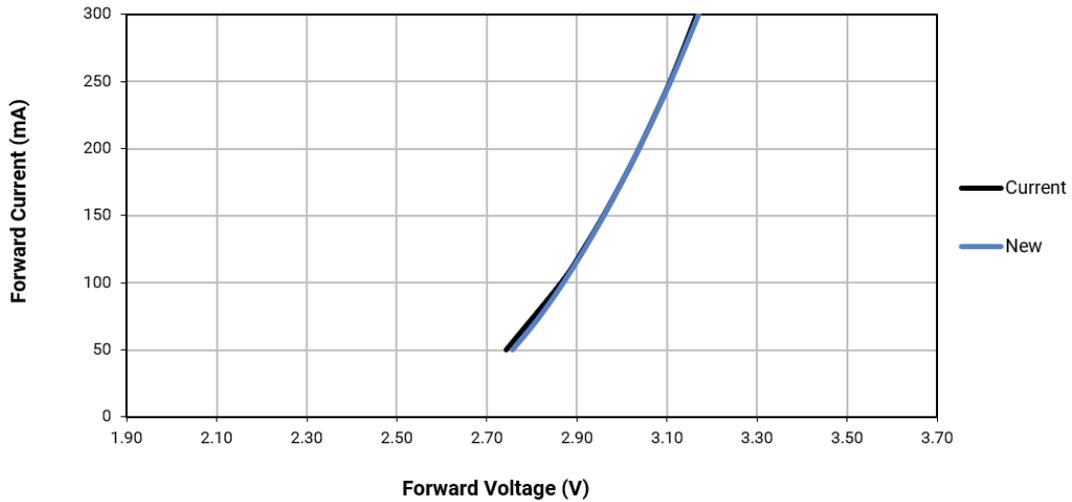
LED	Temperature Coefficient of Voltage (mV/°C)		Thermal Resistance (°C/W)	
	Current	New	Current	New
XQ-A White	-2.8	-1.2	20	12

Table 3 XQ-A Blue & Green Current & New Values

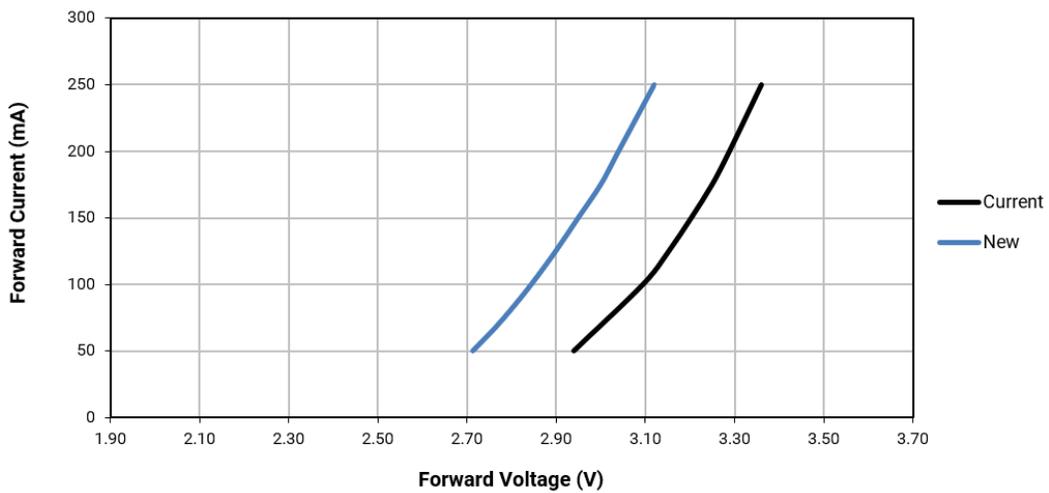
LED	Typical Forward Voltage (V) @ 175 mA, 25 °C		Temperature Coefficient of Voltage (mV/°C)		Thermal Resistance (°C/W)	
	Current	New	Current	New	Current	New
XQ-A Blue	3.25	3.0	-4	-1.1	17	9
XQ-A Green	3.4	3.1	-4.3	-1.3	30	17

The following graphs show the improved Forward Voltage vs. Current curves.

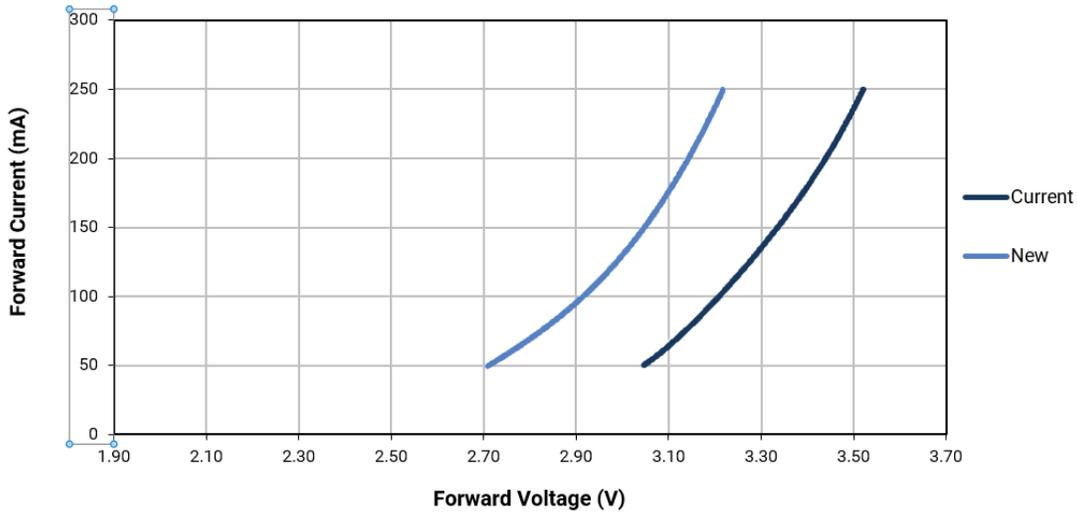
XQ-A White



XQ-A Blue



XQ-A Green



Reason for the Change

This change is being made to improve performance for our customers.

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 4 provides an estimated date for initial shipments of the LED affected by this change.

Table 4 Estimated Initial Shipment Dates

XQ-A White	March 15, 2021
XQ-A Blue	March 15, 2021
XQ-A Green	March 15, 2021

Starting on the estimated shipment date in Table 4, customers may receive LEDs with the improved characteristics. Each reel will contain only LEDs with the current performance or only LEDs with the new performance characteristics.

Reels of new performance XQ-A White LEDs can be identified by an “1” in the fourteenth alphanumeric character of the bin code.

Reels of new performance XQ-A Blue and Green LEDs can be identified by an “8” in the last character of the bin code.

The bin code is clearly identified on each packaged reel.

Customers may receive shipments containing both the current and new performance LEDs in the same shipment until Cree'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.

Cree Contact Information

If you have any questions regarding this PCN please contact:

Table 4 PCN Contact

Cree Contact:	LED Customer Service
Cree Contact E-mail:	xlampsales@cree.com
Address:	4600 Silicon Dr. Durham, NC 27703