

Cree® XLamp® COB LED Product Change Notification

Customer Name: CMA, CMT & CXB customers

PCN Reference Number: CREE-PCN-0956

Date Issued: January 22, 2020

Please be advised that Cree is making improvements to the voltage characteristics of XLamp® CMA1516, CMT1407, CMT1412, CMT1420, CMT1922, CMT1925, CXB1304, CXB1507, CXB1816, CXB2530, CXB2540 and CXB3050 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	
CMA1516-xxxx-xxxxxxxxxxxx	CXB1304-xxxx-xxxxxxxxxxxx
CMA1407-xxxx-xxxxxxxxxxxx	CXB1507-xxxx-xxxxxxxxxxxx
CMA1412-xxxx-xxxxxxxxxxxx	CXB1816-xxxx-xxxxxxxxxxxx
CMA1420-xxxx-xxxxxxxxxxxx	CXB2530-xxxx-xxxxxxxxxxxx
CMA1922-xxxx-xxxxxxxxxxxx	CXB2540-xxxx-xxxxxxxxxxxx
CMA1925-xxxx-xxxxxxxxxxxx	CXB3050-xxxx-xxxxxxxxxxxx

Description of the Change

Cree will be changing the typical forward voltage for CMA1516, CMT1407, CMT1412, CMT1420, CMT1922, CMT1925, CXB1304, CXB1507, CXB1816, CXB2530, CXB2540 and CXB3050 LEDs. Table 2 shows the current and new values.

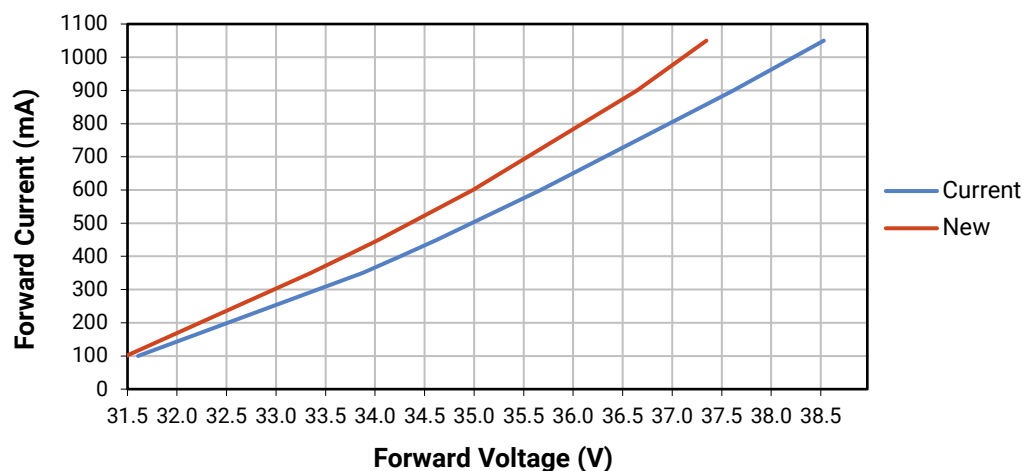
Table 2 Current and New Values

LED	Typical Forward Voltage	
	Current	New
CMA1516	35 V @ 450 mA, 85 °C	34 V @ 450 mA, 85 °C
CMT1407	34.2 V @ 200 mA, 85 °C	33.7 V @ 200 mA, 85 °C
CMT1412	34.5 V @ 200 mA, 85 °C	34 V @ 200 mA, 85 °C
CMT1420	34.4 V @ 550 mA, 85 °C	34 V @ 550 mA, 85 °C
CMT1922	34.2 V @ 600 mA, 85 °C	34 V @ 600 mA, 85 °C
CMT1925	34.2 V @ 700 mA, 85 °C	34 V @ 700 mA, 85 °C
CXB1304 9 V	8.6 V @ 400 mA, 85 °C	8.45 V @ 400 mA, 85 °C
CXB1304 18 V	17.3 V @ 200 mA, 85 °C	16.9 V @ 200 mA, 85 °C
CXB1304 36 V	34.5 V @ 100 mA, 85 °C	33.8 V @ 100 mA, 85 °C
CXB1507 18 V	17.3 V @ 400 mA, 85 °C	16.9 V @ 400 mA, 85 °C
CXB1507 36 V	34.5 V @ 200 mA, 85 °C	33.8 V @ 200 mA, 85 °C
CXB1816	35.0 V @ 450 mA, 85 °C	34.1 V @ 450 mA, 85 °C

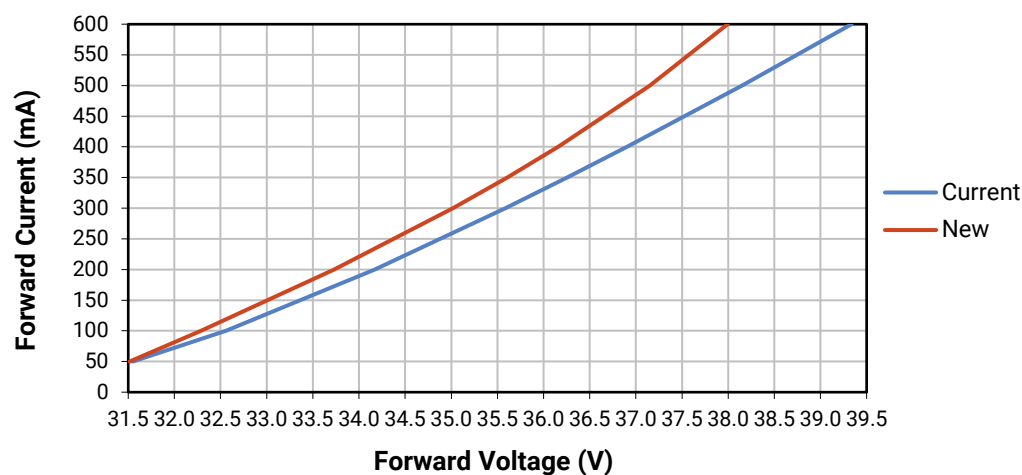
LED	Typical Forward Voltage	
	Current	New
CXB2530	35.0 V @ 800 mA, 85 °C	34.2 V @ 800 mA, 85 °C
CXB2540	34.8 V @ 1100 mA, 85 °C	34.1 V @ 1100 mA, 85 °C
CXB3050	34.8 V @ 1400 mA, 85 °C	34 V @ 1400 mA, 85 °C

The following graphs show the improved forward voltage vs. current curves.

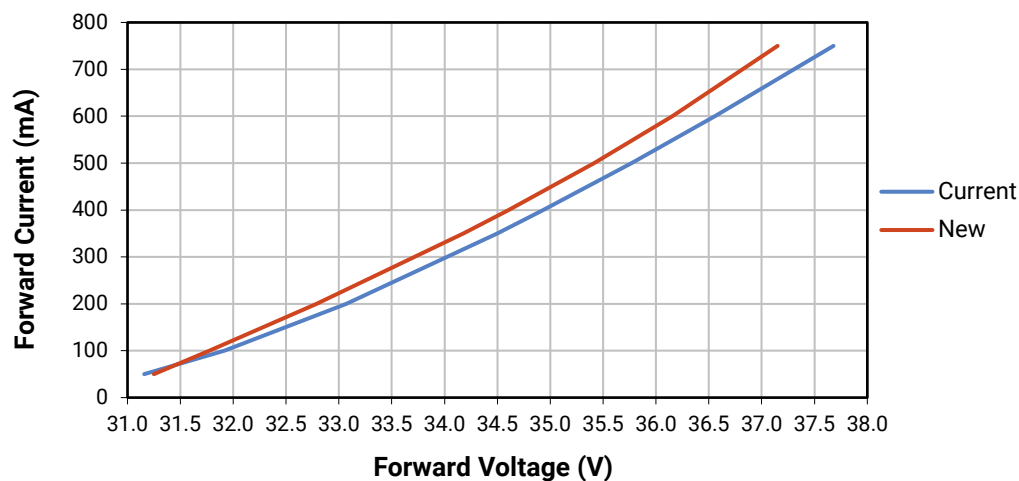
CMA1516



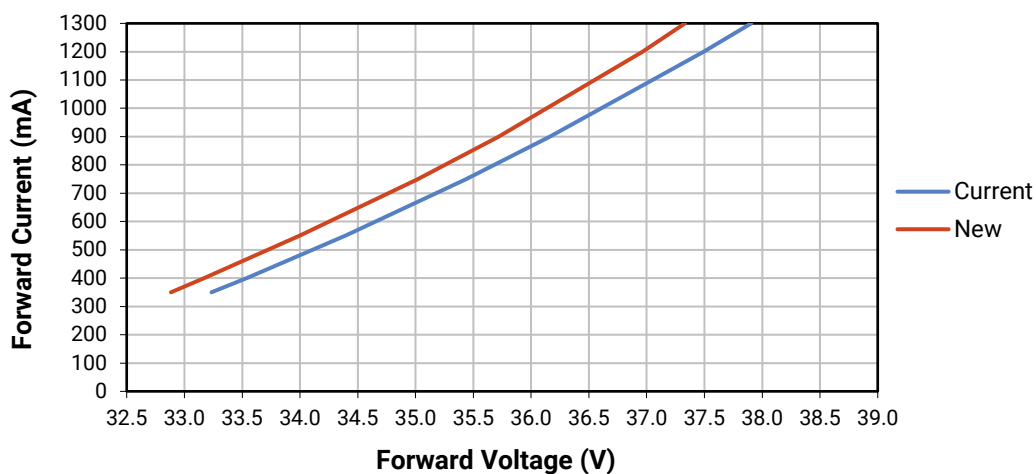
CMT1407



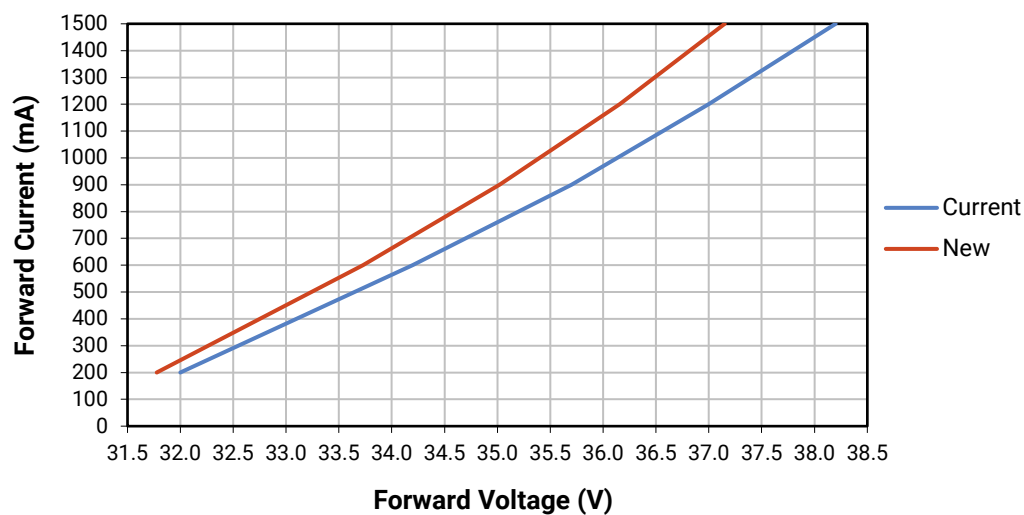
CMT1412



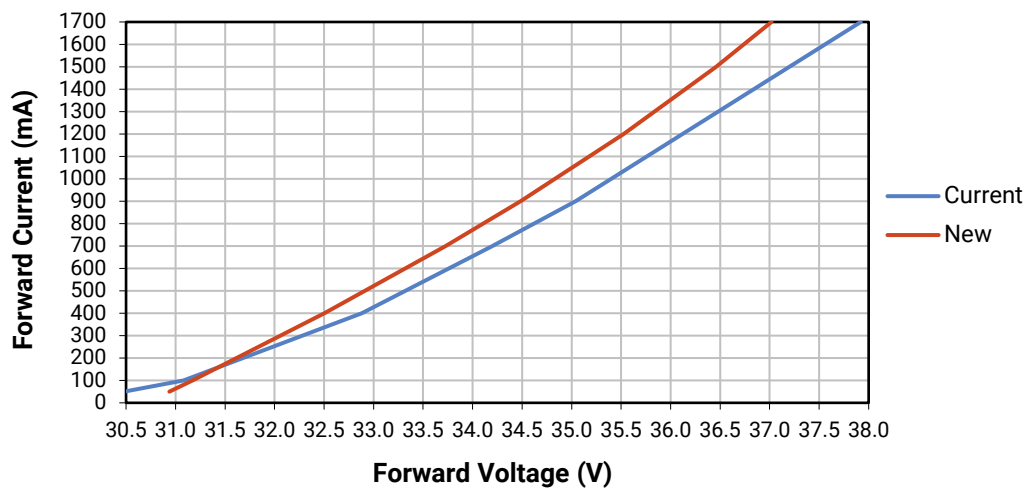
CMT1420



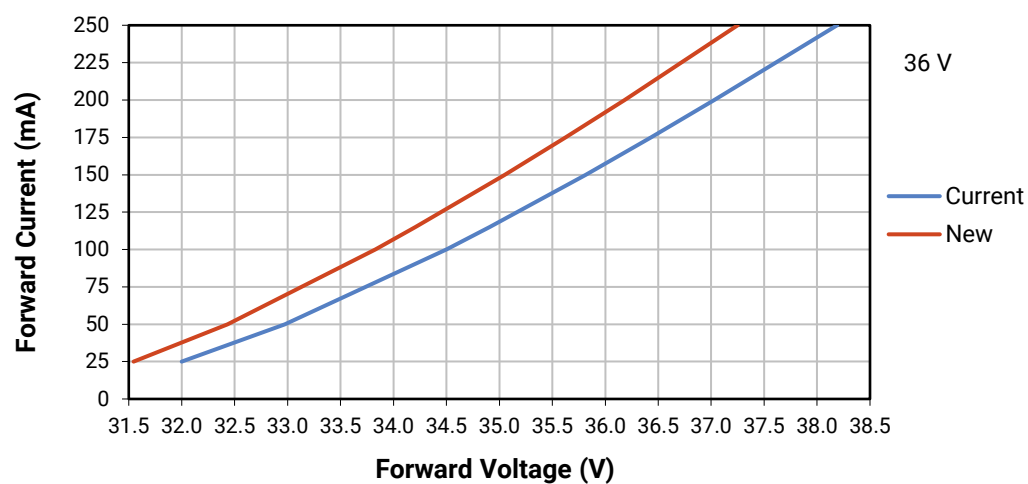
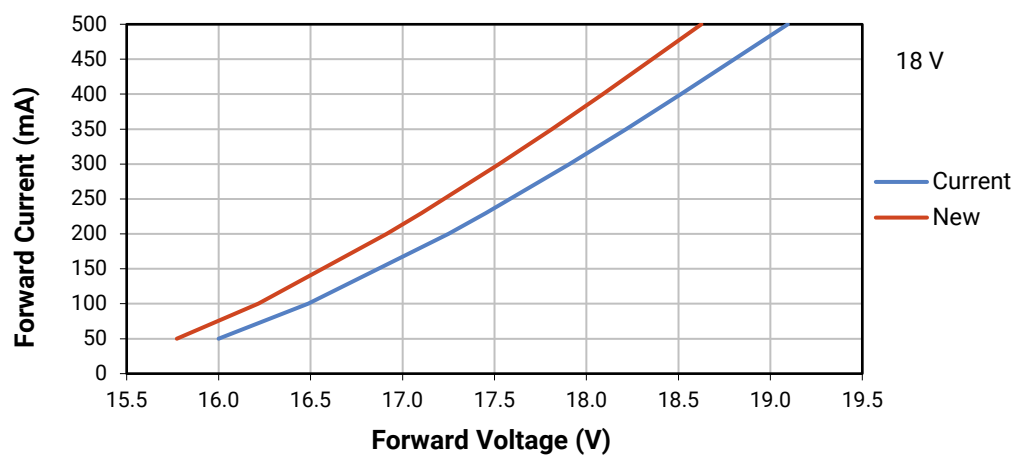
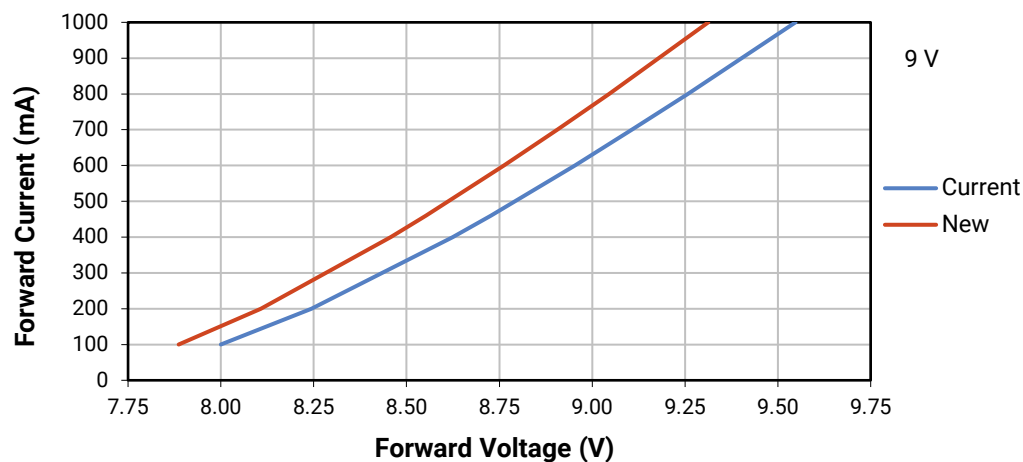
CMT1922



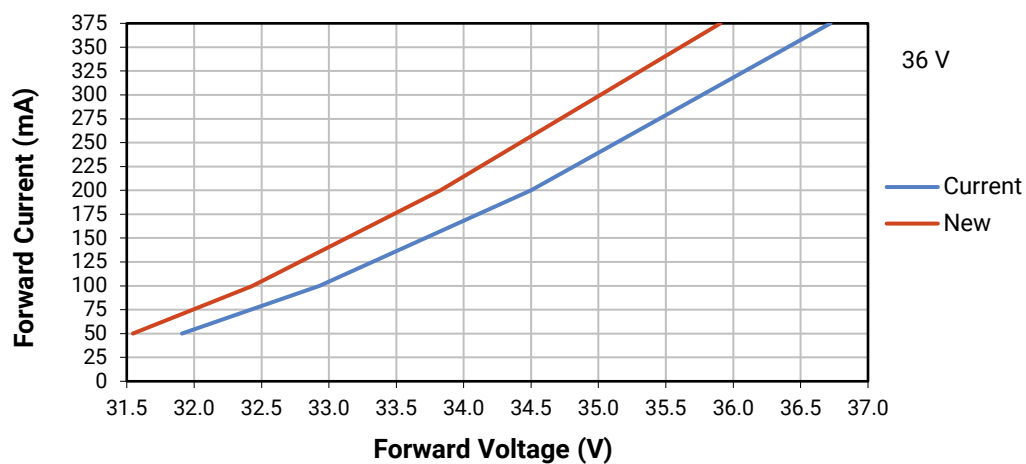
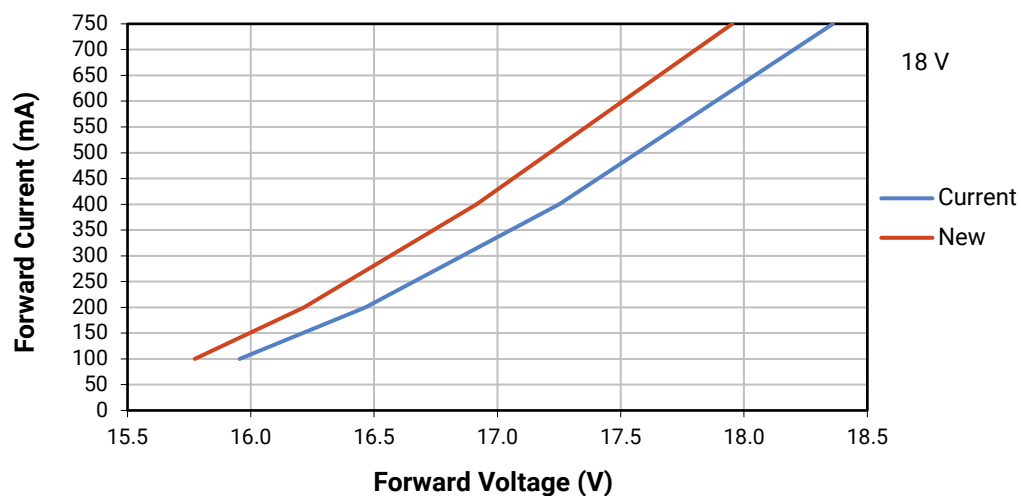
CMT1925



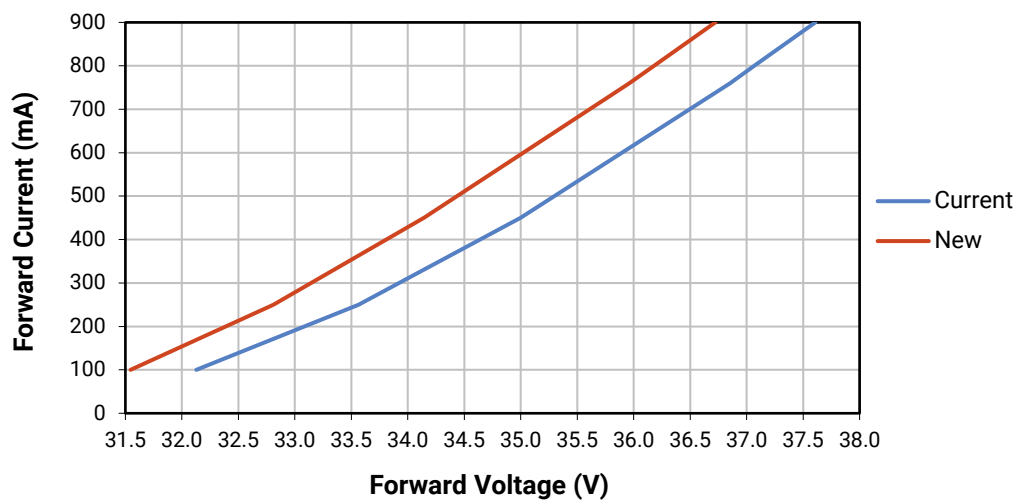
CXB1304



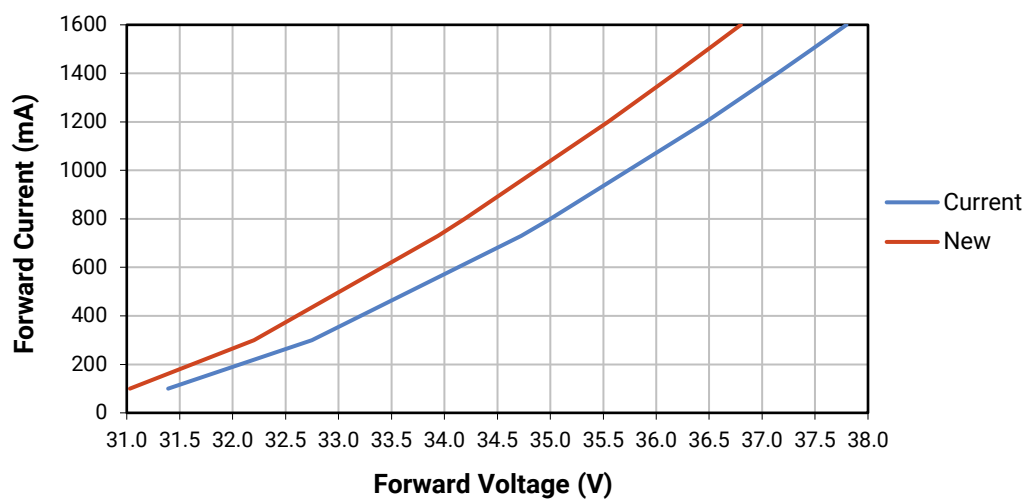
CXB1507



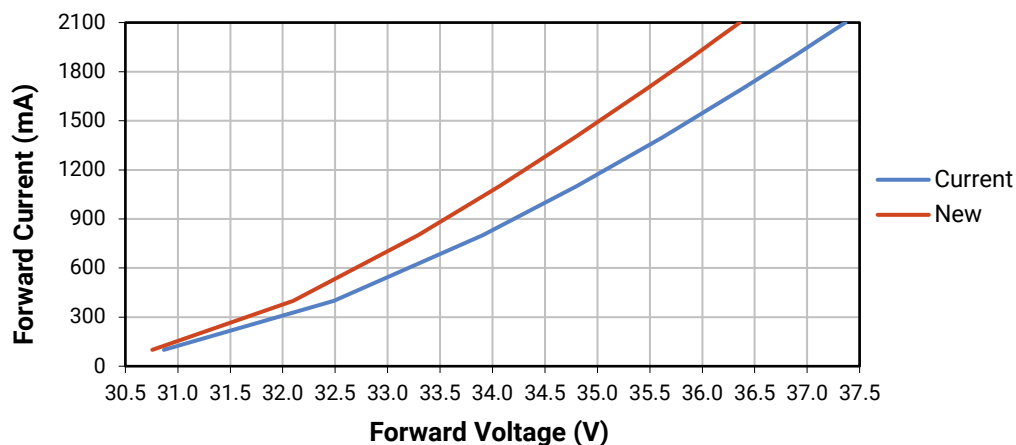
CXB1816



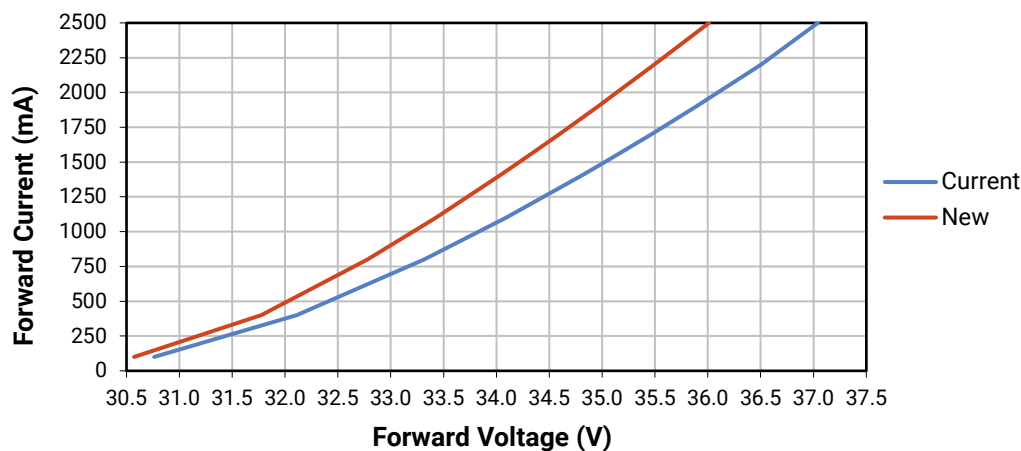
CXB2530



CXB2540



CXB3050



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 3 provides estimated dates for initial shipments of the LEDs affected by this change.

Table 3 Estimated Initial Shipment Dates

CMA1516	December 1, 2019
CMT1407	February 7, 2020

CMT1412	February 7, 2020
CMT1420	February 7, 2020
CMT1922	February 7, 2020
CMT1925	February 7, 2020
CXB1304	February 7, 2020
CXB1507	February 7, 2020
CXB1816	February 7, 2020
CXB2530	February 7, 2020
CXB2540	February 7, 2020
CXB3050	February 7, 2020

Starting on the estimated shipment dates in Table 3, customers may receive LEDs with the improved characteristics. Each tray will contain only LEDs with the current performance or only LEDs with the new performance characteristics.

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