

CBT-120-UV LEDs

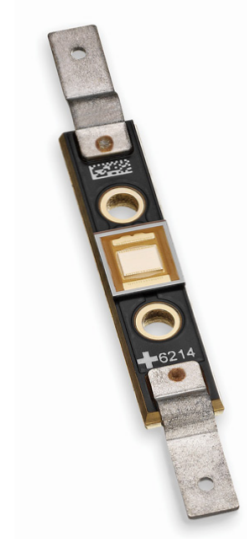


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Introduction:

This document describes the binning and labeling nomenclature for CBT-120-UV-C31 and CBT-120-UV-C14 Big Chip LED™ product as well as the orderable bin kits for each part. With each build of parts, there is a distribution of performance in both flux and wave length or chromaticity. In order to guarantee specific performance for customers, each device is measured and subsequently grouped into flux and wavelength or chromaticity bins. Each individual package or reel of parts contains only one combination of flux and wavelength or chromaticity bin. Furthermore, bins are combined into orderable bin kits comprising a selection of flux and wavelength or chromaticity bins to ease the ordering process.

Table of Products

Products	Ordering Part Number	Description
CBT-120-UV-C11	CBT-120-UV-C31-x123-22	CBT-120 -UV consisting of a 12 mm ² LED, a thermistor, connectors, and a square copper-core PCB.
CBT-120-UV-C14	CBT-120-UV-C14-x123-22	CBT-120 -UV consisting of a 12 mm ² LED, connectors, and a slim (rectangular) copper-core PCB.

CBT-120-UV Bin Kit Ordering Nomenclature

CBT-120-UV products are sold in sets of flux and chromaticity bins called bin kits. Each bin kit specifies a minimum flux bin and a specific selection of chromaticity bins. The ordering part number designation is as follows:

A B C — 1 2 3 — D E — F 4 5 — G 6 7 8 — 9 0

Product Family	Chip Area	Color	Package Configuration	Power & Wavelength Bin	Bin Kit Code
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Product Family	A - Package type: "C" denotes chip-on board B - Lens type: "B" denotes window (no lens) C - Chip quantity: "T" denotes single chip				
Chip Area	1 2 3 - Total LED chip area (mm ²) x 10: "120" denotes 12mm ²				
Color	D E - Color: "UV" denotes ultra violet				
Package Config.	F 4 5 - Package configuration (Core Board dimension and connector descriptor)				
Power and Wavelength Bin	G - Power Bin 6 7 8 - Wavelength bin				
Power and Wavelength Range	9 0 - Bin Kit Code				

Example:

The ordering part number CBT-120-UV-C31-M382-22 refers to a CBT-120-UV square emitter package, with a power level minimum of 13.3 Watts and 2 wavelength bins for a total wavelength range from 382 to 392 nm.

CBT-120-UV Binning Structure

CBT-120-UV LEDs are tested and sorted into one of the following power (F) and wavelength (123) bins.

Power Bins

Color	Power Flux Bin (F)	Minimum Flux (W)	Maximum Flux (W)
UV	M	13.3	14.6
	N	14.6	16.1
	P	16.1	17.7
	Q	17.7	19.5
	R	19.5	21.4

*Note: Luminus maintains a +/- 6% tolerance on power measurements.

Wavelength Bins

Color	Wavelength Bin (123)	Minimum Wavelength (nm)	Maximum Wavelength (nm)
UV	382	382	387
	387	387	392
	392	392	400
	400	400	405
	405	405	410

CBT-120-UV Bin Kit Order Codes

The following tables describe the bin kit ordering codes for the CBT-120-UV. The power and wavelength bins included in the bin kit. Each kit specifies a minimum power and the listed wavelength. A maximum power is not specified. Within each kit, Luminus may ship any part meeting or exceeding the minimum power specification. Shipments will always meet the listed wavelength bin's range. For information on ordering bin kits not listed below, please contact Luminus or an official distributor.

Color	Bin Kit Code	Power (W)	Wavelength (nm)	
		Min	Min.	Max.
UV	M382-22	13.3	382	392
	N382-22	14.6	382	392
	P382-22	16.1	382	392
	P400-22	16.1	400	410
	Q400-22	17.7	400	410
	R400-22	19.5	400	410

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