



CREE XLAMP LED COOLING

For Cree XLamp CXA, CXB, CMA, CMT
LED Arrays - Off the shelf
Passive and active LED cooling

- Validated Thermal Designs
- Adaptable to your Needs
- Functional & Aesthetic



Mastering LED Cooling

With the evolution of LED lighting over the last years, the demand for professional thermal solutions has grown exponentially. And now that we no longer remain in the realm of low power LED's, thermal management becomes a critical factor within LED fixtures. To that end, MechaTronix has developed several series of pin-fin and star heat sinks, manufactured through die casting, forging or extrusion. This has resulted in a comprehensive range of more than 400 off-the-shelf available LED coolers, for passive or active heat dissipation.

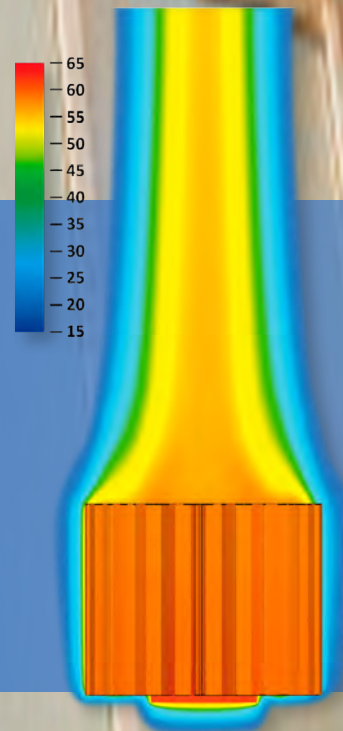
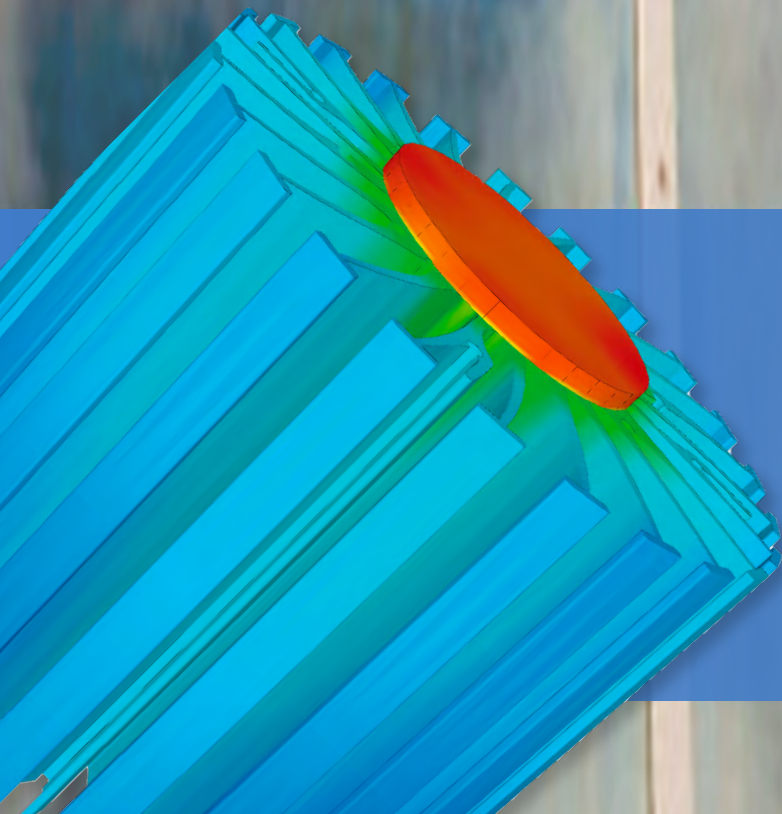
After initial reservations concerning active LED coolers, specialists have found that there really is no better option, when closing in on the 8000 lumen mark. Admittedly, the fan's lifespan becomes somewhat of a focal point in the application of an active LED cooler, but given that the lifespan of the LED engine itself dramatically decreases at high temperatures, the lifespan of the fan looks rather favourable all of a sudden.

MechaTronix' ground breaking ModuLED coolers and its actively cooled sibling IceLED have garnered a lot of attention and positive reviews in the LED market. ModuLED and IceLED are just precursors of a complete range of dedicated and highly effective LED coolers for professional deployment in spotlights, downlights, high bays and a further score of architectural and utility LED applications.

Both ModuLED and IceLED, as well as their upcoming descendants are Zhaga-ready and have a matrix of mounting holes that allows for very easy attachment of a great number of various Cree XLamp LED modules. Simply apply a thermal interface of your choice, put the LED engine in place and fasten with self-tapping screws and you are good to go! No drilling, customisation or special mounting brackets are needed.

Thanks to an extremely thorough thermal verification of all heat sink lines, MechaTronix provides total thermal disclosure for each model, coupled with all Cree XLamp LED Arrays and engines. All thermal data is available in the product specifications, that come with every MechaTronix heat sink. In this way, engineers save time and effort during the design stage of their LED fixture and will significantly shorten their time to market.

OUR PROCESS STARTS WITH LISTENING



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LPF3550-ZHC



Cree XLamp LED Pin Fin cooler
ø35mm - h50mm - Rth 7.41°C/W
Cooling performance 700 - 1,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA/CXB 1304
✓	✓	CMA 1303
	✓	CMT 1407

LPF4768-ZHP



Cree XLamp LED Pin Fin cooler
ø47mm - h68mm - Rth 3.9°C/W
Cooling performance 1,300 - 2,500 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507
	✓	CXB 1304 - 1507
	✓	CMA 1303 - 1516
	✓	CMT 1407 - 1412 - 1420

LPF6050-ZHC



Cree XLamp LED Pin Fin cooler
ø60mm - h50mm - Rth 4.0°C/W
Cooling performance 1,200 - 2,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507
	✓	CXB 1304 - 1507
✓	✓	CMA 1303, CMT 1407 - 1412
	✓	CMA 1516

LPF6768-ZHP



Cree XLamp LED Pin Fin cooler
ø67mm - h68mm - Rth 2.1°C/W
Cooling performance 2,300 - 4,600 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507 - 1512 - 1520 - 1816 - 1820
	✓	CXB 1304 - 1507 - 1512 - 1816 - 1820
	✓	CMA 1303 - 1306 - 1516
✓	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930
	✓	CMA 1825

LPF8050-ZHC



Cree XLamp LED Pin Fin cooler
ø80mm - h50mm - Rth 2.34°C/W
Cooling performance 2,000 - 4,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA/CXB 1816 - 1820
	✓	CMA 1303 - 1306 - 1516 - 1825
	✓	CMT 1412 - 1420
✓	✓	CMT 1922 - 1925 - 1930

LPF8668-ZHC



Cree XLamp LED Pin Fin cooler
ø86mm - h68mm - Rth 1.46°C/W
Cooling performance 3,300 - 6,500 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1816 - 1820 - 2520 - 2530
	✓	CXB 1816 - 1820
	✓	CMT 1516 - 1825 - 1840 - 2550
	✓	CMT 1420
✓	✓	CMT 1922 - 1925 - 1930 - 1945 - 2850

LPF11180-ZHE



Cree XLamp LED Pin Fin cooler
ø111mm - h80mm - Rth 1.07°C/W
Cooling performance 4,800 - 9,600 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1816 - 1820 - 1830 - 2520 - 2530
	✓	CXB 1816 - 1820 - 1830 - 2530
	✓	CMA 1825 - 1840 - 2550
	✓	CMT 1922 - 1925 - 1930 - 1945 - 2850 - 2870

CoolStar® 4740



Cree XLamp Designer LED Star cooler
ø47mm - h40mm - Rth 5°C/W
Cooling performance 1,000 - 2,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA/CXB 1304
	✓	CMA 1303, CMT 1407 - 1412

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CoolStar® 4760



Cree XLamp Designer LED Star cooler
ø47mm - h60mm - Rth 4.17°C/W
Cooling performance 1,200 - 2,400 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA/CXB 1304 - 1507
	✓	CMA 1303, CMT 1407 - 1412
	✓	CMA 1516

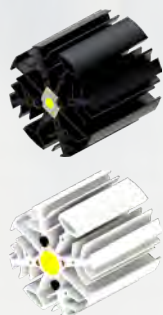
CoolStar® 6730



Cree XLamp Designer LED Star cooler
ø67mm - h30mm - Rth 3.13°C/W
Cooling performance 1,600 - 3,100 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CMA 1303 - 1306
✓	✓	CMT 1407 - 1412 - 1420 - 1922
	✓	CMA 1516

CoolStar® 6760



Cree XLamp Designer LED Star cooler
ø67mm - h60mm - Rth 2.27°C/W
Cooling performance 2,100 - 4,200 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CMA 1303 - 1306
✓	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930
	✓	CMA 1516 - 1825

CoolStar® 8630



Cree XLamp Designer LED Star cooler
ø86mm - h30mm - Rth 2.08°C/W
Cooling performance 2,300 - 4,600 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA/CXB 1816
✓	✓	CMA 1303 - 1306
✓	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930
	✓	CMA 1516 - 1825

CoolStar® 8660



Cree XLamp Designer LED Star cooler
ø86mm - h60mm - Rth 1.56°C/W
Cooling performance 3,100 - 6,100 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA/CXB 1816 - 1820
	✓	CMA 1516 - 1825 - 1840
	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930 - 1945

ModuLED Pico 4750



Cree XLamp Modular LED Star cooler
ø47mm - h50mm - Rth 5.3°C/W
Cooling performance 900 - 1,800 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA/CXB 1304
	✓	CMA 1303, CMT 1407 - 1412

ModuLED Pico 4780



Cree XLamp Modular LED Star cooler
ø47mm - h80mm - Rth 4.2°C/W
Cooling performance 1,200 - 2,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 1304 - 1310 - 1507
	✓	CXB 1304 - 1507
	✓	CMA 1303, CMT 1407 - 1412
	✓	CMA 1516

ModuLED Nano 7050



Cree XLamp Modular LED Star cooler
ø70mm - h50mm - Rth 2.2°C/W
Cooling performance 2,200 - 4,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 1304 - 1310 - 1507 - 1512 - 1520 - 1816
✓	✓	CXB 1304 - 1507 - 1512 - 1816
✓	✓	CMA 1303 - 1306 - 1825
✓	✓	CMA 1516
✓	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930

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ModuLED Nano 7080

Cree XLamp Modular LED Star cooler
ø70mm - h80mm - Rth 1.8°C/W
Cooling performance 2,700 - 5,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507 - 1512 - 1520 - 1816 - 1820
✓	✓	CXB 1304 - 1507 - 1512 - 1816 - 1820
	✓	CMA 1306 - 1825 - 1840
	✓	CMA 1516
✓	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930



ModuLED Micro 8630

Cree XLamp Modular LED Star cooler
ø86mm - h30mm - Rth 1.8°C/W
Cooling performance 2,700 - 5,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507 - 1512 - 1520 - 1816 - 1820
	✓	CXB 1304 - 1507 - 1512 - 1816 - 1820
✓	✓	CMA 1306 - 1825 - 1840
	✓	CMA 1516
✓	✓	CMT 1412 - 1420 - 1922 - 1925 - 1930



ModuLED Micro 8650

Cree XLamp Modular LED Star cooler
ø86mm - h50mm - Rth 1.5°C/W
Cooling performance 3,200 - 6,400 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507 - 1512 - 1520 - 1816 - 1820
	✓	CXB 1304 - 1507 - 1512 - 1816 - 1820
	✓	CMA 1516 - 2550, CMT 2850
✓	✓	CMA 1825 - 1840
✓	✓	CMT 1420 - 1922 - 1925 - 1930 - 1945



ModuLED Micro 8680

Cree XLamp Modular LED Star cooler
ø86mm - h80mm - Rth 1.2°C/W
Cooling performance 4,000 - 8,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1310 - 1507 - 1512 - 1520 - 1816 - 1820 - 1830 - 2520 - 2530
	✓	CXB 1507 - 1512 - 1816 - 1820 - 1830 - 2530
	✓	CMA 2550, CMT 2850
✓	✓	CMA 1825 - 1840
✓	✓	CMT 1420 - 1922 - 1925 - 1930 - 1945



ModuLED 9950

Cree XLamp Modular LED Star cooler
ø99mm - h50mm - Rth 1.34°C/W
Cooling performance 3,600 - 7,200 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1816 - 1820 - 2520 - 2530
	✓	CXB 1816 - 1820
	✓	CMA 1516 - 1825 - 1840 - 2550
	✓	CMT 1420
✓	✓	CMT 1922 - 1925 - 1930 - 1945 - 2850



ModuLED 9980

Cree XLamp Modular LED Star cooler
ø99mm - h80mm - Rth 1.02°C/W
Cooling performance 4,700 - 9,400 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1816 - 1820 - 1830 - 1850 - 2520 - 2530
	✓	CXB 1816 - 1820 - 1830 - 2530
	✓	CMA 1825 - 1840 - 2550
✓	✓	CMT 1922 - 1925 - 1930 - 1945 - 2850 - 2870



ModuLED Xtra 9950

Cree XLamp Modular LED Star cooler
ø99mm - h50mm - Rth 1.34°C/W
Cooling performance 3,600 - 7,200 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1304 - 1310 - 1507 - 1512 - 1520 - 1816 - 1820 - 2520 - 2530
	✓	CXB 1304 - 1507 - 1512 - 1816 - 1820
	✓	CMA 1516 - 2550, CMT 1420 - 1922 - 1925 - 1930 - 1945 - 2850
✓	✓	CMA 1825 - 1840



ModuLED Xtra 9980

Cree XLamp Modular LED Star cooler
ø99mm - h80mm - Rth 1.02°C/W
Cooling performance 4,700 - 9,400 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CXA 1310 - 1507 - 1512 - 1520 - 1816 - 1820 - 1830 - 1850 - 2520 - 2530
	✓	CXB 1507 - 1512 - 1816 - 1820 - 1830 - 2530
	✓	CMA 2550, CMT 1922 - 1925 - 1930 - 1945 - 2850 - 2870
✓	✓	CMA 1825 - 1840

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ModuLED Mega 13420



Cree XLamp Modular LED Star cooler
ø134mm - h20mm - Rth 1.32°C/W
Cooling performance 3,700 - 7,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 1816 - 1820 - 1830 - 2520 - 2530
	✓	CXB 1816 - 1820 - 1830 - 2530
	✓	CMA 1516 - 1825 - 1840 - 2550
	✓	CMT 1420
	✓	CMT 1922 - 1925 - 1930 - 1945 - 2850

ModuLED Mega 13450-HBG



Cree XLamp High Bay LED cooler with
direct mounting holes for Mean Well
HBG series driver
ø134mm - h50mm - Rth 0.88°C/W
Cooling performance 5,500 - 11,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 2520, CXA/CXB 2530 - 2540
	✓	CMA 1516 - 1825 - 1840 - 2550
	✓	CMT 1922 - 1925 - 1930 - 1945 - 2850 - 2870 - 2890, CMA 3090

ModuLED Mega 134100-HBG



Cree XLamp High Bay LED cooler with
direct mounting holes for Mean Well
HBG series driver
ø134mm - h100mm - Rth 0.67°C/W
Cooling performance 7,200 - 14,300 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 2520 - 2530 - 2540 - 2590 - 3050 - 3070
	✓	CXB 2530 - 2540 - 3050 - 3070
	✓	CMA 1840 - 2550
	✓	CMT 1945 - 2850 - 2870 - 2890, CMA 3090

ModuLED Giga 15220



Cree XLamp Modular LED Star cooler
ø152mm - h20mm - Rth 1.13°C/W
Cooling performance 4,300 - 8,500 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 1816 - 1820 - 1830 - 2520 - 2530
	✓	CXB 1816 - 1820 - 1830 - 2530
	✓	CMA 1825 - 1840 - 2550
	✓	CMT 1420 - 1922 - 1925 - 1930 - 1945
	✓	CMT 2850

ModuLED Giga 15250



Cree XLamp Modular LED Star cooler
ø152mm - h50mm - Rth 0.7°C/W
Cooling performance 6,800 - 13,500 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
✓	✓	CXA 1816 - 1820 - 1830 - 1850 - 2520 - 2530 - 2540
	✓	CXB 1816 - 1820 - 1830 - 2530 - 2540
	✓	CMA 1840 - 2550, CMT 1930 - 1945
	✓	CMT 2850 - 2870 - 2890, CMA 3090

ModuLED Giga 152100-HBG



Cree XLamp High Bay LED cooler with
direct mounting holes for Mean Well
HBG series driver
ø152mm - h100mm - Rth 0.52°C/W
Cooling performance 9,000 - 18,000 lm

Direct mount	LED holder	Cree XLamp LED COB
✓	✓	CXA 1830 - 1850 - 2540 - 2590 - 3050 - 3070
	✓	CXB 1830 - 2530 - 2540 - 3050 - 3070 - 3590
	✓	CMA 2550
	✓	CMT 2850 - 2870 - 2890, CMA 3090

ModuLED Giga 152150-HBG



Cree XLamp High Bay LED cooler with
direct mounting holes for Mean Well
HBG series driver
ø152mm - h150mm - Rth 0.46°C/W
Cooling performance 10,500 - 21,000 lm

Direct mount	LED holder	Cree XLamp LED COB
✓	✓	CXA 2590 - 3050 - 3070 - 3590
	✓	CXB 3050 - 3070 - 3590
	✓	CMT 2850 - 2870 - 2890, CMA 3090

CoolBay® Giga-A



Cree XLamp High Bay LED cooler with
CoolTube® heat tube and direct mounting
holes for Mean Well HBG series driver
ø152mm - h200mm - Rth 0.34°C/W
Cooling performance 14,500 - 29,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	✓	CMT 2890

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CoolBay® Giga-B

Cree XLamp High Bay LED cooler with CoolTube® heat tube and direct mounting holes for Mean Well HBG series driver
ø152mm - h200mm - Rth 0.34°C/W
Cooling performance 14,500 - 29,000 lm

Direct mount	LED holder	Cree XLamp LED COB
	☒	CXA/CXB 3590



CoolBay® Tera-B

Cree XLamp High Bay LED cooler with CoolTube® heat tube and direct mounting holes for Mean Well HBG series driver
ø192mm - h250mm - Rth 0.22°C/W
Cooling performance 22,000 - 44,000 lm

Direct mount	LED holder	Cree XLamp LED COB
	☒	CXA/CXB 3590



CoolBlock® SQ-01 2x2MX

Square Pin Fin LED Cooler for 2x2MX platform. Accommodating LED boards with 4 LEDs of Cree CXA15, CXB15 COB by using 2x2MX Bender+Wirth holder and Ledil Strada 2x2MX lenses for IP67 waterproof with just a few screws
W96mm - L96mm - H61.5mm
Thermal resistance Rth 1.45°C/W
Cooling performance 3,300 - 6,500 lm
Black electro-coating



IceLED 450

Cree XLamp Modular Active LED cooler
ø99mm - h45mm - Rth 0.58°C/W
Cooling performance 8,200 - 16,400 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	☒	CXA 1816 - 1820 - 1830 - 1850 - 2520 - 2530 - 2540 - 2590 - 3050 - 3070
	☒	CXB 1816 - 1820 - 1830 - 2530 - 2540 - 3050 - 3070
☒	☒	CMA 2550
☒	☒	CMA 3090
	☒	CMT 1945 - 2850 - 2870 - 2890



IceLED 550

Cree XLamp Modular Active LED cooler
ø99mm - h55mm - Rth 0.46°C/W
Cooling performance 10,500 - 21,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	☒	CXA 1816 - 1820 - 1830 - 1850 - 2520 - 2530 - 2540 - 2590 - 3050 - 3070
	☒	CXB 1816 - 1820 - 1830 - 2530 - 2540 - 3050 - 3070
☒	☒	CMT 2850 - 2870 - 2890, CMA 3090



IceLED Xtra 550

Cree XLamp Modular Active LED cooler
ø99mm - h55mm - Rth 0.46°C/W
Cooling performance 10,500 - 21,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	☒	CXA 1512 - 1520 - 1816 - 1820 - 1830 - 1850 - 2520 - 2530 - 2540 - 2590 - 3050 - 3070
	☒	CXB 1512 - 1816 - 1820 - 1830 - 2530 - 2540 - 3050 - 3070
	☒	CMA 3090, CMT 2850 - 2870 - 2890



IceLED Xtra Ultra

Cree XLamp Modular Active LED cooler
ø99mm - h75mm - Rth 0.25°C/W
Cooling performance 19,000 - 38,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	☒	CXA 1830 - 1850 - 2520 - 2530 - 2540 - 2590 - 3050 - 3070
	☒	CXB 1830 - 2530 - 2540 - 3050 - 3070



IceLED Ultra VS

Cree XLamp Modular Active LED cooler
ø99mm - h75mm - Rth 0.26°C/W
Cooling performance 14,500 - 29,000 lm

Direct mount	Zhaga holder	Cree XLamp LED COB
	☒	CXA 1830 - 1850 - 2520 - 2530 - 2540 - 2590 - 3050 - 3070
	☒	CXB 1830 - 2530 - 2540 - 3050 - 3070
	☒	CMT 2890

Your local distributor:

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