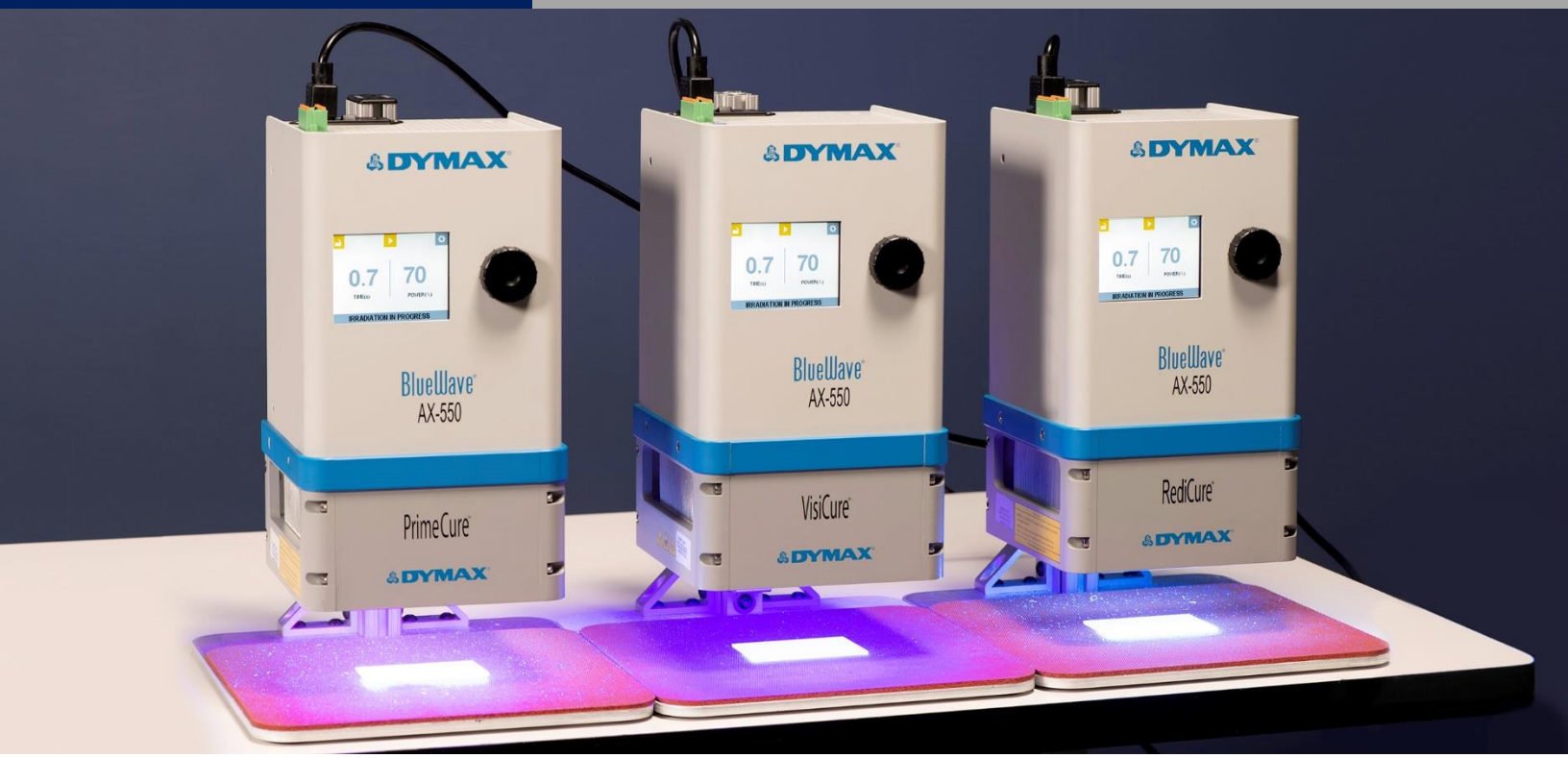
BLUEWAVE® AX-550 PRODUCT BULLETIN



BlueWave® AX-550 LED Curing System

All-in-One, High-Intensity System for Quiet, Efficient LED Curing

The BlueWave® AX-550 is an LED-curing system that combines a controller, emitter, and power supply into a compact, all-in-one design. Eliminating the need for a large, traditional–style controller, this unit has a greatly reduced footprint and is easily integrated into Dymax conveyor systems. The emitters are detachable, and the system is field-upgradable by customers so they can switch to another wavelength or upgrade to a more powerful emitter as improved LED die become available.

The system features a large 5” x 5” (125 mm x 125 mm) curing area along with an easy-to-navigate user interface with push-button controls. Units can be password protected to limit access to only authorized users and protect process parameters.

(ES) Equipements Scientifiques SA - Département Bio-Tests & Industries - 127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 90 - Fax. 01 47 01 16 22 - e-mail: bio@es-france.com - Site Web: www.es-france.com

System Features & Benefits

Field Upgradable Emitters

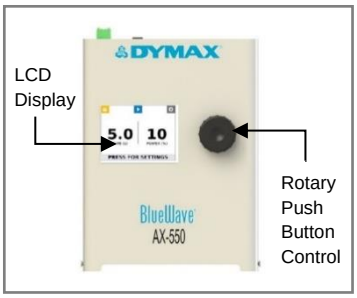
- Enable quick change out of emitters for optimization of application-specific frequency emissions without the need to purchase additional controllers or return or upgrade the entire unit
- Existing units can be quickly upgraded as new emitter frequency and higher power level models become available
- Provide flexibility to meet changing application requirements

Standard SD Card Access Port

- User firmware upgrades can be completed without the need to return the units
- Allows for quick upgrade to latest performance parameters and firmware

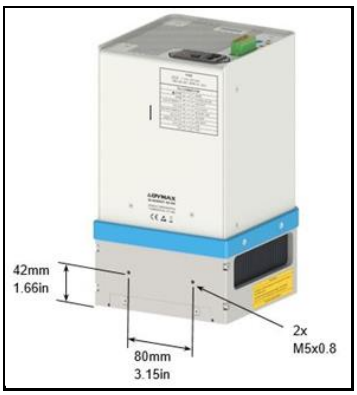
Improved User Interface with Rotary Push-Button Control

- Simple, easy-to-navigate controls
- Provides system status and troubleshooting
- Intuitive, menu-driven programming and operation



Easily Incorporated into Automated Systems

- Machine Mountable - Direct-to-frame pre-drilled holes for stability and easy mounting and integration into automated systems
- PLC activation and control allows for control and monitoring of power levels, exposure times/routines, and system health and safety lockout via PLC interface

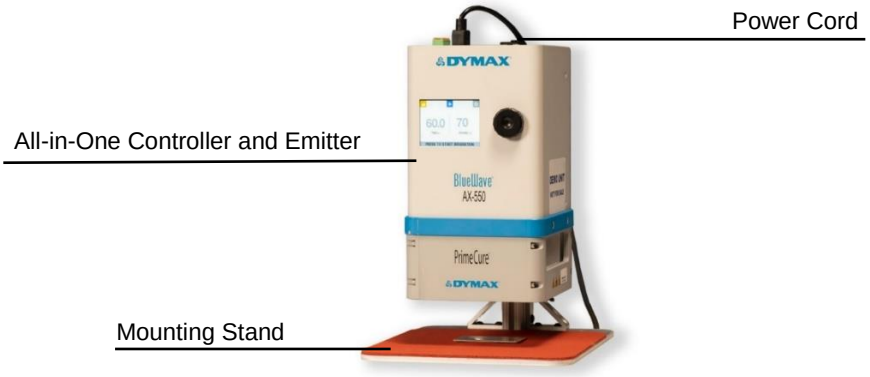


LED Light-Curing Technology

Dymax LED curing systems generate curing energy using high-intensity LEDs in lieu of conventional arc lamp technology. The relatively narrow frequency band of energy emitted by LEDs results in cooler curing environments and substrate temperatures compared to traditional UV-style lamp systems, making them ideal for curing thermally sensitive materials. Dymax LED-curing systems offer many energy and cost-saving benefits, such as no warm-up period, lower energy consumption, no bulbs to change, and more consistent frequency and intensity output for better process control.

Ordering Information

A complete BlueWave® AX-550 system features a combined controller and emitter. The system is available in 385 and 405 nm wavelengths with 365 nm wavelength available mid-2019. Accessories noted later in this bulletin can be added for specific applications. The units are warrantied against defects in material and workmanship for one year from the date of purchase.



PART NUMBERS			
	North American Power Cord	Asian Power Cord (Type G)	No Power Cord*
BlueWave® AX-550 RediCure® (365 nm)	43316	43317	43315
BlueWave® AX-550 PrimeCure® (385 nm)	43319	43320	43318
BlueWave® AX-550 VisiCure® (405 nm)	43322	43323	43321

*For European customers, the appropriate power cord will be added.

Accessories

43410 Mounting Stand with Acrylic Back-Shield

Includes mounting carriage PN 60036.

60036 Mounting Carriage

For use with mounting stand PN 41268

41395 3-Sided Acrylic Shield

40505 ACCU-CAL™ 50-LED Radiometer Kit

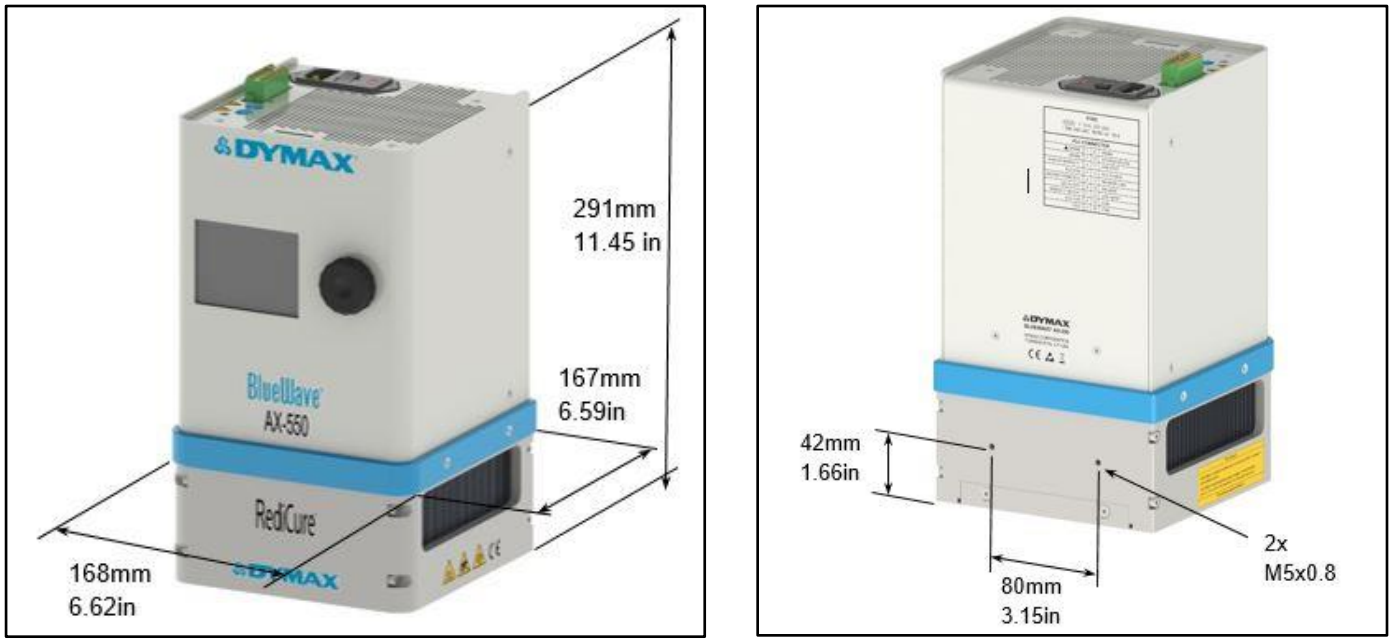
Note: The intensity of the BlueWave® AX-550 can be measured using flood-lamp intensity mode for initial process and operational setup.

System Specifications

Property	Specification		
BlueWave® AX-550	RediCure®	PrimeCure®	VisiCure®
Output Frequency	365 nm (Mid-2019 Release)	385 nm	405 nm
Intensity Output at 25-mm Working Distance*	425 mW/cm^2	800 mW/cm^2	650 mW/cm^2
Cooling	Air cooled		
Dimensions (H x W X D)	6.61" x 11.45" x 6.88" [16.8 cm x 29.1 cm x 17.5 cm]		
Weight	14.1 lbs. [6.4 kg]		
Unit Warranty	1 year from purchase date		
Operating Environment	10 to 40°C (50°F to 104°F) 0-65% relative humidity, non-condensing 2000-meter max. altitude		
Shipping and Storage Conditions	Temperature: -20°C to +50°C Humidity 10-80% RH, Non-condensing Ship via standard ground, ocean or air freight.		

* Measured using a Dymax ACCU-CAL™ 50-LED radiometer in flood lamp mode.

Figure 1. BlueWave® AX-550 Emitter Dimensional Drawing



Emitter Performance

Figure 2. BlueWave ® AX-550 Emitter Spectral Output Chart

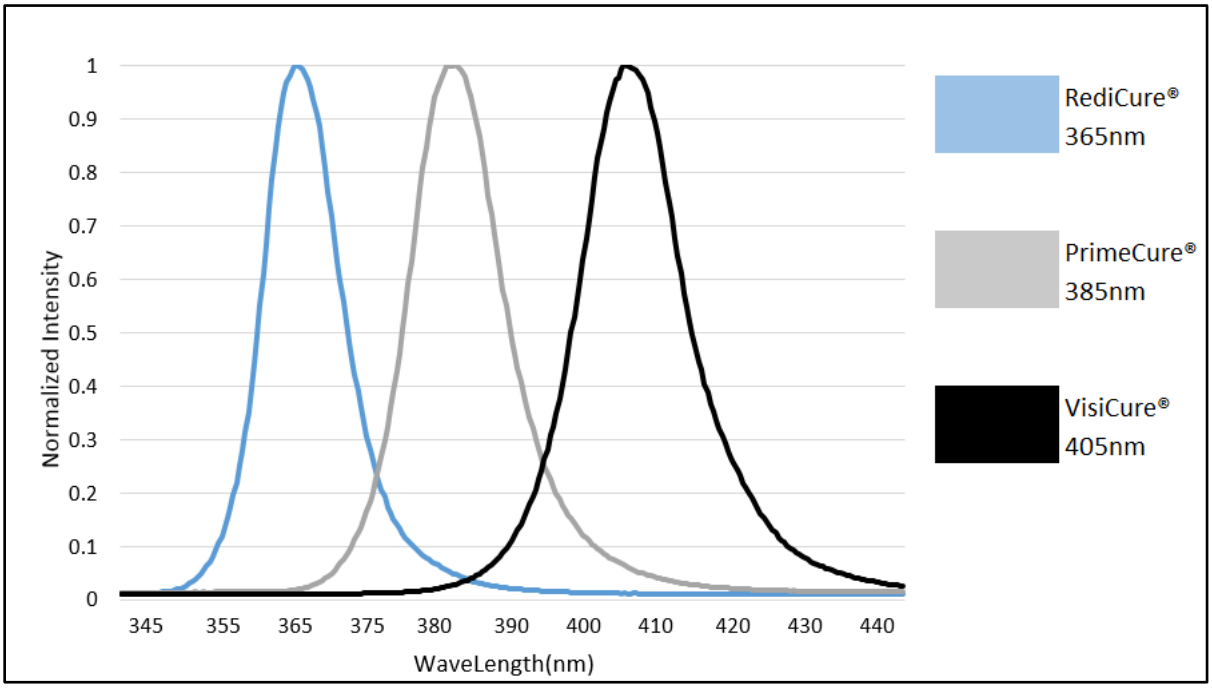
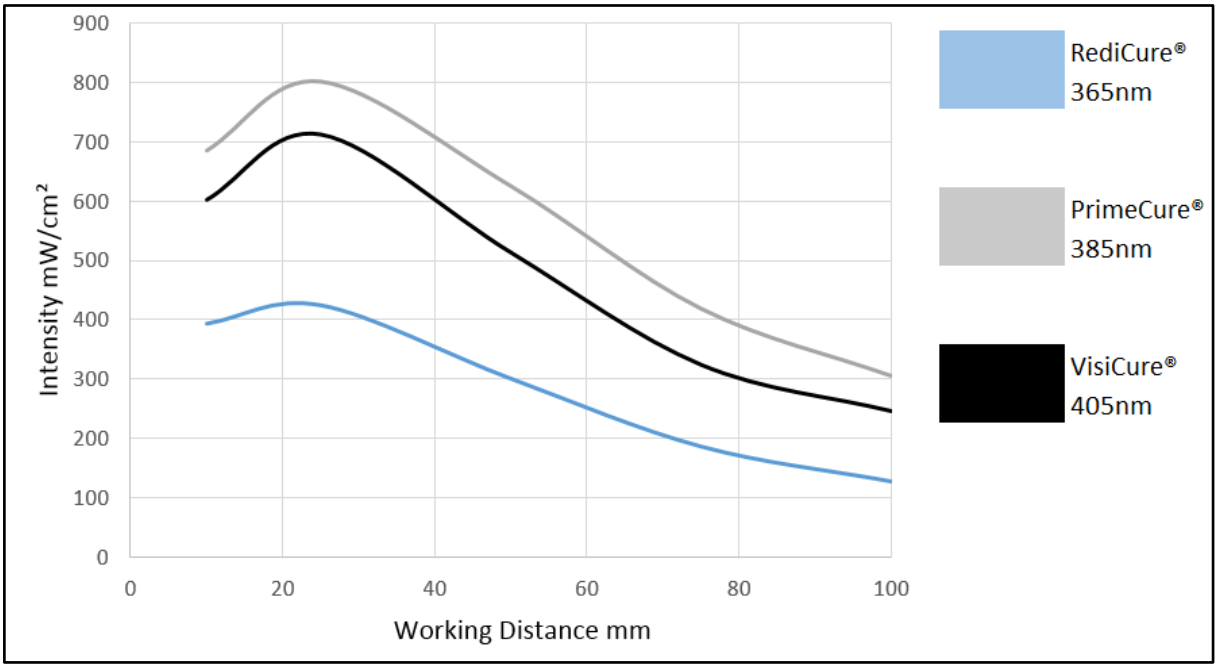
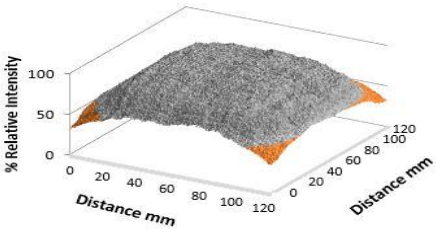
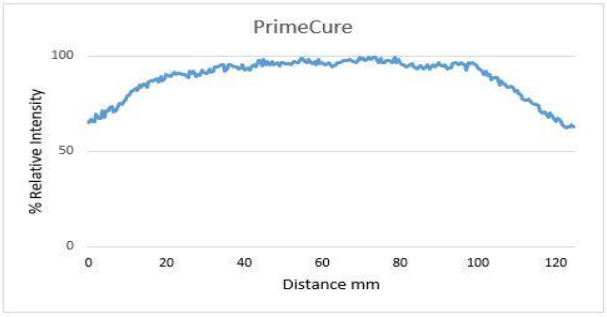
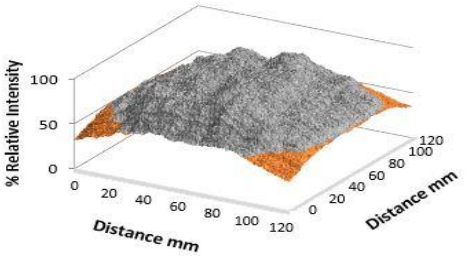
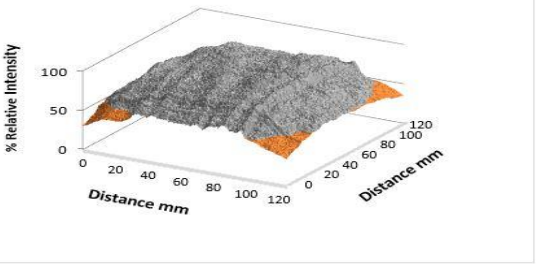
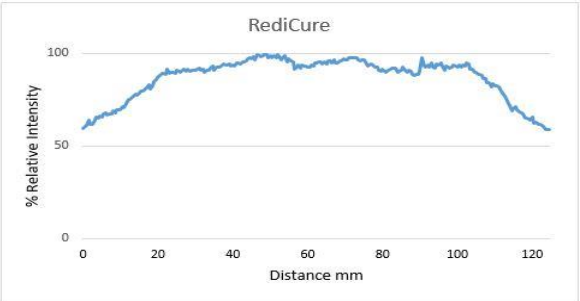
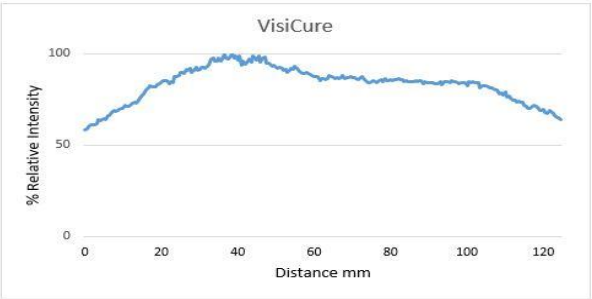


Figure 3. BlueWave® AX-550 Emitter Relative Intensity vs. Distance



NOTE: The BlueWave® AX-550 is optimized for uniformity and intensity at 25-mm working distance.

Table 1. Uniformity/Intensity, 100% Intensity, 25-mm Working Distance

RediCure® 365 nm (Mid-2019 Release)	PrimeCure® 385 nm
	
	
	**VisiCure® 405 nm**
	
	

* Curing area data taken using Fuji UV Light Distribution Mapping System. Output intensity normalized using a Dymax ACCU-CAL™ 50-LED Radiometer.

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Tél. 01 47 95 99 90 - Fax. 01 47 01 16 22 - e-mail: bio@es-france.com - Site Web: www.es-france.com

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Dymax Corporation
+1.860.482.1010 | info@dymax.com | www.dymax.com

Dymax Europe GmbH
+49 611.962.7900 | info_de@dymax.com | www.dymax.de

Dymax Engineering Adhesives Ireland Ltd.
+353 21.237.3016 | info_ie@dymax.com | www.dymax.ie

Dymax Oligomers & Coatings
+1.860.626.7006 | info_oc@dymax.com | www.dymax-oc.com

Dymax UV Adhesives & Equipment (Shanghai) Co. Ltd.
+86.21.37285759 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax UV Adhesives & Equipment (Shenzhen) Co. Ltd.
+86.755.83485759 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax Asia (H.K.) Limited
+852.2460.7038 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax Asia Pacific Pte. Ltd.
+65.6752.2887 | info_ap@dymax.com | www.dymax.com.cn

Dymax Korea LLC
+82.2.784.3434 | info_kr@dymax.com | www.dymax.com/kr