

# BLUEWAVE® QX4™ PRODUCT BULLETIN





# BlueWave® QX4™ LED Multi-Head Spot-Curing System

Control up to Four LED Heads Independently for Greater Curing Flexibility

The BlueWave® QX4™ high-intensity spot-curing system features all the benefits of LED-curing technology in a smaller, more versatile unit. This system is comprised of a controller and up to four LED heads. LED heads are available in 365, 385, and 405 nm and can be outfitted with 3-, 5-, or 8-mm diameter focusing lenses. LED heads and focusing lenses can be used in any combination and can be controlled through the system's variable mode, a feature that allows each head to be individually programmed for intensity and cycle times. Individual exposure times and intensity settings can be set in 1% increments for each LED head, giving users maximum curing flexibility.

In addition to its curing flexibility, the BlueWave® QX4™ also features an easy-to-use control interface that allows flexibility in setup and use of the unit. The unit can be activated by foot pedal or by PLC interface, allowing it to be easily incorporated into automated systems.



# **System Features & Benefits**

Features	Benefits
One controller controls up to four LED heads	Provides maximum application flexibility
LED heads available in 365, 385, or 405 nm wavelengths	<ul> <li>Compatible with a variety of UV and visible light-curable materials</li> <li>Wavelength flexibility allows co-optimization of adhesive and curing system for optimal cure</li> <li>Units can be custom configured to your curing requirements</li> </ul>
Variable mode allows each LED head to be programmed independently	<ul> <li>Individual exposure times and intensity settings available in 1% increments for each LED head allows for maximum curing flexibility</li> </ul>
Interchangeable/Replaceable focusing lenses in 3-, 5-, and 8-mm diameters	Allows tailoring of the unit to your curing requirements
Instant on-off	<ul><li>No warm-up period</li><li>More energy efficient</li></ul>
Efficient LED-head temperature management	<ul> <li>Maximized continuous operation without overheating</li> <li>Comfortable hand-held operating temperature</li> <li>Temperature monitoring assures maximum LED life</li> </ul>
PLC interface	Easily incorporated into automated systems

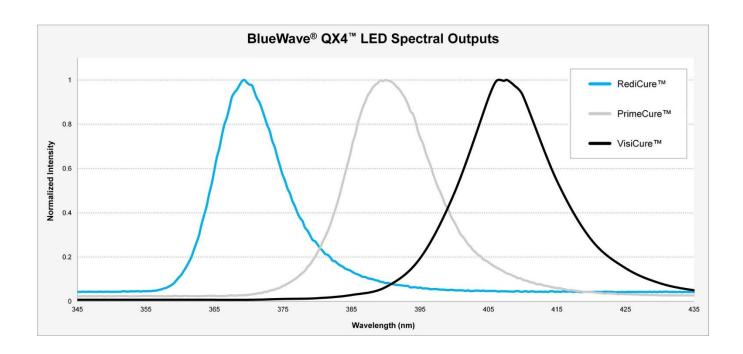
#### **LED Light-Curing Technology**

Dymax LED spot-curing systems generate curing energy using high-intensity LEDs instead of conventional metal-halide or mercury-arc lamps. The relatively narrow frequency band of energy emitted by LEDs results in cooler 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.

#### **Key Advantages of LED Light-Curing Technology**

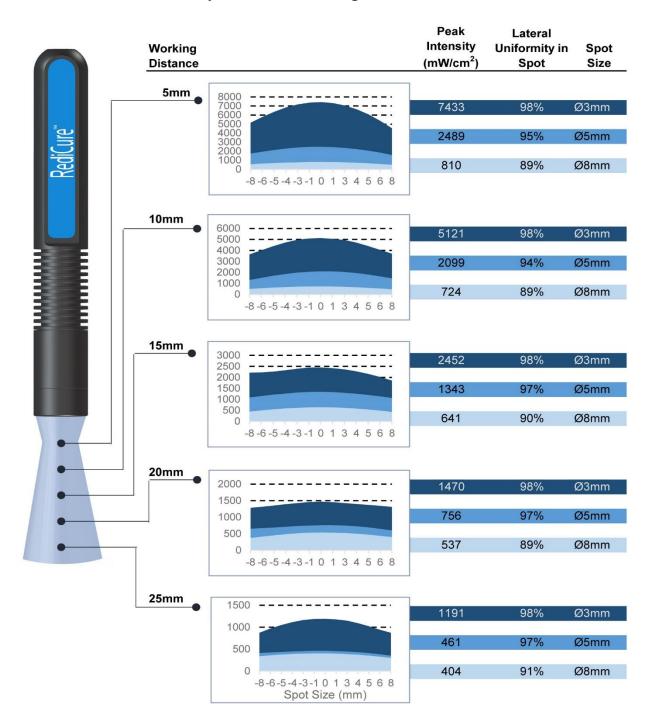
- High electrical efficiency and instant on/off capability for lower operational costs
- Long service life that eliminates bulb replacement and reduces maintenance costs
- "Green" attributes that eliminate mercury and ozone safety risks and handling costs
- Compact unit footprint that reduces workspace requirements and cost of the system
- Consistent frequency and intensity output for better process control
- Narrow wavelength spectral emissions that minimize substrate thermal rise

Visit www.led.dymax.com for more information on LED light-curing technology.



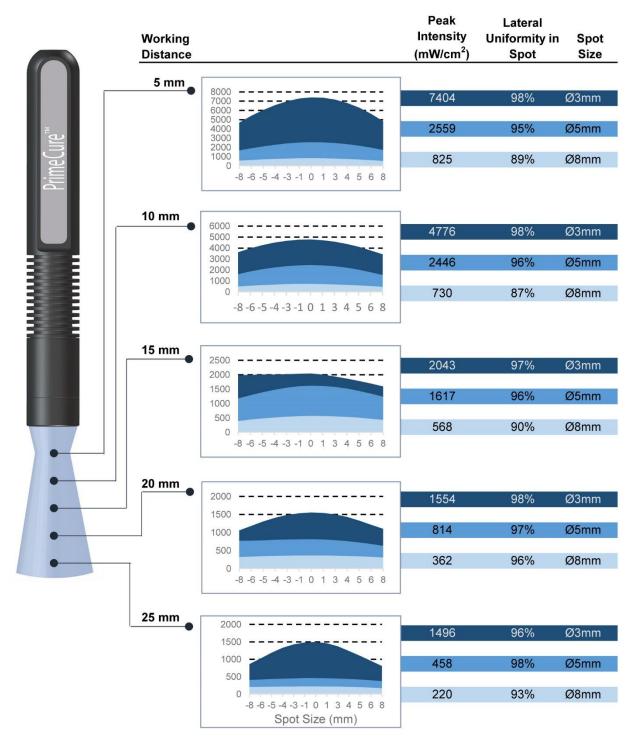
## **System Intensity**

#### RediCure™, 365 nm - Intensity\* at Various Working Distances



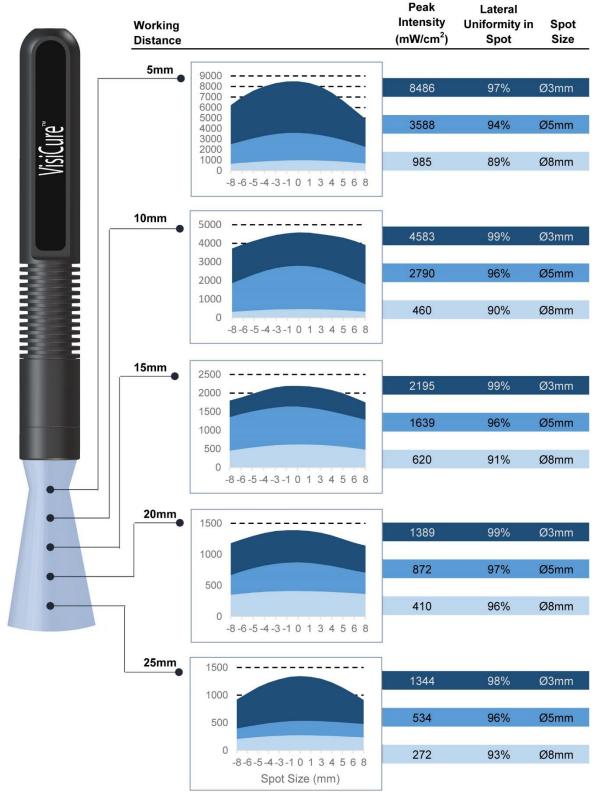
<sup>\*</sup>Measured using a Dymax ACCU-CAL™ 50-LED Radiometer

### PrimeCure™, 385 nm - Intensity\* at Various Working Distances



<sup>\*</sup>Measured using a Dymax ACCU-CAL™ 50-LED Radiometer

VisiCure®, 405 nm - Intensity\* at Various Working Distances



<sup>\*</sup>Measured using a Dymax ACCU-CAL™ 50-LED Radiometer

# **Available Systems**

A complete BlueWave® QX4 system features a controller and up to four LED heads/lenses. Each LED head must have a lens in order to operate properly. Components are sold separately.

PART NUMBERS	PrimeCure™ 385 nm	VisiCure® 405 nm	RediCure™ 365 nm		
System Components					
Controller Only		41573 Asian Version (Type G Power Cord)			
LED Head	41550	41551	41552		
Lens Only	41553 3-mm Lens	41554 3-mm Lens	41556 3-mm Lens		
	41557 5-mm Lens	41558 5-mm Lens	41559 5-mm Lens		
	41560 8-mm Lens	41561 8-mm Lens	41562 8-mm Lens		
Accessories					
Connection Cable Extensions	<b>41563</b> 0.5 M Extension				
	41564 1.0 M Extension	41564 1.0 M Extension			
	<b>41565</b> 1.5 M Extension	41565 1.5 M Extension			
	<b>41566</b> 2.0 M Extension	41566 2.0 M Extension			
Spare Parts					
AC Power Adapter	41547	41547			
Power Cords	41548 North American Power Cord				
	41549 Asian Power Cord	41549 Asian Power Cord			

<sup>\*</sup> For European customers, the appropriate power cord will be added.





In addition to our light-curing equipment, Dymax also offers high-performance oligomers, adhesives, and coatings as well as a variety of dispensing equipment. Our products are perfectly matched to work seamlessly with each other, providing design engineers with tools to dramatically improve manufacturing efficiency and reduce costs. Dymax is committed to providing the best chemistry, curing equipment, and dispensing systems that offer customers complete manufacturing solutions for their challenging applications.



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Please note that most curing system applications are unique. Dymax does not warrant the fitness of the product for the intended application. Any warranty applicable to the product, its application and use is strictly limited to that contained in Dymax standard Conditions of Sale published on our website. Dymax recommends that any intended application be evaluated and tested by the user to ensure that desired performance criteria are satisfied. Dymax is willing to assist users in their performance testing and evaluation by offering equipment trial rental and leasing programs to assist in such testing and evaluations.

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