





The Monet laser curing light has been awarded the **Dentistry Today Top 50 Technology Products Readers' Choice Award 2023**.

# From the innovative mind that invented LED curing comes a quantum leap in curing technology. The World's First handheld laser curing light.

The handheld Monet Laser is the first of its kind. The collimated beam and consistent power of the Monet Laser create superior bond strength, and a faster, deeper, more reliable cure.

Cure up to 2.5 mm in 1-second!

The curing revolution began with the halogen curing light. When halogen curing was introduced in the early 1980s, it took 40 seconds to cure. These bulky curing lights were not very ergonomic, and engineers worked to address this issue by developing more efficient technology. The LED curing technology most dentists currently use was invented by our CEO, Densen Cao in 1999. With the LED light, dentists experienced a significant decrease in the amount of time that it took to cure. But LED lights have their own set of limitations. An

innovative solution was needed to address ongoing problems of debonding and soft cures that hamper the effectiveness of curing. With that, the collimated light beam of the diode laser was born. A more efficient curing light with a collimated beam is revolutionary, but it needs to be practical. Densen Cao and our team of engineers took the curing light and enhanced it into the Monet Curing Laser.

# Your Patients are Ready for Lightspeed!

Patients are ready for improved care through the latest in dental technology. They are actively searching for practices with up-to-date and innovative patient care experiences.

Nothing disrupts a practice like an incomplete cure. Soft cures can leave patients with pain and prolonged sensitivity. A weak bond can even create future structural damage. With proper applications of the Monet, incomplete cures are now a problem of the past.



#### **Laser Curing Means Confidence**

Laser curing has major advantages over LED curing. With the Monet laser cure, you will never have to worry about incomplete bonds or soft cures. The Monet laser produces a deeper cure than LED or any other light sources during the same exposure time.

LED technology was a significant advancement, but LED curing lights present their own set of challenges.

LED lights create a light pattern that can be dispersed away from the curing target when the energy from the LED light waves disperse.

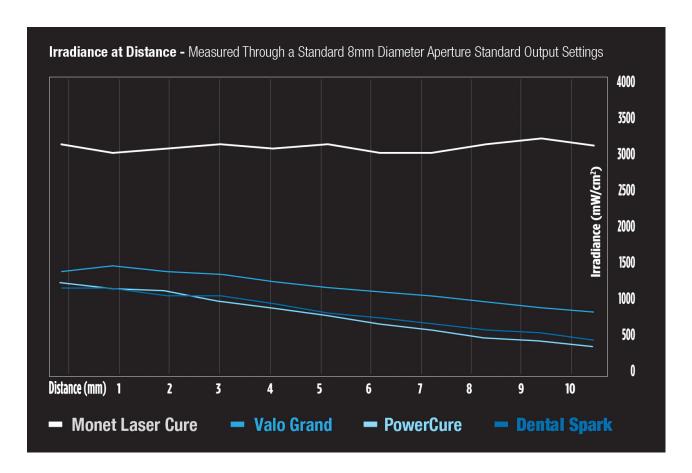
LED is a dispersed light source emitting at random times and random directions.

LED needs a complicated optical system to collimate and homogenize the light beam.

#### **Laser Curing Means Consistency**

Laser curing provides a consistent dispersion of energy and intensity at any distance to create a complete, reliable, and even cure. The collimated beam creates a complete polymerization through composites.

The Monet's laser diode beam emits from a controlled spot of the chip to generate a point light source, while an LED light emits from all surfaces and directions of the chip. With the 1-second curing speed and beam consistency you can now tackle bulk fills with just an extra second or two. Each click is a 1-second cure of 2.5mm, which means that bulk cures can be done in just 3 seconds.



# **Depth of Cure**

Laser Curing is as simple as 1, 2, 3. With the Monet, it is generally recommended to do a single 1-second cure with a composite layer less than 2.5mm, two 1-second cures for composite layers between 2.5-5 mm, and three 1-second cures for layers more than 5 mm.

To control heat, do not cure any spot for more than 3 seconds in rapid succession. For prep areas larger than 8mm in diameter, two overlapping spot cures are recommended. Monet comes with 4 unique apertures for precision control of your laser. For preps near gingival tissues, please use one of the reducing apertures of 2, 4, or 6mm size to avoid light on gingival tissue. The Monet also comes with a reducing aperture which cuts the power by 50% to give you even more custom control!





## Is This "Hype"?

A 1-second cure, you say? That's too fast! Is it just "marketing hype"? If you think this is an exaggeration, you're like other experienced and competent dentists that were initially skeptical. Here are some independent studies done to test the Monet and establish the accuracy of our claims.

Reality Now tested the Monet's claims to determine the depth of composite cured for each second. This chart shows the results of those tests:

Light	Curing Time (sec)	Height of cured composite (mm)	Depth of cure (mm)
Monet	1	3.95	1.98
Monet	2	4.99	2.50
Monet	3	5.49	2.75
Celalux 3	10	5.68	2.84

The Monet was tested in a separate independent study, by Dr. Mateus Rocha, Dr. Richard Price, and Dr. Christiane Maucoski published in the Journal of Dentistry 122 (2022() 04141. The study shows that the Monet laser cure is comparable to a standard LED light when the Monet cures at 1-second versus a 10-second cure with a standard LED light. It also shows the Monet at 3 seconds is comparable to 20 seconds with an LED curing light.

In a 1-second to 1-second curing comparison there's no contest; the Monet is faster than any other curing light on the market. The data shows that The Monet 1-second cure can achieve similar results for a 10 second cure by LEDs, and a 3 second cure by Monet yields similar results for a 20-second cure by LEDs.

Table 4 Mean  $\pm$  SD and Tukey's test for the Depth of Cure (DOC) for the RBCs used in this study.

#### Light Curing Modes Valo SmartLite Pro Valo Grand SmartLite RBC Monet 1s Monet 3s Grand 10s 10s 20s Pro 20s $2.39 \pm 0.05$ $1.61 \pm$ $1.89 \pm 0.08$ $1.98 \pm 0.03$ $2.01 \pm 0.04$ $2.15 \pm 0.06$ Mosaic A2 0.04 Df Cg **BCf** BCg Ag Herculite Ultra $2.21 \pm 0.04$ $2.27 \pm 0.06$ $2.30 \pm 0.04$ $2.44 \pm 0.04$ $2.70 \pm 0.08$ $1.86 \pm$ A2 0.04 De Cf BCe BCf Bf Af Filtek Supreme $2.00 \pm$ $2.80 \pm 0.04$ $2.97 \pm 0.03$ $2.59 \pm 0.07$ $2.91 \pm 0.10$ $3.05 \pm 0.09$ A2B 0.06 De Bd ABcd Ce ABe 2.32 ± $2.58 \pm 0.03$ $2.85 \pm 0.05$ $2.95 \pm 0.04$ $3.02 \pm 0.03$ $3.15 \pm 0.04$ Tetric 0.03 Dd Evoceram A2 Ce Bd Bd ABe Ae Admira Fusion 2.32 ± $2.84 \pm 0.04$ $3.00 \pm 0.06$ $2.92 \pm 0.16$ $3.21 \pm 0.10$ $3.42 \pm 0.10$ 0.17 Dd Ccd Cd Estelite Quick $2.56 \pm$ $2.93 \pm 0.04$ $3.21 \pm 0.09$ $3.65 \pm 0.06$ $3.13 \pm 0.06$ $3.86 \pm 0.09$ A2 0.07 Ec Dd Cc Cc Bc Ac $2.98 \pm$ $3.51 \pm 0.09$ $3.80 \pm 0.05$ $3.73 \pm 0.08$ $4.15 \pm 0.08$ $4.45 \pm 0.10$ Mosaic EN 0.11 Eb $2.95 \pm$ $3.62 \pm 0.03$ $3.80 \pm 0.04$ $3.63 \pm 0.12$ $4.08 \pm 0.12$ $4.36 \pm 0.08$ SDR flow+A2 0.09 Db Cb Cb Cc Bb Ab Tetric 4.16 ± $4.54 \pm 0.02$ $4.90 \pm 0.04$ $4.91 \pm 0.07$ $4.93 \pm 0.03$ $4.99 \pm 0.02$ Powerflow IVA 0.04 Ca Aa Aa Aa Aa $4.29 \pm$ $4.84 \pm 0.05$ $4.91 \pm 0.04$ $4.85 \pm 0.04$ $5.03 \pm 0.04$ $5.04 \pm 0.05$ X-tra Fil U

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## Laser Curing is Safe

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Lasers have been used in dentistry for years, including soft-tissue and larger laser curing devices. While some dentists are concerned with the heat intensity when using a laser to cure composite, all research shows lasers are completely safe.

Tissue damage can occur when pulp tissue temperature increases by 5.5° C. When tested by Clinicians Report at five seconds (two seconds beyond usage recommendations), the Monet stayed within safe heat parameters. The Monet is a laser curing light, and with all lasers and curing lights proper safety eyewear must be worn. For the safety of you and your patients, the Monet comes with two sets of laser safety goggles, a laser-safe loupe insert, and a paddle.

# Say goodbye to LED and join the curing revolution!

<sup>\*</sup>Capital letters show the difference between light-curing modes; Lower case letters show the difference between RBCs; Blue font letters show DOC values above the 4 mm threshold; Green font letters show DOC values above the 2 mm threshold; Red font letters show DOC values below the 2 mm threshold.

It's not rocket science. When 60-80% of the procedures in your office involve composite curing, by eliminating soft cures and cutting chair time, the patient experience improves, and your practice can see more patients and build more revenue. Say goodbye to LED and join the 1-second curing revolution.