

Bluephase[®] N G4

The high-performance curing light

**Very small
cures all**

Efficient
Esthetics

<https://stomshop.pro/>

ivoclar
vivadent[®]

Reliable curing, short exposures

The innovative Bluephase® N G4 is designed for the intraoral polymerization of light-curing dental materials.


Reliable curing performance for direct and indirect restorations

Short curing times starting from 5 seconds due to high light intensities⁽¹⁾

Suitable for every light-curing material due to Polywave LED

Wide 10-mm light guide for time-saving single-exposure curing procedures

Additional PreCure program for the removal of excess cement



Contactless battery charging

<https://stomshop.pro/>

Homogeneous
light emission performance

Backlit display

5-second curing times^[1]

[1] only in conjunction with the Bluephase N G4

<https://stomshop.pro/>

Esthetics are impossible without proper light curing

The evolution of esthetic tooth-coloured composite resin fillings and indirect ceramic restorations would have been impossible without the development of suitable light-curing devices.

Polymerization is considered to be the most common source of error when processing light-curing materials. Inadequate polymerization can lead to suboptimal outcomes as well as postoperative sensitivity and discolouration.





Efficient Esthetics

Products that are optimally coordinated for direct restorative procedures enhance the efficiency with which high-quality esthetic restorations can be achieved.



1 Isolate

Effective isolation with **OptraGate**[®] and **OptraDam**



2 Bond

Direct intraoral application of **Tetric[®] N-Bond Universal** with the efficient VivaPen[®]



3 Restore

Tetric[®] N-Line – composites with light-curing times starting from 5 seconds for all cavities



4 Contour

Time-saving contouring with **OptraSculpt[®]** due to its anti-stick effect



Cure

Bluephase[®] N G4 enables reliable and quick curing times starting from 5 seconds with a light intensity of 2,000 mW/cm²



6 Polish

High-gloss polishing in only one step with **OptraGloss[®]**



7 Protect

Immediate and controlled fluoridation with **Fluor Protector S^[2]**

5

Polywave LED ensures maximum material compatibility

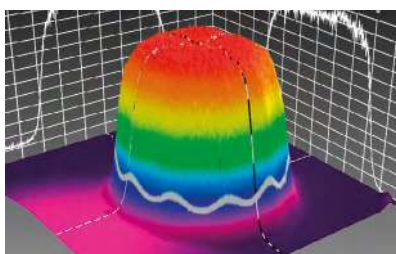
If and how well a dental material polymerizes depends, among other things, on the light emitted. LED polymerization lights of the second generation with blue LEDs are certainly well adapted to camphorquinone, but emit light in a narrow spectrum, between 440 and 500 nm.^[3]

In contrast to these LED lights, the purpose-designed Polywave® LED covers the entire wavelength range between 385 and 515 nm due to two different types of diodes, which produce light in the blue and violet spectrum.

This means that Bluephase N G4 is suitable for curing all current dental photoinitiators and materials without limitations. These materials include restoratives, bonding agents/ adhesives, bases, liners, fissure sealants, temporaries, as well as luting materials for brackets and indirect restorations such as ceramic inlays.

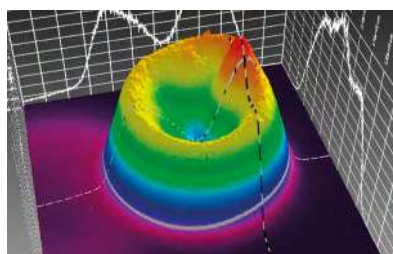
Uniform polymerization effect due to homogeneous light distribution

In addition to the light output and wavelength range, the distribution of the light emitted from the curing device is critical for a reliable polymerization process. If the light is not evenly distributed across the entire surface to be polymerized, the material may not achieve a complete depth of cure in some areas. Bluephase N G4 uses a reflector that ensures a virtually homogeneous distribution of light.



Homogeneous light distribution of the Bluephase N G4

Source: B. Senn, *Test Report*, Ivoclar Vivadent AG, 2019



Example of heterogeneous light distribution

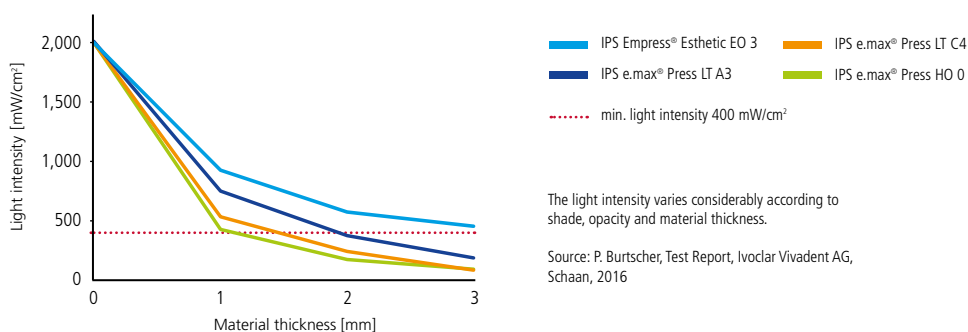
[3] Ilie N., Lohbauer U., Rosentritt M., Lichtpolymerisation, DZW - Das Deutsche Zahnärzteblatt 2016, 125 (6), 284-289.

Reliable curing performance due to **high light intensity**

T☀️ Turbo mode: 2,000 mW/cm²

In some cases not enough light may be delivered to the luting composite to cure it. This is particularly true for indirect restorations, where the amount of light reaching the luting composite can be significantly reduced – depending on the thickness, shade and opacity of the restorative material.

Reduction of light intensity in ceramics



Providing a light intensity of 2,000 mW/cm² in turbo mode, Bluephase N G4 is especially suitable for polymerizing luting composites in indirect restorations. The high light intensity ensures that enough energy passes through the crown or inlay if the restoration is made of high-quality all-ceramic material, such as IPS e.max® or IPS Empress®.

H☀️ High mode: 1,200 mW/cm²

Additionally, light intensity is a decisive factor for both the quality of esthetic restorations and the adequate polymerization of light-curing materials. Generally, a light intensity of 1,000 mW/cm² is recommended to be able to use short exposure times of 10 seconds even in conditions that may not be ideal but that are certainly common in day-to-day restorative care.

Pre PreCure mode: 950 mW/cm²

Cleaning up excess light-cured adhesive composite can be difficult and unpredictable. The PreCure mode of the Bluephase N G4 is pre-set to a light output of 950 mW/cm² and an exposure time of 2 seconds, especially designed for pre-curing Variolink Esthetic.

Excess material is cured to a consistency that is neither too hard nor too soft but just right for a high-quality controlled clean-up.



Short curing times starting from 5 seconds

Effective energy transmission, combined with a light intensity of 2,000 mW/cm², are the features of the Bluephase N G4 that enable users to use short curing times of only 5 seconds. Providing a light intensity of 1,200 mW/cm², the Bluephase N G4 light-curing unit facilitates similarly short curing times of only 10 seconds.

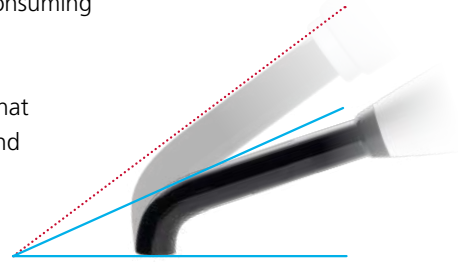
CURING MODE	TIME	LIGHT INTENSITY	APPLICATION SPECTRUM	MATERIAL
Turbo	5 seconds	2,000 mW/cm ²	restorations in Class I–V cavities indirect restorations (per mm of ceramic and per surface)	with IPS Empress® Direct, Tetric® N-Ceram, Tetric® N-Ceram Bulk Fill, Tetric® N-Flow Bulk Fill, Tetric® N-Bond Universal
High	10 seconds	1,200 mW/cm ²	all direct and indirect restorations	e.g. IPS Empress® Direct, Tetric® N-Line, Tetric® N-Bond Universal, Variolink® Esthetic
PreCure	2 seconds	950 mW/cm ²	removal of cement excess	e.g. Variolink® Esthetic, Variolink® N



Wide, 10-mm light guide for time-saving single-exposure curing procedures

A wide, 10-mm light guide enhances the curing efficiency of the Bluephase N G4. Large areas are completely illuminated thanks to the large diameter of the guide tip. Large restorations, e.g. MOD fillings, can be cured in one shot; time consuming multiple exposures are no longer required.

Removable and autoclavable, the light guide clearly stands out from that of conventional curing lights. The light guide is shortened at the tip and can be freely rotated by 360 degrees, enabling access to all tooth surfaces. The mouth does not have to be opened extremely wide. This allows for comfortable treatments, especially in children.



Light intensity can be monitored



Generally, optical devices such as curing lights are susceptible to contamination and damage of all kinds. In order to ensure an adequate cure at all times at the shortest possible curing times, it is recommended to regularly check the performance of the curing light in use. The innovative Bluephase Meter II radiometer is designed to measure the light intensity of all types of light-curing devices (halogen, plasma, LED, etc.) and provides exceptionally accurate readings.

Bluephase[®] N MC

LED for all budgets

Market proven for many years now, the Bluephase N MC is designed for the intraoral polymerization of light-curing dental materials.

Bluephase N MC is a mains-operated LED polymerization light with a light intensity of 800 mW/cm². It offers outstanding value for money. This model focuses on the basic requirements of efficient light-curing procedures, low maintenance as well as continuous operation at all times. The economical polymerization light is suitable for light-curing in the wavelength range of 430–490 nm.

Experience the simplicity

With one universal program and an intuitive 1-button operation, handling becomes easy and straightforward with Bluephase N MC for reliable polymerisation and curing results.

10-mm light probe for every situation

The light probe can be rotated 360 degrees for access to all restored areas. The wide 10-mm light probe facilitates time-saving procedures.



800 mW/cm²



Delivery forms

Bluephase N G4	744011
Bluephase N MC	647619
Bluephase Meter II	667124

Ivoclar Vivadent AG
Bendererstr. 2
9494 Schaan
Liechtenstein
Tel. +423 235 35 35
Fax +423 235 33 60
www.ivoclar.com

750660/EN/2022-08-29

<https://stomshop.pro/>

The logo for Ivoclar Vivadent features a series of colored dots (green, blue, and grey) arranged in a semi-circular arc above the company name. The name "ivoclar" is in a blue, lowercase, sans-serif font, and "vivadent" is in a larger, bold, blue, lowercase, sans-serif font. A registered trademark symbol (®) is located at the end of "vivadent".

ivoclar
vivadent®