

## Curing Light Guide

### Guide To Using Curing Lights For Excess Cement Cleanup

Brand & Condition	CURING LIGHTS			LIGHT CURING DURATIONS(S) FOR GEL PHASE				
	Manufacturer	Type	Market Segment	5s wave cure per surface (=10s)	Calibra Universal Translucent	RelyX Unicem2 Translucent	Maxcem Elite Clear	
SmartLite® IQ2	DENTSPLY	Monowave LED	LED	YES	3-10	1-1	2-4	
SmartLite® Focus®	DENTSPLY	Monowave LED	LED	YES	2-10	2-3	2-4	
Demi Ultra	Kerr	Monowave LED	LED	YES	2-9	1-1	2-8	
Demi Plus	Kerr	Monowave LED	LED	YES	2-10	1-1	2-4	
Elipar S10	3M ESPE	Monowave LED	LED	YES	2-10	1-1	2-4	
Bluephase 16	Ivoclar Vivadent	Monowave LED	LED	YES	3-9	2-3	2-9	
Bluephase Style w/ Shield (Key5)	Ivoclar Vivadent	Dualwave LED	LED	YES	2-5	1-2	2-10	
Valo Cordless, Standard	Ultradent	Dualwave LED	LED	NO	1-1	1-1	2-7	
SmartLite® MAX, normal	DENTSPLY	Dualwave LED	LED	NO	1-1	1-2	2-9	
Spectrum® 800 @ 550mw/cm <sup>2</sup>	DENTSPLY	QTH <sup>1</sup>	Halogen	NO	2-5	1-1	3-8	

% Share of Tested Lights: 64%

### KEY SUMMARY

- The market is broken down into 3 segments:
  - Halogen lights
  - Laser lights
  - LED lights
    - Monowave LED – 52 lights (e.g. SmartLite Focus)
    - Dualwave LED – 3 lights (SmartLite Max, Valo, Bluephase Style)
    - Other: Private label and Lumacool<sup>2</sup>
- We tested all 3 dualwave LED lights, 6 monowave LED lights, and 1 Halogen light.
- For excess cement cleanup, monowave output LED lights with a single peak output around 470nm are recommended. High power, dual or broadwave lights may cause premature hardening of excess cement. Check curing light effect on mixed cement in the laboratory prior to clinical use.
  - ✓ Monowave LED lights = recommended
  - ✗ Dualwave LED lights = not recommended
  - ✗ Halogen & Laser lights = not recommended (comprise only 3.2% of total curing lights market)
- Cleanup technique: 10 second tack cure window equals five-second wave cure per surface (buccal, lingual).
- Bluephase style, although a dualwave LED light, can be used for excess cement cleanup when used WITH SHIELD. It is NOT recommended to be used WITHOUT SHIELD.

1. Quartz Tungsten Halogen

2. Lumacool for teeth whitening, not recommended for curing cements

Valo, Bluephase Style, Demi Ultra, Demi Plus, Elipar S10, Bluephase 16, RelyX Unicem2 and Maxcem Elite are not registered trademarks of DENTSPLY.

Source: US SDM Market Share Data

CURING LIGHTS	COMPANY	Y/N	Wavelength	Light Type
ART CURING LIGHT L5	BONART	Y	460-480nm	Monowave LED
AURORA	PARKELL	N	N/A	Halogen
AURORA S3	PARKELL	N	N/A	Halogen
BLAST-LITE	FIRST MEDICA	Y	430-490nm	Monowave LED
BLUEPHASE 16j*	Ivoclar Vivadent	Y	430-490nm	Monowave LED
BLUEPHASE Style w/Shield*	Ivoclar Vivadent	Y	385-515nm	Dualwave LED
BRACECURE	OrthoEssentials	Y	450-480nm	Monowave LED
CELALUX	VOCO	Y	420-480nm	Monowave LED
CLEAR BLU	Johnson - Promident	Y	440-480nm	Monowave LED
COLORTALK	Coltene/WHALEDENT	N	N/A	Halogen
COLTOLUX	Coltene/WHALEDENT	N	N/A	Halogen
COLTOLUX LED	Coltene/WHALEDENT	Y	450-420nm	Monowave LED
CORDLESS LED 60N	TPC Advanced Technology	Y	430-490nm	Monowave LED
DEMI PLUS*	Kerr	Y	430-490nm	Monowave LED
DEMI ULTRA*	Kerr	Y	430-490nm	Monowave LED
DENTRONIX	Dentronix	Y	430-490nm	Monowave LED
D-LUX	Diadent	Y	420-490nm	Monowave LED
ECOBLAST	First Medica	Y	470nm peak	Monowave LED
ELIPAR FREELIGHT	3M ESPE	Y	440-490nm	Monowave LED
ELIPAR S10*	3M ESPE	Y	430-490nm	Monowave LED
EXTREME	Dentlight	Y	430-490nm	Monowave LED
FLASHLITE 2.0	DEN-MAT	Y	460-480nm	Monowave LED
FLASHLITE MAGNA	DEN-MAT	Y	440-490nm	Monowave LED
FLASHMAX P3	National Dental Products	Y	440-480nm	Monowave LED
FUSION	Dentlight	Y	420-490nm	Monowave LED
HILITE	Heraeus Kulzer	Y	430-490nm	Monowave LED
HILUX	First Medica	N	N/A	Halogen
IBRITE	Pac-Dent	Y	460-490nm	Monowave LED
IVERI LED	Iveri	N	N/A	Laser/HS
IVERI LED	Iveri	Y	430-490nm	Monowave LED
LED 2000	Southland	Y	430-490nm	Monowave LED
LED 2000 PLUS	Southland	Y	430-490nm	Monowave LED
LED BLAST	First Medica	Y	460nm peak	Monowave LED
LED CURING	DNTLWORKS	Y	430-490nm	Monowave LED
LED TURBO	Vector	Y	440-490nm	Monowave LED
LED-P	Vector	Y	440-480nm	Monowave LED
LITEX	Dentamerica	N	N/A	Halogen
LITEX	Dentamerica	N	N/A	Laser/HS
LITEX	Dentamerica	Y	430-490nm	Monowave LED
LUMACOOOL**	Luma-Lite	N	380-530nm (light spectrum)	Dualwave LED
LUMINARY	3D Dental Designs	Y	430-490nm	Monowave LED
LUMINARY II	3D Dental Design	Y	430-490nm	Monowave LED
LUMION	Planmecca	Y	430-490nm	Monowave LED
LUXITE	Itena	Y	430-490nm	Monowave LED
MINI-BLAST	First Medica	Y	430-490nm	Monowave LED
OPTILUX 501	Kerr	N	N/A	Halogen
PARADIGM	3M ESPE	Y	430-480nm	Monowave LED
PRIVATE LABEL	Private Label	N	N/A	Halogen
PRIVATE LABEL	Private Label	N	N/A	Laser/HS
PRIVATE LABEL	Private Label	Y	430-490nm	Monowave LED
QHL75	Dentsply Caulk	N	N/A	Halogen
RADII Plus	SDI	Y	440-480nm	Monowave LED
RADII-CAL	SDI	Y	468-470nm	Monowave LED

**Red - NO, not recommended** \*Light tested \*\*Lumacool for teeth whitening, not recommended for curing cements  
 Bluephase Style not recommended to be used WITHOUT shield.  
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SAPPHIRE	DEN-MAT	N	N/A	Laser/HS
SAPPHIRE PLUS	DEN-MAT	N	N/A	Laser/HS
SATELEC Mini LED	SATELEC	Y	420-480nm	Monowave LED
SILVERLIGHT	GC	Y	440-480nm	Monowave LED
SLIMAX	BEYES	Y	430-480nm	Monowave LED
SMARTLITE FOCUS*	DENTSPLY CAULK	Y	430-490nm	Monowave LED
SMARTLITE iQ2*	DENTSPLY CAULK	Y	430-490nm	Monowave LED
SMARTLITE MAX*	DENTSPLY CAULK	N	385-515nm	Dualwave LED
SMARTLITE PS	DENTSPLY CAULK	Y	450-490nm	Monowave LED
SONIC	ORTHOESSENTIALS	Y	450-480nm	Monowave LED
SPEC 3	COLTENE/WHALEDENT	Y	430-490nm	Monowave LED
SPECTRUM 800*	DENTSPLY CAULK	N	385-515nm	Halogen
THE CURE	SCI-CAN	Y	430-490nm	Monowave LED
THE CURE CORDLESS	SPRING HEALTH PRODUCTS	Y	450-490nm	Monowave LED
THE CURE II CORDLESS	SPRING HEALTH PRODUCTS	Y	440-465nm	Monowave LED
THE CURE TC-01	SPRING HEALTH PRODUCTS	Y	440-490nm	Monowave LED
TRANSLUX	HERAEUS KULZER	Y	430-490nm	Monowave LED
TRANSLUX WAVE	HERAEUS KULZER	Y	440-480nm	Monowave LED
VALO*	ULTRADENT PRODUCTS	N	385-515nm	Dualwave LED

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