

SDI | RADII XPERT

PROFESSIONAL LED CURING LIGHT



SMARTER DESIGN.
OPTIMAL CURE EVERY TIME.



TARGET ASSIST
PRECISION CURING



COLLIMATED
LIGHT



SMART TECHNOLOGY
FOR EASE OF USE



ERGONOMICALLY
WELL-BALANCED GRIP



LEADERS IN LED CURING

SMARTER DESIGN. OPTIMAL CURE EVERY TIME.



UNIQUE TARGET ASSIST FOR PRECISION CURING

Radii Xpert's unique target assist technology enables you to correctly position the light and be confident of the angulation before curing. A light source must be held close and perpendicular to a restoration to avoid incomplete polymerization¹. By activating the positioning light and releasing once over the tooth, you can be sure that curing only begins when the light is in position and restorations will receive a complete cure. Ensure you are on target every time with Radii Xpert.



OPTIMALLY COLLIMATED BEAM

Radii Xpert is the ideal choice for restorations of all sizes, including bulk fill restorations that require a deep cure. The collimated beam ensures light intensity is maintained on the restoration being cured. Achieve a predictable cure, every time with Radii Xpert.



SMART TECHNOLOGY FOR EASE OF USE

Smart technology improves the efficiency of your dental appointment. An LCD display with countdown timer eliminates estimation and provides accuracy during a curing cycle. Radii Xpert gives you the ability to save your favourite setting and the multi-coloured status rings offer a visual representation when you need to charge or when curing is in progress.



ERGONOMICALLY WELL-BALANCED GRIP

Radii Xpert's ergonomic design allows you to comfortably access all restoration sites. The 360-degree rotatable head enables restorations in all quadrants to be accessed easily. Radii Xpert has a well-balanced slimline design and can be held in a pencil or pistol grip, minimising hand and arm fatigue.

BASE WITH INTENSITY INDICATOR

Radii Xpert's built-in intensity indicator allows light intensity to be monitored easily, without the need to purchase an additional hand held meter to assess relative change in output. Routine evaluation of a curing light is important for optimal operation².



PROFESSIONAL LED CURING LIGHT

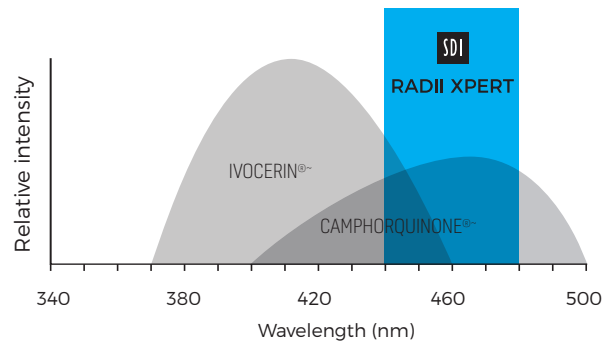
1500 mW/cm²
LIGHT INTENSITY



CURES ALL COMPOSITES

Radian Xpert will cure all commercially available composites without the need for a polywave light. The light intensity of 1500 mW/cm²* over a 4 mm aperture covers a wavelength range between 440 nm - 480 nm. Radian Xpert delivers the right spectral distribution without the need for extended wavelengths, giving you a reliable cure for all composites, including those with Camphorquinone and Ivocerin®.

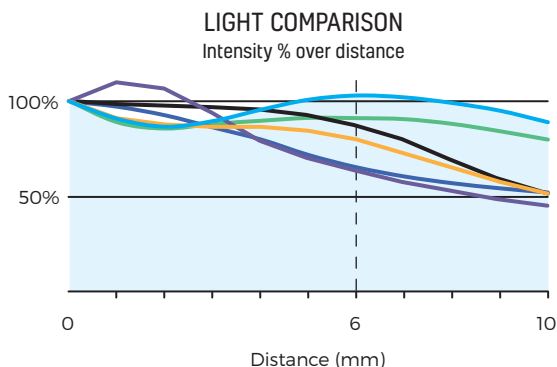
SPECTRAL DISTRIBUTION*



SDI Internal Data

CONSISTENT LIGHT INTENSITY

Radian Xpert has better performance due to the light intensity remaining consistent over clinically relevant distances. The consistent intensity ensures light will penetrate the underlying restorative with limited drop off, giving you the confidence of a full cure to the depth of a restoration.

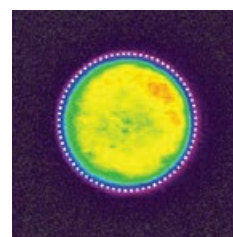


- RADII XPERT
- DENTSPLY SIRONA Smartlite® Focus™
- IVOCLAR VIVADENT Bluephase® Style™
- ULTRADENT Valo® Grand [Standard]™
- 3M ESPE Elipar™ DeepCure-S™
- ULTRADENT VALO® Cordless [Standard]™

Independently tested by Tufts University School of Dental Medicine, Boston, USA, 2017
Results normalised to 100% at 0 mm
Tested on a BlueLight Analytics® Inc. MARC® light collector with 4-mm aperture
~ These are not registered trademarks of SDI Ltd

CONSISTENT BEAM PROFILE

Restorations can be cured with the confidence of a uniform beam profile using Radian Xpert. The beam delivers an even energy distribution, with reduced hot and cold spot variation. The entire beam profile of a curing light is important to ensure restorations are cured evenly.



BEAM PROFILE AT 0 MM DISTANCE
WITHIN THE ACTIVE AREA.
BLUELIGHT ANALYTICS INC., 2017



LED ATTACHMENTS AVAILABLE

ENHANCED HEAT MANAGEMENT

Restorations can be cured safely with Radii Xpert. Heat sink technology is incorporated to reduce the amount of heat emission. Enhanced heat management prevents damage to pulp tissue that can be caused by excess heat³.

You can conveniently cure multiple restorations without the risk of overheating the unit. The absence of excess heat also helps to maintain the life of the LED.

PULSE TECHNOLOGY

Radii Xpert uses a combination of pulse technology and steady current to further reduce heat emitted onto the tooth. With multiple pulses per second, light output is maintained on the restoration being cured, without the risk of overheating.

INTERCHANGEABLE ATTACHMENTS






Radii Xpert offers versatility with the availability of full arch bleaching, diagnostic and orthodontic attachments that snap in with ease.

TECHNICAL DATA STANDARD ATTACHMENT

Wavelength	440 nm - 480 nm
Peak wavelength	460 nm
Light intensity	1500 mW/cm ² (+ 5 %, - 15 %) from 0 - 10 mm distance
Duration of continuous use	20 seconds
Time to charge flat battery	3 - 5 hours
Time to charge battery (general use)	60 - 180 minutes
Battery	1 x 3.7 V 2600 mAh
Multi-region plug pack	AC input: 100 - 240 V ~ 0.8A, 50 - 60 Hz DC output: 12V 1.66A, 20.0W MAX Dimensions: 34mm (H) x 41mm (W) x 62.5 (L) Weight: 104g
Operating temperature	10°C - 40°C / 50°F - 104°F
Weight	185 g / 6.5 ounces
Total height with handpiece	290 mm

Radii Xpert LED curing light has a 3 year warranty.
Battery has a 2 year warranty.

³The irradiance as measured using a 4-mm diameter sensor that is centred.

LED ATTACHMENT TYPE	INDICATIONS	PROGRAM	COLOUR
 Standard LED attachment ø 7mm	Light curing at contra angle similar to a hand piece	• Run time: 2, 10, 20 seconds as selected • Beeps at completion	Blue light (440 nm - 480 nm)
 Diagnostic LED attachment ø 7mm	Detection of cracks, fractures, calculus, decay, caries, root canal openings, non-vital teeth, leaking restorations and root tips	• Run time: 5 minutes • Low, medium or high intensity selections available • Beeps at completion	White light
 Orthodontic LED attachment ø 7mm	Light curing specifically for orthodontic use	• Run time: 5 minutes or 10 seconds as selected • Beeps at completion	Blue light (440 nm - 480 nm)
 Radii Xpert Multiwave LED attachment ø 7mm	• Polymerizing a variety of composites containing camphorquinone in combination with phenyl-propanedione (PPD), acyl phosphine oxide (e.g. Lucirin TPO®) or Ivocerin®.	• Run time: 2, 10, 20 seconds as selected. • Beeps at completion.	Violet light (395 - 480 nm)
 Full arch bleaching LED attachment	• In-office whitening of upper and lower arch • Vital and non-vital whitening procedures	• Run time: 8, 10, 15 minutes as selected • Beeps at half-way point for each selection and at completion	Blue light (440 nm - 480 nm)

KEY FEATURES

Unique target assist for precision curing

Optimally collimated beam

Consistent light intensity

Smart technology for ease of use

Ergonomically well-balanced grip

Cures all composites

Consistent beam profile

Enhanced heat management

Base with intensity indicator

"Your curing light is vitally important to your dentistry and your practice. You need several things in a curing light. The Radii Xpert by SDI has all of those things. It gives you functionality and flexibility for everyday use."

Dr Joshua Austin, DDS, MAGD. Dental Economics - United States - November 2020



360° ROTATABLE HEAD

Radii Xpert's 360-degree rotatable head enables restorations in all quadrants to be accessed with ease.

185g LIGHT WEIGHT

Weighing 185g, Radii Xpert is lightweight and minimises hand and arm fatigue.

2.5 HOUR RUNTIME

Achieve 900 x 10 second cures with Radii Xpert before the need to recharge. This equates to a convenient 2-hour 30 minute runtime.

INTERCHANGEABLE ATTACHMENTS

Radii Xpert offers versatility with the availability of full arch bleaching, diagnostic and orthodontic attachments that snap in with ease.

SLIMLINE DESIGN

Radii Xpert's slimline design enables easy access to the posterior region of the mouth. This is particularly beneficial when treating children.

HEAT SINK TECHNOLOGY

Multiple restorations can be cured safely due to the heat absorption properties of heat sink. Heat sink technology directs heat away from the LED, without the need for a cooling fan.

PULSE TECHNOLOGY

Radii Xpert uses a combination of pulse technology and steady current to further reduce heat emitted onto the tooth. With multiple pulses per second, light output is maintained on the restoration being cured, without the risk of overheating.

EASY TO CLEAN

Radii Xpert has smooth surfaces and comes with a perfectly fitted barrier sleeve to prevent cross-contamination.

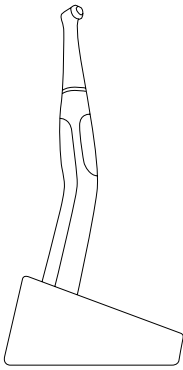
DURABLE

Radii Xpert is constructed with high strength polymer for durability.

CORDLESS

Radii Xpert is a cordless unit allowing complete freedom of movement.

ORDER DETAILS



RADII XPERT LED CURING LIGHT

Radii Xpert LED curing light	5600300
- 1 x Radii Xpert handpiece	
- 1 x charger	
- 1 x multi-region plug pack	
- 5 x small light shields	
- 1 x large light shield	
- 3 x spare lens caps	
- 100 x barrier sleeves	

LED ATTACHMENTS

Radii Xpert standard LED attachment	5600301
Radii Xpert full arch bleaching LED attachment	5600308
- 1 x full arch bleaching LED attachment	
- 2 x light shields	
- 50 x barrier sleeves	
Radii Xpert diagnostic LED attachment	5600306
Radii Xpert orthodontic LED attachment	5600307
Radii Xpert multiwave LED attachment	5600311

ACCESSORIES AND REPLACEMENT PARTS

Radii Xpert replacement lens caps (5 pack)	5600310
Radii Xpert barrier sleeves (1000 pack)	5600309
Radii Xpert small light shield (5 pack)	5600056
Radii Xpert large light shield	5600089
Radii Xpert replacement battery pack	5600305
Radii Xpert charger + plug pack	5600304
Bleach stand	5600095
Full arch bleaching LED attachment barrier sleeves (50 pack)	5600093
Full arch bleaching LED attachment light shields (5 pack)	5600094
Diagnostic adapter tip	5600078
Tacking tip set (1 mm and 2 mm openings)	5600079

~ Not registered trademarks of SDI Ltd.

^Timothy S. Menees et al, (2015), 'Depth of cure of bulk fill composites with monowave and polywave curing lights', American Journal of Dentistry, 28(6): 357-361

1 Marianne Federlin, D.D.S., Ph.D et al (2012), 'Improving Light-Curing Instruction in Dental School', Journal of Dental Education, Vol 77, No 6

2 Christensen GJ 'Are direct restorative resins being cured adequately?', Dental Economics (2013). Available from: <http://www.dentaleconomics.com/articles/print/volume-103/issue-5/practice/are-direct-restorative-resins-being-cured-adequately.html>

3 E. Armellin et al (2016), 'LED Curing Lights and Temperature Changes in Different Tooth Sites', BioMed Research International, Vol 2016, Article ID 1894672



YOUR SMILE. OUR VISION.



M100315 E

02-2025



+D036M1003151Y

MADE IN AUSTRALIA
by SDI Limited
Bayswater, Victoria 3153
Australia
www.sdi.com.au

AUSTRALIA 1800 337 003
AUSTRIA 00800 022 55 734
BRAZIL 0800 770 1735
FRANCE 00800 022 55 734
GERMANY 0800 100 5759

ITALY 00800 0225 5734
NEW ZEALAND 0800 808 855
SPAIN 00800 022 55 734
UNITED KINGDOM 00800 022 55 734
USA & CANADA 1 800 228 5166