



UPEN DATASHEET & USER MANUAL

Wireless & powerful UV LED curing pen

Delivered in a kit with accessories for an efficient & safe curing process

Up to 2 hours operating life thanks to the Li-ion rechargeable battery

A lightweight and easy-to-use product designed for precise & quick manual applications.



Electronics	Power supply	Rechargeable Li-ion battery (3,6V - 3100mAh)
	Running time	Up to 2 hours per battery
	Illumination mode	Continuous with an ON/OFF
Optics	Wavelength	UVA: 365, 385, 395, 405 nm
	Irradiance	Up to 2000 mW/cm ²
Mechanics	Width x Height x Length	146mm x 12mm (head diameter) & 25mm (body diameter)
	Weight	130 g
	Material	Device body: Aluminum alloy
	IP rating	IP40
Environment	Operation	Temperature: 10°C to 35°C – Humidity: 20% to 80% humidity (with no condensation) – Altitude: Up to 2000m
	Regulations & marking	CE - UKCA
	Environmental standards	RoHS III Directives - REACH Regulation



Product reference

UPEN standard version available into a complete KIT for manual use:

KIT - UPEN - **XXX**

WAVELENGTH (nm)

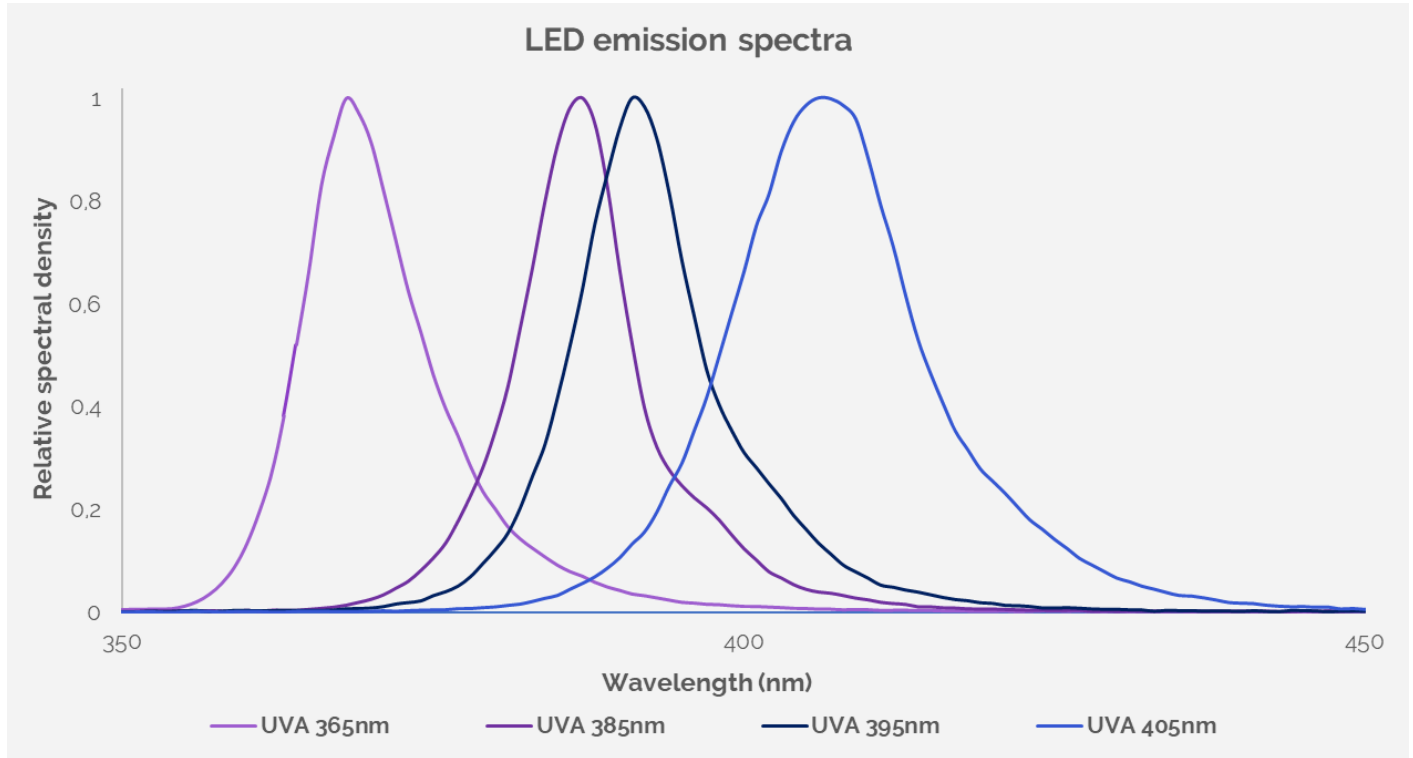
365
385 (UVA)
395
405





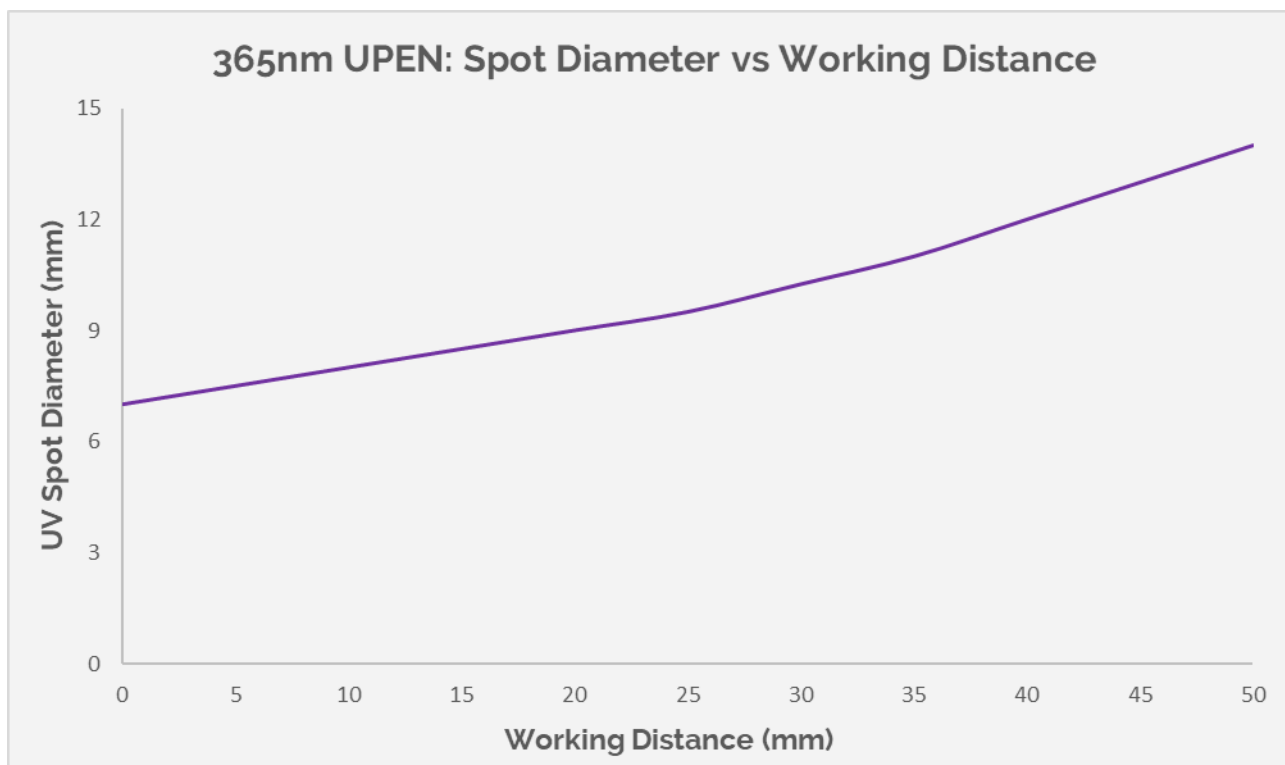
Optical considerations

LED spectra

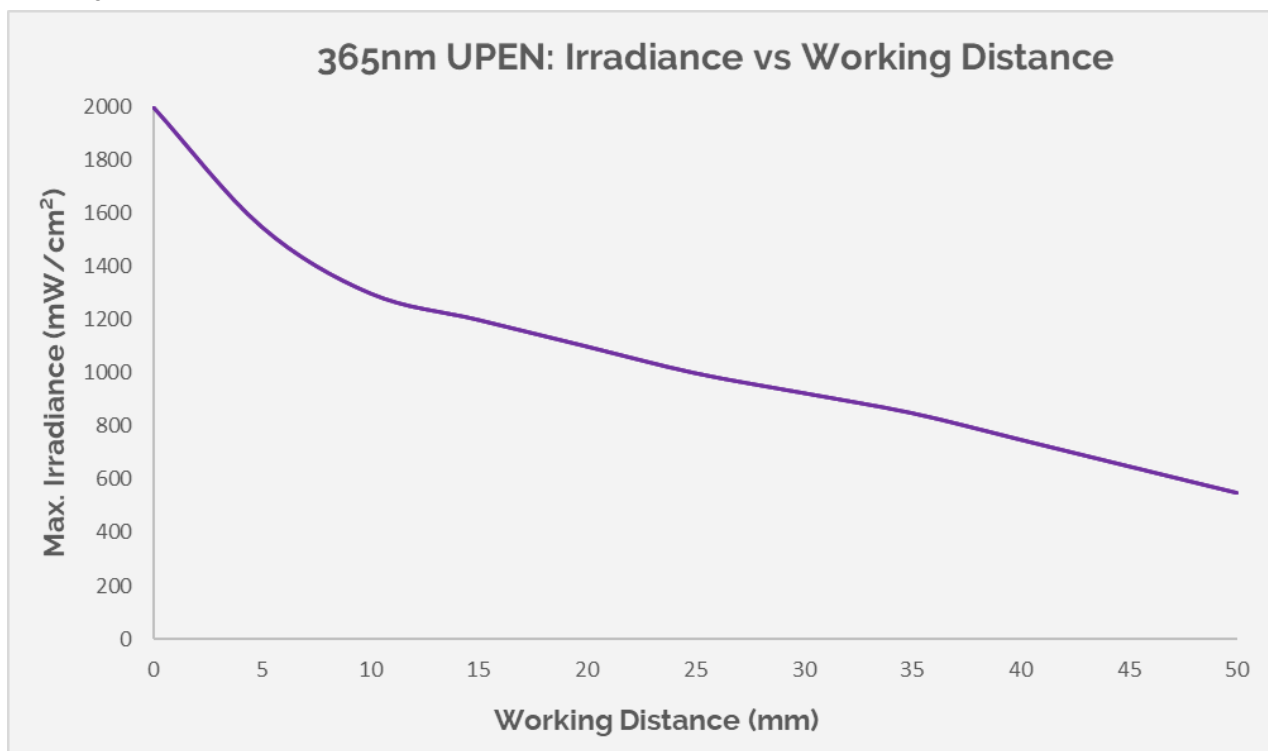


 For other wavelengths (UVC / UVB / UVA / VISIBLE / IR), feel free to ask us!

UV spot size



Photometry



Curve plotted for UVA wavelength. Radiometer: GIGA HERTZ OPTIK RCH-116 (June 2023). For the UV spot graph, the spot size is the exposed area where the irradiance is higher than 50% of the maximum irradiance.



General Information

UPEN-XXX

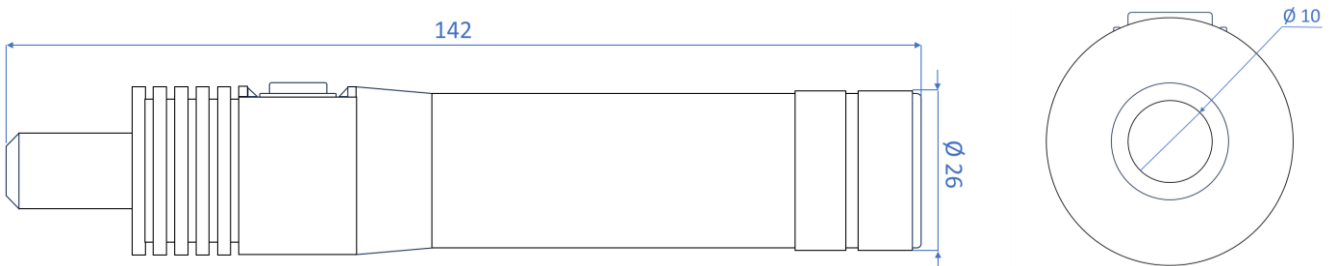


When the UV light starts blinking:
battery is low and must be replaced or charged.

Battery positioning



Mechanical considerations (mm)





Kit

In order to allow facilitated manual use of the UPEN-XXX, UWAVE has developed a complete kit which contains the following components:



Li-ion Rechargeable Batteries



The kit contains two rechargeable batteries to power the UV LED spotlight.

- Each battery offers a 2-hour continuous running time.
- Full charge of batteries may take up to 8 hours with the charger.
- Compliant to CE, RoHS, and REACH standards



Please fully charge the batteries before first use.

Batteries Charger + USB Cable



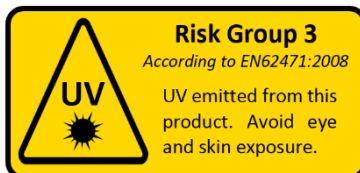
The kit contains a charger to charge the two batteries.

- The charger is powered with a USB cable provided in the kit.
- Full charge of batteries may take up to 8 hours with the charger.
- Select mode 1A.
- LED indicator to see the level of charge.
- User's manual included.
- Compliant to CE, RoHS, REACH, and FCC standards











UV security

UWAVE products come under the standard DIN EN 62471:2008 which classified sources of optical radiation into risk groups subject to their potential photo biological hazard. Due to the emission of high UV irradiation, our products belong to Risk Group 3 (hazardous even for momentary exposure) therefore special safety measures, detailed in the following, must be observed.



Thanks to its experience and knowledge about UV risks, UWAVE offers to its customer a wide range of UV protections & services:

Eyes protection	UGLASS-02: To protect eyes from direct rays. 	UGLASS-03: To cover all the face. 	
	Body protection	UGLOVE-01: to protect hands. 	UV-SHIELD: To protect all workers around. 
UV measurement	EIT LEDCURE: UV values recording. 	GIGAHERTZ OPTIK: Direct UV value reading. 	
	UWAVE expertise	EXPOSURE LIMIT VALUE  According to European Directive 2006/25/EC.	PERFORMANCES QUALIFICATION  Monitoring of all performances of your device.