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**ProPhotonix Limited** 

("ProPhotonix" or "the Company")

# ProPhotonix introduces 265nm UVC LED Lamp COBRA Clean<sup>™</sup> FX1

Rapid Development Solution for Water, Air and Surface Disinfection.

ProPhotonix Limited, (London Stock Exchange - AIM: PPIX; OTC: STKR), a designer and manufacturer of LED illumination systems and laser diode modules with operations in Ireland and the United Kingdom, today announces the launch of the COBRA Clean FX1, a 265nm UVC LED based lamp providing a rapid development solution disinfection. UVC is a proven method in the disinfection of water, air, and surfaces which has shown to be effective against pathogens such as *E. coli, L. innocua*, and COVID-19<sup>1,2</sup>.

COBRA Clean FX1 is a patent protected, compact, fan-cooled UVC LED lamp in a stackable form factor that produces a uniform line with a peak irradiance of 55 mW/cm<sup>2</sup> and peak energy density (dose) of 65 mJ/cm<sup>2</sup> at 265nm. COBRA Clean FX1 can be configured with numerous optical and electrical options. LED illumination offers significant benefits versus traditional UV lamps including design flexibility, longer illuminator lifetimes, high stability light output, precise control, thermal management, ozone-free and heavy metal free. The lamp is independently CE and UL certified.

Deep UV is the wavelength range between 100 – 280 nanometers (nm) referred to as UVC. The maximal pathogenic effect occurs between 240-280nm with 265nm showing the most promising peak effectiveness. UVC LEDs are currently available in the wavelength range 255-280nm. The <u>REWATERGY H2020 European Research Grant awarded to ProPhotonix in November 2018</u>, which focuses on water treatment, augments the development <u>of ProPhotonix UVC LED based</u> <u>products</u>. With the release of COBRA Clean FX1, the Company is actively seeking partners to further commercialize this technology.

Commenting on the COBRA Clean FX1 launch, Tim Losik, CEO and President of ProPhotonix, said: "Following the adoption of the Minamata Convention on Mercury in 2013 as a result of the environmental risks associated with the use of mercury, there has been an increased drive to replace mercury lamps with UV light sources. This product is designed to put reliable UVC LED lamps in the hands of innovators to help accelerate adoption of UVC LED lamps in the marketplace. As this product line develops, we intend to introduce more exciting form factors and capabilities for users." Also commenting, Ken Reynolds PhD, Business and Technology Manager, said: "The work in UVC lamps at ProPhotonix began several years ago out of concepts on the matter of neutralizing pathogens at commercial scale. We are now working with and seeking partners in the collaborative design, development and manufacturing of novel UVC LED based products for market adoption."

- 1. Cheng, Y., Chen, H., Sánchez Basurto, L.A. *et al.* Inactivation of *Listeria* and *E. coli* by Deep-UV LED: effect of substrate conditions on inactivation kinetics. *Sci Rep* **10**, 3411 (2020).
- 2. <u>Gerchman, Y., Mamane, H.,Friedman</u>, N., <u>Mandelboim</u>, M., UV-LED disinfection of Coronavirus: Wavelength effect, *Journal of Photochemistry and Photobiology B: Biology* **212** (2020).

For more information about ProPhotonix' COBRA Clean FX1, visit: https://www.prophotonix.com/led-and-laser-products/uvc-led-systems/uvc-led-system/

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## About ProPhotonix

ProPhotonix Limited, headquartered in Salem, New Hampshire, is a high technology designer and manufacturer of diode-based laser modules and LED systems for industry leading OEMs and medical equipment companies. In addition, the Company distributes premium diodes for Ushio, Osram, QSI, Panasonic, and Sony. The Company serves a wide range of markets including the machine vision, industrial inspection, security, and medical markets. ProPhotonix has offices and subsidiaries in the U.S., Ireland, U.K., and Europe. For more information about ProPhotonix and its innovative products, visit the Company's web site at www.prophotonix.com.