

CW APPLIED TECHNOLOGIES WORK WITH CAPPa TO VERIFY MUV-X ROOM STERILISER PERFORMANCE



BACKGROUND

CW Applied Technology offers design, manufacture, and distribution services to facilitate successful electronic and, IoT enabled innovations. As well as Product Design, CW Applied Tech is also re-imagining manufacturing to satisfy the demands of an evolving market. They see their fast time to market with high-end, personalised, client-owned technology solutions as their key differentiator.

THE NEED

CW Applied Tech was quick to react to the Covid-19 crisis, designing and implementing a MUV-X room sterilizer. It is a portable sanitizing device that uses four high-output UV-C lamps to emit powerful beams of ultraviolet light, quickly sterilizing the air and all visible surfaces in a room. UV-C has a long history of use in medical facilities, as it inactivates viruses and kills bacteria.

Independent performance verification is an important step in product development and the commercialisation process. CW Technology engaged CAPPa to verify the performance (irradiance and dose) of their MUV-X room sterilizer.



THE SOLUTION

The Centre for Advanced Photonics & Process Analysis (CAPPa) at MTU is one of 15 Enterprise Ireland Technology Gateways and is at the forefront of photonics research in Ireland. CAPPa provides solutions to companies in sectors such as photonics, medical devices, food, and pharma, ranging from short-term consultancy to multiyear collaborative projects.

To validate the performance of the MUV-X room sterilizer the irradiance and dose values were measured with UVPAD E spectral radiometer with an external fibre coupled sensor head (Opsytec DE). These measurements were taken over a 120-second time frame. For each distance (0.5m, 1m, 2m) two measurements were taken (or attempted in case of too low signal): The first with the sensor head oriented perpendicularly to the plane joining two most adjacent bulbs and the second with the sensor head oriented parallel to the plane joining the two most adjacent bulbs. For each measurement, the sensor head was held at half the bulb length.

BENEFITS OF THE ENGAGEMENT

CAPPa's expertise in photonics was useful in fast-tracking the commercialisation process of the new MUV-X sanitization unit. The research carried out by the team at CAPPa was a fundamental factor in accelerating the product's quick route to market, especially during such challenging times.

"WE WERE HAPPY BOTH WITH THE RESPONSIVENESS AND THE QUALITY OF WORK COMPLETED BY CAPPa. WE WILL DEFINITELY BE USING THEIR SERVICES AGAIN IN THE FUTURE."

- JOHN O CONNELL, MANAGING DIRECTOR, CW APPLIED TECHNOLOGIES

Contact us to connect your Enterprise with MTU. Email us at extended.campusCork@mtu.ie to discuss a collaboration to suit your needs!