

Measurement of UV radiation

Testing the safety and performance of appliances

■ Safety of lamps, luminaires and tanning beds

Too much UV radiation is harmful for the human skin. Not only that, but materials exposed to UV radiation can degrade at an accelerated rate. Therefore, as a manufacturer of tanning beds, lamps or luminaires, you have to ensure that your products meet the UV radiation safety standards. The authorities can conduct random tests to check whether these standards have been met.

■ Safety and performance of industrial equipment

Some industrial installations emit UV radiation, such as industrial dryers, for example. To ensure the safety of the workforce these appliances must be in line with the recommendations on maximum UV radiation. Moreover, UV measurements demonstrate whether these appliances are performing as well as they ought to.

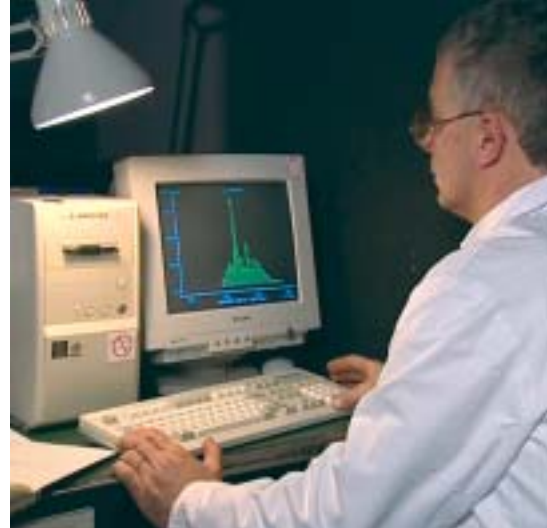
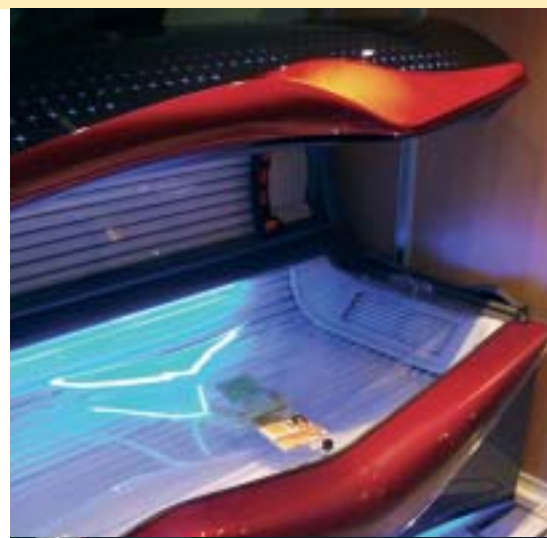
■ Accurate UV measurements bring clarity

A specialised measurement campaign will reveal whether the UV radiation from your products or appliances is as it should be. Such a campaign determines the radiation intensity for each separate wavelength, as opposed to simple measurement devices, which integrate the intensity over the spectrum in a standard way and so give a distorted picture. Indeed, only one part of the spectrum is harmful to humans, and only one part determines the quality of industrial processes. At Laborelec we have the expertise to carry out this type of specialised measurement campaign.

A specialised service

■ Make use of our specialised measurement campaign as part of a total service :

- Determining the measurement points
- Carrying out the measurements in situ in the actual environment of the appliance, over one half-day
- If necessary, carrying out reference measurements in the laboratory
- Processing and interpreting the measurement results
- Summarising the results in a clear report



The technical Competence Center
in energy processes and energy use.
From innovation to operational assistance.



We will help you to guarantee the safety and performance of your UV emitters.

■ Spectral measurements for a precise result

The intensity of the UV radiation is determined through a combination of two measurements. First a spectral measurement is taken (a measurement of the energetic spectrum of the radiation source), and then a light measurement is taken. Through this combination we can determine the intensity of each individual wavelength. Our method differs from measurements performed with small devices. These measurements usually integrate the radiation intensity over the UV spectrum in a standard way, which makes it difficult to reach a well-founded conclusion over safety or performance.

■ BELTEST accredited

Our laboratory is BELTEST accredited, which guarantees the independence, accuracy and reproducibility of our measurements. We use reference sources of radiation, calibrated in an authorised laboratory, and our measuring equipment is regularly calibrated too.

■ Clear reports

The results of the measurement campaign are presented in a clear and well laid-out report with extensive notes. In addition to all the necessary technical details, the report compares the value measured against a familiar source of radiation such as an ordinary light bulb. Therefore anyone without a technical background can quickly gain an idea of the significance of the results.

■ Advice on adjustments

If the measurement campaign reveals that certain products or installations are radiating too much UV, we can advise you on the measures to take to prevent this (screening, exposure at a greater distance, shorter duration, etc.). With new measurements we can check the effect of the measures put in place.



Five reasons for you to choose Laborelec:

- you have one-stop shopping for your energy needs;
- you get access to more than 40 years of experience;
- you get rapid service with reliable solutions;
- you increase the profitability of your installations;
- you benefit from independent and confidential advice.

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Light and Customer Safety

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