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NIP 525-000-82-64 REGON 000053835 KRS 0000126823

Lodz, 23-11-2021

Certificate of Analysis No K/370/02/2021 (1/1)

Subject of analysis: **UV-C STERILON MAX 1500 288W Philips 8x36W UVC radiators**

State of the subject: correct

Customer: **Lena Lighting S.A**
63-000 Środa Wlkp., ul. Kórnicka 52

The device for testing was delivered by the Customer 03-11-2021
The tests began: 16-11-2021
The tests finished: 22-11-2021

Type of analysis	Analytical method	Results	
Microbial parameters			
Testing of the level of air pollution during the operation of the purifier in a room of 40 m^2	Own methodology using a microbiological air sampler MAS-100 ECO™ Manual MAS-100 ECO™	*[cfu/1 m^3]	Microorganisms reduction
- Total Viable Count at time 0		**224**	-
- Total Viable Count after 2 hours		**64**	R_{2h} = 71.43%
- Total Viable Count after 6 hours		**30**	R_{6h} = 86.61 %
- Total Viable Count after 20 hours		**3**	R_{20h} = 98.66%
-Total Yeast and Mold Counts at time 0		**166**	-
- Total Yeast and Mold Counts after 2 hours		**57**	R_{2h} = 65.66%
- Total Yeast and Mold Counts after 6 hours		**25**	R_{6h} = 84.94 %
- Total Yeast and Mold Counts after 20 hours		**5**	R_{20h} = 96.99 %

* The results are the average number of microorganisms from two measurements

Authorized:

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Pracowni Mikrobiologii
dr inż. Anna Szosland-Fałtyn
Adiunkt

Accepted:

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Assessment of efficacy of UV-C STERILON MAX 1500 288W Philips 8 x 36W UVC radiators

The aim and scope of the research

The aim of the study was to determine the effectiveness of air disinfection using **UV-C STERILON MAX 1500 288 W Philips 8x36 W UVC radiators** (Certificate of Analysis No K/370/02/2021) on the basis of reduction in numbers of molds, yeasts and bacteria that are present naturally in air, using aspiration method after 2, 6 and 20 hours of lamp working in a room with an area of 40 m^2.

Test procedure

The studies were conducted in accordance with the laboratory's methodology and the manufacturer's manual MAS-100 ECO™ (Microbiological Air Sampler) in a room with an area of 40 m^2. Before turning on the device, the total viable count of microorganisms and the number of mold and yeast in the room air were examined (at 0 time). The bactericidal lamp was placed in the center of the room. The air pollution was measured after 2, 6 and 20 hours of operation. The tests were carried out using the aspiration method using the microbiological air sampler MAS-100 ECO™. Each time the device took 1000 liters of air through a perforated plate (suction time about 9 minutes). The air stream containing particles was directed to the PCA or YGC agar surface in a standard Petri dish. After completing the air sampling cycle, the Petri dishes were incubated at 30°C for 72h or 25°C for 5 days, then the colonies grown were counted and the number of microorganisms in 1 m^3 of air was determined, taking into account the correction of the Feller's statistical correction table.

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