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Lodz, 16-11-2021

Certificate of Analysis No K/370/01/2021 (1/1)

Subject of analysis: **UV-C STERILON MAX 1200 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: 08-11-2021
The tests finished: 14-11-2021

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		**348**	-
- Total Viable Count after 2 hours		**114**	R_{2h} = 67.24%
- Total Viable Count after 6 hours		**49**	R_{6h} = 85.92 %
- Total Viable Count after 20 hours		**5**	R_{20h} = 98.56%
-Total Yeast and Mold Counts at time 0		**173**	-
- Total Yeast and Mold Counts after 2 hours		**72**	R_{2h} = 58.38%
- Total Yeast and Mold Counts after 6 hours		**30**	R_{6h} = 82.66 %
- Total Yeast and Mold Counts after 20 hours		**9**	R_{20h} = 94.80 %

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

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Assessment of efficacy of UV-C STERILON MAX 1200 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 1200 288 W Philips 8x36 W UVC radiators** (Certificate of Analysis No K/370/01/2021) 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^{TM} (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^{TM}. 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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