



Certificate of Analysis No K/350/01/2021 (1/1)

Subject of analysis: UV-C STERILON CLEAN 216W (Philips 6 x 36 W 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 18-10-2021
The tests began: 26-10-2021
The tests finished: 01-11-2021

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 25 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		499	-
- Total Viable Count after 2 hours		119	R _{2h} = 76.15%
- Total Viable Count after 6 hours		72	R _{6h} = 85.57 %
- Total Viable Count after 20 hours		13	R _{20h} = 97.39%
-Total Yeast and Mold Counts at time 0		110	-
- Total Yeast and Mold Counts after 2 hours		60	R _{2h} = 45.46%
- Total Yeast and Mold Counts after 6 hours		24	R _{6h} = 78.18 %
- Total Yeast and Mold Counts after 20 hours		9	R _{20h} = 91.82 %

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

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Assessment of efficacy of UV-C STERILON CLEAN 216W (Philips 6 x 36 W 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 CLEAN 216W (Philips 6 x 36 W UVC radiators)** (Certificate of Analysis No K/350/01/2021) 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 25 m².

Test procedure

The studies were conducted in accordance with its methodology developed at the Laboratory and the manufacturer's manual MAS-100 ECO™ (Microbiological Air Sampler) in a room with an area of 25 m². 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 m³ of air was determined, taking into account the correction of the Feller's statistical correction table.

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