Test 2: Evaluation of Disinfectant efficacy Light Progress surface irradiation product following FDA (Food and Drug Administration) protocol described in "Guidance for Industry about enforcement Policy for Sterilizers, Disinfectant Devices, Air Purifier during the Coronavirus Disease 2019 (COVID-19 Public Health Emergency"

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TESTS PARAMETERS:

Name of product tested: UV PENTALIGHT
Microrganisms Tested:

- Pseudomonas Aeruginosa ATCC 27853
- Escherichia Coli ATCC 8739
- Stafilococco Aureus ATCC 43300
- Salmonella Typhimurium ATCC 23853
- Klebsiella Pneumoniae ATCC BAA-1705

Inocolum Carriers: 20 cm^2 stainless Steel carriers
Concentrations: $1.5x10^7$; $1.5x10^6$ CFU/mL
Exposure Times: 4, 7 and 10 minutes
Distance Surface – Source: 3,5 m
Repetitions: tests were performed 3 times in triplicate between August and September 2020

Experiment method:

2 PCB solution to suspend inoculum colonies were spread on the stainless-steel carriers, one placed under UV irradiation and the other out of device reach. At the end of the exposure time both the samples were transferred into 90 mm Petri dishes and D/E medium added. Plates were incubated at 36°C for 48h.

TESTS RESULTS:

After Irradiation, all Microrganisms tested were eliminated with value from 4 Log_{10} (99,99%) to 7 Log_{10} (99,99999%). The higher effect was of course achieved at 10 minutes exposures (distance was fixed at 3,5 m).


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Image 3 Light Progress UV PENTALIGHT: lateral view

Image 4 Light Progress UV PENTALIGHT: UV-C ON

REPORT V 1.0 "TEST ON UV-PENTALIGHT BY LIGHT PROGRESS"

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