

OCTO

Abstract wavy lines in blue and green, flowing across the middle of the page.

OCTO PurePlace Building Mini Certification

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The PurePlace system is designed to maintain an healthy context inside the controlled environment (either the car passenger compartment or the house / office environment), reducing the presence of harmful bacteria and viruses, after a proper application cycle, up to the better standards as per the EU practices for the sterile environments. In particular, the minimum time of operation to reach a Class B environmental context (as per the EU standard mentioned before), inside a small / medium size sedan passenger compartment and without injection of new viral/bacterial colonies, is of 60 minutes. However, please be well advised that, notwithstanding the system efficiency and efficacy in containing and controlling the spread of bacteria and viruses, it cannot replace adopting all the necessary measures to prevent a contagion event. Therefore, with this regard, any kind of warranty and/or representation cannot be, and is not, provided by Octo. The active and efficient adoption of such necessary measures remains within the control of the customer.

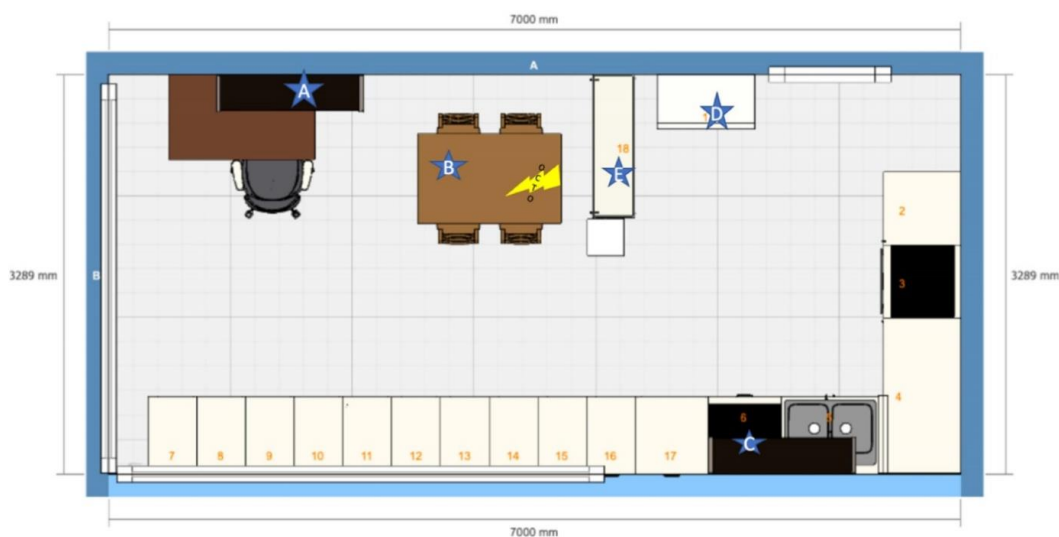


Rome, January 22, 2021

Preliminary analysis of the sanitation of the Octo Telematics AFL MINI Sanifier device

The sanitization was carried out using a 25 sqm room. Not wanting to alter the results, the room was not sanitized or cleaned prior to the experiments to mimic the real conditions of use. The tests were carried out by analyzing the battery charger in 5 points of the room and the quantity of bacteria is expressed as CFU (bacterial colony). The higher this value, the greater the amount of bacteria present in the environment. A sterile environment has less than 1 colony at each sampling point, a nearly sterile environment has between 1 to 4 colonies at the sampling points, a healthy environment has fewer than 20 bacterial colonies. A highly polluted environment have more than 100 colonies for all sampling points. The count of bacterial colonies took place before and after sanitization with the OCTO AFL MINI Sanifier device, sanitizing the environment for 1 or 2 hours. The comparison of bacterial colonies before and after indicates the effectiveness of the sanitation. The number of colonies after sanitation indicates the level of sanitation achieved

Scheme 1. Sampling points indicated as A-E stars, MINI Sanifier indicted as lightning



The sanitization conducted with the OCTO AFL MINI Sanifier device led to a reduction of the bacterial load in the environment up to 90% and all the sampling points had a charge of 1 or less bacterial colonies indicating an almost sterile environment. The sanitization has proved effective even with only 1 hour of treatment.



Prof. Pierluca Galloni

Client:**Octo Telematics SpA**

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Test Certificate**Date:** January 22th, 2021**Project number:** 2021/1**PO number:** 1-OCTO2021**Testing date:** January 2021**Project / Test
description**

Verification of the effectiveness and efficiency of the Air For Life Mini Sanifier (AFL®) incorporating Air For Life UK LTD proprietary technology AFLPCO® for Octo Telematics in sanitation of air inside a room.

Test sample identification

Air For Life MINI sanifier assembly S/N AFLM200003885

**Test equipment / Test
procedure**

Test performed on medium room (25 m²), according to the test procedure attached (annex A), using Petri dishes for environment characterization and samples collection in different testing points, and subsequent bacterial growth monitoring after 72 hours incubation.

Test results

Applying the system for the specified time (after 1 or 2 hours respectively), the bacterial load is progressively reduced to a bacteria colonies average ≤ 1 cfu after 60 minutes of sanitation for all the sampling points. These results indicate more than the grade B level in the **European Union Good manufacturing Practice** scale, meaning a quasi-aseptic ambient. The grade A for the aseptic conditions requires 0 colonies.

Released by:


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Annex A



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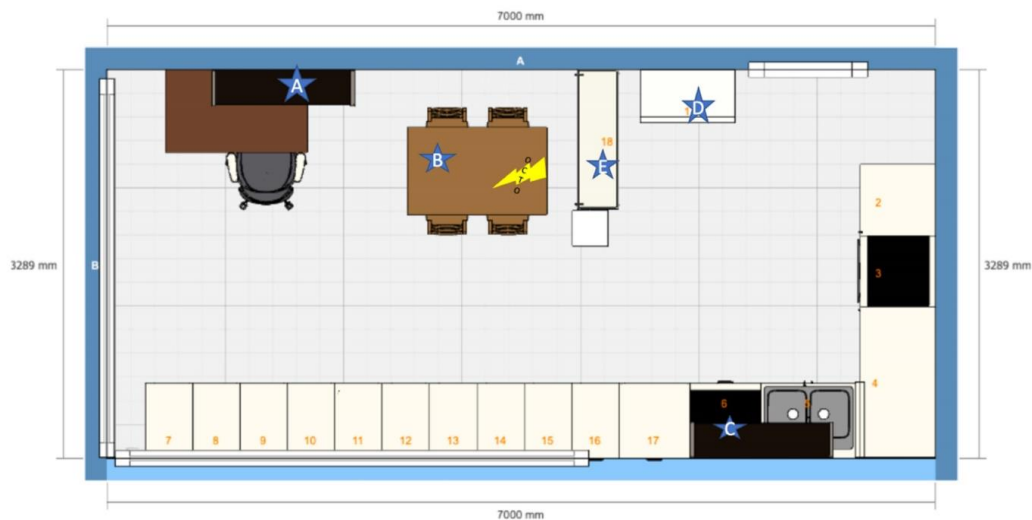
Rome, 22 January 2021

Preliminary analysis of Octo Telematics room device sanitization

Sanitation experiments have been carried out in a rectangular room of approximately 25 m², in particular a space characterized by a mild usage. Not wanting to alter results, room has been not tidied up or cleaned before the experiments to mimic the everyday real conditions. Tests batteries have been organized according to the following protocol:

1. Five sterile containers (Petri's dish), containing a solid support of non-selective feeding media in which bacteria can grow, were placed in five different points of the room, as showed in scheme 1. The points were selected in order to collect different points in the room having a full map of the device sanitizer capacity in working condition equal to the optimum range (20-30 m²). Points have been also chosen in pointing out the most critical areas of the environment. Especially, near a wide window, on the table, near the room door.
2. A sterile container with solid bacterial growth media was opened for 1 hour in the room to record the reference (control);
3. Sanitation of the environments with OCTO devices for the established time;
4. A second sterile container with bacterial growth media was opened in the room for 1 hour immediately after the end of the sanitization (time = 1 from sanitation)

Scheme 1: Stars show sanitation points while flash shows OCTO device



All data sets have been analyzed at 72 hours, after exposure of Petri's dishes in the room environment, and a 22°C incubation, in order to have a significant and reliable growth of the bacterial colonies. The sanitation was carried out for 60 minutes keeping the door closed limiting people access. Another set of experiments have been conducted after these preliminary tests, for 120 minutes of sanitation. Tests after 60 minutes of sanitation show a very good results with an efficacy up to 90% in bacteria decreased. Furthermore, the experimental setups ended up with less than 1 Colony Forming Units in all the sampling points, and therefore confirming the effectiveness and efficacy of the system.

It has been noted that the results measured after 1 h indicates that at this time there is a very good level of sanitation, as indicating from the less or equal to 1 CFU for all sampling point, showing a quasi-sterile ambient.

Experimental data, even after 2 hours of sanitation, do not show an increasing efficacy in device activity against bacteria. It could be due to a very great low level already reached. Thus, this data confirm the device efficacy in a very short time



of usage: the bacterial load is almost completely eliminated immediately after only one hour of treatment.

Prof. Pierluca Galloni



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January 12, 2021

To Whom It May Concern

Gentleperson:

Re: NASA adopted PCO technology is used in the AFL-PCO air purifiers (Air For Life, UK), the equipment used for the air purifications and the square footage covered by AFL Mini Sanifier®

I am writing this letter at the request of Mr. Jay Vitale, Founder and CEO of the Air For Life (AFL), UK. I have been working with the AFL Mask® built by the Air For Life (AFL), UK. More than twenty-five of my research students have been analyzing the AFL Air purifiers under my supervision to evaluate their effect on the indoor airborne allergens including the airborne bacterial and fungal population, dusts and burnt residues. We have also assessed and analyzed the capacity of the AFL Air Purifiers namely:

1. LUNA WALL MOUNT SANIFIER®, LNT-2 6000
2. MINI SANIFIER®-AFL M1
3. AFL Car Sanifier®
4. AIR FOR LIFEMASK®

Scientists at NASA-developed a new green technology called Photo Catalytic Oxidation (PCO) to remove the ethylene gas build-up. PCO technology works by breaking down the ethylene gas into harmless Carbon Dioxide (CO₂) and Water (H₂O) by exposure to Ultra Violet (UV) light in the presence of a Titanium Dioxide (TiO₂) catalyst. Further tests by NASA revealed PCO technology

not only eliminated ethylene gas build up, but also destroyed all carbon-based impurities in the air such as bad odors, Volatile Organic Compounds (VOC's), Fungi, Bacteria, and Viruses. Our team of scientists has further enhanced the NASA developed PCO technology by creating the Air For Life Photocatalytic Oxidation (AFLPCO®). (Ref. page-9, N. Ghosh, Vitale, J., Bell, J., Goyal, S., A. Howard, Banerjee, P. (2020). An Assessment of the AFL Mask® and LUNA Wallmount, the new developments in the Air-Purifier industry for preventing the airborne pathogens. *European Scientific Journal*, September 2020 edition Vol.16, No.27 ISSN: 1857-7881 (Print) e - ISSN 1857-743: 1-16).

It has been stated in the attached research paper entitled “**An Assessment of the AFL Mask® and LUNA Wallmount, the new developments in the Air-Purifier industry for preventing the airborne pathogens**” published in the peer-reviewed renowned scientific journal *European Scientific Journal*.

Regarding the square footage covered by AFL Mini Sanifier® for air purifications, I would like to state that we have tested the capacity of the AFL Mini Sanifier® in the “Aerobiology Laboratory” of the West Texas A&M university, Canyon, Texas. This Laboratory room was measured as 15 ft.x22 ft. totaling to 330 sq. feet.

For any other question, please feel free to contact me via e-mail at nghosh@wtamu.edu or phone at (806) 651-2571 (USA).

Thanks,



N. Ghosh Ph.D., MAAAAI (Member, American Academy of Allergy, Asthma and Immunology)

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