

Effective protection from pathogens in food service areas

CleanLight is a powerful LED panel proven to destroy deadly airborne viruses, including COVID-19, wherever it shines.

Approved by eminent microbiologist Dr Carl Edwards and extensively tested in laboratories as well as real-world trials, CleanLight has been proven to eliminate the problem of bacteria, viruses, pollutants, and odours in the air across a number of different environments.

Our Air Quality Audit is a precise, scientifically verified process that accurately measures airborne pathogens and shows where the potential for onwards transmission of disease is greatest.

Restaurants have a combination of public and private areas, food preparation and seating areas as well as toilets and food storage. With continuous traffic from staff and public, it is essential to provide adequate protection from airborne microbes – often in cramped conditions or where continual wiping or cleansing is not possible. COVID-19 has made this a business-critical consideration.

Here's how CleanLight was able to significantly reduce potential threats from airborne pathogens in a restaurant setting.

The problem

Restaurants rely on people coming and going, being able to feel relaxed and safe, and the preparation of food in hygienic conditions at all times. They offer restrooms and communal staff areas, changing rooms, as well as kitchens and food storage areas.

The risk of food contamination was already high before the emergence of COVID-19, but now restaurants are at the forefront of the efforts to get back to normal without increasing the risk of viral transmission.

Restaurants have many areas that are difficult to keep safe and often have cramped or constricted

spaces. With air conditioning already in place and staff protocols and cleaning regimes maximised, it was difficult both to measure the levels of potential infection and find a way to increase protection for staff and guests alike.

The solutions

Lightico's Air Quality Audit is an essential part of assessing the situation, regardless of the complexity of the space or the need to reduce downtime. We were able to place several air sampling plates dishes in key locations for an exposure period of up to 90 minutes.

Because of the high risk of surface transmission with utensils and cash, swabs were also taken on key 'high touch' items. This non-disruptive assessment gave us a precise quantitative estimate of the concentration of micro-organisms in the air in the many different areas under consideration.

The detailed analysis of the existing airborne threat this provided, alongside verified tabulated results, helped indicate where our CleanLight LEDs would have optimum effect.

We installed one CleanLight unit in each of the locations suggested by the Air Quality Audit. Once installed they immediately began to control levels of airborne pathogens that no amount of extra cleaning, air conditioning, hair and beard nets or tighter storage protocol around outdoor clothes could ever tackle.

This was a totally different way of protecting staff that worked all the time the lights were on and did not require any further input from the staff to increase protection from infection and contamination.

Once the CleanLight LEDs were installed, we carried out another Clean Air Audit to measure their immediate effect.

The results

In the complex restaurant environment, where public and staff mix and share space, and where food is both prepared and consumed, it is vital that everything possible is done to maintain levels of cleanliness. CleanLight LEDs achieve additional protection, without adding work to already busy staff. CleanLight LEDs were shown – by the use of our Clean Air Audit to considerably reduce pathogen levels.

Sample	Bacterial colony counter (per plate)	
	Before TiO2 light installation	After TiO2 light installation
Restaurant Entrance	80	0
Restaurant Kitchen	47	2
Restaurant Bathroom	107	1
Restaurant Rest Area (after 75 min)	48	7
Restaurant Rest Area (after 90 min)	86	1
Restaurant Till Area	15	5
Bottle (swab sample)	41	16
Cash Till (swab sample)	115	13
Coins (swab sample)	225	26

Bacteria was reduced by 100% after switching CleanLight on*

*Based on samples at the Restaurant Entrance

The bigger picture

Where everything is already being done to maintain standards of hygiene and cleanliness, and the public are mingling with staff, CleanLight is an effective and inconspicuous way to achieve even greater protection. By first using the accurate Air Quality Audit to identify key locations for installation, we were able to first measure, then boost, the control of airborne bacteria and viruses, despite complex, cramped or busy spaces.

