

# Final Report

February 2021

# The Pilot

Provide a comprehensive solution for improving and managing the air quality in a Chili's restaurant, while increasing awareness of air quality in the entire chain. The pilot will be executed through an interactive data-based approach providing recommendations for the chain, staff and visitors.

## Schedule:



## ABOUT AURA AIR

At Aura Air, we believe the act of breathing should be as nature intended.

Clean, pure and simple.

constant since birth, breathing sets our life's rhythm. Inhale. Exhale. Fresh clean air clears our mind and rejuvenates our body without us committing a second thought.

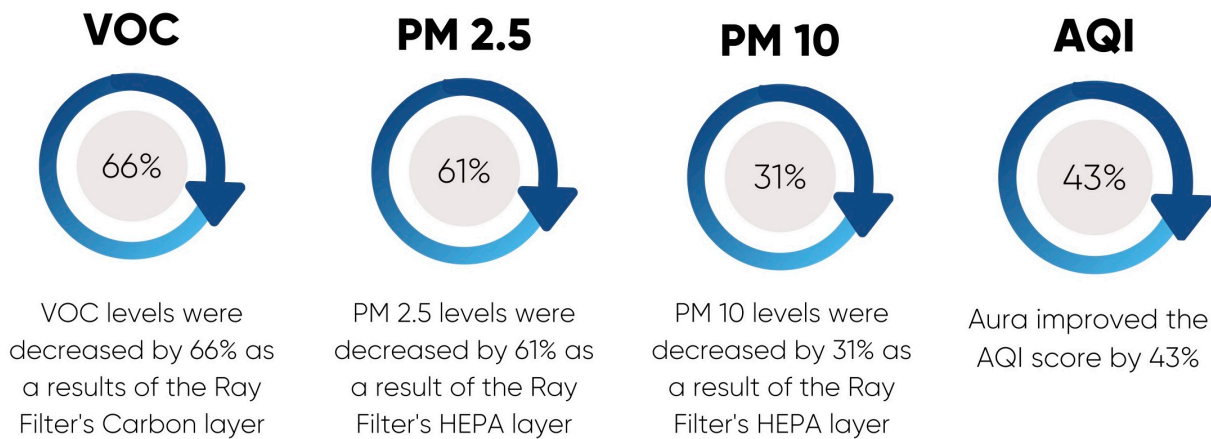
With a quest to reclaim our natural right to clean air, Aura Air developed the world's smartest air purification system, one that cleanses and disinfects your indoor air while vigilantly monitoring its quality in real-time. Cutting-edge in design, Aura is remarkably simple to install and effortless to operate.

Just hang it up and plug it in.  
We'll do the rest.

# The Results

## Air Quality Improvement:

In weeks 2-3, Aura operated in Chili's restaurant. The device disinfected and purified the air, significantly reducing the amount of harmful particles and parameters in the room:



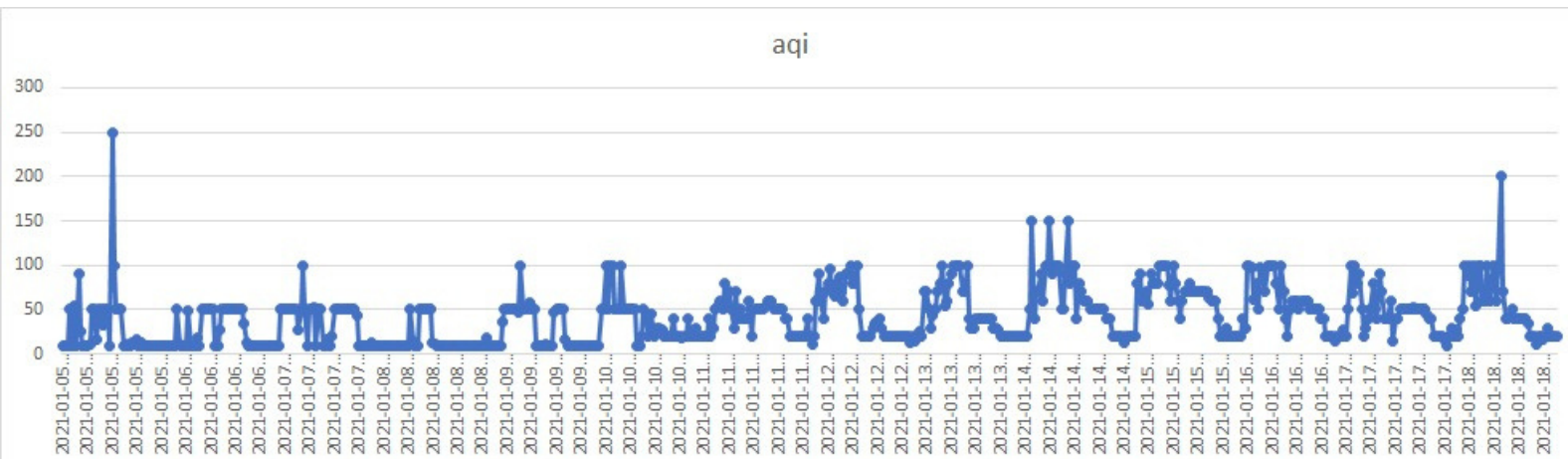
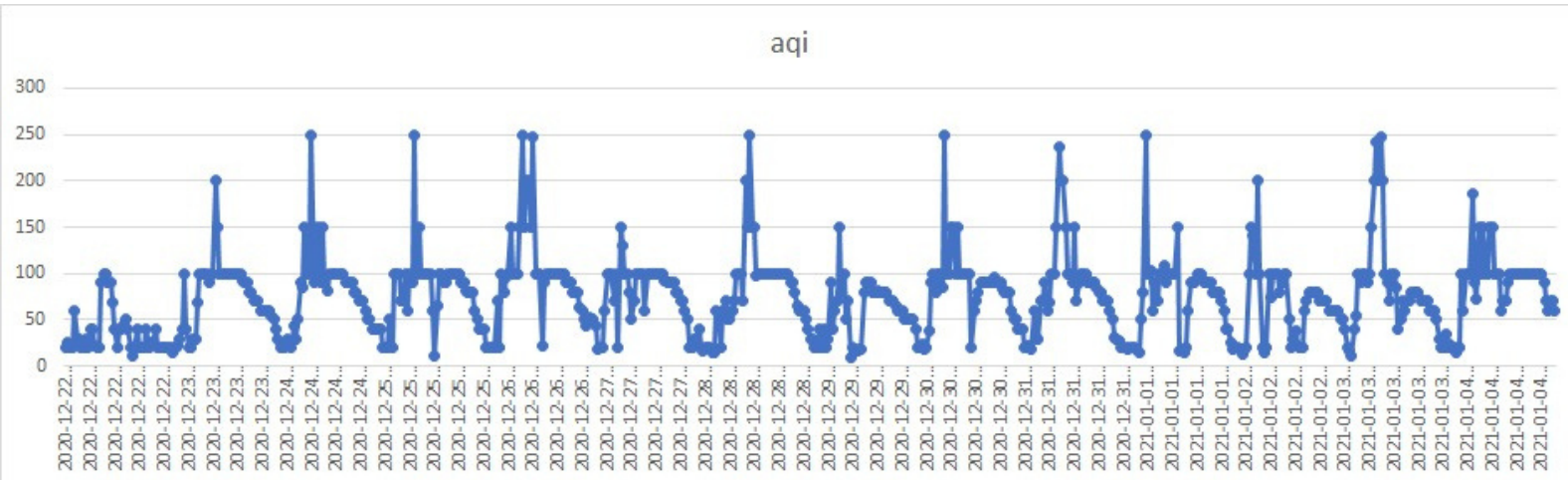
### VOC's

Volatile organic compounds are compounds that easily become vapours or gases. They are released from burning fuel such as gasoline, wood, coal or natural gas. They are also released from many consumer products such as cigarettes, solvents, paints, glues, wood preservatives, cleaners, disinfectants, air fresheners, building materials, pesticides and more. Formaldehyde, ethanol, toluene, and benzene are just a few examples of VOC's. Not all VOC's are harmful, but a large number of them are. Some of the health effects of VOC's are short-term such as irritation of the eyes, headaches, and dizziness. Others have long term effects such as fatigue, loss of coordination, liver and kidney damage and even cancer.

### PM 2.5 and PM 10

Particulate matter (PM) or also known as atmospheric aerosol particles are microscopic solid or liquid matter suspended in the atmosphere of Earth. These particles include coarse particles with a diameter of 10  $\mu\text{m}$  or less (PM10) and fine particles with a diameter of 2.5  $\mu\text{m}$  or less (PM2.5). PM10 includes particles as dust, pollen, and mold. PM2.5 includes particles such as combustion particles, organic compounds, metals, bacteria and more. The effects of inhaling particulate matter that has been widely studied in humans and animals include asthma, lung cancer, respiratory diseases, cardiovascular disease, premature delivery, birth defects, low birth weight and premature death.

# General AQI - Treatment and detection



Sensor Name	Phase 1 - Average	Phase 2 - Average	Improvement (%)
AQI	73.9874739	41.53143713	43%
Co	1.688517745	1.723652695	-2%
Voc	275.3340292	92.06736527	66%
Co2	1.688517745	441.7709581	7%
Pm10	17.58532934	13.37891441	31%
Pm2.5	5.247005988	2.010438413	61%