# Effectiveness of Bluezone® Model 420 in a Cannabis Trim Room

Bluezone's ultraviolet enhanced oxidation technology is a breakthrough approach to air purification; Bluezone kills or converts chemical and biological impurities inside a self-contained reaction chamber using both oxidation and ultraviolet irradiation.

## Objective

Test effectiveness of Bluezone preservation technology in a cannabis trim room.

### **Methods and Materials**

Microbial sampling was performed in the 7,900  ${\rm ft^3}$  trim room.

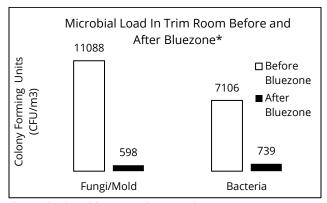
- Four days of sampling were performed.
- In the first two days of sampling, no Bluezone 420 was in operation to test baseline microbial load.
- After the second day of baseline sampling, a Bluezone 420 was installed.
- After installation, Bluezone operated in the trim room for a week.
- After a week of operation, the first day of post-installation sampling was performed.
  The Bluezone operated for another week and then a final day of post-installation sampling was performed.

Microbial measurements were made using an air sampling pump on MEA plates for fungi/mold and TSA plates for bacteria.

- Air was pulled through an air pump onto two different types of agar plates, MEA and TSA.
- After sampling, plates were placed in an incubator for 5 days.
- CFUs (colony forming units) were counted on each plate and used to calculate CFU/m<sup>3</sup>.
- A probable statistical total count was used to calculate the most accurate CFU/m<sup>3</sup>.

## Results

Test results from cannabis trim room air sampling shows microbial load decreased 90% after Bluezone operation. The graph and agar plates pictures below reveal how significantly Bluezone improved the air quality in the trim room.



\*Data displayed from test days 2 and 4

#### Without Bluezone

With Bluezone



### Conclusion

Bluezone dramatically reduces microbial load in cannabis trim rooms.

