



# BiPolar Ionization Systems Independent Laboratory Testing

Advanced Air BiPolar Ionization Systems have been tested in an independent third-party testing laboratory. Units tested utilize Advanced Air BiPolar Ionization technology to deploy a high concentration of positive and negative ions into the air which reduce pollutants and improve indoor air quality.

## VIRUS TESTING

Specimen	Time	Reduction	Testing Organization
H1N1 Influenza A Virus	60 minutes	99.19%	GZ Institute of Microbiology

## BACTERIA TESTING

Specimen	Time	Reduction	Testing Organization
Staphylococcus Albus 8032	60 minutes	99.37%	GZ Institute of Microbiology
Staphylococcus Aureus ATCC	60 minutes	99.43%	GZ Institute of Microbiology
Escherichia Coli (E. Coli)	60 minutes	99.73%	GZ Institute of Microbiology

## VOC (CHEMICAL) TESTING

Specimen	Time	Reduction	Testing Organization
Formaldehyde	24 hours	64.40%	GZ Institute of Microbiology
Benzene	24 hours	62.20%	GZ Institute of Microbiology

### H1N1 Influenza A Virus

A strain of Influenza A which was associated with the outbreaks of the 1918 Spanish Flu pandemic, 1977 Russian Flu pandemic and 2009 Swine Flu pandemic.

### Staphylococcus Albus 8032

Staphylococcus albus, also known as Staphylococcus epidermis, is a bacteria that is one of the bacteria that are natural human flora, especially the skin. It is one of the leading causes of skin and soft tissue infections.

### Staphylococcus Aureus

One of the leading bacteria to cause infections in humans. Although *S. aureus* usually acts as a commensal of the human microbiota it can also become an opportunistic pathogen, being a common cause of infections including abscesses, respiratory infections, and food poisoning.

### Escherichia Coli

E. Coli bacteria is commonly found in the lower intestine of which some serotypes can cause serious food poisoning.

### Formaldehyde

Formaldehyde is a volatile organic compound (VOC), known carcinogen and common indoor air pollutant due to its widespread use in the manufacturing of building materials, insulation, composite wood products (i.e., hardwood, plywood, particleboard) and household products such as glues, paints, lacquers and finishes.

### Benzene

Benzene is a volatile organic compound (VOC), known carcinogen and indoor air pollutant.