

## **Influence of air ionization on the reduction of bacteria on agar plates in a clean room**

Tests conducted by:

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**test room:** 3,0 m<sup>3</sup>

**appliance:** **aerotron 200**

**ionization intensity:** level 2 of 8

**ionization tubes:** 1 pcs.

type: IRC

dimensions: length: 195 mm; diameter: 38 mm

### **cultivation parameter:**

sampling time: cultivation plates 6 hours exposure to air

cultivation medium: plate 5 % sheep blood TSA agar

period of germination: 2 days

temperature: 35 °C

### **inoculation method:**

inoculation location: in the middle of the room

inoculation cultures: Staphylococcus aureus (Methicillin-resistant)

### **measuring protocol:**

First the agar plates have been positioned in the test room without air ionization.

Then the same test have been conducted with air ionization turned on.

## SUMMARY

starting concentration of staphylococcus aureus: 13.000 cfu/m<sup>3</sup>

air ionization off: 12.000 cfu/m<sup>3</sup>

**Average reduction of Staphylococcus aureus: 7,7 %**

starting concentration of staphylococcus aureus: 13.000 cfu/m<sup>3</sup>

air ionization on: 450 cfu/m<sup>3</sup>

**Average reduction of Staphylococcus aureus: 96,5 %**