

**THE PRELIMINARY RESULTS FROM YOUR EVALUATION OF
ANTIMICROBIAL EFFECTIVENESS OF A PHOTOCATALYST DEVICE
TEST THAT WAS PERFORMED BY AN INDEPENDENT ACCREDITED
LAB ARE LISTED BELOW.**

Test Unit: Air Reactor Model 110

Test Organism: Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)

Organism Dilution: 1:20

Exposure Temperature: Room Temperature (21.71-22.12°C)

Soil Load: No soil load

Test Description: Test was performed in test room with dimensions 18' 8.5" x 16' 8" x 11' 9" (length x width x height), totally approximately 3663.7 feet³. The device was turned on ~30 minutes prior to placing the carriers in the room. Inoculated and dried carriers, held in Petri dishes, were placed across from the test machine at a distance of approximately 8 feet and the dish lids were removed. The carriers were allowed to be exposed for 1, 2, and 5 hours. All controls were acceptable.

Carrier Population Control Results for MRSA:

1 hour = 6.7×10^4 CFU/carrier (4.83 log₁₀)

2 hours = 5.9×10^4 CFU/carrier (4.77 log₁₀)

5 hours = 8.2×10^4 CFU/carrier (4.91 log₁₀)

Test Results for MRSA:

1 hour = 3.25×10^4 CFU/carrier = **51.5% (2.34 log₁₀) reduction**

2 hours = 1.47×10^4 CFU/carrier = **75.1% (1.19 log₁₀) reduction**

5 hours = 0.11×10^4 CFU/carrier = **98.6% (0.07 log₁₀) reduction**

ANALYSIS: The Air Reactor, Model #110, provided by Hi Tech Air Solutions demonstrated a 98.6% reduction of Methicillin Resistant *Staphylococcus aureus*- MRSA after 5 hour exposure, a 75.1% reduction after 2 hours of exposure, and a 51.5% reduction after 1 hour of exposure.