Biuro Naukowo-Techniczne
SIGMA

Laboratory complient
with ISO 17025

Testing environment
ISO Class 2

Active member of:

Polish Committee
for Standardization
- Technical Committee no 161
for Interiors Air Quality

Polish Committee
for Standardization
- Technical Committee no 317
for Ventilation and Air Conditioning

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QUALIFICATION CERTIFICATE

ISO 14644-14 CLEANROOM SUITABILITY TEST: PARTICLE EMISSION TEST

Product tested: Lighting fixture ELBAMED LED APARENT
Customer name: ELBA S.A.
Customer address: Str Paul Morand Nr. 135, Timisoara, Romania



Test results:
When operated under below specified test conditions, lighting fixture ELBAMED LED APARENT is suitable for use in cleanrooms fulfilling the specification of air cleanliness **ISO Class 3 - 9** according to ISO 14644-1:2015.

Test method: ISO 14644-14:2026
Test device: Laser Particle Counter TSI 9110; s/n: 91101102001
Particles size channels: ≥0.1µm; ≥0.2µm; ≥0.3µm; ≥0.5µm; ≥1.0µm; 5.0µm

Test environment:
· Cleanroom Air Cleanliness: ISO Class 2 (according to ISO 14644-1:2015)
· Airflow velocity and pattern: 0,45m/s±20%; vertical laminar flow
· Temperature and relative humidity: 21°C±2°C; 50%±20%

Stress conditions applied:
· Structure-bore noise: 50Hz
· Oscillation; velocity; acceleration: 0.9 mm; 18.0 mm/s; 1.6 m/s^2

Detailed test results can be found in the BNT SIGMA test report no. E-2609-21-1

Laboratory: BNT SIGMA, Section of Cleanroom Technology
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