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 under test: Lighting fixture EXF390LED-0600
Customer name: ATM LIGHTING Sp. z o.o.
Customer address: ul. Maszynowa 30A, 90-298 Gdańsk, Poland

Test results:
When operated under below specified test conditions, lighting fixture **EXF390LED-0600** 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 14644-14:2015
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±1°C; 50%±10%

Stress conditions applied:
· Structure-bore noise: 50Hz
· Oscillation of the object, velocity and accel.: 0.74 mm; 19.0 mm/s; 2.1 m/s^2

Detailed test results can be found in the BNT SIGMA test report no. E-24-22/1. This document, as well as full test report, applies only to the product named above.

Laboratory: BNT SIGMA, Section of Cleanroom Technology
Operator: Krzysztof Zarczynski, Senior Validation Engineer
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