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**TESTED[®]
DEVICE**

Philips Lighting B.V.
CR434B LED88/840 SQR
Report No. PH 1201-586

DUPLICATE

Statement of
Qualification

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Customer: Philips Lighting B.V.
Rondweg Zuid 85
7102 JD Winterswijk
Netherlands

Test results / Classification:
(according to ISO 14644-1)

The luminaire CR434B LED88/840 SQR is suitable for use in cleanrooms fulfilling the Air Cleanliness Class 1.

Component tested:

Category: Cleanroom Facilities
Subcategory: Lighting Systems
Type: CR434B LED88/840 SQR

Random check measurements of particle emission (airborne) at representative points

Test procedure: According to VDI 2083 Part 9.1

Measuring instruments being used: Optical Particle Counter:
Model LasAir II 110 manufactured by PMS with measuring channels of
 $\geq 0.1 \mu\text{m}$, $\geq 0.2 \mu\text{m}$, $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1.0 \mu\text{m}$ and $\geq 5.0 \mu\text{m}$

Test parameters of the test environment:

- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1
- Air flow velocity:.....0.45 m/s
- Air flow guidance:vertical unidirectional air flow
- Temperature:22 °C \pm 0.5 °C (71.6 °F \pm 0.9 °F)
- Relative humidity: 45 % \pm 5 %

Test parameters of the test execution:

The lighting was stressed as follows:

- Impact sound:between approx. 5 Hz and 50 Hz
- Average oscillation velocity: $v = 1.276 \text{ mm/s}$
- Average oscillation acceleration: $a = 0.462 \text{ m/s}^2$
- Average oscillation of the system: $s = 0.00358 \text{ mm}$

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The measuring equipment used for the qualification is regularly calibrated and is based on national and international standards. In the case where no national standards exist, the measuring procedure used corresponds with technical regulations and norms valid at the time of the measurement. The documents drawn up for this procedure are available for viewing.

The validity of this certificate applies only to the mentioned product in this particular condition for a duration of 5 years.
Further information: www.tested-device.com.


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Stuttgart, February 23, 2012

Place, Date


i. A.
Project manager