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TESTED® DEVICE

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

Statement of Qualification





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Customer:

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

Component tested:

Category: Cleanroom Facilities

Subcategory: Lighting Systems

Type: CR434B LED88/840 RECT

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

Test procedure:

Measuring instruments being used:

Test parameters of the test environment:

Test parameters of the test execution:

According to VDI 2083 Part 9.1

Optical Particle Counter:

Model LasAir II 110 manufactured by PMS with measuring channels of $\geq 0.1 \, \mu m$, $\geq 0.2 \, \mu m \geq 0.3 \, \mu m$, $\geq 0.5 \, \mu m$, $\geq 1.0 \, \mu m$ and $\geq 5.0 \, \mu m$

• 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 ± 0.5°C (71.6°F ± 0.9°F)
Relative humidity:	15% + 5%

The lighting was stressed as follows:

Impact sound:	between approx. 5 Hz and 50 Hz
Average oscillation velocity:	v = 0.522 mm/s
Average oscillation acceleration:	a = 0.320m/s^2
• Average oscillation of the system:	s = 0.00148 mm

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

The luminaire CR434B LED88/840 RECT is suitable for use in cleanrooms fulfilling the Air Cleanliness Class 2.



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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Nobelstrasse 12 70569 Stuttgart Germany Stuttgart, February 23, 2012

Place, Date

i. A. Project manager

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