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TESTED® DEVICE

OMS s.r.o. RELAX XTP PAR 4x24W **Report No. OM 1206-601**

Statement of Qualification





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Customer: OMS s.r.o.

Dojč 419 90602 Dojč Slovak Republic

Component tested:

Category: Cleanroom Facilities

Subcategory: Lighting system

Type: RELAX XTP-IP65 PV PAR T5 4x24W,350G, EB A2;9003

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
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Air flow velocity:	0.45 m/s
• Air flow guidanco:	vortical unidirectional air flow

Air flow guidance:vertical unidirectional air flow

• Temperature:22 °C \pm 0.5 °C (71.6 °F \pm 0.9 °F)

The lighting system was stressed as follows:

• Impact sound:between approx. 5 Hz and 50 Hz

• Average oscillation velocity:v = 0.3190 mm/s

• Average oscillation acceleration:a = 0.132 m/s²

• Average oscillation of the system:s = 0.001168 mm



Test results / Classification:

(according to ISO 14644-1)

The lighting system RELAX XTP-IP65 PV PAR T5 4x24W,350G, EB A2;9003 is suitable for use in cleanrooms fulfilling Air Cleanliness Class 1.

It must be pointed out, that according to ISO 14644-1 cleanrooms classes 1 to 5 have a high number of filters, which makes the use of lighting systems partly impossible. Cleanrooms with horizontal laminar flow are an exception.

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**.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

Department Ultraclean Technology and Micromanufacturing

Nobelstrasse 12 70569 Stuttgart Germany Stuttgart, July 27, 2012

Place, Date

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