



Fraunhofer

**TESTED[®]
DEVICE**

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

DUPLICATE

Statement of
Qualification

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|-------------------|---|--|---|
| Customer: | OMS s.r.o. Dojč 419 90602 Dojč Slovak Republic | 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. |
| Component tested: | | | |
| Category: | Cleanroom Facilities | | |
| Subcategory: | Lighting system | | |
| Type: | RELAX XTP-IP65 PV PAR T5 4x24W,350G, EB A2;9003 | | 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. |

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

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| 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 $\geq 0.1\text{ }\mu\text{m}$, $\geq 0.2\text{ }\mu\text{m}$, $\geq 0.3\text{ }\mu\text{m}$, $\geq 0.5\text{ }\mu\text{m}$, $\geq 1.0\text{ }\mu\text{m}$ and $\geq 5.0\text{ }\mu\text{m}$ |
| Test parameters of the test environment: | <ul style="list-style-type: none">Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1Air flow velocity:.....0.45 m/sAir flow guidance:vertical unidirectional air flowTemperature: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 system was stressed as follows: <ul style="list-style-type: none">Impact sound:between approx. 5 Hz and 50 HzAverage oscillation velocity: v = 0.3190 mm/sAverage oscillation acceleration:a = 0.132 m/s²Average oscillation of the system:s = 0.001168 mm |