



Fraunhofer

TESTED[®] DEVICE

MICROELECTRONICA S.A.
LuminaLED cleanroom laboratory
Report No. ME 1111-578

Qualification Certificate

This is to certify that the LuminaLED cleanroom laboratory hardware (provided by YIT Germany GmbH, Stuttgart, Germany; pre-installed at Fraunhofer IPA, Stuttgart, Germany) procured for

MICROELECTRONICA S.A.
Voluntari, Ilfov, Romania

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number ME 1111-578.

The LuminaLED cleanroom laboratory hardware was tested according to ISO 14644-1 and ISO 14644-3 and is fulfilling the following specifications:

- Visual inspection: no deviations
- Air cleanliness classes: ISO Class 1 and 8
- Pressure cascade/differential pressure: requirements fulfilled
- Temperature and humidity: $22\text{ }^{\circ}\text{C} \pm 2\text{ K}$, $45\% \pm 5\%$
- Airflow velocity (non-turbulent flow): $0.40\text{ m/s} \pm 0.05\text{ m/s}$
- Noise emission: $< 67\text{ dB}$; lighting system: within specifications
- Airflow visualization: no deviations

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA IQ/OQ report.

Stuttgart, July 14, 2012

i. A. 
Project manager

The validity of this certificate applies only to the above mentioned tested hardware in this particular condition.

Further information:
www.tested-device.com