



Fraunhofer

**TESTED[®]
DEVICE**

LEONI Elocab Ltd.
EHBK 37770 Rev.1 with track
Report No. LE 0912-501

DUPLICATE

Statement of
Qualification

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Customer: LEONI Elocab Ltd.
258 McBride Drive
Kitchener, ON, N2R 1H8
Canada

Component tested: LEONI Elocab Ltd. High Performance Flat Cable

Type: EHBK 37770 Rev.1 with track

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

Test parameters:

- Fixed with aluminium adapters
- Energy chain: igus E6.29.02.150
- Stroke length: 830 mm
- Set of parameters 1: v_1 : 0.5 m/s; a_1 : 1.0 m/s²
- Set of parameters 2: v_2 : 1.0 m/s; a_2 : 2.0 m/s²
- Set of parameters 3: v_3 : 2.0 m/s; a_3 : 4.0 m/s²

Test results / classification: When the cable system is being operated at the above mentioned test parameters, it is suitable for use in cleanrooms fulfilling the Air Cleanliness Class 5 according to ISO 14644-1.

Test parameters	Air Cleanliness Class (in accordance to ISO 14644-1)
v_1 : 0.5 m/s; a_1 : 1.0 m/s ²	1
v_2 : 1.0 m/s; a_2 : 2.0 m/s ²	4
v_3 : 2.0 m/s; a_3 : 4.0 m/s ²	5

Standards / guidelines used for the qualification: VDI 2083 Part 9.1; ISO 14644-1

Test parameters of the cleanroom environment: Cleanroom of Air Cleanliness Class ISO Class 1 (according to ISO 14644-1)

Air flow velocity: 0.45 m/s

Air flow guidance: vertical unidirectional air flow from ceiling to floor (raised floor)

Temperature: 22 °C ± 0.5 °C (71.6 °F ± 0.9 °F)

Relative humidity: 45 % ± 5 %

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.