



# Fraunhofer TESTED<sup>®</sup> DEVICE

LAPP OLFLEX &  
UNITRONIC Clean Room  
Report No. LA 0604-347

DUPLIKAT

Statement of  
Qualification

# Statement of Qualification

<b>Manufacturer of object to be tested:</b>	LAPP KOREA CO., LTD. 7F, SongWon Bldg., 92-2 Yuljun JangAn SuWonCity, KyungGi 440-824 Korea	<b>Standards used for the qualification:</b>	VDI 2083 Part 1, 4 and 8, ISO 14644-1
<b>Component tested:</b>	Cable systems	<b>Test environment:</b>	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%
<b>Type:</b>	OLFLEX & UNITRONIC Clean Room 12 x 0,25 OLFLEX & UNITRONIC Clean Room 3 x 0,14		
<b>Test parameters of object to be assessed:</b>	Stroke length: 820 mm Set of parameters 1: $v_1$ : 0.6 m/s; $a_1$ : 0.5 m/s <sup>2</sup> Set of parameters 2: $v_2$ : 1.2 m/s; $a_2$ : 2.0 m/s <sup>2</sup> Set of parameters 3: $v_3$ : 2.0 m/s; $a_3$ : 5.0 m/s <sup>2</sup>		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.
<b>Performed tests:</b>	Random check measurements of particle emission (airborne) at representative points.		
<b>Test results/classification:</b>	When the below mentioned test piece is being operated at the conditions of the following table, it is suitable for use in cleanrooms fulfilling the specifications of the given Air Cleanliness Classes according to ISO 14644-1.		

Model Description	Air Cleanliness Class according to ISO 14644-1		
	at $v_1 = 0.6$ m/s	at $v_2 = 1.2$ m/s	at $v_3 = 2.0$ m/s
OLFLEX & UNITRONIC Clean Room 12 x 0,25	ISO Class 3	ISO Class 3	ISO Class 5
OLFLEX & UNITRONIC Clean Room 3 x 0,14	ISO Class 3	ISO Class 3	ISO Class 4