



Fraunhofer

**TESTED[®]
DEVICE**

F.-W. Dauphin GmbH & Co.
IS20650 166481 0171
Report No. DA 1512-795

DUPLICATE

Statement of
Qualification

Electrostatic
Resistance

Statement of Qualification

Customer

Bürositzmöbelfabrik
Friedrich-W. Dauphin GmbH & Co.
Espanstrasse 29
91238 Offenhausen
Germany

Component tested

Category: Working Place and Operator
Subcategory: Chairs
Product name: Work chair IS20650 166481 0171
(manufacturing date: 11/2015; upholstery: 0171/Tec profile, polyurethane, black, conductive; base: no. 16; castors: no. 81)

Test result / Classification

The work chair IS20650 166481 0171 fulfills the ESD requirements for EPAs (ESD-protected areas) of surface resistivity, volume resistivity and discharge resistance according to DIN EN 61340-5-1 and DIN EN 61340-4-1.

	Operating voltage [V]	Resistance [Ω]	Rating
Surface resistivity	10	6.3E + 4	electrostatically discharging
Volume resistivity	10	2.4E + 9	electrostatically discharging
Discharge resistance	10	5.7E + 5	electrostatically discharging

Electrostatic discharge measurements at representative points (surface resistivity, volume resistivity, discharge resistance)

Standards/Guidelines: DIN EN 61340-5-1; DIN EN 61340-4-1
The norms stated generally refer to the version valid at the time of the tests.

Test devices:

- Data capture: Tera-Ohm-Meter, Typ 6206, Eltex GmbH
- Measuring probes (2 pieces): ETS Model 850 (2.5 kg), Electro-Tech Systems Inc.
- Counter electrode:
 - type: stainless steel plate
 - dimensions: 500 mm x 500 mm (± 2 mm)
 - thickness: 1.2 mm (± 0.1 mm)
- Insulating mounts:
 - type: planar PTFE-sheet with $R > 10^{14} \Omega$
 - dimensions: 1210 mm x 1200 mm (± 5 mm)
 - thickness: 5 mm (± 1 mm)

Test environment parameters:

- Cleanroom Air Cleanliness Class (according to ISO 14644-1): ISO 1
- Airflow velocity: 0.45 m/s
- Airflow pattern: vertical laminar flow
- Temperature: $22^\circ\text{C} \pm 0.5^\circ\text{C}$
- Relative humidity: $45\% \pm 5\%$

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

For further information about the test environment and parameters, please refer to the Fraunhofer IPA test report.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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Place, date of first document issued

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Place, current date

on behalf of 
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