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DEVICE

Bürositzmöbelfabrik F.-W. Dauphin
IS2087ESD ST 044033
**Report No. DA 1905-1117**

DUPLICATE

Statement of
Qualification

Single product
**Electrical**
**Resistance**

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# Statement of Qualification · Single product

**Customer**

Bürositzmöbelfabrik F.-W. Dauphin
Espanstrasse 29
91238 Offenhausen
Germany

**Component tested**

Category: Working Place and Operator

Subcategory: Chairs

Product name: IS2087ESD ST 044033
(manufacturing date: 3/2019; color: 033 black; article number: 2087_ESD 000127215 BAND 4 2028; collection back/seat: 044; seat height/gas spring: S64CR; footring: ZF00; rollers/gliders: R70WGSL)

**Electrical resistance measurements at representative points (resistance to groundable point ($R_{gp}$))**

Standards/Guidelines: DIN EN 61340-2-3, -5-1
The norms stated generally refer to the version valid at the time of the tests.

Test devices:
- Data acquisition: ..... Tera-Ohm-Meter TO-3
  ..... H.-P. Fischer Elektronik GmbH & Co. KG (Mittenwalde)
- 2 Measuring probes:
  – Typ: ..... Model 860, ME 2,5 kg, Ø 63,5 mm, DIN IEC 61340-2-3, -4-1
  ..... KEINATH Electronic
- Backrest electrode:
  – Typ: ..... Model 900
  ..... Wolfgang Warmbier GmbH Co. KG

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 °C ± 0.5 °C
- Relative humidity: ..... 45 % ± 5 %

Test procedure parameters:
- Counter electrode:
  – Material: ..... stainless steel plate
  – Dimensions: ..... 500 mm x 500 mm (± 2 mm)
  – Thickness: ..... 1.2 mm (± 0.1 mm)
- Insulating base:
  – Type: ..... planar PTFE-sheet with R > $10^{14}$ Ω
  – Dimensions: ..... 1210 mm x 1200 mm (± 5 mm)
  – Thickness: ..... 5 mm (± 1 mm)

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**Test result / Classification**

The chair IS2087ESD ST 044033 was tested according to DIN EN 61340-2-3 for resistance to groundable point ($R_{gp}$).
The measurement result lies below the required limit value of 1 x $10^9$ Ω according to DIN EN 61340-5-1 for ESD protection elements.

| Measuring point | Operating voltage [V] | Average value resistance to groundable point ($R_{gp}$) [Ω] | Compliance with limit value as per DIN EN 61340-5-1 |
|---|---|---|---|
| **Backrest** | 10 | 2.1 x $10^5$ | **fulfilled*** |
| **Seat point 1** | 100 | 2.4 x $10^6$ | **fulfilled*** |
| **Seat point 2** | 100 | 2.4 x $10^6$ | **fulfilled*** |
| **Seat point 3** | 100 | 2.5 x $10^6$ | **fulfilled*** |

*In situations where it is important to consider whether the Charged Device Model (CDM) could cause damage, the lower limit value for ESD protective components should be above > $10^4$ Ω.

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.

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

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on behalf of
Dr.-Ing. Udo Gommel, Project Manager Fraunhofer IPA

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first document was issued. The document can be verified under **www.tested-device.com**.