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## Test of boxes regarding electrostatic protective properties (1 appendix)

Black plastic boxes and fittings.



9050-6624-900 ShuttleBox 800x600x50 ESD

### **RISE Research Institutes of Sweden AB** **Electronics - Product Safety**

Performed by

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## Summary

The test objects fulfilled the requirements for ESD-approval according to IEC 61340-5-1, edition 1.0, 2007 provided the marking is supplemented.

### 1 Commission

Tests according to IEC 61340.

### 2 Client

SumoBox AB, Västerås, Sweden

### 3 Test objects

Black plastic boxes and fittings manufactured by SumoBox AB.

9050-6624-900	ShuttleBox 800x600x50 ESD
1060-6627-900	ShuttleDivider 100x600 ESD

Six test objects arrived at SP 2017-11-22.

### 4 Performance and result

The surface resistance measurements were performed 2017-11-24 according SP-method 2472, issue 6 with appendix 1, issue 4.

The test objects were conditioned during more than 48 h in  $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$  and  $12\text{ \% RH} \pm 3\text{ \% RH}$ .

The measurements were performed in the same climate.

Electrode: Concentric rings without guard electrode.  
Outer diameter of the inner ring: 30,5 mm  
Inner diameter of the outer ring: 57,2 mm  
Contact material: conductive rubber

Instrument: SP inv.No. 502589 (instrument uncertainty less than  $\pm 0.6\text{ \%}$ ).

Measurement voltage: 100 V DC

All test objects were measured.

Testing was carried out by Sven Byheden 2017-11-24.

The test results apply to the tested items only.

**Result, 9050-6624-900 ShuttleBox 800x600x50 ESD**

all measured resistance values were in the range  $7.6 \times 10^3 \Omega$  to  $8.3 \times 10^3 \Omega$ .

The requirement of surface resistance in the range  $10^2 \Omega$  to  $10^{11} \Omega$  was fulfilled.

**Result, 1060-6627-900 ShuttleDivider 100x600 ESD**

all measured resistance values were in the range  $1.2 \times 10^3 \Omega$  to  $2.9 \times 10^3 \Omega$ .

The requirement of surface resistance in the range  $10^2 \Omega$  to  $10^{11} \Omega$  was fulfilled.

## 5 Marking

Requirements were fulfilled. The products were marked with manufacturers/suppliers name and type designation. ESD-symbol was missing.

### Appendix

Appendix 1: Photographs

## Appendix 1



9050-6624-900 ShuttleBox 800x600x50 ESD



1060-6627-900 ShuttleDivider 100x600 ESD