



# Fraunhofer

## TESTED<sup>®</sup> DEVICE

SAMICK PRECISION IND.CO., Ltd

LME8uu

Report No. SA 1709-944

### Outgassing Behavior VOC/SVOC

### Qualification Certificate

This is to certify that the product mentioned above, provided by

**SAMICK PRECISION IND.CO., Ltd**  
Daegu, South Korea

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number SA 1709-944.

The outgassing behavior of LME8uu at the stated temperatures was investigated according to VDI 2083 Part 17. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding Contaminant Category:

Contaminant Category (x)	SER <sub>u</sub> <sup>1)</sup> 23 °C [g/unit · s]	SER <sub>u</sub> <sup>1)</sup> 90 °C [g/unit · s]	ISO-ACC <sub>m</sub> Class (x) based on 23 °C
VOC	< 2.8 x 10 <sup>-13</sup>	< 1.7 x 10 <sup>-12</sup>	< -12.6
SVOC	< 2.8 x 10 <sup>-13</sup>	< 1.7 x 10 <sup>-12</sup>	< -12.6
Amines	< 2.8 x 10 <sup>-13</sup>	< 1.7 x 10 <sup>-12</sup>	--
Organophosphates	< 2.8 x 10 <sup>-13</sup>	< 1.7 x 10 <sup>-12</sup>	--
Siloxanes	< 2.8 x 10 <sup>-13</sup>	< 1.7 x 10 <sup>-12</sup>	--
Phthalates	< 2.8 x 10 <sup>-13</sup>	< 1.7 x 10 <sup>-12</sup>	--

<sup>1)</sup> SER<sub>u</sub>: Unit-specific emission rate

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](http://www.tested-device.com).

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

DUPLICATE

SA 1709-944  
Report No. first document

Stuttgart, February 23, 2018  
Place, date of first document issued

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Report No. current document

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Place, current date

on behalf of

Dr.-Ing. Udo Gommel, Project manager Fraunhofer IPA