



Fraunhofer

TESTED[®] DEVICE

KUKA Deutschland GmbH

LBR iisy 15 R930 CR

Report No. KU 2303-1404

Statement of
Qualification

Single product
Electrostatic
Charge Behavior

Statement of Qualification · Single product

Customer	KUKA Deutschland GmbH Zugspitzstrasse 140 86165 Augsburg Germany
Component tested	
Category:	Automation Components
Subcategory:	Robotics
Product name:	LBR iisy 15 R930 CR (manufacturing date: 9/2024; color: white and orange; weight: 43.2 kg; serial number: 4561012)

Measurement of charge behavior

Standards/Guidelines:	SEMI E78-0222 The norms stated generally refer to the version valid at the time of the tests.
Test devices:	<ul style="list-style-type: none">Data capture:.....Influence-E-Fieldmeter, type EMF58 Eltex-Elektrostatik-GmbH
Test environment parameters:	<ul style="list-style-type: none">Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1Airflow velocity:.....0.45 m/sAirflow pattern:..... vertical laminar flowTemperature:.....22 °C ± 0.5 °CRelative humidity: 45 % ± 5 %
Test procedure parameters:	<ul style="list-style-type: none">Tool weight:no tools mountedMotion sequence:typical pick & place sequenceCapacity:..... 80% of maximum capacity

Test result / Classification

The robot LBR iisy 15 R930 CR fulfills the permissible limit values of 13 V/cm (0.2 kV/m) for the sensitivity threshold 2033/7.7 nm according to SEMI E78-0222.

Electrostatic field			
Electrostatic level		Test result	
Year Node	Limit value [V/cm]	Max. mean value [V/cm]	Max. single value measured [V/cm]
2033 7.7 nm	8.5	8	13
Limit value:		fulfilled	


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.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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on behalf of	
Dr.-Ing. Frank Bürger, 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.