Fraunhofer

TESTED®
DEVICE

Rite-Hite Corporation
LITESPEED CLEANROOM
Report No. RI 2108-1247

Statement of
Qualification

Single product
Riboflavin Test
(Equipment)

Fraunhofer
IPA

Statement of Qualification · Single product

Customer

Rite-Hite Material Handling Equipment (Kunshan) Co., Ltd.
110 Donglong Road
Kunshan Jiangsu 215300
China

Component tested

Category: Cleanroom Facilities

Subcategory: Wall / Ceiling / Floor / Door

Product name: LITESPEED CLEANROOM High Performance Door
(manufacturing date: 5/7/2021; color: white; serial number: 136419;
Height: 98.50 inch; Width: 78.75 inch)

Cleanability test (riboflavin test)

Standards/Guidelines: VDMA information sheet »Riboflavin test for low-germ or sterile process technologies – Fluorescence test for examination of cleanability«. The norms stated generally refer to the version valid at the time of the tests.

Test environment parameters: Laboratory

Test procedure parameters:

- Test solution: .....0.2 g riboflavin, 1.0 g hydroxethylcellulose .....in 1000 ml ultrapure water
- Application of test solution: ..... pump spray
- Drying time: ..... approx. 2 - 3 h
- Cleaning method: ..... wiping
- Cleaning medium: .....ultrapure water
- Number of wiping cycles: 3
- UV-light: .....λ = 366 nm

The cleanability is examined and assessed qualitatively. The assessement based on the amount and size of defects occuring.

Test result / Classification

The LITESPEED CLEANROOM High Performance Door can be cleaned well using a simple wiping procedure with ultra-pure water. However, the fluorescence test identified a few critical areas. It is extremely difficult to clean these areas of the door effectively.
These areas have to be cleaned especially thoroughly or using a more complex procedure, e.g. by removing certain parts before cleaning.

System component	Assessment of cleanability
LITESPEED CLEANROOM	**good**

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**.