



Fraunhofer

**TESTED[®]
DEVICE**

ISOONE
MARS (EUP2094EPF)
Report No. LA 2411-1574

DUPLICATE

Statement of
Qualification

Single product
Riboflavin Test
(Equipment)

Customer	La Manufacture de France SAS -ISOONE 18 rue Jean Monnet 3124 Saint-Jean France
Tested product	
Category:	Cleanroom Facilities
Subcategory:	Lighting Systems
Product name:	MARS OPMI LED 390/390 3950/5 31/840 EPF (manufacturing date: 3/28/2025; color: white and red; size: 390 x 390 cm; article number: EUP2094EPF)

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 hydroxethylcellulosein 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 assesement based on the amount and size of defects occuring.

Test result / Classification	The luminaire MARS OPMI LED 390/390 3950/5 31/840 EPF can be cleaned simply by wiping it with ultrapure water. However, the fluorescence test identified a few critical areas. These areas have to be cleaned especially thoroughly or using a more complex procedure, e.g. by removing certain parts before cleaning.
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System component	Assessment of cleanability
MARS OPMI LED 390/390 3950/5 31/840 EPF	very 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.

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Business unit Testing and Certification	-- Report No. current document	-- Place, current date
Nobelstrasse 12 70569 Stuttgart Germany	on behalf of Dr.-Ing. Frank Bürger, head of business unit Testing and Certification	