





Fraunhofer TESTED® DEVICE Knauf Ceiling Solutions Armstrong Perla OP 0.95 19 mm

Report No. KN 2101-1202

Statement of Qualification

Single product
Particle Emission

Statement of Qualification • Single product

Customer

Category:

Subcategory

Product name:

Standards/Guidelines:

Test devices:

Component tested

Knauf Ceiling Solutions GmbH & Co. KG Elsenthal 15 94481 Grafenau Germany

Cleanroom Facilities

Wall/Ceiling/Floor/Door

Armstrong Perla OP 0.95 19 mm

dimension: 600x600x19mm)

(manufacturing date: 10/5/2020; article number: BP5188;

Test result/Classification

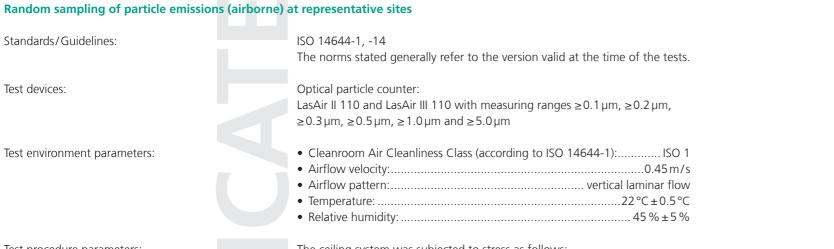
When operated under the specified test conditions, the ceiling system Armstrong Perla OP 0.95 19 mm is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Class according to ISO 14644-1:

Test parame

Structure-b **Overall** res

to this. assembly situation.

Please note: Transport damages, incorrect installation, aging behavior, corrosion etc. can influence the test result.



Test procedure parameters:

Test environment parameters:

The ceiling system was subjected to stress as follows:	
Structure-borne noise:	approx. 5 to 50 Hz
Oscillation velocity (Ø):	v = 0.7262 mm/s
Oscillation acceleration (Ø):	a = $0.0192 \mathrm{m/s^2}$
• Deflection of the system (Ø):	s = 0.1426 mm

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

KN 2101-1202 Report No. first document

Department of Ultraclean Technology and Micromanufacturing

Nobelstrasse 12 70569 Stuttgart Germany



Report No. current document



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rne noise = approx. 5 to 50 Hz	3	
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It should be noted that cleanrooms of class 1 to 5 according to ISO 14644-1 have a higher filter occupancy, which may restrict the use of ceiling systems. Cleanrooms with a horizontal displacement flow form an exception

The test result may be affected by the surrounding ceiling system, in particular the material pairing between lights and ceiling frames, as well as other mounting accessories. Particle emission behavior should be reassessed in each

Stuttgart,	March	29,	2021	
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Place, date of first document issued

Place,	current	date	

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.