





## Fraunhofer TESTED® DEVICE Knauf Ceiling Solutions Adagio Acoustic+ Report No. KN 2405-1523

Statement of Qualification

Single product
Particle Emission

## **Statement of Qualification** • Single product

## Customer

Category:

Subcategory

Product name:

**Component tested** 

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

Cleanroom Facilities

Adagio Acoustic+

Wall/Ceiling/Floor/Door

Test result/Classification

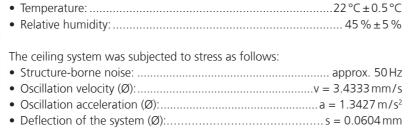
## Test parame

**Overall resu** 

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

	batch number: GR-L-19-02; size: 1200 x 1200 x 19mm; grid system: KCS T 24)
Random sampling of particle emissions (airb	orne) at representative sites under atmospheric conditions
Standards/Guidelines:	ISO 14644-1, -14 The norms stated generally refer to the version valid at the time of the tests.
Test devices:	Optical particle counter: LasAir II 110 and LasAir III 110 with measuring ranges $\geq 0.1 \mu$ m, $\geq 0.2 \mu$ m, $\geq 0.3 \mu$ m, $\geq 0.5 \mu$ m, $\geq 1.0 \mu$ m and $\geq 5.0 \mu$ m
Test environment parameters:	Cleanroom Air Cleanliness Class (according to ISO 14644-1): ISO 1     Airflow velocity:

Test procedure parameters:



(manufacturing date: 2/5/2024; color: white; article number: 831599;

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 2405-1523 Report No. first document

Department of Ultraclean Technology and Micromanufacturing

Nobelstrasse 12 70569 Stuttgart Germany



Report No. current document





When operated under the specified test conditions, the ceiling system Adagio Acoustic+ is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Class according to ISO 14644-1:

eter(s)	Air Cleanlines Class	
rne noise = approx. 50Hz		
ılt	4	

It must be pointed out, that according to ISO 14644-1 cleanrooms classes 1 to 5 have a high filter occupancy, with the result that large-surface ceiling systems cannot be used in some cases. Cleanrooms with a horizontal displacement flow form an exception to this.

The test result may be influenced by the surrounding ceiling system, in particular the material pairing between the light and ceiling frame, as well as other assembly accessories. Particle emission behavior should be re-assessed in the respective assembly situation.

The cut edges/back are made of very porous material. Therefore, the use of the test piece in clean/hygienic areas is considered to be critical.

Stuttgart,	October	2,	2024	
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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.