

TEST REPORT

No. 2232422/1 dated 16.11.2022

E7B-S Series

Type of Testing: Performance testing in accordance with DIN 18032-3, the

German standard for sport halls, part 3: Halls for gymnastics, games and multi-purpose-use, testing of safety against ball

throwing (2018)

Applicant: ETAP Lighting International NV

Antwerpsesteenweg 130

2390 Malle Belgium

Test Institute: ISP GmbH

Institut für Sportstättenprüfung

Amelunxenstraße 65 48167 Münster Germany

Order No.: 2232422

Page 1 of: 5 Pages



By the Deutsche Akkreditierungsstelle (DAkkS) DIN EN ISO/IEC 17025:2018 accredited testing laboratory.

The accreditation covery only the test methods listed in the D-PL-20181-01-00 accredication certificate.



Test Location: ISP GmbH

Institut für Sportstättenprüfung

Amelunxenstraße 65

48167 Münster

Germany

Date of arrival: 28.10.2022

ISP-Sample-No.: 2232422/1

Sampling: No sampling by employees of ISP GmbH,

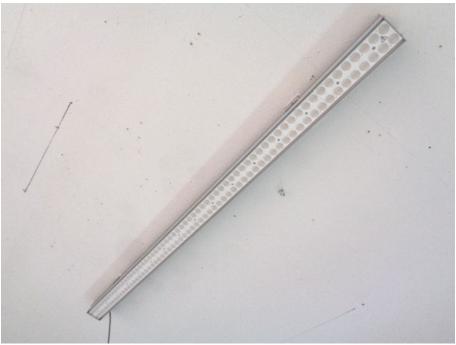
Sample has been provided by the applicant.

Date of the Testing: 28.10.2022

1. Sample description

The tested ceiling luminaire **E7B-S Series** had the dimensions $(L \times W \times H)$ of approximately 1580 mm x 90 mm x 80 mm.

According to the applicant's instructions, the luminaire was installed force-fit onto the test ceiling of the ISP GmbH test laboratory.



Picture 1: View of the luminaire

Test Report No.: 2232422/1 dated 16.11.2022 Page 2 of 5





Picture 2: View of the holding brackets

2. Test procedure

The safety against ball throwing test has been conducted in accordance with DIN 18032, part 3 (November 2018) paragraph 6.2 – testing of ceiling elements with a ball shooting device, of which the air pressure can be regulated manually.

The testing of impact resistance for ceiling elements was conducted with the following requirements:

| Ball | Impact velocity | Angle | Number of impacts |
|----------|-----------------|-------|-------------------|
| Handball | 16.5 m/s | 90° | 12 |
| | 16.5 m/s | 60° | 12 |
| | 16.5 m/s | 60° | 12 |

The testing climate of 23/50-2 met the requirements of DIN EN ISO 291:2008-08.

Test Report No.: 2232422/1 dated 16.11.2022 Page 3 of 5



3. Test results

| Ball | Impact angle | Number of impacts | Changes in the element |
|----------|----------------|-------------------|------------------------|
| Handball | 90 60 60 | 12 12 12 | none |

4. Evaluation

The evaluation is based on the requirements of DIN 18032 part 3 (November 2018). The Evaluation is carried out through visual assessment.

The ceiling, wall or built-in elements, or parts thereof, must not have been destroyed during the test, or have fallen or fallen out. The test elements, including the substructures and fastenings, may only have changed their appearance slightly after being tested and their stability, function and safety must not be impaired.

The tested ceiling luminaire E7B-S Series withstood the testing of safety against ball throwing without any damage. Therefore, the system is classed as safe against ball throwing for ceiling elements in accordance with 18032 part 3 (November 2018) for ceiling elements (ballwurfsicher für Deckenelemente).

Test Report No.: 2232422/1 dated 16.11.2022 Page 4 of 5



END OF THE TEST REPORT

The measurement results were stated and evaluated without the measurement uncertainty.

Reproduction and publication of this document in shortened text and the use of advertising is permitted only with the written approval of the ISP GmbH.

The test results relate only to the tested samples in the condition as they were received.

This test report was created and released digitally. Effectiveness and validity are equivalent to digital and analogue reports.

Münster, 16.11.2022

Dennis Frank
MANAGING DIRECTOR

Test Report No.: 2232422/1 dated 16.11.2022