Test report no.: 133560/18-IX

Customer:
GEWISS S.p.A.
Via A. Volta, 1
24069 CENATE SOTTO (BG)
ITALY

Order: Testing the safety against ball throwing according to DIN 18032-3 : 2018-11 on the luminaire "ESALITE 20K" (code GW S6 344 GD) with chain for suspension and carabiner hook

Letter of:	2018-11-27	**Ref.:**	Nicola Brignoli
Sample received:	2018-12-05	**Sample taken:**	-
Test period:	2019-01-08 **to** 2019-01-25		

The test report comprises 3 pages.

Würzburg, 2019-02-04
De/mo

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1 Order

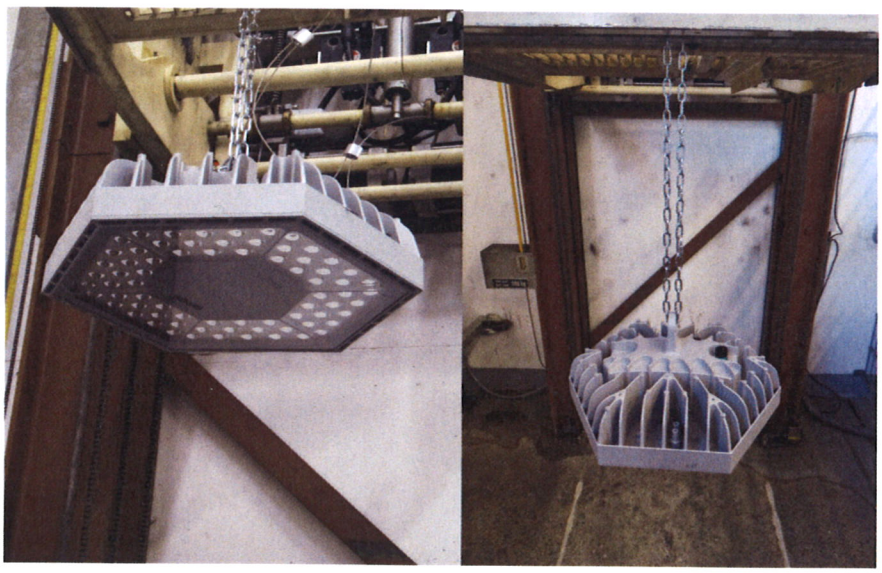
The company GEWISS S.p.A., Via A. Volta, 1, 24069 CENATE SOTTO (BG), ITALY, ordered SKZ - Testing GmbH with letter dated 2018-11-27 to test the safety against ball throwing according to DIN 18032-3 : 2018-11 on the luminaire "ESALITE 20K" (code GW S6 344 GD) with chain for suspension and carabiner hook.

2 Test material

On 2018-12-05 SKZ - Testing GmbH received the following sample material for testing:

- one floodlight (picture 1) with a grey coloured case (434 mm x 376 mm x 191 mm), a chain for suspension and carabiner hook for fixing, marking on the screwable carabiner "4x40 RWFL 30 KG"

According to the client the luminaire is denominated "ESALITE 20K". The flat glass plane is made from sodium calcium without lead in a thickness of 4 mm and is tempered in accordance with EN 60598-2-5 with uniform cooling.



Picture 1: Luminaire as delivered and fastening with chain for suspension and carabiner hook

SKZ - Testing GmbH had no influence on the selection of the test material.

3 Execution of tests

Usually we carry out tests according to standards for which we have an accreditation. The list of all standards for which we are accredited is shown on the homepage at www.skz.de. All non-accredited procedures are market with a *.

The tests were carried out at a temperature of 23 °C after a minimum of 72 hours storage in this atmosphere.

Before the test the electrical connection to the power supply was done. For testing purposes the luminaire was fixed to an unflexible and rigid metal construction according to the clients general information.

The tests were carried out with a ball cannon according to DIN 18032-3 : 2018-11 "Halls and rooms for sports and multi-purpose use - Part 3: Testing of safety against ball throwing" clause 6.2 and to VDE 0710-13 : 1981-05 clause 18 with a handball (in total 36 shots with a speed of (16,5 ± 0,8) m/s). The weight of the handball was 437 g and the diameter was 18.5 cm. While the shooting the illuminant was switched off. The horizontal distance between the luminaire and the ball throwing machine was 2.0 m.

4 Test results

After the shooting all LED lamps still worked. The luminaires showed no damages and the finger test was positive (no contact possible). The grade of ingress protection against humidity and dust was not influenced in a negative way.

The tested luminaire "ESALITE 20K" with chain for suspension and carabiner hook withstood the load of the handball without damages and proved to be **safe against ball throwing** according to DIN 18032-3 : 2018-11 for ceiling elements and mounting elements in the ceiling area. The mechanical requirements of DIN VDE 0710-13 clause 18 for luminaires installed on ceilings and cannonaded with the handball were also fulfilled.