

Laboratorium Badawcze i WzorcująceLaboratorium badawcze akredytowane przez
Polskie Centrum Akredytacji, sygnatariusza porozumień EA MLA i ILAC MRA
dotyczących wzajemnego uznawania świadectw wzorcowania.
Nr akredytacji AB 024

TEST REPORT

Ref. no. B/2017/180 dated 28/06/2017

Subject: Examination of the degree of protection IK09 for the URBANO street lighting fixture.

| | | | |
|---|--|-----------------------|------------|
| Tested for: | LUG Light Factory Sp. z o.o. | | |
| | ul. Gorzowska 11 | | |
| | 65-127 Zielona Góra | | |
| Tested at: | Institutes for Research and Certification "ZETOM" Katowice | | |
| | Testing and Calibration Laboratory "ZETOM" Katowice. | | |
| Customer Order Index: | Order (e-mail) | dated: | 21/06/2017 |
| Laboratory Log Reference No. of Order: B/2017/182 | | | |
| Test start date: | 22/06/2017 | Test end date: | 28/06/2017 |
| This Test Report contains: | 5 pages | | |
| 3 copies hereof are issued to the following recipients: | | | |
| | 1. LUG Light Factory Sp. z o.o. | | |
| | 2. LUG Light Factory Sp. z o.o. | | |
| | 3. LT | | |
| Test supervisor: | Katarzyna Hadam Ph.D. | | |
| Tested and measured by: | Piotr Jureczko, MSc Eng. | Lab Section: WE | |
| | Kamil Długajczyk | Lab Section: WE | |
| Test Report prepared by: | Kamil Długajczyk | | |

Authorised by:
mgr inż. Piotr Jureczko**Approved by:**
p.o. Z-ca Dyrektora
ds. Badań i Wzorcowania
Kierownik Laboratorium
Badawczego i Wzorcującego
dr Katarzyna Hadam

Zakłady Badań i Atestacji „ZETOM”
im. Prof. F. Stauba w Katowicach sp. z o.o.
Institutions for Research and Certification “ZETOM” Ltd.
EU Notified Body no. 1436,
for the following Directives: Construction, Low Voltage & Machinery
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Phone: 0048(032) 2569-257, 0048(032) 2569-273, 0048(032) 2569-353

PROVISIONS

A. Obligatory:

1. The Test Report shall be property of the Customer who has ordered to have the test done.
2. The Test Report and all information contained therein shall only be used with the consent of the Test Report owner.
3. This Test Report shall only be used in full.
4. All test and measurement reports listed herein refer to the test objects only and shall not be construed as a quality approval thereof.
5. The work covered herein has been carried out according to its Work Plan and in line with the Management System requirements specified in the Testing and Calibration Laboratory Quality Manual.
6. All reference to this Test Report shall be made with the following statement (or its equivalent in meaning):

Tested by the Testing and Calibration Laboratory "ZETOM" in Katowice, a unit accredited by the Polish Centre for Accreditation seated in Warsaw within the scope of the Certificate No. AB 024 Annex.

B. Complementary (listed in this Test Report) Section

C. Anomalies (listed in this Test Report) Section

When using the contents of this Test Report, the owner hereof shall state that they use the results produced by the Testing and Calibration Laboratory at the Institutes for Research and Certification "ZETOM" in Katowice, accredited by the Polish Centre for Accreditation in Warsaw.

1. BASIS OF TESTING

1.1. Customer's document title: Order LUG Light Factory Sp. z o.o. to do the research in the Research and Calibration Laboratory "ZETOM" Katowice

1.2. Customer's document identification: Order (e-mail)

dated: 21/06/2017

1.3. Subject: Performance test IK09 degree for lighting fixture

2. TESTING OBJECTIVE Verification of properties and characteristics according to PN-EN 50102:2001

3. TEST OBJECT

3.1. Nazwa przedmiotu: URBANO street lighting luminaire

3.2. Customer: LUG Light Factory Sp. z o.o.

3.3. Supplier/Manufacturer: LUG Light Factory Sp. z o.o.

3.4. Place of production: ul. Gorzowska 11; 65-127 Zielona Góra

3.5. Method of object delivery for testing: delivered by the Customer

3.6. Objects collected at: LUG Light Factory Sp. z o.o.

3.7. Collect Report: -

3.8. Date of receiving the test objects: 20/06/2017

3.9. Collector's additional labelling applied: -

3.10. Object packaging: cardboard box

3.11. In-laboratory labelling of objects:

| Object labelling in prior of delivery to the Lab | Labelling of objects made at the Lab ¹⁾ | Notes |
|---|--|-------|
| - | 2017/182 | - |
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| | | |
| ¹⁾ Remains the Sample Index | | |

4. TESTING PROGRAM

The Testing Program includes the testing's cope of the following reference standards:

- PN-EN 50102:2001 "Degree of protection against external mechanical impacts provided by enclosures of electrical equipment (IK code)".

This standard is essentially identical to the standard PN-EN 62262:2003.

5. Results

5.1 Results of the IK degree of protection provided by the URBANO street lighting fixture

| Degree of protection IK09 |
|--|
| <p>The test was done by hitting a 5.0 kg hammer with an energy equivalent to 10 J impact on the outside of the luminaire.</p> <p>Three hits in different lighting fixtures (total with a translucent glass shade) did not cause distortion of the housing body or cracks in the glass cover.</p> <p>Proper protection provided by the luminaire is ensured.</p> |

Photos of the lighting fixture tested:



