

# TEST REPORT

Ref. no. B/2017/158 dated 12/06/2017

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

<b>Tested for:</b>	LUG Light Factory Sp. z o.o.		
	ul. Gorzowska 11		
	65-127 Zielona Góra		
<b>Tested at:</b>	Institutes for Research and Certification "ZETOM" Katowice		
	Testing and Calibration Laboratory "ZETOM" Katowice.		
Customer Order Index:	Order (e-mail)	dated:	26/05/2017
Laboratory Log Reference No. of Order: B/2017/144			
<b>Test start date:</b>	06/06/2017	<b>Test end date:</b>	08/06/2017
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		
<b>Test supervisor:</b>	Katarzyna Hadam Ph.D.		
<b>Tested and measured by:</b>	Piotr Jureczko, MSc Eng.	Lab Section: WE	
	Kamil Długajczyk	Lab Section: WE	
<b>Test Report prepared by:</b>	Kamil Długajczyk		

**Authorised by:**  
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p.o. Z-ca Dyrektora  
ds. Badań i Wzorcowania  
Kierownik Laboratorium  
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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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## 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: 26/05/2017

**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:** URBINO 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:** 31/05/2017

**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 <sup>1)</sup>	Notes
-	2017/144	-
<sup>1)</sup> 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)".

#### 5. Results

5.1 Results of the IK degree of protection provided by the URBINO 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><b>Proper protection provided by the luminaire is ensured.</b></p>

Photos of the lighting fixture tested:

