






<p>TEST REPORT IEC 62262</p> <p>Degree of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)</p>	
Report Number	4789813403
Date of issue	2021-03-12
Total number of pages	8 including attachments
Name of Testing Laboratory preparing the Report	UL International Italia S.r.l.
Applicant's name	LUG LIGHT FACTORY Sp. z o.o.
Address	ul. Gorzowska 11 Zielona Gora, 65-127 PL
Test specification:	
Standard	IEC 62262 (ed. 1) and IEC 60068-2-75 (ed. 2).
Test procedure	Informative Test Report
Non-standard test method	N/A
Test Report Form No.	IEC62262-B
Test Report Form(s) Originator	UL International Italia S.r.l.
Master TRF	2018-05
General disclaimer:	
<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.</p>	

Test item description :	LED Luminaire	
Trade Mark :	LUG LIGHT FACTORY Sp. z o.o.	
Manufacturer :	Same as applicant	
Model/Type reference :	Urbino Plus	
Ratings :	195 W 220-240 V ~ 50/60 Hz IP 66	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/> Testing Laboratory:	UL International Italia S.r.l.	
Testing location/ address	Via delle Industrie 5 & 6 20061 Carugate (MI) Italy	
<input type="checkbox"/> Associated Testing Laboratory:		
Testing location/ address		
Tested by (name, function, signature)	Fausto Pedroni (Project Handler)	
Approved by (name, function, signature) ..	Walter Parmiani (Reviewer)	
<input type="checkbox"/> Testing procedure: CTF Stage 1:		
Testing location/ address		
Tested by (name, function, signature)		
Approved by (name, function, signature) ..		
<input type="checkbox"/> Testing procedure: CTF Stage 2:		
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name, function, signature)		
Approved by (name, function, signature) ..		
<input type="checkbox"/> Testing procedure: CTF Stage 3:		
<input type="checkbox"/> Testing procedure: CTF Stage 4:		
Testing location/ address		
Tested by (name, function, signature)		
Witnessed by (name, function, signature)		
Approved by (name, function, signature) ..		
Supervised by (name, function, signature)		

List of Attachments (including a total number of pages in each attachment):				
Photos		(Enclosure 1): 2 pages		
Summary of testing:				
Tests performed (name of test and test clause):				Testing location:
IK 09 (IEC 62262 with IEC 60068-2-75)	Degree of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	Applicable	Pass	UL International Italia S.r.l. Via delle Industrie 5 & 6 20061 Carugate (MI) Italy
TEST RESULTS WERE FAVOURABLE				
<p>The measurement uncertainties stated in this Test Report are estimated according to the Quality Procedure 23-CL-G0025.</p> <p>If requested, UL International Italia S.r.l. will be able to estimate the uncertainty contribution for all the quantities stated in this Test Report.</p> <p>Where not otherwise specified or communicated in writing, statements of conformity (e.g. Pass/Fail) are established according to the following decision rule:</p> <p>Considering that the applied test standards take measurement uncertainty into account, acceptance limit equals the tolerance limit (Accuracy Method). This leads to a maximum 50 % of false accept or false reject when the measured value equals the tolerance limit. See ILAC-G8:09/2019 for further details.</p>				
Test and measuring equipment used have been recorded into Internal UL Instrument's Database (Aurora project number 1001138039).				
Summary of compliance with National Differences:				
<input checked="" type="checkbox"/> The product fulfils the requirements of EN 62262:2002 and EN 60068-2-75:2014 (IK 09 Test)				
Copy of marking plate:				
 <p> LUG CE EAC 130222.2L241.381.001 URBINO LED ED 1-10V 27650lm/740 O62 szary 1 klasa 130222.2L R7B40S2765.138.V <hr/> LED MADE IN POLAND 220-240V 50/60Hz ZM-41036088 / 707773 Ix max IP66 ta 50°C UL GORZOWSKA II 65-127 ZIELONA GÓRA </p>				

Test item particulars :
Classification of installation and use : Class I
Supply Connection : Terminal Block :
Possible test case verdicts: - test case does not apply to the test object : N/A - test object does meet the requirement : P (Pass) - test object does not meet the requirement : F (Fail)
Testing :
Date of receipt of test item..... : 2021-02-09
Date (s) of performance of tests : 2021-03-01 to 2021-03-12
General remarks:
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.

General product information:

LED Luminaire for streetlighting equipped with 96 LEDs and integrated electronic control gear.

Tested model:

Luminaire code	Model Number	Electrical Ratings
Urbino Plus	130222.2L241.381.001	195 W 220-240 V~ 50/60 Hz

Table of components:

Component	Nr.	Manufacturer	Type / Model	Ratings / Technical data
LED Control gear	1	OSRAM	OT200/UNV/1A0 2DIM P7	120-277 V~ 50/60 Hz
LED Chip	96	CREE	XPG3	4000 K
Optic	1	-	-	Plastic
Glass	1	-	-	Transparent glass

Clause	Requirement + Test	Result - Remark	Verdict
	IEC 62262 (ed. 1) Degree of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)		—
	- Classification according to IK code.....:	IK 09	—
	- Impact Energy (J)	10	—
	- Impact test equipment	Free fall (mass: 5 kg, height: 200 mm)	—
	- Number samples tested.....:	1	—
	- Parts tested.....:	Light emitter surface (glass) and metallic enclosure.	—
	- Number of impact	5 on each exposed face.	—
	- Ambient temperature (°C).....:	25	—
	- Precondition	The luminaires have been coordinated with endurance test at 60°C as requested in clause 12.3 IEC/EN 60598-1	P
	- Test evaluation	After the test: No breakages on metallic enclosure, no breakages on glass and no access to hazardous parts and live parts.	P

Enclosure 1 | Photos

Photograph No. 1 General view of the luminaire



Photograph No. 2 General view of the luminaire



Enclosure 1 | Photos

Photograph No. 3 Detail of light emitter surface after IK 09 test (no breakages on glass)



Photograph No. 4 Detail of luminaire after IK 09 test (No breakages on metallic enclosure)

