

FORM L-54 Edition 01 – Revision 01 - Date: 10/09/2019

# Mechanical impact resistance test

## General information

Subject : IZYLUM 3 - 60 led's LH351C - Philips FP 150W driver 700mA - CL II

Asked by : SZÜGYI János Péter

Created on : 25/10/2019

Validated on : 30/10/2019

Test number : D190995

Reference norm : IEC/EN 60598-1 & 62696 Standards

Sample(s) : E190754

Folder : P-F19086

## Test conditions

Luminaire : IZYLUM 3

Quantity of sample under test : 5

Protector Material : Glass Extra Clear

Protector Shape : Flat

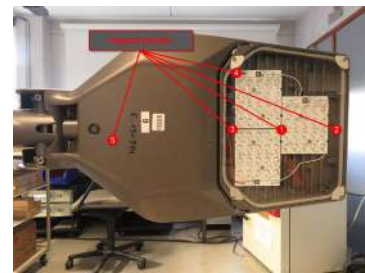
Serigraphy : None

Protector Thickness (mm) : 5

Method of test :


At pendulum hammer  
5 impact points distributed on luminaire  
One impact on each point  
2 supplementary impacts on the most fragile point

Operator : Philippe Léonard



IMG\_5355a

## Conclusion

 Success

Conclusion :

IK09 passed.

Validated by :  
GHYSENS Gilles

Duplicate to : SZÜGYI János Péter, HORVÁTH Csaba, BEDŐ Péter, BOS Peter  
LAB : 05/11/2019

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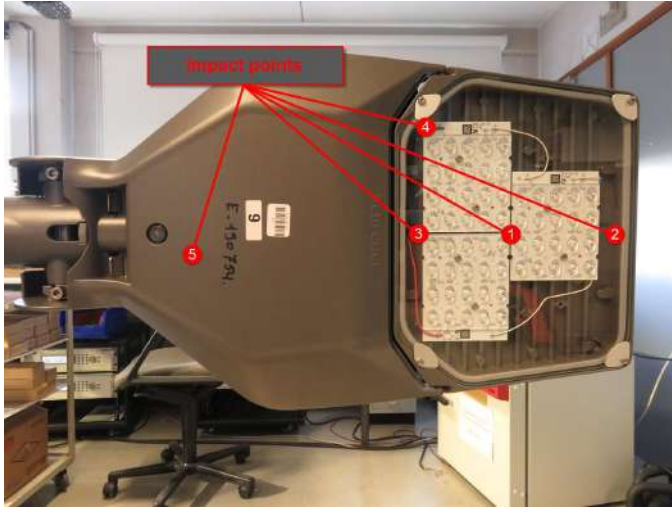


# Test(s) details

## Test(s)

| Name | Description  | Result  |
|------|--|---------|
| IK09 | Impact energy: 10 joules<br>Hammer weight: 5 kg<br>Height of fall: 20 cm | Success |

## Impact points



## IK09

## Annex(es)

|            |
|------------|
| TESTED     |
| NOT TESTED |

| IK 09  | Impact | 1 |   |   | 2 |   |   | 3 |   |   | 4 |   |   | 5 |   |   |
|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample | Shot   | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| 1      |        | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ | ✓ | ✓ |
| 2      |        | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ | ✓ | ✓ |
| 3      |        | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ | ✓ | ✓ |
| 4      |        | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ | ✓ | ✓ |
| 5      |        | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ |   |   | ✓ | ✓ | ✓ |

IK09\_Izylum\_3

**Test room temperature (°C) : 25**

**Measurement equipment :**

Pendulum hammer with chariot (M062)

Thermometer (A039/3)

Electronic scale 120kg (M057)

Dynamometric key (M059)

**Quantities measured:**

For IK 04/05/06: Verification of the mechanical strength of a luminaire according to PT-S-13

For IK07/08/09/10/10+: Verification of the mechanical strength of a luminaire according to PT-S-05

**Uncertainties:**

Statement of uncertainties (K=2, 95% of confidence level):

Temperature: 0,6 °K

Mass: 0,25 %

Dynamometric key :

From 0.5 to 2.5 Nm : 0,15 Nm

From 2.5 to 5 Nm : 0,22 Nm

From 5 to 25 Nm : 0,83 Nm

From 25 to 60 Nm : 2,73 Nm

From 60 to 100 Nm : 3,55 Nm

For IK 04/05/06, Impact energy: ± 10%

For IK07/08/09/10/10+, Impact energy: ± 1%

**Decision rules**

Pass/fail criteria according to GDE-GUI-003

By visual inspection (or other means if necessary):

Luminaire shows dangerous behavior: fail

Luminaire shows no dangerous behavior: pass

When several luminaires are tested, 4 out of 5 samples need to show positive result for compliance of the batch

End of test report-----