

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 :

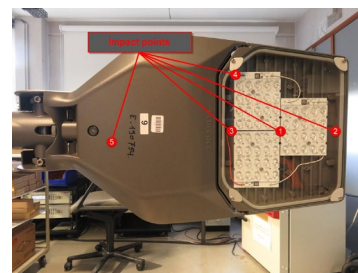
At pendulum hammer

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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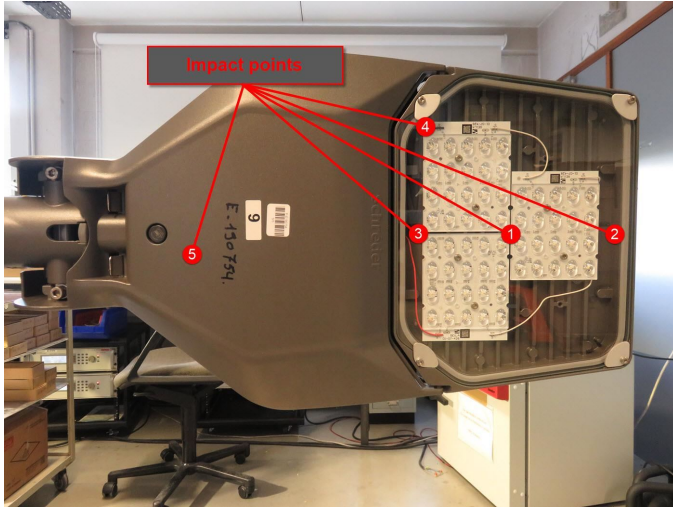


Test(s) details

Test(s)

| Name | Description | Result |
|------|--|---------|
| IK09 | Impact energy: 10 joules Hammer weight: 5 kg 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: $\pm 10\%$

For IK07/08/09/10/10+, Impact energy: $\pm 1\%$

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-----