

Mechanical impact resistance test

General information

Subject : IZYLUM 2 - 40 LH351C - Philips FP 110W - 700mA - Nema - CL II (N#8)

Asked by : SZÜGYI János Péter

Created on : 11/12/2019

Started on : 18/12/2019

Test number : D191146

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

Sample(s) : E190876

Folder : P-F19085

Test conditions

Luminaire : IZYLUM 2

Quantity of sample under test : 5

Protector Material : Glass Extra Clear

Protector Shape : Flat

Serigraphy : None

Protector Thickness (mm) : 5

Method of test :

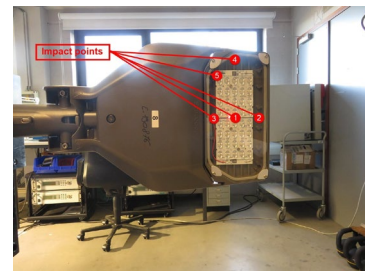
At pendulum hammer

5 impact points distributed on protector surface

One impact on each point

2 supplementary impacts on the most fragile point

Operator : Philippe Léonard



IMG_5521a

Conclusion



Success

Conclusion :

IK09 granted.

Validated by :
Maghe Laurent



Duplicate to : SZÜGYI János Péter, HEYMANS Tom, LÁMFALUSI Ferenc,
HORVÁTH Csaba, BEDŐ Péter, BOS Peter
LAB : 19/12/2019

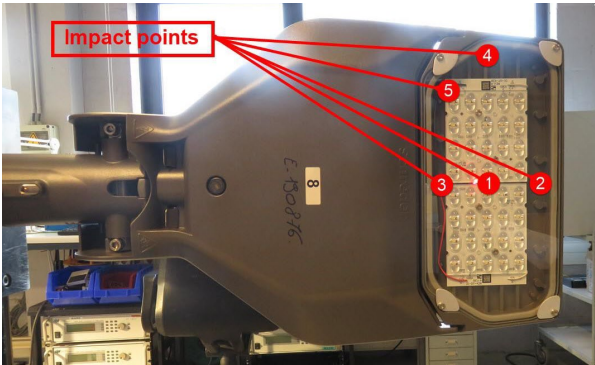
D191146

1/3

Test(s) details

Test(s)

Name	Description	Result
IK08	Impact energy : 5 joules Hammer weight : 1.7 Kg Height of fall : 30 Cm	Success
IK09	Impact energy: 10 joules Hammer weight: 5 kg Height of fall: 20 cm	Success



IK08

TESTED
NOT TESTED

IK 08	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

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		✓			✓			✓	✓	✓	✓			✓		

Test room temperature (°C) : 25.3

Measurement equipment :

Pendulum hammer with chariot (M062)
Thermometer (A039/3)

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 :

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 :
