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Mechanical impact resistance test

General information

Subject : CITEA NG MINI - Hecker - Diffuse

Asked by : DELOBEL Olivier

Created on : 07/08/2020

Started on : 07/08/2020

Test number : D201105

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

Sample(s) : E200577, E200578

Folder : P-F18045

Test conditions

Luminaire : CITEA NG MINI

Quantity of sample under test : 1

Protector Shape : Flat

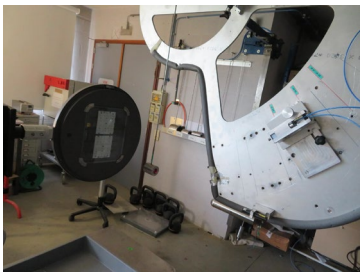
Serigraphy : none

Protector Thickness (mm) : 5

Remark :

Diffuse glass

Operator : KOY Fiston



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Conclusion

Success

Conclusion :

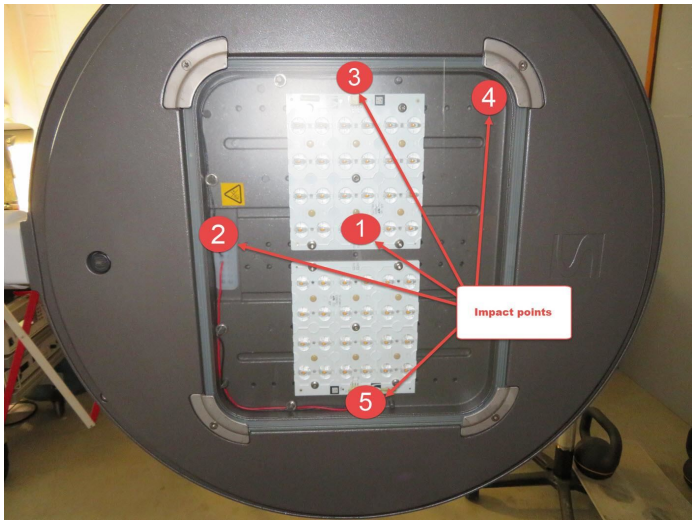
IK10 passed

Test(s) details

Test(s)

Name	Description	Result
iK08 Glass diffuse	Impact energy : 5 joules Hammer weight : 1.7 Kg Height of fall : 30 Cm	Success
IK09 Glass diffuse	Impact energy: 10 joules Hammer weight: 5 kg Height of fall: 20 cm	Success
IK10 Glass diffuse	Impact Energy: 20 joules Hammer Weight: 5 Kg Height of fall: 40 cm	Success

Annex(es)



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iK08 Glass diffuse

Result(s)

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		✓	✓	✓	✓			✓			✓			✓		

IK09 Glass diffuse

Result(s)

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		✓	✓	✓	✓			✓			✓			✓		

IK10 Glass diffuse

Result(s)

IK 10	Impact	1			2			3			4			5		
Sample	Shot	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1		✓	✓	✓	✓			✓			✓			✓		

Test room temperature (°C) :

25.1

Measurement equipment :

Pendulum hammer with chariot (M062)
Thermometer (A039/3)
Electronic scale 120kg (M057)
Dynamometric key (M068)

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 :

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 accredited report :
