Laboratory Test report





FORM L-54 Edition 01 - Revision 03 - Date : 20/05/2020

Mechanical impact resistance test

General information

Subject: VOLTANA EVO 1 - 16 Oslon Square Giant - Philips 75W

Asked by: SZÜGYI János Péter

<u>Created on</u>: 12/01/2021 <u>Started on</u>: 13/01/2021 <u>Test number</u>: D210050

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

Sample(s): E210035, E210036, E210037

Folder: P-F21002

Test conditions

Luminaire: VOLTANA EVO 1

Quantity of sample under test: 5

<u>Protector Material</u> : PC

Serigraphy: None

Protector supplier: External - Gaggione

Operator : Philippe Léonard



IMG_7602

Conclusion



Success

Conclusion .

Conformity statement according to TR 62696:2011 and section 4.13 of IEC 60598-1:2014, AMD1:2017:

IK10 passed.

Validated by:

Duplicate to: RACANELLI Frank, SZÜGYI János Péter,

D210050

GHYSENS Gilles

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LAB: 15/03/2021

Test(s)

Name	Description	Result
Impact points	At pendulum hammer 5 impact points distributed on protector surface One impact on each point 2 supplementary impacts on the most fragile point	Informative
IK08	Impact energy: 5 joules Hammer weight: 1.7 Kg Height of fall: 30 Cm	Informative
IK09	Impact energy: 10 joules Hammer weight: 5 kg Height of fall: 20 cm	Informative
IK10	Impact Energy: 20 joules Hammer Weight: 5 Kg Height of fall: 40 cm	Informative

Impact points

Annex(es)



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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		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
2		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
3		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
4		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
5		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
		-	NOT T	ESTED												

<u>IK09</u>

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		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
2		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
3		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
4		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
5		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
		-	NOT T	ESTED												

<u>IK10</u>

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		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
2		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
3		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
4		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
5		Pass	-	-	Pass	-	-	Pass	-	-	Pass	-	-	Pass	Pass	Pass
					·											
		-	NOT T	ESTED	·											

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Test room temperature (°C):

22

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: ± 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:

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