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(**) Activities marked are not covered by the ENAC accreditation

SORT OF TEST	Sine swept vibration
APPLICANT	AIRFAL INTERNATIONAL, S.L. Carlos Jiménez PG Ind. Villanueva de Gállego. CL Río Ésera, nº 4 50830 Villanueva de Gállego (Zaragoza) SPAIN
SAMPLE IDENTIFICATION	Luminaire: "Farm Led: Q0959"
DATE/S OF TEST	28/06/2019
DATE OF RECEPTION	24/06/2019

OBSERVATIONS

Authorized signatory/ies

Date of issue

03/07/2019

Alberto Laspalas
Technician

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SAMPLE DESCRIPTION AND PERFORMED TESTS

Sample description (***)

(***): Information provided by the applicant. The laboratory is not responsible for such information

ITAINNOVA sample code	Applicant Identification
C/191891/1	Luminaire "Farm Led" Model: Q0959 SN: 190621



Picture 1. Sample description.



Picture 2. Sample identification: on the luminaire (Left) // on the packaging (Right).

Performed test

Acceptance Criteria:

- Visual inspection:
 - o Absence of disassembled or deformed parts.
 - o Absence of damaged or deformed parts.
- Functional verification:
 - o The luminaire keeps switched on during the test.

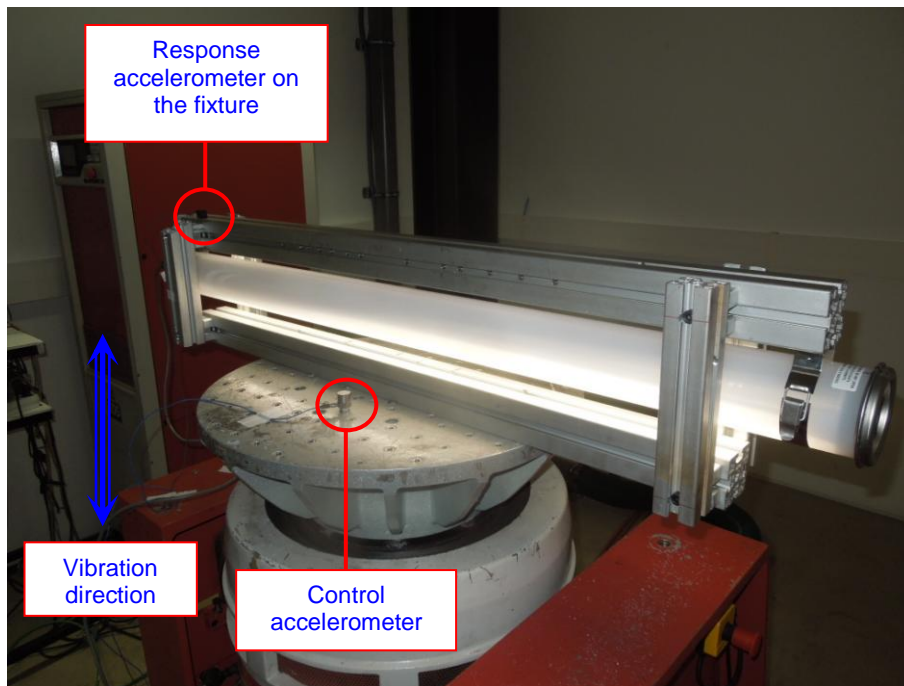
Test results

ITAINNOVA sample code	Standard	Type of test	Result
C/191891/1	UNE-EN 60068-2-6: 2008 (Vibration profile according to the definition included in the standard: UNE-EN 60598-1:2009 Section. 4.20) (**)	Sine swept vibration	C

C= Compliance. NC= No Compliance. NA= Not Apply

TEST EQUIPMENT AND TEST SET UP

Test equipment	
Denomination	Identification code
Vibration shaker LDS, model V830A	2PG61052-370
Controller, LDS Dactron LASER USB	2PG61052-370-02
Slip table (for horizontal tests), LDS LPT 600-C	2PG61052-370-07
Control accelerometer, PCB 353B31	2PG61052-432
Test set up remarks	
<ul style="list-style-type: none"> - The luminaire is tested in its more demanding position (hanged from the ceiling). With this purpose, it is built a fixture strong enough to allow the disposition of the sample in the mentioned position. - The luminaire keeps switched on during test execution. 	



Picture 3. Test set-up.

SINE SWEPT VIBRATION TEST

Test conditions				
Standard		UNE-EN 60068-2-6: 2008 (Vibration profile according to the definition included in the standard: UNE-EN 60598-1:2009 Section. 4.20) (**)		
Type of vibration		Sine swept		
Axis	Frequency	Amplitude	Swept rate	Duration
Vertical	10 a 55 Hz.	0,35 mm. (Pk-Pk)	1 Octaves/min	30 min.
Test set-up		According to picture 3		
Control strategy		By means of an accelerometer on the vibration surface		
Evaluation method		Visual inspection after test Functional check during and after test		
Control curves				
<ul style="list-style-type: none"> - Control curve (white line): it is within the tolerance range established in the UNE-EN 60068-2-6: 2008 standard. - Response curve on the fixture (blue line): no resonances (amplification >2) are pointed in the tested frequency range. 				
Control curve		Fixture response curve		