

Laboratory Service PHYSICAL TEST REPORT



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Subject: VOLTANA-2 – Side entry Configuration

Sample n°: P-E14365

Test purpose: Vibrations test: "Street Lighting Luminaires" testing protocol

Remarks:

Test request n°: P-D14801

Folder n°: P-F14058

TEST CONDITIONS:

Operator: V2i

<u>Testing protocol</u>	
"Street Lighting Luminaires" testing protocol	
Test Item	Post-top and Side-entry Luminaire
Excitation Direction	3 directions
Search for frequencies and quality factor Q	Excitation: sine sweep Frequency band: 5 - 55 Hz Sweep speed: 1 octave/min. Acceleration: 0.5g
Test	Q < 2 (no natural frequency)
	Excitation: RANDOM (*) Frequency band: 5 - 55 Hz Acceleration: 0.84g _{RMS} Duration: 1h
	Q > 2
	Excitation : sine dwell Frequency : f0 (Qmax) Acceleration : 0.5g Duration : 30 minutes
Search for frequencies and quality factor Q	Excitation: sine sweep Frequency band: 5 - 55 Hz Sweep speed: 1 octave/min. Acceleration: 0.5g

(*) The RANDOM equivalent test consist in an accelerated ageing process of one hour which presents, on a reference one-degree-of-freedom system, an equivalent fatigue damage spectrum than 20 years of mean wind and 90 hours of storms.

CONCLUSIONS:

VOLTANA-2 side entry configuration satisfies the Vibration tests following "Street Lighting Luminaires" testing protocol.

Duplicate to: Mr M. Thijs
LAB 21/10/2014
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