

# Laboratory Service PHYSICAL TEST REPORT



**R-Tech**  
Rue de Mons 3 – B-4000 Liège – Belgium  
Tel.: +32 4 224 71 40 – Fax: +32 4 224 25 90  
Member of Schröder Group

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

//P-14E801