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TESTING LABORATORIES

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Electrotechnics & Electronics Department

Noise & Vibrations Testing Laboratory



AB 128



TEST REPORT

Number: BOS/3213/BE/22

Date: 27.05.2022

Subject: Vibration test of ST-52-100W luminaire

Ordered by: Pollight sp. z o.o.

/Name and address/ Al. Ch. Szucha 11B lok. H2
00-580 Warszawa

ORDER		TESTING	
Number	Date	Commenced	Completed
-	20.05.2022	26.05.2022	27.05.2022

Written by:

mgr inż. Paweł Suchy
/First name, last name/

/Signature/

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/Signature/

Report contains:

4 pages

CHECKED BY:

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/Stamp, Date, Signature/

APPROVED BY:

Instytut Badań i Rozwoju Motoryzacji
BOSMAL Sp. z o.o.
Prezes Zarządu
DYREKTOR ds. BADAŃ

mgr inż. Piotr Świątek

2022-05-27
/Stamp, Date, Signature/

Report to:

N° 1	Customer	N° 7	
N° 2	NRP BOSMAL	N° 8	
N° 3	BE BOSMAL	N° 9	
N° 4		N° 10	
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1. DESCRIPTION AND IDENTIFICATION OF THE TESTED OBJECT

ST-52-100W luminaire – see Fig. 1

Supplier: Pollight sp. z o.o.

Quantity: 1 pc.

Identification data: see Fig. 2

Delivery date: supplied by the Customer on 25.05.2022



Fig. 1. Tested sample

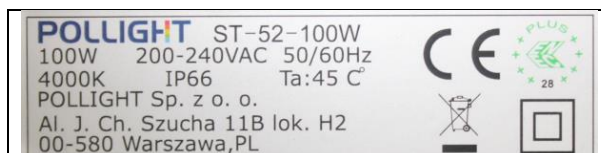


Fig. 2. Identification label

2. RANGE OF THE TEST

Vibration test acc. to PN-EN 60598-1:2015-04 p. 4.20.

Test method acc. to PN-EN 60068-2-6:2008.

Simple functionality check after the test.

3. RUN OF THE TEST

3.1. Test preparation

The luminaire was installed on the fixture and mounted on the vibration tables as in Figs 3...5.

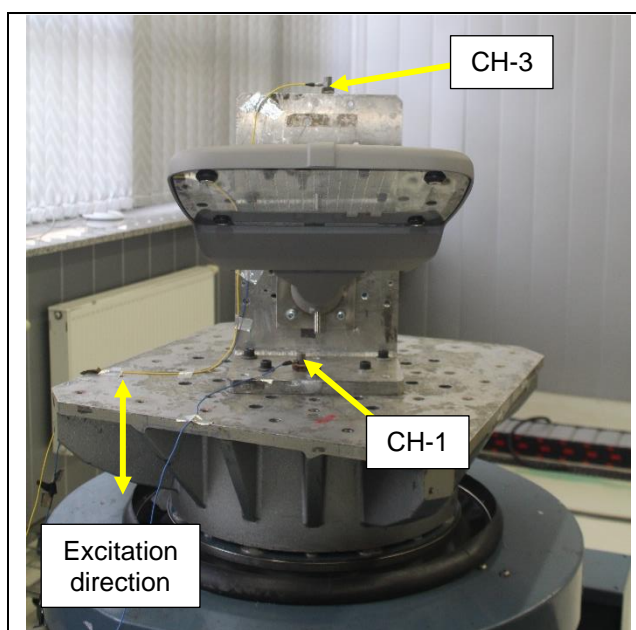
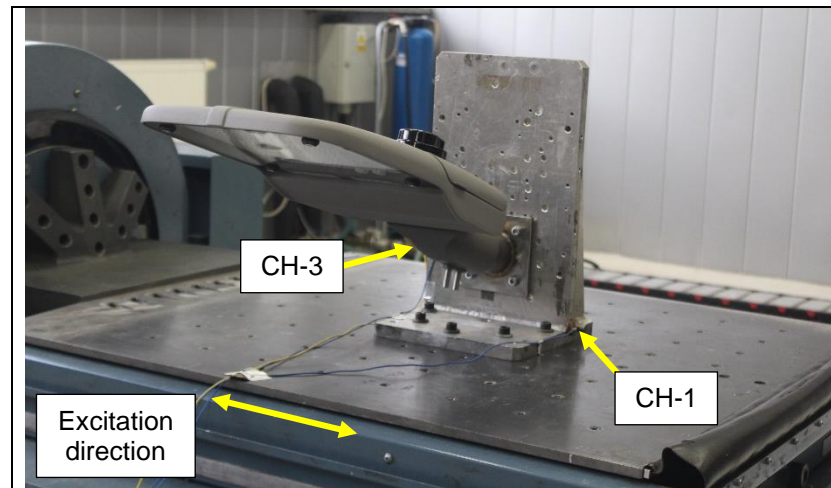
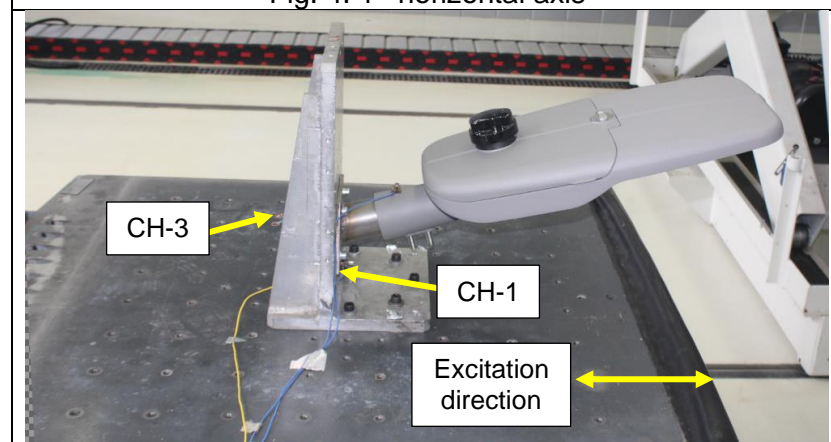


Fig. 3. Vertical axis

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Fig. 4. 1st horizontal axisFig. 5. 2nd horizontal axis

3.2. Vibration Test

Sinus vibration test acc. to PN-EN 60598-1:2015-04 p. 4.20 and PN-EN 60068-2-6:2008.

Test parameters:

- vibration frequency: 10...55...10 Hz
- displacement amplitude: 0.35 mm
- vibration profile: as in Fig. 6
- sweep rate: 1 oct / min
- excitation direction: Z, Y, X axes
- test duration: 30 min / axis
- temperature: 20...23°C
- control strategy: average of CH-1 and CH-3

Simple functionality check after the test (applying the supply voltage 230 V AC and observing if the lamp turns on).

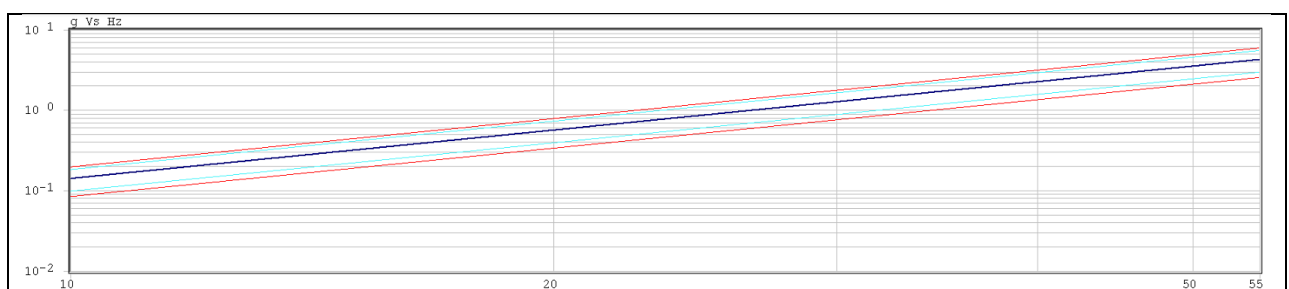


Fig. 6. Vibration profile

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4. TEST RESULTS

After the vibration test a visual inspection was carried out. No visible damage nor loosened parts were observed. Functionality of the luminaire was preserved. The luminaire after the test is presented in Fig. 7. The exemplary sine sweep graph is presented in Fig. 8.

Test result: OK

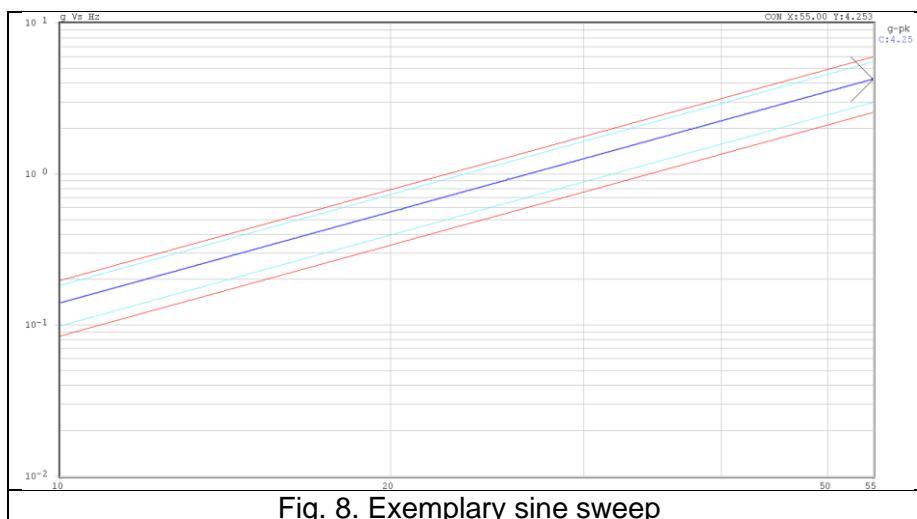
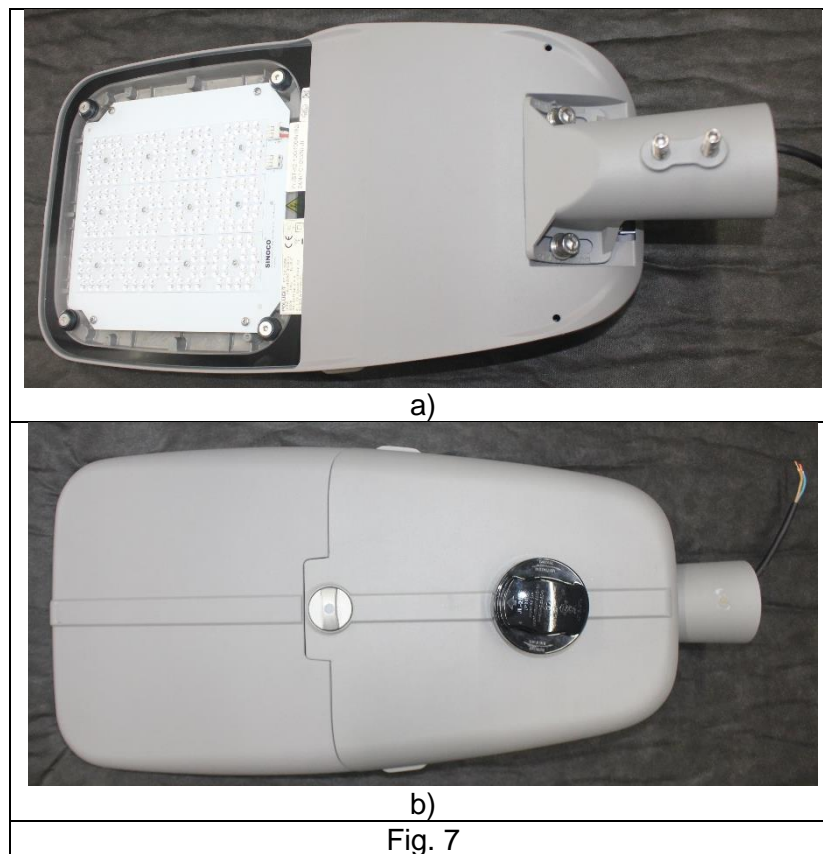


Table 1. Test equipment

Identification number	Device	Calibration date	Next calibration
X/0540/BE	Electrodynamic shaker Unholtz-Dickie H560B-16-3	05.2022	05.2024
I/0547/BE	CH 1 Endevco 751-100 15182	02.2022	02.2024
I/0716/BE	CH 3 Endevco 751-10 15163	02.2021	02.2023
I/0723/BE	Vibration calibrator PCB 394C06 LW5561	07.2021	07.2023

End of the Test Report