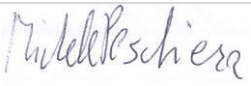
TEST REPORT Nr. 1045-QL25-R01 ver. 0

Dates and authorization Date e autorizzazioni		
Report Date Data emissione rapporto di prova	24/07/2025	
Written by Preparato da	Leonardo Mazzucchelli	
Authorized by Autorizzato da	Ing. Michele Peschiera	
Data declared under the sole responsibility of the applicant Dati dichiarati dal richiedente e sotto la sua responsabilità		
Applicant Richiedente	L&L Luce&Light Srl - Via Trescalini, 8 - 36031 - Dueville (VI) - Italy	
Manufacturer Produttore	Same as applicant/Come il richiedente	
Sample description Descrizione campione	LED luminaire	
Type Modello	Flori 1.2 – FS12007##	
Main material Materiale principale	Die cast aluminium	
Power supply Alimentazione	DC 24 V	
Functional test Test funzionale	Sample lights up when powered	
Applicable parameter and requirement Parametri e requisiti applicabili	ANSI C136.31-2018	
Applicable standards Norme applicabili		
	EN 60068-2-6:2008, ANSI C136.31-2023	

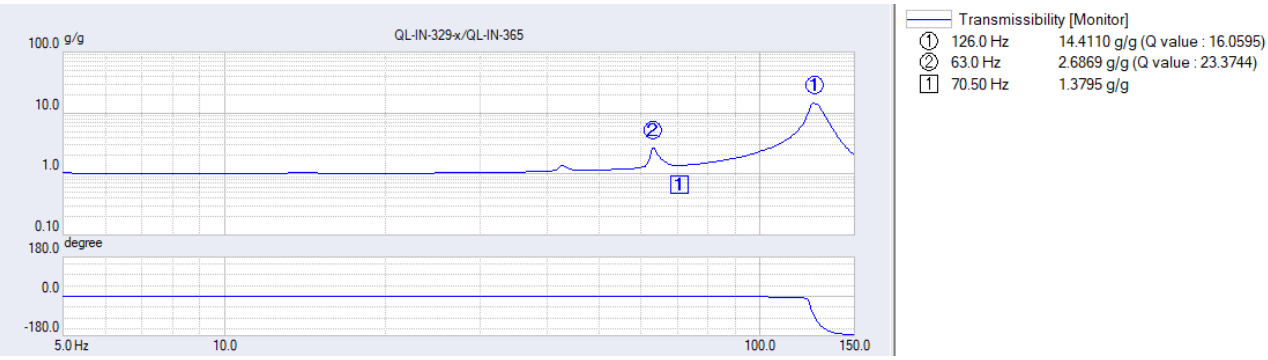
Annex **Annesso**	**Test Name** **Identificazione prova**	**Test Method** **Metodo di prova**	**Test Requirement** **Requisito di prova**	**Verdict / Result** **Esito / Risultato**
I	Luminaire vibration	EN 60068-2-6:2008 Parameter: ANSI C136.31-2023 Starting frequency 5 Hz (applicant's deviation)	Sample fully operational at the end of the test No damage to the enclosure, reduction of electrical spacing, or loosening of any part of the luminaire	Pass
II	Photographs	-	-	-

ANNEX I	**Luminaire vibration**
Test Method	EN 60068-2-6:2008, ANSI C136.31-2023
Sample identification	1045-QL25-S01
Place of testing	Qualilab Srl - Via Trento, 87 - 25020 - Capriano del Colle (BS) - Italy
Test date	From 21/07/2025 to 23/07/2025
Environmental conditions	Temperature 25 °C ± 5 °C Relative Humidity 50 % ± 25 % Atmospheric pressure 960 mbar ± 100 mbar
Instruments	Vibration system QL-IN-195 Rail Table QL-IN-303 Triaxial accelerometer QL-IN-329 Accelerometer QL-IN-365 Pressure-temperature-humidity datalogger QL-IN-282 Temperature-humidity datalogger QL-IN-260
Test description	Sample installed on the vibration table by means of the fixture and/or fixing elements supplied by the applicant. A resonance search followed by a vibration endurance test was performed on the 3 mutual axis, X-Y-Z axis:

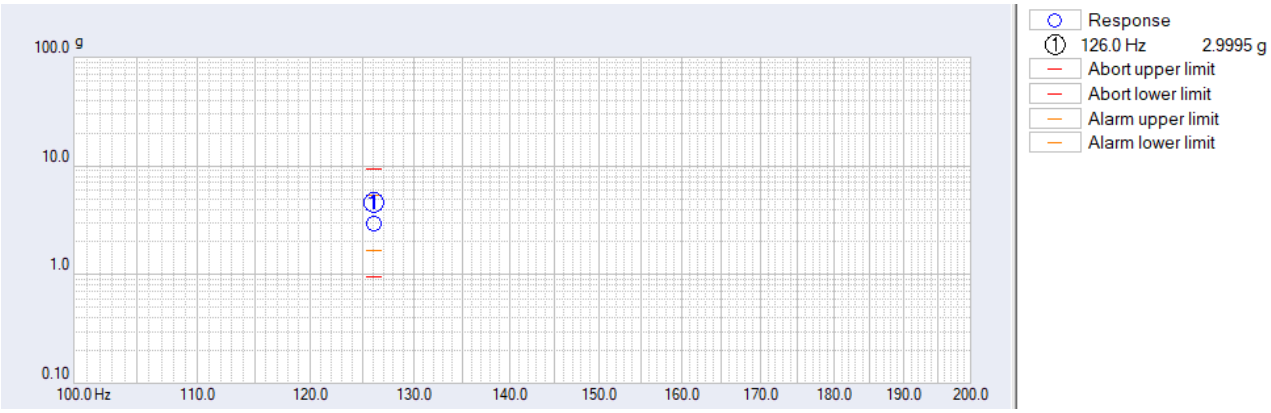
Resonance search parameters	
Frequency range	From 5 Hz to 150 Hz (Applicant's deviation)
Acceleration	1 g from 5 Hz to 150 Hz
Operating mode	Not powered
Sweep rate	1 oct/min
Sweep definition	From 5 Hz to 150 Hz
Alarm tolerance limit	± 0,6 dB
Abort tolerance limit	± 3 dB
Control strategy	Single point
Signal filters used	Lowpass filter, 2000 Hz
Reading points for resonance frequencies	One accelerometer was mounted on the vibration table (QL-IN-365) and the other one was mounted on the surface of the sample (QL-IN-329), see Annex II
Resonance criterion	Displacement amplitude at peak value and sample 90° out of phase with the exciter table

	Vibration endurance test parameters Frequency range: At the resonance frequency or 30 Hz Acceleration: 3 g Tightening torque of mounting screws: 7 Nm Sample status during the test: Not powered Alarm tolerance limit: ± 0,6 dB Abort tolerance limit: ± 3,0 dB Control strategy: Single point Signal filters used: Lowpass filter, 2000 Hz Test duration: 100000 cycles/axis
Test requirements	Sample fully operational at the end of the test. No damage to the enclosure, reduction of electrical spacing, or loosening of any part of the luminaire
Test measurement	**Spurious motion measurement** Cross axis motion (all axis): Conform (EN 60068-2-6:2008 § 4.1.2.1)

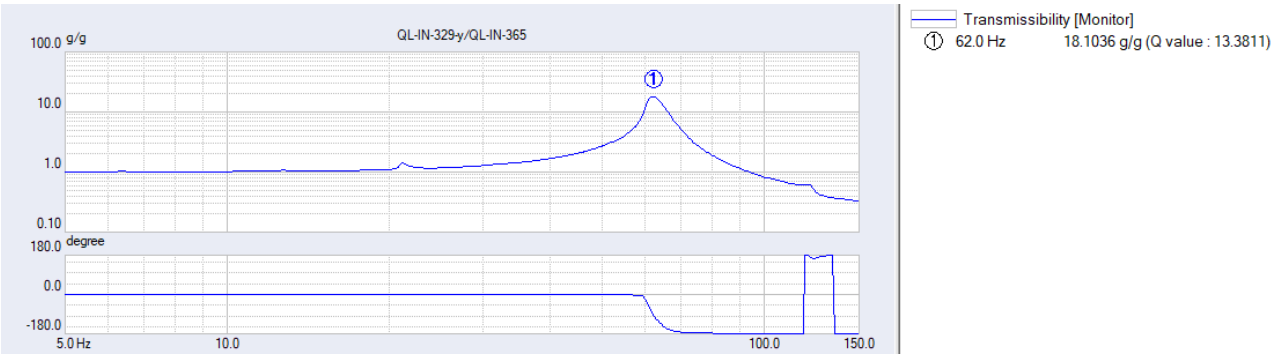
Axis	Measurement point	Resonance Frequency [Hz]	Amplification [g/g]
X	1	126,00	14,41
Y	2	62,00	18,10
Z	3	120,00	6,61



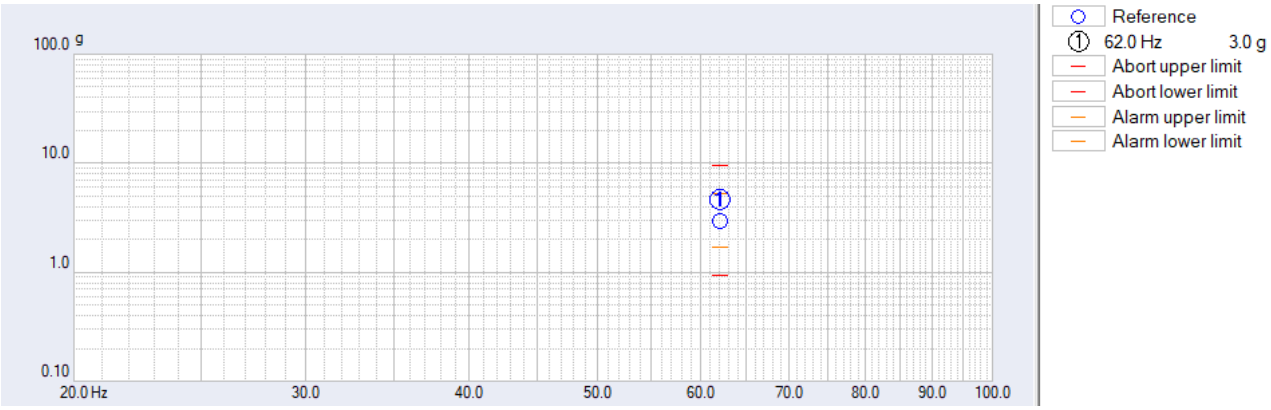
Resonance search of X-axis



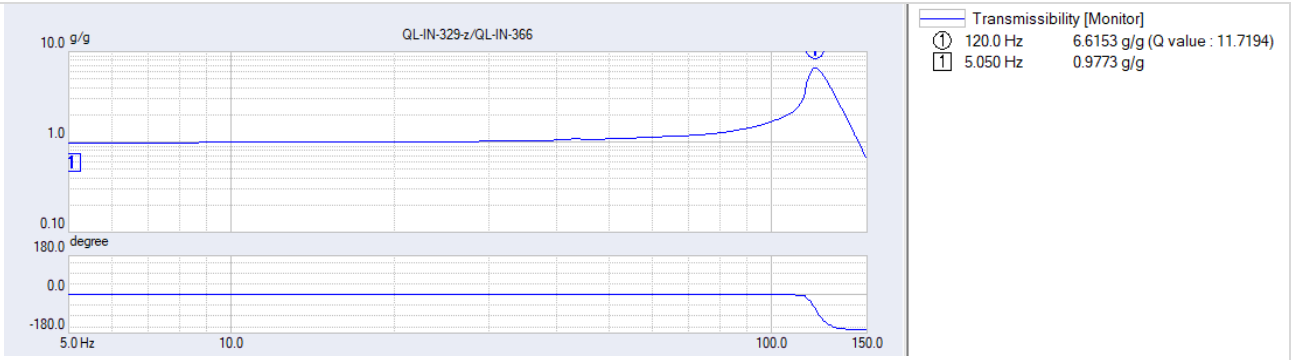
X-axis: resonance founding. Sample was subjected to 100000 cycles at 126,00 Hz



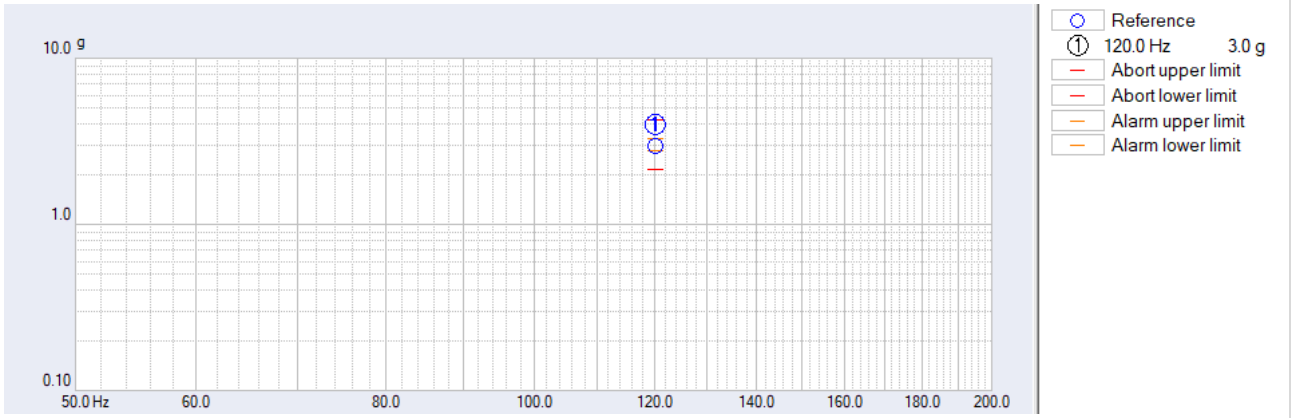
Resonance search of Y-axis



Y-axis: resonance founding. Sample was subjected to 100000 cycles at 62,00 Hz



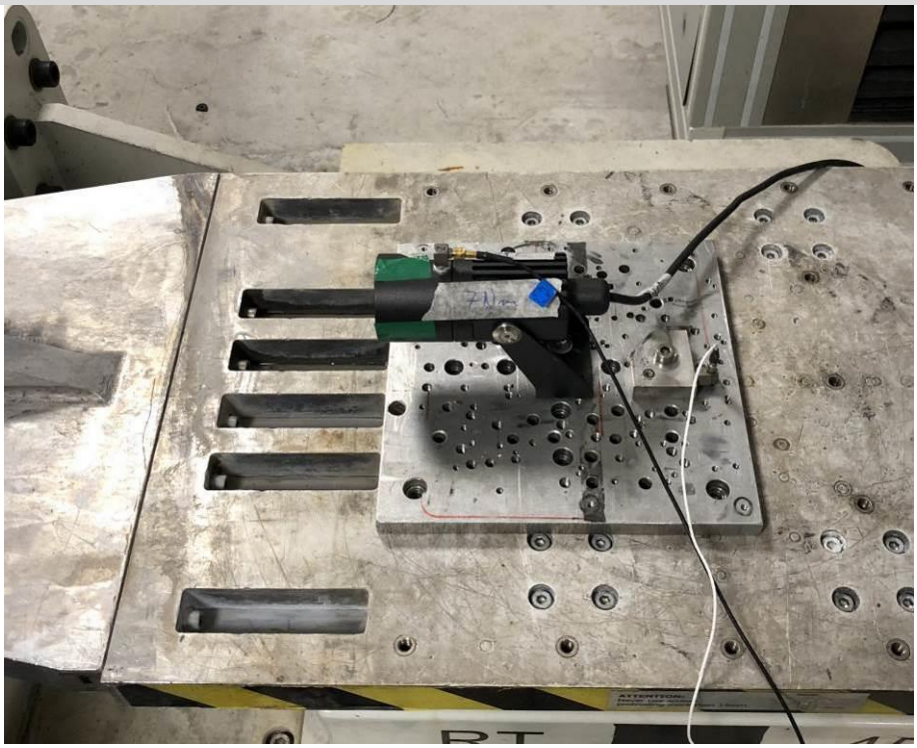
Resonance search of Z-axis



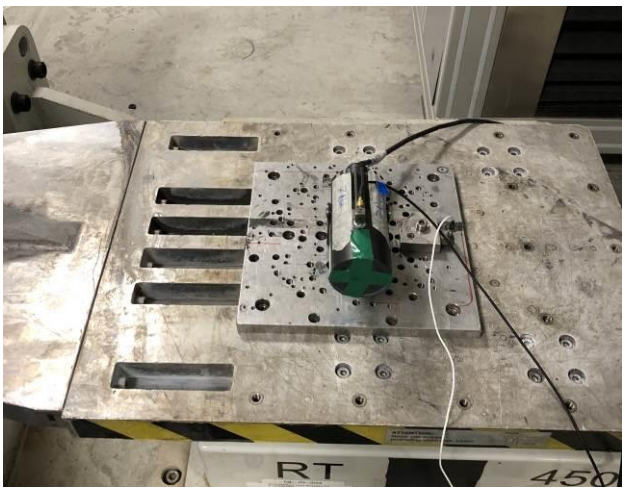
Z-axis: resonance founding. Sample was subjected to 100000 cycles at 120,00 Hz

Verdict	PASS

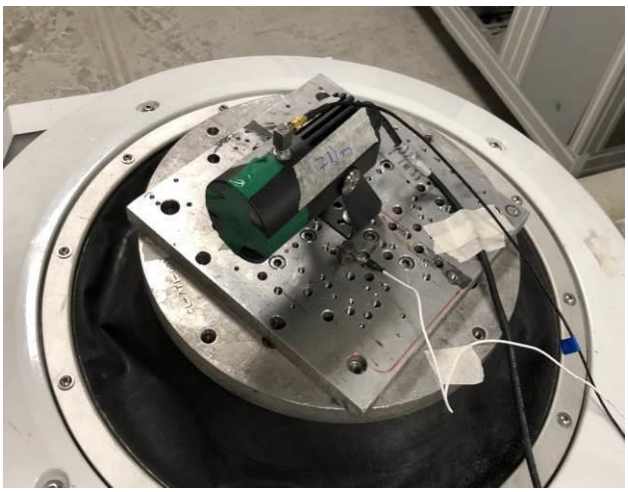
ANNEX II Photographs



X-axis



Y-axis



Z-axis