TEST REPORT

Schréder S.A
Rue de Lusambo 67, 1190 Brussels, BELGIUM

Model: BRITEL22-bcc-d-e-f-g

Report Type: **Vibration Test Report**	**Product Type:** Schreder/Briteline Flood light
Test Engineer:	Koons kong
Report Number:	DG3230515-26445E-SF
Test Date:	2023-05-13 to 2023-05-16
Report Date:	2023-05-16
Reviewed By:	Andrew Luo
Test location:	Room 301, No. 113 Pingkang Road, Dalang Town, Dongguan.
Prepared By:	Bay Area Compliance Laboratories Corp. (Dongguan). No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China. Tel: +86-0769-86858888 Fax:+86-0769-86858588

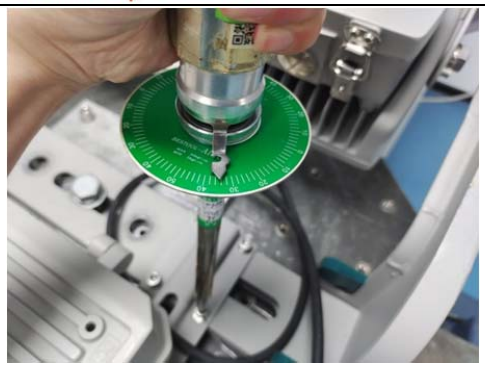
1.Test Project：

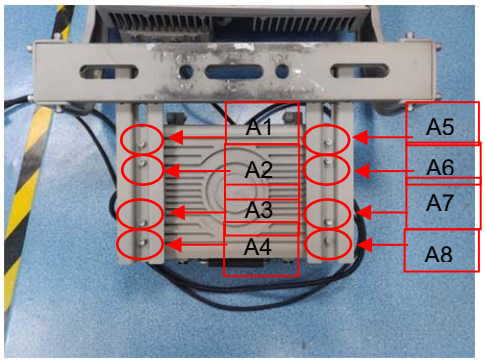
No.	Test Item
1	Vibration Test

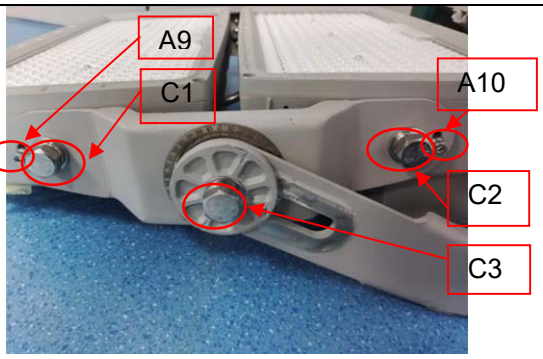
2. General product information

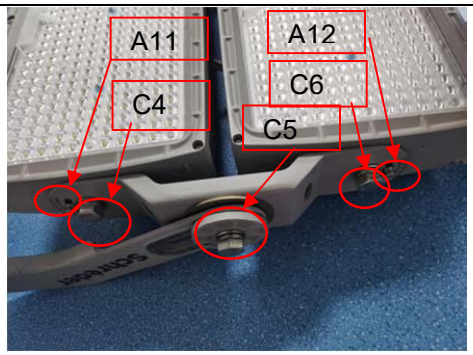
Sample No.	DG3230515-26445E-SF-01
Sample Name	Schreder/Briteline Flood light
Type	BRITEL22-bcc-d-e-f-g
Quantity	1PCS
Brand	Schréder

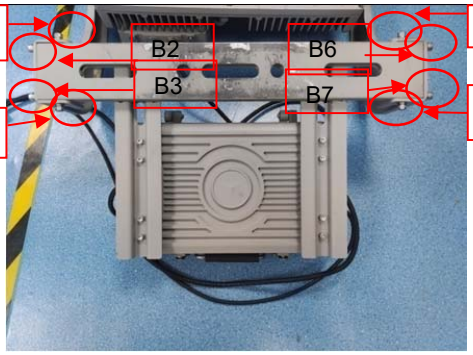
3. Sample Photos before the test




A1
A2
A3
A4
A5
A6
A7
A8


A9
C1
A10
C2
C3


A11
A12
C4
C6
C5


B1
B2
B6
B5
B3
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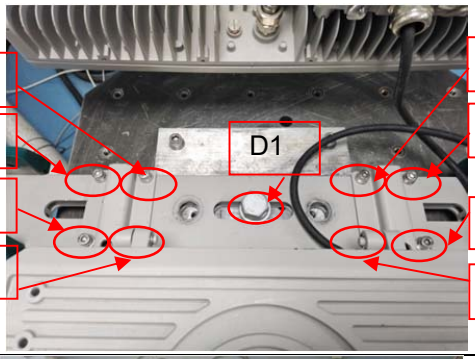
B4


B9
B13
B10
D1
B14
B11
B15
B12
B16

4. Test Equipment

Test Equipment	Model	Cal. Date	Due Date
Electric Vibration Test Machine	ES-10-240	2023-03-21	2024-03-20
Torsional Batch	T-08-SF381	2023-02-27	2024-02-26

Reference documents for the calibration: JJG 948-2018 (V.R. of Electrodynamic vibration Testing Systems)**;** JJG 707-2014 Torque Wrenches.

5. Environmental Conditions

Temperature: 25.3℃; Humidity: 67%RH

6. Test Standard

IEC 60068-2-6-2007& IEC 60068-2-64-2008

7. Test condition

1. The screws on the bracket and tailstock need to be tightened and measure the torque value before and after vibration test.
2. Set a accelerometer as control accelerometer, and another accelerometer as a monitor accelerometer on the gravity centre of the luminaire.
3. Vibrated the sample from 5Hz to 100 Hz with acceleration of 0.5g to find the resonant frequency, and record the value of acceleration though the monitor accelerometer.
4. Compare the value of acceleration, when Q((monitor value) /(control value))≤2 go to step 5;when Q >2,vibtated the sample at the resonant frequency for 30 minutes;
5. Set the vibration tester as “IEC 60068-2-64-2008 with 5Hz-100Hz;0.86Grms”, test the sample at this condition for 1 hour.
6. Repeat the step at the 3 mutually perpendicular planes(X, Y and Z axis)

Axis	Frequency(Hz)	Acceleration resonance point(g)	Q($A_{monitor}/A_{control}$)	Time of dwell
X	44.65	3.43	6.86>2	30 minutes
y	37.56	3.57	7.14>2	30 minutes
Z	41.43	2.38	4.76>2	30 minutes

Visual inspection on samples after the test, the structure has no damage and no change contrast with before the test. The torque after the test80% initial torque.		
Torque (N·m)		
Screws	Initial torque	Torque after the test

/	20N.m	X	Y	Z
A1	20	17.18	17.43	17.19
A2		18.12	18.27	17.72
A3		17.46	17.43	17.52
A4		17.43	16.99	17.28
A5		17.63	17.49	17.37
A6		18.5	18.63	17.89
A7		17.23	17.52	17.29
A8		17.81	17.51	17.22
A9		17.13	17.42	16.89
A10		17.21	17.44	17.26
A11		17.58	17.49	17.43
A12		17.36	17.16	17.25
/	34 N.m	X	Y	Z
B1	34	28.42	28.16	28.32
B2		28.66	27.89	27.94
B3		28.14	28.88	28.16
B4		28.26	28.17	28.32
B5		28.32	28.19	28.33
B6		28.45	28.38	28.26
B7		28.17	28.41	28.49
B8		27.93	28.19	28.28
B9		28.13	29.22	28. 34
B10		29.18	28.36	28.47
B11		28.77	28.29	29.1

B12		28.43	28.44	27.86
B13		28.82	28.33	28.12
B14		27.96	28.55	28.47
B15		28.36	28.49	27.75
B16		28.59	28.66	28.19
/	120 N.m	X	Y	Z
C1	120	97.98	98.45	98.68
C2		98.58	98.38	98.74
C3		97.86	98.52	98.66
C4		97.58	98.44	98.46
C5		97.89	98.68	99.72
C6		97.99	99.12	98.87
/	200 N.m	X	Y	Z
D1	200	168.72	162.5	165.75

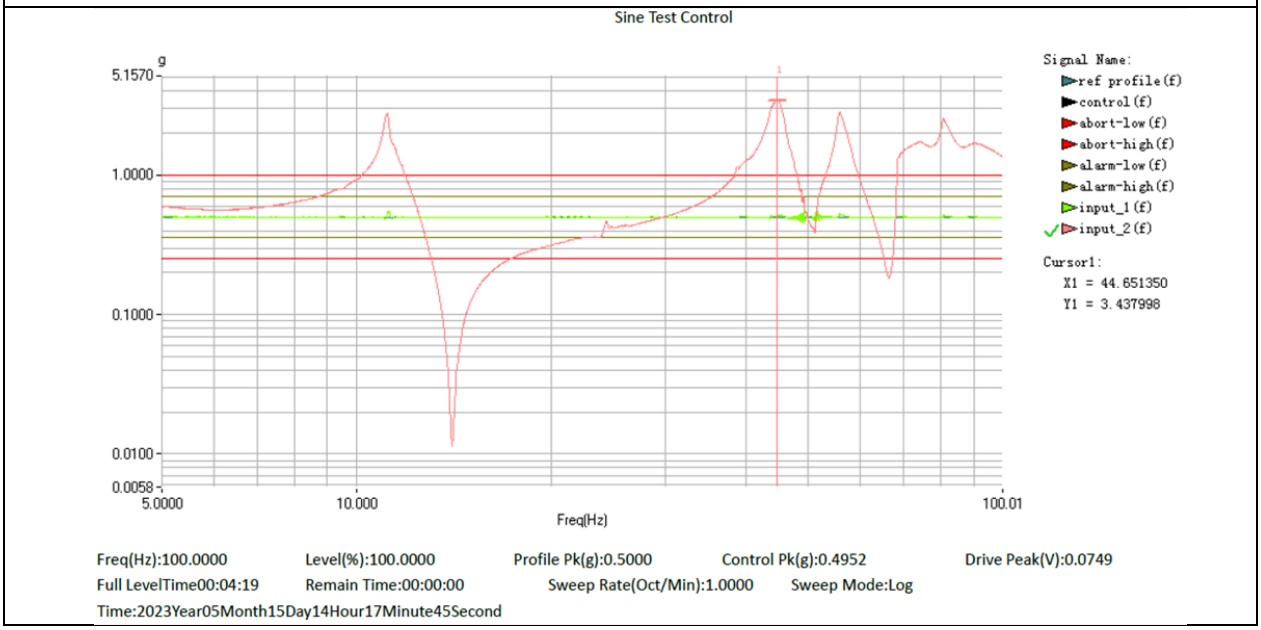
8. Test Result(s)

Sample No.	Test Result	Verdict
DG3230515-26445E-SF-01	After the test, The samples were not damaged, Light up normally, The screws are not loose.	Pass

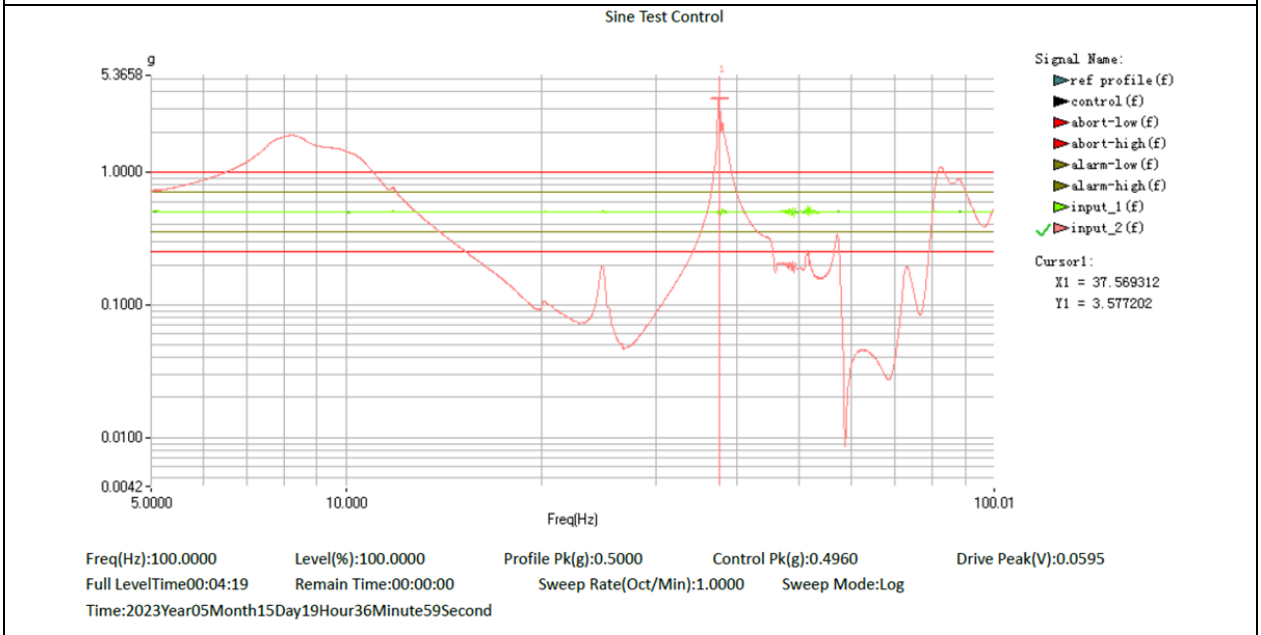
9. Testing curve and photo

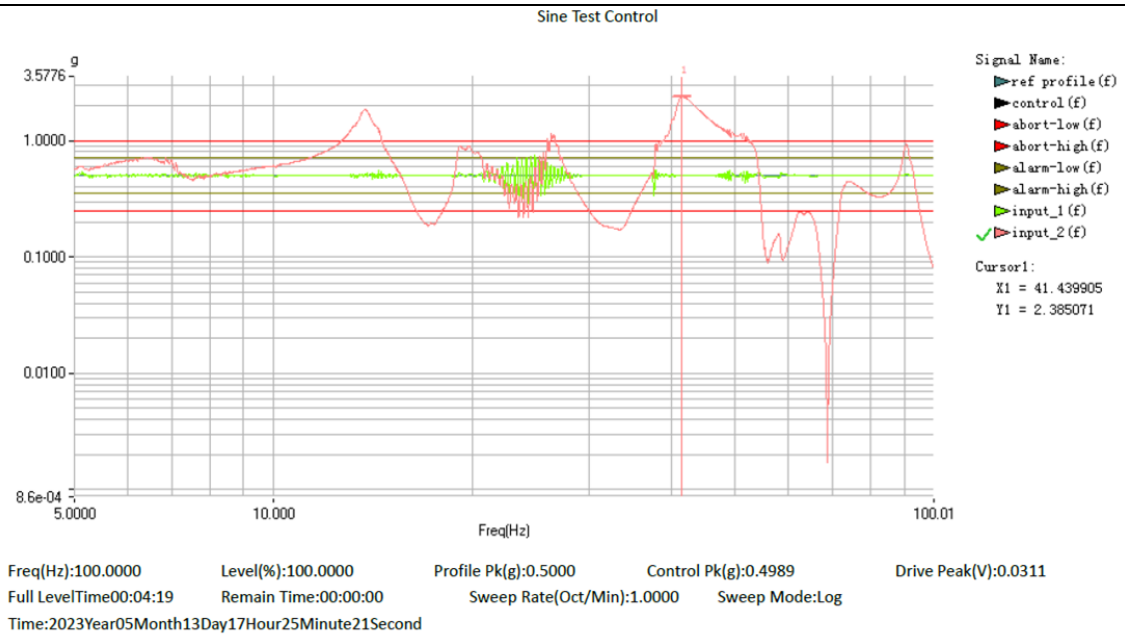
9.1 Sweep frequency of resonance curve

Sweep frequency of resonance point curve (X direction,44.65Hz,3.43g)

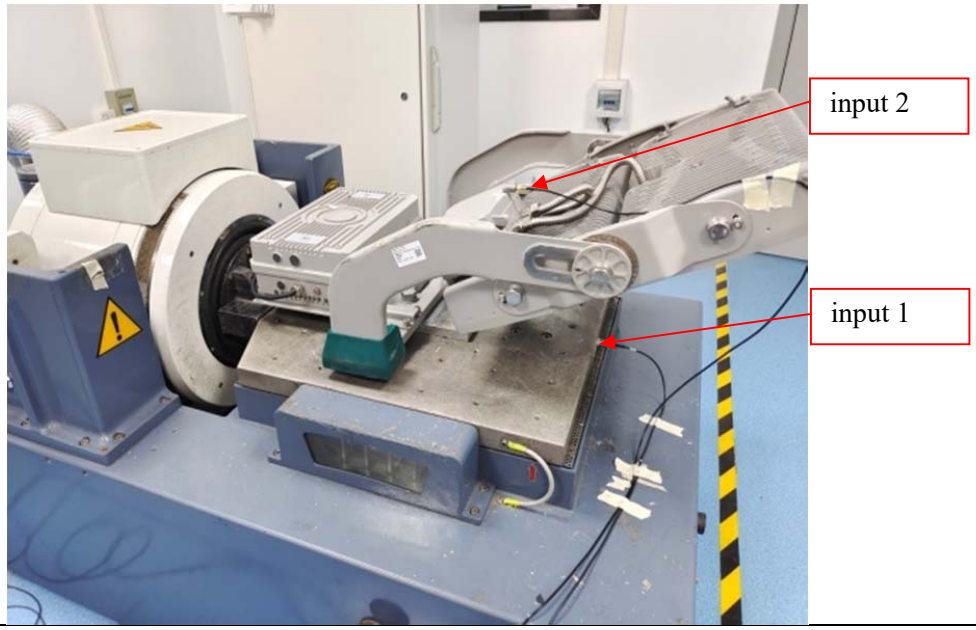


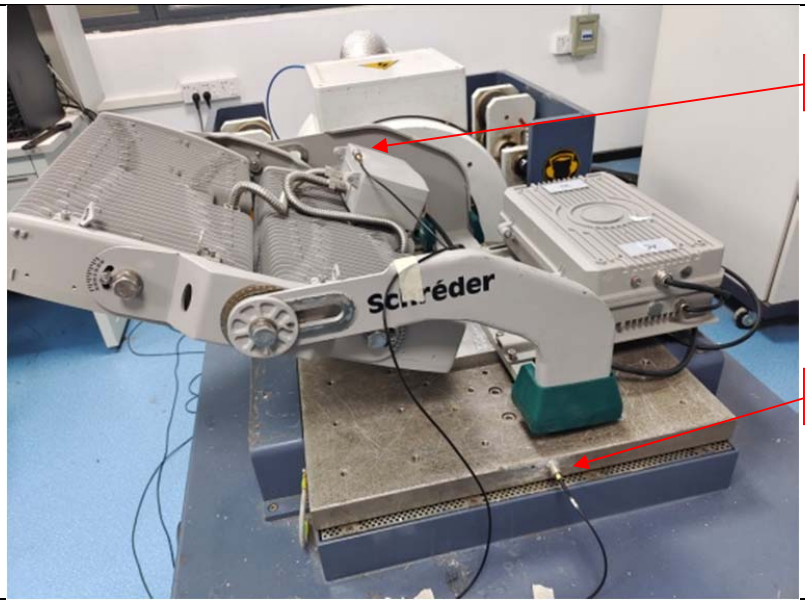
Sweep frequency of resonance point curve(Y direction,37.56Hz,3.57g)



Sweep frequency of resonance point curve(Z direction,41.43Hz 2.38g)


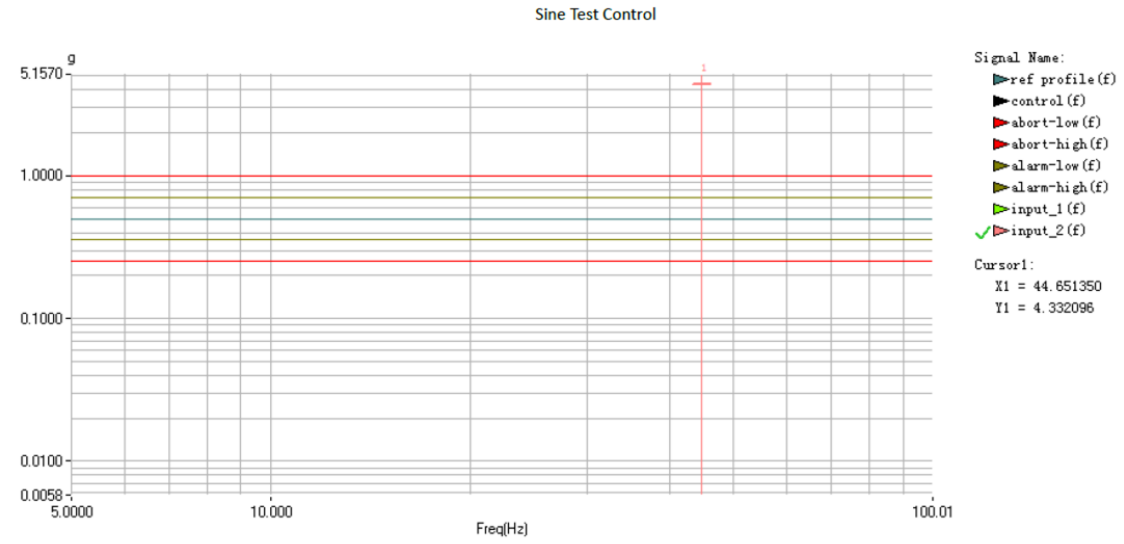
9.2 Dwell at the frequency of resonance curve

X direction


Y direction


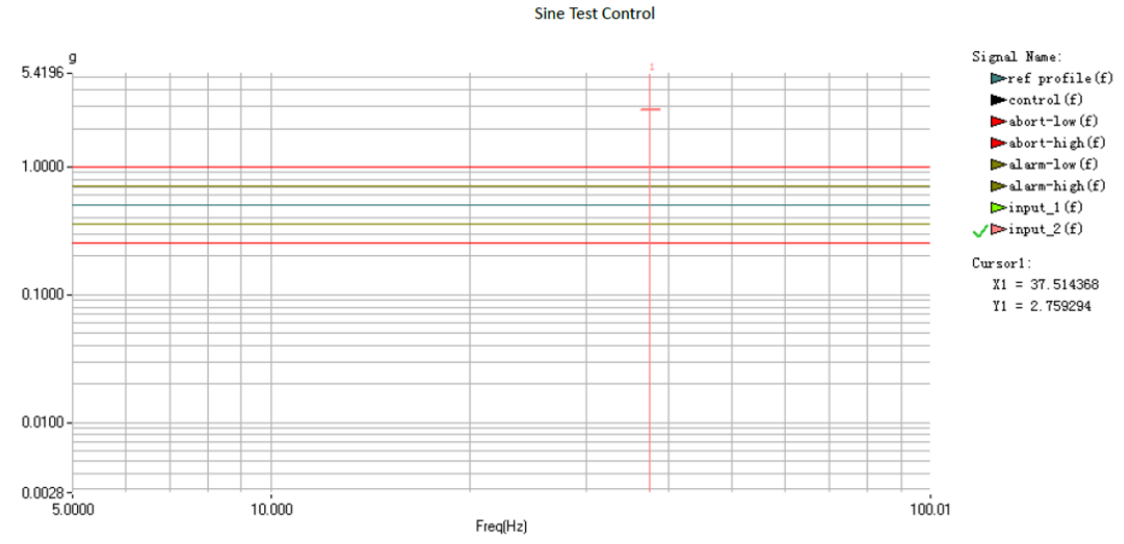
Z direction


X Test curve(dwell at 44.65Hz)



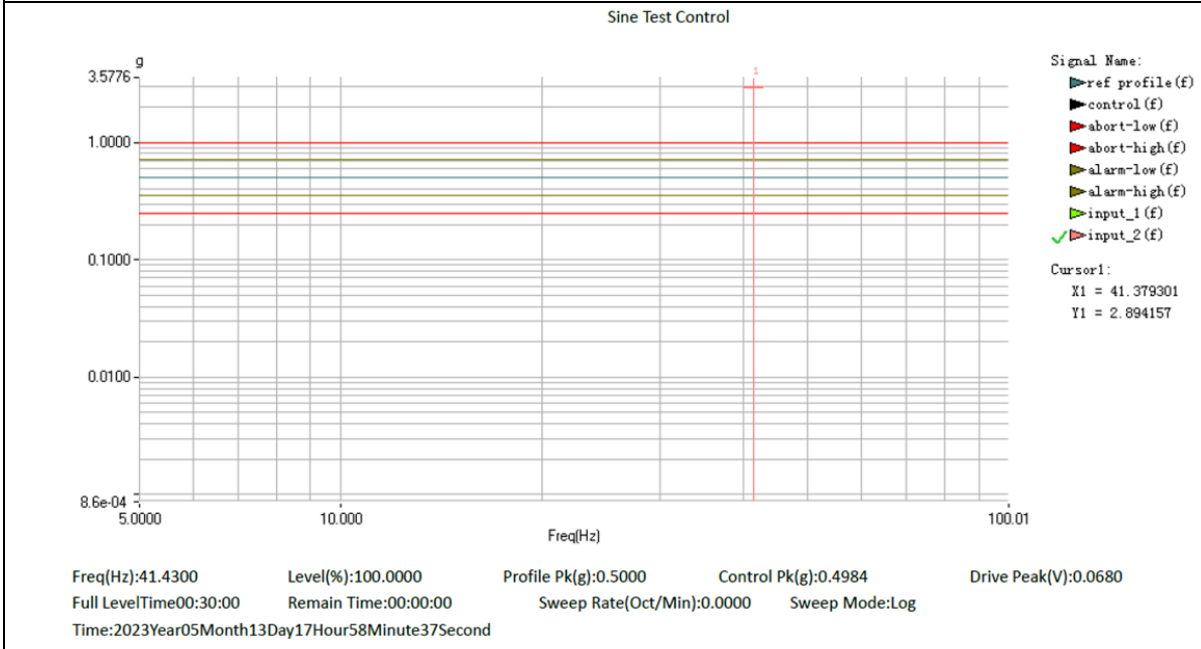
Freq(Hz):44.6500 Level(%):100.0000 Profile Pk(g):0.5000 Control Pk(g):0.5018 Drive Peak(V):0.1609
Full LevelTime00:30:00 Remain Time:00:00:00 Sweep Rate(Oct/Min):0.0000 Sweep Mode:Log
Time:2023Year05Month15Day14Hour50Minute36Second

Y Test curve-37.56Hz



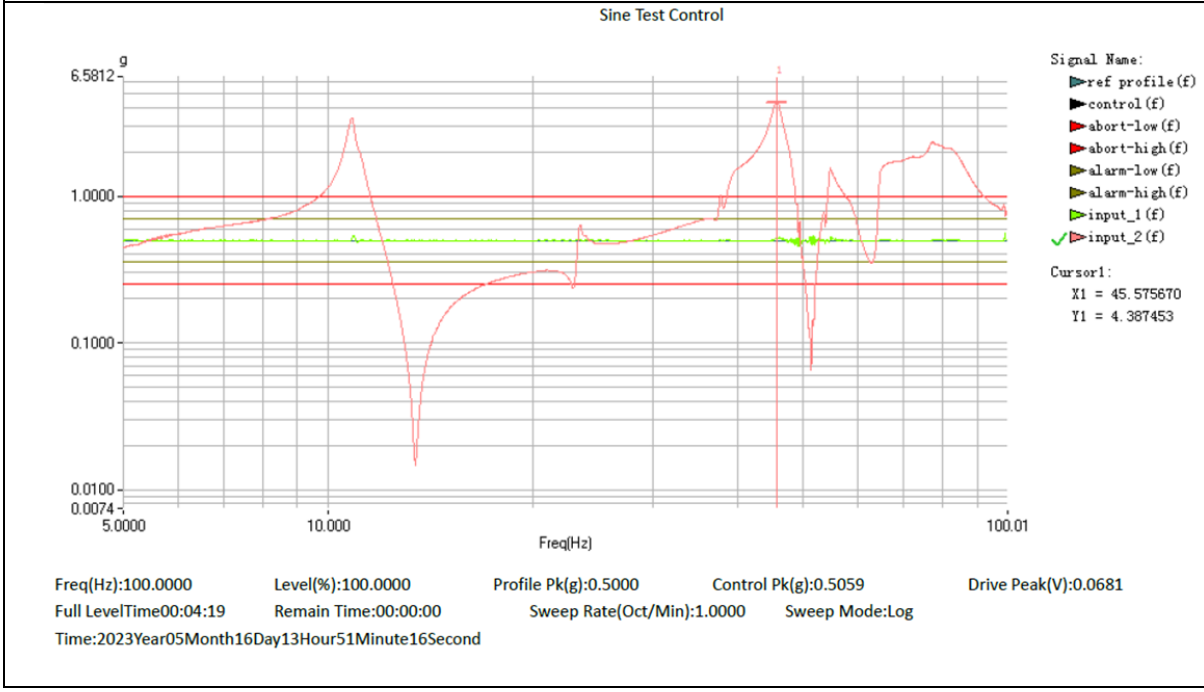
Freq(Hz):37.5600 Level(%):100.0000 Profile Pk(g):0.5000 Control Pk(g):0.5018 Drive Peak(V):0.0725
Full LevelTime00:30:00 Remain Time:00:00:00 Sweep Rate(Oct/Min):0.0000 Sweep Mode:Log
Time:2023Year05Month15Day20Hour16Minute32Second

Z Test curve-41.43Hz

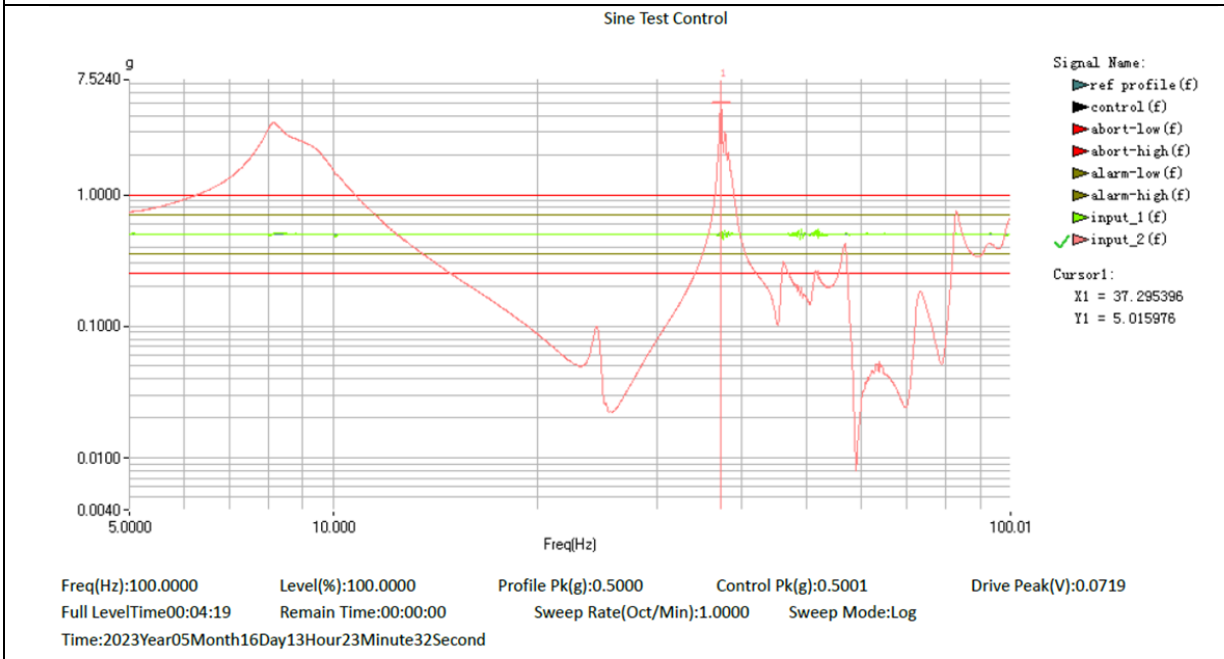


9.3 Sweep frequency of resonance curve after dwell vibration of each axis

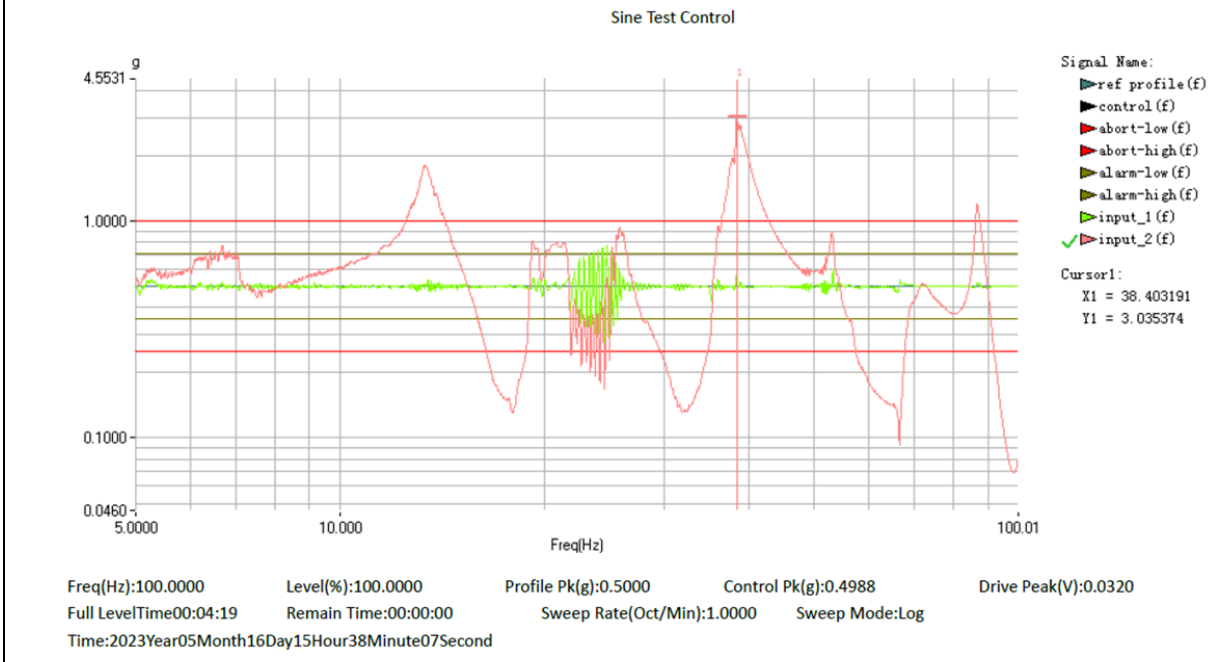
Sweep frequency resonance point curve(X direction,45.57Hz)



Sweep frequency resonance point curve(Y direction,37.29Hz)



Sweep frequency resonance point curve(Z direction,38.40Hz)



10. Sample Photos after the test

Directions

1. The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
3. Sample received time:2023-05-13, Normal appearance of sample and not found damaged.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
6. This report cannot be reproduced except in full, without prior written approval of the Company.
7. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
8. This report is based entirely on the original report DG3230515-26445E-SF, Model: BRITEL22-bc-d-e-f-g changed to BRITEL22-bcc-d-e-f-g.

********** **End of Report** **********