

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : HL50164A/2019

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Date : MAY 21, 2019

YUN LIANG MACHINERY CO., LTD.

NO. 205, Jiazhan Rd., Ziguan Dist., Kaohsiung City 82647, Taiwan

The following merchandise was submitted and identified by the applicant as:

Product Description: PUBLIC STACKING CHAIR LTS-210ZR

Style/Item No.: Stacking Chair LTS-210ZR/Airy

Manufacturer/Vendor: YUN LIANG MACHINERY CO., LTD.

Country of Origin: TAIWAN

We have tested the submitted sample(s) as requested and the following results were obtained:

Type of chair: TYPE III, fixed seat angle, fixed backrest

Test Requested: For compliance with ANSI/BIFMA X5.1-2017 General-Purpose Office Chairs-Tests
Clause 6 Back Strength Test - Static - Type III
Clause 7 Drop Test – Dynamic
Clause 11 Stability Test
Clause 17 Leg Strength Test

Test Methods: According to test procedures of ANSI/BIFMA X5.1-2017

Test Results: ---See following sheet(s)---

Conclusion: The submitted sample(s) **comply with** clause 6, 7, 11 and 17 of ANSI/BIFMA X5.1-2017 General-Purpose Office Chairs-Tests.

Date of Receipt : May 08, 2019

Testing Period : May 08, 2019 ~ May 21, 2019

Signed for and on behalf of
SGS Taiwan Ltd.


Lawrence Yang
Supervisor



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| Evaluation | Citation/Method | Criteria | Results | Rating |
|--|------------------------------------|--|--------------------------------|--------|
| PERFORMANCE | | | | |
| Back Strength Test - Static - Type III - Functional Load | ANSI/BIFMA X5.1-2017 Clause 6.4.1 | No loss of serviceability when 150 lb (667 N) is applied for 1 min. applied to 90° from back at 16 in above the seat. If the back is less than 17.8 in, the load is applied at the top of the back. | M | Pass |
| Back Strength Test - Static - Type III - Proof Load | ANSI/BIFMA X5.1-2017 Clause 6.4.2 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 225 lb (1001 N) is applied for 1 min. Applied 90° to the back at 16in. above the seat. If the back is less than 17.8 In, the load is applied at the top of the back. | M | Pass |
| Drop Test – Dynamic – Functional Load | ANSI/BIFMA X5.1-2017 Clause 7.4.1 | No loss of serviceability when 102 kg (225 lbs.) weight free falls from 6 in. height to the center of the seat. | M | Pass |
| Drop Test Dynamic – Proof Load | ANSI/BIFMA X5.1-2017 Clause 7.4.2 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 136 kg (300 lbs.) weight free falls from 6 in. height to the center of the seat. | M | Pass |
| Stability Test – Rear Stability for type III | ANSI/BIFMA X5.1-2017 Clause 11.3.1 | Apply only to chairs with backrests greater than 200mm Type III: Load the chair with 6 disks, apply a horizontal force to the highest disk. The location of the force application is 6 mm (0.25 in.) from the top of the disk. The force shall be: • F = 0.1964 (1195 – H) Newton. H is the seat height in mm. • [F = 1.1 (47 – H) pounds force.]. H is the seat height in inches. For chairs with seat height equal to or greater than 710 mm (28.0 in.), a fixed force of 93 N (20.9 lbf.) shall be applied. The chair shall not tip over. | M (Type III: F= 146.3 N) | Pass |
| Stability Test – Rear Stability for type I and II | ANSI/BIFMA X5.1-2017 Clause 11.3.2 | Apply only to chairs with backrests greater than 200mm Load the chair with 13 disks, the chair shall not tip over. | N/A | / |
| Stability Test – Front Stability | ANSI/BIFMA X5.1-2017 Clause 11.4 | The chair is obstructed with a 13mm (½ in.) obstruction to the chair casters/legs. A downward load of 61 kgs (135 lbs.) is centered 60 mm (2.4 in.) from the seat front center edge. The seat shall withstand a 20 N (4.5lbf.) horizontally from the front seat edge without tipping. | M | Pass |
| Leg Strength Test -Front Load - Functional Load | ANSI/BIFMA X5.1-2017 Clause 17.3 | No loss of serviceability when a force of 334 N (75 lbf.) is applied to each front leg individually for 1 minute. | M | Pass |
| Leg Strength Test- Front Load - Proof Load | ANSI/BIFMA X5.1-2017 Clause 17.3 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when a force of 503 N (113 lbf.) is applied to each front leg individually for 1 minute. | M | Pass |
| Leg Strength Test -Side Load - Functional Load | ANSI/BIFMA X5.1-2017 Clause 17.4 | No loss of serviceability when a force of 334 N (75 lbf.) is applied once to each front and rear leg individually for 1 minute. | M | Pass |
| Leg Strength Test -Side Load - Proof Load | ANSI/BIFMA X5.1-2017 Clause 17.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when a force of 503 N (113 lbf.) is applied once to the front and rear leg individually for 1 minute. | M | Pass |

Results Key:

| | | | |
|-----|----------------|-----|---------------|
| M | Meets | N/M | Does Not Meet |
| N/A | Not Applicable | N/T | Not Tested |
| C | Claimed | R | Recorded |

Rating Key:

| |
|------|
| Pass |
| Fail |

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- Pictures -



Photo A: Appearance of the sample - front



Photo B: Appearance of the sample - side



Photo C: Appearance of the sample - back



Photo D: Type(s) of the chair

---End of Report---

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