

Report ID: 357376

Date of sample receipt: 03/10/23

Date of issue: 06/11/23 PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG)

**ITALIA** 

Sample name: POLAR 3775 - 3776

### **SAMPLE N° 357376**

Overall dimensions: 750 x 750 x 1010 (h) mm

#### List of test reports:

1. Seating durability test - Cyclic - ANSI-BIFMA X5.1-2017/10(2022)

2. Swivel test - cyclic ANSI-BIFMA X5.1-2017/8(2022)

- 3. Leg strength test-Front application ANSI-BIFMA X5.1-2017/17(2022)
- 4. Leg strength test- Side application ANSI-BIFMA X5.1-2017/17(2022)
- 5. Out stop test for manually adjustable seat depth ANSI-BIFMA X5.1-2017/21(2022)
- 6. Caster/chair base durability test -Cyclic ANSI-BIFMA X5.1-2017/16(2022)
- Tilt mechanism test Cyclic ANSI-BIFMA X5.1-2017/9(2022)
- 8. Backrest strength test Static ANSI-BIFMA X5.1-2017/6(2022)
- 9. Back durability test Cyclic-Type II and III ANSI-BIFMA X5.1-2017/15(2022)
- 10. Backrest strength test Static ANSI-BIFMA X5.1-2017/5(2022)
- 11. Back durability test Cyclic-Type I ANSI-BIFMA X5.1-2017/14(2022)
- 12. Arm strength test-Vertical-Static ANSI-BIFMA X5.1-2017/12(2022)
- 13. Arm strength test Horizontal-Static ANSI-BIFMA X5.1-2017/13(2022)
- 14. Arm durability test cyclic ANSI-BIFMA X5.1-2017/20(2022)
- 15. Drop test Dynamic ANSI- BIFMA X5.1-2017/7(2022)
- 16. Stability test ANSI-BIFMA X5.1-2017/11(2022)



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The managing director Dr. Franco Bulian



### **SAMPLE N° 357376**

Date of issue: 06/11/23

Sample weight: Not determined
Sample name: POLAR 3775 - 3776



Side view



Bottom view



Rear view



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LAB N° 0027 L Membro degli MRA EA, IAF e ILAC

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Revision: 0

Date of sample receipt: 03/10/23
Date of test: 06/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Seating durability test - Cyclic - ANSI-BIFMA X5.1-2017/10(2022)

Test carried out on sample 1 of 3

Type of chair: Type I

Seat impact test

Height of drop: 36 mm above the uncompressed seat surface

Test results:

Mass of drop (kg)	Number of drops	Remarks
57	100.000	No defects

Front corner load-ease test - cyclic -off-center

Test results:

Seat load (N)	Number of cycles	Remarks
890	20.000	No defects

The test results comply with the requirements in clause 10.5 of ANSI-BIFMA X5.1-2017(2022).

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Revision: 0

Date of sample receipt: 03/10/23
Date of test: 06/10/23
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Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

### Swivel test - cyclic ANSI-BIFMA X5.1-2017/8(2022)

Test carried out on sample 3 of 3

Type of chair: Type I

Test results:

Seat loa (kg)	d Seat height position	Number of cycles	Remarks
122	Maximum	60.000	No defects
122	Minimum	60.000	No defects

Rotations per minute: 10

Rotations: bi-directional

The test results comply with the requirements in clause 8.5 of ANSI-BIFMA X5.1-2017(2022).

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LAB N° 0027 L Membro degli MRA EA, IAF e ILAC

## **357376 / 3**

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 09/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Leg strength test-Front application ANSI-BIFMA X5.1-2017/17(2022)

Test carried out on sample 2 of 3

Type of chair: Type I

Test results:

Leg	Applied load (N)	Time of application (minutes)	Number of cycles	Remarks
Right leg	334	1	1	No defects
Left leg	334	1	1	No defects

Leg	Applied load (N)	Time of application (minutes)	Number of cycles	Remarks
Right leg	503	1	1	No defects
Left leg	503	1	1	No defects

The test results comply with the requirements in clause 17.5 of ANSI-BIFMA X5.1-2017(2022).

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LAB N° 0027 L Membro degli MRA EA, IAF e ILAC

## TEST REPORT 357376 / 4

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 09/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Leg strength test- Side application ANSI-BIFMA X5.1-2017/17(2022)

Test carried out on sample 2 of 3

Type of chair: Type I

Test results:

Leg	Applied load (N)	Time of application (minutes)	Number of cycles	Remarks
Front leg	334	1	1	No defects
Rear leg	334	1	1	No defects

Leg	Applied load (N)	Time of application (minutes)	Number of cycles	Remarks
Front leg	503	1	1	No defects
Rear leg	503	1	1	No defects

The test results comply with the requirements in clause 17.5 of ANSI-BIFMA X5.1-2017(2022).

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Revision: 0

Date of sample receipt: 03/10/23
Date of test: 09/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Out stop test for manually adjustable seat depth ANSI-BIFMA X5.1-2017/21(2022)

Test carried out on sample 2 of 3

Type of chair: Type I

Test results:

S	Seat load (kg)	Horizontal weight (kg)	Number of cycles	Remarks
	74	25	25	No defects

The test results comply with the requirements in clause 21.4 of ANSI-BIFMA X5.1-2017(2022).

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# **357376 / 6**

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 09/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Caster/chair base durability test -Cyclic ANSI-BIFMA X5.1-2017/16(2022)

Test carried out on sample 2 of 3

Type of chair: Type I

Clause 16.1 - Pedestal base chair with casters

Seat load: 122 kg

Test frequency: 10 cycles/min

#### Test results:

Number of cycles	Obstacles	Minimum pull force to separate the caster from the base required (N)	Pull force to separate the caster from the base measured (N)	Remarks
2.000	yes	//	//	No defects
98.000	no	22	> 22	No defects

The test results comply with the requirements in clause 16.1.5 of ANSI-BIFMA X5.1-2017(2022).

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Date of sample receipt: 03/10/23
Date of test: 12/10/23
Date of issue: 06/11/23

Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

### Tilt mechanism test - Cyclic ANSI-BIFMA X5.1-2017/9(2022)

Test carried out on sample 1 of 3

Type of chair: Type I

Test results:

Seat load (kg)	Numberof cycles	Remarks
109	300.000	No defects

The test results comply with the requirements in clause 9.5 of ANSI-BIFMA X5.1-2017(2022).

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## **357376 / 8**

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 16/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Backrest strength test - Static ANSI-BIFMA X5.1-2017/6(2022)

Test carried out on sample 1 of 3

Type of chair: Type III

Backrest height: 460 mm

Test results:

Back load for each seating position (N)	Time of application (minutes)	Number of cycles	Remarks
667	1	1	No defects
1.001	1	1	No defects

The test results comply with the requirements in clause 6.5 of ANSI-BIFMA X5.1-2017(2022).

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LAB N° 0027 L Membro degli MRA EA, IAF e ILAC

## **357376 / 9**

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 16/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

### Back durability test - Cyclic-Type II and III ANSI-BIFMA X5.1-2017/15(2022)

Test carried out on sample 1 of 3

Type of chair: Type III

Backrest height: 460 mm

Backrest widths: 450 mm

#### Test results:

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Number of cycles	Seat load (kg)	Force application points on the backrest	Backrest force (N)	Remarks
80.000	109	Center of the backrest	334	No defects
20.000	109	102 mm right from the center	334	No defects
20.000	109	102 mm left from the center	334	No defects

The test results comply with the requirements in clause 15.5 of ANSI-BIFMA X5.1-2017(2022).

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## TEST REPORT 357376 / 10

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 24/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Backrest strength test - Static ANSI-BIFMA X5.1-2017/5(2022)

Test carried out on sample 1 of 3

Type of chair: Type I

Backrest height: 460 mm

Test results:

Back load for each seating position (N)	Time of application (minutes)	Number of cycles	Remarks
667	1	1	No defects
1.001	1	1	No defects

The test results comply with the requirements in clause 5.5 of ANSI-BIFMA X5.1-2017(2022).

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### TEST REPORT 357376 / 11

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 24/10/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

### Back durability test - Cyclic-Type I ANSI-BIFMA X5.1-2017/14(2022)

Test carried out on sample 1 of 3

Type of chair: Type I

Backrest height: 460 mm

Backrest widths: 450 mm

#### Test results:

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Number of cycles	Seat load (kg)	Force application points on the backrest	Backrest force (N)	Remarks
80.000	109	Center of the backrest	445	No defects
20.000	109	102 mm right from the center	445	No defects
20.000	109	102 mm left from the center	445	No defects

The test results comply with the requirements in clause 14.5 of ANSI-BIFMA X5.1-2017(2022).

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## TEST REPORT 357376 / 12

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 02/11/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### **Arm strength test-Vertical-Static ANSI-BIFMA X5.1-2017/12(2022)**

Test carried out on sample 2 of 3

Type of chair: Type I

Maximum armrest height change allowed after the functional load: 6 mm

Maximum armrest height change allowed after the proof load: 25 mm

#### Test results:

Load on armrest (N)	Time of load application	Armrest height change measured (mm)	Number of cycles	Remarks
750	1 min	3	1	No defects
1.125	15 sec	5	1	No defects

The test results comply with the requirements in clause 12.5 of ANSI-BIFMA X5.1-2017(2022).

Unless otherwise specified, measurement uncertainty expanded to a confidence level of about 95% is ± 2,0 mm.

The measurement uncertainties stated in this document have been determined according to UNI CEI 70098-3:2016. They were estimated as expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally k=2.

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### TEST REPORT 357376 / 13

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 02/11/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776

PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### **Arm strength test - Horizontal-Static ANSI-BIFMA X5.1-2017/13(2022)**

Test carried out on sample 2 of 3

Type of chair: Type I

#### Test results:

Horizontal load (N)	Time of application	Number of cycles	Remarks
445	1 min.	1	No defects
667	15 sec.	1	No defects

The test results comply with the requirements in clause 13.5 of ANSI-BIFMA X5.1-2017(2022).

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### TEST REPORT 357376 / 14

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 02/11/23
Date of issue: 06/11/23

Sample name: POLAR 3775 - 3776

PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### Arm durability test - cyclic ANSI-BIFMA X5.1-2017/20(2022)

Test carried out on sample 3 of 3

Type of chair: Type I

Seat height: lowest position

Armrest positioning: highest and outermost

Test results:

Load on arm rest (N)	Number of cycles	Remarks
400	60.000	No defects

The test results comply with the requirements in clause 20.4 of ANSI-BIFMA X5.1-2017(2022).

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Revision: 0

Date of sample receipt: 03/10/23
Date of test: 02/11/23
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Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

### Drop test - Dynamic - ANSI- BIFMA X5.1-2017/7(2022)

Test carried out on sample 1 of 3

Type of chair: Type I

Height of drop: 152 mm above the uncompressed seat surface

Test results:

Bag weight (kg)	Seat height position	Numberof drops	Remarks
102	Maximum height	1	No defects
102	Minimum height	1	No defects
136	Maximum height	1	No defects
136	Minimum height	1	No defects

The test results comply with the requirements in clause 7.5 of ANSI-BIFMA X5.1-2017(2022).

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### TEST REPORT 357376 / 16

Revision: 0

Date of sample receipt: 03/10/23
Date of test: 02/11/23
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Sample name: POLAR 3775 - 3776



PEDRALI S.P.A. STRADA PROVINCIALE 122 24050 MORNICO AL SERIO (BG) ITALIA

#### **Stability test ANSI-BIFMA X5.1-2017/11(2022)**

Test carried out on sample 3 of 3

Type of chair: Type I and III

Clause 11.3.1

Rear stability for chair type III

Seat load: 60 kg Minimum force required: 135 N

Measured force: > 145 N Does not overturn

Clause 11.3.2

Rear stability for chair type I and II

Loading discs on the seat: 13 Does not overturn

Clause 11.4 Front stability

Vertical load: 61 kg Minimum force required: 20 N

Measured force: > 20 N Does not overturn

The test results comply with the requirements in clause 11.3.1.3, 11.3.2.3 and 11.4.4 of ANSI-BIFMA X5.1-2017(2022).

The measurement uncertainties stated in this document have been determined according to UNI CEI 70098-3:2016. They were estimated as expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally k=2.

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