



CERTIFICATE OF CALIBRATION

CERT. NO.: **C310211**

GENERAL INFORMATION

Customer: Phoenix Calibration
Contact: Bryan Ricart
Service No.: 44711
Asset No.: 10951
Description: AS 82/220.X2 ANALYTICAL BALANCE
Manufacturer: Radwag
Model No.: AS 82/220.X2 Plus
Serial No.: 716305
Range: See datasheets
Location: N/D

CALIBRATION INFORMATION

Calibration Date: 08/31/2022
Next Due: 09/30/2022
Cal. Freq.: 1 Months
As Found Condition: In tolerance
Calibration Results: Passed
Calibration Location: MVD Lab
Calibrated by: Francisco Diaz
Environment: 72.32°F 54%RH
757.2mmHg
Cal. Procedure: DR-WI-0042

The instrument listed on this certificate has been calibrated against reference standards traceable through the National Institute of Standards and Technology (NIST), derived from ratio type measurements or compared to nationally or internationally recognized consensus standards. A test uncertainty ratio (TUR) of 4:1 (K=2, 95% Confidence Level) calculated using expanded measurement uncertainty was maintained unless otherwise stated. Phoenix Calibration is accredited to ISO/IEC-17025. All Instruments are calibrated in compliance with the calibration systems requirements established by ISO and in accordance with reference procedures. This certificate shall not be reproduced except in full and with the written consent of Phoenix Calibration. Results contained in this document relate only to the items tested or calibrated. Statement of conformity (pass/fail; in/out of tolerance) is made based on the calibration/ test method, manufacturer or customer's specifications and does not consider the measurement uncertainty unless the method or customer's request it. Calibration due dates appearing on the certificate or label are determined by the client for administrative purposes and do not imply continued conformance to specification.

REMARKS

Performed Routine Calibration/Certification. All tested parameters were found in Tolerance. TUR Double check by Frander Cordero.

REFERENCE STANDARDS USED TO CALIBRATE EQUIPMENT

ID Inst	Description	Cal. Date	Due Date
5934	Weight Sets 0.001-200g	01/11/2022	10/31/2022

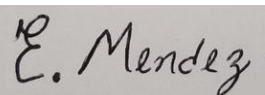
REVISION COMMENT

SIGNATURES

Calibrated by: **Francisco Diaz**

Date: 08/31/2022

Quality Approval: Estephanie Méndez



Date: 09/01/2022



DATASHEET

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Weight - Sensitivity

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.00006	0.0019980	0.00194	0.00206	0.00199	✓	n/a

Weight - Eccentricity Center

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.0004	70.000008	69.99961	70.00041	69.99980	✓	n/a

Weight - Eccentricity East

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.0004	70.000008	69.99961	70.00041	69.99980	✓	n/a

Weight - Eccentricity North

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.0004	70.000008	69.99961	70.00041	69.99980	✓	n/a

Weight - Eccentricity South

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.0004	70.000008	69.99961	70.00041	69.99970	✓	n/a

Weight - Eccentricity West

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.0004	70.000008	69.99961	70.00041	69.99980	✓	n/a



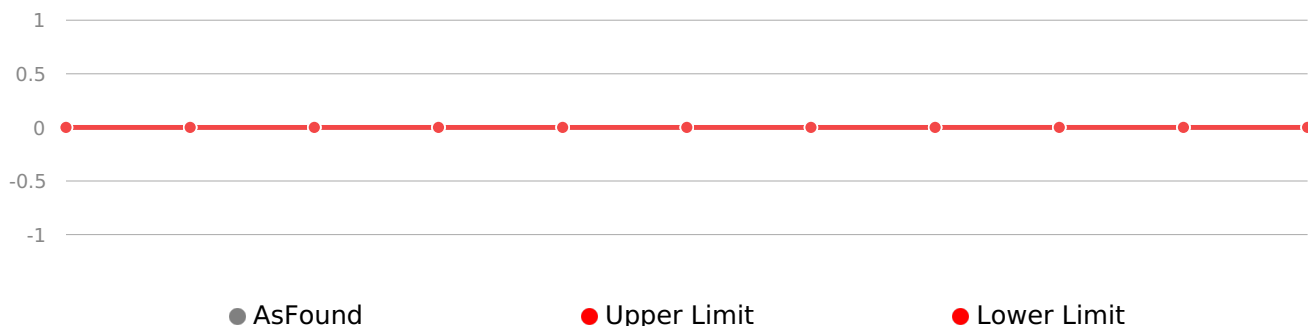
DATASHEET

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Weight - Linearity Down

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.00005	0.0000000	-0.00005	0.00005	0.00000	✓ n/a	n/a
g	0.00005	0.0050010	0.00495	0.00505	0.00500	✓ 0.000010	8.5:1
g	0.00005	0.2000010	0.19995	0.20005	0.20000	✓ 0.000010	8.5:1
g	0.00005	1.0000057	0.99996	1.00006	1.00000	✓ 0.000022	2.5:1
g	0.00005	5.0000080	4.99996	5.00006	5.00000	✓ 0.00003	1.7:1
g	0.00005	10.000009	9.99996	10.00006	10.00000	✓ 0.000044	1.2:1
g	0.00005	50.000030	49.99998	50.00008	50.00000	✓ 0.00010	0.5:1
g	0.00005	80.000016	79.99997	80.00007	80.00003	✓ 0.00011	0.5:1
g	0.0002	100.000000	99.9998	100.0002	99.9998	✓ 0.00017	1.3:1
g	0.0002	150.000030	149.9998	150.0002	149.9999	✓ 0.0003	0.7:1
g	0.0002	200.000038	199.9998	200.0002	199.9998	✓ 0.0003	0.7:1

Accuracy Chart





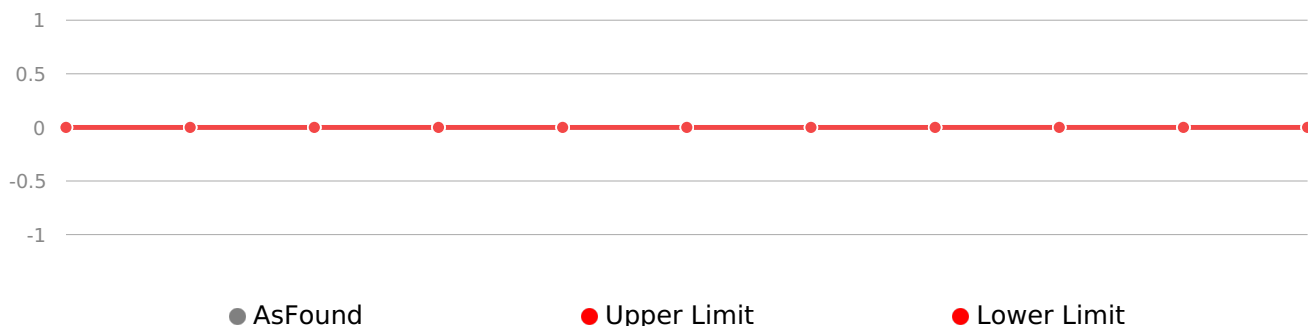
DATASHEET

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Weight - Linearity Up

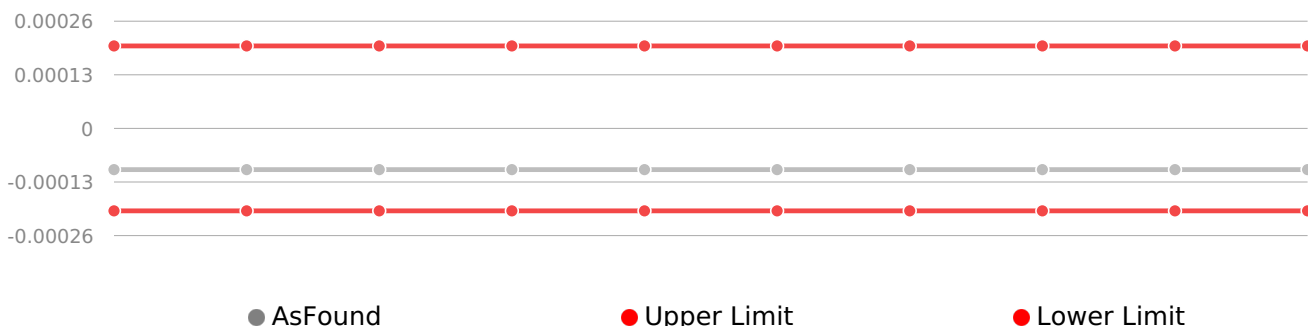
Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	0.00005	0.0000000	-0.00005	0.00005	0.00000	✓ n/a	n/a
g	0.00005	0.0050010	0.00495	0.00505	0.00502	✓ 0.000010	8.5:1
g	0.00005	0.2000010	0.19995	0.20005	0.20003	✓ 0.000010	8.5:1
g	0.00005	1.0000057	0.99996	1.00006	1.00002	✓ 0.000022	2.5:1
g	0.00005	5.0000080	4.99996	5.00006	5.00005	✓ 0.00003	1.7:1
g	0.00005	10.000009	9.99996	10.00006	10.00003	✓ 0.000044	1.2:1
g	0.00005	50.000030	49.99998	50.00008	50.00000	✓ 0.00010	0.5:1
g	0.00005	80.000016	79.99997	80.00007	80.00004	✓ 0.00011	0.5:1
g	0.0002	100.000000	99.9998	100.0002	100.0000	✓ 0.00017	1.3:1
g	0.0002	150.000030	149.9998	150.0002	149.9999	✓ 0.0003	0.7:1
g	0.0002	200.000038	199.9998	200.0002	199.9998	✓ 0.0003	0.7:1

Accuracy Chart



Weight - Repeatability

Accuracy Chart



Dev.Std: 3.57E-19

Weight - g - - StdDev

Units	Max. Error(Tol.)	Nominal	Low Limit	HighLimit	AsFound	Meas. Uncert.	TUR
g	N/A	0.000000	N/A	N/A	0.000005	n/a	n/a



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End of datasheet

(X) means that it was found out of tolerance when performing a routine calibration of the equipment.