



Certificate No.: 4753-1109013
Procedure No.: NA17-20MA-03

Control No.: 616187
Page 1 of 2

UNIT UNDER TEST

Manufacturer: MONARCH INSTRUMENTS
Model No.: PLT200
Serial No.: 1951894
Cust. Ref. No.: N/A
Description: LASER TACHOMETER
Date Rec'd: 10/19/2020
Condition Rec'd: GOOD

SUBMITTED BY

Customer: K&S TECHNICAL SERVICES, INC
941 NEW LONDON ROAD
NEWARK, DE 19711
P.O. #: 10354
Precal: IN SPEC **Final:** IN SPEC

CALIBRATION CERTIFICATE

All calibrations are performed by qualified personnel using instrumentation, procedures and methods which guarantee specifications claimed are reliable. When specified, all calibrations are performed in accordance with current ISO/IEC 17025, ANSI/NCSL Z-540-1, MIL-STD-45662A, and ENV/Pro-Lab Quality Manual - Rev 5. Standards used are traceable to The National Institute of Standards and Technology (NIST). Expanded uncertainties are calculated using methods described in the Guide to the Expression of Uncertainty of Measurement (GUM) utilizing a coverage factor of K=2 (95% confidence) and kept on file at Pro-Lab. At a minimum, standards are selected with an uncertainty of 25% or better, where possible. This certificate and/or data shall not be reproduced except in full, without the written permission of Pro-Lab Management.

Standards Used

Asset #	Description	Certificate Number	Date Due
1186	MULTIFUNCTION CALIBRATOR	52-VEN-14711	7/27/2021

Temperature: 25.0 C
Humidity: 40.8% RH
Approved By: Jennifer Shelly
Laboratory Supervisor
E-Signed 26-Oct-2020 4:30 PM

Date Tested: 26-Oct-2020
Date Due: 26-Oct-2021
Calibrated By: Elizabeth Pawling
Metcal Operator
E-Signed 26-Oct-2020 3:57 PM

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CALIBRATION DATA

Note: Calibration results may drift from documented values prior to calibration due date attributable to various factors. Results obtained apply to the UUT only and are reflective of conditions at the time of this test. Measurement uncertainty is not taken into account when statements of compliance with specifications are made.

REVOLUTIONS PER MINUTE (OPTICAL)

Description	Standard	As Found	Final	Min.	Max.
RPM	100.00	100.01	100.01	99.99	100.01
RPM	300.00	300.01	300.01	299.97	300.03
RPM	600.00	600.01	600.01	599.94	600.06
RPM	1500.0	1500.0	1500.0	1499.8	1500.2
RPM	3000.0	3000.0	3000.0	2999.7	3000.3
RPM	6000.0	6000.1	6000.1	5999.4	6000.6
RPM	9000.0	9000.1	9000.1	8999.1	9000.9
RPM	24000	24000	24000	23998	24002
RPM	30000	30000	30000	29997	30003
RPM	90000	90001	90001	89991	90009
RPM	190000	190001	190001	189981	190019