



Awareness Briefing on Waters Finding in Calibration Report, 22 Jul 2020

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Section 6.6.10 – Calibration System procedure, SKW-MFG2003-00 Rev C

SKW-MFG2003-00
Calibration System

Rev: C

ensure it is meeting all specifications as stated and signed off by the calibration personnel on the report.

6.6.10 Calibration Report / Certificate shall include the following minimum information:

6.6.10.1 IMTE Name

6.6.10.2 IMTE Model (if applicable)

6.6.10.3 IMTE Serial number (if applicable)

6.6.10.4 IMTE specification / range

6.6.10.5 Date of calibration performed

6.6.10.6 Calibration due date of Reference Equipment used to calibrate the IMTE.

6.6.10.7 Calibration points

6.6.10.8 As-found values

6.6.10.9 As left values (If applicable, if repair or adjustments made)

6.6.10.10 Description of any remedial action/adjustments and/repairs made

6.6.10.11 Signature/date of whom performed the calibration

6.6.10.12 Accredited Logo is applicable for:

- AC/DC Hi-Pot
- Leakage Current Tester
- Electrical Safety Analyzer
- Ground Bond Tester
- AC/DC Withstand Voltage Tester
- Multimeter which are used during the safety testing measurement.
- Load Box

Section 6.6.10 & all sub-sections which followed and initially briefed to all participants on how to review a Calibration Report generally, against calibration specification.

Details and more focused area for this briefing shall be based on next slides to emphasize on the Findings by Waters on Calibration Report.

Calibration Specification for Load Box, EQID 2096

S/N 14354691



Calibration Specification

Cal Spec / Equipment ID # : 2096		Rev # : A	
Equipment Description : Load Box			
Equipment Model : S14-03			
Equipment Manufacturer : Chroma		Calibration Onsite : Yes ☐ No ☒	
Customer ID # : 86079		Calibration Interval : 12 months	
Equipment S/N : 14354691			
Equipment Owner : Joel Mamalateo Deduyo		Location : Waters - Production	
Equipment Usage Description : Use for Waters Production Line on electrical safety analyzer for Ground Continuity and Hipot daily verification.			
Equipment Range : Function Test Pass 50 mΩ and 450kΩ , Function Test Fail 150 mΩ and 400kΩ			
Usage Range : Function Test Pass 50 mΩ and 450kΩ , Function Test Fail 150 mΩ and 400kΩ			
Calibration Lab Information (Not Applicable to OEM)			
Calibration Range : Function Test Pass 50 mΩ and 450kΩ , Function Test Fail 150 mΩ and 400kΩ			
Accuracy Specification : +/- 1%			

Calibration Specification for Load Box, EQID 2096 S/N 14354691 was then used to review the Calibration Report# 551220083592482 and explain on the Waters Findings in next slides.



Waters Finding in Calibration Report# 551220083592482 for Load Box EQID 2096, S/N 14354691



MICRO PRECISION
BLOCK 5006 ANG MO KIO AVENUE 5 #07-02/03
TECHPLACE II SINGAPORE 638674
65 87484384



ilac-MRA
ANAB
ACCREDITED
CALIBRATION LABORATORY
AC-1908-13

Certificate of Calibration

Date: May 02, 2020
Customer:
WATERS PACIFIC PTE LTD
1 SCIENCE PARK ROAD, #02-08 THE CAPRICORN
SINGAPORE SCIENCE PARK II
SINGAPORE 117528

Work Order #: SG-11014146
Serial Number: 14354691
Department: N/A
Performed By: SENGTHYE CHEW
Received Condition: OPERATIONAL
Returned Condition: REPORT OF VALUE
Cal. Date: May 02, 2020
Cal. Interval: 12 MONTHS
Cal. Due Date: May 02, 2021

MPC Control #: 14354691
Asset ID: 2096
Gage Type: LOAD BOX
Manufacturer: CHROMA
Model Number: S14-03
Size: N/A
Temp/RH: 22°C / 52 %
Location: Calibration performed at MPC facility

Calibration Notes:
The user shall determine the suitability of the equipment for its intended use.
The calibration status is defined as Report of Value.
Calibration performed at Flextronics Pte Ltd.
See attached data. (1 page).
This supersedes Certificate Number 551220083592482

REVIEWED & ACCEPTED
SIGN: 
DATE: 13 May 2020
REMARKS: EQID 2096


I.D.	Description	Model	Serial	Manufacturer	Cal. Due Date	Traceability #
CA004	MULTIMETER	3456A	2623A2688	HEWLETT PACKARD	Jun 10, 2021	1-12015829011-1

Procedures Used in this Event

Procedure Name	Description
CHROMA 1500X PRODUCT	Using a Load Box to Verify Hpot Tester Chroma 1500X Product, Jun-16-2016

This number is auto generated by our system.

The supersedes Certification Number is invalid as we mistake on this job numbering.

This is correct, equipment is performed at MPC side.

- 1. Calibration performed at Flextronics Pte Ltd -----for on-site
 - 2. Calibration performed For Flextronics Pte Ltd -----for in-House (MPC facility)
- We have put wrong statemen for this calibration job.

MP standard used to calibrate equipment due date

MP procedure update on Jun-16-2016

Explanation on Respective Findings

Observation:

- For the finding (1): There is typo on the verbiage “Calibration performed at Flextronics Pte. Ltd.”

Explanation: The correct verbiage is “Calibration performed for Flextronics Pte. Ltd” as the calibration was performed at Vendor site for all three (3) equipment for the CM Flextronics Pte. Ltd.

- For the finding (2), The statement “This supersedes Certificate Number 551220083592482” was been falsely copied and input by Micro Precision for the job done.

Explanation: The Calibration Report is generated with correct data and dates, as well as other important information. Hence, the statement was irrelevant for the Certificate and equipment under calibration. Unless there is a new revised Calibration Report, then it will supersede the previous report and this statement is required. The top right corner written with correct Calibration Report number as it automatically generated by system for any Report issuance.

- For the finding (3), The “Description” statement with date of “Jun-16-2016”

Explanation: The date is correct and valid as it is released date of updated calibration procedure since Jun, 16th 2016. Hence, this 3rd finding is not valid. Flex shall post an enquiry as and when there is confused dates been written.

Explanation on the Root Cause which related to Findings

Root Cause:

- 1) Feedback from the Supplier, the additional “Calibration Notes” was specially requested by Waters to be added in into Supplier calibration template format to indicate which Contract Manufacturer (CM) is using/sending the equipment for calibration to Micro Precision. This additional requirement was not being shared to Flex as CM. Therefore, Flex is assuming this “Calibration Notes.” is internal supplier control which not important to Flex.
- 2) Vendor had also mistakenly input the verbiage(s) which the content in Calibration Notes were incorrectly selected for correct calibration activity performed.

Explanation on the Impact of the Findings to Calibration

Conclusion:

- The Calibration Reports are still valid to be accepted at that point of time, and to released the equipment for use where the calibration data are correctly tabulated and summarized.
- The two (2) valid errors found were not impacting the overall Calibration Results and to the equipment, as they were only documentation error on the verbiage(s) and not to the data or dates.
- Hence, there is no impact to the released Equipment and to the products.