# Alcotest 7110 Calibration Record

| | | | | | |
|---|---|---|---|---|---|
| **Equipment** | Alcotest 7110 MKIII-C | | | Serial No.: | ARXA-0056 |
| Location: | LONG BRANCH POLICE DEPT | | | | |
| Calibration File No.: | 00802 | Calib. Date: | 09/24/2019 | Calib. No.: | 00031 |
| Certification File No.: | 00780 | Cert. Date: | 05/30/2019 | Cert. No.: | 00024 |
| Linearity File No.: | 00781 | Lin. Date: | 05/30/2019 | Lin. No.: | 00024 |
| Solution File No.: | 00798 | Soln. Date: | 09/08/2019 | Soln. No.: | 00165 |
| Sequential File No.: | 00802 | File Date: | 09/24/2019 | | |
| Calibrating Unit: | WET | Model No.: | CU-34 | Serial No.: | DDXN S3-0217 |
| Control Solution %: | 0.100% | | | Expires: | 07/23/2020 |
| Solution Control Lot: | 18220 | | | Bottle No.: | 0167 |

**Coordinator**

Last Name: LUTZ First Name: DENNIS MI: J

Signature: Tpr I Lutz 7045 Badge No.: 7045

Date: 09/24/2019

*Black Key Temperature Probe Serial.....# DDEEP2-060 DL

*Digital NIST Temperature Measuring System Serial.....# 191 959 029 DL

Pursuant to law, and the "Chemical Breath Testing Regulations" N.J.A.C. 13:51, I am a duly appointed Breath Test Coordinator/Instructor. In my official capacity, and consistent with "Calibration Check Procedure for Alcotest 7110," as established by the Chief Forensic Scientist of the Division of State Police, I perform calibration checks on approved instruments employing infrared analysis and electrochemical analysis, when utilized in a single approved instrument as a dual system of chemical breath testing. Pursuant to, and consistent with, the current "Calibration Check Procedure for Alcotest 7110," as established by the Chief Forensic Scientist, I performed a Calibration Check on the approved instrument identified on this certificate. The results of my Calibration Check are recorded on this certificate, which consists of two parts on two pages: Part I - Control Tests; and Part II - Linearity Tests. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are wilfully false, I am subject to punishment.

# Alcotest 7110 Calibration Certificate

## Part I - Control Tests

| | | | | | |
|---|---|---|---|---|---|
| **Equipment** | Alcotest 7110 MKIII-C | | | Serial No.: | ARXA-0056 |
| Location: | LONG BRANCH POLICE DEPT | | | | |
| Calibration File No.: | 00802 | Calib. Date: | 09/24/2019 | Calib. No.: | 00031 |
| Certification File No.: | 00803 | Cert. Date: | 09/24/2019 | Cert. No.: | 00025 |
| Linearity File No.: | 00781 | Lin. Date: | 05/30/2019 | Lin. No.: | 00024 |
| Solution File No.: | 00798 | Soln. Date: | 09/08/2019 | Soln. No.: | 00165 |
| Sequential File No.: | 00803 | File Date: | 09/24/2019 | | |
| Calibrating Unit: | WET | Model No.: | CU-34 | Serial No.: | DDXN S3-0217 |
| Control Solution %: | 0.100% | | | Expires: | 07/23/2020 |
| Solution Control Lot: | 18220 | | | Bottle No.: | 0167 |

| Function | Result %BAC | Time HH:MM | Temperature Simulator (°C) | Comment(s) or Error(s) |
|---|---|---|---|---|
| Ambient Air Blank | 0.000% | 09:31D | | |
| Control 1 EC | 0.099% | 09:32D | 33.9°C | *** TEST PASSED *** |
| Control 1 IR | 0.100% | 09:32D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:33D | | |
| Control 2 EC | 0.099% | 09:34D | 34.0°C | *** TEST PASSED *** |
| Control 2 IR | 0.100% | 09:34D | 34.0°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:34D | | |
| Control 3 EC | 0.098% | 09:35D | 33.9°C | *** TEST PASSED *** |
| Control 3 IR | 0.100% | 09:35D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:36D | | |

All tests within acceptable tolerance.

**Coordinator**

Last Name: LUTZ First Name: DENNIS MI: J

Signature: Tpr I Dennis 7045 Badge No.: 7045

Date: 09/24/2019

Pursuant to law, and the "Chemical Breath Testing Regulations" N.J.A.C. 13:51, I am a duly appointed Breath Test Coordinator/Instructor. In my official capacity, and consistent with "Calibration Check Procedure for Alcotest 7110," as established by the Chief Forensic Scientist of the Division of State Police, I perform calibration checks on approved instruments employing infrared analysis and electrochemical analysis, when utilized in a single approved instrument as a dual system of chemical breath testing. Pursuant to, and consistent with, the current "Calibration Check Procedure for Alcotest 7110," as established by the Chief Forensic Scientist, I performed a Calibration Check on the approved instrument identified on this certificate. The results of my Calibration Check are recorded on this certificate, which consists of two parts on two pages: Part I - Control Tests; and Part II - Linearity Tests. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are wilfully false, I am subject to punishment.

# Alcotest 7110 Calibration Certificate

## Part II - Linearity Tests

| | | | | | |
|---|---|---|---|---|---|
| **Equipment** | Alcotest 7110 MKIII-C | | | Serial No.: | ARXA-0056 |
| Location: | LONG BRANCH POLICE DEPT | | | | |
| Calibration File No.: | 00802 | Calib. Date: | 09/24/2019 | Calib. No.: | 00031 |
| Certification File No.: | 00803 | Cert. Date: | 09/24/2019 | Cert. No.: | 00025 |
| Linearity File No.: | 00804 | Lin. Date: | 09/24/2019 | Lin. No.: | 00025 |
| Solution File No.: | 00798 | Soln. Date: | 09/08/2019 | Soln. No.: | 00165 |
| Sequential File No.: | 00804 | File Date: | 09/24/2019 | | |
| Calibrating Unit: | WET | Model No.: | CU-34 | Serial No.: | DDSC S3-0001 |
| Control Solution %: | 0.040% | | | Expires: | 07/31/2020 |
| Solution Control Lot: | 18240 | | | Bottle No.: | 0763 |
| Calibrating Unit: | WET | Model No.: | CU-34 | Serial No.: | DDXC S3-0020 |
| Control Solution %: | 0.080% | | | Expires: | 08/06/2020 |
| Solution Control Lot: | 18250 | | | Bottle No.: | 1446 |
| Calibrating Unit: | WET | Model No.: | CU-34 | Serial No.: | DDMK S3-0008 |
| Control Solution %: | 0.160% | | | Expires: | 08/21/2020 |
| Solution Control Lot: | 18260 | | | Bottle No.: | 1458 |

| Function | Result %BAC | Time HH:MM | Temperature Simulator (°C) | Comment(s) or Error(s) |
|---|---|---|---|---|
| Ambient Air Blank | 0.000% | 09:49D | | |
| Control 1 EC | 0.042% | 09:49D | 33.9°C | *** TEST PASSED *** |
| Control 1 IR | 0.040% | 09:49D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:51D | | |
| Control 2 EC | 0.041% | 09:52D | 33.9°C | *** TEST PASSED *** |
| Control 2 IR | 0.039% | 09:52D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:53D | | |
| Control 3 EC | 0.082% | 09:54D | 34.0°C | *** TEST PASSED *** |
| Control 3 IR | 0.079% | 09:54D | 34.0°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:56D | | |
| Control 4 EC | 0.080% | 09:57D | 34.0°C | *** TEST PASSED *** |
| Control 4 IR | 0.080% | 09:57D | 34.0°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 09:58D | | |
| Control 5 EC | 0.161% | 09:59D | 34.0°C | *** TEST PASSED *** |
| Control 5 IR | 0.159% | 09:59D | 34.0°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 10:01D | | |
| Control 6 EC | 0.159% | 10:01D | 34.0°C | *** TEST PASSED *** |
| Control 6 IR | 0.158% | 10:01D | 34.0°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 10:03D | | |

All tests within acceptable tolerance.

**Coordinator**

Last Name: LUTZ First Name: DENNIS MI: J

Signature: Tpr I Dennis 7045 Badge No.: 7045

Date: 09/24/2019

# Calibrating Unit
# New Standard Solution Report

| | | | | | |
|---|---|---|---|---|---|
| **Equipment** | Alcotest 7110 MKIII-C | | | Serial No.: | ARXA-0056 |
| Location: | LONG BRANCH POLICE DEPT | | | | |
| Calibration File No.: | 00802 | Calib. Date: | 09/24/2019 | Calib. No.: | 00031 |
| Certification File No.: | 00803 | Cert. Date: | 09/24/2019 | Cert. No.: | 00025 |
| Linearity File No.: | 00804 | Lin. Date: | 09/24/2019 | Lin. No.: | 00025 |
| Solution File No.: | 00805 | Soln. Date: | 09/24/2019 | Soln. No.: | 00166 |
| Sequential File No.: | 00805 | File Date: | 09/24/2019 | | |
| Calibrating Unit: | WET | Model No.: | CU-34 | Serial No.: | DDXN S3-0217 |
| Control Solution %: | 0.100% | | | Expires: | 02/11/2021 |
| Solution Control Lot: | 19060 | | | Bottle No.: | 0687 |

| Function | Result %BAC | Time HH:MM | Temperature Simulator (°C) | Comment(s) or Error(s) |
|---|---|---|---|---|
| Ambient Air Blank | 0.000% | 11:20D | | |
| Control 1 EC | 0.100% | 11:20D | 33.9°C | *** TEST PASSED *** |
| Control 1 IR | 0.099% | 11:20D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 11:21D | | |
| Control 2 EC | 0.099% | 11:22D | 33.9°C | *** TEST PASSED *** |
| Control 2 IR | 0.100% | 11:22D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 11:23D | | |
| Control 3 EC | 0.099% | 11:24D | 33.9°C | *** TEST PASSED *** |
| Control 3 IR | 0.097% | 11:24D | 33.9°C | *** TEST PASSED *** |
| Ambient Air Blank | 0.000% | 11:25D | | |

All tests within acceptable tolerance.

On this date, I installed the above indicated "NEW SOLUTION" in acordance with Alcotest 7110 operator training and procedures established by the (NJSP) Chief Forensic Scientist.

Temperature Probe Serial Number: DDEEP2-090 DL

**Changed By:**

Last Name: LUTZ First Name: DENNIS MI: J

Signature: Tpr I Lutz 7045 Badge No.: 7045

Date: 09/24/2019

# Alcotest 7110 MKIII-C Calibration
# NIST-Traceable Digital Thermometer Readings

**Coordinator:**

Tpr I Dennis J Lutz — Name

7045 — Badge No.

**Location:**

Long Branch Police Dept — Agency

ARXA-0056 — Alcotest Serial No.

**Equipment:**

191 959 029

Digital NIST Temperature Measuring System Serial No.

| Simulator Solution Concentration | CU-34 Simulator Serial No. | Time Simulators Started to Heat | Time Temp. Reading Obtained | Temp. Reading on NIST Traceable Thermometer |
|---|---|---|---|---|
| 0.04% | DDSCS3-0001 | 08:08 D | 09:17 D | 33.9°C |
| 0.08% | DDXCS3-0020 | 08:08 D | 09:17 D | 34.0°C |
| 0.10% | DDXNS3-0217 | 08:08 D | 09:18 D | 34.0°C |
| 0.16% | DDMKS3-0008 | 08:08 D | 09:19 D | 34.0°C |

Pursuant to law and the "Chemical Breath Testing Regulations" established at N.J.A.C. 13:51, I am a duly appointed Breath Test Coordinator/Instructor. In my official capacity and consistent with the "Calibration Check Procedure for Alcotest 7110" as established by the Chief Forensic Scientist of the Division of State Police, I perform calibration checks on Alcotest 7110 MKIII-C instruments. Pursuant to and consistent with the current "Calibration Check Procedure for Alcotest 7110", I performed a Calibration Check Procedure on the Alcotest 7110 MKIII-C instrument identified on this certificate. Pursuant to the current "Calibration Check Procedure for Alcotest 7110", I used the Digital NIST-traceable Temperature Measuring System identified on this certificate to confirm that the temperatures of the 0.10%, 0.04%, 0.08%, and 0.16% Simulator Solutions used in the respective CU-34 Simulators identified on this certificate, were 34.0 degrees Celsius ± 0.2 degrees Celsius. I hereby certify that I truthfully recorded on this certificate the temperatures of each of the simulator solutions as shown on the Digital NIST-traceable Temperature Measuring System thermometer. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

Tpr I [signature] 7045

**Coordinator's Signature**

9-24-19

**Date**

Dräger

## Simulator

# CERTIFICATE OF ACCURACY

This Certificate of Accuracy verifies that the specified unit has been examined and found to be in compliance with National Highway and Traffic Safety Administration regulations for devices used to calibrate Evidential Breath Testers.
(F.R. Vol. 59 No. 249 12/19/94 Notices)
**Draeger, Inc.**

- ⊘ Model: ALCOTEST CU34
- ○ Model: MARK IIA
- ○ X-Cal 2000 (Alcosim)
- ○ Other: _____

Serial Number: DDFS3-0001

Certification Date: 7-18-19

Technician: BS

Re-Certification Due Date: 7-18-20

Dräger

Simulator

CERTIFICATE OF ACCURACY

This Certificate of Accuracy verifies that the specified unit has been examined and found to be in compliance with National Highway and Traffic Safety Administration regulations for devices used to calibrate Evidential Breath Testers.
(F.R. Vol. 59 No. 249 12/19/94 Notices)
Draeger, Inc.

- ⊘ Model: ALCOTEST CU34
- ○ Model: MARK IIA
- ○ X-Cal 2000 (Alcosim)
- ○ Other: _____

Serial Number: DDXCS3-0020

Certification Date: 7-18-19

Technician: BS

Re-Certification Due Date: 7-18-20

Dräger

## Simulator

# CERTIFICATE OF ACCURACY

This Certificate of Accuracy verifies that the specified unit has been examined and found to be in compliance with National Highway and Traffic Safety Administration regulations for devices used to calibrate Evidential Breath Testers.
(F.R. Vol. 59 No. 249 12/19/94 Notices)
**Draeger, Inc.**

- ⊘ Model: ALCOTEST CU34
- ○ Model: MARK IIA
- ○ X-Cal 2000 (Alcosim)
- ○ Other: _____

Serial Number: DDMKS3-0008

Certification Date: 7-18-19

Technician: BS

Re-Certification Due Date: 7-18-20

Dräger

## Alcotest 7110 Temperature Probe

# CERTIFICATE OF ACCURACY

This is to certify that the Alcotest 7110 Temperature Probe has been tested for accuracy with with instrumentation that is traceable to the National Institute of Standards and Technology (NIST). The manufacturer recommends accuracy verification of the Temperature Probe within 12 months of the certification date below, or sooner, according to your state's specifications. For accurate temperature readings, the probe value on this certificate, noted below, must be programmed into the Alcotest 7110.

Serial Number Temp Probe: DDEEP2-060

Certification Date: 7-18-19

Next Certification Due: 7-18-20

Probe Value: 104

**Draeger, Inc.** BS

# Calibration complies with ISO/IEC 17025, ANSI/NCSL Z540-1, and 9001

ACCREDITED
A2LA Certificate No. 1750.01
Calibration

**Cert. No.: 4000-10177848**

## Traceable® Certificate of Calibration for Digital Thermometer

Manufactured for and distributed by : VWR International LLC Radnor Corporate Center, Bldg 1,Ste 200, 100 Matsonford Road,Radnor,PA,19087

### Instrument Identification:

Model: 61220-601, S/N: 191959029 Manufacturer: Control Company

### Standards/Equipment:

| Description | Serial Number | Due Date | NIST Traceable Reference |
|---|---|---|---|
| Temperature Calibration Bath | 93139 | | |
| Thermistor Module | A17118 | 20 Apr 2019 | 1000424560 |
| Thermistor Module | A27129 | 10 Jan 2020 | 1000436202 |
| Temperature Calibration Bath | A73332 | | |
| Temperature Probe | 3039 | 08 May 2019 | 6-B7F4L-20-1 |
| Temperature Calibration Bath | A79341 | | |
| Temperature Probe | 5394 | 29 Jan 2020 | B9124038 |
| Temperature Calibration Bath | B16388 | | |
| Temperature Probe | 5267 | 28 Jan 2020 | B9124036 |

### Certificate Information:

Technician: 104 Procedure: CAL-06 Cal Date: 13 Feb 2019 Cal Due Date: 13 Feb 2021

Test Conditions: 38.85%RH 24.21°C 1023mBar

### Calibration Data: (New Instrument)

| Unit(s) | Nominal | As Found | In Tol | Nominal | As Left | In Tol | Min | Max | ±U | TUR |
|---|---|---|---|---|---|---|---|---|---|---|
| °C | N.A. | N.A. | | -0.002 | 0.001 | Y | -0.052 | 0.048 | 0.0087 | >4:1 |
| °C | N.A. | N.A. | | 24.999 | 25.000 | Y | 24.949 | 25.049 | 0.0087 | >4:1 |
| °C | N.A. | N.A. | | 50.001 | 50.000 | Y | 49.951 | 50.051 | 0.0087 | >4:1 |
| °C | N.A. | N.A. | | 100.000 | 100.002 | Y | 99.95 | 100.05 | 0.0087 | >4:1 |

**This certificate indicates Traceability to standards provided by (NIST) National Institute of Standards and Technology and/or a National Standards Laboratory.**

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement : (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Min=As Left Nominal(Rounded) – Tolerance; Max= As Left Nominal(Rounded) + Tolerance;

Nicol Rodriguez

Nicol Rodriguez, Quality Manager

Aaron Judice, Technical Manager

Note :

### Maintaining Accuracy:

In our opinion once calibrated your Digital Thermometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Thermometer change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

### Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

**CONTROL COMPANY 12554 Galveston RD Suite B230 Webster TX USA 77598**
**Phone 281 482-1714 Fax 281 482-9448 sales@control3.com www.control3.com**

## Traceable® Certificate of Calibration for Digital Thermometer

CONTROL COMPANY 12554 Galveston RD Suite B230 Webster TX USA 77598
Phone 281 482-1714 Fax 281 482-9448 sales@control3.com www.control3.com