



# ILLIANA INSTRUMENTATION

1831 Govert Drive Schererville, IN 46375 Phone (219)227-8788 Fax (219)515-6161

## CERTIFICATE OF CALIBRATION

### CUSTOMER:

Illiana Instrumentation Service  
1831 Govert Drive  
Schererville, IN 46375

### MISCELLANEOUS DETAILS:

Date Received 3/21/22  
Certification Date: 3/21/22  
Recalibration Date: 3/31/23  
Cal. Number: 1216-032122  
P.O. Number:  
Location of Calibration: Lab  
Detailed Results Attached: YES  
Procedure Used: Fluke Procedure

### EQUIPMENT CALIBRATED

MANUFACTURER:	Fluke
MODEL:	725
SERIAL NUMBER:	7624249
ITEM NUMBER:	1216
DESCRIPTION:	Calibrator
CONDITION AS FOUND:	Good, unless otherwise noted on reports

### STANDARDS USED/UNCERTAINTIES

Item 1546 Fluke 525B; Item 1205 HP34401A, SN 3146A01748

### TEST CONDITIONS

TEMPERATURE	70 Deg F.
HUMIDITY	40%

CERTIFIED BY: *Oliver* TITLE: SERVICE TECHNICIAN DATE 3/21/22

APPROVED BY: *Janna Grava* TITLE: ASST. QUALITY MANAGER DATE 3/21/22

This certifies that the above equipment was calibrated using appropriate Illiana Instrumentation technical procedures. At planned intervals, Illiana Instrumentation standards are calibrated by comparison to or measurement against standards which are traceable to the SI units through the NIST or other recognized national measurement institutes or international standard bodies. The results in this report relate only to the item(s) calibrated. If so indicated above, detailed calibration results are attached to this certificate. These results are part of this certificate and this certificate shall not be reproduced except in full, without the written approval of Illiana Instrumentation. Any number of factors not under the control of the calibration laboratory may cause the calibration of the above item(s) to drift before the recommended recalibration date. Supporting documentation relative to traceability and technical procedures used is on file and is available for examination upon request and approval of our quality assurance manager. The above uncertainties represent an expanded uncertainty expressed at approximately 95% confidence level using a coverage factor of k=2. The date this report is signed constitutes the issue date. Pass/Fail criteria does not take into account measurement uncertainty.

Item	1216 Fluke 725								
Accuracy:	Varies By Range								
Date:	3/21/2022								
Intentional Offset as Found	None								
Intentional Offset as Left	None								
Limitations	None								
Input range	Eng. Units	Cal Pt	Upper	lower	Initial	Final	Sensitivity	Unc.	
							Check		
Meas VDC Upper Display	VDC	0	0.002	-0.002	0	0	OK	0.000005	
		15	15.005	14.995	14.999	14.999	OK	0.000005	
		30	30.008	29.992	29.998	29.998	OK	0.000005	
Meas mVDC on lower display	mDVC	0	0.02	-0.02	0	0	OK	0.0032	
		45	45.03	44.97	45	45	OK	0.0032	
		90	90.04	89.96	90	90	OK	0.0032	
Lower display voltage measure	VDC	0	0.002	-0.002	0	0	OK	0.000005	
		10	10.004	9.996	10	10	OK	0.000005	
		20	20.006	19.994	20	20	OK	0.000005	
Meas mADC 30 mADC upper display	mADC	4	4.003	3.997	3.999	3.999	OK	0.0016	
		12	12.005	11.995	11.998	11.998	OK	0.0016	
		24	24.007	23.993	23.997	23.997	OK	0.0057	
Meas mADC 30 mADC lower display	mADC	4	4.003	3.997	3.999	3.999	OK	0.0016	
		12	12.005	11.995	11.998	11.998	OK	0.0016	
		24	24.007	23.993	23.997	23.997	OK	0.0057	
Frequency source lower display	kHz	10	10.025	9.975	9.99993	9.99993	OK	0.0033	
Lower display 4 wire resistance measure	Ohms	15	15.1	14.9	15.01	15.01	OK	0.025	
		350	350.1	349.9	350.1	350.1	OK	0.025	
		500	500.5	499.5	500.1	500.1	OK	0.049	
Lower display 3 wire RTD measure	Ohms	350	350.2	349.8	350.1	350.1	OK	0.049	
Measure K	C	-180	-179.4	-180.6	-180.1	-180.1	OK	0.17	
Measure K	C	0	0.6	-0.6	0	0	OK	0.17	
Measure K	C	400	400.6	399.4	399.9	399.9	OK	0.17	
Measure K	C	800	800.8	799.2	800	800	OK	0.17	
Measure K	C	1000	1001	999	999.9	999.9	OK	0.17	
Measure K	C	1300	1301.3	1298.7	1299.9	1299.9	OK	0.17	
Simulate K	C	-180	-179.4	-180.6	-179.7	-179.7	OK	0.16	
Simulate K	C	0	0.6	-0.6	0.2	0.2	OK	0.16	
Simulate K	C	400	400.6	399.4	399.9	399.9	OK	0.16	
Simulate K	C	800	800.8	799.2	799.9	799.9	OK	0.16	
Simulate K	C	1000	1001	999	999.9	999.9	OK	0.16	
Simulate K	C	1300	1301.3	1298.7	1299.9	1299.9	OK	0.16	
Measure J	C	-200	-199.4	-200.6	-200.2	-200.2	OK	0.15	
Measure J	C	0	0.6	-0.6	-0.1	-0.1	OK	0.15	
Measure J	C	300	300.6	299.4	299.8	299.8	OK	0.15	
Measure J	C	600	600.6	599.4	599.9	599.9	OK	0.15	
Measure J	C	900	900.9	899.1	899.8	899.8	OK	0.15	
Measure J	C	1200	1201.2	1198.8	1199.9	1199.9	OK	0.15	
Simulate J	C	-200	-199.4	-200.6	-199.7	-199.7	OK	0.13	
Simulate J	C	0	0.6	-0.6	0.2	0.2	OK	0.13	
Simulate J	C	300	300.6	299.4	300.1	300.1	OK	0.13	
Simulate J	C	600	600.6	599.4	600.2	600.2	OK	0.13	
Simulate J	C	900	900.9	899.1	900.2	900.2	OK	0.13	
Simulate J	C	1200	1201.2	1198.8	1200.1	1200.1	OK	0.13	

Input range	Eng. Units	Cal Pt	Upper	lower	Initial	Final	Sensitivity	Unc.
							Check	
Measure S	C	1000	1001	999	999	999	OK	0.67
Measure S	C	1150	1151.5	1148.5	1149	1149	OK	0.58
Measure S	C	1300	1301.3	1298.7	1299	1299	OK	0.58
Measure S	C	1450	1451.5	1448.5	1449	1449	OK	0.58
Measure S	C	1600	1601.6	1598.4	1599	1599	OK	0.58
Measure S	C	1750	1751.75	1748.25	1749	1749	OK	0.58
Simulate S	C	1000	1001	999	999.2	999.2	OK	0.67
Simulate S	C	1150	1151.5	1148.5	1149.9	1149.9	OK	0.58
Simulate S	C	1300	1301.3	1298.7	1299.3	1299.3	OK	0.58
Simulate S	C	1450	1451.5	1448.5	1449.2	1449.2	OK	0.58
Simulate S	C	1600	1601.6	1598.4	1599.5	1599.5	OK	0.58
Simulate S	C	1750	1751.75	1748.25	1749.4	1749.4	OK	0.58
Measure N	C	0	0.6	-0.6	-0.4	-0.4	OK	0.2
Measure N	C	200	200.6	199.4	199.6	199.6	OK	0.2
Measure N	C	500	500.6	499.4	499.6	499.6	OK	0.2
Measure N	C	800	800.8	799.2	799.7	799.7	OK	0.2
Measure N	C	1100	1101.1	1098.9	1099.6	1099.6	OK	0.2
Measure N	C	1300	1301.3	1298.7	1299.6	1299.6	OK	0.2
Source N	C	0	0.6	-0.6	-0.4	-0.4	OK	0.18
Source N	C	200	200.6	199.4	200.3	200.3	OK	0.18
Source N	C	500	500.6	499.4	500.4	500.4	OK	0.18
Source N	C	800	800.8	799.2	800.2	800.2	OK	0.18
Source N	C	1100	1101.1	1098.9	1100.3	1100.3	OK	0.18
Source N	C	1300	1301.3	1298.7	1300.3	1300.3	OK	0.18
Measure T	C	-200	-199.4	-200.6	-199.8	-199.8	OK	0.74
Measure T	C	0	0.6	-0.6	0	0	OK	0.35
Measure T	C	100	100.6	99.4	100.1	100.1	OK	0.35
Measure T	C	200	200.6	199.4	200	200	OK	0.35
Measure T	C	300	300.6	299.4	300.1	300.1	OK	0.35
Measure T	C	400	400.6	399.6	400	400	OK	0.35
Source T	C	-200	-199.4	-200.6	-200.3	-200.3	OK	0.73
Source T	C	0	0.6	-0.6	-0.1	-0.1	OK	0.33
Source T	C	100	100.6	99.4	99.9	99.9	OK	0.33
Source T	C	200	200.6	199.4	199.9	199.9	OK	0.33
Source T	C	300	300.6	299.4	299.9	299.9	OK	0.33
Source T	C	400	400.6	399.6	399.9	399.9	OK	0.33
Source mADC lower display	mADC	4	4.0028	3.9972	4.0002	4.0002	OK	0.01
		12	12.0044	11.9956	12.000	12.000	OK	0.01
		24	24.0068	23.9932	24.001	24.001	OK	0.012
Source mVDC lower display	mVDC	0	0.02	-0.02	0	0	OK	0.0045
		45	45.03	44.97	44.999	44.999	OK	0.01
		100	100.04	99.96	99.999	99.999	OK	0.01
Source VDC lower display	VDC	0	0.002	-0.002	0.00000	0.00000	OK	0.0000045
		5	5.003	4.997	5.0002	5.0002	OK	0.00053
		10	10.004	9.996	10.0001	10.0001	OK	0.0058
Lower display ohm source	Ohms	15	15.1	14.9	15	15	OK	0.0018
		360	360.1	359.9	360.01	360.01	OK	0.016
		500	500.5	499.5	499.98	499.98	OK	0.016
		1500	1500.5	1499.5	1500.2	1500.2	OK	0.016
		3200	3201	3199	3200.2	3200.2	OK	0.016