

# Indiana Standards Laboratory

2919 SHELBY STREET  
INDIANAPOLIS, INDIANA 46203-5236

## REPORT of CALIBRATION

DATE : 09/18/12 TEST NUMBER : 118099  
MANUFACTURER : Gould-Bass Company, Inc. MODEL NUMBER : DLM-1500  
NOMENCLATURE : Radiometer SERIAL NUMBER : 0815024A  
TOLERANCE :  $\pm 1\%$  reading  $\pm 1$  digit comparative  
  
MACHINE NUMBER : TJLM-005  
SUBMITTED BY : Eaton Industries-San Diego P.O. NUMBER : P207217  
1659 Gables Blvd.  
Brokerage & Logistics  
San Diego, CA 92154-  
PROCEDURE : ISL-010-RADMT-03-0612 TEMPERATURE : 23 °C  
CAL INTERVAL : 6 Months HUMIDITY : 48 %RH  
PREVIOUS TEST NO. : 112581 NEXT CAL DUE : 03/18/13  
TECHNICIAN : JAD  
RCVD CONDITION : In-tolerance  
RETURNED CONDITION : In-tolerance, no adjustments required.  
COMMENTS :

CALIBRATION SOURCE(S) : 112850

UNCERTAINTY:  $\pm 0.1\%$  reading

The customer should consider the uncertainty of the measurement in determining compliance.

The reported uncertainty is based on the standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

Uncertainty is not taken into account in pass / fail function checks.

OK  
JAD  
NDT Level 3

## CERTIFICATION

After careful inspection of the above-described instrument, tests were performed in-laboratory to establish calibration accuracy. All equipment utilized in the testing is maintained by this laboratory and checked frequently against standards that have been certified traceable to SI Units through National Institute of Standards and Technology (NIST) or another National Metrology Institute (NMI).

It is hereby certified that the test instrument meets all the original manufacturer's performance specifications unless otherwise noted above. Test documentation is on file and may be viewed in our office. Testing was completed per ISL Quality Manual: Doc-001-Rev15 dated 08-23-12, and ISO/IEC 17025:2005, L-A-B Accredited Certificate Number L-2222.

Richard F. Chance



*[Signature]*  
Chief, Metrology

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DATE	: 09/18/12	TEST NUMBER	: 118099
MANUFACTURER	: Gould-Bass Company, Inc.	MODEL NUMBER	: DLM-1500
NOMENCLATURE	: Radiometer	SERIAL NUMBER	: 0815024A
TOLERANCE	: $\pm 1\%$ reading $\pm 1$ digit comparative		

## CALIBRATION SOURCES

Source	Manufacturer	Nomenclature	Model	Serial	Cal Due
112850	Fluke Corp.	Calibrator, Multifunction	5100B	4855003	01/31/13

## CALIBRATION DATA

mV Input	Previous Test (counts)	Current Test (counts)
190	1899	1899
100	1000	1000
75	750	750
10	100	100
0	0	0

\*Out-of-tolerance    \*\*Indeterminate    Ø = Fixed Zero    Note: Uncertainty is not taken into account in pass / fail function checks.

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## REPORT of CALIBRATION

DATE : 09/18/12 TEST NUMBER : 118100  
MANUFACTURER : Gould-Bass Company, Inc. MODEL NUMBER : DLM-1500  
NOMENCLATURE : Sensor, Light, White, Lux SERIAL NUMBER : 0815024L  
TOLERANCE :  $\pm$  (5% reading + 1 lsd)  
  
MACHINE NUMBER : TJLM-005  
SUBMITTED BY : Eaton Industries-San Diego P.O. NUMBER : P207217  
1659 Gailles Blvd.  
Brokerage & Logistics  
San Diego, CA 92154-  
PROCEDURE : ISL-080-WHTLT-03-0712 TEMPERATURE : 23 °C  
CAL INTERVAL : 6 Months HUMIDITY : 54 %RH  
PREVIOUS TEST NO. : 112582 NEXT CAL DUE : 03/18/13  
TECHNICIAN : JAD  
RCV'D CONDITION : Out-of-tolerance  
RETURNED CONDITION : In-tolerance after adjustment or repair.  
COMMENTS : Adjusted to standard

CALIBRATION SOURCE(S) : 117053 118062

UNCERTAINTY: Refer to data

The customer should consider the uncertainty of the measurement in determining compliance.

The reported uncertainty is based on the standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

Uncertainty is not taken into account in pass / fail function checks.

OK  
NOT  
LEVEL 3  
11/12/12

## CERTIFICATION

After careful inspection of the above-described instrument, tests were performed in-laboratory to establish calibration accuracy. All equipment utilized in the testing is maintained by this laboratory and checked frequently against standards that have been certified traceable to SI Units through National Institute of Standards and Technology (NIST) or another National Metrology Institute (NMI).

It is hereby certified that the test instrument meets all the original manufacturer's performance specifications unless otherwise noted above. Test documentation is on file and may be viewed in our office. Testing was completed per ISL Quality Manual: Doc-001-Rev15 dated 08-23-12, and ISO/IEC 17025:2005, L-A-B Accredited Certificate Number L-2222.

Richard F. Chance



*[Signature]*  
Chief, Metrology

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DATE	: 09/18/12	TEST NUMBER	: 118100
MANUFACTURER	: Gould-Bass Company, Inc.	MODEL NUMBER	: DLM-1500
NOMENCLATURE	: Sensor, Light, White, Lux	SERIAL NUMBER	: 0815024L
TOLERANCE	: $\pm$ (5% reading + 1 lsd)		

## CALIBRATION SOURCES

Source	Manufacturer	Nomenclature	Model	Serial	Cal Due
117053	International Light	Radiometer	IL1700	811	07/31/13
118062	International Light	Detector, Light, White	SED 033	5648/Y19235/W8789	09/30/13

## CALIBRATION DATA

Measured (lx)	As Found (lx)	As Left (lx)	Uncertainty $\pm$ (lx)
0	0	0	0.58
30	352*	324	6.9
70	813*	753	16
150	1761*	1619	35
180	over range	1946	42

\*Out-of-tolerance    \*\*Indeterminate    Ø = Fixed Zero    Note: Uncertainty is not taken into account in pass / fail function checks.

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## REPORT of CALIBRATION

DATE : 09/18/12 TEST NUMBER : 118101  
MANUFACTURER : Gould-Bass Company, Inc. MODEL NUMBER : DLM-1500  
NOMENCLATURE : Sensor, Luminance SERIAL NUMBER : 0815024F  
TOLERANCE :  $\pm$  (5% reading + 1 lsd)  
  
MACHINE NUMBER : TJLM-005  
SUBMITTED BY : Eaton Industries-San Diego P.O. NUMBER : P207217  
1659 Gailles Blvd.  
Brokerage & Logistics  
San Diego, CA 92154-  
PROCEDURE : ISL-080-LUMINLT-03-0712 TEMPERATURE : 21 °C  
CAL INTERVAL : 6 Months HUMIDITY : 48 %RH  
PREVIOUS TEST NO. : 112583 NEXT CAL DUE : 03/18/13  
TECHNICIAN : JAD  
RCV'D CONDITION : Out-of-tolerance  
RETURNED CONDITION : In-tolerance after adjustment or repair.  
COMMENTS : Adjusted to standard

CALIBRATION SOURCE(S) : 117053 118063

UNCERTAINTY: Refer to data

The customer should consider the uncertainty of the measurement in determining compliance.

The reported uncertainty is based on the standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

Uncertainty is not taken into account in pass / fail function checks.

OK [Signature] 11/12/12

## CERTIFICATION

After careful inspection of the above-described instrument, tests were performed in-laboratory to establish calibration accuracy. All equipment utilized in the testing is maintained by this laboratory and checked frequently against standards that have been certified traceable to SI Units through National Institute of Standards and Technology (NIST) or another National Metrology Institute (NMI).

It is hereby certified that the test instrument meets all the original manufacturer's performance specifications unless otherwise noted above. Test documentation is on file and may be viewed in our office. Testing was completed per ISL Quality Manual: Doc-001-Rev15 dated 08-23-12, and ISO/IEC 17025:2005, L-A-B Accredited Certificate Number L-2222.

Richard F. Chance



[Signature]

Chief, Metrology

[Signature]

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DATE	: 09/18/12	TEST NUMBER	: 118101
MANUFACTURER	: Gould-Bass Company, Inc.	MODEL NUMBER	: DLM-1500
NOMENCLATURE	: Sensor, Luminance	SERIAL NUMBER	: 0815024F
TOLERANCE	: $\pm$ (5% reading + 1 lsd)		

## CALIBRATION SOURCES

Source	Manufacturer	Nomenclature	Model	Serial	Cal Due
117053	International Light	Radiometer	IL1700	811	07/31/13
118063	International Light	Detector, Light, Luminance	SED 033	5648/Y19235/R#691	09/30/13

## CALIBRATION DATA

Measured (fL)	As Found (fL)	As Found (fL)	Uncertainty $\pm$ (fL)
0	0	0	58
700	500*	700	60
1100	600*	1000	62
2000	1500*	2000	74
3000	2300*	3000	90
5000	4000*	5100	129
10000	7900*	10200	237
20000	17100*	20500	464
30000	25400*	30800	693

\*Out-of-tolerance    \*\*Indeterminate    Ø = Fixed Zero    Note: Uncertainty is not taken into account in pass / fail function checks.

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