

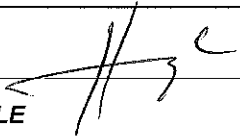


Dytran Instruments, Inc.

21592 Marilla St. Chatsworth, CA 91311 Ph: 818-700-7818 Fax 818-700-7880
www.dytran.com email: info@dytran.com

CALIBRATION CERTIFICATE LIVM HIGH INTENSITY MICROPHONE



CUSTOMER: ALLIANTECH SAS		TEST REPORT #: 2295		8/16/2013		
PURCHASE ORDER #: FB100340		SALES ORDER #: 160836		PROCEDURE: TP2006		
MODEL: 2013D		SERIAL #: 2295		TEMP (°C): 22		
HUMIDITY (%): 46						
NEW UNIT	X	RE-CALIBRATION [1]		AS RECEIVED CODE	AS RETURNED CODE	
CALIBRATION PERFORMED AT 1000 Hz			RESOLUTION (dB) [2]: 78.7			
BIAS VOLTAGE (VDC) 12.6			RANGE, F.S. (psi): 2.56 , 178.93 dB [2]			
SOUND PRESSURE LEVEL (dB)		SENSOR OUTPUT LEVEL (mV)		SENSOR SENSITIVITY (mV/psi)		
130		18.49		2009.78		
140		55.17		1902.41		
150		176.7		1920.65		
160		565.80		1951.03		
TEST EQUIPMENT LIST - CALIBRATION STATION # 7						
DII #	MANUFACTURER	MODEL	SERIAL #	DESCRIPTION	CAL DATE	DUE DATE
017	NICOLET	310	IAQ9406710	DIGITAL OSCILLOSCOPE	06/07/12	09/07/13
1113	DYTRAN INST.	2013D	2232	MICROPHONE	09/07/12	09/07/13
1439	FLUKE	8808A	475791	MULTIMETER	10/10/12	10/10/13
<p>[1] AS RECEIVED / AS RETURNED CODES:</p> <p>1 = IN TOLERANCE, NO ADJUSTMENTS 4 = OUT OF TOLERANCE > 5% 7 = UNIT NON-REPAIRABLE, RECOMMEND REPLACEMENT 2 = IN TOLERANCE, BUT ADJUSTED 5 = REPAIR REQUIRED 8 = UNIT SERVICEABLE WITH CURRENT CALIBRATION DATA 3 = OUT OF TOLERANCE < 5% 6 = REPAIRED AND CALIBRATED</p> <p>[2] ZERO dB REFERENCE = .0002 DYNE / CM² OR 2.9 X 10⁻⁹ PSI.</p> <p>THIS CALIBRATION WAS PERFORMED PER MIL-STD-45662A, ANSI/NCSL Z540-1-1994, ISO 10012-1 WITH A NIST TRACEABLE NUMBER OF: 822/270212-04, D1209 - ESTIMATED UNCERTAINTY OF CALIBRATION: 2.5%.</p> <p>THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN PERMISSION FROM DYTRAN INSTRUMENTS, INC.</p>						
CALIBRATION TECHNICIAN:  HUNG LE				TEST DATE: 08/16/13		
				RECALL DATE: 08/16/14		



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<p>[1] AS RECEIVED / AS RETURNED CODES:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1 = IN TOLERANCE, NO ADJUSTMENTS</td> <td style="width: 33%;">4 = OUT OF TOLERANCE > 5%</td> <td style="width: 33%;">7 = UNIT NON-REPAIRABLE, RECOMMEND REPLACEMENT</td> </tr> <tr> <td>2 = IN TOLERANCE, BUT ADJUSTED</td> <td>5 = REPAIR REQUIRED</td> <td>8 = UNIT SERVICEABLE WITH CURRENT CALIBRATION DATA</td> </tr> <tr> <td>3 = OUT OF TOLERANCE < 5%</td> <td>6 = REPAIRED AND CALIBRATED</td> <td></td> </tr> </table> <p>[2] ZERO dB REFERENCE = .0002 DYNE / CM² OR 2.9 X 10⁻⁹ PSI.</p> <p>THIS CALIBRATION WAS PERFORMED PER MIL-STD-45662A, ANSI/NCSL Z540-1-1994, ISO 10012-1 WITH A NIST TRACEABLE NUMBER OF: 822/270212-04, D1209 - ESTIMATED UNCERTAINTY OF CALIBRATION: 2.5%.</p> <p>THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN PERMISSION FROM DYTRAN INSTRUMENTS, INC.</p>								1 = IN TOLERANCE, NO ADJUSTMENTS	4 = OUT OF TOLERANCE > 5%	7 = UNIT NON-REPAIRABLE, RECOMMEND REPLACEMENT	2 = IN TOLERANCE, BUT ADJUSTED	5 = REPAIR REQUIRED	8 = UNIT SERVICEABLE WITH CURRENT CALIBRATION DATA	3 = OUT OF TOLERANCE < 5%	6 = REPAIRED AND CALIBRATED	
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