Scantek, Inc.
CALIBRATION LABORATORY

ISO 17025: 2005, ANSI/NCSL Z540:1994 Part 1 and relevant requirements of ISO 9002:1994 ACCREDITED by NVLAP (an ILAC and APLAC signatory)

NVLAP®
NVLAP Lab Code: 200625-0

Calibration Certificate No.20657

Instrument: **Sound Level Meter**
Model: **Piccolo**
Manufacturer: **Soft dB**
Serial number: **090915003**
Tested with:

Type (class): **2**

Customer: **Soft dB, Inc.**
Tel/Fax: **418-686-0993 / 418-686-2043**

Date Calibrated: **11/3/2009**

Status:	Received	Sent
In tolerance:	X	X
Out of tolerance:		
See comments:		

Contains non-accredited tests: __Yes X No
Calibration service: __ Basic X Standard

Address: **1040 Belvedere, 215, Quebec, QC, Canada G1S 3G3**

Tested in accordance with the following procedures and standards:
Calibration of Sound Level Meters, Scantek Inc., 06/07/2005
SLM & Dosimeters – Acoustical Tests, Scantek Inc., 06/15/2005

Instrumentation used for calibration: Nor-1504 Norsonic Test System:

Instrument - Manufacturer	Description	S/N	Cal. Date	Traceability evidence Cal. Lab / Accreditation	Cal. Due
483B-Norsonic	SME Cal Unit	31071	Jul 7, 2009	Scantek, Inc./NVLAP	Jul 7, 2010
DS-360-SRS	Function Generator	88077	Aug 19, 2008	ACR Env./ A2LA	Jan 3, 2010
34401A-Agilent Technologies	Digital Voltmeter	MY47011118	Aug 19, 2009	ACR Env./ A2LA	Aug 19, 2010
HM30-Thommen	Meteo Station	1040170/39633	Jul 10, 2009	Transcat / A2LA	Jul 10, 2010
HMP233-Vaisala Oyj	Humidity & Temp. Transmitter	V3820001	May 7, 2008	Transcat / A2LA	Nov 7, 2009
4226-Bruel&Kjaer	Multifunction calibrator	2305103	Apr 7, 2009	Scantek / NVLAP	Apr 7, 2010
PC Program 1019 Norsonic	Calibration software	v.5.0	Validated July 2009	-	-
1253-Norsonic	Calibrator	30878	Jan 2, 2009	Scantek, Inc./NVLAP	Jan 2, 2010

Instrumentation and test results are traceable to SI (International System of Units) through standards maintained by NIST (USA) and NPL (UK).

Environmental conditions:

Temperature (°C)	Barometric pressure (kPa)	Relative Humidity (%)
23.1 °C	99.629 kPa	55.6 %RH

Calibrated by	Mariana Buzduga	**Checked by**	Valentin Buzduga
Signature		Signature	
Date	11/4/09	Date	11/04/2009

Results summary: Device complies with following clauses of mentioned specifications:

CLAUSES [1] FROM IEC/ANSI STANDARDS REFERENCED IN PROCEDURES:	MET[2,3]	NOT MET	MEASUREMENT EXPANDED UNCERTAINTY (coverage factor 2) [dB]
IEC 60651/ANSI S1.4:			
Level Linearity Test (#7.9/ 6.9)	X		0.15
Differential Level Linearity (#7.10/6.10)	X		0.21
Weighting Network Tests: A, C, Lin network (#7.2.1/ 6.2.1-electrical test)	X		0.15
Overload Detector Test: A-network (#9.3.1/8.3.1)	X		0.15
F/S/I/Peak Test: Steady State Response (#7.4/ 6.4)	X		0.15
Fast and Slow Overshoot Test (# 8.4.1)	X		0.15
Fast-Slow Test: Single Sine Wave Burst (9.4.1&9.4.3/8.4.1 & 8.4.3)	X		0.15
RMS Detector Test: Continuous Sine Wave Burst (#9.4.2/8.4.2)	X		0.15
RMS Detector Test: Crest Factor Test (#9.4.2/ 8.4.2)	X		0.15
IEC60804/ANSI S1.43			
Level linearity Test (# 9.3.3/8.3.3)	X		0.15
Time Averaging Test (#9.3.2/ 8.3.2) (Leq and LE)	X		0.15/0.17
Acoustical Test: Accuracy at selected frequencies	X		0.15
Acoustical tests: Weighting A Network Tests (#7.2.1/ 6.2.1)	X		0.2

[1] The results of this calibration apply only to the instrument type with serial number identified in this report

[2] Parameters are certified at actual environmental conditions

[3] The tests marked with (*) are not covered by the current NVLAP accreditation

Comments: The instrument was tested for the selection of tests listed above and met all specifications found in the referenced procedures

Note: The instrument was tested for the parameters listed in the table above, using the test methods described in the listed standards. All tests were performed around the reference conditions. The test results were compared with the manufacturer's or with the standard's specifications, whichever are larger. Compliance with any standard cannot be claimed based solely on the periodic tests.

Tests made with the following attachments to the instrument:

X	Microphone	for acoustical test
	Preamplifier	for electrical tests
	Other: line adaptor for electrical tests	

Measured Data: in Test Report # 20657 of 7+1 pages.

Place of Calibration: Scantek, Inc.
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Columbia, MD 21045 USA

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