

# ISO 6798-2:2020-02 (E)

## Reciprocating internal combustion engines - Measurement of sound power level using sound pressure - Part 2: Survey method

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms, definitions and symbols .....	1
4	Test environment .....	2
4.1	General .....	2
4.2	Criterion for background noise .....	2
4.3	Criterion for acoustic adequacy of test environment .....	2
5	Instrumentation .....	2
5.1	General .....	2
5.2	Calibration .....	3
5.3	Application .....	3
6	Installation and operation conditions .....	3
6.1	General .....	3
6.2	Installation conditions .....	3
6.3	Engine conditions and operation conditions .....	4
6.3.1	Engine conditions .....	4
6.3.2	Operating conditions .....	4
7	Measurement .....	4
7.1	General .....	4
7.2	Measurement uncertainty .....	5
7.3	Reference box .....	5
7.4	Measurement distance .....	5
7.5	Measurement surface and area .....	5
7.6	Microphone positions .....	5
7.7	Criterion for position adequacy of microphones .....	8
8	Calculation .....	9
8.1	General .....	9
8.2	Calculation of standard deviation of the mean sound pressure level .....	9
8.3	Calculation of sound power level .....	10
8.3.1	Measured surface time-averaged sound pressure levels .....	10
8.3.2	Corrections for background noise .....	10
8.3.3	Environmental correction .....	10
8.3.4	Surface time-averaged sound pressure level .....	10
8.3.5	Sound power level .....	11
9	Information to be recorded .....	11
10	Test report .....	12
Annex A (normative)	Qualification procedures for the acoustic environment .....	13

<b>Annex B (normative) Sound power level under reference meteorological conditions .....</b>	<b>17</b>
<b>Bibliography .....</b>	<b>19</b>