

ISO 6798-2:2020-02 (E)

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

Contents		Page
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

Annex B (normative) Sound power level under reference meteorological conditions	17
Bibliography	19