



CLEPA
*European Association of
Automotive Suppliers*

Informal document No. GRB-49-08
(49th GRB, 16-18 February 2009,
agenda item 4.)

**CLEPA presentation
supporting justification of
working document
GRB 2008/5r1, proposing
amendments to R59.**

Content

1. New driving-by test of R51 in R59

Measurement accuracy

2. Stationary noise test

Paragraph 6.2.2.



Conditions of measurement

- **Measurement accuracy**
 - The current R59 regulation results in some practical inconsistencies and confusions with regard to the measurement accuracy and rounding off practice to the nearest integer dB(A) value.

CLEPA proposes a simplified and uniform rule, taking into account the 1 dB(A) measurement inaccuracy.

Reference noise level of vehicle type approval : Running vehicle
Paragraph 6.2.2.1.(a).

Reference vehicle type approval value is 72 dB(A)	Measured dB(A)	Rounded dB(A)	Result
Replacement system 1	73,9	74	NOK
Replacement system 2	73,5	74	NOK
Replacement system 3	73,4	73	OK
Replacement system 4	73	73	OK
Replacement system 5	72,5	73	OK
Replacement system 6	72,3	72	OK
Replacement system 7	71,8	72	OK

Tolerance 1 dB(A) after rounding off to the nearest integer

Back to back test : Running vehicle

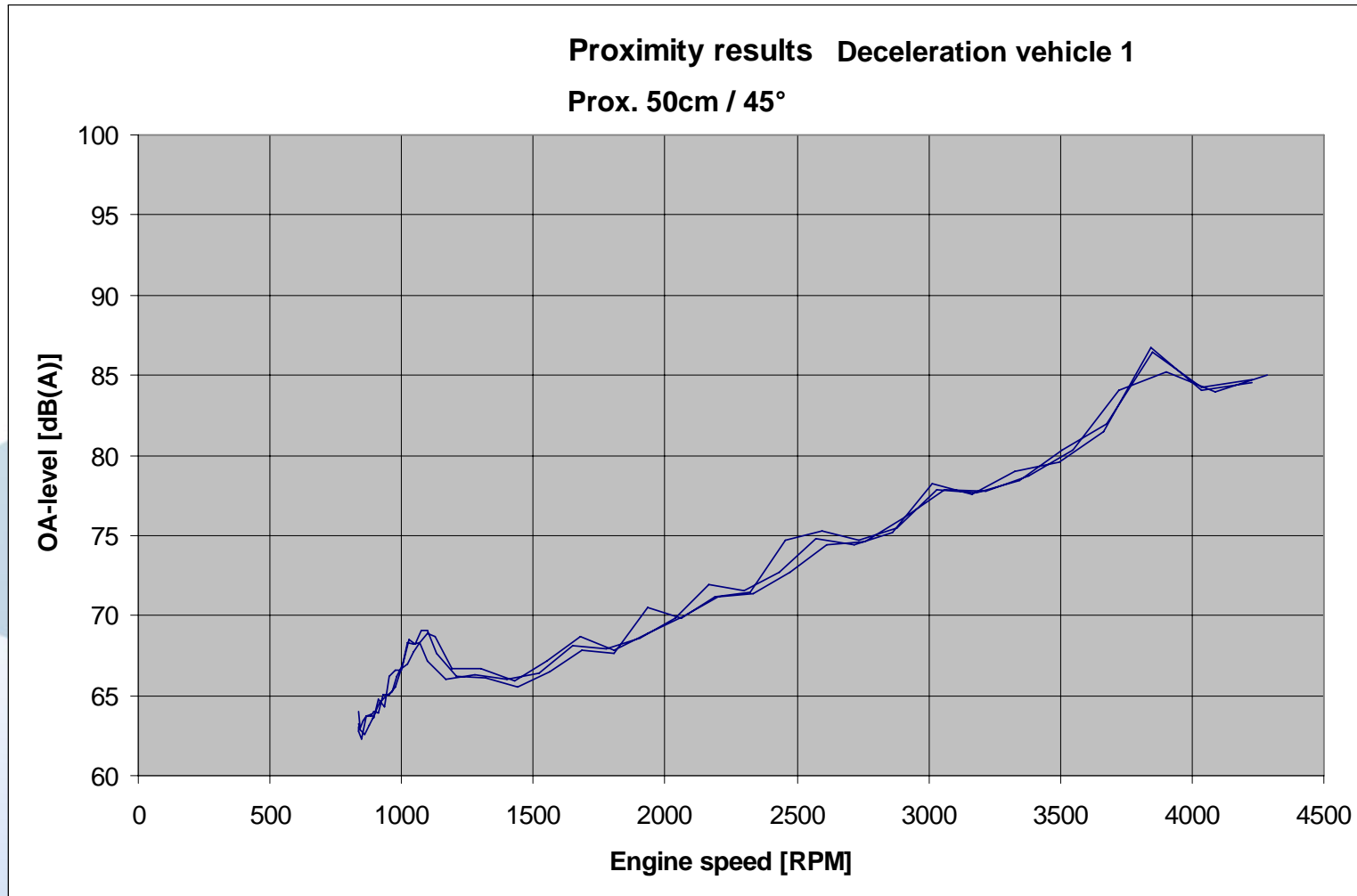
Back to back test : Running vehicle				Current regulation	New proposal
OEM system	Replacement system	OEM system	Replacement system	Result	Result
Measured dB(A)	Measured dB(A)	Measured and rounded dB(A)	Measured and rounded dB(A)		
74,4	75,9	74	76	NOK	NOK
74,4	75,5	74	76	NOK	NOK
74,4	74,9	74	75	NOK	OK
73,9	75,5	74	76	NOK	NOK
73,9	75,4	74	75	NOK	NOK
73,9	75,0	74	75	NOK	NOK
73,9	74,5	74	75	NOK	OK
73,5	75,0	74	75	NOK	NOK
73,5	74,6	74	75	NOK	NOK
73,5	74,3	74	74	OK	OK
73,5	73,9	74	74	OK	OK
73,5	73,6	74	74	OK	OK
73,5	73,3	74	73	OK	OK

Tolerance 1 dB(A) after rounding off to the nearest integer

2. Justification for the CLEPA amendment proposal of the stationary noise test procedure in R59.

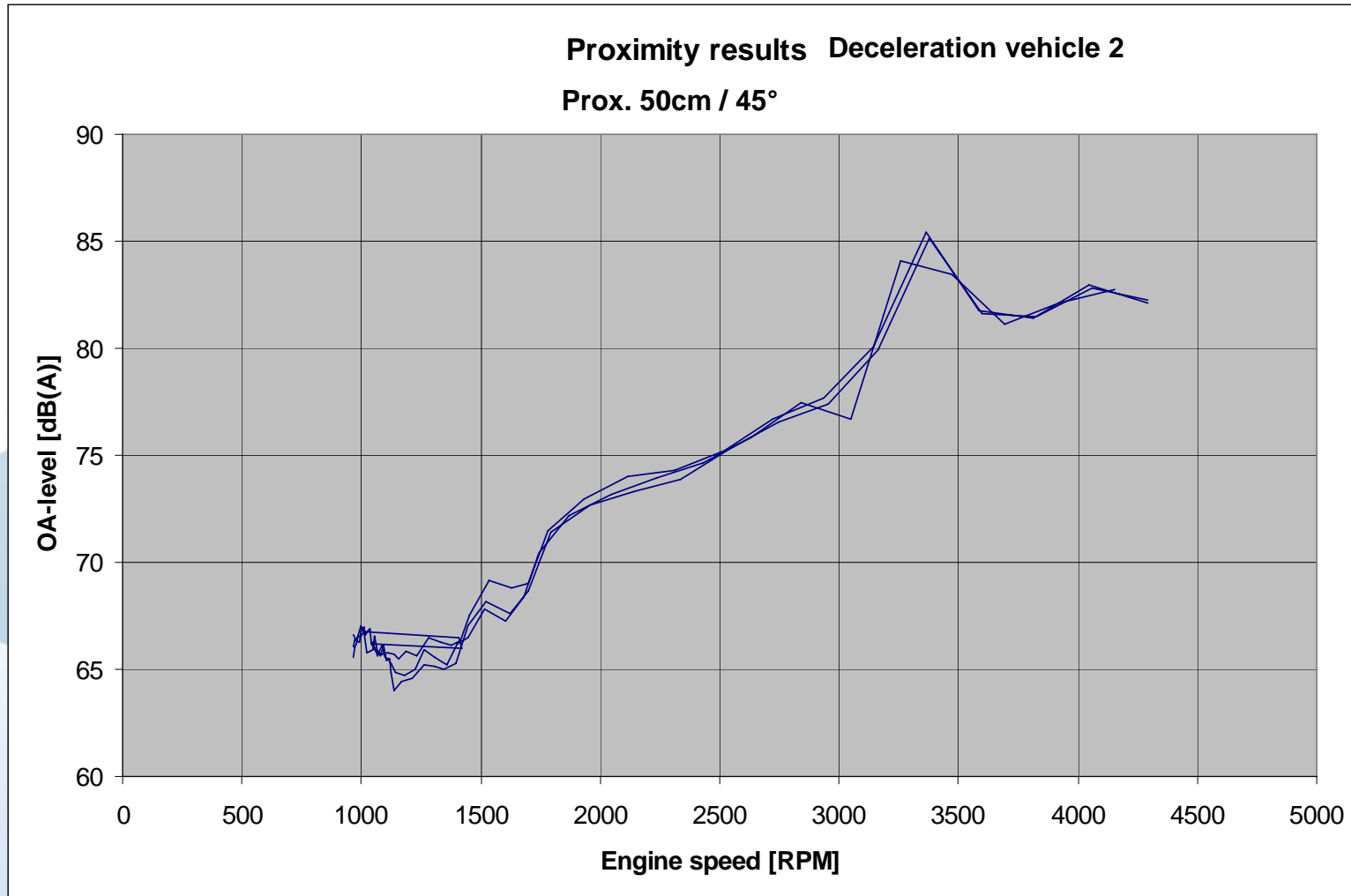


Static noise test



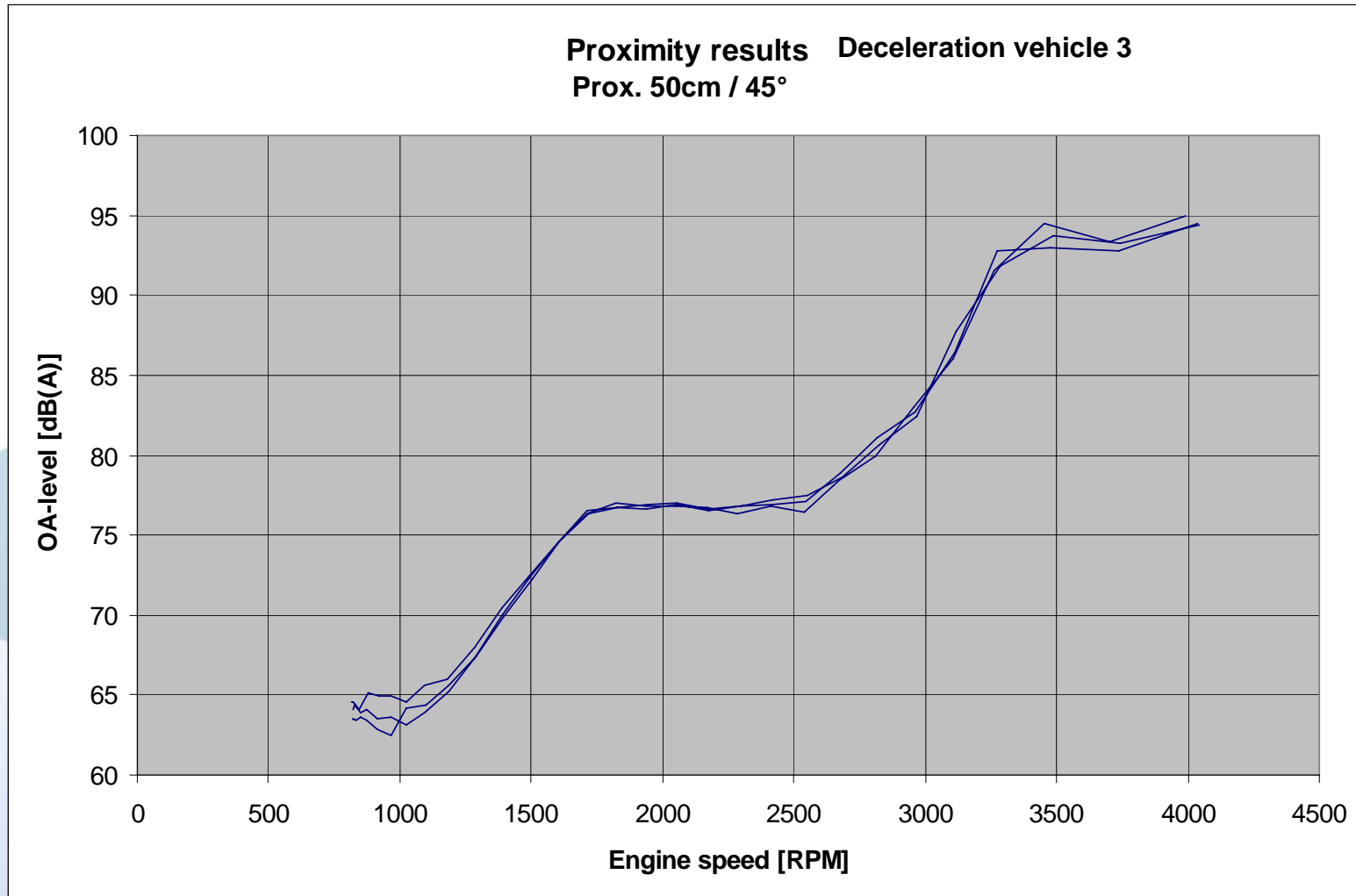


Static noise test





Static noise test





Stationary noise test

- Further to the test results presented by CLEPA during last GRB, the previous graphs illustrate the poor reproducibility of the current stationary noise test. CLEPA proposes to take into account this poor reproducibility by introducing a 2 dB(A) uniform tolerance on the comparison. The current test procedure however will not be modified.



Reference noise level of vehicle type approval : Stationary vehicle
Paragraph 6.2.2.1.(b)

Reference vehicle type approval value is 77 dB(A)	Measured dB(A)	Rounded dB(A)	Result
Replacement system 1	80,5	81	NOK
Replacement system 2	79,5	80	NOK
Replacement system 3	79,4	79	OK
Replacement system 4	78,2	78	OK
Replacement system 5	77,3	77	OK
Replacement system 6	76,5	77	OK
Replacement system 7	76,2	76	OK

Tolerance 2 dB(A) after rounding off to the nearest integer