

Concerning regarding the future development of ECE R28

Contents

- **Comparing of GRB-2015-07e and GRB-2016-02e on item 14.3.6.**
- **The differences of test results**
- **The purpose of the top and bottom limit value**
- **A future solution**
- **Conclusion**
- **Other topic**

Comparing of GRB-2015-07e and GRB-2016-02e

GRB-2015-07e:

14.3.6

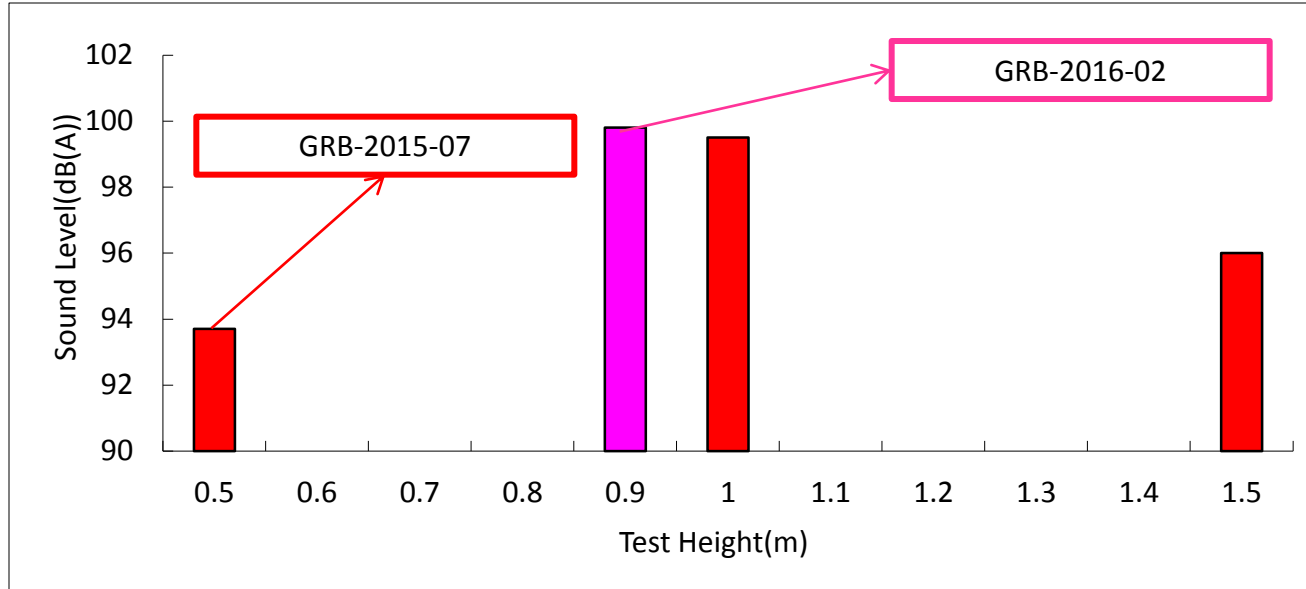
The A-weighted sound pressure level measurement is carried out at three points at the height of (0.5 ± 0.10) m, (1.0 ± 0.10) m, (1.5 ± 0.10) m. In each point three measurements shall be performed. The arithmetic average of all measurements at each point shall be rounded to the nearest whole number. The final result shall be the minimum value amongst the three arithmetic averages.

GRB-2016-02e:

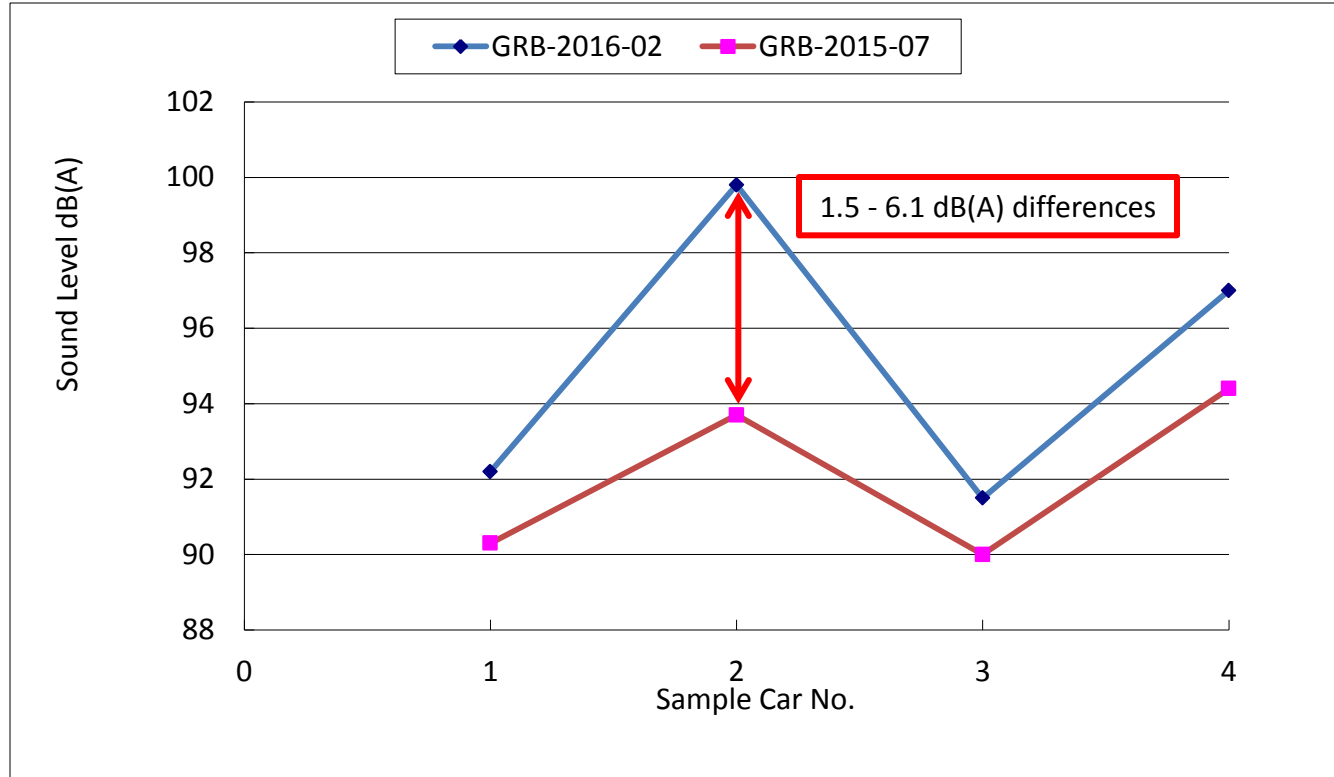
14.3.6

The maximum sound-pressure level shall be sought within the range of 0.5 and 1.5 m above the ground, and the height, at which the maximum sound-pressure level was found has to be fixed.

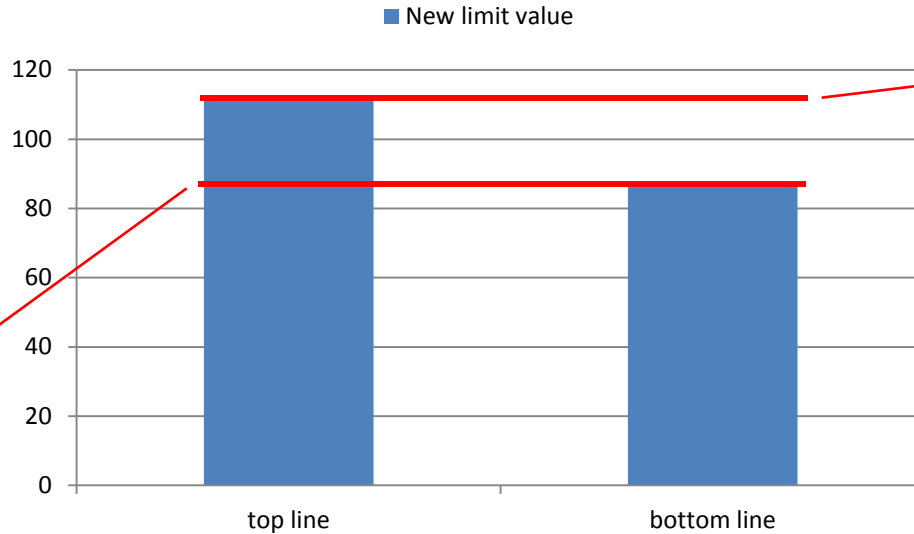
The differences of test results



The differences of test results



The purpose of the top and bottom limit value



For audible warning:

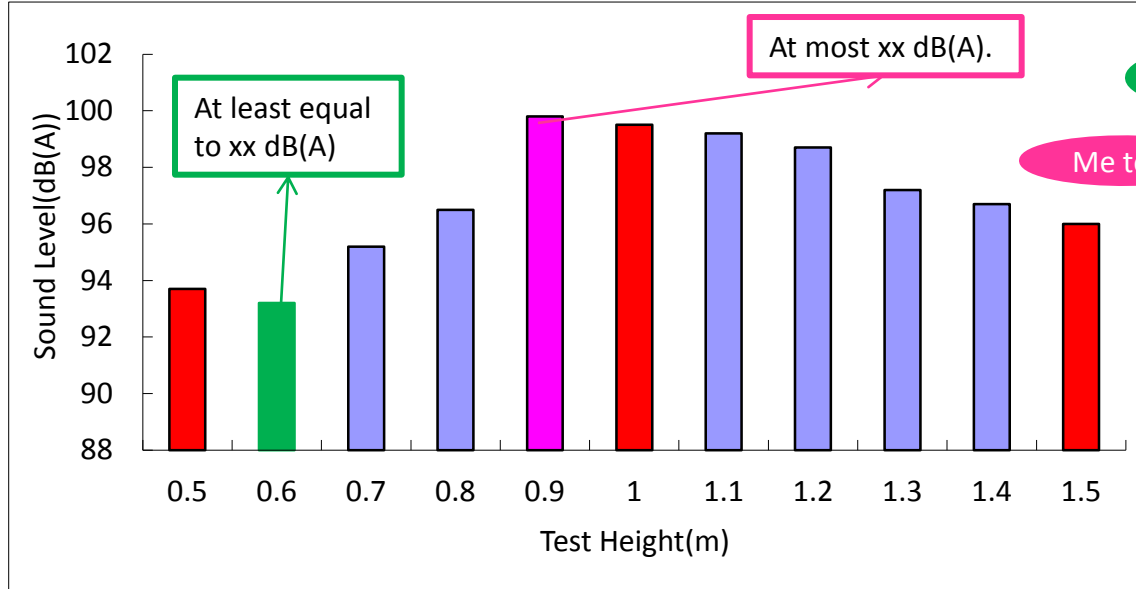
In the height between 0.5 to 1.5m, the minimum sound of the horn will not be lower than 87 dB(A), to make certain all people with different height can be warned.

For hearing protection:

In the height range between 0.5 to 1.5 m, the maximum sound of the horn will not be higher than 112 dB(A), to make certain the hearing of all people with different heights can be protected.

A future solution

* Maybe a new test method should be considered in the future, which is much more complicated.



Conclusion

- * China has not finalized the test method of audible warning devices, and this document is not the China official comments and formal opinions on ECE R28.
- * The background noise, and the horn users habits of China are different from Europe.
- * From a technical point, more research should be carried out on test method and limit values of ECE R28.

Other topic

* In the newest draft of GB 7258 of China, there is an additional requirement on horns in discussing, says:

8.6.1 When the key of vehicle is taken out and the vehicle is locked, the horn should still be used inside the vehicle.



This change makes sense to avoid the dangerous condition of Children who are locked inside the vehicles. Hope the ECE R28 can also considered this condition, and harmonizes with Chinese standard, GB 7258.

Thanks for your attention