

# DIN EN 16272-3-1:2024-02 (E)

Railway applications - Infrastructure - Noise barriers and related devices acting on airborne sound propagation - Test method for determining the acoustic performance - Part 3-1: Normalized railway noise spectrum and single number ratings for diffuse sound field applications

---

<b>Contents</b>	<b>Page</b>
European foreword .....	3
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms, definitions, symbols and abbreviations .....	6
3.1 Terms and definitions.....	6
3.2 Symbols and abbreviated terms.....	6
4 Normalized railway noise spectrum for diffuse sound field applications .....	7
5 Single-number rating of sound absorption $DL_{\alpha,NRD}$ .....	8
6 Single-number rating of sound reduction index $DL_R$ .....	8
7 Uncertainty of single-number ratings .....	8
8 Expression of results .....	9
Annex A (informative) Guidance note on use of the single-number rating of sound absorption $DL_{\alpha,NRD}$ .....	10
Annex B (informative) Guidance note on use of the single-number rating of sound reduction index $DL_R$ .....	11
Annex C (informative) Measurement uncertainty of the single-number ratings .....	12
C.1 General.....	12
C.2 Measurement uncertainty based upon reproducibility data for $DL_{\alpha,NRD}$ .....	12
C.3 Measurement uncertainty based upon reproducibility data for $DL_R$ .....	12
Bibliography .....	14