

Determination the Optimal Parameters of Reverberation Time in Octagonal Room Using Statistical Analysis

Violeta Stojanović, MA¹; Zoran Milivojević, PhD²; Zoran Veličković, PhD³

¹ College of Applied Technical Sciences, Niš, Serbia, violeta.stojanovic@vtsnis.edu.rs

² College of Applied Technical Sciences, Niš, Serbia, zoran.milivojevic@vtsnis.edu.rs

³ College of Applied Technical Sciences, Niš, Serbia, zoran.velickovic@vtsnis.edu.rs

Abstract: *The first part of this paper defines the acoustic parameters of the room: reverberation time RT_{10} , RT_{20} , RT_{30} , as well as early reverberation time EDT. The second part of the paper describes the statistical analysis of the obtained values of these parameters, according to recorded impulse response in „Octagon at the Mile End campus of Queen Mary“, University in London, using software package EASERA and Matlab. By comparison of the results statistical analysis in the analyzed octagonal room, it can be concluded which acoustic parameters are the representatives of reverberation condition.*