



## Part 2 - Substitution Method in Reverberation Chamber

Measure the sound power of the same device as Part 1 in the reverberation chamber. Use the ILG source (the gray squirrel cage blower) as the reference sound source and take at least six measurements in the reverberant field at different locations in the room. *How can you predict or measure where the reverberant field begins?* The octave band power levels of the ILG source are listed on its nameplate. Determine the octave band power levels and the overall power level. Note: with this method you are essentially measuring the room absorption and empirically determining the relation between sound power and sound pressure. *Does the room meet the requirements listed in the text?*

Measured Data:

Source							SPL avg
ILG							

Summary of results:

Test Method	Sound Power Level (dB re $10^{-12}$ watts)
Free Field	
Substitution Method	

**Reporting Requirements:** Submit a brief, concise lab report, including: cover page, list of instrumentation, calculation details, sources of error, conclusions, comments, answers to all questions