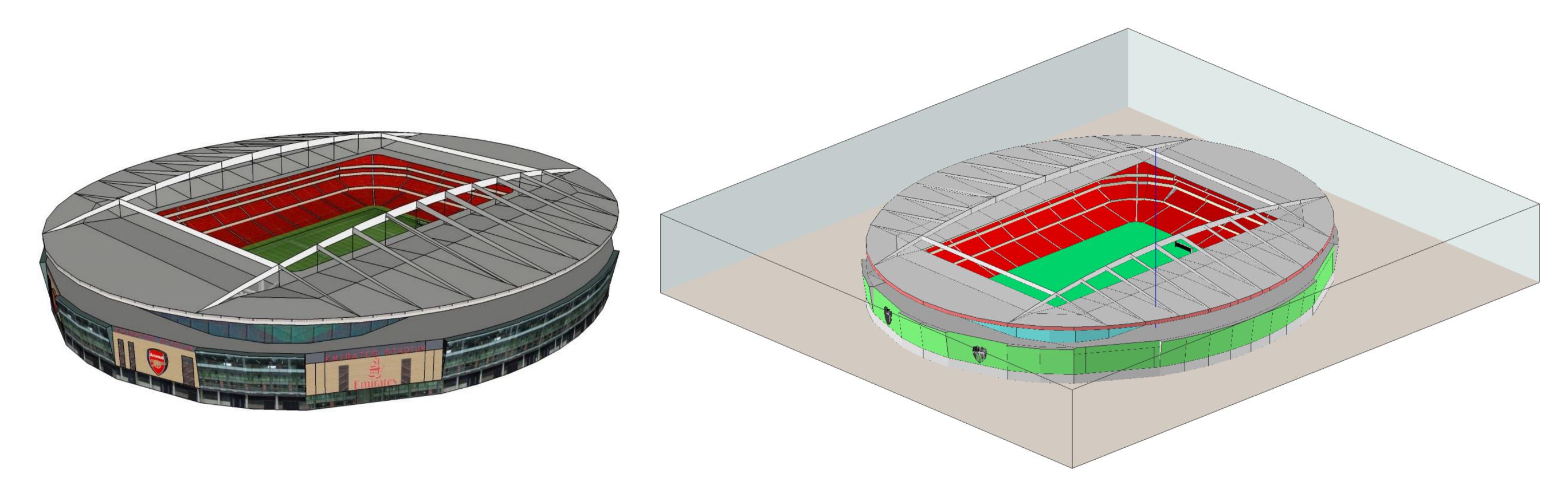
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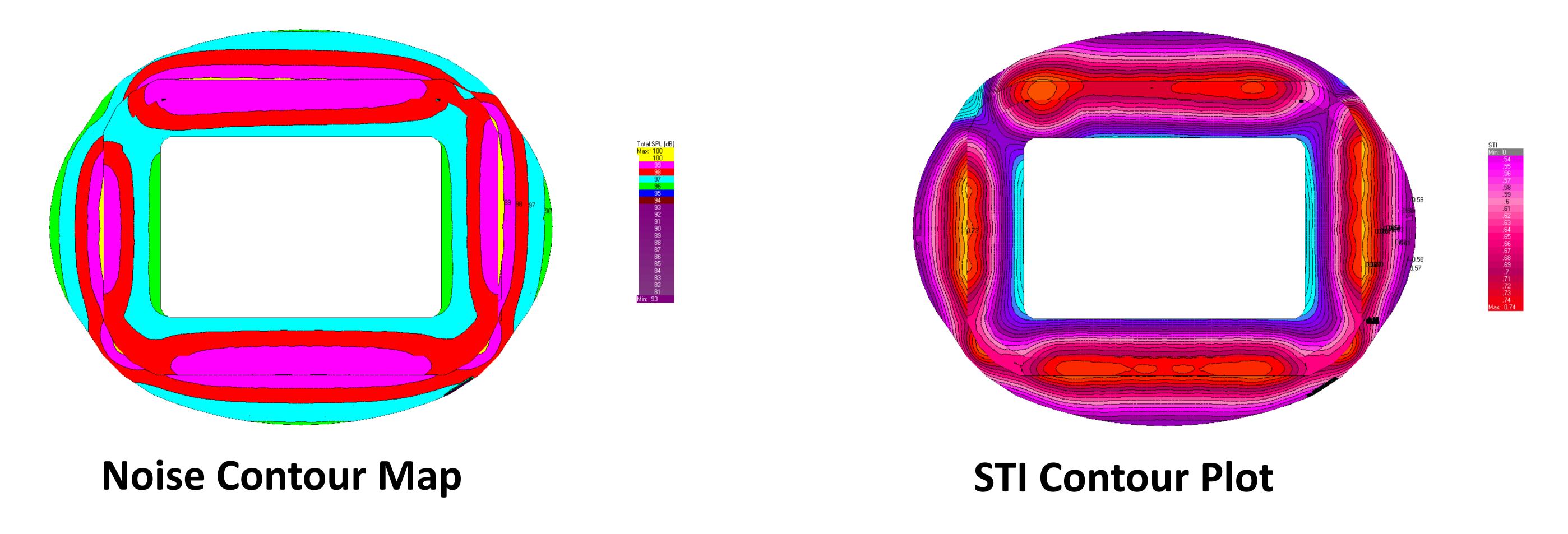
ELECTRO-ACOUSTIC STUDY

ADZAAN CONSULTING PTE LTD did an in-house noise prediction study of the Emirates Stadium using the Enhanced Acoustic Simulators for Engineers (EASE) software.



Emirates Stadium from Google Sketch-up (above) and imported in EASE (left)

EASE uses established techniques such as image source method and ray tracing method to predict expected sound pressure levels in acoustic spaces. It takes into consideration reflection and absorption by equipment and their enclosures.



Sound Pressure Level (SPL) is an objective measure of the magnitude of sound in an acoustic space at a particular point. The sound comprises of both direct sound (eg. from the speakers, ventilation system or other sources inside the space) and indirect or reverberant sound.

Speech Transmission Index (STI) is an objective measure of the level of speech intelligibility from the PA system or sound reinforcement system in an acoustic space. It is quantified by playing a modulated signal over the sound system and measuring the depth of spectral modulation, with less depth corresponding to less intelligible signal.



