REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 3185702 Date: November 20, 2009

REPORT NO. 3185702CRT-001a
STATIC PRESSURE, SOUND POWER LEVEL,
AREA FACTOR AND THROW TESTS ON AN
18" BY 18" SQUARE CEILING DIFFUSER
MODEL NUMBER SAD-B10/RAD-B10

RENDERED TO
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INTRODUCTION

This report gives the results of tests conducted on an 18" by 18" square ceiling diffuser model number SAD-B10/RAD-B10. The test results include Static Pressure, Area Factor, Throw and Sound Power Level. The sample was selected and supplied by the client and was received at the laboratories on October 22, 2009. The sample appeared to be in new unused condition upon receipt.

AUTHORIZATION

Signed Intertek Quotation No. 500161069.

TEST METHOD

The diffuser was tested in accordance with the ASHRAE 70-2006 Standard "Method of Testing for Rating the Performance of Air Outlets and Inlets", which incorporates ADC 1062: GRD-84 Test Code for Grilles, Registers and Diffusers. Acoustical data was obtained employing a Bruel & Kjaer Digital Frequency Analyzer Type 2131 and analyzed on a Compaq Prolinea 4/33 Computer and Epson LQ-850 printer. The reference sound source used for this test was a calibrated Bruel & Kjaer Type 4204, which conforms to the above standard. The octave band sound power levels were plotted on graph of Noise Criteria Curves which is in the ADC Test Code. These curves are reprinted with permission from the ASHRAE Handbook and Product Directory, 1976. The diffuser was installed in the facility and supplied with measured volumes of air. The static pressure was measured 1½ duct diameters upstream of the diffuser inlet.