

# NWAA Labs

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## SOUND SURFACE REFLECTION TEST REPORT #: NWSR230620-04

Client: RealAcoustix LLC  
2361 B Avenue.  
Ogden, UT 84401

Test Date: 20 June 2023  
Report Date: 29 June 2023  
Test Specimen: RealQuad TF1X Diffuser

### INTRODUCTION

The methods and procedures used in this test conform to the provisions and requirements of ASTM Preliminary Procedure, *Standard Test Method for Surface Reflections by the Modified AES Standard AES-156*. The test volume is a cuboid, 205.74 m (675.0 ft) long by 106.68 m (350.0 ft) wide by 18.29 m (60.0 ft) high, and volume is 401,391.3 m<sup>3</sup> (14,175,000.0 ft<sup>3</sup>). There are six fixed surfaces in the test volume. There is a single source consisting of a SoundTube, 8inch speaker mounted in a pendant mount above the DUT on the microphone arc next to the #1 microphone about 3degree off to the side. We utilize nineteen Earthworks M-30 Omni directional microphones mounted in an arc, with the center of the arc located at the rotational origin of the DUT to gather the data. This test report relates only to the item(s) tested. Any advertisement that utilizes this test report or test data must not imply product certification or endorsement by NWAA Labs and must include all pages of the report.

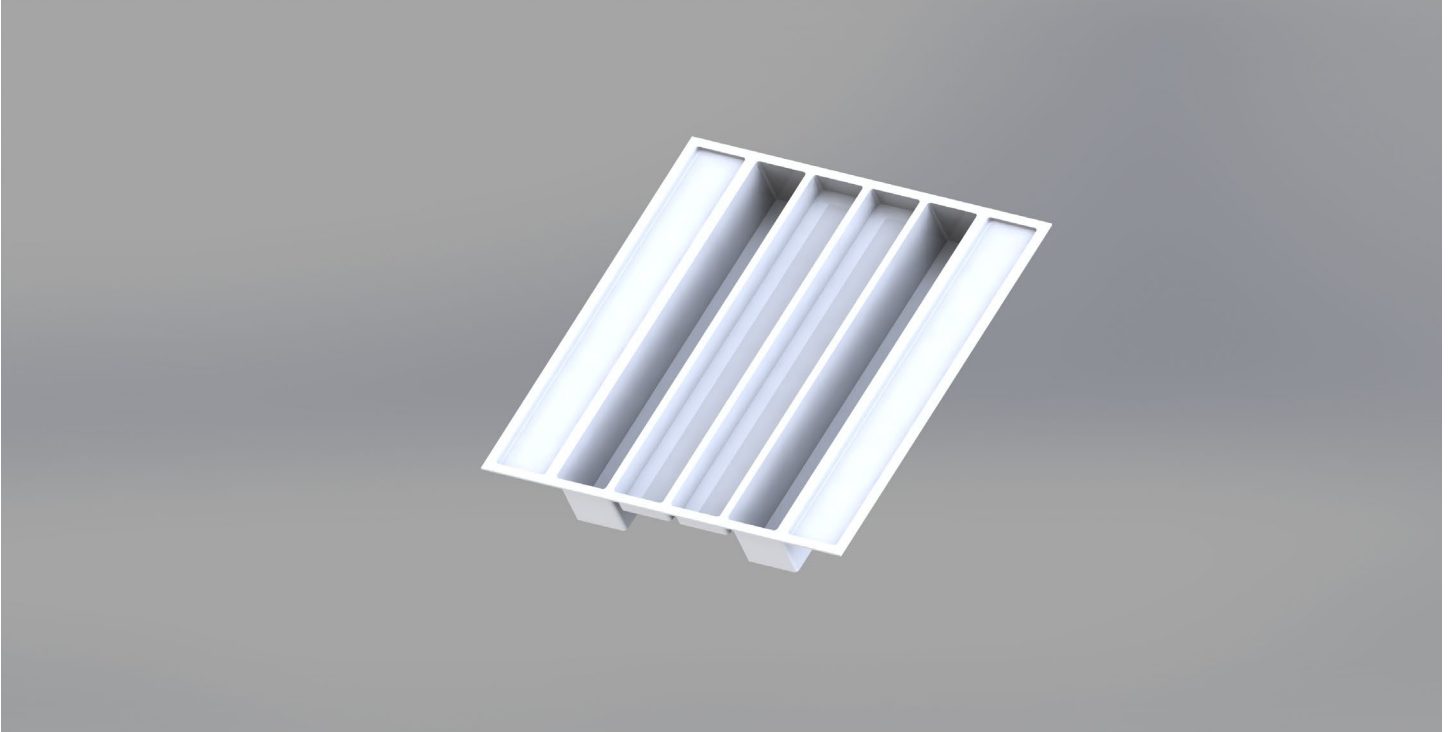
### DESCRIPTION OF TEST SPECIMEN

The test specimen consisted of one sample unit that is 60.96 cm (24.0 inches) long by 60.96 cm (24.0 inches) wide by 10.16 cm (4.0 inches) thick flat panel mounted in the DUT test position. These panel was made from a Thernoplastic material. (See Pictures).

## DESCRIPTION OF BASIC TEST RESULTS

**Rated Bandwidth (-6Db)**  
**Coverage Angles (4.0KHz)**  
**Material Construction**  
**Type of Surface Reflector**

**3550Hz-7000Hz**  
**70 deg H by 20 deg V**  
**2 ft by 2 ft Thermoplastic**  
**Prime 7 Quadratic Residue Diffuser.**



Submitted by,  
NWAA Labs Inc

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Ron Sauro  
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