

REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 104030097

Date: November 22, 2019

REPORT NO. 104030097CRT-001a

SOUND ABSORPTION TEST ON PROFILE SERIES - PRFL-24 FIXTURES

RENDERED TO

**SCW CORP DBA DAY-O-LITE
126 CHESTNUT ST
WARWICK, RI 02888-2104**

INTRODUCTION

This report gives the results of a Sound Absorption test on Profile Series - PRFL-24 Fixtures. The test specimen was selected and supplied by the client and received at the laboratories on July 25, 2019. The sample appeared to be in a new, unused condition.

AUTHORIZATION

Signed Intertek Quotation No. Qu-00967873-0.

TEST METHOD

The specimen was tested in accordance with the American Society for Testing and Materials designation ASTM C423-2017, "Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method".

GENERAL

This test method describes the measurement of sound absorption by analyzing the decay rate of sound in a reverberation room. The difference of the decay with and without the specimen in the room is utilized to determine the sound absorption of the specimen under test. Intertek Testing Services Acoustical Facilities utilizes a 16,640 cu. ft. (470 cubic meter) reverberation room.

DESCRIPTION OF TEST SPECIMEN

The test Profile Series - PRFL-24 Fixtures consisted of six light fixtures installed above the concrete floor of our 16,640 cu. ft. reverberation room. Each sample measured 96 inches long by 3 7/8 inches wide by 11 7/8 inches tall. The samples were spaced 30 inches apart and were 29 inches above the floor.



RESULTS OF TEST

PROFILE SERIES - PRFL-24 FIXTURES

<u>One Third Octave Band Center Frequency, Hz</u>	<u>Total Sample Absorption Sabines (m²)</u>	<u>Sample Absorption Per Unit Sabines (m²)</u>
80	4.831	0.805
100	1.614	0.269
125	5.552	0.925
160	5.542	0.924
200	5.312	0.885
250	4.547	0.758
315	6.101	1.017
400	3.927	0.655
500	5.518	0.920
630	6.279	1.047
800	5.555	0.926
1000	8.470	1.412
1250	8.097	1.349
1600	10.339	1.723
2000	9.666	1.611
2500	9.746	1.624
3150	10.589	1.765
4000	9.899	1.650
5000	9.336	1.556

MOUNTING: Type “J” per ASTM Designation E795-16, “Standard Practices for Mounting Test Specimens During Sound Absorption Tests”.

REMARKS

1. Aging Period: None
2. Ambient Temperature: 74°F
3. Relative Humidity: 62%

CONCLUSION

The test method employed for this test has no pass-fail criteria, therefore, the evaluation of the test results is left to the discretion of the client.

Date of Test: August 7, 2019

Report Approved by:



Brian Cyr
Engineer
Acoustical Testing

Report Reviewed By:



James R. Kline
Engineer/Quality Supervisor
Acoustical Testing

Attachments: None