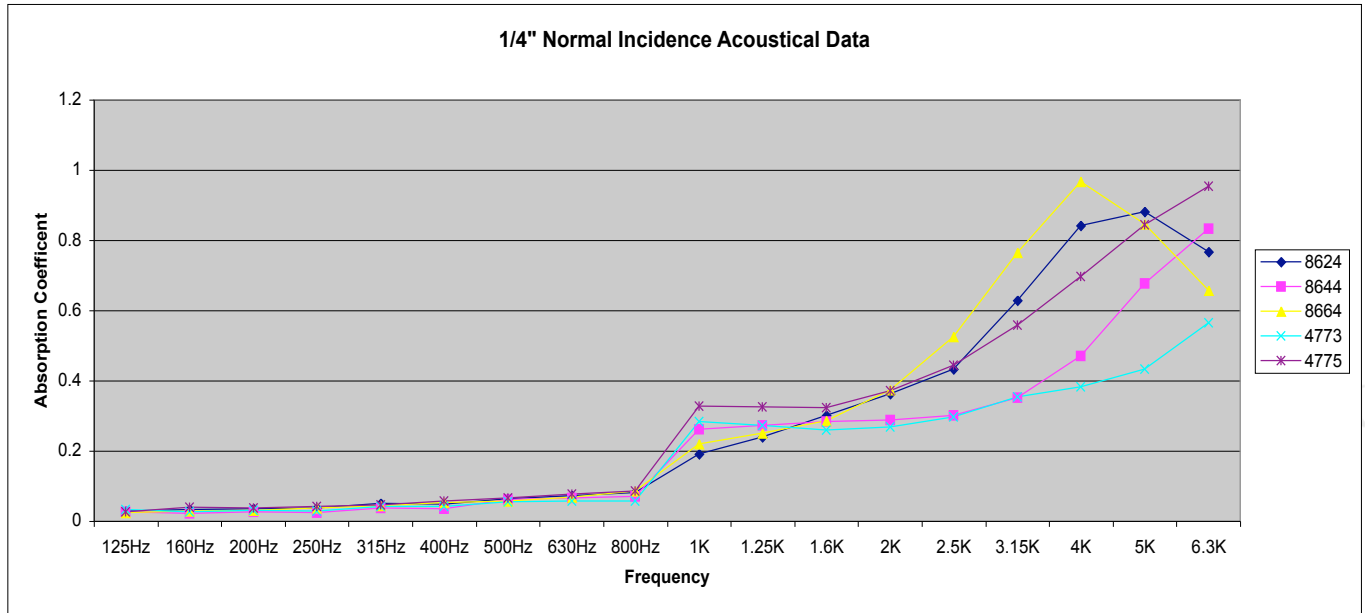




1/4" ACOUSTICAL DATA

The following data was compiled following ASTM Test Method C 384-95 "Impedance and Absorption of Acoustical Materials by the Impedance Tube Method"



Frequency	LMC Material Designation				
	8624	8644	8664	4773	4775
125Hz	0.028	0.026	0.024	0.032	0.026
160Hz	0.034	0.022	0.029	0.026	0.039
200Hz	0.035	0.026	0.031	0.031	0.037
250Hz	0.038	0.024	0.038	0.029	0.041
315Hz	0.051	0.038	0.045	0.041	0.047
400Hz	0.049	0.036	0.053	0.041	0.058
500Hz	0.064	0.062	0.058	0.056	0.066
630Hz	0.072	0.065	0.069	0.058	0.077
800Hz	0.081	0.071	0.086	0.057	0.086
1K	0.192	0.262	0.219	0.283	0.327
1.25K	0.239	0.272	0.251	0.273	0.325
1.6K	0.302	0.283	0.285	0.259	0.324
2K	0.362	0.287	0.373	0.269	0.371
2.5K	0.432	0.302	0.526	0.296	0.444
3.15K	0.628	0.351	0.764	0.354	0.558
4K	0.842	0.471	0.967	0.383	0.697
5K	0.881	0.678	0.847	0.434	0.845
6.3K	0.766	0.832	0.658	0.564	0.953

Absorption Coefficient

The testing was conducted by the supplier of the foam to LMC and is believed to be valid. Any further testing requirements will have to be discussed with a LMC representative.

Summary of Test Method
 A plane wave traveling in one direction down a tube is reflected back by the test specimen to produce a standing wave that can be explored with a microphone. The normal incidence sound absorption coefficient is determined from the standing wave ratio at the face of the test specimen. To determine the impedance ratio a measurement of the position of the standing wave with reference to the face of the material is needed. The absorption coefficient and impedance ratio are functions of frequency. Measurements are made with pure tones at a number of frequencies chosen, unless there are compelling reasons to do otherwise, from those specified.

Significance and Use
 The acoustical impedance properties of a sound absorptive material are related to its physical properties, such as airflow resistance, porosity, elasticity, and density. As such, the measurements described in this test method are useful in basic research and product development of sound absorptive materials....