

The rationale and process of the NBS Smoke Chamber test method used to determine the smoke emission characteristics of cabin materials will be discussed. This method is the industry standard used to evaluate compliance with CFR 25.853. In recent years, Round Robin testing conducted by the Boeing Commercial Airplane Company yielded unexpected results raising concern. The Federal Aviation Administration conducted worldwide round robin testing beginning in late 2006 and experienced similar ambiguity in the data. As a result, more concerns regarding reliability have emerged. Additional discussion will review round robin results and general observations.