

Abstracts

Design of Open-Ended Microwave Resonant Cavities (Correspondence)

D.C. Thorn and A.W. Straiton. "Design of Open-Ended Microwave Resonant Cavities (Correspondence)." 1959 Transactions on Microwave Theory and Techniques 7.3 (Jul. 1959 [T-MTT]): 389-390.

This paper summarizes a Ph.D. dissertation on the design and analysis of open-ended microwave cavities. The study was motivated by the need for a cavity with a high measure of quality, Q , through which an unobstructed flow of gases or particulate matter could be obtained. Used in conjunction with the Crain refractometer, instantaneous measurements of the refractive index of the material in the cavity can be made. Measurements utilizing this technique but with other types of cavities have previously been made in order to study the dielectric properties of smoke and other aerosols.

[Return to main document.](#)