A setup for measuring characteristics of microwave electric vacuum devices with open resonance structures - DTU Orbit (08/11/2017)

A setup for measuring characteristics of microwave electric vacuum devices with open resonance structures

A new modification of the universal experimental setup for measuring electrodynamic characteristics of microwave generators with open resonance structures of the orotron–diffraction-radiation-generator type is described. To expand the functional capabilities and the electronic frequency-tuning range, an additional periodic metal–dielectric structure is introduced into the open resonator. The experimental results of investigations of the energy, volt–ampere, and frequency characteristics of the modified diffraction-radiation generator prototype are compared to the characteristics of the generator without a metal–dielectric structure.

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