

Electrical Parameters of One Atmosphere Uniform Glow Discharge Plasma

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Abstract

The One Atmosphere Uniform Glow Discharge Plasma Panel (OAUGDP) is a kind of panel that allows making some sharp and clear pictures of glow and cold discharge plasma. The panel is a sheet that made of polystyrene foam. The (OAUGDP) in our laboratory was created by two techniques; manual and electronic. The electric fields employed to create the OAUGDP are normally less than 10 kV/cm in air and 465 kV/cm in argon and helium. The aim of this work is to measure and calculate the electrical parameters of plasma using these two different circuits. A high voltage probe is used to measure the plasma voltage and current for both manual and electronic circuits.

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