

Helicon Discharge Plasma Source and Laser Thomson Scattering System in KRISS

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We introduce Helicon discharge plasma source and Laser Thomson scattering system recently finished an installation in KRISS. Laser Thomson scattering method is promising for diagnostics in Helicon plasma because a measurement by electrical probe typically used has significant errors due to the gyromotion of electrons induced by high magnetic field. However, we found that LTS is affected by magnetic field so that we applied the normalization method for processing data and the results show a clear Maxwellian distribution at various conditions of magnetic field and RF power at low energy part without distortion.

Keywords: 플라즈마 진단, laser thomson scattering, helicon discharge plasma