Upgrades of AXUV Radiation Measurement System on the EXL-50 Spherical Tokamak

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System upgrades of the time resolved Absolute eXtreme UltraViolet (AXUV) radiation measurement on the ENN XuanLong-50 (EXL-50) spherical tokamak are described. Ultra-High-Vacuum (UHV) compatible gate valve, retractable feedthrough and buffer vacuum chamber are designed and employed for multiple purposes: 1) detector protection by minimizing its exposure time to avoid unnecessary damages from harsh experimental environment; 2) more flexibility for maintenance without breaking the main vacuum, including essential parts check, optical-slit change and detector periodical replacement. Two AXUV16ELG detector arrays are used on both the upper CF400 and lower-side CF400 ports, doubling the previous measurement chords from 32 to 64. In addition to the horizontal AXUV63HS1 single-detector based system, a vertical one is arranged on the top CF150 port, for more plasma coverage and better view. Preliminary measurement results will be presented.