

ID	Name	Description	Rationale	Design Validation	Verification Method
HV-001	Range for cathode potential	HV range for cathode potential shall be between 15 to 50 kV	Provide choise for charge R factor 0.6 to 0.7 for MIPs	Full Scale Demonstrator	Test/ Inspection
HV-002	HV long term stability	Variation of HV shall be 0.1% (0.5mm deviation at cathode or 0.01% in charge) at F<1 Hz	Coordinate accuracy < 1 mm Charge accuracy <0.1%	Full Scale Demonstrator	Test/ Inspection
HV-003	HV ripple/noise variation	Variation of HV shall be <4 mV (0.016fC or 100e) at 100kHz > F >1 Hz	Noise induction to R/O	Full Scale Demonstrator	Test/ Inspection
HV-005	HV nominal ramp rate	Nominal ramp rate provided by HVPS shall be 300 V/s (~2pA per pixel)	Ramp up/down rate to limit recharging currents in the TPC to <5pA	Full Scale Demonstrator	Test/ Inspection