ID	Name	Description	Rationale	Design Validation	Verification Method
SYS-010	Electric Field Uniformity of 96% of active volume shall be 95%	Nominal Electric Field of 96% of active volume shall be uniform to <5%	Equivalent electric field uniformity as FD.	Full Scale Demonstra-tor	MIF Integrated Testing
SYS-012	Cathode HV ripple contributio n to system noise	The HV ripple in the ND LArTPC shall contribute < 100 e- electron equivalent noise contribution (ENC) to the overall system noise level.	The HV system should be engineered so that it is not a significant contributor to overall system noise.	Full Scale Demonstra-tor	MIF Integrated Testing
SYS-018	Photon detection pileup separation	The photon detection system shall efficiently discriminate the light signals from separate neutrino interactions at nominal beam intensity to < 100 ns	This specification should contribute to the efficiency and accuracy of charge-light signal matching, SYS-005.	Full Scale Demonstra-tor	MIF Integrated Testing
SYS-019	Photon detection time resolution	The time resolution of the photon detection system which match to neutrino interation time shall be < 10 ns	This specification is needed to achieve photon detection pileup separation, SYS-018, to provide the required efficiency and accuracy in charge-light signal matching, SYS-005.	Full Scale Demonstra-tor	MIF Integrated Testing
SYS-020	Photon detection efficiency for discriminati on	The photon detection efficiency shall be high enough to discriminate two light signals from localized energy depositions of ~20% difference in intensity or > 50 cm spatial separation within the ND LArTPC.	This specification is needed to achieve photon detection pileup separation, SYS-018, to provide the required efficiency and accuracy in charge-light signal matching, SYS-005.	Full Scale Demonstra-tor	MIF Integrated Testing