ID	Name	Description	Rationale	Design Validation	Verification Method
MOD-003	Support bank of modules	The module support structure shall structurally support the bank of 5 modules in the temperature range of 87 K to 300 K, without imparting TBD loads on the field cage	The module structure shall support the load of 5 modules, but it needs to minimize loads transferred to the field cage to prevent damage to boards and to ensure drift field is not altered. Also, it needs to be able to ensure loads from thermal distortions do not impact drift field or damage components	Eng Analysis	Commissioning
MOD-004	Module placement	The module support structure shall determine the position of the TPC active volume to an accuracy of 2 cm within the Near Detector cryostat in the temperature range of 87 K to 300 K.	Unexpected deviations in module position complicate neutrino signal reconstruction. Accurate determination of the position of the active TPC volume within the Near Hall is particularly important for correlation of events between the ND LArTPC and downstream spectrometer.	Eng Analysis	Commissioning
MOD-008	LAr Flow Rate	LAr distribution shall provide 0.125kg/s/row of purified LAr	Flow rate for purity needed is derived from ProtoDUNE experience which state one volume change every 5 days. Also provides cooling for electronics, but this flow rate is more than required.	Eng Analysis/ Full Scale Demonstrator	Commissioning
MOD-010	Thermal monitoring	The thermal monitoring system shall be sensitive to gradients greater than 0.3 deg/cm across the TPC modules during cooldown and warmup.	The thermal monitoring system must provide feedback to the ND Cryogenics system during cooldown and warmup in order to avoid thermal-induced damage to sensitive elements of the TPC modules.	Full Scale Demonstrator	MIF Integration Testing