Version 7.6 - 10/6/2010

doc 2843

Input value	
Calculated	

Quality	Meaning
***	Stable, well understood parameter
**	Reasonably well defined parameter
*	Rough estimate

Parameter	Value	Units	Quality	Req ID	Notes
Estimated BG due to materials	TBD		*		Background due to concrete bathtub and other construction materials
Veto System					
Veto Configuration					
Veto square tube size outer	10.2	cm	**	FR.Det.LAr Veto.Efficiency	4" square tubing
Veto square tube size inner	8.9	cm			1/4" wall thickness
Num veto rows	2		*	FR.Det.LAr Veto.Efficiency	
Num side veto tubes	3189				both sides of cavern, extending 5m past the detector on both ends, 2 rows
Num end veto tubes	866				both ends of cavern extending 9m past the detector on both ends
Total num veto tubes	4055				
Veto Counter					
Veto counter tube size outer	8.4	cm			0.5 cm allowance
Veto counter tube size inner	7.8	cm			3 mm wall thickness
Veto counter length	9	m	**	FR.Det.LAr Veto.Efficiency	7m in the rock and 2m over the top of the detector
Veto counter volume	54,616	cm^3			volume of liquid scintillator in each counter
Veto counter extrusion volume	8737	cm^3			
Total liquid scintillator volume	221	m^3			
Total veto counter extrusion volume	35	m^3			
Total veto counter extrusion weight	47	kg			
Photon Detector					
PMT density	1	PMT/m^2	**	FR.Det.LAr Photon	
PMT photocathode area	324	cm^2	***	FR.Det.LAr Photon	MicroBooNE 8" PMT's
Photocathode fractional coverage	3.2%				
Num PMT's per CPA	18				
Total num PMT's	2016				PMT's on both sides of the detector
Sensitivity at 2.5 m	2.2	PE/MeV	*	FR.Det.LAr Photon	MicroBooNE calculation. Photo-electrons observed in all PMT's
DAQ					
DAQ readout mode	Continuous		***	FR.Phy.LAr PDK.DAQ	Needed for pdk, SN
DAQ hit rate					
DAQ samples/hit					
Data rate: beam events					
Data rate: non-beam events					
Data compression factor					