TABLE V. Estimated range of the LAr-TPC detector performance parameters for the primary oscillation physics. The expected range of signal efficiencies, background levels, and resolutions from various studies (middle column) and the value chosen for the baseline LBNE neutrino-oscillation sensitivity calculations (right column) are shown. * For atmospheric neutrinos this is the mis-identification rate for < 2 GeV events, the mis-identification rate is taken to be 0 for > 2 GeV.

Parameter	Range of Values	Value Used for LBNE Sensitivities
Identification of ν_e CC events		
ν_e CC efficiency	70-95%	80%
ν_{μ} NC mis-identification rate	0.4-2.0%	1%
ν_{μ} CC mis-identification rate	0.5-2.0%	1%
Other background	0%	0%
Signal normalization error	1-5%	1%
Background normalization error	2-10%	5%
Identification of ν_{μ} CC events		
ν_{μ} CC efficiency	80-95%	85%
ν_{μ} NC mis-identification rate	0.5-10%	0.5%
Other background	0%	0%
Signal normalization error	1-5%	5%
Background normalization error	2-10%	10%
Identification of ν NC events		
ν NC efficiency	70-95%	90%
ν_{μ} CC mis-identification rate	2-10%	10% *
ν_e CC mis-identification rate	1-10%	10% *
Other background	0%	0%
Signal normalization error	1-5%	
Background normalization error	2-10%	
Neutrino energy resolutions		
ν_e CC energy resolution	$15\%/\sqrt{E(GeV)}$	$15\%/\sqrt{E(GeV)}$
ν_{μ} CC energy resolution	$20\%/\sqrt{E(GeV)}$	$20\%/\sqrt{E(GeV)}$
E_{ν_e} scale uncertainty		
$E_{\nu_{\mu}}$ scale uncertainty	1-5%	2%