

Group	Test Title	Receiving Tests							Integration Tests							Test Bay				Single Tower in Grid				Multiple Towers in Grid				
		TEM/TEMPS	Calorimeter	Tracker	GASU	PDU	SIU	EPU	ACD	CAL/TEM/TEMPS	GASU	PDU	SIU	EPU	ACD	Heater ctrl Box	Detector LPT	Detector CPT	SVAC	ETE	Detector LPT	Detector CPT	SVAC	ETE	Detector LPT	Detector CPT	SVAC	ETE
TEM/ TEM PS	TEM/TPS Interface Check																											X
Tracker	TE100 – Tracker Turn-on and Power Consumption			X												X	X			X	X			X	X			X
Tracker	TE201 - GTRC Configuration Register and Read-Back			X												X	X			X	X			X	X			X
Tracker	TE202 - GTFE Register Load and Read-Back			X												X	X			X	X			X	X			X
Tracker	TE203 – Readout Configuration Test			X												X	X			X	X			X	X			X
Tracker	TE301 – Gain and Noise Measurement			X												1	X			1	X			1	X			X
Tracker	TE302 – Single Strip Noise Occupancy			X												X	X			X	X			X	X			X
Tracker	TE303 – GTFE Noise Occupancy Scan			X													X			X				X			X	
Tracker	TE305 – Layer Trigger Threshold Scan			X													X			X				X			X	
Tracker	TE306 – TOT Test			X													X			X				X			X	
Tracker	TE307 – TREQ Check															X				X				X				
Tracker	TE401 – Self-Triggering Test															X				X				X				
Tracker	TE403 - Efficiency, Resolution, and Alignment 2																											
Tracker	TE601 – Threshold Calibration 2																											
Tracker	TE602 – TOT Conversion Parameter Calibration 2																											
Tracker	TE603 – MIP Calibration 2																											
Tracker	TE604 – Threshold Dispersion 2																											
Tracker	TE702 – Trigger Jitter Measurement																										X	
Tracker	TE703 – Dead Time Measurement																X										X	
Tracker	TE704 - Noise Occupancy with Readout in Progress																X										X	
Calorimeter	Limited Functional Test Suite															X				X				X				
Calorimeter	Comprehensive Functional Test Suite		X														X			X				X			X	
GASU	TBD				X																							
PDU	TBD					X																						
SIU	TBD						X																					
EPU	TBD							X																				
ACD	TBD								X																			
Integration Tests	CAL to TEM/TEMPS Integration Tests									X																		
Integration Tests	TBD GASU Integration Tests										X																	
Integration Tests	TBD PDU Integration Tests											X																
Integration Tests	TBD SIU Integration Tests												X															
Integration Tests	TBD EPU Integration Tests													X														
Integration Tests	TBD ACD integration tests														X													
Integration Tests	TBD Heater Control Box Integration tests															X												
Tower Tests	Functionality vs Clock Frequency															X	X											
SVAC Tests	TE403 - Efficiency, Resolution, and Alignment																	3,5				3,5				3	3	
SVAC Tests	TE601 – Threshold Calibration																	5				5				X	X	
SVAC Tests	TE602 – TOT Conversion Parameter Calibration																	5				5				X	X	
SVAC Tests	TE603 – MIP Calibration																	4,5				4,5				4	4	
SVAC Tests	TE604 – Threshold Dispersion																	5				5				X	X	
SVAC Tests	Calib Gen																	5				5				X	X	
SVAC Tests	Calib DAC																	5				5				X	X	
SVAC Tests	Muon Runs (See LAT-DS-04136)																	5				5				X	X	
T&DF Tests	LAT Main Feed Power-Up Test																											
T&DF Tests	SIU/EPU Power-Up Test																											
T&DF Tests	SIU/EPU Warm Boot, via Hardware Reset																											
T&DF Tests	SIU/EPU Warm Boot, via Watchdog Timer Expiration																											
T&DF Tests	SIU/EPU Cold/Warm, via Command																											
T&DF Tests	LAT Power On																											
T&DF Tests	LAT Configuration																											
T&DF Tests	GEM Timing Alignment																			X								
T&DF Tests	Subsystem TACK Delay																			X								
T&DF Tests	FLE Muon Scan																			X								
T&DF Tests	Trigger Efficiency																			X								
T&DF Tests	Trigger Window Test																						X					
T&DF Tests	Baseline CR																										7	
T&DF Tests	Condition Scan CR																										7	
T&DF Tests	Baseline CR trigger sub-tests																										7	
T&DF Tests	Nominal-rate CR																										7	
T&DF Tests	Nominal-rate condition scan CR																										7	
T&DF Tests	CAL nominal-rate CR																											
T&DF Tests	Baseline CR data volume sub-tests																										7	
T&DF Tests	Nominal-rate CR data volume sub-tests																										7	
T&DF Tests	VDG two-rate tests																											
T&DF Tests	Deliberate Introduction of errors																											
System Interface Tests	TBD																											

1-The LPT version of this test is abbreviated
 2-See SVAC definition (below) for these tests
 3-Partial test with no threshold variations, data processing on SVAC muon runs
 4-Data processing on SVAC muon runs
 5-First tower only
 6-First tower only
 7-With 2 tower test only, per LAT-DS-4136