

LAT Level Test Case Development/Execution Priority

2 March 06

v1

Tier	Tier Test Cases		Tier Reasoning
	Test Case ID	Test Case Name	
1	LAT00x LAT01x LAT04x LAT22x	LAT Power On LAT Power Off Establish Science Operations Config Science Operations Demo	The LAT must be power on, off, and put in a state where science data can be taken before anything else. Performed in config 1, possibly config 2.
2	LAT30x LAT40x LAT50x	ACD CPT CAL CPT TKR CPT	Detector hardware performance verification is of the next highest priority.
3	LAT07x LAT21x	LAT Energy Measurement Calibration LAT Timing Measure & Adjust	Understanding the timing and interaction of the entire Instrument is a high priority.
4	LAT03x LAT13x	Electrical Power Subsystem Performance LAT/Spacecraft Interface Test	External interface hardware verification tests.
5	LAT02x LAT06x	LAT Reinitialization SIU/EPU Hardware Functional	Demonstrate the ability of EPU/SIU hardware/software to perform basics such as boot, memory dump, manage files, and reprogram.
6	LAT15x LAT16x LAT521 Tier 1-6 X-Strap	LAT Ambient TCS Test LAT Survival Heater Test LAT Light Tight Test Tier 1-6 tests in Configs 2-6	Remaining hardware verifications.
7	LAT650 LAT660 LAT70x LAT711 LAT8xx	LAT False Triggers LAT Data Transport Errors LAT SVAC Flight Config on Ground LAT SVAC Muon Calibration End-To-End Committee Recommended	SVAC/ETE tests.
8	LAT08x LAT12x	LAT Safe Modes LAT Science Modes	Hardware/Software interface tests.
9	LAT20x LAT23x	LAT Science Performance Diagnostics LAT GRB Handling	LAT Level demonstrations. Mostly software, GRB interface.
10	LAT17x LAT181 LAT31x LAT41x LAT51x	LAT Conducted & Radiated Emissions LAT Conducted & Radiated Susceptibility ACD LPT CAL LPT TKR LPT	LPTs not required until Post Ship LAT CPT at NRL. EMI test cases not required until EMI test at NRL.