

HIGH ENERGY SOLAR SPECTROSCOPIC IMAGER

| System Description | EMI EMC | Modal Survey | Vibration | Struct.Loads (Sine Burst) | Mass | Bakeout | Thermal Cycle/ Thermal Vacuum | Failure Free Hrs | Special Tests |
|--------------------------------|--|-----------------|--------------------------------|-------------------------------------|-------------|------------|--|---------------------|---|
| INSTRUMENTS | | | | | | | | | |
| Roll Angle System | | psi T | 9.8 Grms | | psi T | | psi T | psi T | QM Radiation 0 |
| Imager | | .25G swp0 | 8.5/6.6 Grms0 Force Limited | 7.5 Grms Lateral 9.2 Grms Axial0 | 0 | | TC: 5 cycles 5 to 45C pre-vib TC : 2 cycles 0 to 40C post-vib Twist < 2 arcsec 0 | psi T | Gridlet 0 TMS < 2 arcsec. 0 Tube Neutron Radi Tube Humidity 0 |
| - SAS | | 0 | 12.8/8.6 Grms0 | | 0 | | TV: 1 cycle -30 to 20C each0 | | SAS Spare0 |
| - Grids | | .5G swp0 | Enveloped 0 | | 18.478 kg 0 | | TV: 2 cycles 5 to 450 | | Optical & X-Ray Cl |
| - Trays | | 0 | 12.8/8.6 Grms0 | | 0 | | | | |
| - Imager Harness | | | | | ucb T | 60C, 48hr | | | |
| Spectrometer | | .25G sweep0 | 6.5/3/3 Grms 0 | 7.5 Grms Lateral 9.2 Grms Axial0 | ucb T | 40C, 72 hr | ucb T | ucb T | Thermal Performan |
| - CryoCooler | | | 14.1/6.8 Grms | | GSFC T | | TV: TBD cycles -40 to +60C | 13000 hrs 0 | |
| - Spectrometer Harness | | | | | ucb T | 60C, 48hr | | | |
| Instrument Data Processor Unit | CS: 1Vpp 120Hz | | | | | | | | |
| -VME | | .5 G sweep | 14.1/9.8 Grms | | ucb T | | TV: 4 cycles -7 to +43C | 100 hrs | |
| -IPC | | .5 G sweep | 9.8 Grms | | ucb T | | TV: 4 cycles -11 to +43C | 100 hrs | |
| -CPC | | .5 G sweep | 9.8 Grms | | ucb T | | TV: 4 cycles -21 to +54C | 100 hrs | |
| -PD | | .5 G sweep | 9.8 Grms | | ucb T | | TV: 4 cycles -40 to +15C | 100 hrs | |
| -PMT | | .5 G sweep | 9.8 Grms | | ucb T | | TV: 4 cycles -7 to +43C | 72 hrs | |
| S/C COMPONENTS | | | | | | | | | |
| Solar Array Wings/Panels | | | 139.9 dB | | sa T | | TC: -95C to +95C0 | | |
| IAD Motor | | | 14.1 Grms0 | | | | TV 8 cycles -45C to +55C0 | | |
| Battery Assembly | | | 14.6 Grms0 | | sa T | | TV: 35 cycles0 | | |
| Solid State Recorder | | | 14.6 Grms0 | | sa T | | TC: 8 cycles -34C to +71C0 | | |
| Coarse Sun Sensor | | | 14.1 Grms0 | | sa T | | TC: 8 cycles at -24C to +61C0 | | |
| Fine Sun Sensor | | | 14.1 Grms0 | | sa T | | TC: 8 cycles at -20C to +60C0 | | |
| Torque Rods | | | 14.1 Grms0 | | sa T | | TC: 8 cycles at -34C to +71C0 | | |
| Magnetometer | | | 14.1 Grms0 | | sa T | | TC: 8 cycles at -30C to +70C0 | | |
| Transponder | ce T | | 14.6 Grms0 | | ce T | | TV: 8 cycles at -20C to +65C0 | | |
| RF Switch | | | 14.6 Grms0 | | sa T | | TV: 2 cycles at -34C to +71C0 | | |
| Combiner | | | 14.1 Grms0 | | | | TV: 8 cycles at -34C to +71C0 | | |
| Antenna | | | 14.6 Grms0 | | | | TC: 8 cycles at -24C to +61C0 | | |
| SEM | sa Abbreviated | | 14.6 Grms0 | | sa T | | TV: 8 cycles at -34C to +71C0 | | |
| - PCB | | | | | | | TC: 1 cycles -34 to +71C0 | | |
| - ADB | | | | | | | TC: 1 cycles -34 to +71C0 | | |
| - CCB | | | | | | | TC: 1 cycles -34 to +71C0 | | |
| - PACI | | | | | | | TC: 1 cycles -34 to +71C0 | | |
| - CIB | | | | | | | TC: 1 cycles -34 to +71C0 | | |
| - CPU (RAD6000) | | | 8.4 Grms0 | | | | TC: 2 cycles -34 to +70C0 | | |
| Structure | | Tap Test 0 | | | | | | | |
| SPACECRAFT | RS: 20V/m RE: 461C Self Compatible | .5 G Sweep | 2.7 Grms Force Limited | 7.5 Grms Lateral 9.2 Grms Axial | ucb T | | TV: 4 cycles | 350 hrs Total | TMS < 2 arcsec. RAS-SAS Coalign Ground Station Cor Separation Shock 1 Mass Moments Thermal Balance Spin Balance |