**SPxY Project: General Testing Plan**

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| **Filename:** Document6  **Project:** Project SPxY, EPFL Spacecraft team | **Prepared by:** Valentin Suppa-Gallezot  **Approved by:** TBA |

# Scope

This Document will be used to summarize all the tests needed to be performed in the verification and qualification process. Identification of the potential point of failure and testing them is also a part of risk mitigation strategies. We will also discuss the maintenance plan of the SPxY Project.

# Testing plan for validation and Qualification

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| --- | --- | --- |
| Element tested | Method | Assigned party |
| Mechanical compliance with design | Measurement Report (Specify tolerances) | PLTE or manufacturer |
| Reductor testing (Backlash, Reduction ratio, rigidity) and characterization | Testing plan (Number) | SPxY project |
| Electrical Cabinet Testing | Testing plan (503001) | SPxY project |
| Antenna Patch Testing | Testing plan (506001) | SPxY project |
| Motor testing and Characterization | Testing plan (Number) | SPxY project |
| Validation and qualification of the Pointing capacity of the system | Testing plan (Number) | SPxY project |
| Control testing (Simulation Simulink) | Testing plan (Number) | SPxY project |
| GUI compliance testing | Testing plan (Number) | SPxY project |
| Visual Inspection |  |  |

Change method 🡪 4

Visual 🡪 Check oxidation, Visual

Check sequence 🡪 MIP (mandatory inspection point) / IP (Inspection point)

Elements Critique

# Maintenance plan

|  |  |  |
| --- | --- | --- |
| Element tested | Method | Assigned party |
| Electrical cabinet |  |  |
| Pointing ability |  |  |
| Structural integrity of the system |  |  |
| Clean Up of the whole system |  |  |