Design File (Report) Rubric

Criteria	Unacceptable	Weak	Good	Exemplary
Report Format *Are all required sections in the report and in the proper order?* (5 points)	Missing several sections and not ordered correctly (0)	Missing one section or several sections incomplete (1.7)	All sections present but missing information or out of order (3.3)	All sections present and complete (5)
Summary *Is the summary of appropriate length? Does it describe the project and results?* (5 points)	Summary too short (<125 words), too long (>500 words) or does not make sense on its own (0)	Summary indicates some of the work done but does not describe the project completely (1.7)	Some aspects of the project and its results are unclear, but all aspects are covered (3.3)	Clearly and concisely describes the project and results (5)
Design Description *Could technician build your design based on this documentation?* (20 points)	Documentation is missing. Assembly requires new design effort (0)	Documentation is not clear. Attempts to assemble the design would result in a similar but not same product (6.7)	Documentation is complete but there are ambiguities in the design. A technician familiar with the project could replicate it (13.3)	Engineering drawings, code, and assembly instructions are complete and correct (20)
Testing Description *Could another test engineer replicate your tests?* (15 points)	Test equipment not identified or test procedure not described. The same test could not be conducted (0)	Test replication requires significant effort to redesign the tests, but they could be replicated (5)	Test equipment described only generically or procedures are ambiguous in some instances (10)	All test equipment specified (model numbers) and procedures fully described (15)
Testing Results *Were the test results described correctly? Were the proper tests performed to measure system capabilities?* (15 points)	Several tests are missing or results are not understandable (0)	Results are not clear or an important test was skipped (5)	Necessary tests were performed, but some there are formatting issues that affect clarity (10)	Proper tests were conducted and results clearly documented (15)

Design Decision Discussion *Could competent engineer build on top of your design with modifications to provide different capabilities?* (20 points)	An engineer working on a similar project would have to start from scratch (0)	Only some features of the design are described. This design is only of limited use to another engineer (6.7)	Some design decisions are arbitrary, but the design of the system still would be useful to an engineer (13.3)	Design decisions are described completely. This is an excellent reference design for this type of system (20)
Test Results Discussion *Are the capabilities of the system described? Where would this design work? How well does it work? What are its limitations? What can it not do?* (20 points)	No meaningful interpretation of the testing results (0)	Minimal interpretation of results and few capabilities of the system are clear (6.7)	Results are interpreted into capabilities, but some capabilities are ambiguous (13.3)	It is clear what the system can do, cannot do, and where it works best (20)

Required Sections

- Project Name
- People Involved (with roles as applicable)
- Summary (Project goal; Summary of work performed; Summary of outcome)
- Materials
- Assembly Procedures
    - Schematics
    - Engineering Drawings
    - Programming Code
- Test Equipment
- Test Procedures
- Test Results
- Discussion
    - Of Design Decisions
    - Of Test Results