Design Report

Test Team

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Test Course

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1 Introduction

This is a test document to verify that the designreport.cls class file works correctly after removing the impact statement environment.

2 Test Section

This section contains some basic content to test the formatting:

2.1 Subsection Test

This is a subsection with some text content.

2.1.1 Subsubsection Test

This is a subsubsection to test the formatting hierarchy.

3 Engineering Requirements

The following table demonstrates the longtable functionality for engineering requirements that can span multiple pages:

Table 1. Engineering Requirements Table

| ER | Engineering Require- | MR | Justification | Verification |
|-----|----------------------------|-----|-----------------------------|---------------------------|
| No. | ment | | | |
| 1 | System shall control pri- | 1 | Core objective of the | Test each control mecha- |
| | mary functionality | | project | nism individually |
| 2 | Device shall fit within | 2 | Physical constraints of the | Verify using dimensional |
| | specified dimensions | | application | measurements |
| 3 | System shall have inde- | 3 | Operational indepen- | Confirm electrical isola- |
| | pendent power supply | | dence requirement | tion using multimeter |
| 4 | Device shall sense motion | 1,5 | Required for state moni- | Perform sensor accuracy |
| | and orientation | | toring | and repeatability tests |
| 5 | System shall operate for | 1,3 | Must function throughout | Test under simulated con- |
| | required duration | | operation period | ditions |
| 6 | Device shall use standard | 3 | Standardization and avail- | Verify component specifi- |
| | components | | ability | cations |
| 7 | System shall not cause in- | 4 | Compatibility with other | Perform electromagnetic |
| | terference | | systems | compatibility testing |
| 8 | Device shall withstand | 5 | Structural integrity under | Conduct force testing per |
| | operational forces | | normal loads | specifications |
| 9 | System shall tolerate vi- | 5 | Environmental durability | Perform vibration testing |
| | brations | | requirement | at specified levels |
| 10 | Device shall handle im- | 5 | Shock resistance capabil- | Execute impact testing |
| | pact loads | | ity | per mission profile |
| 11 | System shall operate in | 5 | Temperature tolerance re- | Test across expected tem- |
| | thermal range | | quirement | perature range |

| ER No. | Engineering Requirement | MR | Justification | Verification |
|-----------|---|----|---------------------------------|--|
| 12 | Development cost shall stay within budget | 7 | Financial constraint | Track expenses against allocated budget |
| 13 | Design shall comply with regulations | | Legal and regulatory compliance | Review against applicable standards |
| 14 | System shall provide real- time response | 6 | Performance timing requirement | Verify response time under test conditions |
| 15 | Device shall not interfere with operations | 6 | Non-interference requirement | Test activation scenarios and verify non-operation |

4 Conclusion

The design report class file appears to be working correctly with longtable support.