# **Design Report**

## **Test Team**



# University of Kentucky Department of Engineering

**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.