

**NTS Labs, LLC**  
**(DBA Element Materials Technology Huntsville)**  
**Test Report for**  
**CS115 Testing of the**  
**Battery**

**Prepared For**

Rubix LLC | 2310 Township Rd 444 | Sugarcreek, OH 44681

**Prepared By**Element Materials Technology Huntsville | 7800 Highway 20 West | Huntsville, AL 35806 | 256-837-4411 |  
[www.element.com](http://www.element.com)

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Technical Writer

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EMI Project Engineer

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Quality Assurance Representative

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**Revision History**

<b>Rev.</b>	<b>Description</b>	<b>Technical Writer</b>	<b>Project Engineer</b>	<b>Quality Assurance</b>
0	Initial Release	—	—	—

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### 1.0 Introduction

This document presents the test procedures used and the results obtained during the performance of an EMI test program. The test program was conducted to assess the ability of the specified Equipment Under Test (EUT) to successfully satisfy the requirements listed in Section 2.0.

### 2.0 References

The following references listed below form a part of this document to the extent specified herein.

- Test Specification: MIL-STD-461G
- Rubix LLC Purchase Order(s) Credit Card
- Quote(s) QUO-000747537-0
- ISO/IEC 17025:2017(E) General Requirements for the Competence of Testing and Calibration Laboratories, dated 11/1/2017
- ISO-9001:2015, Quality Management Systems Requirements

### 3.0 Product Selection and Description

Rubix LLC selected and provided the following test sample(s) to be used as the Equipment Under Test.

**Table 3.0-1: Product Identification - Equipment Under Test (EUT)**

Item	Qty.	Name/Description	Part Number	Serial Number
1	1	Battery	RS51100	Element - 001

3.1 Received EUT Photographs



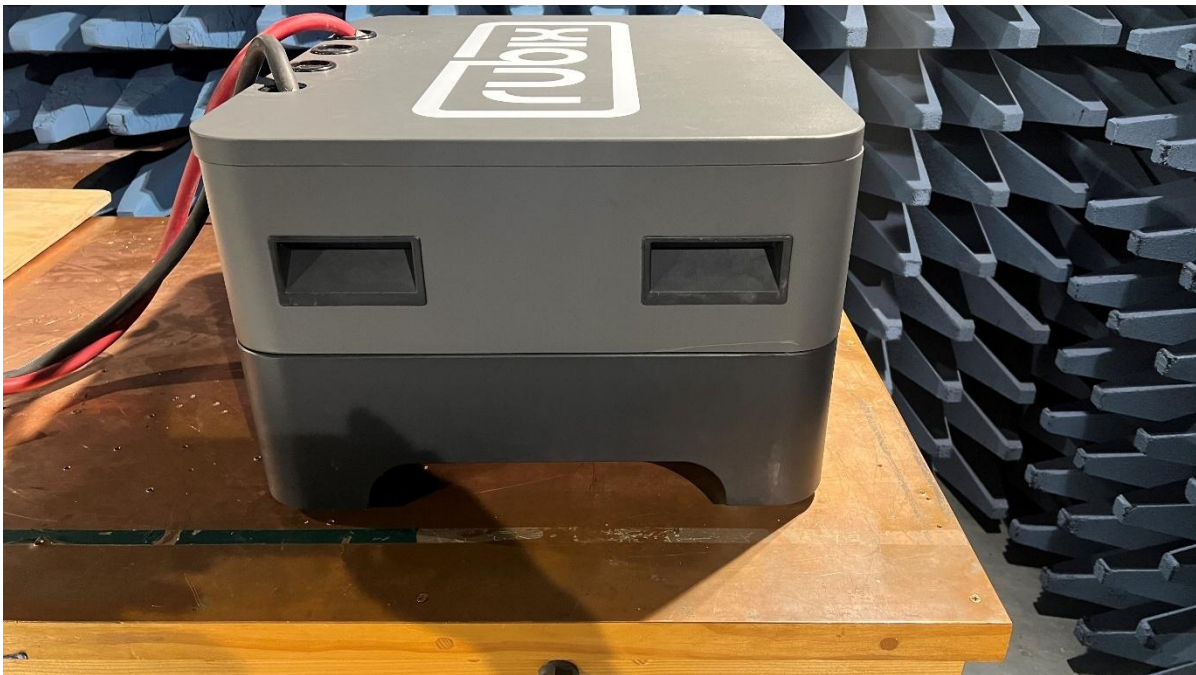
01 EUT - Rubix Battery



02 EUT - Rubix Battery



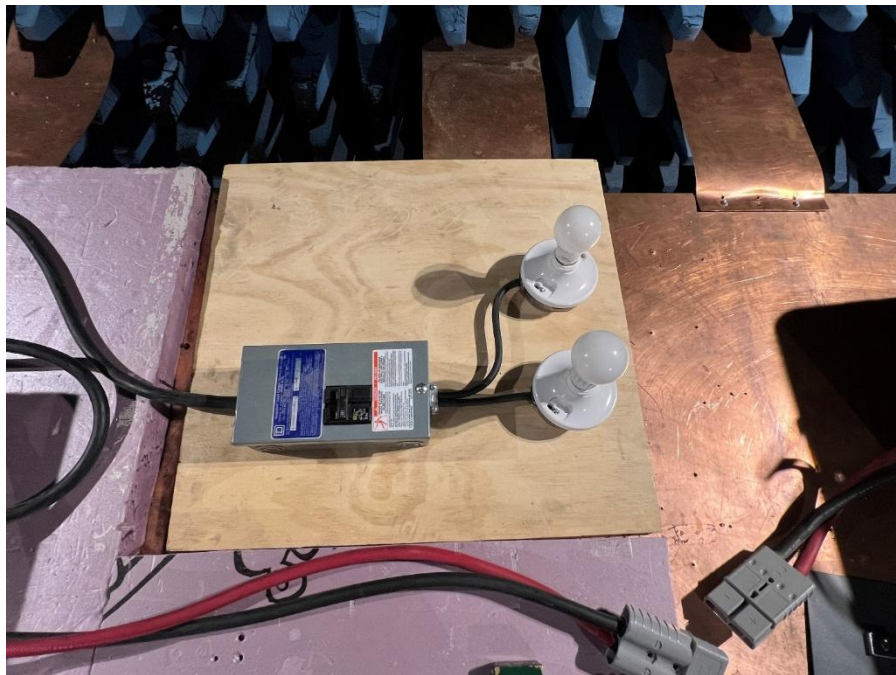
03 EUT - Rubix Battery



04 EUT - Rubix Battery



05 EUT - Rubix Battery



06 Light Bulb Fixture - Load



07 Support Equipment - Sol-Ark 12k-P



08 Support Equipment - Sol-Ark 12k-P



09 Support Equipment - Sol-Ark 12k-P



10 Support Equipment - Sol-Ark 12k-P





13 Support Equipment - Sol-Ark 12k-P



14 Support Equipment - Sol-Ark 12k-P

**3.2 Security Classification**  
Non-classified

**3.3 Source Inspection**  
Element QA

**3.4 Quality Assurance**

All work performed on this test program was in accordance with Element’s Quality Program.

The Element Materials Technology, Huntsville Facility, Quality Management System is registered in compliance with the ISO-9001:2015 International Quality Standard. Registration has been completed by Intertek.

**4.0 General Test Requirements**

**4.1 Test Equipment**

The instrumentation used in the performance of these tests is periodically calibrated and standardized within manufacturer's rated accuracies and are traceable to the National Institute of Standards and Technology. The calibration procedures and practices are in accordance with ISO 17025:2017. Certification of calibration is on file subject to inspection by authorized personnel.

**4.2 Standard Test Conditions**

The EUT was configured using the method as described in MIL-STD-461G.

1. The EUT physical layout was performed by Element Materials Technology personnel with assistance from the customer's technical representative.
2. The EUT installation and operation were verified prior to the start of testing by the customer's technical representative.
3. The customer's technical representative authorization was acquired prior to test commencement.

**Table 4.2-1: MIL-STD-461 Bonding Summary**

Measurement Points			Measurements	Units
From	To	Location	Bonding reading	
Table	Table	Chamber 1	0.08	mΩ
Table	Floor		0.62	
EUT	Table		0.36	

## 5.0 Test Descriptions and Results

**Table 5.0-1: Summary of Test Information & Results**

Section	Test	Specification	Test Facility	Test Date	Part #	Serial #	Notice of Deviation (NOD)	Test Result
5.1	CS115	MIL-STD-461G	Huntsville, AL	11/26/2025	RS51100	Element - 001	N/A	Compliant

The decision rule for Test Results was based on the Test Specification used for testing.

**5.1 CS115****5.1.1 Test Procedure**

CS115 testing was performed on the EUT in the manner detailed in MIL-STD-461G.

**5.1.2 Test Equipment**

All EMI test equipment required for this test is listed on the Test Equipment List.

Element Huntsville uses commercially purchased EMI test software. The ETS-Lindgren Test software called TILE was specifically designed for EMI testing.

**5.1.3 Test Result**

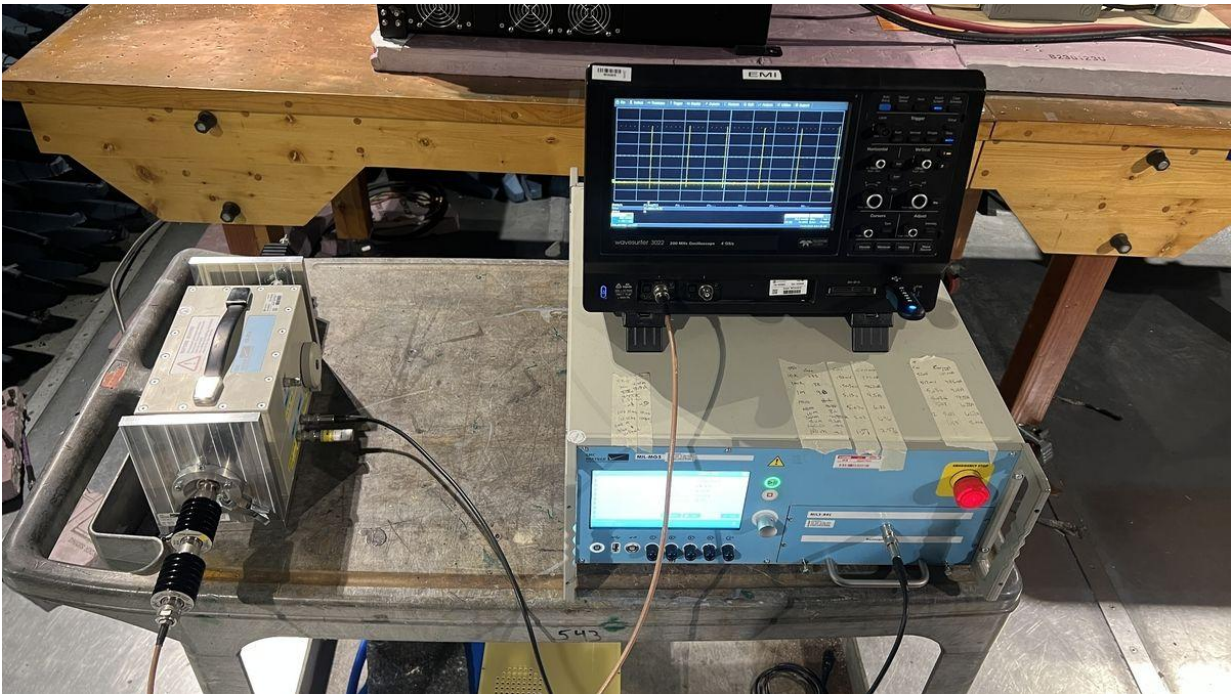
Conducted Susceptibility per MIL-STD-461G was performed on the EUT. During testing, the EUT showed no signs of susceptibility, and no deviations were noted. The EUT was compliant with CS115.

The test results contain the following information:

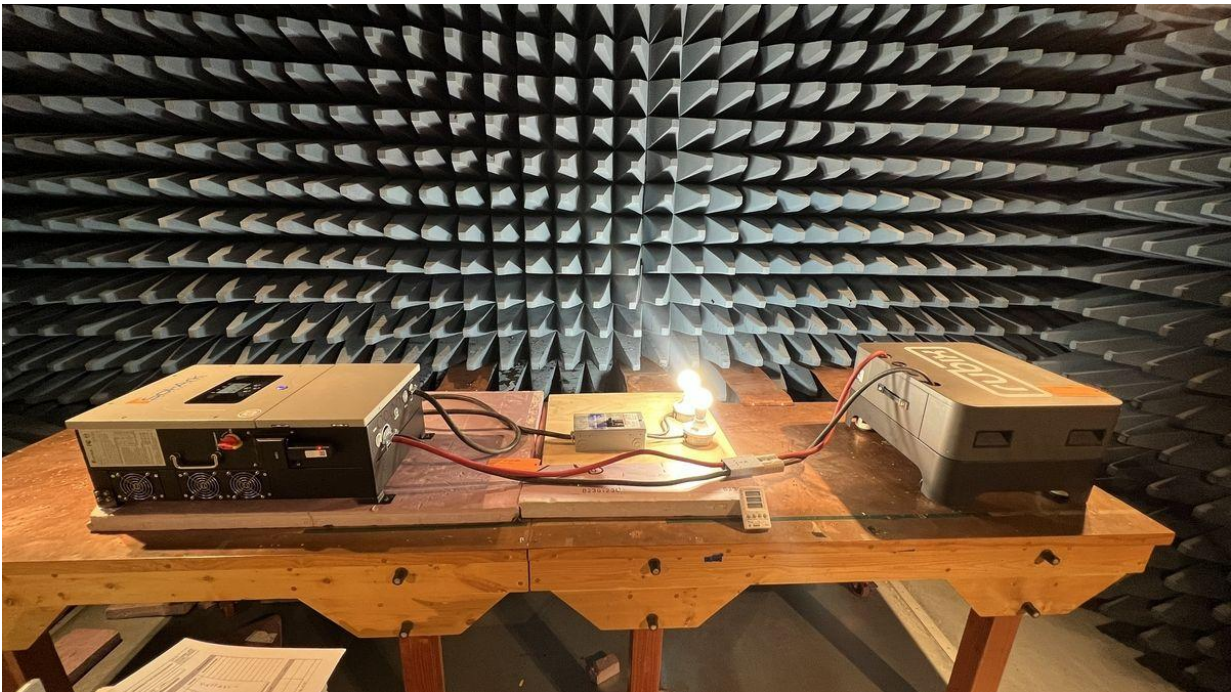
- CS115 Datasheets
- CS115 Photographs
- CS115 Test Data
- CS115 Test Equipment List



5.1.5 Test Photographs



01 CS115 - Calibration



02 CS115 - Active - Test Setup

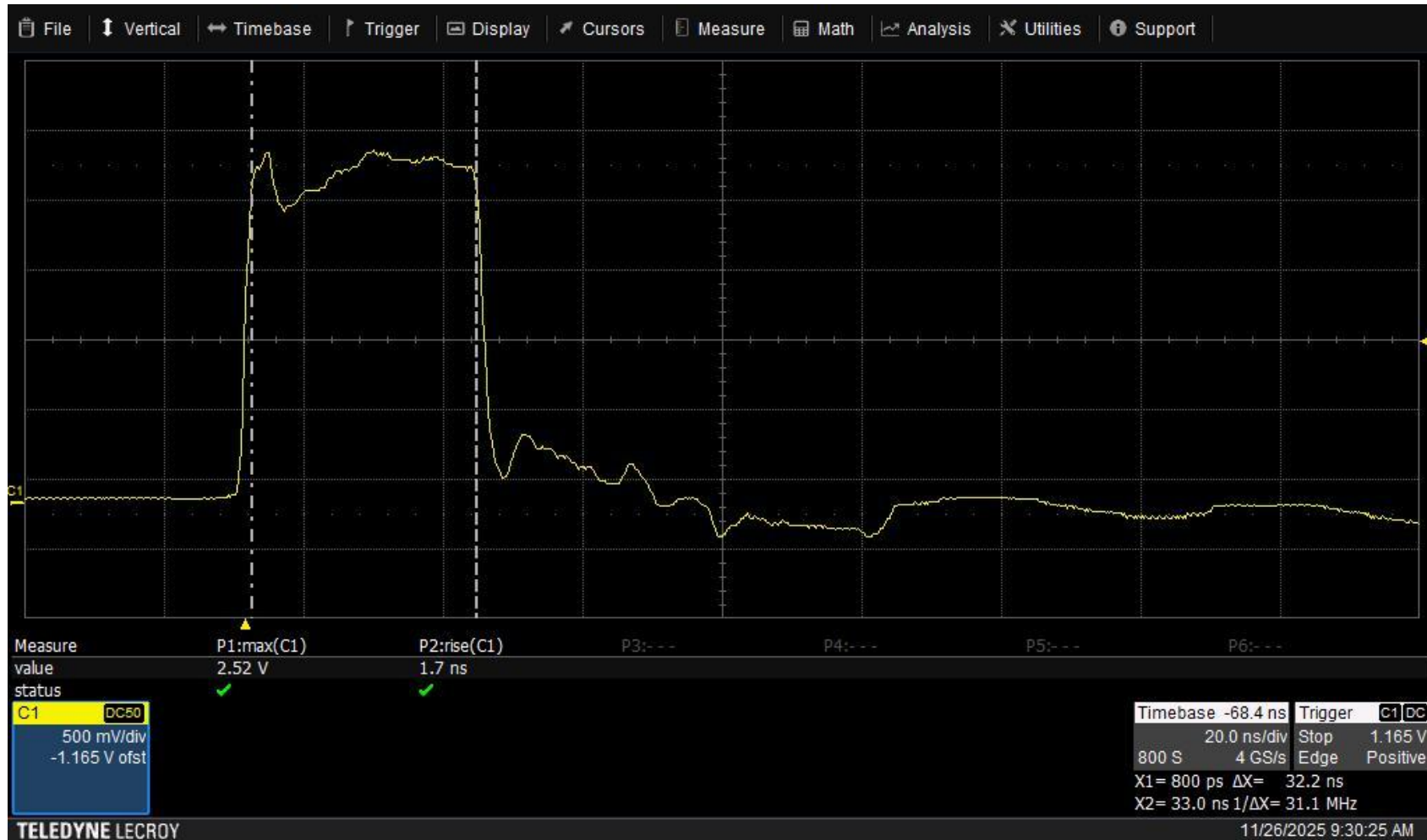


03 CS115 - Active - Power Bundle

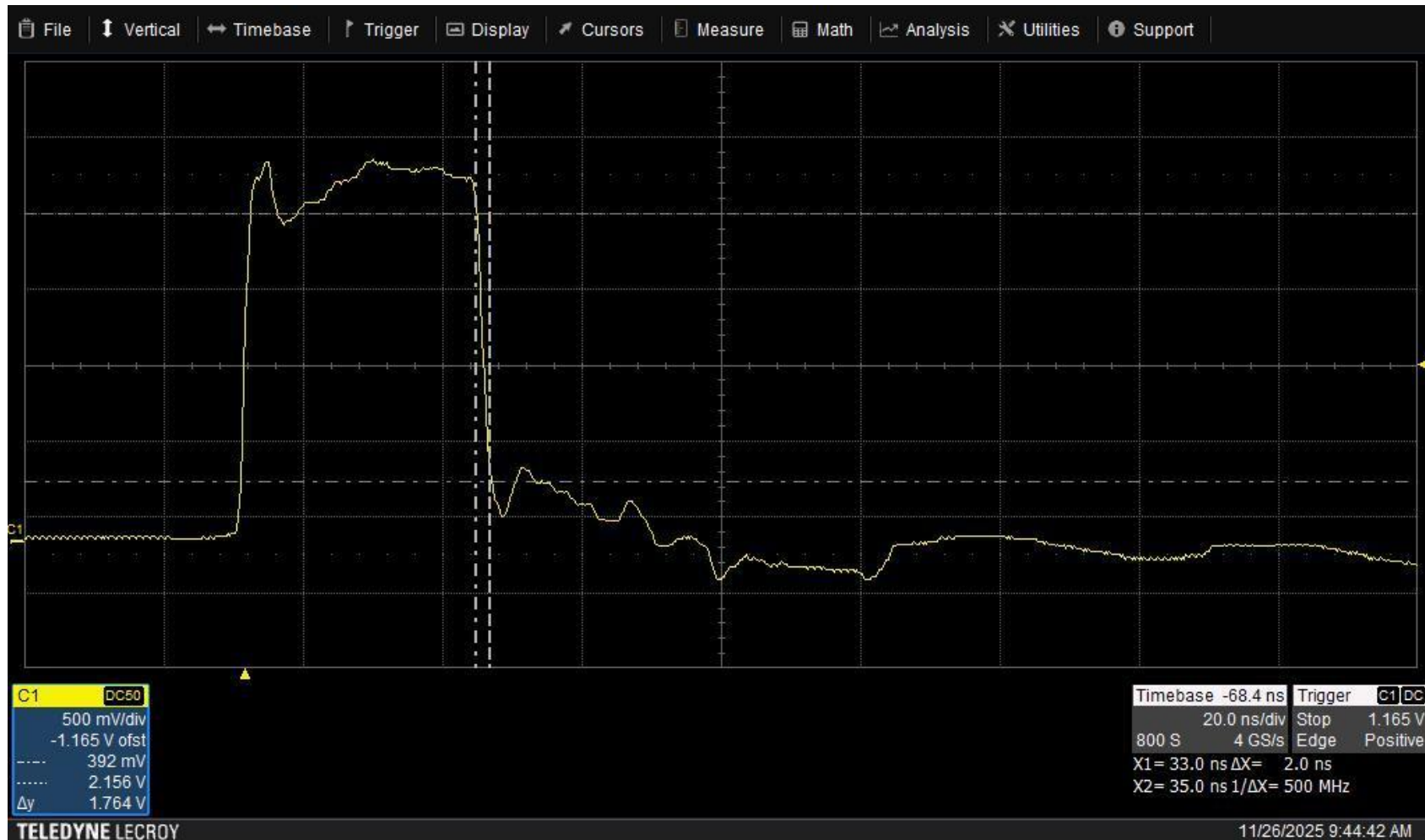


04 CS115 - Active - High Side

### 5.1.6 Test Data



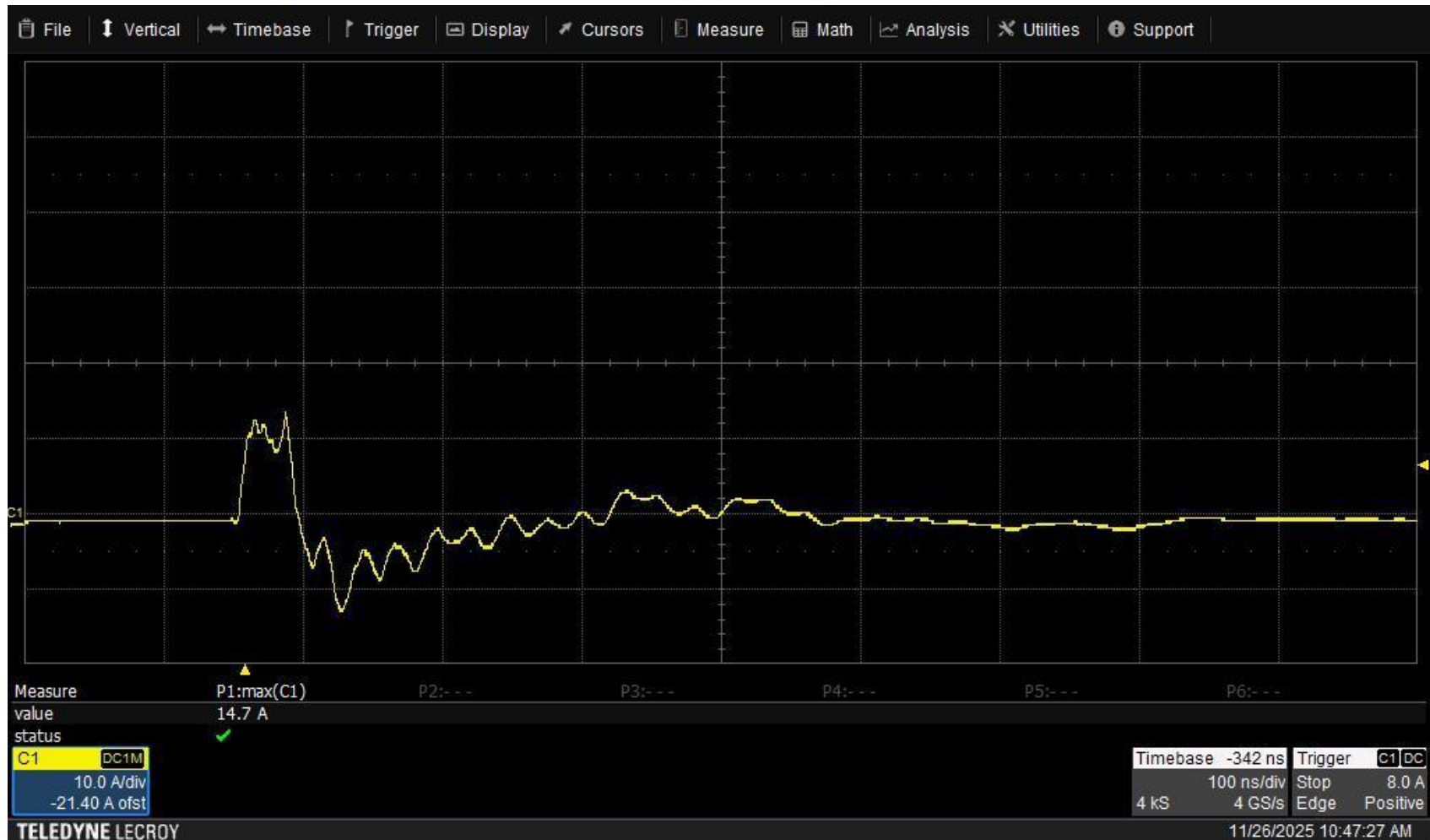
01 CS115 - Calibration - Amplitude and Rise Time



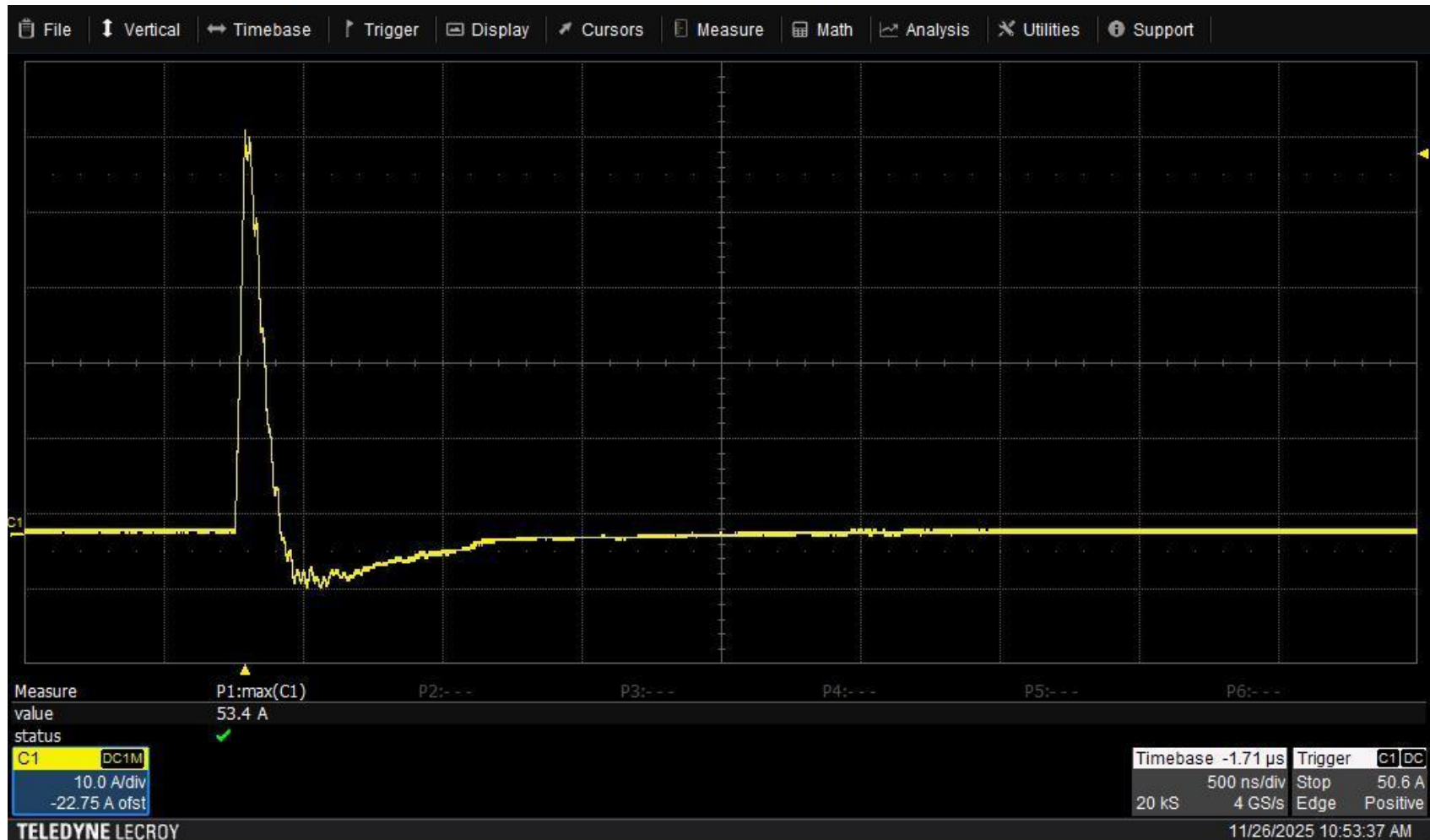
02 CS115 - Calibration - Fall Time



03 CS115 - Calibration - Repetition Rate



04 CS115 - Active - Power Bundle



05 CS115 - Active - High Side

**5.1.7 Test Equipment List**

**Table 5.1-1: CS115 Test Equipment List**

Asset Number	Asset Name	Manufacturer	Model	Calibrated	Due
US58-A042494	EMIC1 17'8" x 14'8" x 9'4"	ETS-Lindgren	CH 1 (S201 8X8)	NCR	NCR
US58-A077833	Generator System	EMC-Partner	MIL-MG3	NCR	NCR
US58-A043078	Oscilloscope	LeCroy	WS3022	04/02/2025	04/02/2026
US58-A084156	Attenuator	Bird Electronic	50-A-MFN-40	02/26/2025	02/26/2026
US58-A050007	Current Clamp	Solar Electronics	9257-1N	04/02/2025	04/02/2026
US58-A041819	Hygrometer	Extech Instruments	445702	01/27/2025	01/27/2026
US58-A069742	Milliohm Meter	BCD Electronics	M1	04/02/2025	04/02/2026

**Calibration Abbreviations**

CAL: Calibration

NCR: No Calibration Required

**End of Test Report**