Glenair, Inc. 1211 Air Way, Glendale, California, 91201
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GT-26-103

PwrLine HV 971-200 (Non-Shielded)
Test Report

PREPARED BY: _____ **DATE:** 6/10/2026

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Revision History

REVISION	DATE	REVISED PAGES	REVISION NOTES
-	6/9/2026	N/A	Initial Release

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1.0 SCOPE

1.1 The purpose of the Glenair Evaluation Test Plan is to substantiate the performance of the Glenair 971-200 PwrLine HV interface when exposed to testing parameters typically used to substantiate the mechanical performance of terminal lugs and the electrical performance of contacts defined within SAE-AS7928 and SAE-AS39029.

1.2 Testing demonstrated that the Glenair PwrLine HV system meets or exceeds the Electro-mechanical requirements defined in SAE-AS7928 specification for terminal lugs and SAE-AS39029 Specification for electrical contacts used in connectors.

2.0 EXECUTIVE SUMMARY

2.1 Using elements of the performance parameters defined within SAE-AS7928 and SAE-AS39029, Glenair's testing of the 971-200 PwrLine HV has demonstrated Glenair's product meets or exceeds the traditional terminal lug-electrical contact systems used in commercial aerospace applications.

2.2 Testing was performed at Vertical Laboratories LLC, 1805 Flower St. Glendale, CA 91201 – See detailed report in **Attachment** section.

Requirement	**Test Procedure**	**Results**
Visual and dimensional examination	EIA-364-18	Parts conform to engineering drawings
Initial Contact Resistance (25°C)	EIA-364-06D	
Level 1 8 AWG – 46A 2 AWG – 100A 2/0 AWG – 185A		8 AWG: 20.67 mV 2 AWG: 13.28 mV 2/0 AWG: 13.28 mV
Level 2 8 AWG – 90 A 2 AWG – 230 A 2/0 AWG – 360 A		8 AWG: 44.25 mV 2 AWG: 30.68 mV 2/0 AWG: 30.68 mV
Temperature Cycling – 5 cycles (-65°C to 200°C)	EIA-364-32, Method A, Condition IV Duration A	

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Requirement	Test Procedure	Results
Vibration	MIL-STD-202, Method 201 (10 Hz to 55 Hz with an amplitude of 0.03 inches)	No electrical discontinuities, evidence of cracking, breaking, loosening of parts, or defects detrimental to the mechanical or electrical performance.
Shock (30 G's)	EIA-364-27D, Condition I	No electrical discontinuities, evidence of cracking, breaking, loosening of parts, or defects detrimental to the mechanical or electrical performance.
Post accelerated aging Contact Resistance (25°C)	EIA-364-06D	
Level 1 8 AWG – 46A 2 AWG – 100A 2/0 AWG – 185A		8 AWG: 23.45 mV 2 AWG: 25.88 mV 2/0 AWG: 25.93 mV
Level 2 8 AWG – 90 A 2 AWG – 230 A 2/0 AWG – 360 A		8 AWG: 51.93 mV 2 AWG: 68.88 mV 2/0 AWG: 58.78 mV
Contact Resistance (200°C)	EIA-364-06D	
Level 1 8 AWG – 46A 2 AWG – 100A 2/0 AWG – 185A		8 AWG: 36.15 mV 2 AWG: 34.38 mV 2/0 AWG: 32.25 mV
Level 2 8 AWG – 90 A 2 AWG – 230 A 2/0 AWG – 360 A		8 AWG: 73.3 mV 2 AWG: 78.55 mV 2/0 AWG: 64.98 mV
Crimp Tensile Strength	EIA-364-08C	8 AWG: 387 lbf 2 AWG: 961 lbf 2/0 AWG: 870 lbf

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Overview:

Glenair 971-200 PwrLine HV is intended to replace terminal lugs, terminal strips and strip protective covers, traditional in-line splices, and large circular connectors. Glenair's PwrLine HV eliminates the issues associated with using traditional terminal lugs and terminal strips with their ancillary hardware by behaving more like an in-line splice while providing the convenience of a traditional connector without the packaging and installation challenges.

Based on the PwrLine HV intended application, replacement of terminal lugs, terminal strips, in-line splices, and electrical contacts used in large circular connectors, elements from SAE-AS7928 and SAE-AS39029 have been used to validate the performance.

Details of test:

PwrLine HV was subjected to a series of tests to accelerated the aging of the electrical interface. The environmental tests consisted of:

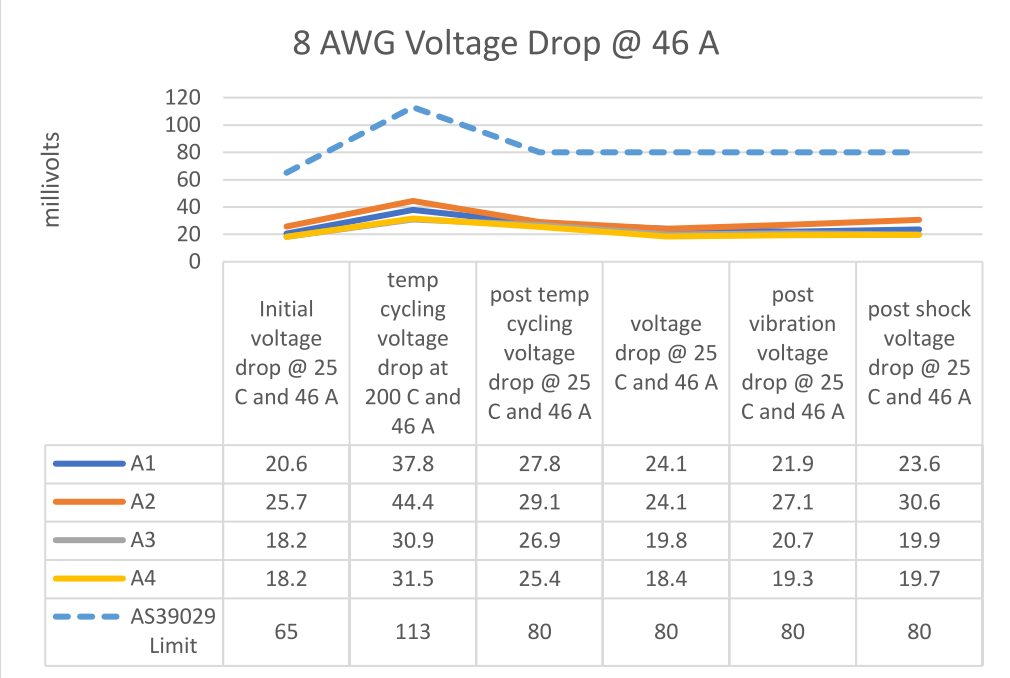
Temperature Cycling -65°C to +200°C
Vibration – 18 hours in each of two axes mutually perpendicular to each other
Shock – 30G's

Contact voltage drop was used to monitor the performance of the PwrLine HV system. At the beginning of testing, contact voltage drop was measured and re-taken at the completion of temperature cycling, vibration and shock. The following charts capture the performance of the 8 AWG, 2 AWG and 2/0 AWG PwrLine HV contact system. Voltage Drop was measured at two current levels. Level 1 used the rated current values define within SAE-AS39029. Level 2 current values were approximately 2X. The rational for the higher current level is based typical usage application in aviation where the main power feeder distribution cabling utilizes the material maximum thermal properties in determining the optimized cable weight.

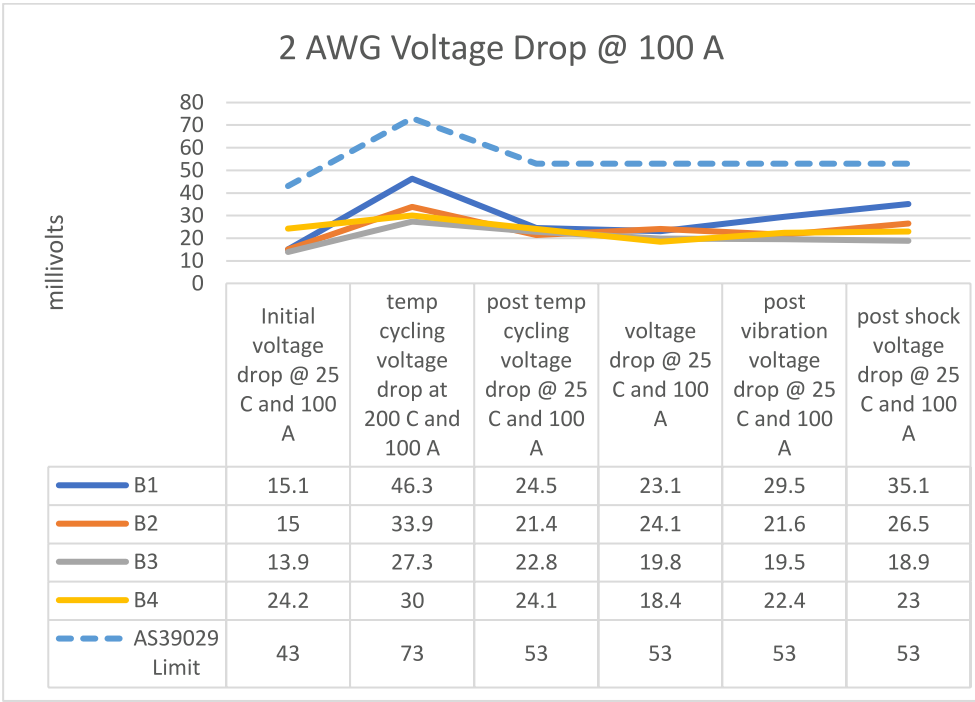
The following charts demonstrate the robust design of the PwrLine HV system. The initial charts show the voltage drop across the PwrLine HV system using the test current defined in SAE-AS39029, TABLE 6 – Contact resistance (Type A) with nickel-plated wire. The charts include the allowable voltage drop per SAE-AS39029 for comparison.

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Contact Resistance at AS39029 Test Current



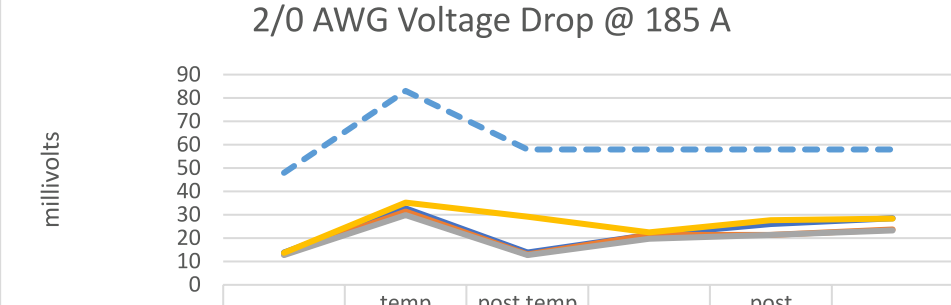
	Initial voltage drop @ 25 C and 46 A	temp cycling voltage drop at 200 C and 46 A	post temp cycling voltage drop @ 25 C and 46 A	voltage drop @ 25 C and 46 A	post vibration voltage drop @ 25 C and 46 A	post shock voltage drop @ 25 C and 46 A
A1	20.6	37.8	27.8	24.1	21.9	23.6
A2	25.7	44.4	29.1	24.1	27.1	30.6
A3	18.2	30.9	26.9	19.8	20.7	19.9
A4	18.2	31.5	25.4	18.4	19.3	19.7
AS39029 Limit	65	113	80	80	80	80



	Initial voltage drop @ 25 C and 100 A	temp cycling voltage drop at 200 C and 100 A	post temp cycling voltage drop @ 25 C and 100 A	voltage drop @ 25 C and 100 A	post vibration voltage drop @ 25 C and 100 A	post shock voltage drop @ 25 C and 100 A
B1	15.1	46.3	24.5	23.1	29.5	35.1
B2	15	33.9	21.4	24.1	21.6	26.5
B3	13.9	27.3	22.8	19.8	19.5	18.9
B4	24.2	30	24.1	18.4	22.4	23
AS39029 Limit	43	73	53	53	53	53

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Contact Resistance at AS39029 Test Current

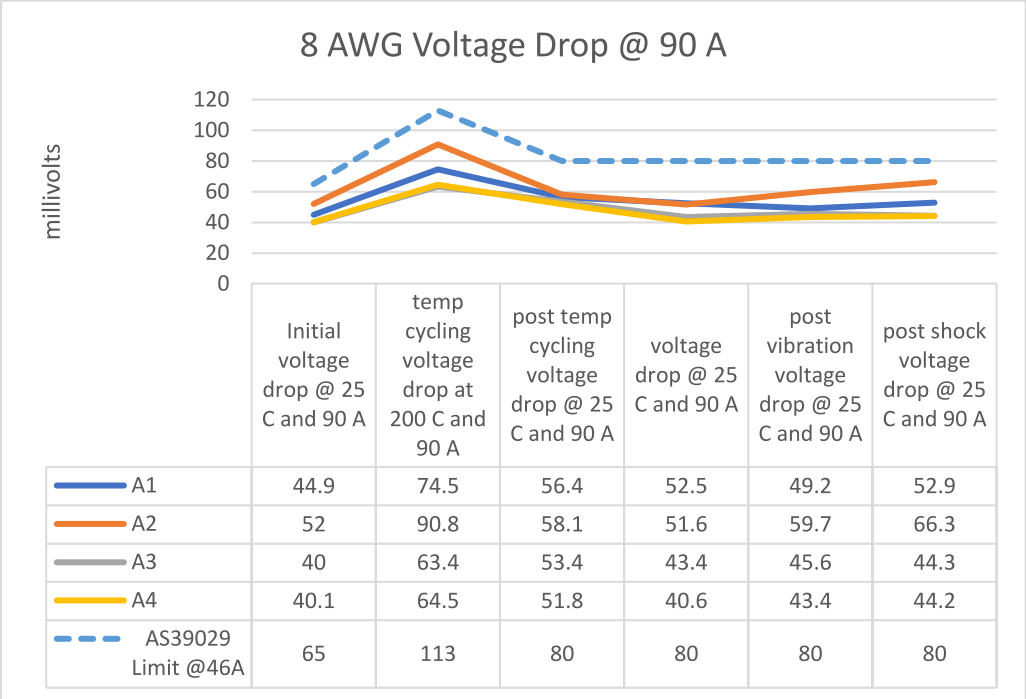


	Initial voltage drop @ 25 C and 185 A	temp cycling voltage drop at 200 C and 185 A	post temp cycling voltage drop @ 25 C and 185 A	voltage drop @ 25 C and 185 A	post vibration voltage drop @ 25 C and 185 A	post shock voltage drop @ 25 C and 185 A
C1	13.8	32.7	13.8	21.4	26	28.5
C2	12.9	31.3	12.9	21.4	21.3	23.6
C3	12.7	29.8	12.7	19.7	21.4	23.3
C4	13.7	35.2	29.2	22.4	27.7	28.3
AS39029 Limit	48	83	58	58	58	58

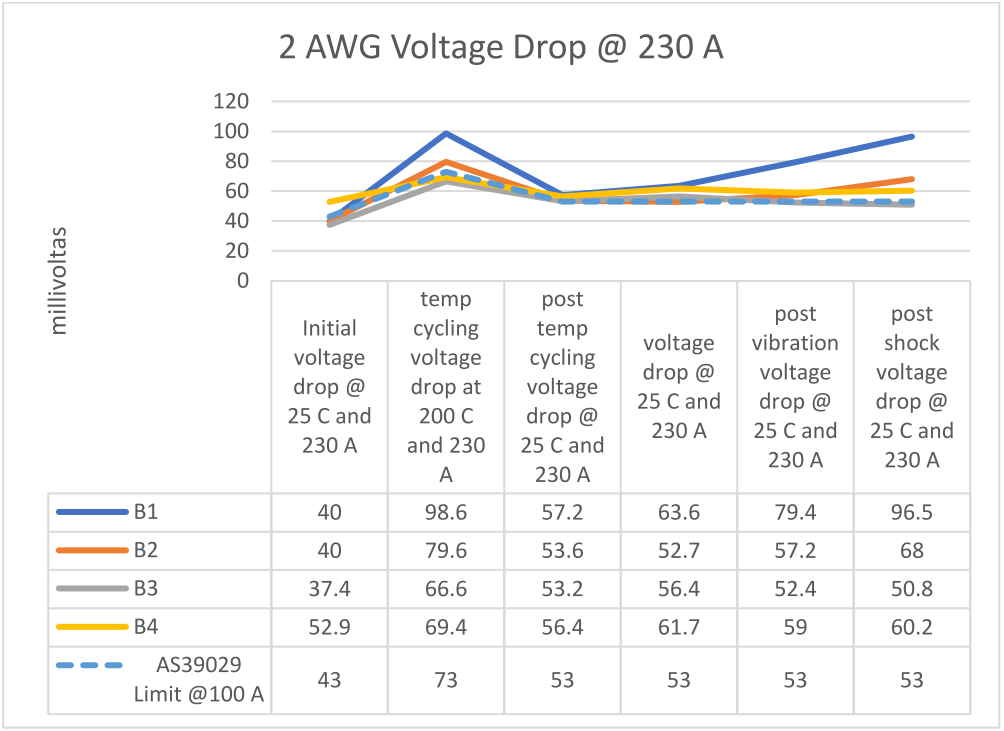
In the following set of charts, the test current levels have been increased approximately 2X to generate voltage drop values that align with power system architectures that are optimizing the cable gauge to minimize weight. Test current was targeted to produce an I^2R value that at 200°C the nickel-plated wire would not exceed the maximum temperature rating of 260°C. The charts incorporate the allowable voltage drop per SAE-AS39029 at the rated amperage per gauge size for comparison. Note that the test-current per SAE-AS39029 is approximately ½ of the value used to produce the following charts.

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Contact Resistance at High Current



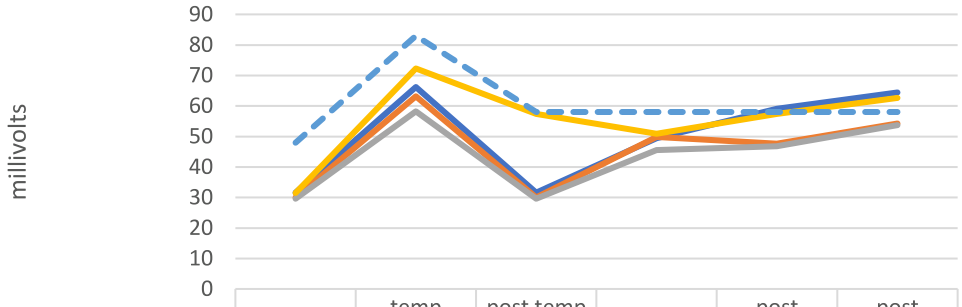
	Initial voltage drop @ 25 C and 90 A	temp cycling voltage drop at 200 C and 90 A	post temp cycling voltage drop @ 25 C and 90 A	voltage drop @ 25 C and 90 A	post vibration voltage drop @ 25 C and 90 A	post shock voltage drop @ 25 C and 90 A
A1	44.9	74.5	56.4	52.5	49.2	52.9
A2	52	90.8	58.1	51.6	59.7	66.3
A3	40	63.4	53.4	43.4	45.6	44.3
A4	40.1	64.5	51.8	40.6	43.4	44.2
AS39029 Limit @46A	65	113	80	80	80	80



	Initial voltage drop @ 25 C and 230 A	temp cycling voltage drop at 200 C and 230 A	post temp cycling voltage drop @ 25 C and 230 A	voltage drop @ 25 C and 230 A	post vibration voltage drop @ 25 C and 230 A	post shock voltage drop @ 25 C and 230 A
B1	40	98.6	57.2	63.6	79.4	96.5
B2	40	79.6	53.6	52.7	57.2	68
B3	37.4	66.6	53.2	56.4	52.4	50.8
B4	52.9	69.4	56.4	61.7	59	60.2
AS39029 Limit @100 A	43	73	53	53	53	53

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Contact Resistance at High Current



	Initial voltage drop @ 25 C and 360 A	temp cycling voltage drop at 200 C and 360 A	post temp cycling voltage drop @ 25 C and 360 A	voltage drop @ 25 C and 360 A	post vibration voltage drop @ 25 C and 360 A	post shock voltage drop @ 25 C and 360 A
C1	31.6	66.2	31.6	49.4	59.1	64.4
C2	30	63.2	30	49.8	47.7	54.3
C3	29.6	58.2	29.6	45.5	46.8	53.7
C4	31.5	72.3	57.4	50.9	57.4	62.7
AS39029 Limit @185 A	48	83	58	58	58	58

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ATTACHMENT

Vertical Labs Test Report 25298R1RNV1

Test Report

QTP-1513 PwrLine HV Qual
25298R1RNV1
Version 1
4/17/2026

Prepared By:	Brandi Pitts Quality Associate	
Reviewed By:	Ron Nguyen Test Engineer	4/6/2026 Date
Approved By:	Margarito Quiroz Quality Associate	4/6/2026 Date

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Version History

Version	Date	Comments	Prepared By	Reviewed By	Approved By
1	4/17/2026	Initial release	Brandi Pitts	Ron Nguyen	Margarito Quiroz

Deviation No.	Test Name	Description
-	-	-

Job Name	QTP-1513 PwrLine HV Qual
Job No.	25298
Client Job Number	N/A
Client	Glenair
Delivery Address	1100 Air Way, Glendale, CA 91201
Contact Name	Raul Galvan
Telephone No.	(818) 247-6000
Email	raulgalvan@glenair.com
Controlling Document	QTP-1513 PwrLine HV Qual Rev. B and 25298 Scope of Work

Test Name	Serial No.	Start Date	End Date	Pass	Fail	Record
Visual and Dimensional Examination	25298-A1, 25298-A2, 25298-A3, 25298-A4	9/3/2025	9/4/2025	-	-	X
Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	9/10/2025	9/11/2025	-	-	X
Temperature Cycling	25298-A1, 25298-A2, 25298-A3, 25298-A4	9/22/2025	9/23/2025	X	-	-
Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	10/6/2025	10/7/2025	-	-	X
Vibration	25298-A1, 25298-A2, 25298-A3, 25298-A4	10/29/2025	11/18/2025	X	-	-
Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	11/26/2025	12/1/2025	-	-	X
Shock	25298-A1, 25298-A2, 25298-A3, 25298-A4	12/19/2025	12/29/2025	X	-	-
Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	1/2/2026	1/5/2026	-	-	X
Contact Resistance (200 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	3/13/2026	3/16/2026	-	-	X
Tensile Strength	25298-A1, 25298-A2, 25298-A3, 25298-A4	3/24/2026	3/25/2026	-	-	X
Visual and Dimensional Examination	25298-B1, 25298-B2, 25298-B3, 25298-B4	9/3/2025	9/4/2025	-	-	X
Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	9/11/2025	9/12/2025	-	-	X
Temperature Cycling	25298-B1, 25298-B2, 25298-B3, 25298-B4	9/23/2025	9/29/2025	X	-	-
Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	10/8/2025	10/9/2025	-	-	X
Vibration	25298-B1, 25298-B2, 25298-B3, 25298-B4	11/6/2025	11/24/2025	X	-	-
Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	12/2/2025	12/3/2025	-	-	X
Shock	25298-B1, 25298-B2, 25298-B3, 25298-B4	12/19/2025	12/29/2025	X	-	-

Testing Summary

Test Name	Serial No.	Start Date	End Date	Pass	Fail	Record
Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	1/6/2026	1/7/2026	-	-	X
Contact Resistance (200 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	3/13/2026	3/16/2026	-	-	X
Tensile Strength	25298-B1, 25298-B2, 25298-B3, 25298-B4	3/24/2026	3/25/2026	-	-	X
Visual and Dimensional Examination	25298-C1, 25298-C2, 25298-C3, 25298-C4	9/3/2025	9/4/2025	-	-	X
Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	9/12/2025	9/15/2025	-	-	X
Temperature Cycling	25298-C1, 25298-C2, 25298-C3, 25298-C4	9/23/2025	9/30/2025	-	-	X
Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	10/10/2025	10/13/2025	-	-	X
Vibration	25298-C1, 25298-C2, 25298-C3, 25298-C4	11/12/2025	12/1/2025	X	-	-
Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	12/4/2025	12/5/2025	-	-	X
Shock	25298-C1, 25298-C2, 25298-C3, 25298-C4	12/19/2025	12/29/2025	X	-	-
Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	1/8/2026	1/9/2026	-	-	X
Contact Resistance (200 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	3/13/2026	3/16/2026	-	-	X
Tensile Strength	25298-C1, 25298-C2, 25298-C3, 25298-C4	3/24/2026	3/25/2026	-	-	X

Summary of Testing

Twelve PwrLine HV cables underwent the test sequence described above in accordance with QTP-1513 Pwrline HV Qual Rev. B and the 25298 Scope of Work. The samples were divided into three groups, with each group consisting of four samples. Group 1 samples were 8 AWG, Group 2 were 2 AWG, and Group 3 were 2/0 AWG.

First, the samples underwent a Visual and Dimensional Examination in which they were examined for visual defects that could affect life, serviceability, or appearance. The results were read and recorded.

Next, the samples underwent Contact Resistance (25 °C). All samples were tested at the same ambient conditions (25 °C ± 3 °C) and were subjected to two different test currents. The voltage drop was read and recorded. Each sample had a slit cut into it in order for the voltage probes to be applied.

After that, the samples underwent Temperature Cycling from -65 °C to 200 °C for five cycles with two hours at each temperature extreme. At the end of the final cycle, Contact Resistance was measured while the samples were subjected to conditions of 200 °C. In order to meet the passing criteria, there could be no evidence of defects detrimental to mechanical or electrical performance. The samples met the passing criteria. As a result of the testing, minor debris was observed on the insulation of Group 1 and 2 samples, while Group 3 samples experienced brown smudging on the insulation.

Testing continued with Vibration. Before undergoing testing, the samples were visually inspected. They were then mounted where the fixed clamp points of the cable were 12 inches from the center. Additionally, the samples were elevated about 1 inch from the vibration platform.

Summary of Testing, continued
During the test, discontinuity was monitored. The samples underwent Vibration for 18 hours on each of the two axes mutually perpendicular to each other and the axis of the wire. The samples had an amplitude of 0.03 inches and a frequency range from 10 Hz to 55 Hz (returning to 10 Hz), which was traversed in approximately 1 minute. In order to meet the passing criteria, the samples must not experience any discontinuities or damage to the mechanical or electrical performance. Contact Resistance (25 °C) was performed again, with each group being subjected to the same parameters as the first test. Testing continued with Shock. Prior to testing, the samples were visually examined. The samples were mounted where the fixed clamp points of the cable were 12 inches from the center. The Shock test was performed only on the radial axis and the samples were monitored for discontinuity. In order to meet the passing criteria, the samples must not experience any discontinuities or damage to the mechanical or electrical performance. The samples met the passing criteria. After Shock testing, the samples in all three groups had grey smudges and cuts along the insulation. Contact Resistance (25 °C) was performed again, with each group being subjected to the same parameters as the first test, followed by Contact Resistance 200 °C, which also followed the same parameters as before. Testing concluded with Tensile Strength in which the samples were exposed to tension at a rate of 0.5 inches per minute. The force was recorded in pounds until the samples experienced failure. The results were read and recorded. After testing, all samples experienced heat shrink band stretch and indents or markings on the barrel heads and crimps. Group 1 samples experienced conductor separation and Group 3 experienced cracks on the barrels. For detailed results regarding individual samples, please refer to the Test Data Pages.

#	Test Name	Serial No.	Group 1	Group 2	Group 3
1	Visual and Dimensional Examination	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
2	Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
3	Temperature Cycling	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
4	Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
5	Vibration	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
6	Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
7	Shock	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
8	Contact Resistance (25 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
9	Contact Resistance (200 °C)	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
10	Tensile Strength	25298-A1, 25298-A2, 25298-A3, 25298-A4	X	-	-
11	Visual and Dimensional Examination	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
12	Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
13	Temperature Cycling	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
14	Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
15	Vibration	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
16	Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
17	Shock	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
18	Contact Resistance (25 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
19	Contact Resistance (200 °C)	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-

#	Test Name	Serial No.	Group 1	Group 2	Group 3
20	Tensile Strength	25298-B1, 25298-B2, 25298-B3, 25298-B4	-	X	-
21	Visual and Dimensional Examination	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
22	Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
23	Temperature Cycling	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
24	Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
25	Vibration	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
26	Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
27	Shock	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
28	Contact Resistance (25 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
29	Contact Resistance (200 °C)	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X
30	Tensile Strength	25298-C1, 25298-C2, 25298-C3, 25298-C4	-	-	X

Test Sample Identification

Date Received	8/29/2025

Description of Samples	12 PwrLine HV cables, 8 AWG, 2 AWG, 2/0 AWG

Special Handling Instructions	-

Serial No.	Test Group	Part Name	Part No.	Date Code
25298-A1	1	PwrLine HV	961-053-N-C-5-9	-
25298-A2	1	PwrLine HV	961-053-N-C-5-9	-
25298-A3	1	PwrLine HV	961-053-N-C-5-9	-
25298-A4	1	PwrLine HV	961-053-N-C-5-9	-
25298-B1	2	PwrLine HV	961-053-N-F-5-9	-
25298-B2	2	PwrLine HV	961-053-N-F-5-9	-
25298-B3	2	PwrLine HV	961-053-N-F-5-9	-
25298-B4	2	PwrLine HV	961-053-N-F-5-9	-
25298-C1	3	PwrLine HV	961-053-N-H-5-9	-
25298-C2	3	PwrLine HV	961-053-N-H-5-9	-
25298-C3	3	PwrLine HV	961-053-N-H-5-9	-
25298-C4	3	PwrLine HV	961-053-N-H-5-9	-

ID No.	Equipment Name	Manufacturer	Model No.	Cal. Date	Cal. Due
DM005	CD-6 CSX DIGITAL CALIPER (6)	MITUTOYO	500-196-20	4/5/2025	4/30/2026
DM029	MEASURING TAPE (35')	STARRETT	TX1-35	8/11/2025	8/31/2027
TC013	TEMPERATURE DATALOGGER	EXTECH INSTRUMENTS	SD200	7/21/2025	8/31/2026
EM080	AC/DC CURRENT SENSOR, 2000A	HIOKI	CT7642	8/5/2025	8/31/2026
EM079	DISPLAY UNIT/POWER SUPPLY w/ BLUETOOTH	HIOKI	CM7291	8/5/2025	8/31/2026
EM004	TRUE RMS MULTIMETER	FLUKE	287	5/16/2025	5/31/2026
FC012	STOPWATCH	CONTROL COMPANY	1043,94460-06	8/19/2024	8/31/2026
DM028	MEASURING TAPE (35')	STARRETT	TX1-35	7/10/2025	7/31/2027
EM067	SYSTEM DC POWER SUPPLY	HEWLETT PACKARD	6681A	-	-
TC082	RH/TEMP PROBE WITH F4TCONTROLLER BOX (CHAMBERS / HV ROOM)	VERTICAL LABORATORIES	HTP201	12/16/2024	12/31/2025
TC082	RH/TEMP PROBE WITH F4TCONTROLLER BOX (CHAMBERS / HV ROOM)	VERTICAL LABORATORIES	HTP201	12/15/2025	12/31/2026
CE093	THERMAL SHOCK CHAMBER	ESPEC	TSE-12-A	4/1/2025	4/30/2026
CE031	ENVIRONMENTAL CHAMBER	SUN ELECTRONIC SYSTEMS	EC13HA	4/3/2025	4/30/2026
MA028	DIGITAL COUNTING SCALE, 12000.0G	SETRA	12000C/QUARTZ	11/18/2024	11/30/2025
MA028	DIGITAL COUNTING SCALE, 12000.0G	SETRA	12000C/QUARTZ	11/6/2025	11/30/2026
TC079	RH/TEMP PROBE WITH F4TCONTROLLER BOX (SHOP)	VERTICAL LABORATORIES	HTP201	10/24/2024	10/31/2025
TC079	RH/TEMP PROBE WITH F4TCONTROLLER BOX (SHOP)	VERTICAL LABORATORIES	HTP201	10/27/2025	10/31/2026
SK07	SHAKER	LDS	V8-440 LPT900C, 3/8 UNC-R-CE	-	-

ID No.	Equipment Name	Manufacturer	Model No.	Cal. Date	Cal. Due
AM05	AMPLIFIER	LDS	SPA56K, V8-CE	-	-
AC034	ACCELEROMETER	DYTRAN	3056D1T	8/1/2025	8/31/2026
AC035	ACCELEROMETER	DYTRAN	3056D1T	8/20/2025	8/31/2026
TQ017	DRIVE TORQUE WRENCH (15 TO 75 FT-LBS)	SNAP-ON	QD2FR75B	7/7/2025	7/31/2026
TQ030	TORQUE WRENCH (20 FT-LB TO 100 FT-LB)	SNAP-ON	QD2R100A	7/7/2025	7/31/2026
CE100	VIBRATION CONTROLLER	VIBRATION RESEARCH	VR5200HF	4/18/2025	4/30/2026
EM049	DISCONTINUITY MONITOR	MERTRONICS	DM600-10A	7/28/2025	7/31/2026
TC078	RH/TEMP PROBE WITH F4TCONTROLLER BOX (SHAKER ROOM)	VERTICAL LABORATORIES	HTP201	10/27/2025	10/31/2026
EM038	TRUE RMS MULTIMETER	FLUKE	287	2/13/2025	2/28/2026
EM038	TRUE RMS MULTIMETER	FLUKE	287	2/16/2026	2/28/2027
TC014	TEMPERATURE METER	EXTECH INSTRUMENTS	SDL200	9/10/2025	9/30/2026
FC013	STOPWATCH	CONTROL COMPANY	1043,94460-06	8/19/2024	8/31/2026
AC115	ACCELEROMETER	DYTRAN	3056D1T	10/24/2025	10/31/2026
AC056	VOLTAGE MODE ACCELEROMETER	DYTRAN	3056D1T	9/24/2025	9/30/2026
SK11	SHAKER	ETS SOLUTIONS	I537M	-	-
AM11	AMPLIFIER	ETS SOLUTIONS	IPA240H	-	-
AM12	AMPLIFIER	ETS SOLUTIONS	IPA240H	-	-
AM13	AMPLIFIER	ETS SOLUTIONS	TF240537	-	-

ID No.	Equipment Name	Manufacturer	Model No.	Cal. Date	Cal. Due
CE039	VIBRATION CONTROLLER	VIBRATION RESEARCH	VR9500 REVOLUTION	7/14/2025	7/31/2026
TC080	RH/TEMP PROBE WITH F4TCONTROLLER BOX (SMALL SHAKER ROOM)	VERTICAL LABORATORIES	HTP201	11/8/2024	11/30/2025
TC080	RH/TEMP PROBE WITH F4TCONTROLLER BOX (SMALL SHAKER ROOM)	VERTICAL LABORATORIES	HTP201	11/24/2025	11/30/2026
CE001	ENVIRONMENTAL CHAMBER	SUN ELECTRONIC SYSTEMS	EC13HA	12/17/2025	12/31/2026
EM007	TRUE RMS CLAMP ON AMMETER	FLUKE	376	6/19/2025	6/30/2026
CE061	UNIVERSAL TESTING MACHINE	INSTRON	68TM-10	1/28/2026	1/31/2027
CE089	UNIVERSAL TESTING MACHINE	INSTRON	68FM-300A1	10/31/2025	10/31/2026
CE038	HORIZONTAL THERMAL SHOCK	LR ENVIRONMENTAL	8000	5/16/2025	5/31/2026
CP040	LOAD CELL (10KN)	INSTRON	2580-10KN	1/28/2026	1/31/2027

Pretest Sample Conditions
Test samples had no visually apparent defects when received.

Posttest Sample Conditions		
Test Name	**Group**	**Description**
Contact Resistance (25 °C)	1, 2, 3	Slit was cut open for voltage probes.
Temperature Cycling	1,2	Minor debris on insulation.
Shock	1, 2, 3	Gray smudges and cuts along the insulation.
Tensile Strength	1	Heat shrink band stretch; indent/markings on crimp and barrel head; conductor separation.
Tensile Strength	2	Heat shrink band stretch; indent/markings on crimp and barrel head.
Temperature Cycling	3	Brown smudges on insulation.
Tensile Strength	3	Heat shrink band stretch; indent/markings on crimp and barrel head; crack on barrel.

Visual and Dimensional Examination

Doc No. 25298R1RNV1

Test Name	Visual and Dimensional Examination	**Test Start Date**	9/3/2025
Job Number	25298	**Test End Date**	9/4/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	DM005, DM029		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-18B		

Test Parameters

Samples shall have no visual defects that will affect life, serviceability, or appearance.

Contacts, wires, bands, and sleeving shall be examined to ensure that there are no defects.

3X magnification may be used as a close-up for visual inspection.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	9/3/2025	**Date:**	9/4/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Visual and Dimensional Examination Test Data

Test Name	Visual and Dimensional Examination	Temp (°C)	24.58
Test Parameters	Samples shall show no signs of visual defects.	%RH	47.24%

Visual Observation
No visual damage.

Dimensional Examination					
Serial No.	Total Length (in)	Insulation Diameter (in)	Barrel Diameter-Big (in)	Barrel Diameter-Tip (in)	Heat Shrink Diameter (in)
25298-A1	51.8750	0.2300	0.2365	0.1450	0.4340
25298-A2	51.9375	0.2425	0.2315	0.1405	0.4430
25298-A3	52.0000	0.2430	0.2300	0.1405	0.4270
25298-A4	51.8750	0.2345	0.2315	0.1405	0.4225

Dimensional Examination	
Serial No.	Barrel Length (in)
25298-A1	1.1585
25298-A2	1.1525
25298-A3	1.1555
25298-A4	1.1555



Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



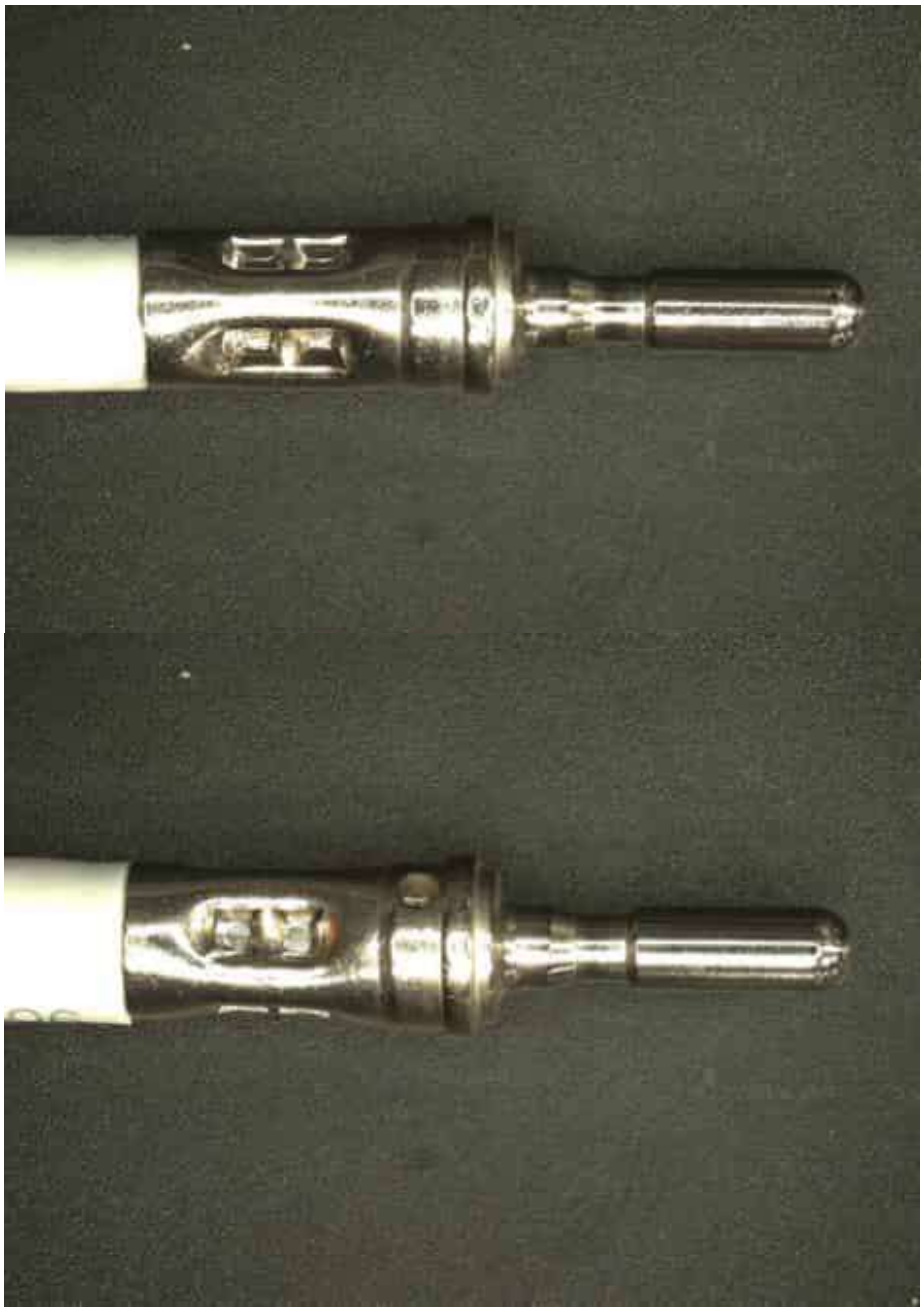
Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4



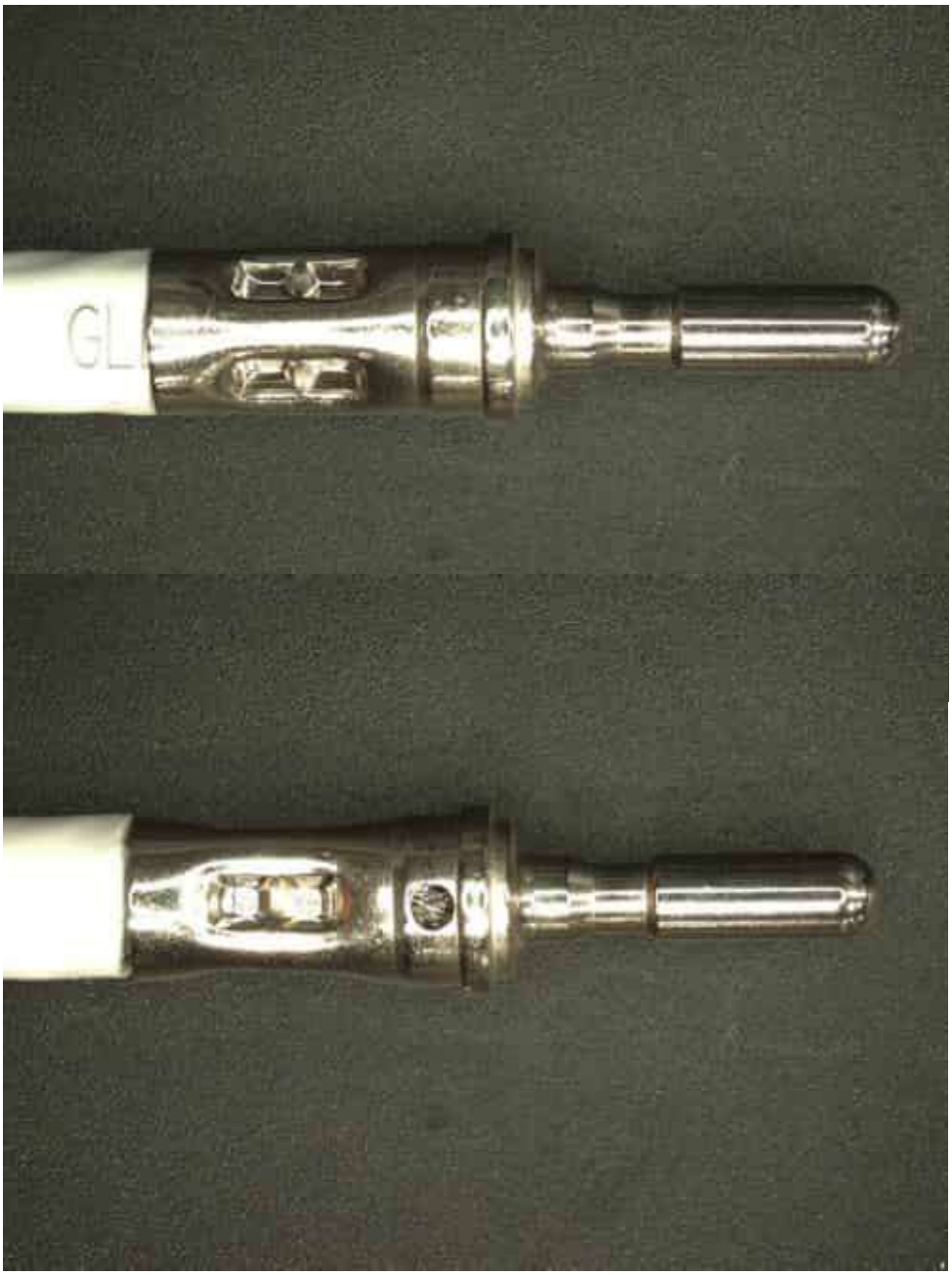
Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	9/10/2025
Job Number	25298	**Test End Date**	9/11/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	TC013, EM080, EM079, EM004, FC012, DM028, EM067, EM004, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Environmental conditions shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group A (8 AWG) are as follows:
  i.) Test Current Level 1: 46 Amps (DC)
  ii.) Test Current Level 2: 90 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Slit was cut open for voltage probes.	**Pass**	**Fail**	**Record**
	X	-			-	-	X

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Daniel Wong
Date:	9/10/2025	**Date:**	9/16/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

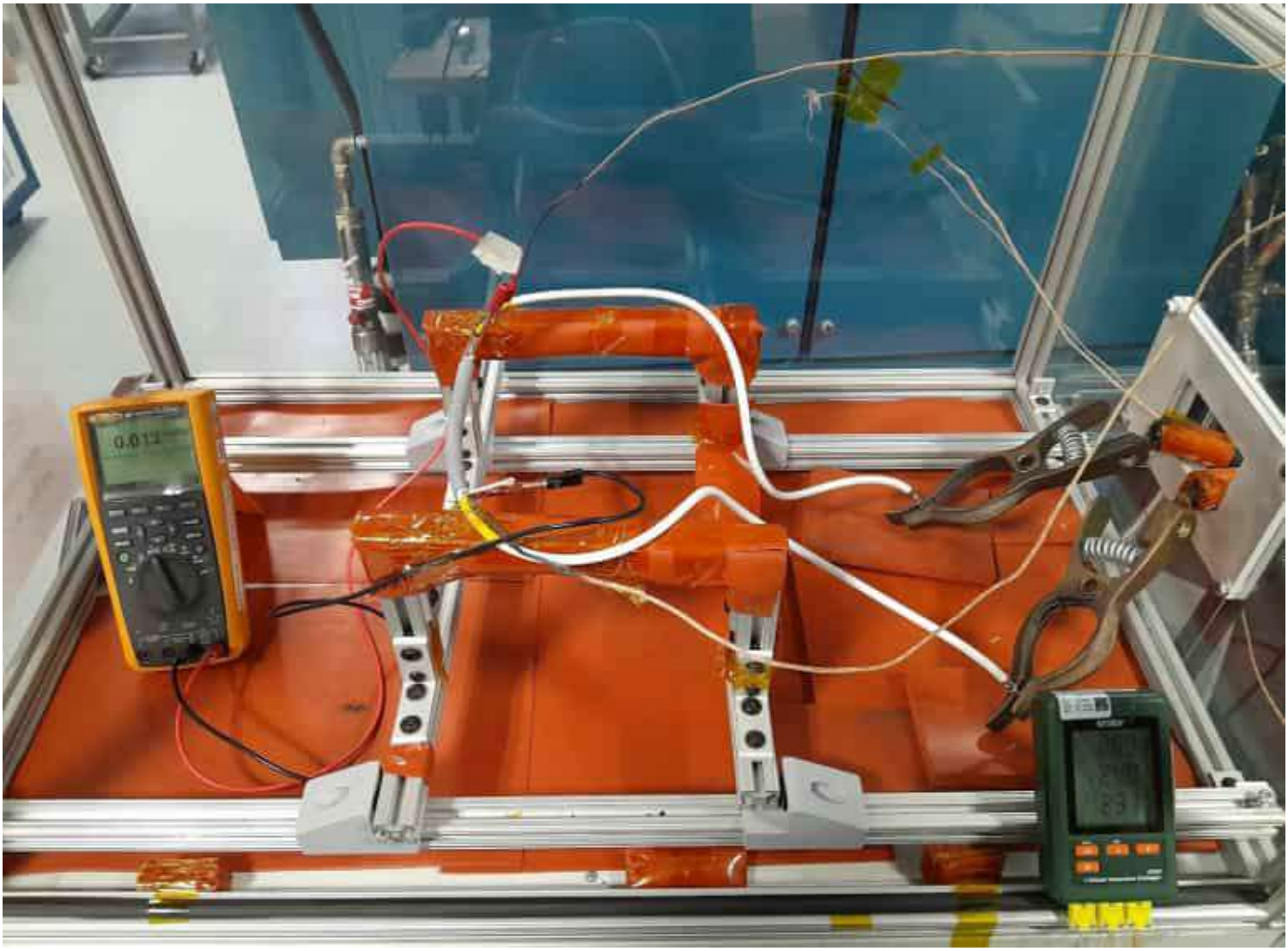
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.58
Test Parameters	Test Current Level 1: 46 Amps; Test Current Level 2: 90 Amps	RH%	46.86

Test Current Levels (A)	
Level 1	46
Level 2	90

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	46	20.6	0.448
25298-A2		25.7	0.559
25298-A3		18.2	0.396
25298-A4		18.2	0.396

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	90	44.9	0.499
25298-A2		52.0	0.578
25298-A3		40.0	0.444
25298-A4		40.1	0.446

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	252998-A1

Temperature Cycling

Test Name	Temperature Cycling	**Test Start Date**	9/22/2025
Job Number	25298	**Test End Date**	9/23/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	CE093, CE031, EM004, EM079, EM080, EM067, MA028, TC079		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-32H		

Test Parameters

In accordance with EIA-364-32H, Method A, Condition IV, Duration A,

a.) Temperature Cycling shall be from -65 °C to 200 °C.
b.) Duration shall be 5 cycles.
c.) 1 hour at each temperature extreme.
d.) Specimen transfer time shall be 2 minutes maximum.
e.) At the end of the 5th cycle, Contact Resistance shall be tested while the specimen is subjected to 200 °C.
f.) Test currents for group A (8 AWG) are as follows:
  i.) Test Current Level 1: 46 Amps (DC)
  ii.) Test Current Level 2: 90 Amps (DC)
g.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
h.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Pass/Fail Criteria:
No evidence of defects detrimental to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Minor debris on insulation.	**Pass**	**Fail**	**Record**
	X	-			X	-	-

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	9/22/2025	**Date:**	9/30/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Temperature Cycling Test Data

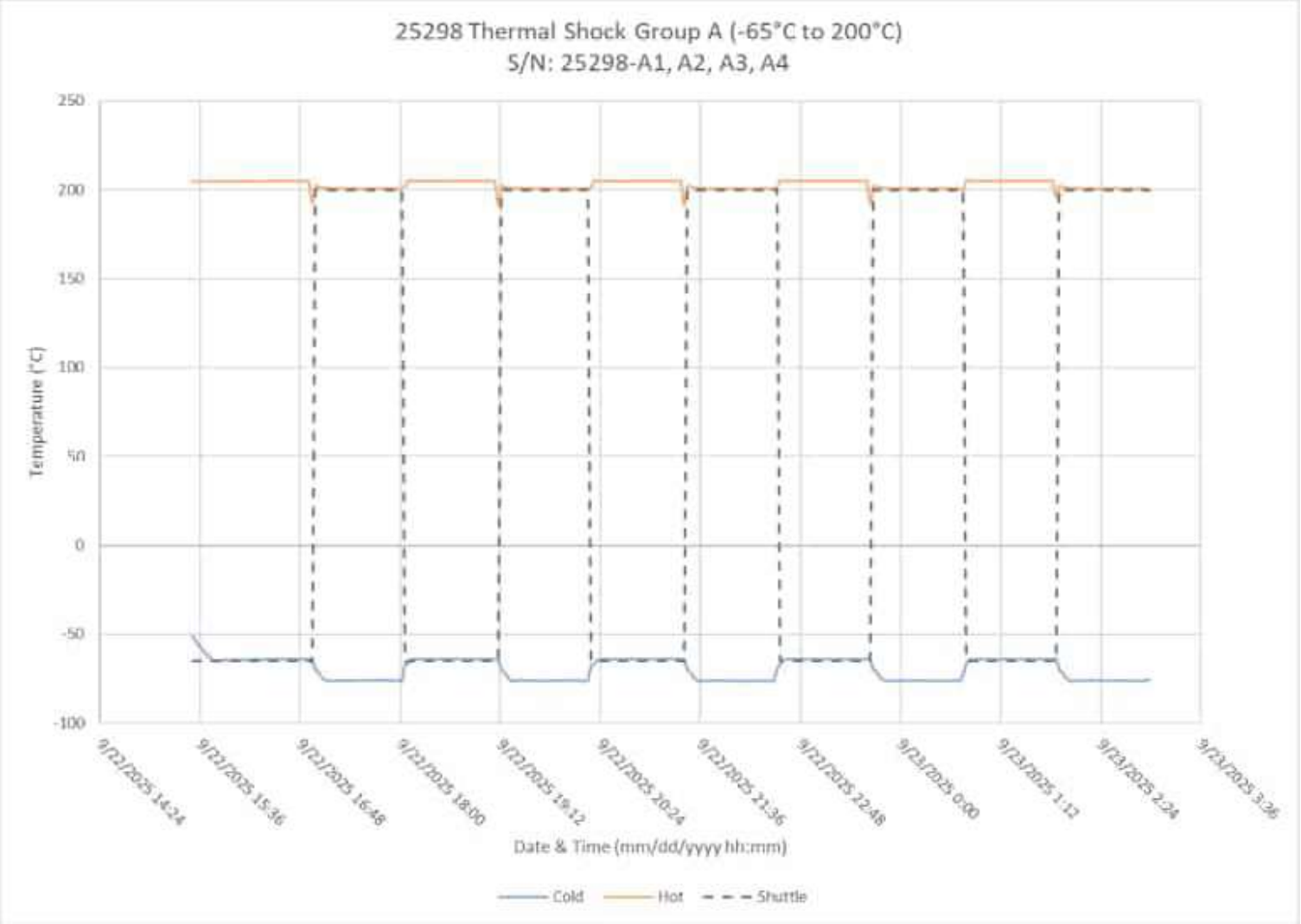
Test Name	Post Temperature Cycling (Contact Resistance (25 °C))	Temp (°C)	24.24
Test Parameters	Test Current Level 1: 46 Amps; Test Current Level 2: 90 Amps	RH%	45.97

Test Current Levels (A)	
Level 1	46
Level 2	90

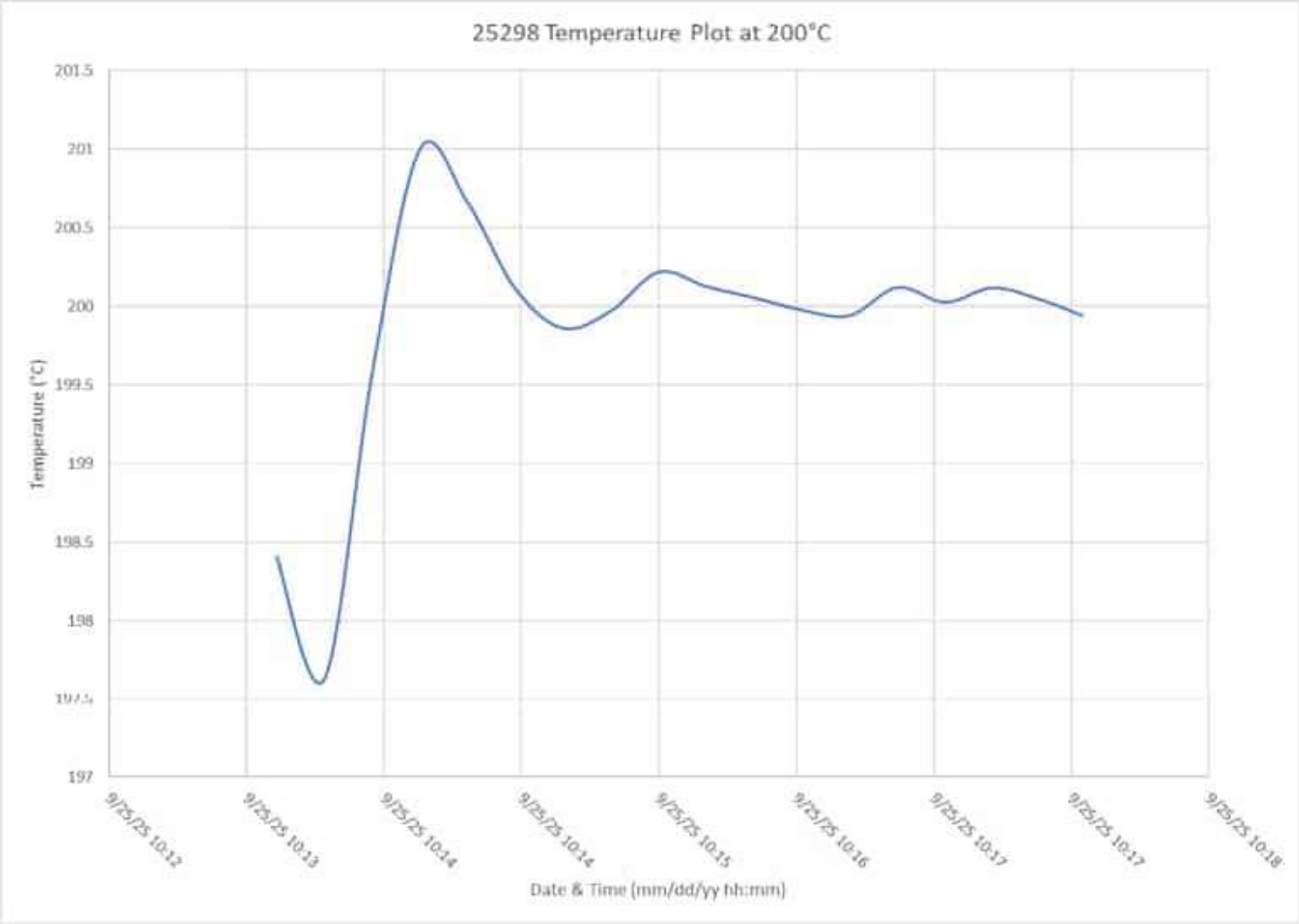
Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	46	27.80	0.604
25298-A2		29.10	0.633
25298-A3		26.90	0.585
25298-A4		25.40	0.552

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	90	56.4	0.627
25298-A2		58.1	0.646
25298-A3		53.4	0.593
25298-A4		51.8	0.576

Test Observations	
Serial No.	Notes
25298-A1	Minor debris on insulation.
25298-A2	Minor debris on insulation.
25298-A3	Minor debris on insulation.
25298-A4	Minor debris on insulation.



Description	Typical Temperature Cycling Plot
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification Page



Description	Typical Temperature Plot at 200 °C Dwell
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification Page



Description	Typical Temperature Cycling Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Typical Contact Resistance Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Typical Contact Resistance Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	10/6/2025
Job Number	25298	**Test End Date**	10/7/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	TC013, EM080, EM079, EM004, FC012, DM028, EM067, EM004, TC082, TC079		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group A (8 AWG) are as follows:
  i.) Test Current Level 1: 46 Amps (DC)
  ii.) Test Current Level 2: 90 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	10/6/2025	**Date:**	10/13/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

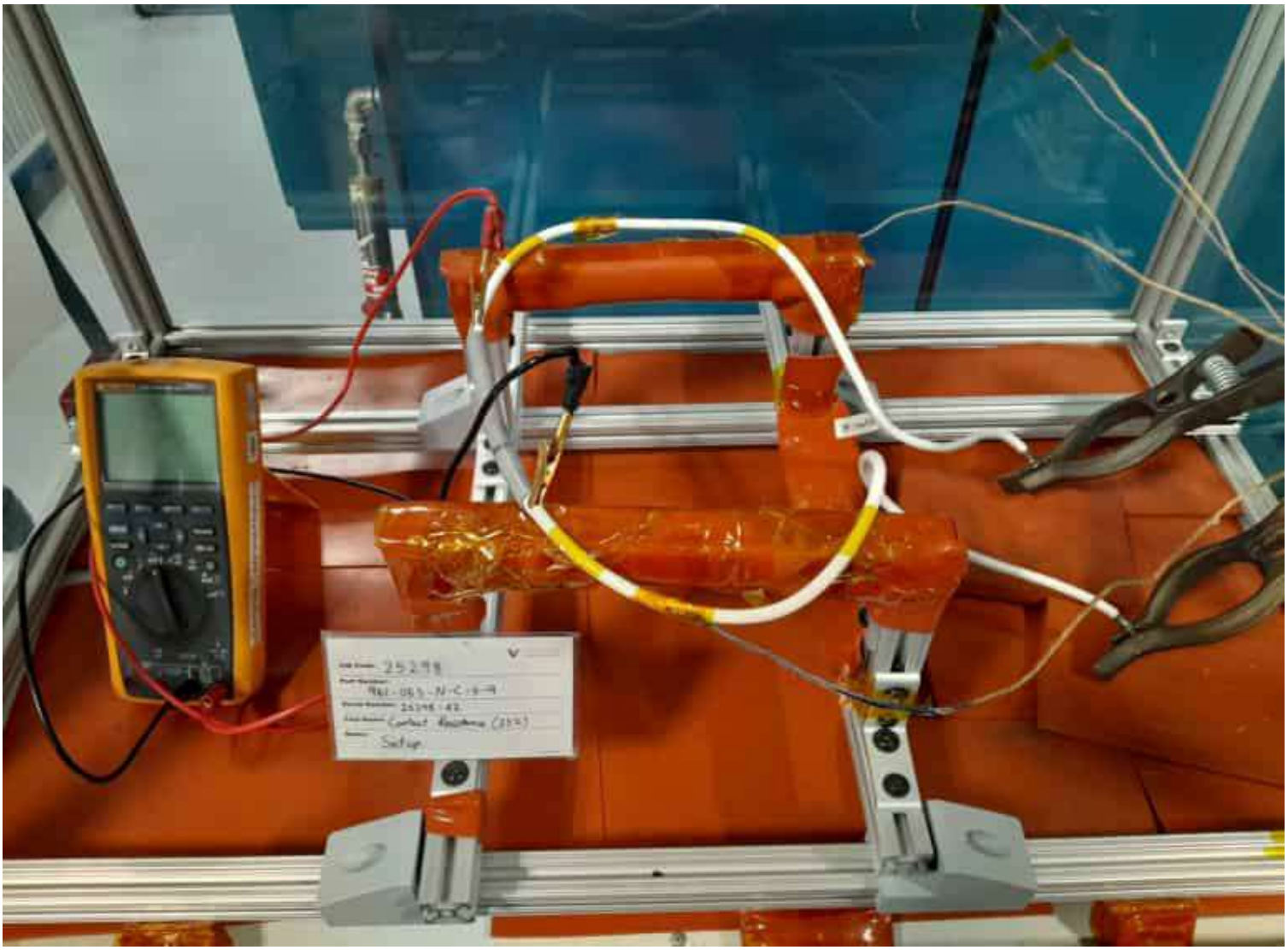
Contact Resistance (25 °C) Test Data

Test Name	Contact Resistance (25 °C)	Temp (°C)	25.08
Test Parameters	Test Current Level 1: 46 Amps; Test Current Level 2: 90 Amps	RH%	41.70

Test Current Levels (A)	
Level 1	46
Level 2	90

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	46	24.1	0.524
25298-A2		24.1	0.524
25298-A3		19.8	0.430
25298-A4		18.4	0.400

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	90	52.5	0.583
25298-A2		51.6	0.573
25298-A3		43.4	0.482
25298-A4		40.6	0.451



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	252998-A2

Test Name	Vibration	**Test Start Date**	10/29/2025
Job Number	25298	**Test End Date**	11/18/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	SK07, AM05, AC034, AC035, TQ017, TQ030, CE100, EM049, TC078		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, MIL-STD-202		

Test Parameters

In accordance with MIL-STD-202, Method 201,

a.) Samples shall be visually inspected before mounting for Vibration.
b.) Samples shall be mounted where the fixed clamp points of the cable shall be 12 inches from the center. (6 in. ± 0.25 in. from the left and right).
c.) Samples shall also be elevated about 1 in. ± 0.15 in. from the surface of the vibration platform.
d.) Discontinuity monitoring required (100 mA max current; detecting discontinuities > 1 µs).
e.) Duration shall be 18 hours in each of two axes mutually perpendicular to each other and to the axis of the wire.
f.) The UUT shall have an amplitude of 0.03 inches, the frequency shall be varied uniformly between the approximate limits of 10 Hz and 55 Hz. The entire frequency range, from 10 Hz to 55 Hz and return to 10 Hz, shall be traversed in approximately 1 minute.

Pass/Fail Criteria:
No discontinuities > 1µs and no evidence of defects or damage to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			X	-	-

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Carlos Nungaray
Date:	10/29/2025	**Date:**	12/8/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Vibration Test Matrix

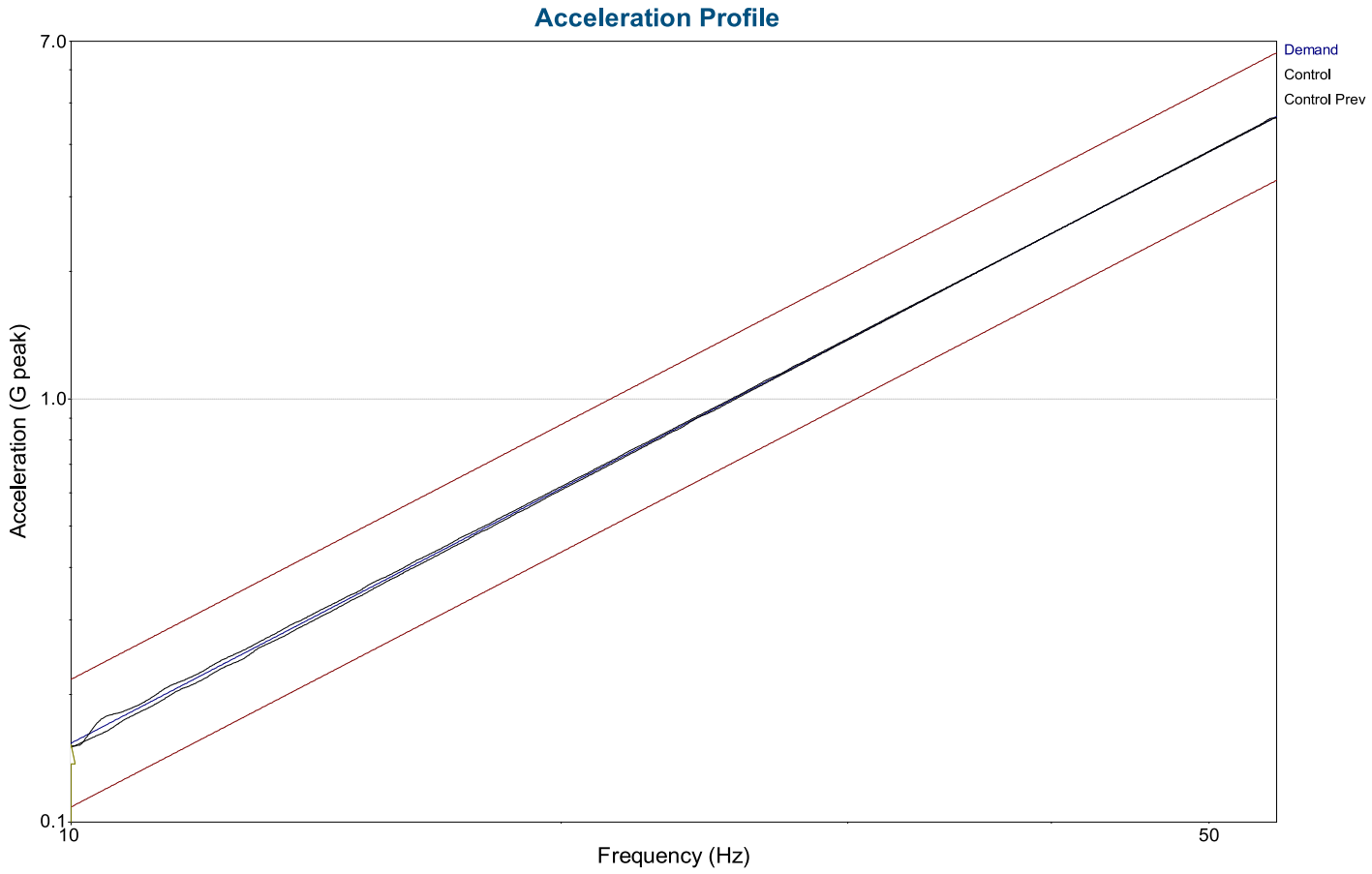
Group 1			
Test Name	Run #	Axis	Notes
Vibration	1	X	-
	2	Y	-
	3	Z	-

Test Name	Vibration	Temp (°C)	23.18
Test Parameters	Duration of 18 hours in all mutually perpendicular axes (X, Y, Z)	RH%	19.80

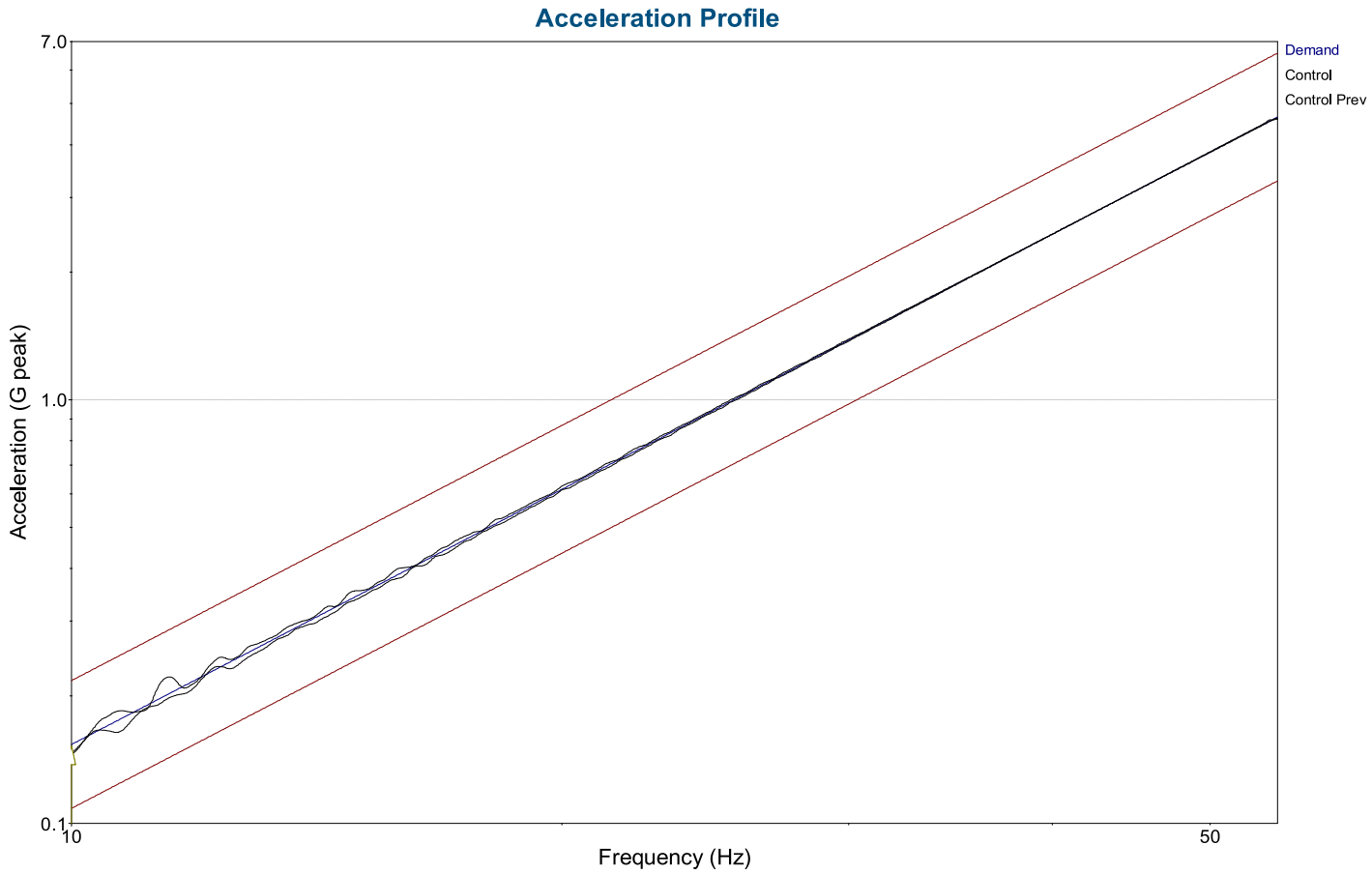
Test Observations		
Axis	Serial No.	Notes
X	25298-A1	No visual damage or discontinuities.
	25298-A2	No visual damage or discontinuities.
	25298-A3	No visual damage or discontinuities.
	25298-A4	No visual damage or discontinuities.

Test Observations		
Axis	Serial No.	Notes
Y	25298-A1	No visual damage or discontinuities.
	25298-A2	No visual damage or discontinuities.
	25298-A3	No visual damage or discontinuities.
	25298-A4	No visual damage or discontinuities.

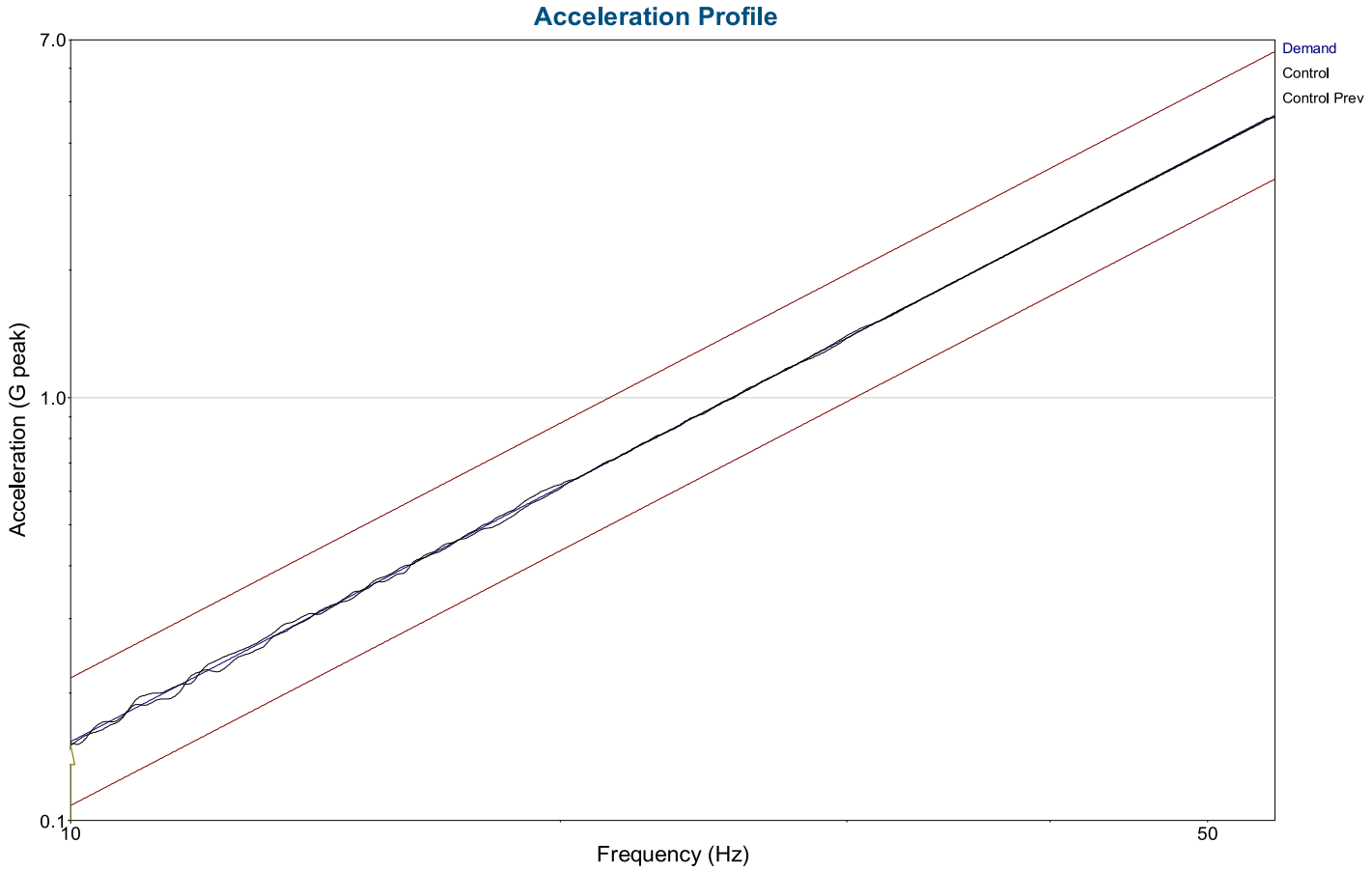
Test Observations		
Axis	Serial No.	Notes
Z	25298-A1	No visual damage or discontinuities.
	25298-A2	No visual damage or discontinuities.
	25298-A3	No visual damage or discontinuities.
	25298-A4	No visual damage or discontinuities.



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Group A
Duration	18:00:00
Axis	X



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Group A
Duration	18:00:00
Axis	Y



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Group A
Duration	18:00:00
Axis	Z



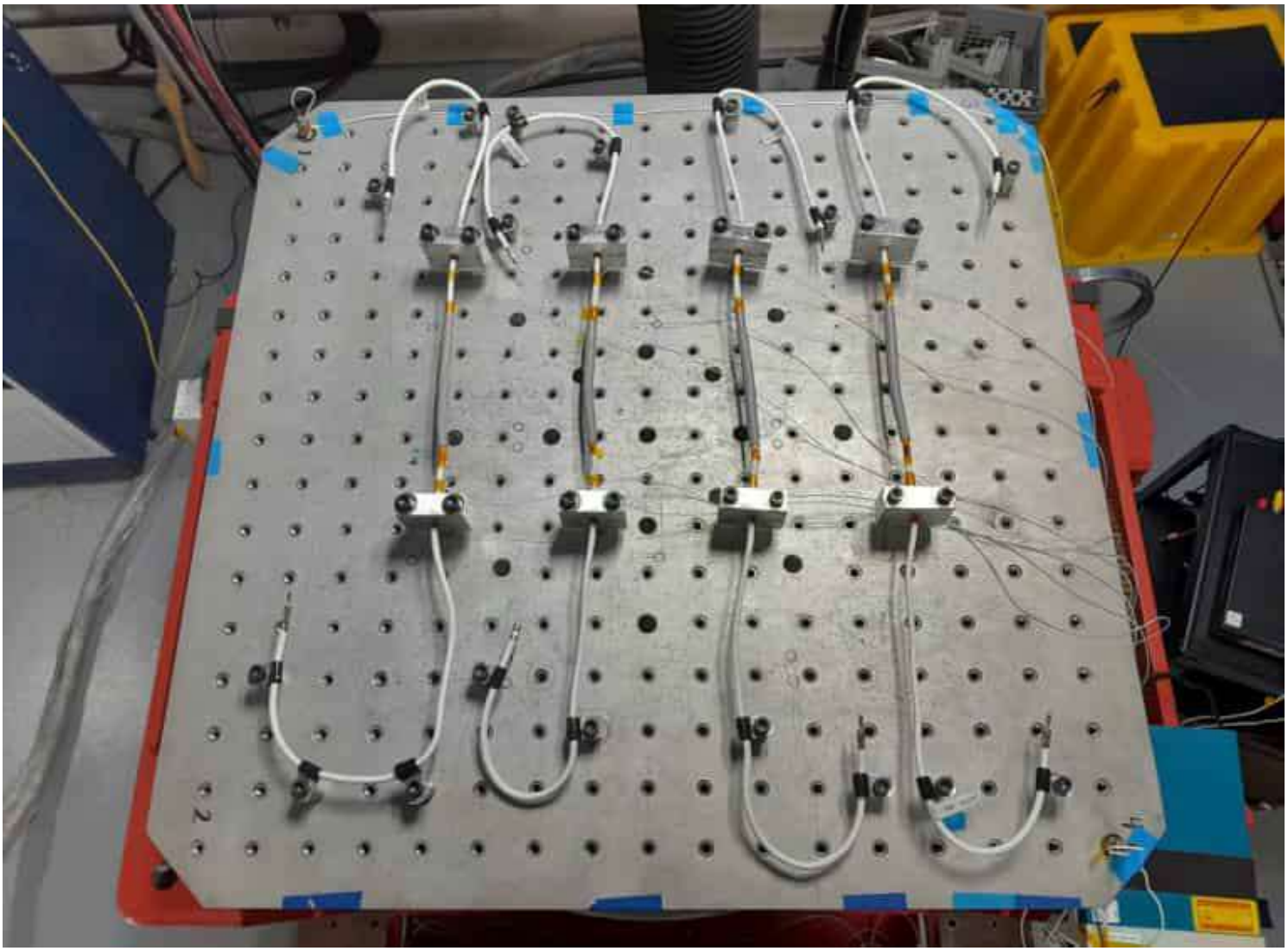
Description	Typical Overall Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification



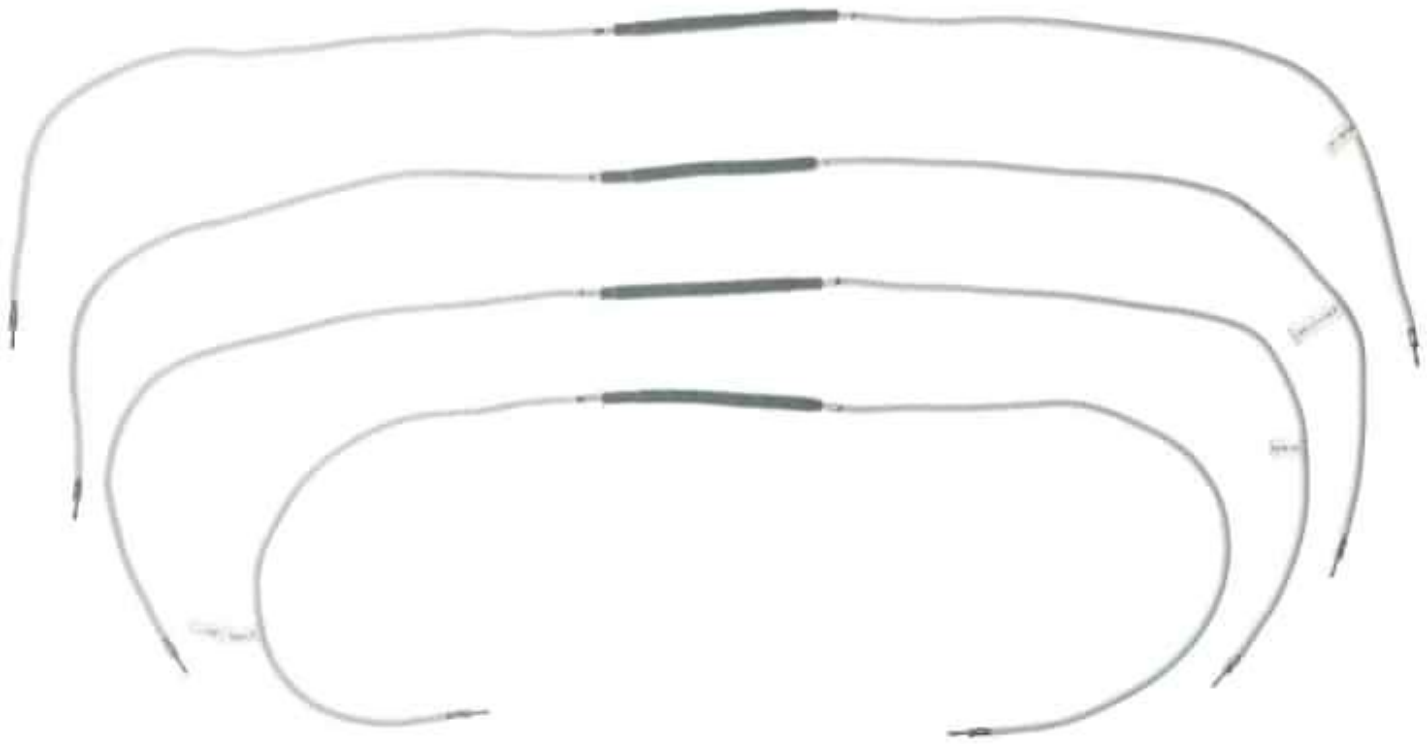
Description	Vibration X-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification



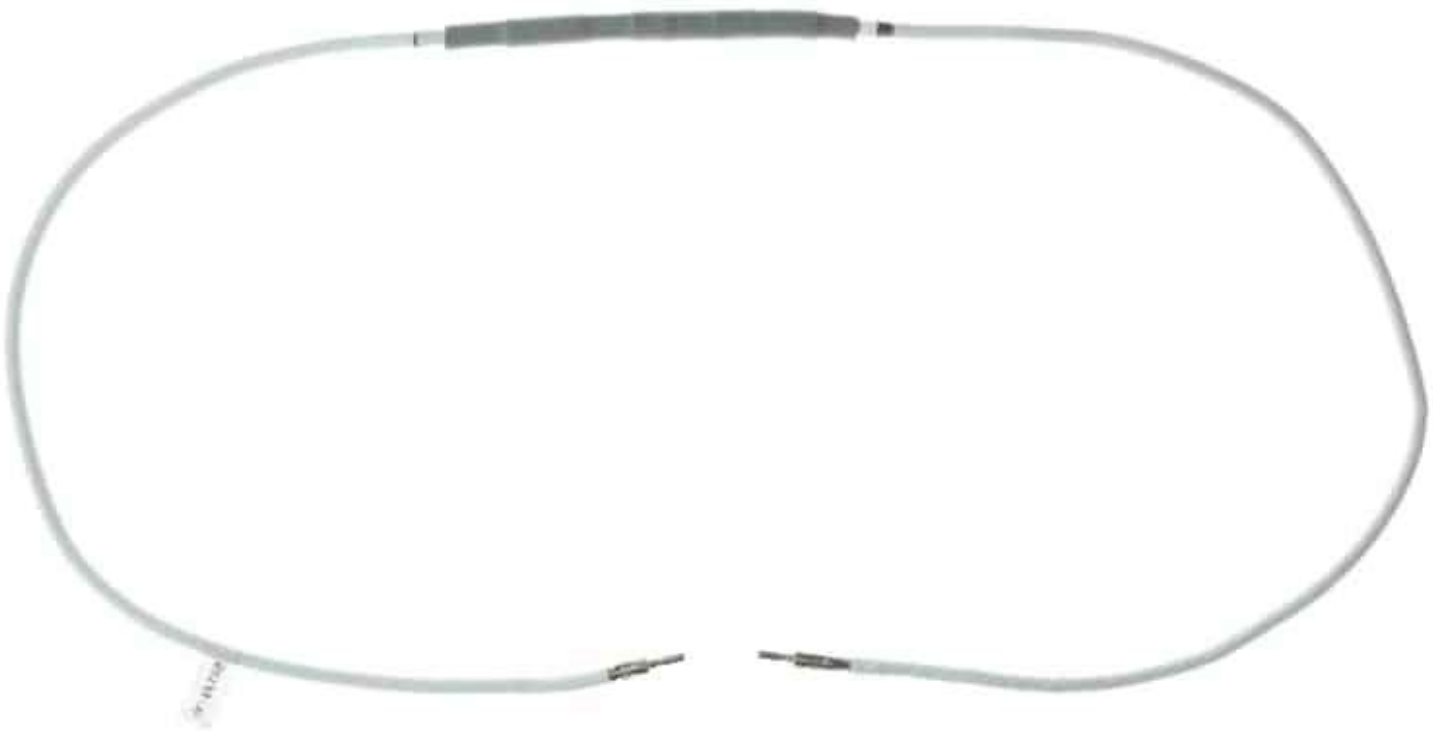
Description	Vibration Y-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification



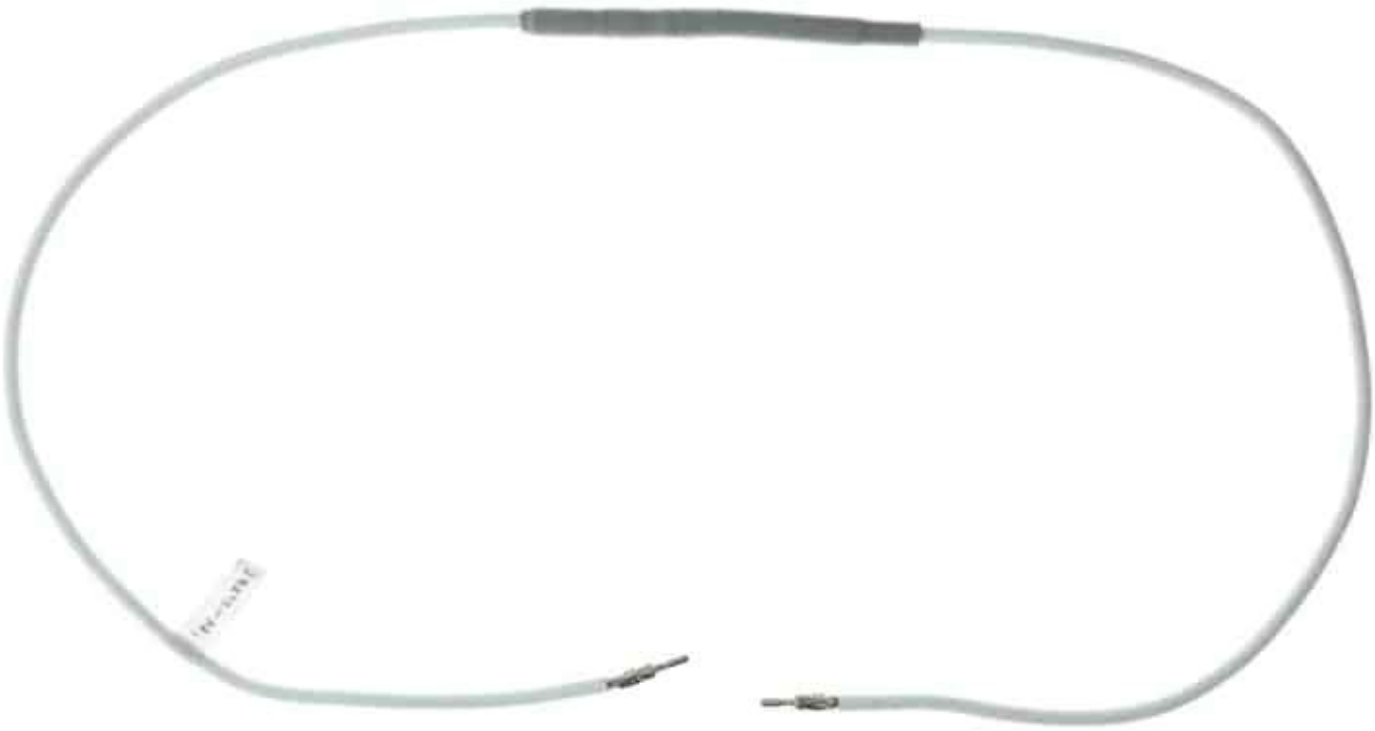
Description	Vibration Z-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	Refer to Test Sample Identification



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	11/26/2025
Job Number	25298	**Test End Date**	12/1/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	EM038, TC014, FC013, EM079, EM080, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group A (8 AWG) are as follows:
  i.) Test Current Level 1: 46 Amps (DC)
  ii.) Test Current Level 2: 90 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	12/1/2025	**Date:**	12/8/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

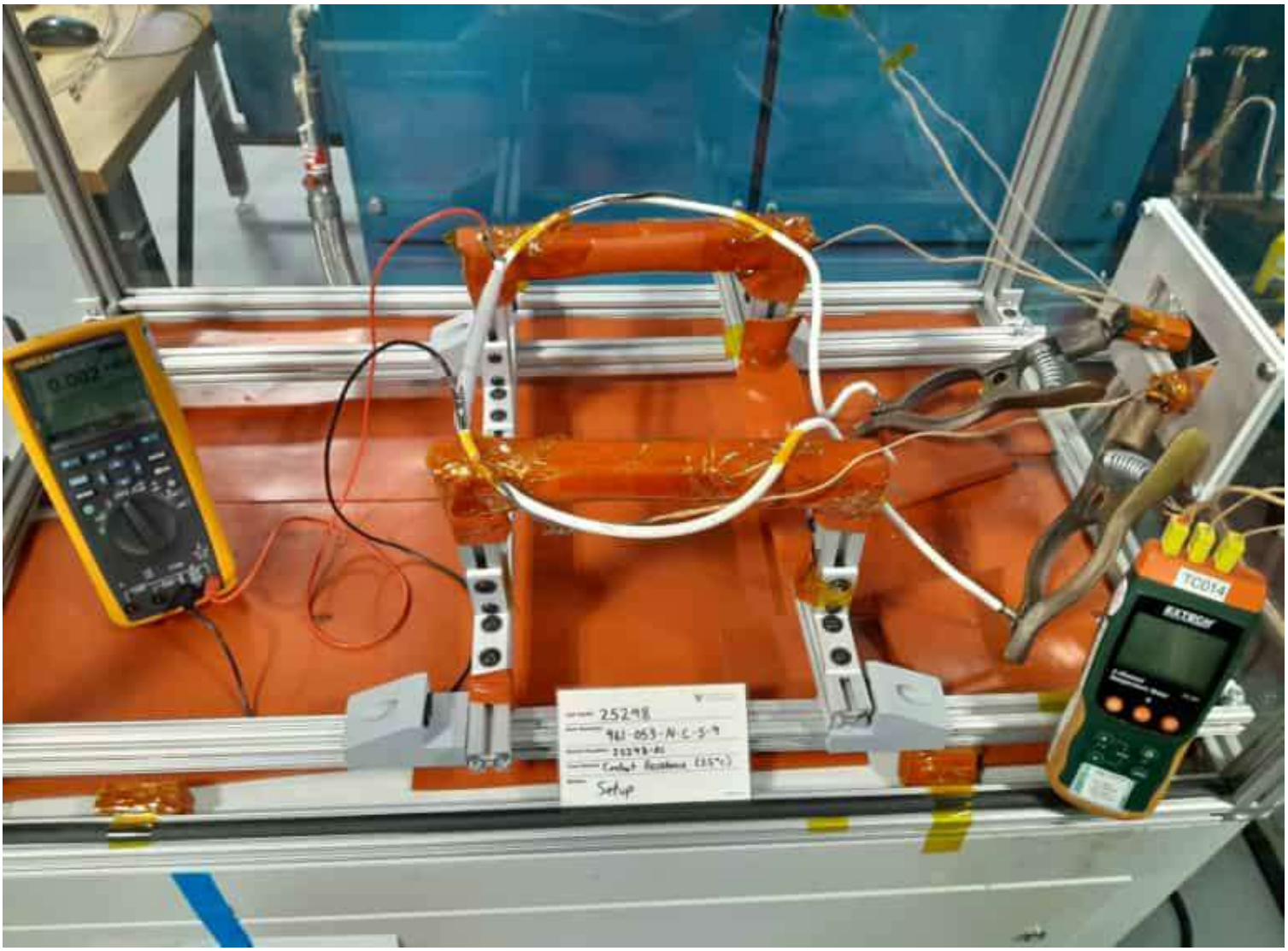
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.01
Test Parameters	Test Current Level 1: 46 Amps; Test Current Level 2: 90 Amps	RH%	33.10

Test Current Levels (A)	
Level 1	46
Level 2	90

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	46	21.9	0.476
25298-A2		27.1	0.589
25298-A3		20.7	0.450
25298-A4		19.3	0.420

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	90	49.2	0.547
25298-A2		59.7	0.663
25298-A3		45.6	0.507
25298-A4		43.4	0.482

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	252998-A1

Test Name	Shock	**Test Start Date**	12/19/2025
Job Number	25298	**Test End Date**	12/29/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	DM029, AC115, AC056, SK11, AM11, AM12, AM13, CE039, EM049, TC080		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-27D		

Test Parameters

In accordance with EIA-364-27D, Condition I,

a.) Peak acceleration: 30 Gs
b.) Samples shall be visually inspected before mounting for Mechanical Shock.
c.) Samples shall be mounted where the fixed clamp points of the cable shall be 12 inches from the center. (6 in. ± 0.25 in. from the left and right).
d.) Shock shall be performed along the radial axis.
e.) Discontinuity monitoring required (100 mA max current; detecting discontinuities > 1 µs).

* Interested in the cable length from clamp to clamp.
* Excess cable can be routed and supported in any preferred methodology that isolates the section under test.

Pass/Fail Criteria:
No electrical discontinuities, evidence of cracking, breaking, loosening of parts, or defects detrimental to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Gray smudges and cuts along the insulation.	**Pass**	**Fail**	**Record**
	X	-			X	-	-

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Carlos Nungaray
Date:	12/19/2025	**Date:**	12/30/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

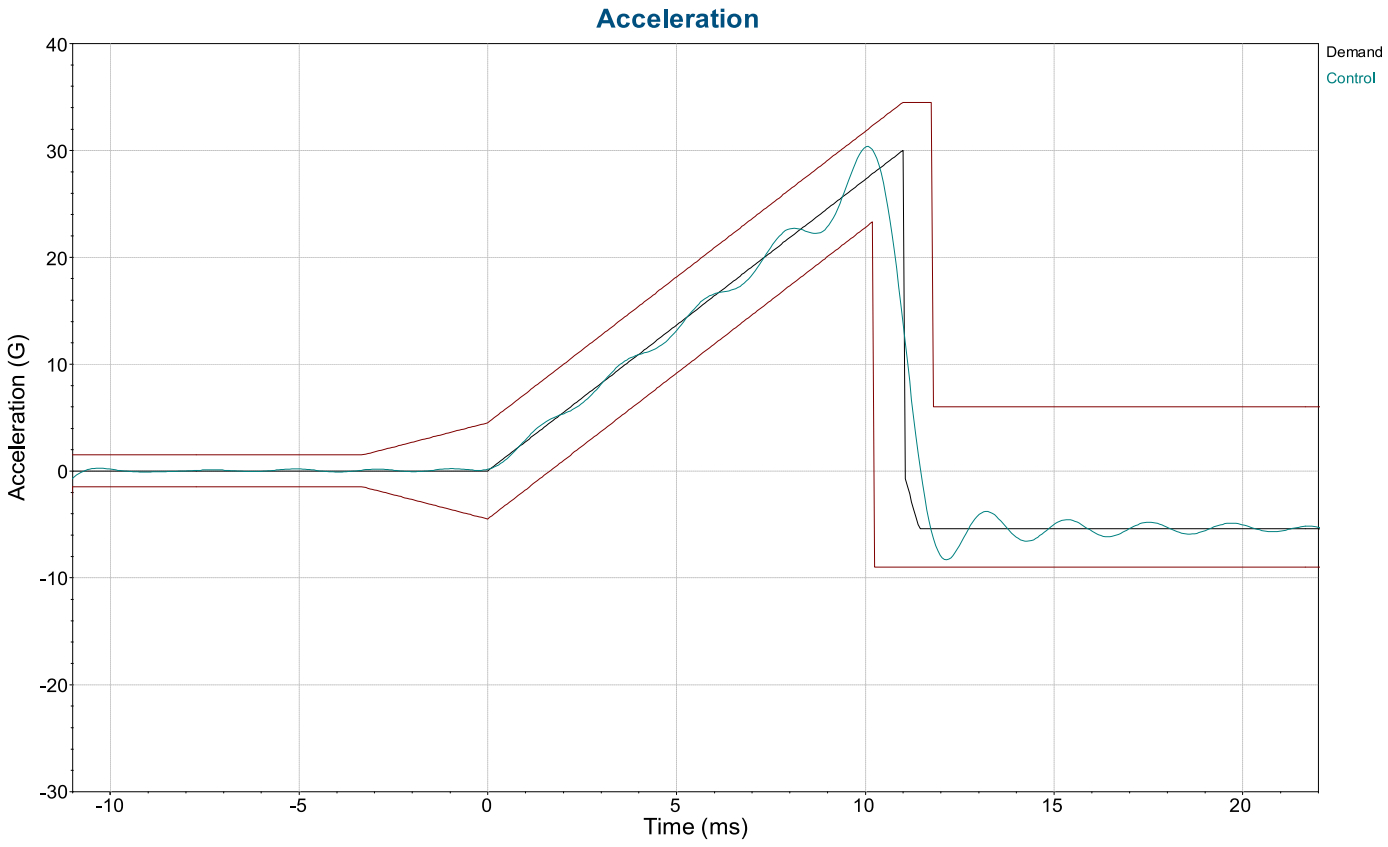
Shock Test Matrix

Group 1			
Test Name	Serial No.	Axis	Notes
Shock	25298-A1	Z	No Discontinuities
	25298-A2		No Discontinuities
	25298-A3		No Discontinuities
	25298-A4		No Discontinuities

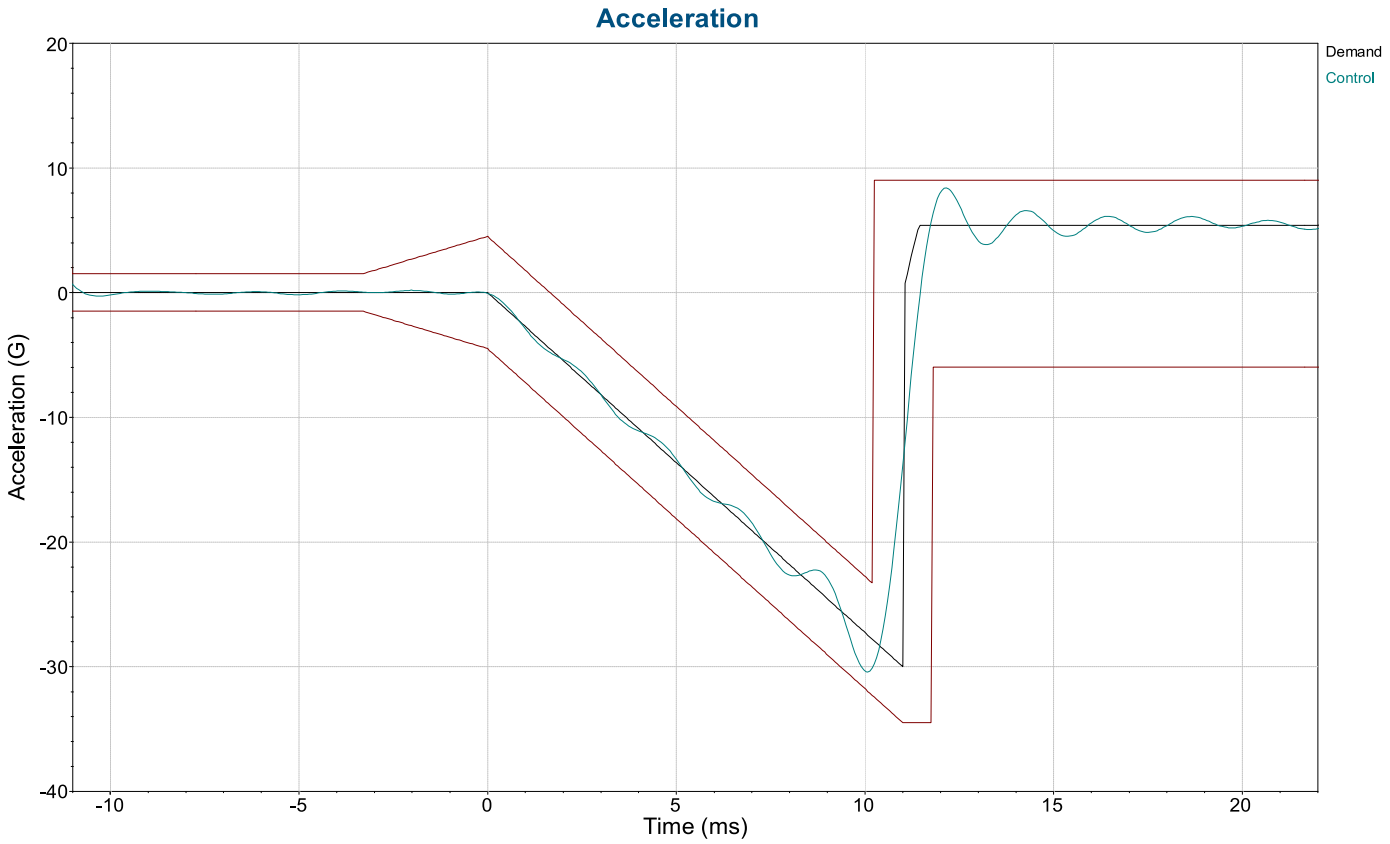
Shock Test Data

Test Name	Shock	Temp (°C)	23.67
Test Parameters	3 shocks performed along the radial axis in both the positive and negative direction	RH%	17.69

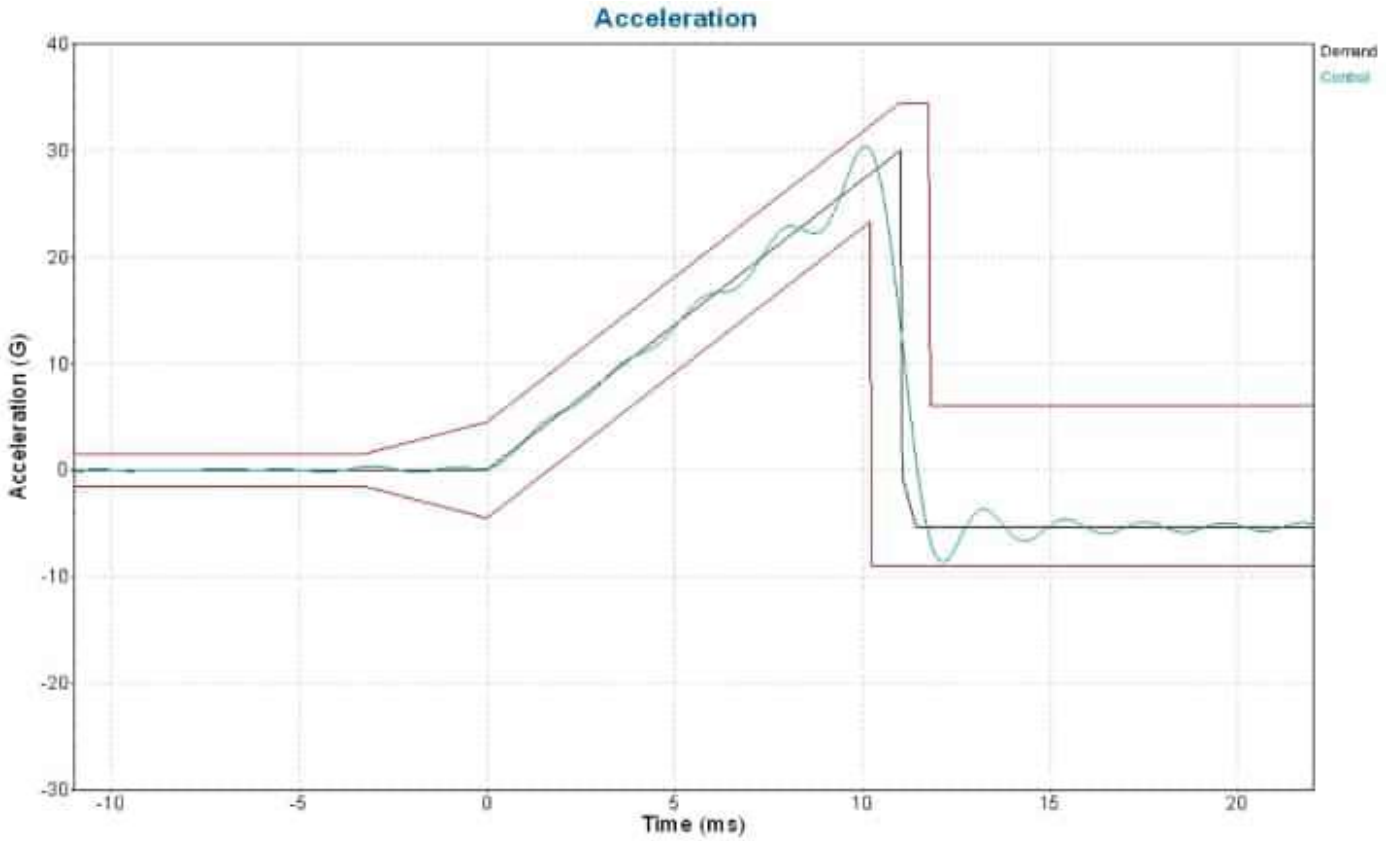
Test Observations		
Axis	Serial No.	Notes
Z	25298-A1	Gray smudges and cuts. No discontinuities.
	25298-A2	Gray smudges and cuts. No discontinuities.
	25298-A3	Gray smudges and cuts. No discontinuities.
	25298-A4	Gray smudges and cuts. No discontinuities.



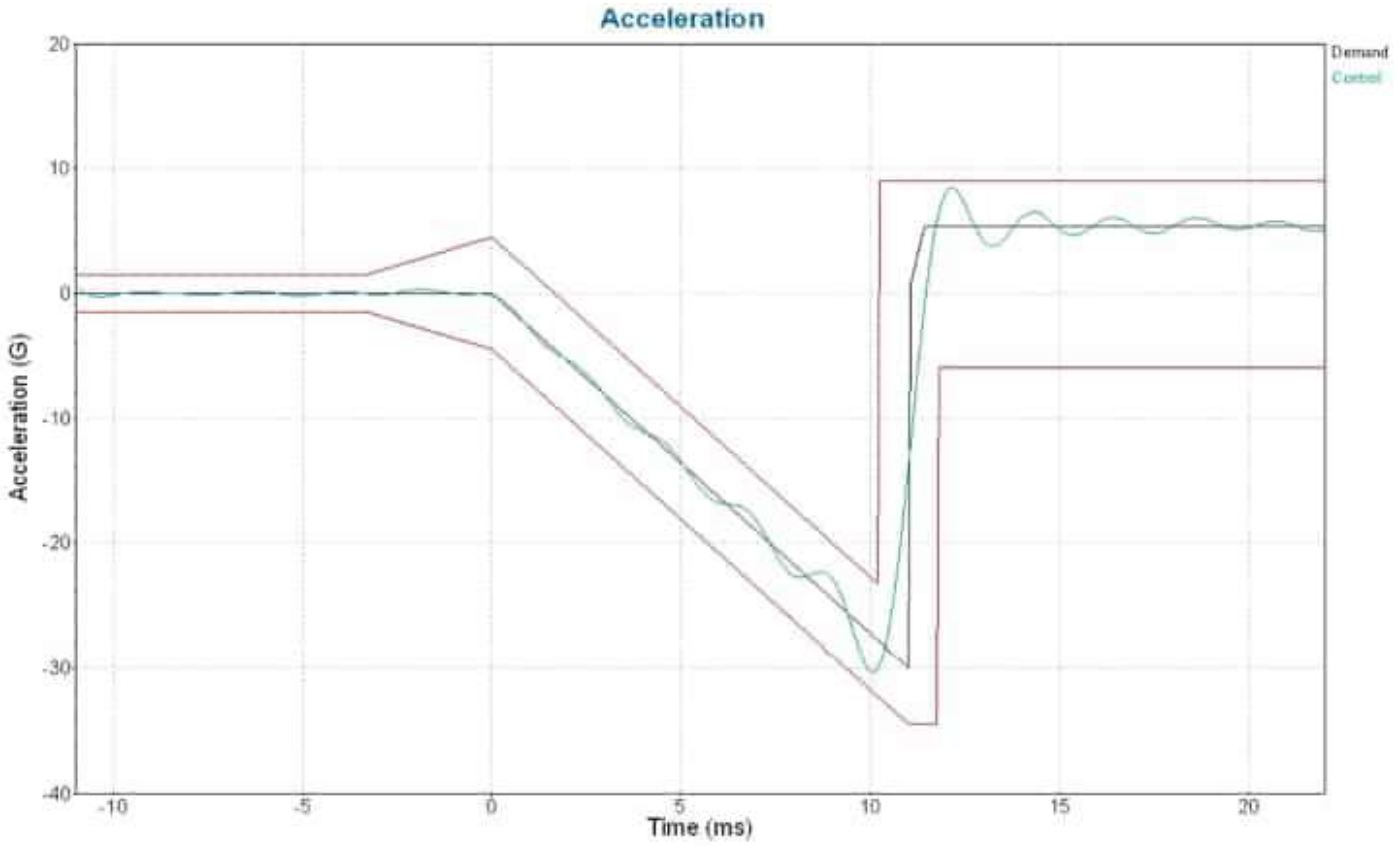
Description	Typical Shock Plot for Sample A1
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1
No. of Shocks	3
Axis	+ Z



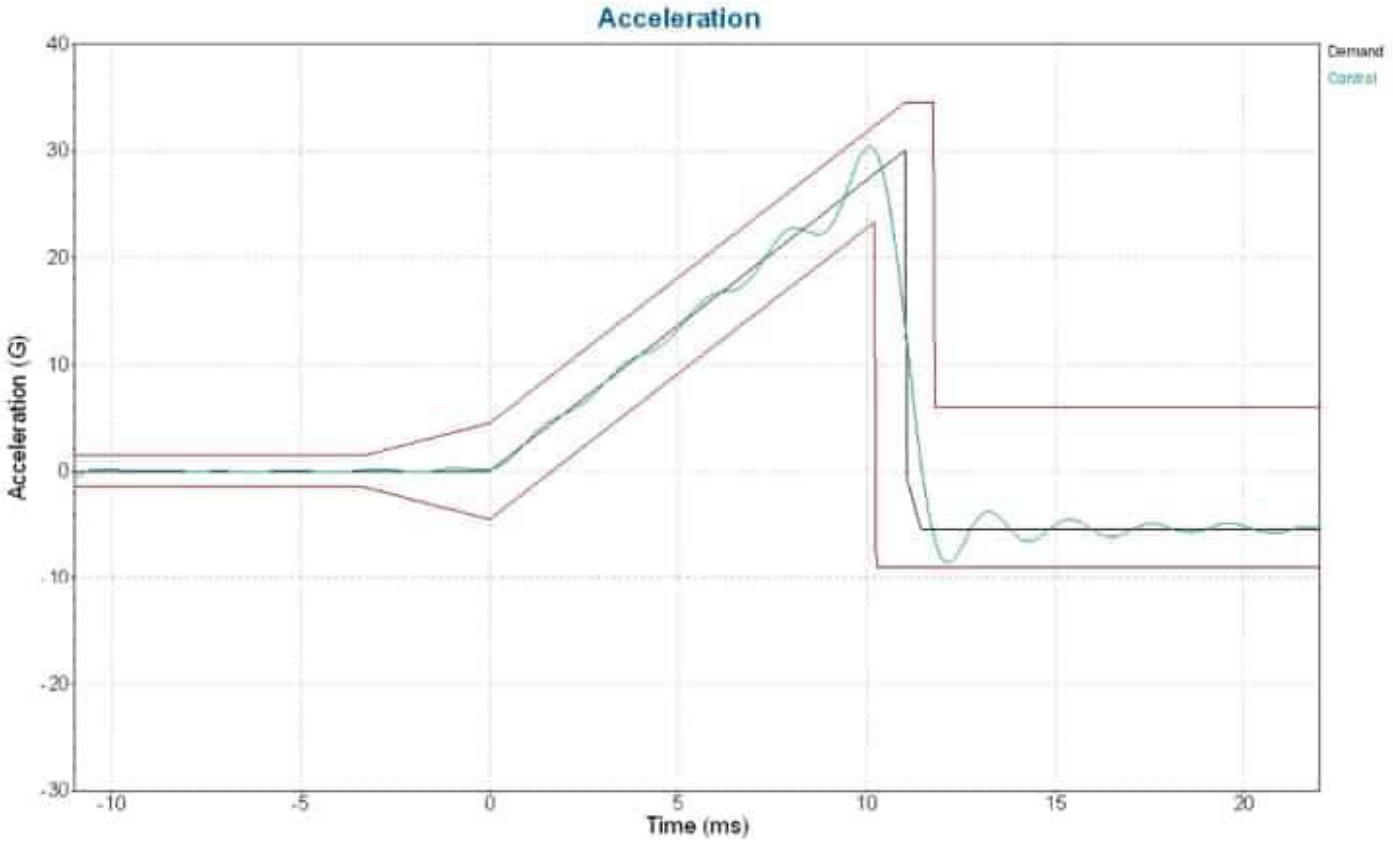
Description	Typical Shock Plot for Sample A1
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1
No. of Shocks	3
Axis	- Z



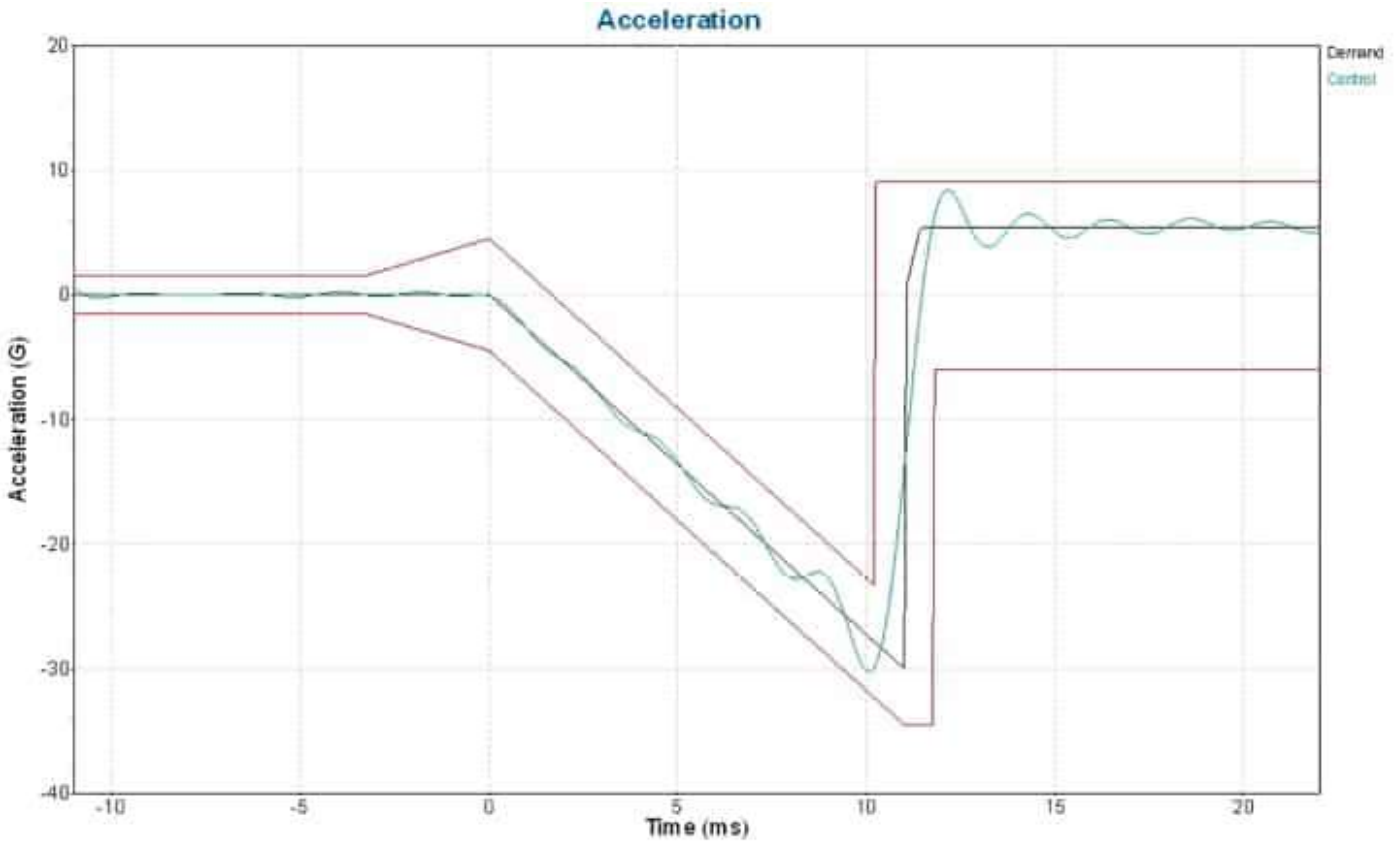
Description	Typical Shock Plot for Sample A2
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2
No. of Shocks	3
Axis	+ Z



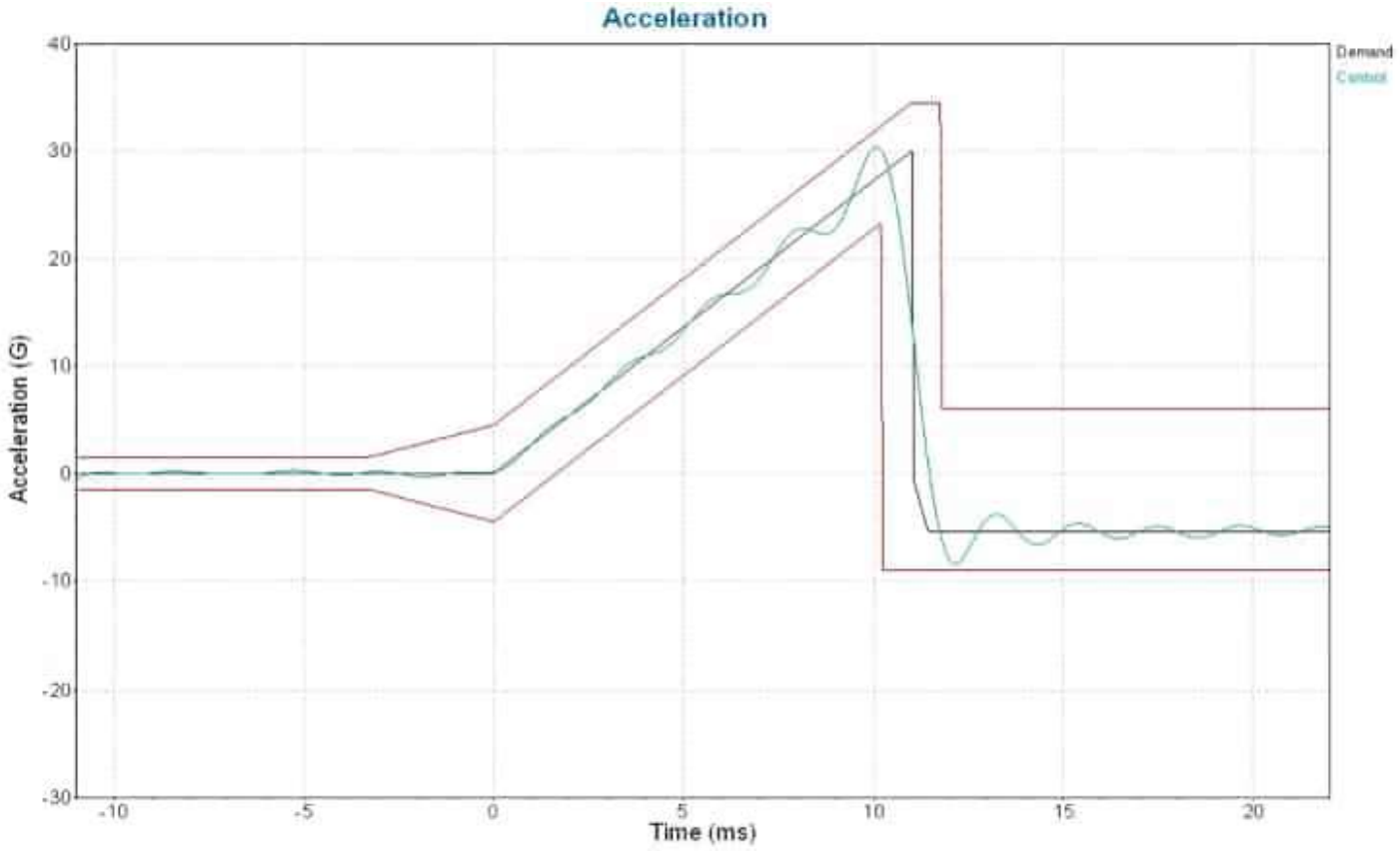
Description	Typical Shock Plot for Sample A2
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2
No. of Shocks	3
Axis	- Z



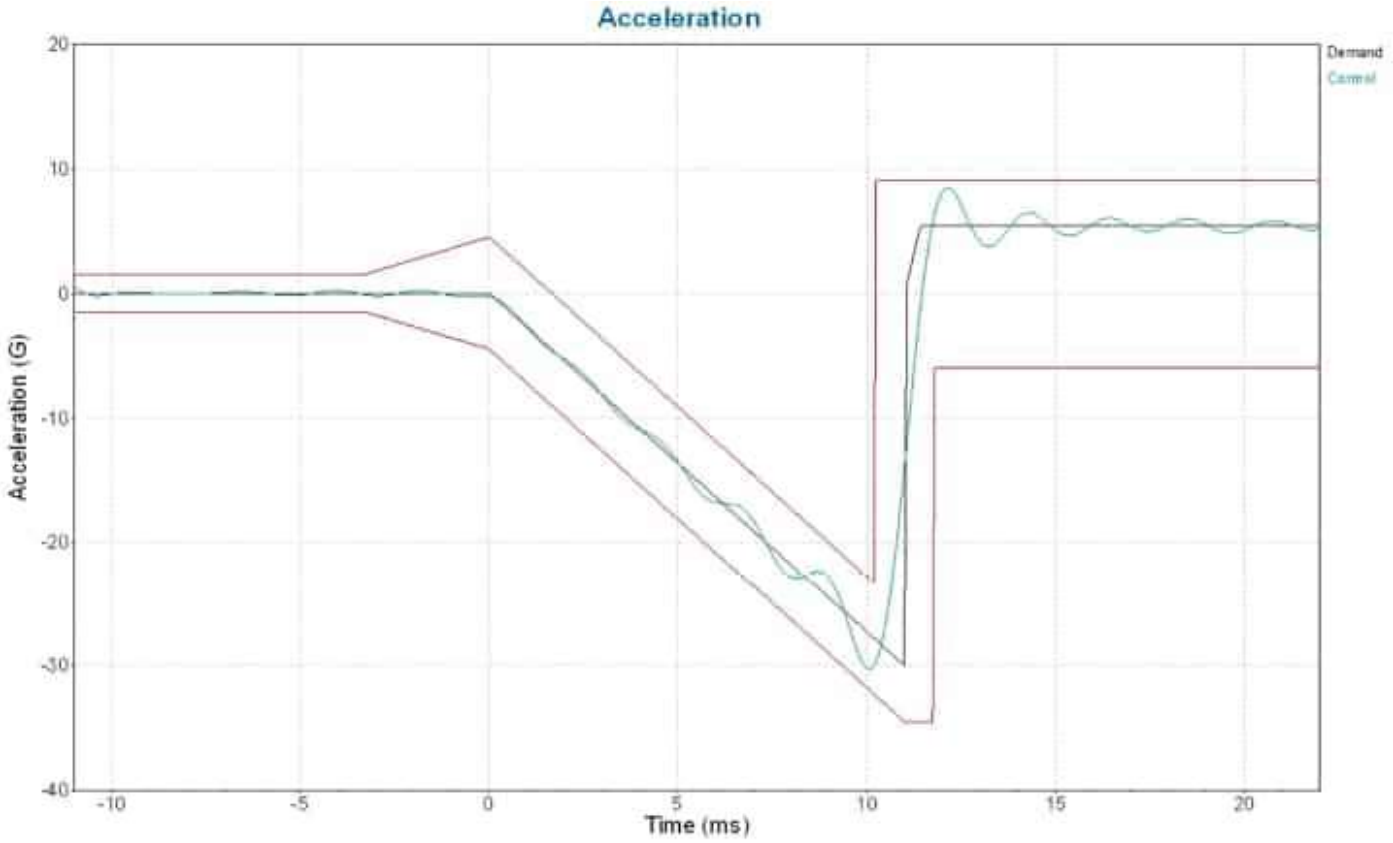
Description	Typical Shock Plot for Sample A3
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3
No. of Shocks	3
Axis	+ Z



Description	Typical Shock Plot for Sample A3
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3
No. of Shocks	3
Axis	- Z



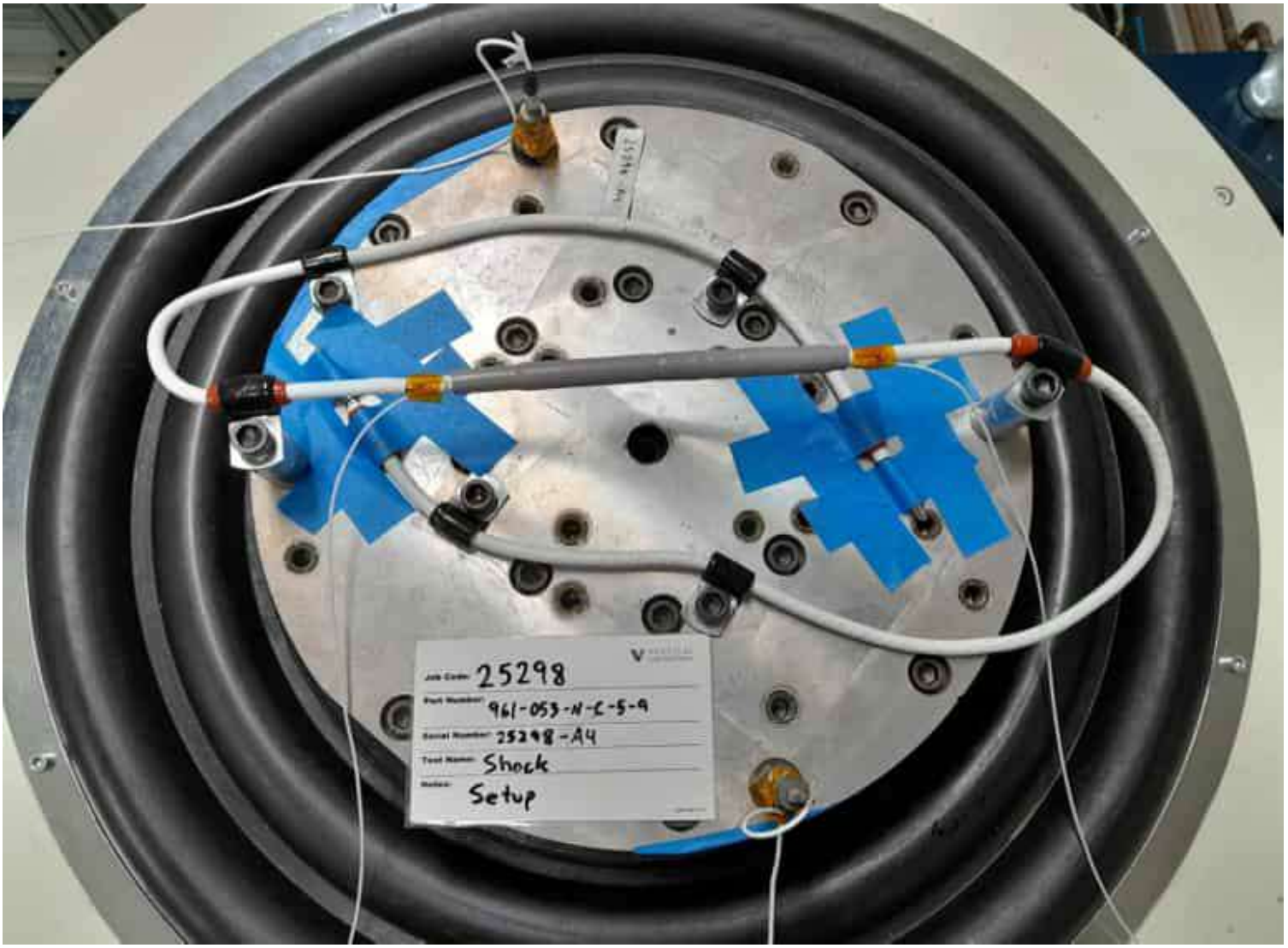
Description	Typical Shock Plot for Sample A4
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4
No. of Shocks	3
Axis	+ Z



Description	Typical Shock Plot for Sample A4
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4
No. of Shocks	3
Axis	- Z



Description	Typical Overall Setup
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4



Description	Typical Overall Setup
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	1/2/2026
Job Number	25298	**Test End Date**	1/5/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	EM038, TC014, FC013, EM079, EM080, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group A (8 AWG) are as follows:
  i.) Test Current Level 1: 46 Amps (DC)
  ii.) Test Current Level 2: 90 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	1/2/2026	**Date:**	1/30/2026

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

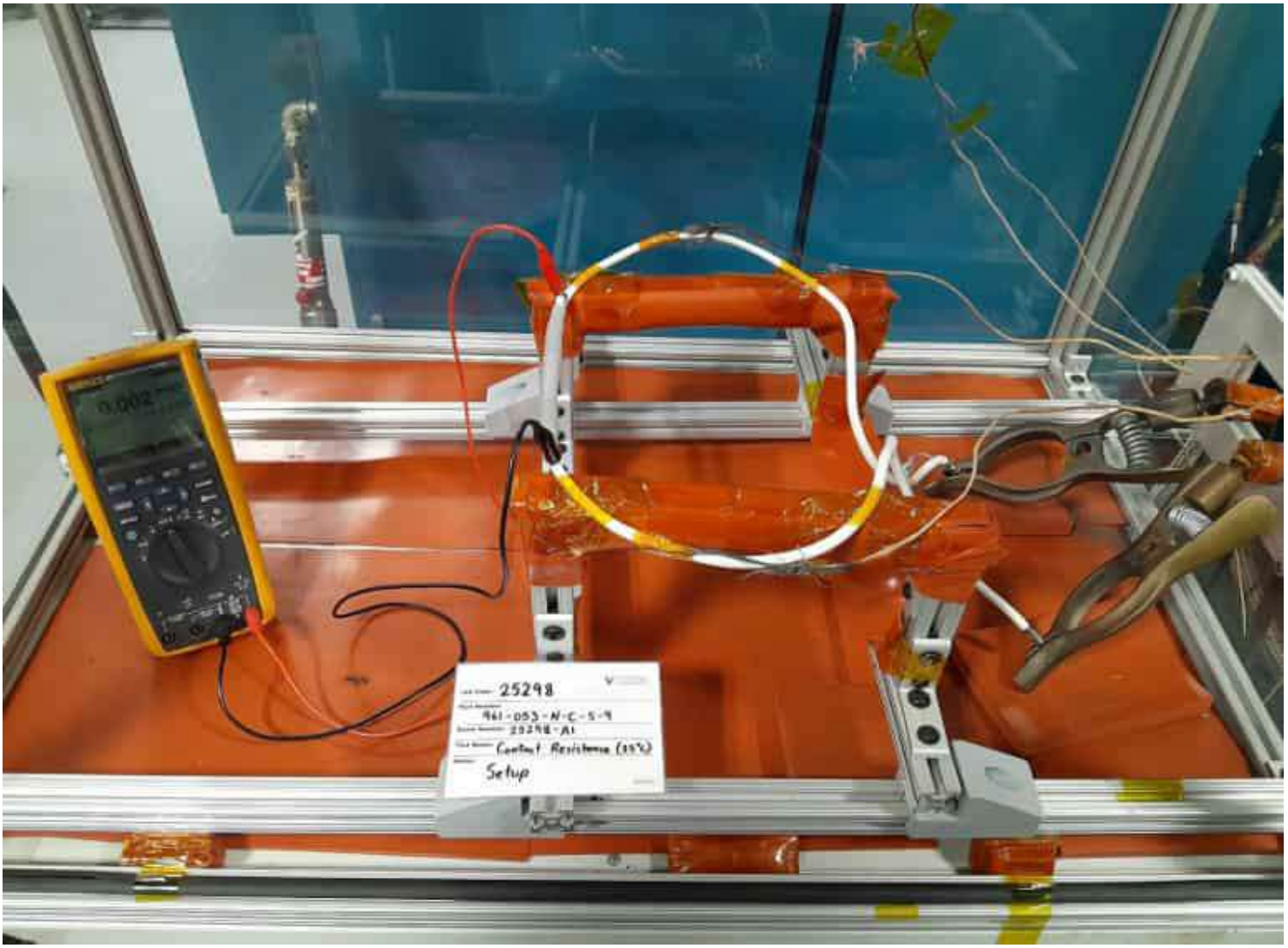
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.01
Test Parameters	Test Current Level 1: 46 Amps; Test Current Level 2: 90 Amps	RH%	33.10

Test Current Levels (A)	
Level 1	46
Level 2	90

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	46	23.6	0.513
25298-A2		30.6	0.665
25298-A3		19.9	0.433
25298-A4		19.7	0.428

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	90	52.9	0.588
25298-A2		66.3	0.737
25298-A3		44.3	0.492
25298-A4		44.2	0.491

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1

Contact Resistance (200 °C)

Test Name	Contact Resistance (200 °C)	**Test Start Date**	3/13/2026
Job Number	25298	**Test End Date**	3/16/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	CE001, EM004, EM007, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature shall be at specified conditions as stated in QTP-1513 (200 °C).
b.) Test currents for group A (8 AWG) are as follows:
  i.) Test Current Level 1: 46 Amps (DC)
  ii.) Test Current Level 2: 90 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	3/13/2026	**Date:**	3/18/2026

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (200 °C) Test Data

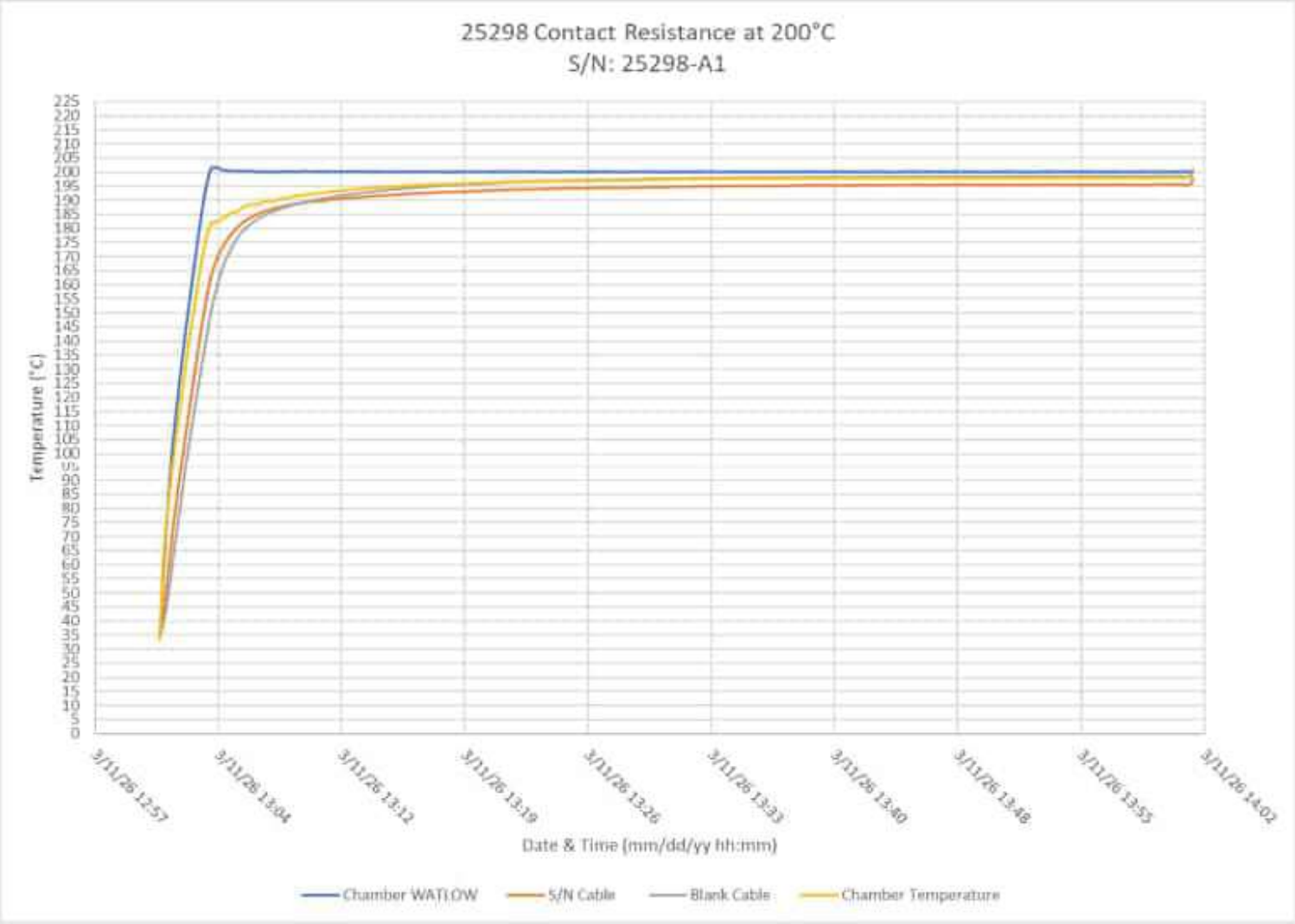
Test Name	Contact Resistance (200 °C)	Temp (°C)	24.04
Test Parameters	Test Current Level 1: 46 Amps; Test Current Level 2: 90 Amps	RH%	31.09

Test Current Levels (A)	
Level 1	46
Level 2	90

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	46	37.8	0.822
25298-A2		44.4	0.965
25298-A3		30.9	0.672
25298-A4		31.5	0.685

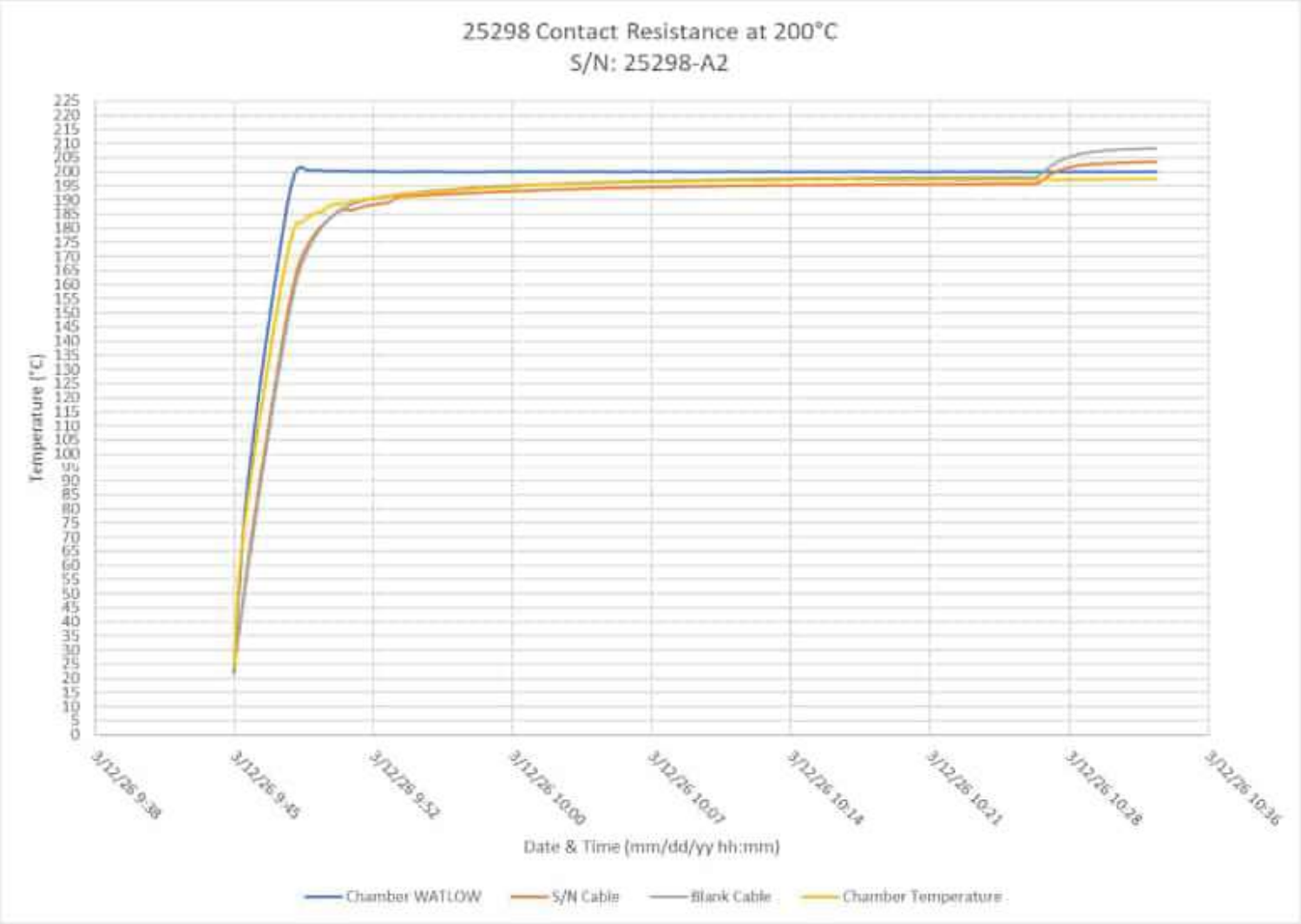
Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-A1	90	74.50	0.828
25298-A2		90.80	1.009
25298-A3		63.40	0.704
25298-A4		64.50	0.717

Contact Resistance (200 °C) Test Plots



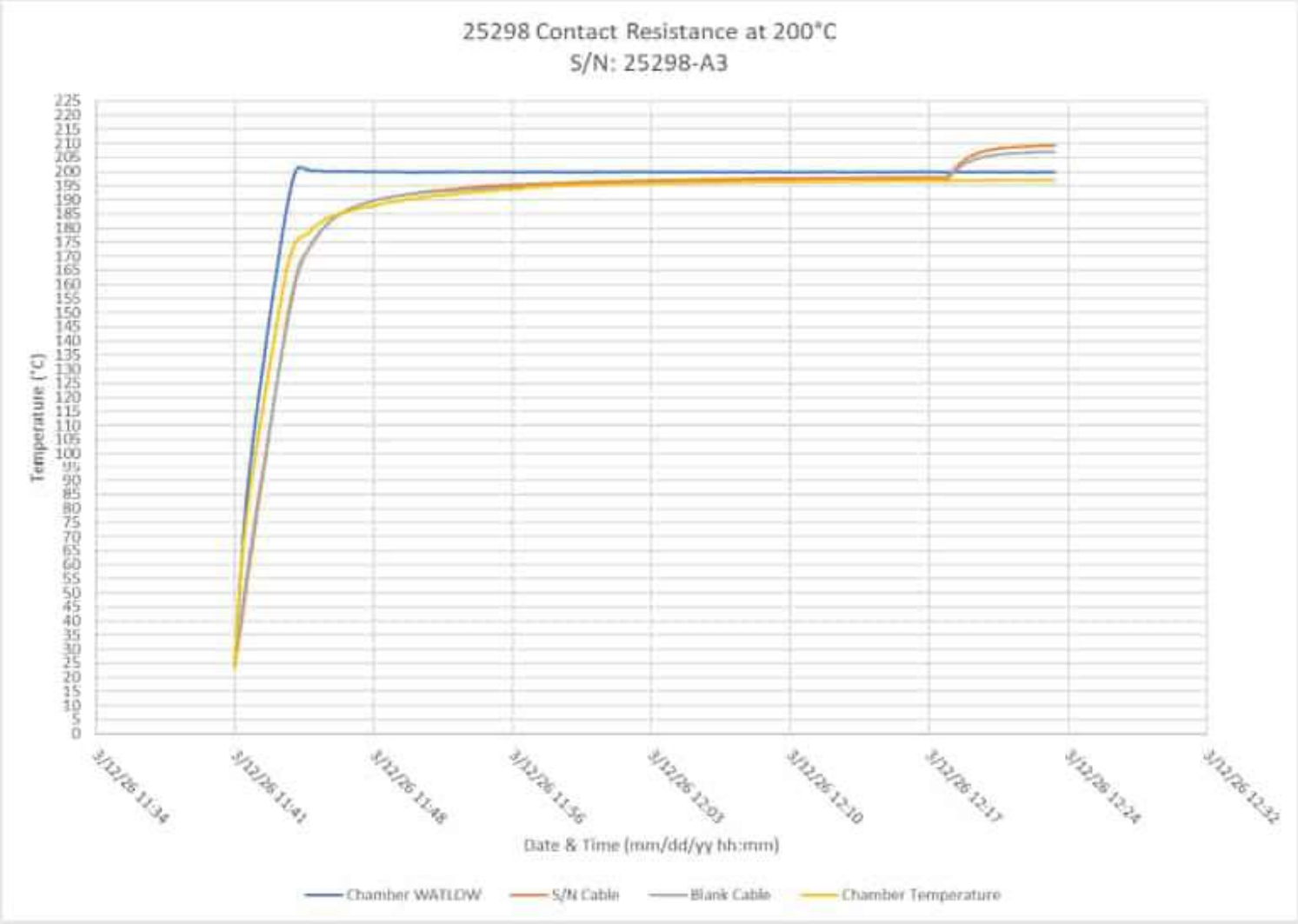
Description	Temperature Plot for Sample 25298-A1
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1

Contact Resistance (200 °C) Test Plots



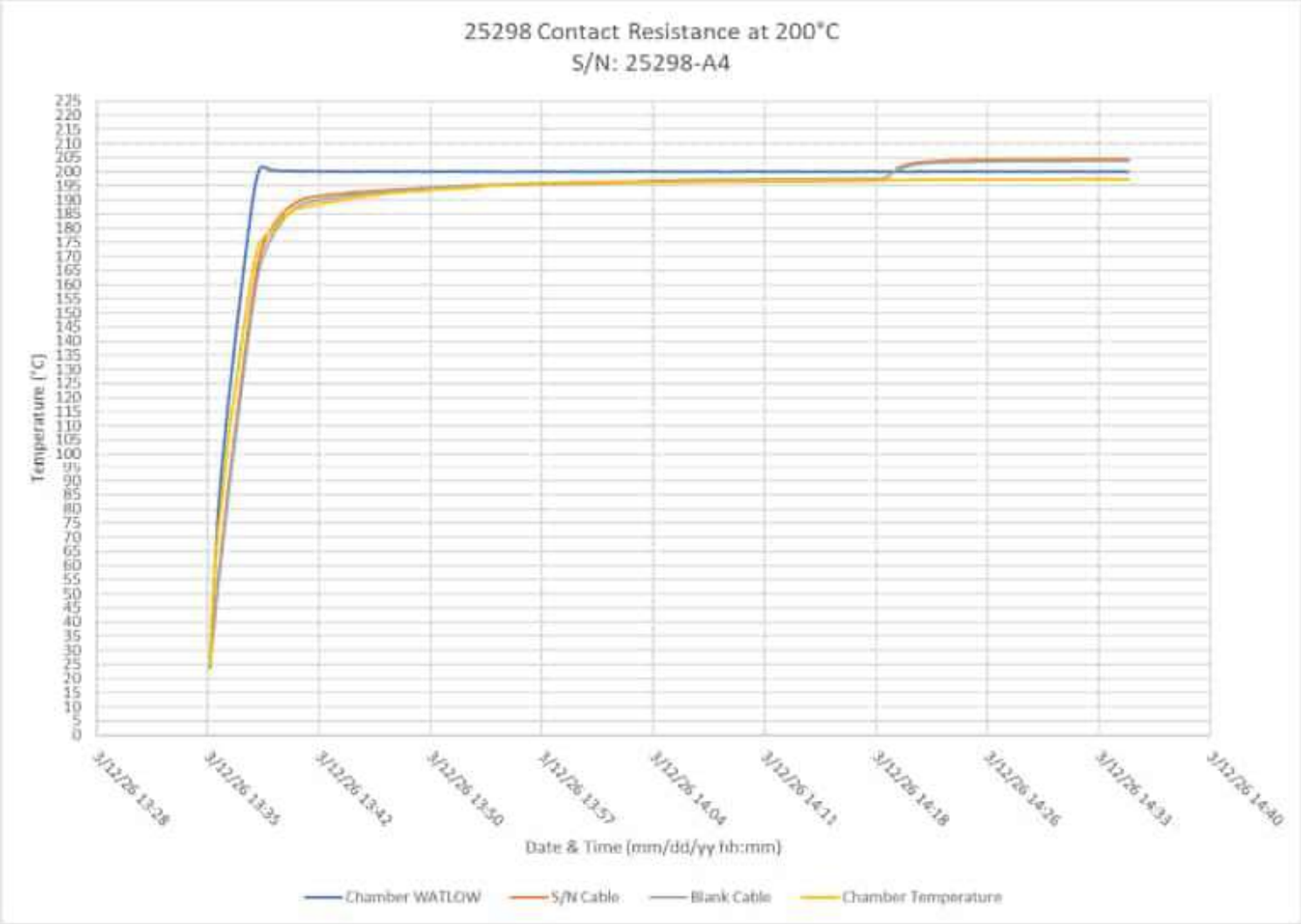
Description	Temperature Plot for Sample 25298-A2
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2

Contact Resistance (200 °C) Test Plots



Description	Temperature Plot for Sample 25298-A3
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3

Contact Resistance (200 °C) Test Plots



Description	Temperature Plot for Sample 25298-A4
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4

Contact Resistance (200 °C) Test Photos



Description	Typical Test Setup
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1

Test Name	Tensile Strength	**Test Start Date**	3/24/2026
Job Number	25298	**Test End Date**	3/25/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-A1, 25298-A2, 25298-A3, 25298-A4		
Equipment Used	CE061, CE089, TC079, CP040		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-08C		

Test Parameters

In accordance with EIA-364-08C,

a.) The Tensile Strength shall be determined by applying a plate to the upper load cell and the base.
b.) The sample shall be under tension at a rate of 0.5 in./min.
c.) Record the force in pounds.
d.) Test samples shall be tested until failure.

Sample conditions were altered:	**Yes**	**No**	**Notes:**		**Pass**	**Fail**	**Record**
	X	-		Heat shrink band stretch; indent/markings on crimp and barrel head; conductor separation.	-	-	X

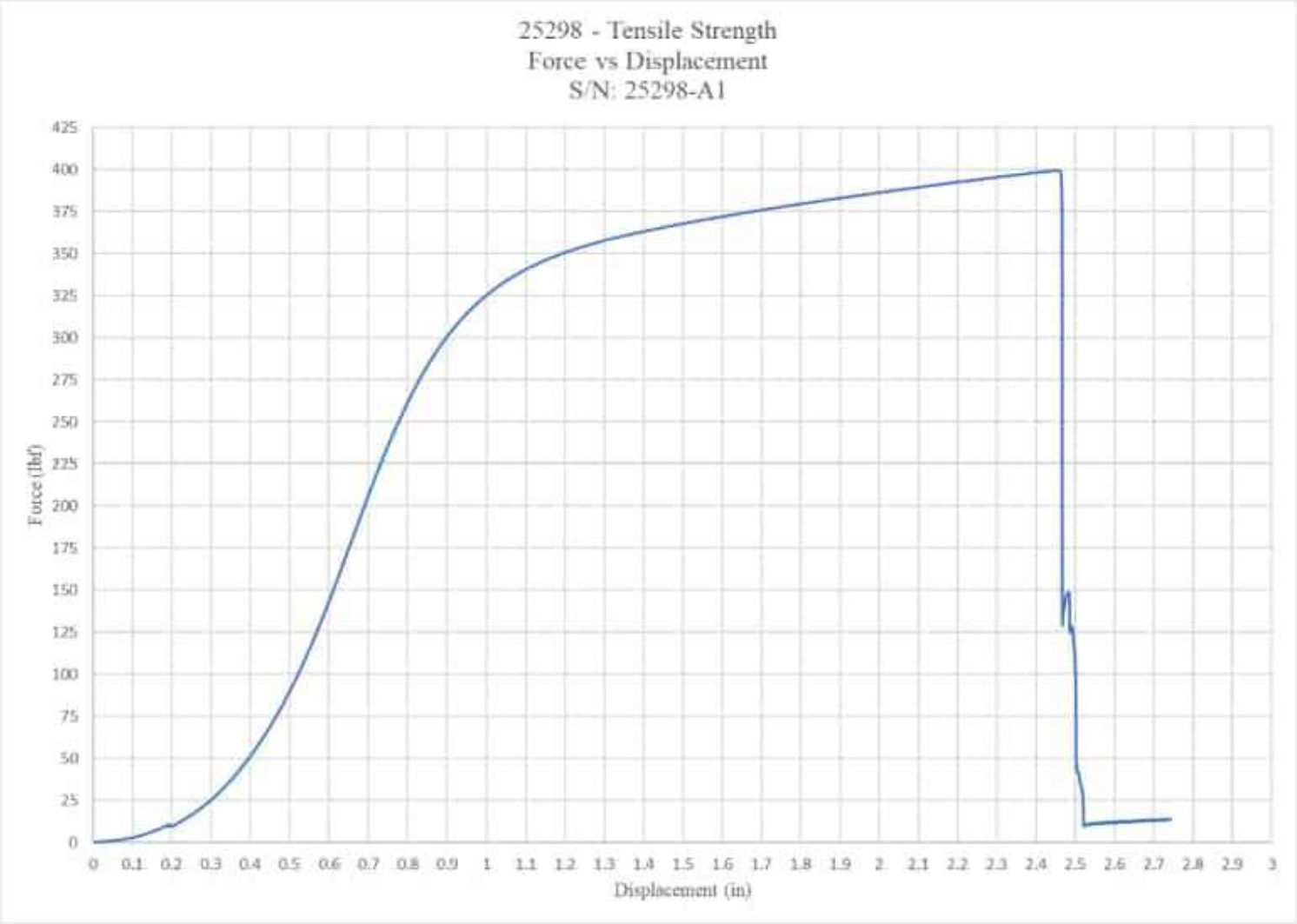
Test Setup Verified by:	Danny Tan	**Test Data Reviewed by:**	Danny Tan
Date:	3/24/2026	**Date:**	3/26/2026
If applicable, list any Test Deviations:	N/A		
Date:	N/A		

Tensile Strength Test Data

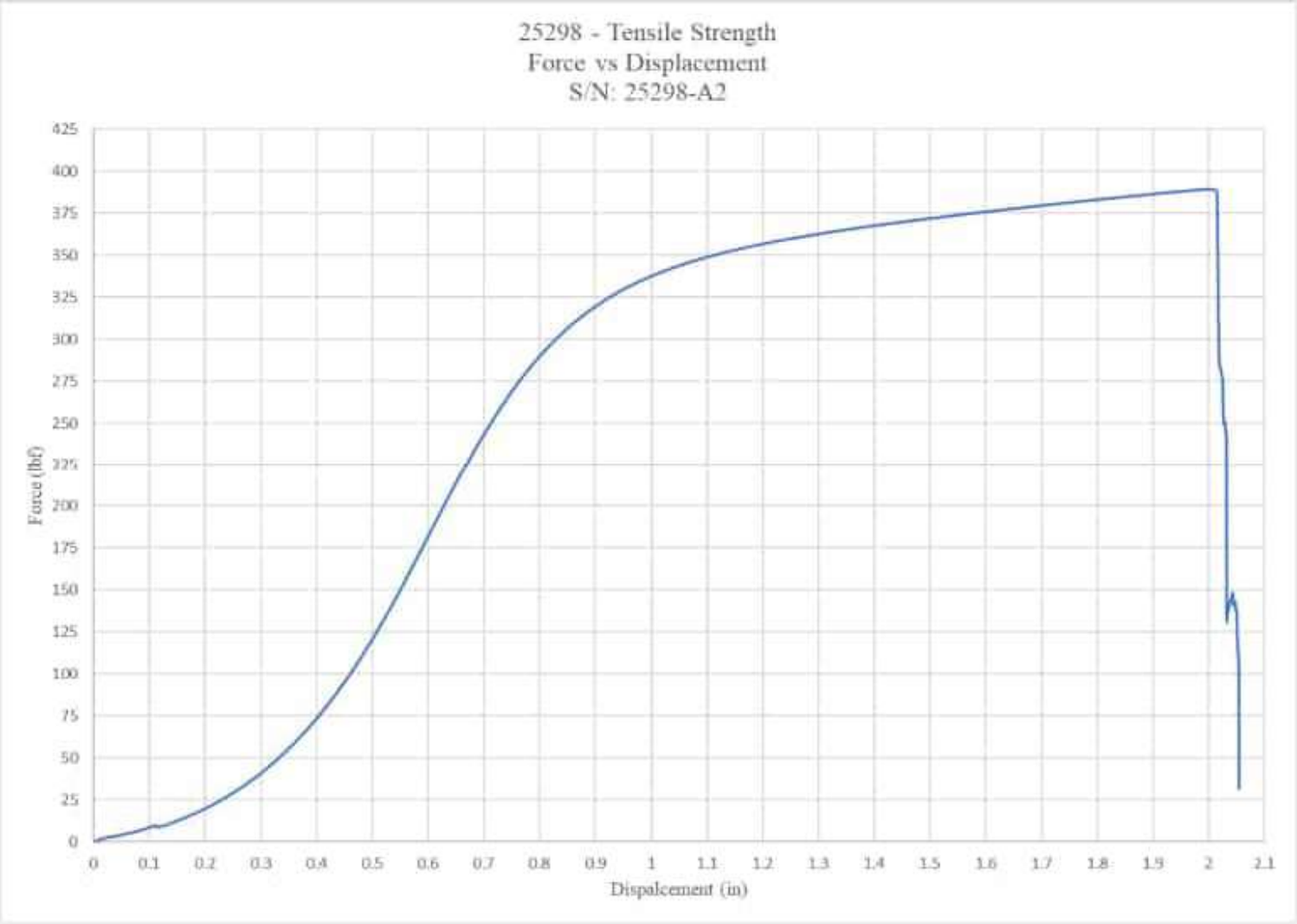
Test Name	Tensile Strength	Temp (°C)	23.45
Test Parameters	Test sample shall be tested until failure.	RH%	48.47

Test Observations	
Serial No.	Notes
25298-A1	Heat shrink band stretched; crimp barrel head has indent from vice grips; conductor separated from barrel head.
25298-A2	Heat shrink band stretched; crimp barrel head has indent from vice grips; conductor separated from barrel head.
25298-A3	Heat shrink band stretched; crimp barrel head has indent from vice grips; conductor wires are ripped and exposed.
25298-A4	Heat shrink band stretched; crimp barrel head has indent from vice grips; conductor wires are ripped and exposed.

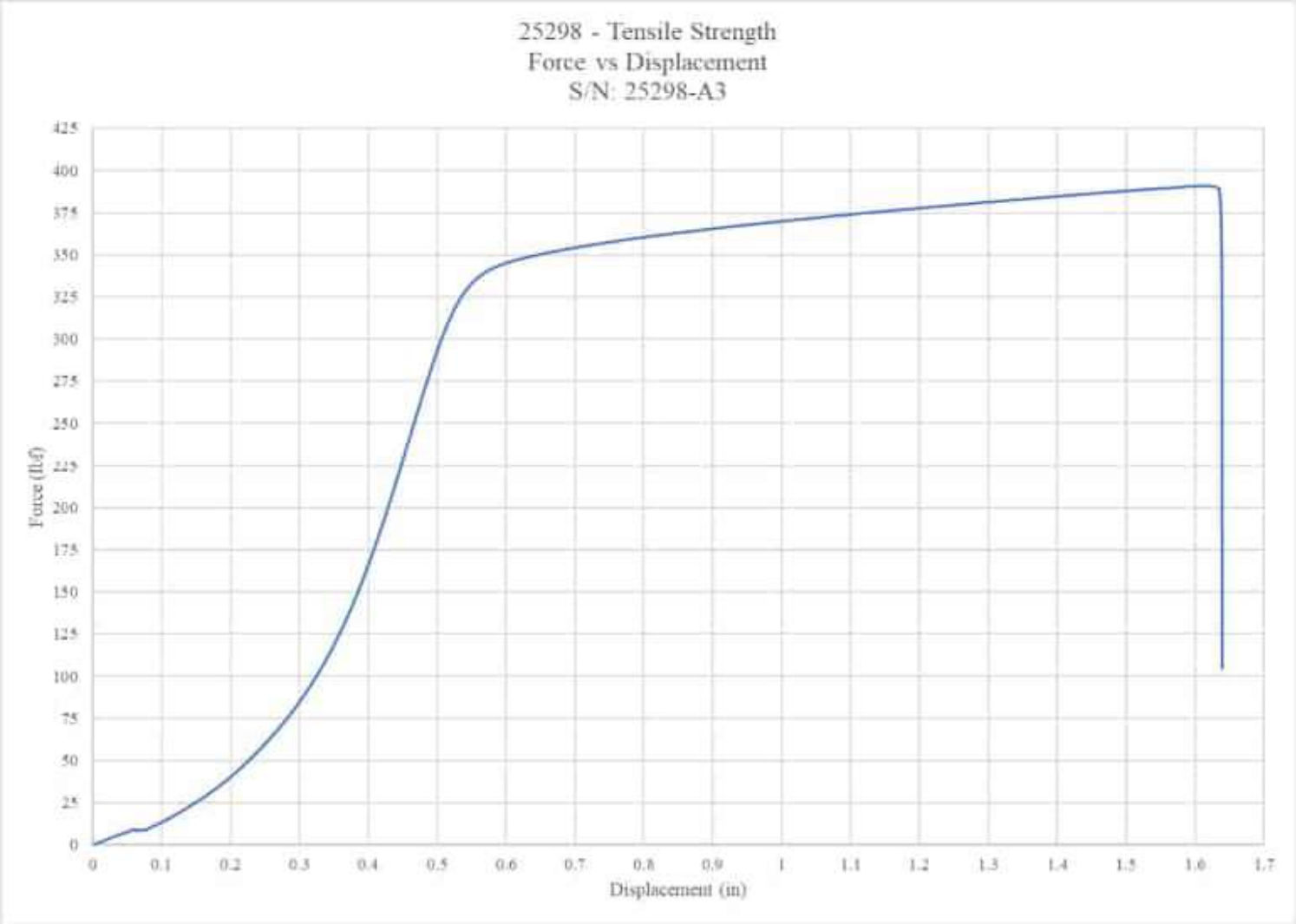
Test Data	
Serial No.	Maximum Force (lbf)
25298-A1	399.3171
25298-A2	389.3804
25298-A3	391.1073
25298-A4	368.5626



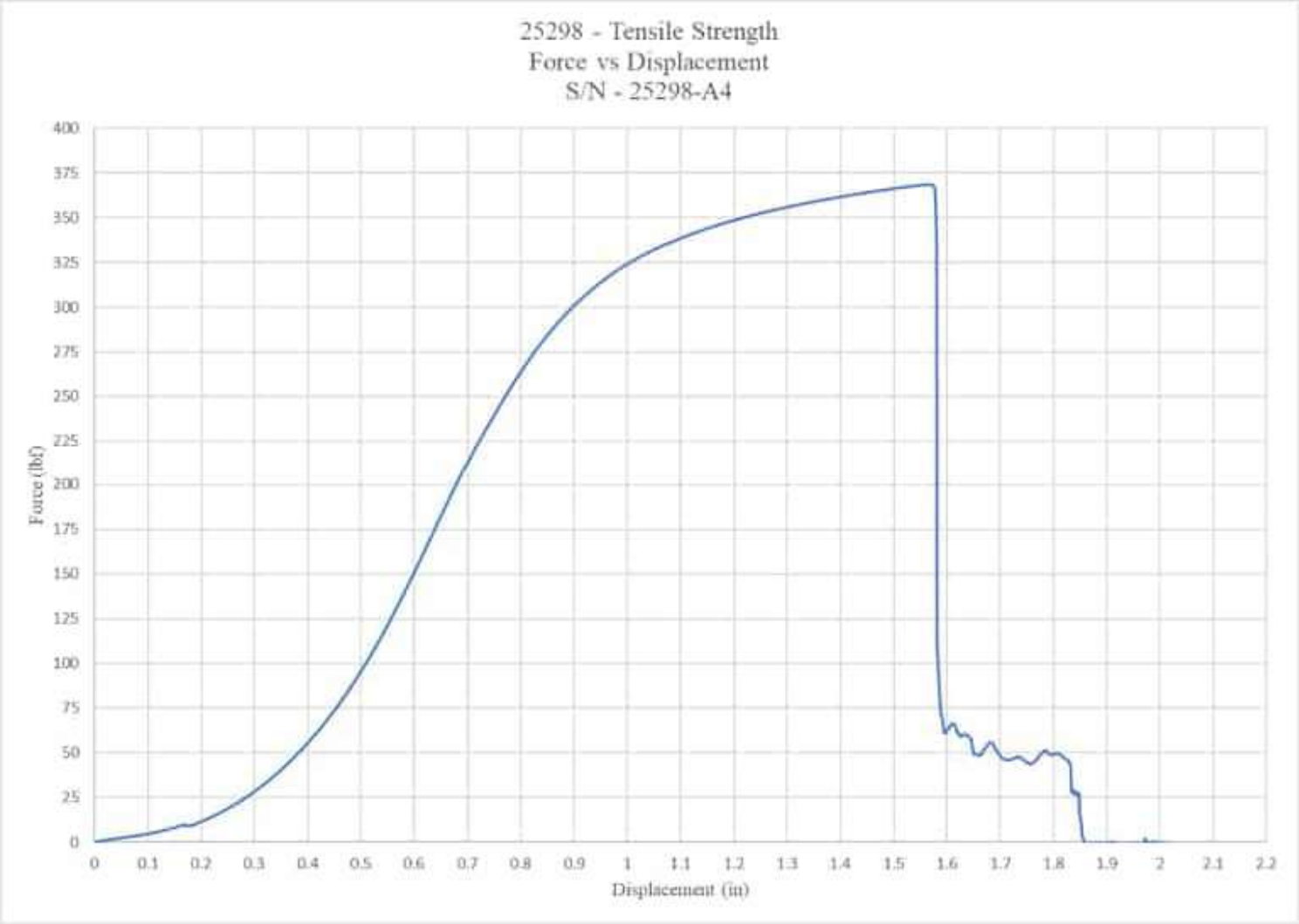
Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



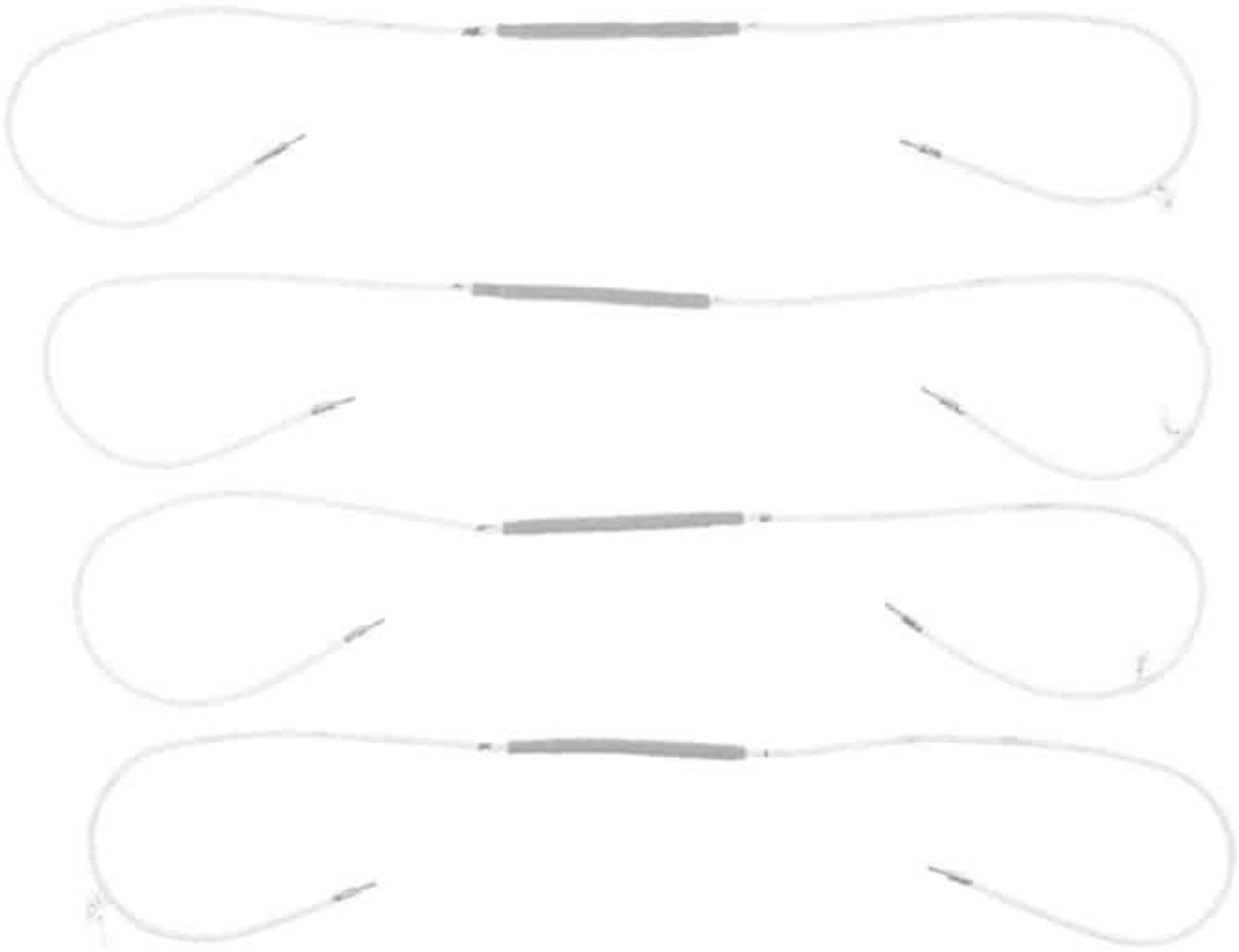
Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4



Description	Typical Tensile Strength Setup
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Post Tensile Strength Full Length of Sample
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1, 25298-A2, 25298-A3, 25298-A4



Description	Post Tensile Strength Straight Wall Tubing
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1, 25298-A2, 25298-A3, 25298-A4



Description	Post Tensile Strength Crimp Barrel End 1
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1, 25298-A2, 25298-A3, 25298-A4



Description	Post Tensile Strength Crimp Barrel End 2
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1, 25298-A2, 25298-A3, 25298-A4



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A1



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A2



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A3



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-A4

Visual and Dimensional Examination

Test Name	Visual and Dimensional Examination	**Test Start Date**	9/3/2025
Job Number	25298	**Test End Date**	9/4/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	DM005, DM029		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-18B		

Test Parameters

Samples shall have no visual defects that will affect life, serviceability, or appearance.

Contacts, wires, bands, and sleeving shall be examined to ensure that there are no defects.

3X magnification may be used as a close-up for visual inspection.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	9/3/2025	**Date:**	9/4/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Visual and Dimensional Examination Test Data

Test Name	Visual and Dimensional Examination	Temp (°C)	24.58
Test Parameters	Samples shall show no signs of visual defects.	%RH	47.24%

Visual Observation
No visual damage.

Dimensional Examination					
Serial No.	Total Length (in)	Insulation Diameter (in)	Barrel Diameter-Big (in)	Barrel Diameter-Tip (in)	Heat Shrink Diameter (in)
25298-B1	53.2500	0.4580	0.3995	0.2830	0.6335
25298-B2	53.3125	0.4550	0.4005	0.2920	0.6210
25298-B3	53.3125	0.4585	0.4045	0.2830	0.6265
25298-B4	53.3750	0.4490	0.3970	0.2830	0.6240

Dimensional Examination	
Serial No.	Barrel Length (in)
25298-A1	1.6055
25298-A2	1.6090
25298-A3	1.6020
25298-A4	1.6030



Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B1



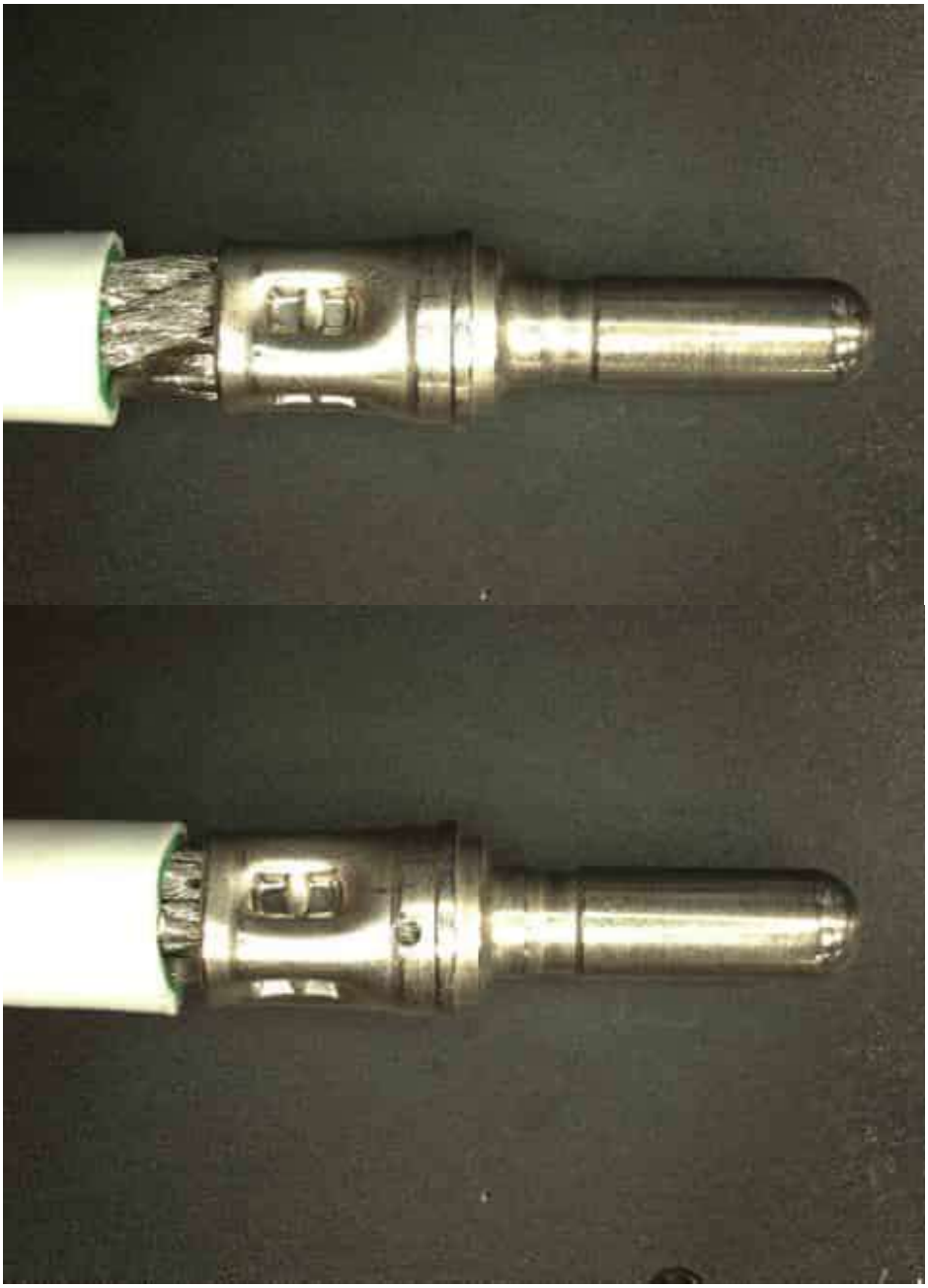
Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B2



Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B3



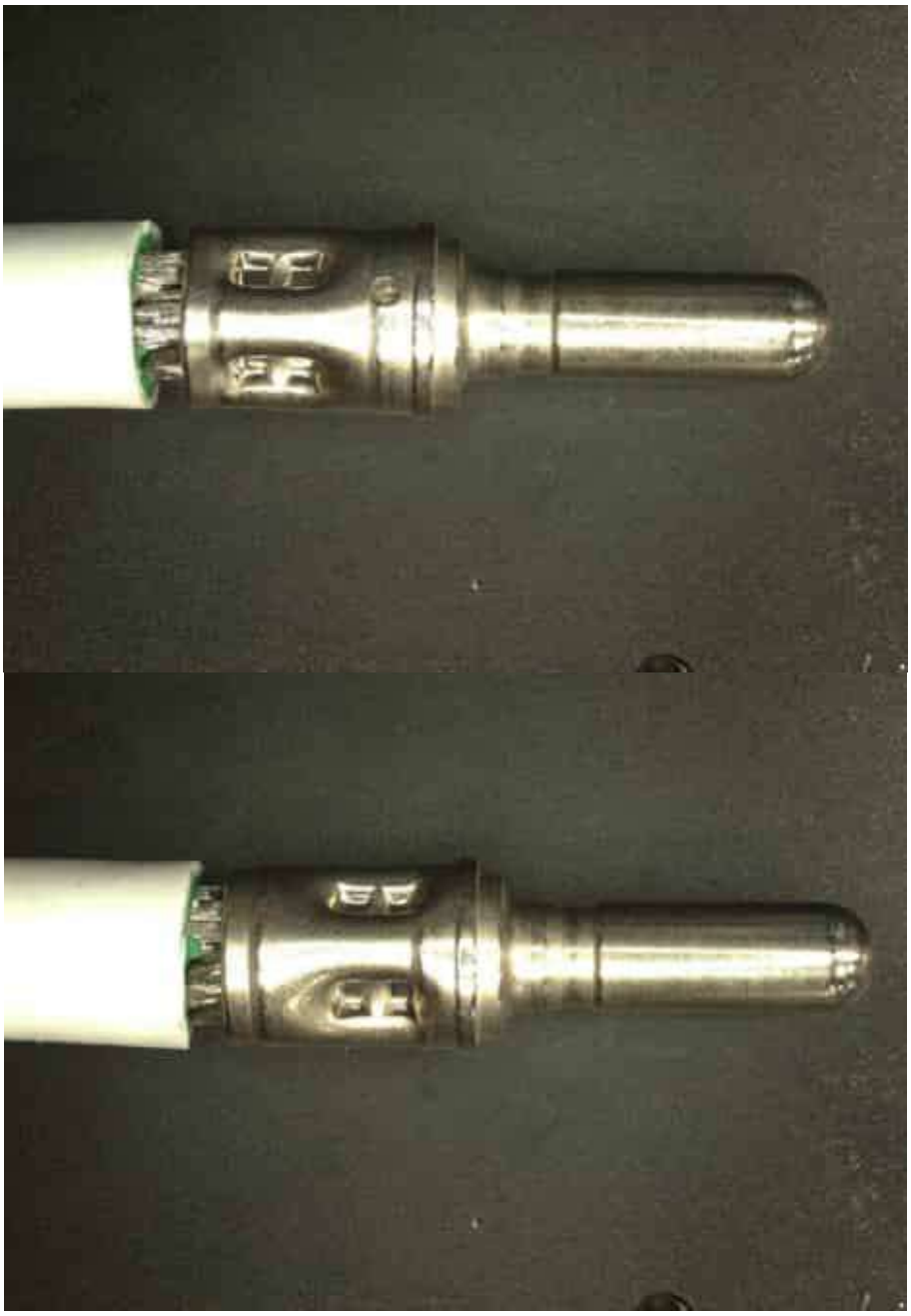
Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B4



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B1



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B2



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B3



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-B4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	9/11/2025
Job Number	25298	**Test End Date**	9/12/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	TC013, EM080, EM079, EM004, FC012, DM028, EM067, EM004, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Environmental conditions shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group B (2 AWG) are as follows:
  i.) Test Current Level 1: 100 Amps (DC)
  ii.) Test Current Level 2: 230 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Slit was cut open for voltage probes.	**Pass**	**Fail**	**Record**
	X	-			-	-	X

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Daniel Wong
Date:	9/11/2025	**Date:**	9/16/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

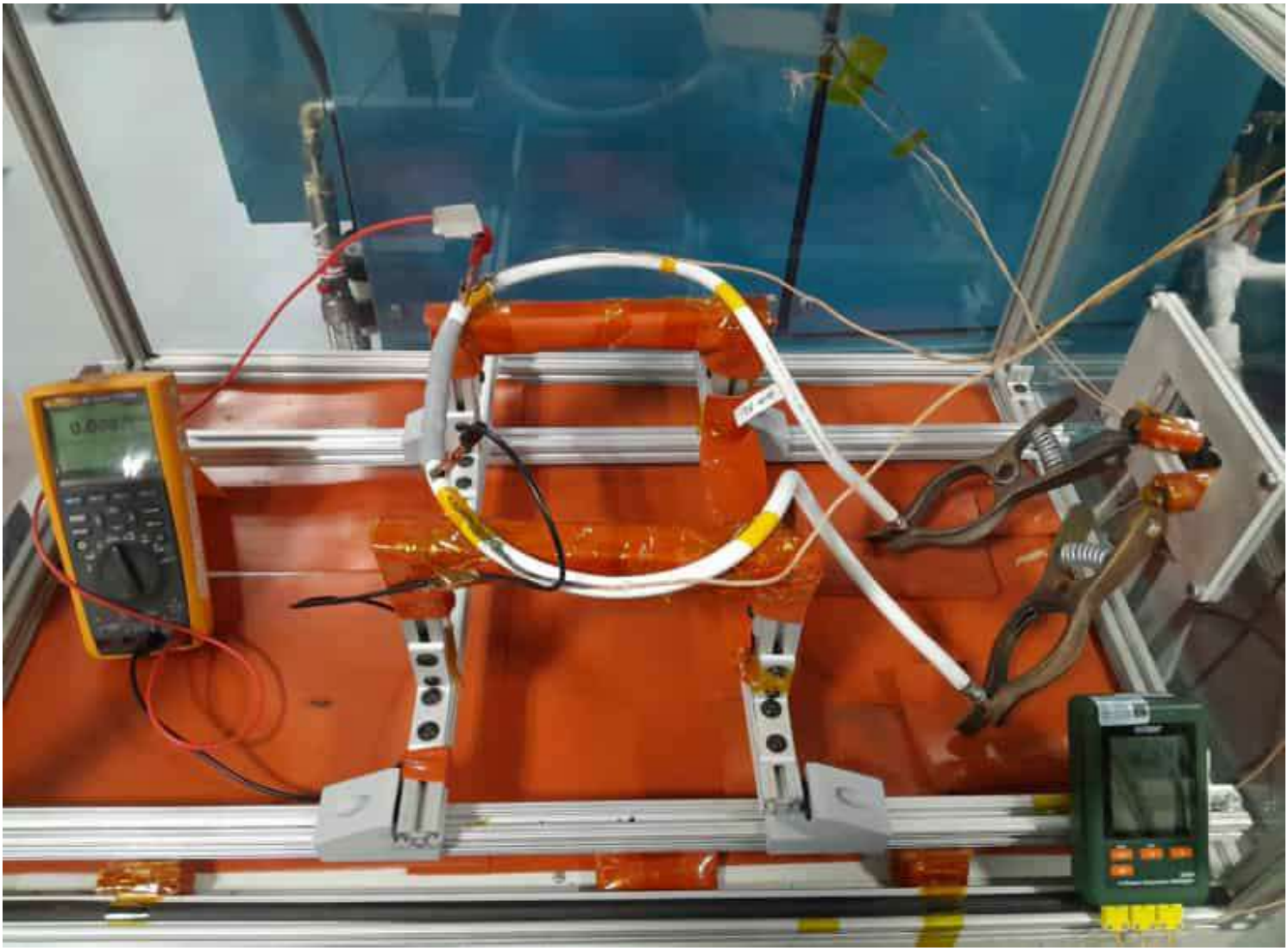
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.58
Test Parameters	Test Current Level 1: 100 Amps; Test Current Level 2: 230 Amps	RH%	46.86

Test Current Levels (A)	
Level 1	100
Level 2	230

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	100	15.1	0.151
25298-B2		15.0	0.150
25298-B3		13.9	0.139
25298-B4		24.2	0.242

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	230	40.0	0.174
25298-B2		40.0	0.174
25298-B3		37.4	0.163
25298-B4		52.9	0.230

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	252998-B2

Temperature Cycling

Test Name	Temperature Cycling	**Test Start Date**	9/23/2025
Job Number	25298	**Test End Date**	9/29/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	CE093, CE031, EM004, EM079, EM080, EM067, MA028, TC079		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-32H		

Test Parameters

In accordance with EIA-364-32H, Method A, Condition IV, Duration A,

a.) Temperature Cycling shall be from -65 °C to 200 °C.
b.) Duration shall be 5 cycles.
c.) 2 hours at each temperature extreme.
d.) Specimen transfer time shall be 2 minutes maximum.
e.) At the end of the 5th cycle, Contact Resistance shall be tested while the specimen is subjected to 200 °C.
f.) Test currents for group B (2 AWG) are as follows:
  i.) Test Current Level 1: 100 Amps (DC)
  ii.) Test Current Level 2: 230 Amps (DC)
g.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
h.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Pass/Fail Criteria:
No evidence of defects detrimental to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Minor debris on insulation.	**Pass**	**Fail**	**Record**
	X	-			X	-	-

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	9/23/2025	**Date:**	9/30/2025
If applicable, list any Test Deviations:	N/A		
Date:	N/A		

Temperature Cycling Test Data

Test Name	Post Temperature Cycling (Contact Resistance (25 °C))	Temp (°C)	24.24
Test Parameters	Test Current Level 1: 100 Amps; Test Current Level 2: 230 Amps	RH%	45.97

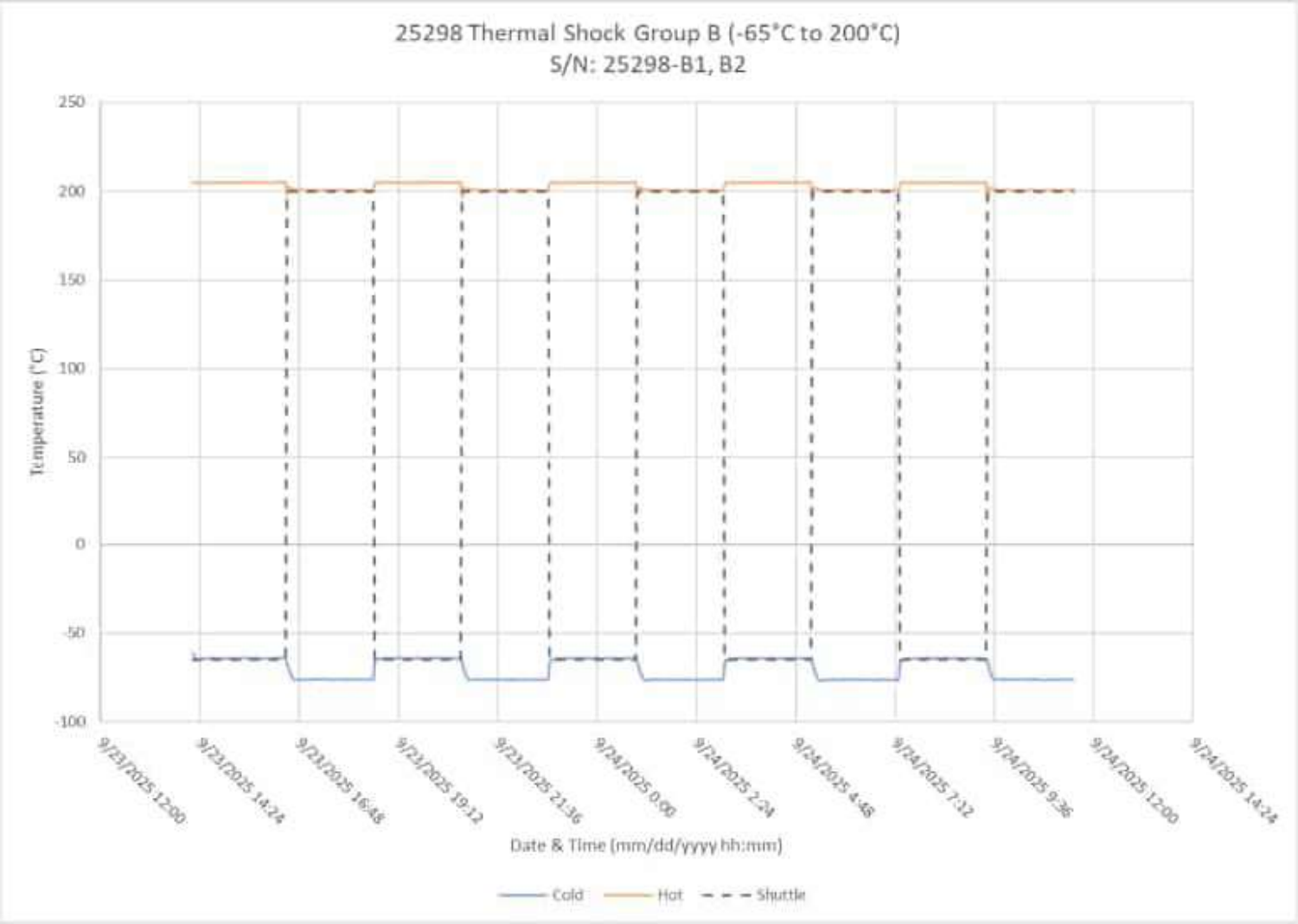
Test Current Levels (A)	
Level 1	100
Level 2	230

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	100	24.5	0.245
25298-B2		21.4	0.214
25298-B3		22.8	0.228
25298-B4		24.1	0.241

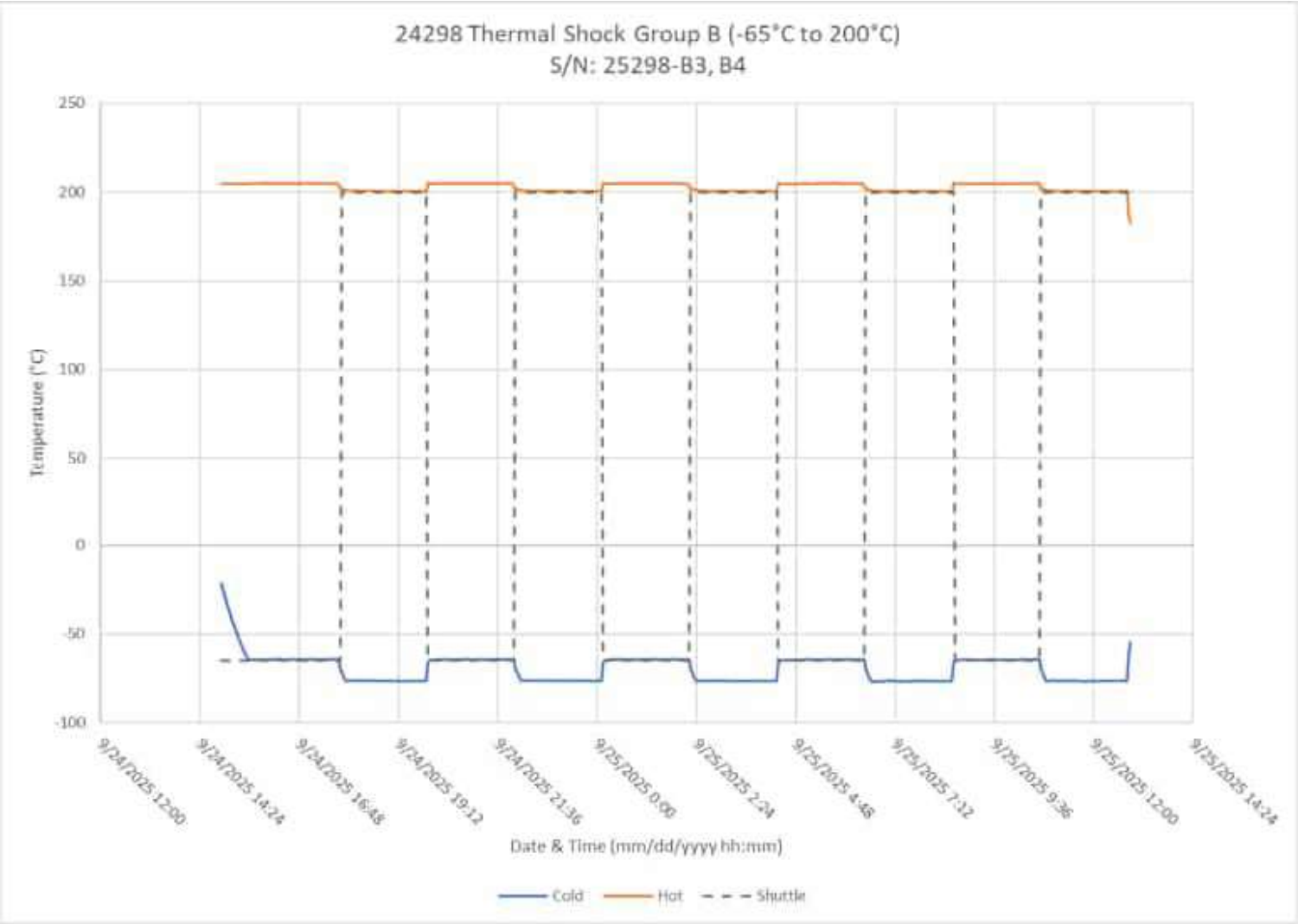
Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	230	57.2	0.249
25298-B2		53.6	0.233
25298-B3		53.2	0.231
25298-B4		56.4	0.245

Test Observations	
Serial No.	Notes
25298-B1	Minor debris on insulation.
25298-B2	Minor debris on insulation.
25298-B3	Minor debris on insulation.
25298-B4	Minor debris on insulation.

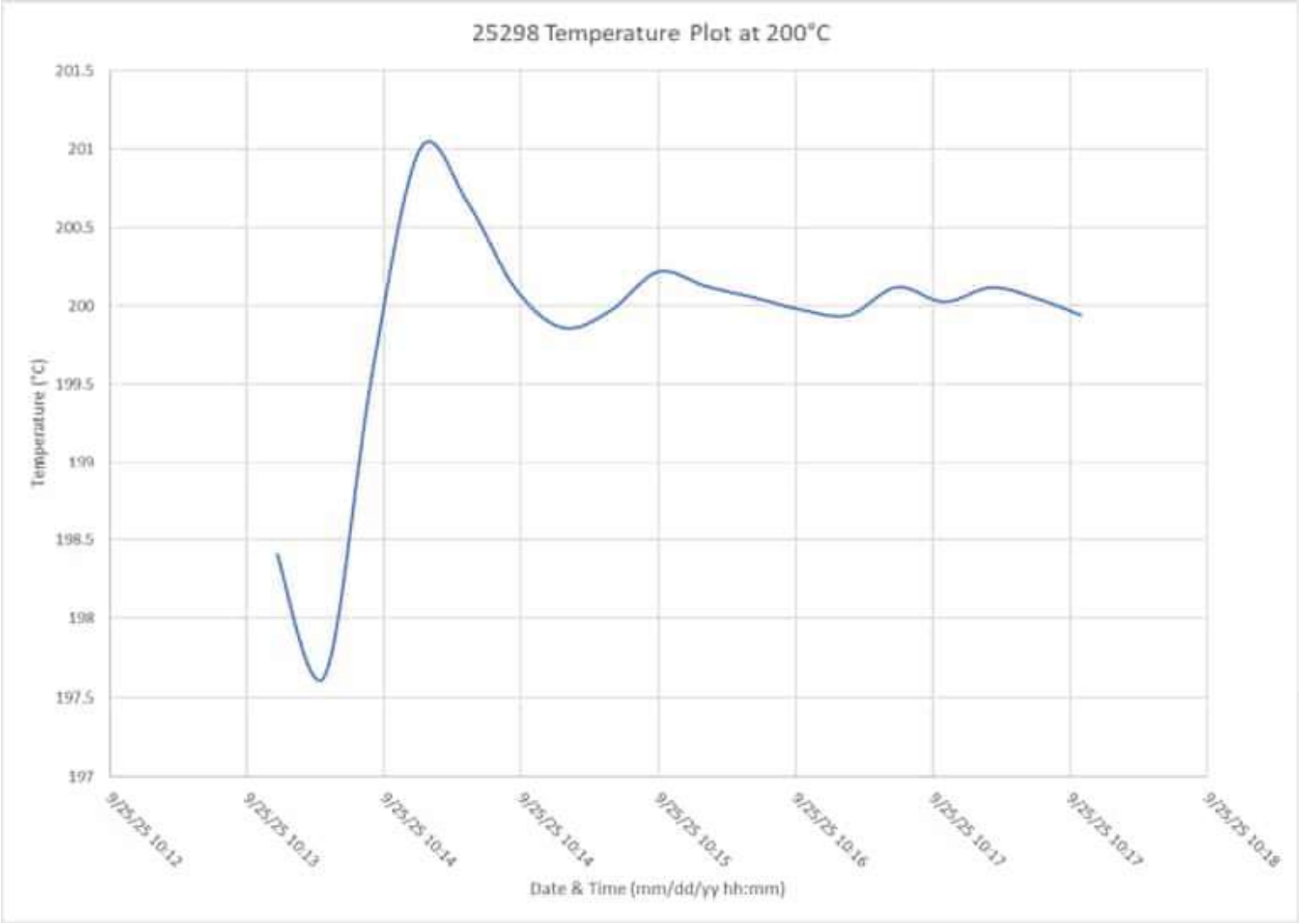
Temperature Cycling Test Plots



Description	Typical Temperature Cycling Plot
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification Page



Description	Typical Temperature Cycling Plot
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification Page



Description	Typical Temperature Plot at 200 °C Dwell
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification Page



Description	Typical Temperature Cycling Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1; 25298-B2



Description	Typical Contact Resistance Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Typical Contact Resistance Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	10/8/2025
Job Number	25298	**Test End Date**	10/9/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	TC013, EM080, EM079, EM004, FC012, DM028, EM067, EM004, TC082, TC079		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group B (2 AWG) are as follows:
  i.) Test Current Level 1: 100 Amps (DC)
  ii.) Test Current Level 2: 230 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	10/8/2025	**Date:**	10/13/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

Test Name	Contact Resistance (25 °C)	Temp (°C)	25.08
Test Parameters	Test Current Level 1: 100 Amps; Test Current Level 2: 230 Amps	RH%	41.70

Test Current Levels (A)	
Level 1	100
Level 2	230

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	100	23.1	0.231
25298-B2		24.1	0.241
25298-B3		19.8	0.198
25298-B4		18.4	0.184

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	230	63.6	0.277
25298-B2		52.7	0.229
25298-B3		56.4	0.245
25298-B4		61.7	0.268

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	252998-B1

Test Name	Vibration	**Test Start Date**	11/6/2025
Job Number	25298	**Test End Date**	11/24/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	SK07, AM05, AC034, AC035, TQ017, TQ030, CE100, EM049, TC078		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, MIL-STD-202		

Test Parameters

In accordance with MIL-STD-202, Method 201,

a.) Samples shall be visually inspected before mounting for Vibration.
b.) Samples shall be mounted where the fixed clamp points of the cable shall be 12 inches from the center. (6 in. ± 0.25 in. from the left and right).
c.) Samples shall also be elevated about 1 in. ± 0.15 in. from the surface of the vibration platform.
d.) Discontinuity monitoring required (100 mA max current; detecting discontinuities > 1 µs).
e.) Duration shall be 18 hours in each of two axes mutually perpendicular to each other and to the axis of the wire.
f.) The UUT shall have an amplitude of 0.03 inches, the frequency shall be varied uniformly between the approximate limits of 10 Hz and 55 Hz. The entire frequency range, from 10 Hz to 55 Hz and return to 10 Hz, shall be traversed in approximately 1 minute.

Pass/Fail Criteria:
No discontinuities > 1µs and no evidence of defects or damage to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			X	-	-

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Carlos Nungaray
Date:	11/6/2025	**Date:**	11/24/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Group 2			
Test Name	Run #	Axis	Notes
Vibration	1	X	-
	2	Y	-
	3	Z	-

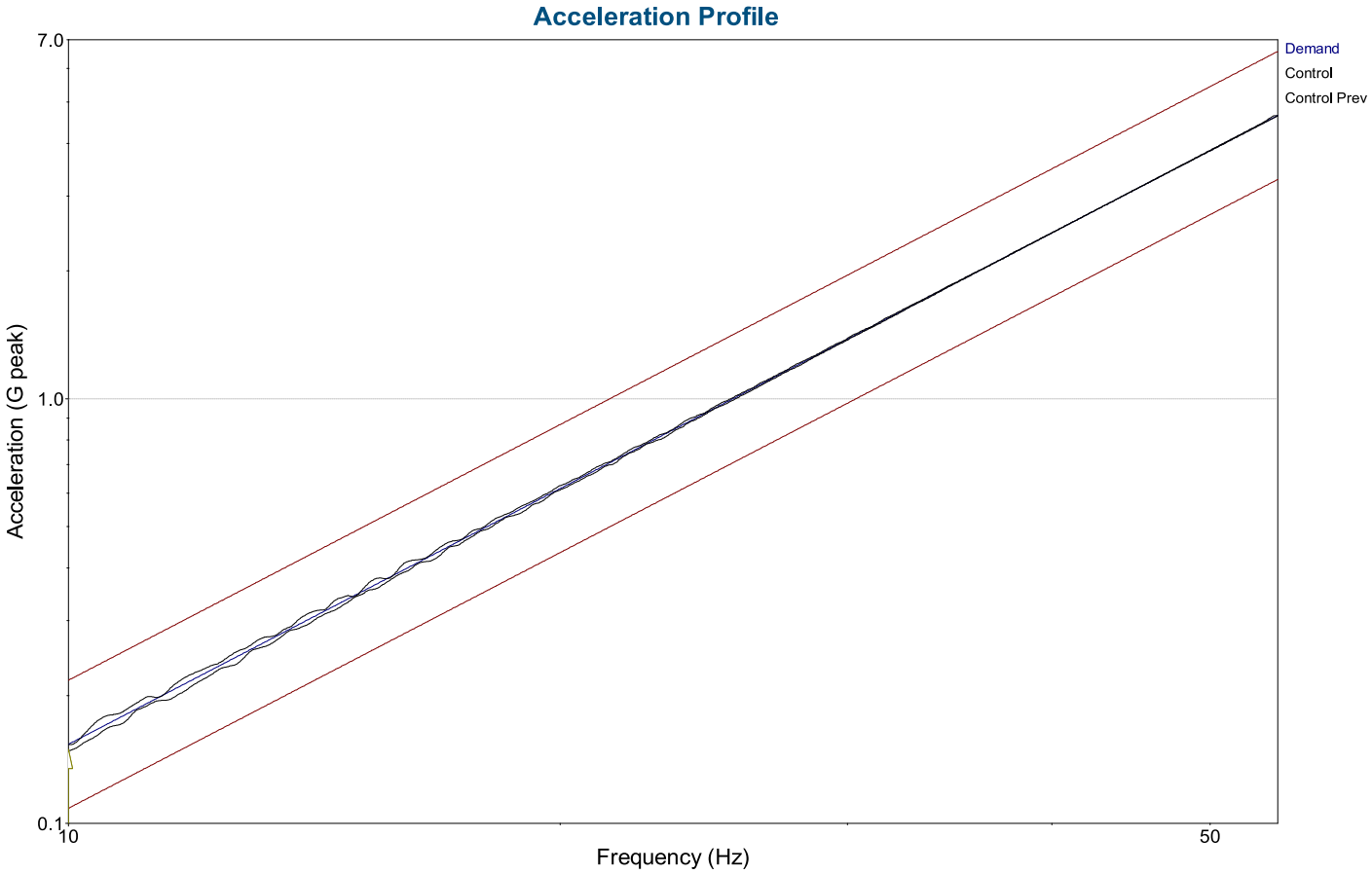
Vibration Test Data

Test Name	Vibration	Temp (°C)	23.18
Test Parameters	Duration of 18 hours in all mutually perpendicular axes (X, Y, Z)	RH%	19.80

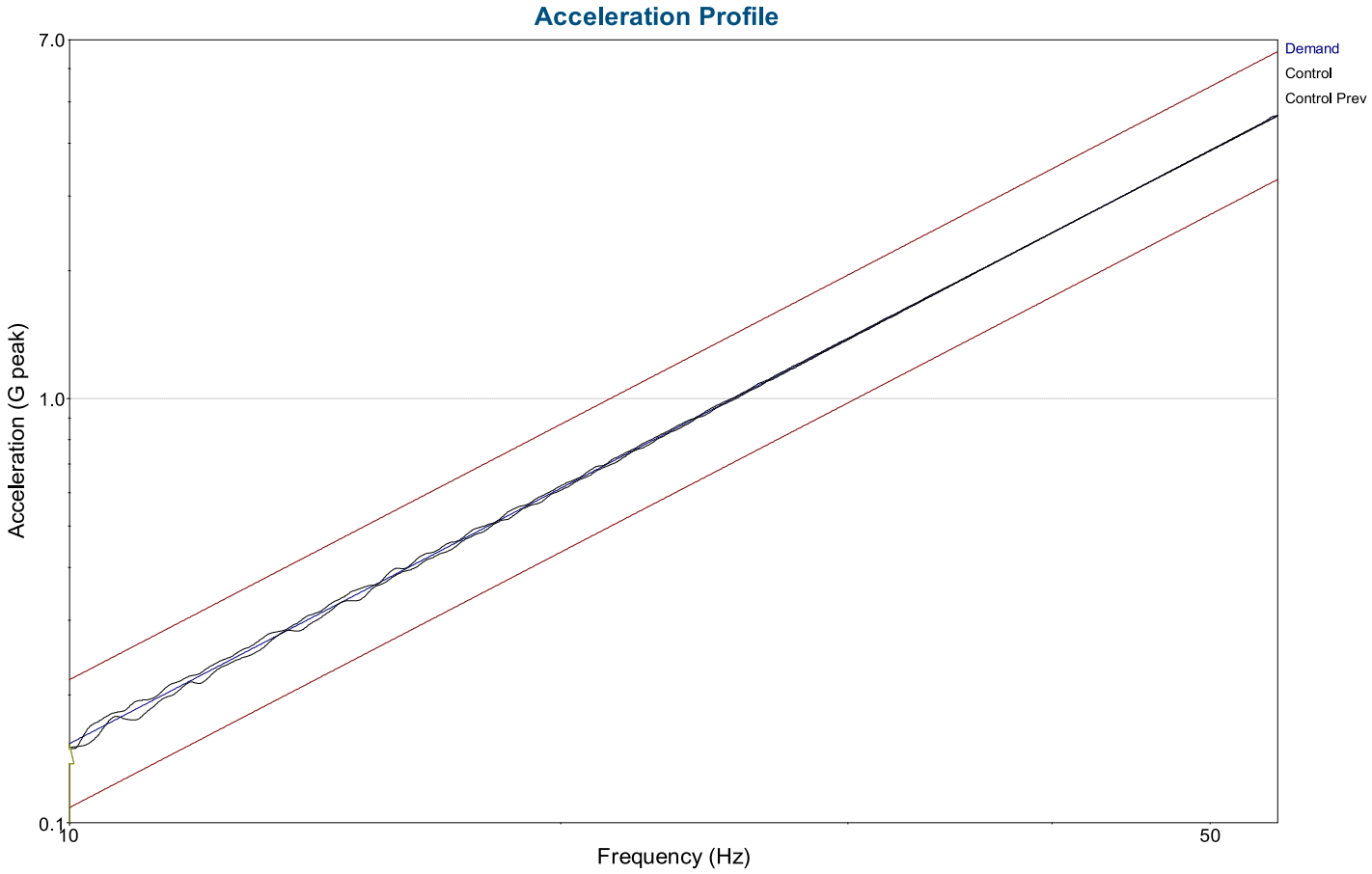
Test Observations		
Axis	Serial No.	Notes
X	25298-B1	No visual damage or discontinuities.
	25298-B2	No visual damage or discontinuities.
	25298-B3	No visual damage or discontinuities.
	25298-B4	No visual damage or discontinuities.

Test Observations		
Axis	Serial No.	Notes
Y	25298-B1	No visual damage or discontinuities.
	25298-B2	No visual damage or discontinuities.
	25298-B3	No visual damage or discontinuities.
	25298-B4	No visual damage or discontinuities.

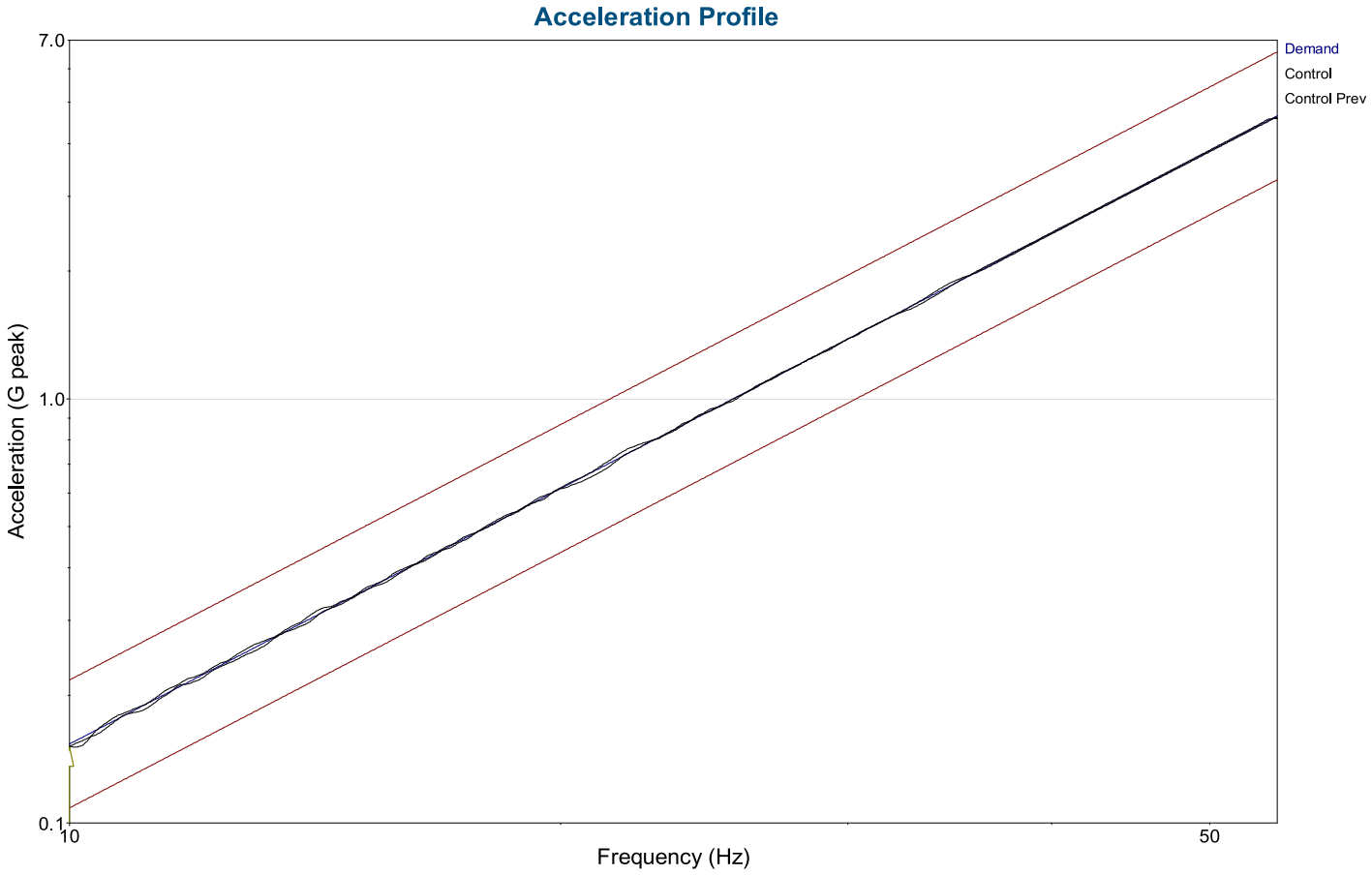
Test Observations		
Axis	Serial No.	Notes
Z	25298-B1	Minor Scratches and cuts but no discontinuities.
	25298-B2	Minor Scratches and cuts but no discontinuities.
	25298-B3	Minor Scratches and cuts but no discontinuities.
	25298-B4	Minor Scratches and cuts but no discontinuities.



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Group B
Duration	18:00:00
Axis	X



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Group B
Duration	18:00:00
Axis	Y



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Group B
Duration	18:00:00
Axis	Z



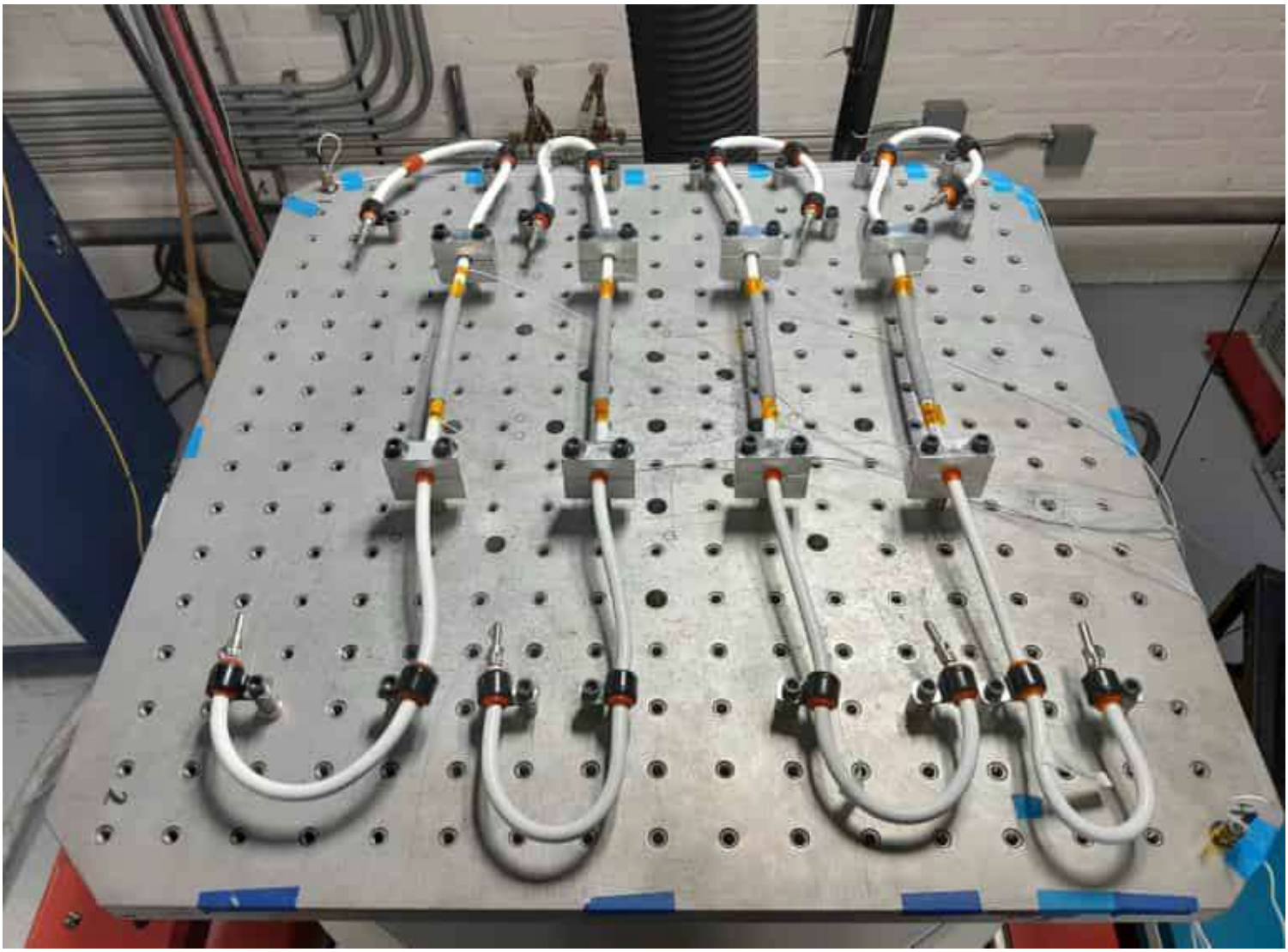
Description	Typical Overall Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification



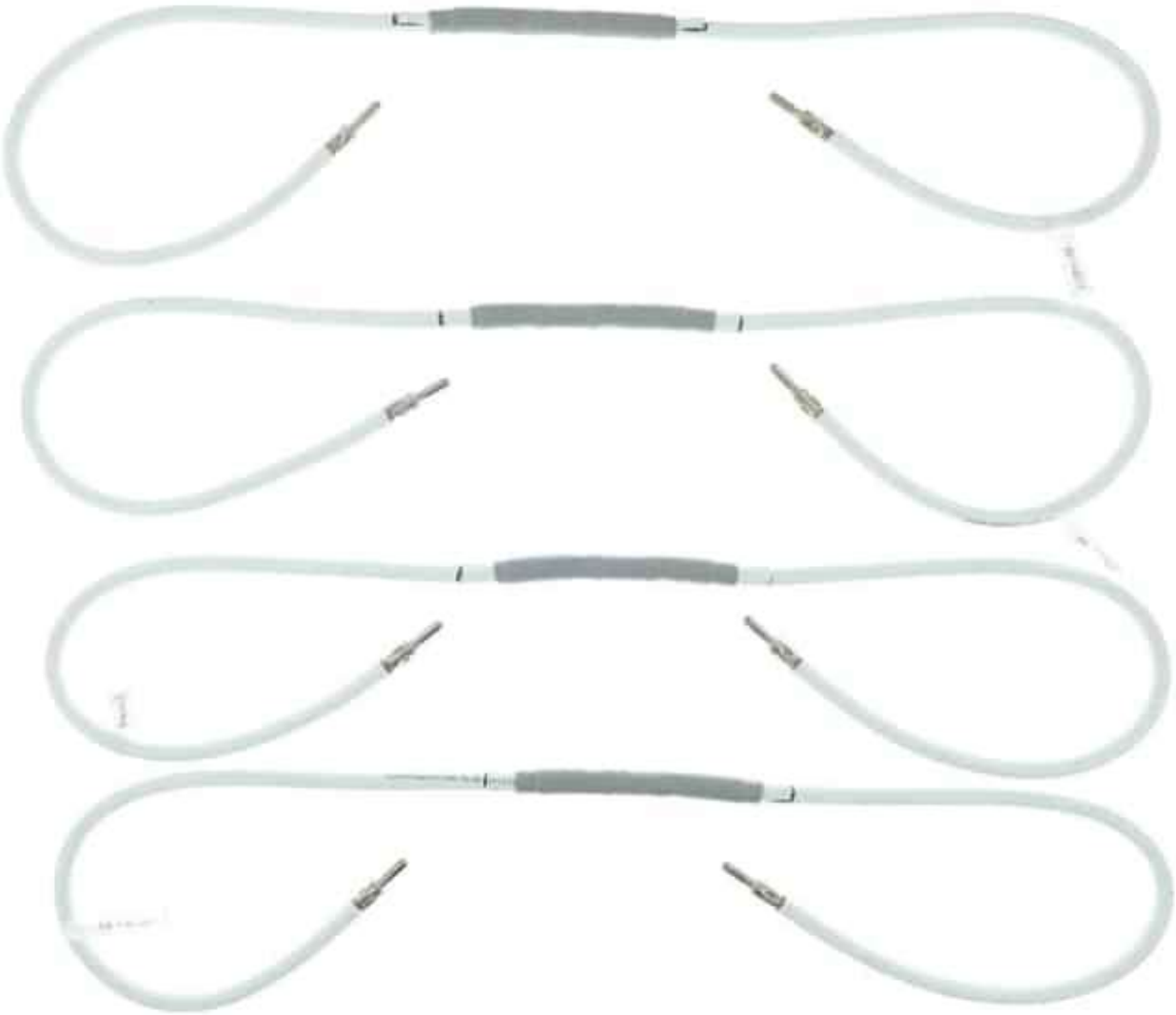
Description	Vibration X-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification



Description	Vibration Y-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification



Description	Vibration Z-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	Refer to Test Sample Identification



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B2



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B3



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	12/2/2025
Job Number	25298	**Test End Date**	12/3/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	EM038, TC014, FC013, EM079, EM080, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group B (2 AWG) are as follows:
i.) Test Current Level 1: 100 Amps (DC)
ii.) Test Current Level 2: 230 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	12/2/2025	**Date:**	12/8/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

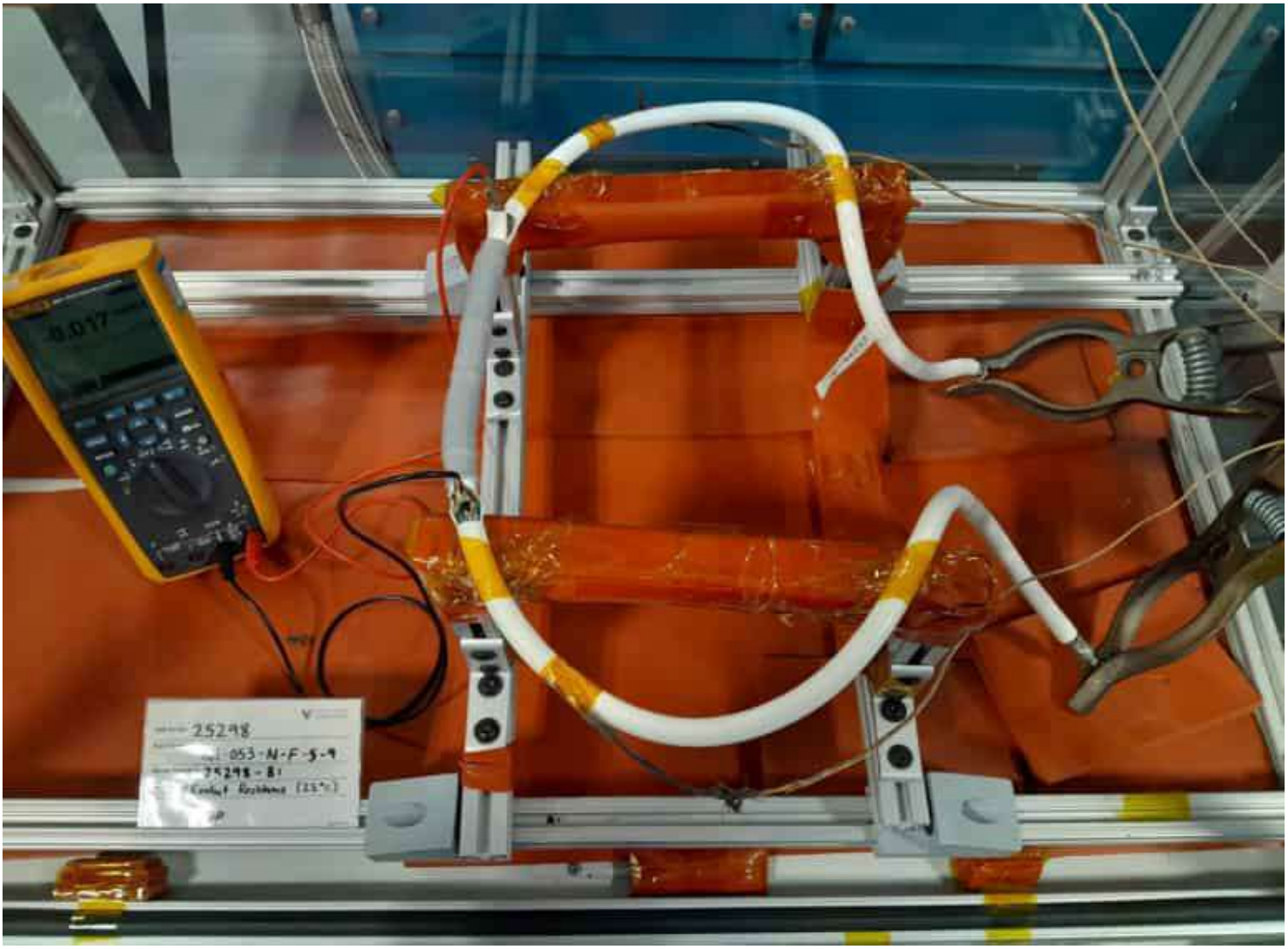
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.10
Test Parameters	Test Current Level 1: 100 Amps; Test Current Level 2: 230 Amps	RH%	33.10

Test Current Levels (A)	
Level 1	100
Level 2	230

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	100	29.5	0.295
25298-B2		21.6	0.216
25298-B3		19.5	0.195
25298-B4		22.4	0.224

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	230	79.4	0.345
25298-B2		57.2	0.249
25298-B3		52.5	0.228
25298-B4		59.0	0.257

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	252998-B1

Test Name	Shock	**Test Start Date**	12/19/2025
Job Number	25298	**Test End Date**	12/29/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	DM029, AC115, AC056, SK11, AM11, AM12, AM13, CE039, EM049, TC080		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-27D		

Test Parameters

In accordance with EIA-364-27D, Condition I,

a.) Peak acceleration: 30 Gs
b.) Samples shall be visually inspected before mounting for Mechanical Shock.
c.) Samples shall be mounted where the fixed clamp points of the cable shall be 12 inches from the center. (6 in. ± 0.25 in. from the left and right).
d.) Shock shall be performed along the radial axis.
e.) Discontinuity monitoring required (100 mA max current; detecting discontinuities > 1 μs).

* Interested in the cable length from clamp to clamp.
* Excess cable can be routed and supported in any preferred methodology that isolates the section under test.

Pass/Fail Criteria:
No electrical discontinuities, evidence of cracking, breaking, loosening of parts, or defects detrimental to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Gray smudges and cuts along the insulation.	**Pass**	**Fail**	**Record**
	X	-			X	-	-

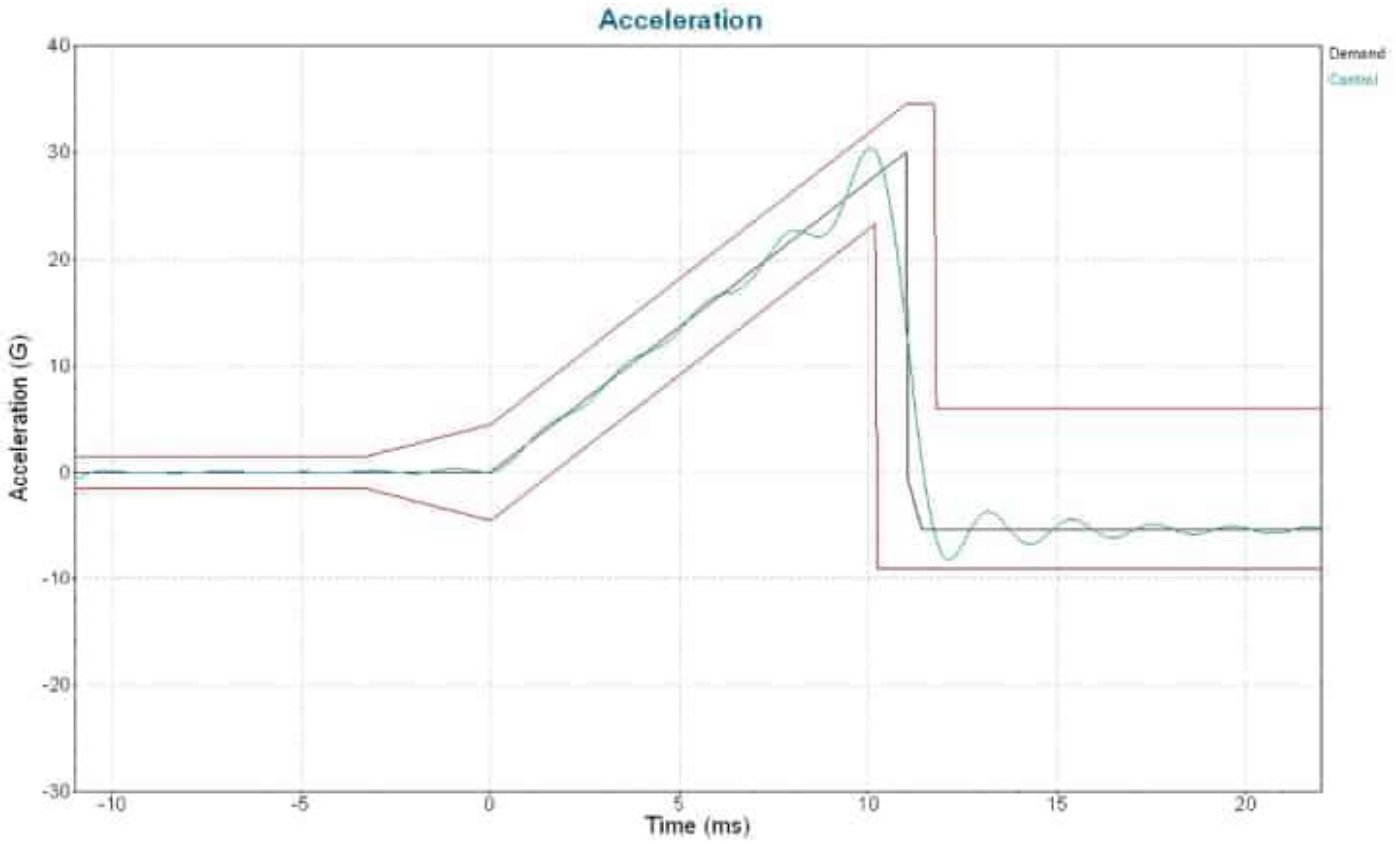
Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Carlos Nungaray
Date:	12/19/2025	**Date:**	12/30/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

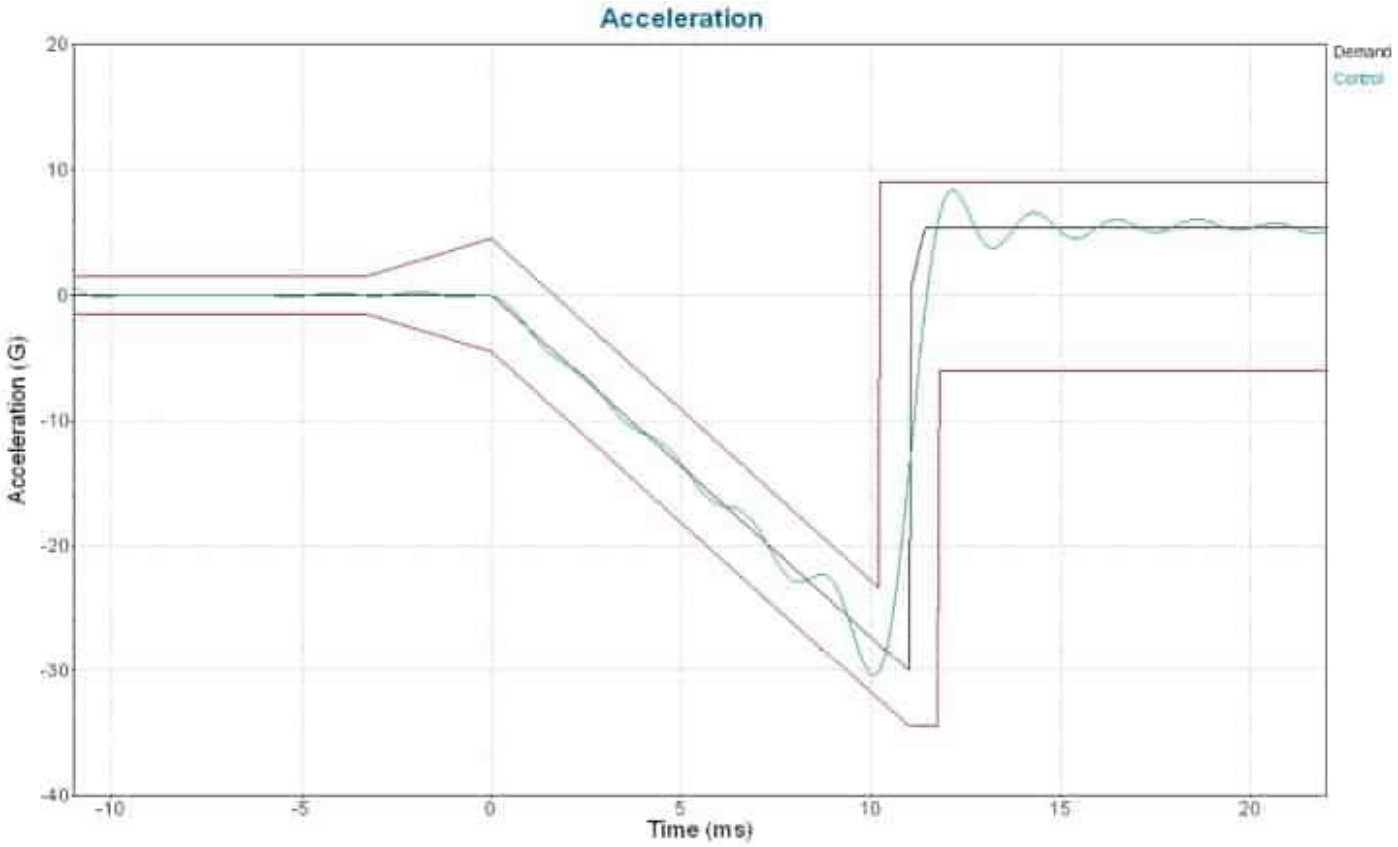
Group 2			
Test Name	Serial No.	Axis	Notes
Shock	25298-B1	Z	No Discontinuities
	25298-B2		No Discontinuities
	25298-B3		No Discontinuities
	25298-B4		No Discontinuities

Test Name	Vibration	Temp (°C)	23.67
Test Parameters	Duration of 18 hours in all mutually perpendicular axes (X, Y, Z)	RH%	17.69

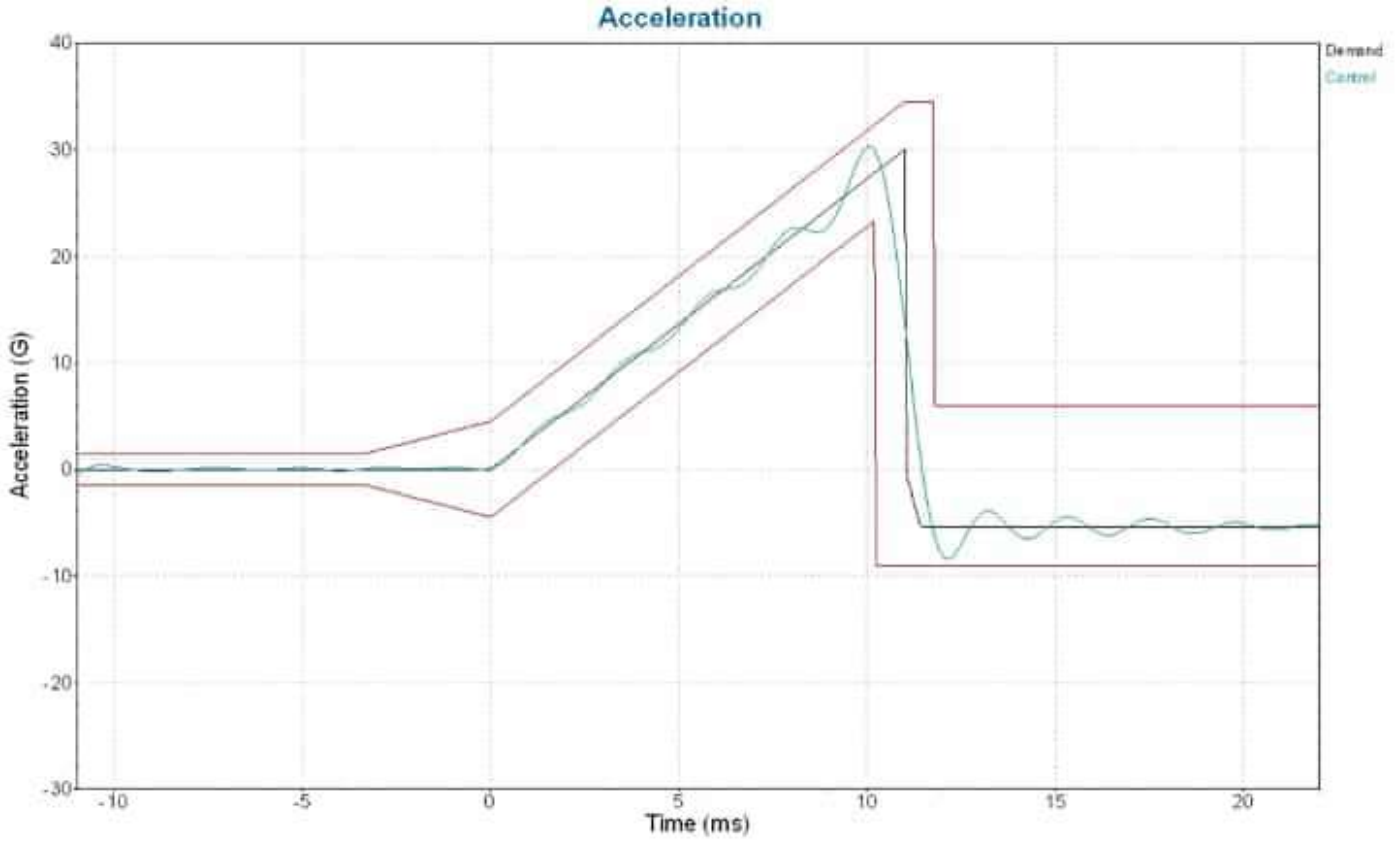
Test Observations		
Axis	Serial No.	Notes
Z	25298-B1	Gray smudges and cuts. No discontinuities.
	25298-B2	Gray smudges and cuts. No discontinuities.
	25298-B3	Gray smudges and cuts. No discontinuities.
	25298-B4	Gray smudges and cuts. No discontinuities.



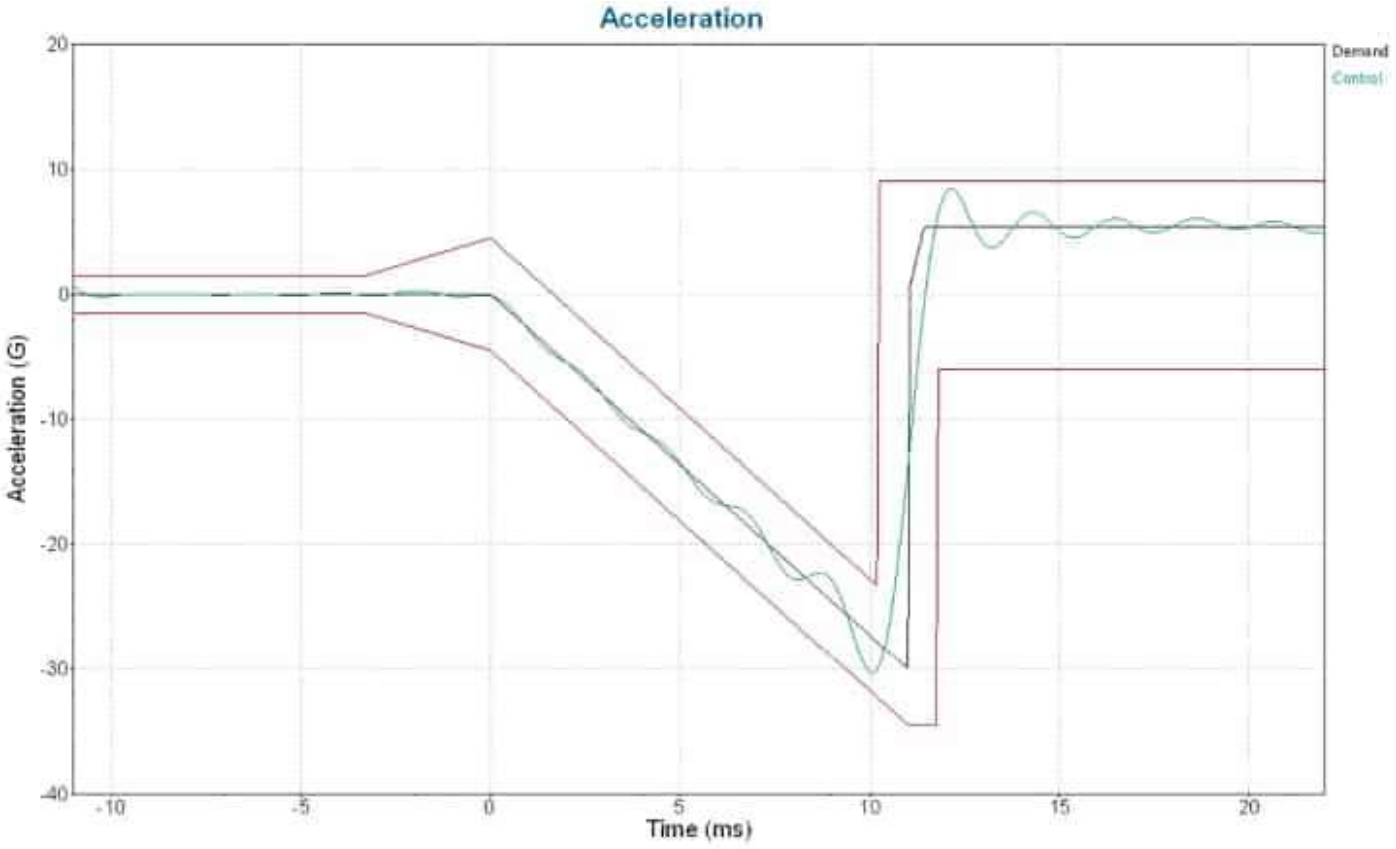
Description	Typical Shock Plot for Sample B1
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1
No. of Shocks	3
Axis	+ Z



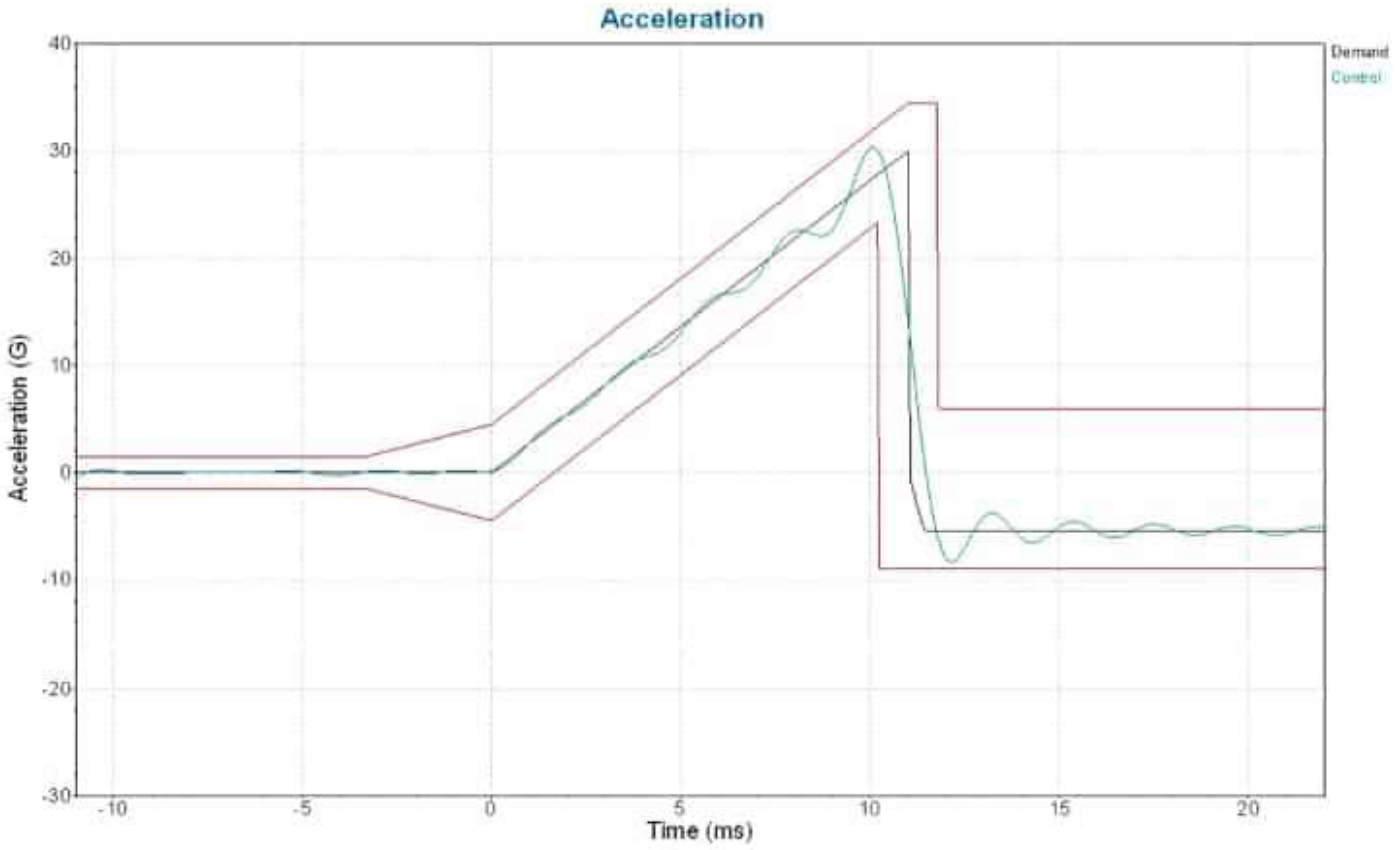
Description	Typical Shock Plot for Sample B1
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1
No. of Shocks	3
Axis	- Z



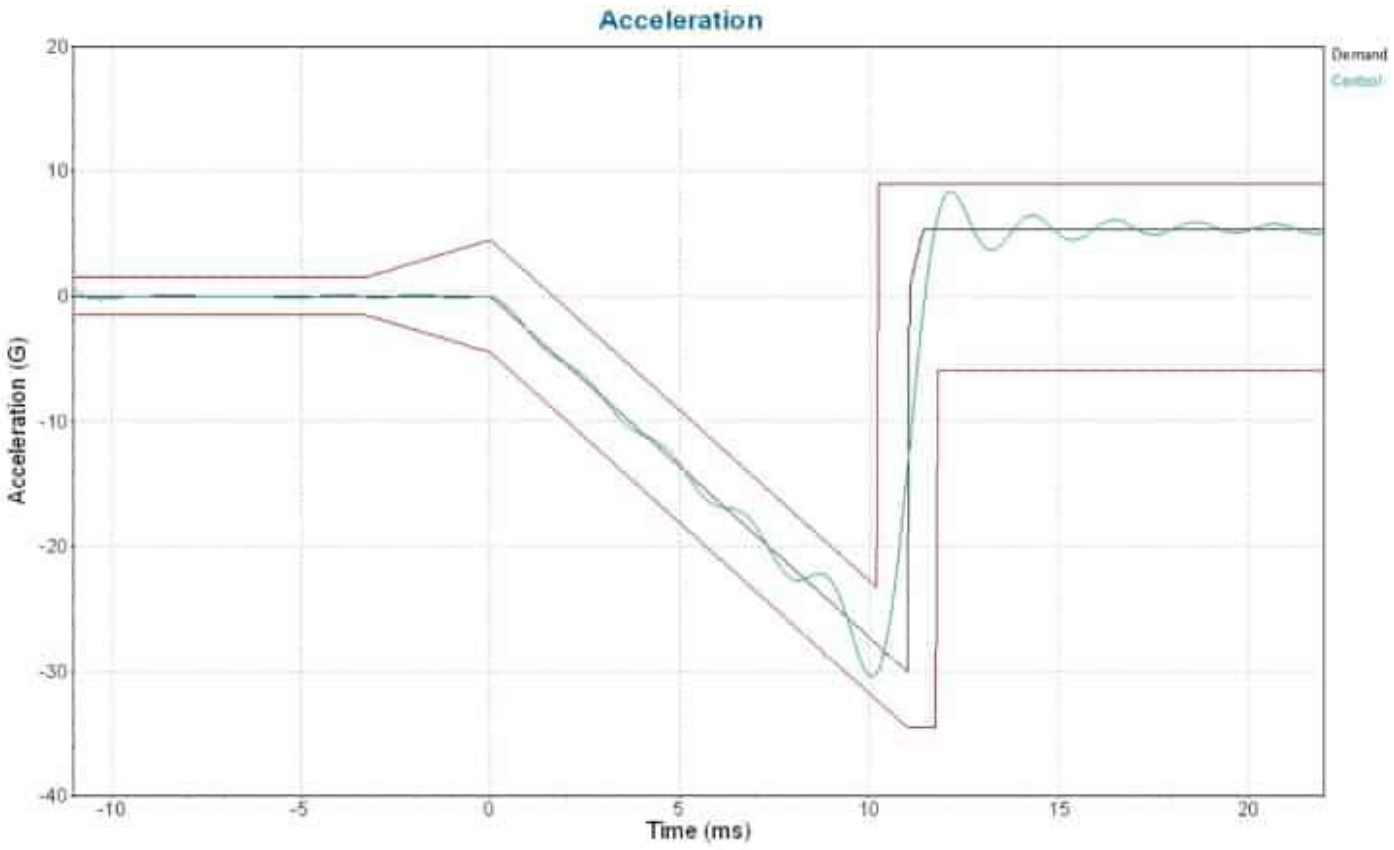
Description	Typical Shock Plot for Sample B2
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B2
No. of Shocks	3
Axis	+ Z



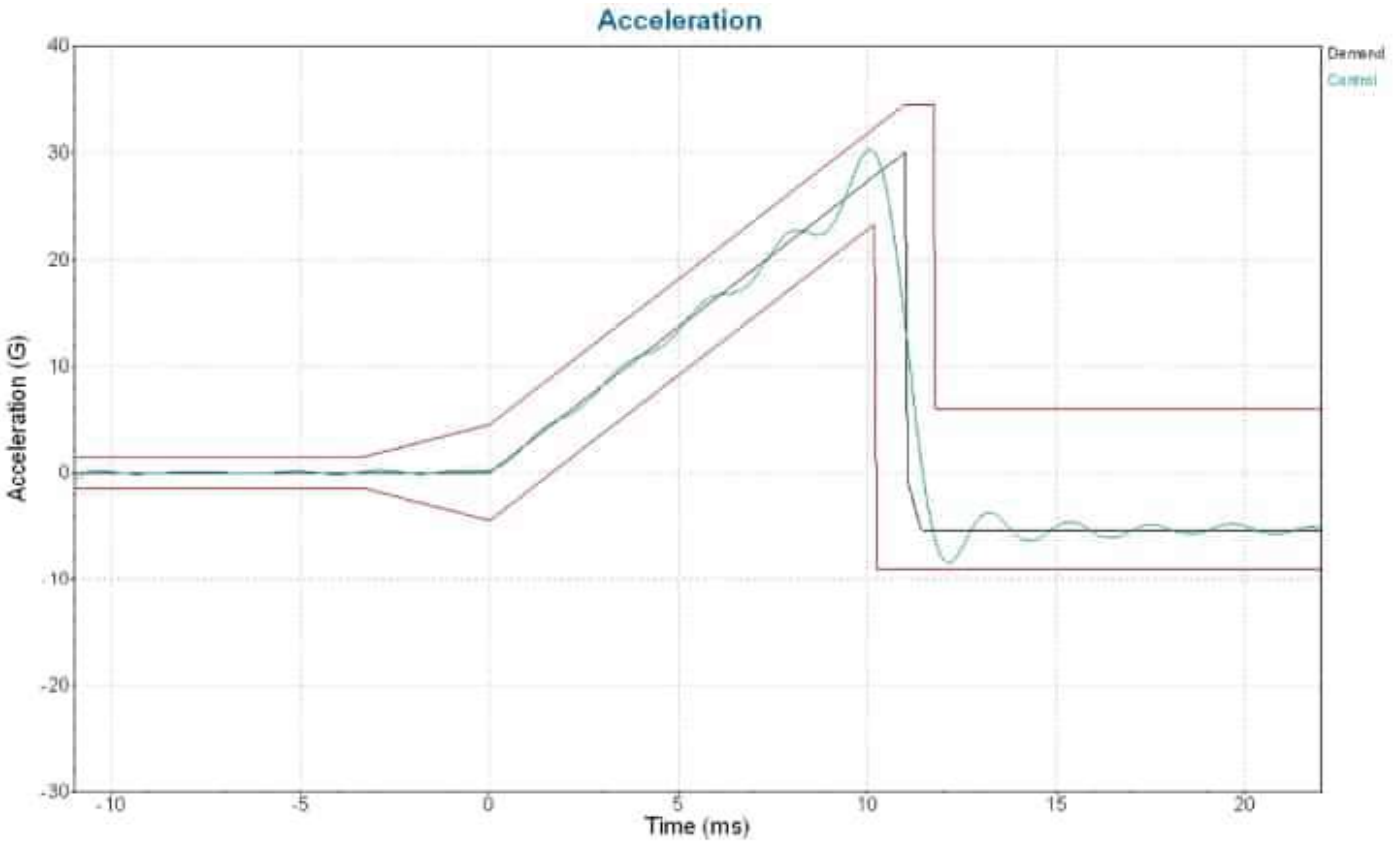
Description	Typical Shock Plot for Sample B2
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B2
No. of Shocks	3
Axis	- Z



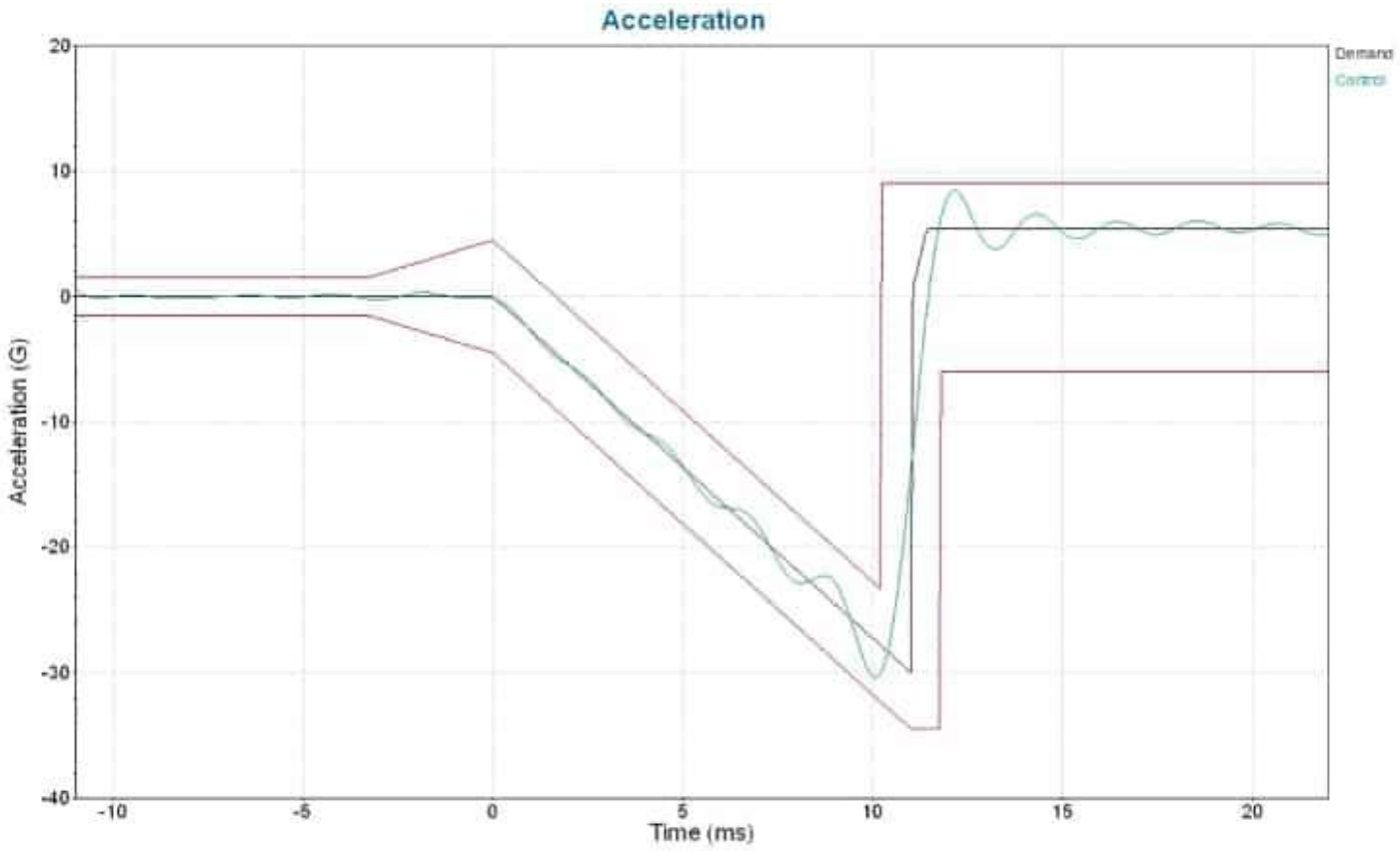
Description	Typical Shock Plot for Sample B3
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B3
No. of Shocks	3
Axis	+ Z



Description	Typical Shock Plot for Sample B3
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B3
No. of Shocks	3
Axis	- Z



Description	Typical Shock Plot for Sample B4
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B4
No. of Shocks	3
Axis	+ Z



Description	Typical Shock Plot for Sample B4
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B4
No. of Shocks	3
Axis	- Z



Description	Typical Overall Setup
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Typical Overall Setup
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B2



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B3



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	1/6/2026
Job Number	25298	**Test End Date**	1/7/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	EM038, TC014, FC013, EM079, EM080, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group B (2 AWG) are as follows:
  i.) Test Current Level 1: 100 Amps (DC)
  ii.) Test Current Level 2: 230 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	1/6/2026	**Date:**	1/30/2026

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

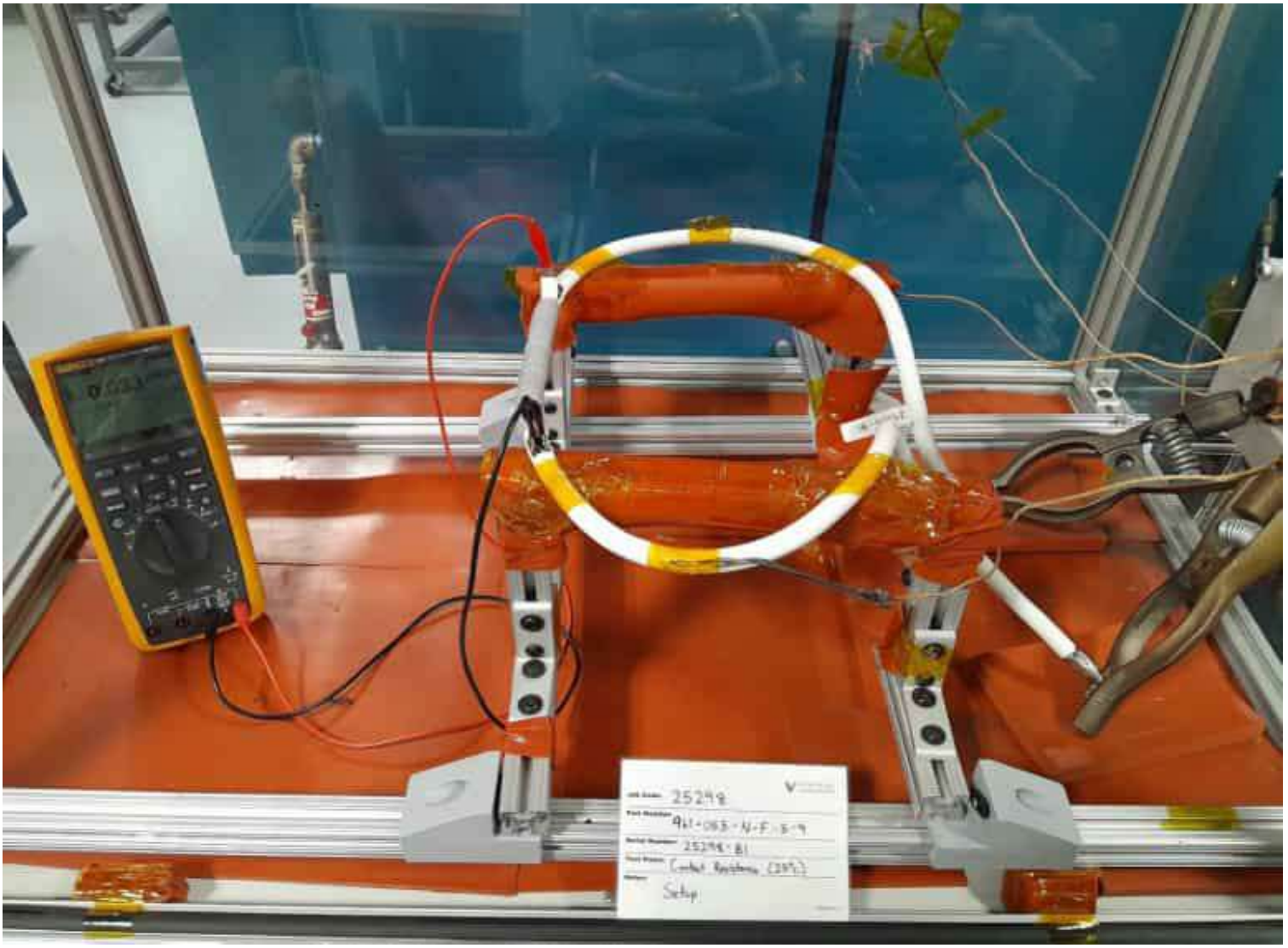
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.10
Test Parameters	Test Current Level 1: 100 Amps; Test Current Level 2: 230 Amps	RH%	33.10

Test Current Levels (A)	
Level 1	100
Level 2	230

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	100	35.1	0.351
25298-B2		26.5	0.265
25298-B3		18.9	0.189
25298-B4		23.0	0.230

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	230	96.5	0.420
25298-B2		68.0	0.296
25298-B3		50.8	0.221
25298-B4		60.2	0.262

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1

Contact Resistance (200 °C)

Test Name	Contact Resistance (200 °C)	**Test Start Date**	3/13/2026
Job Number	25298	**Test End Date**	3/16/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	CE001, EM004, EM007, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature shall be at specified conditions as stated in QTP-1513 (200 °C).
b.) Test currents for group B (2 AWG) are as follows:
  i.) Test Current Level 1: 100 Amps (DC)
  ii.) Test Current Level 2: 230 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	3/13/2026	**Date:**	3/18/2026

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (200 °C) Test Data

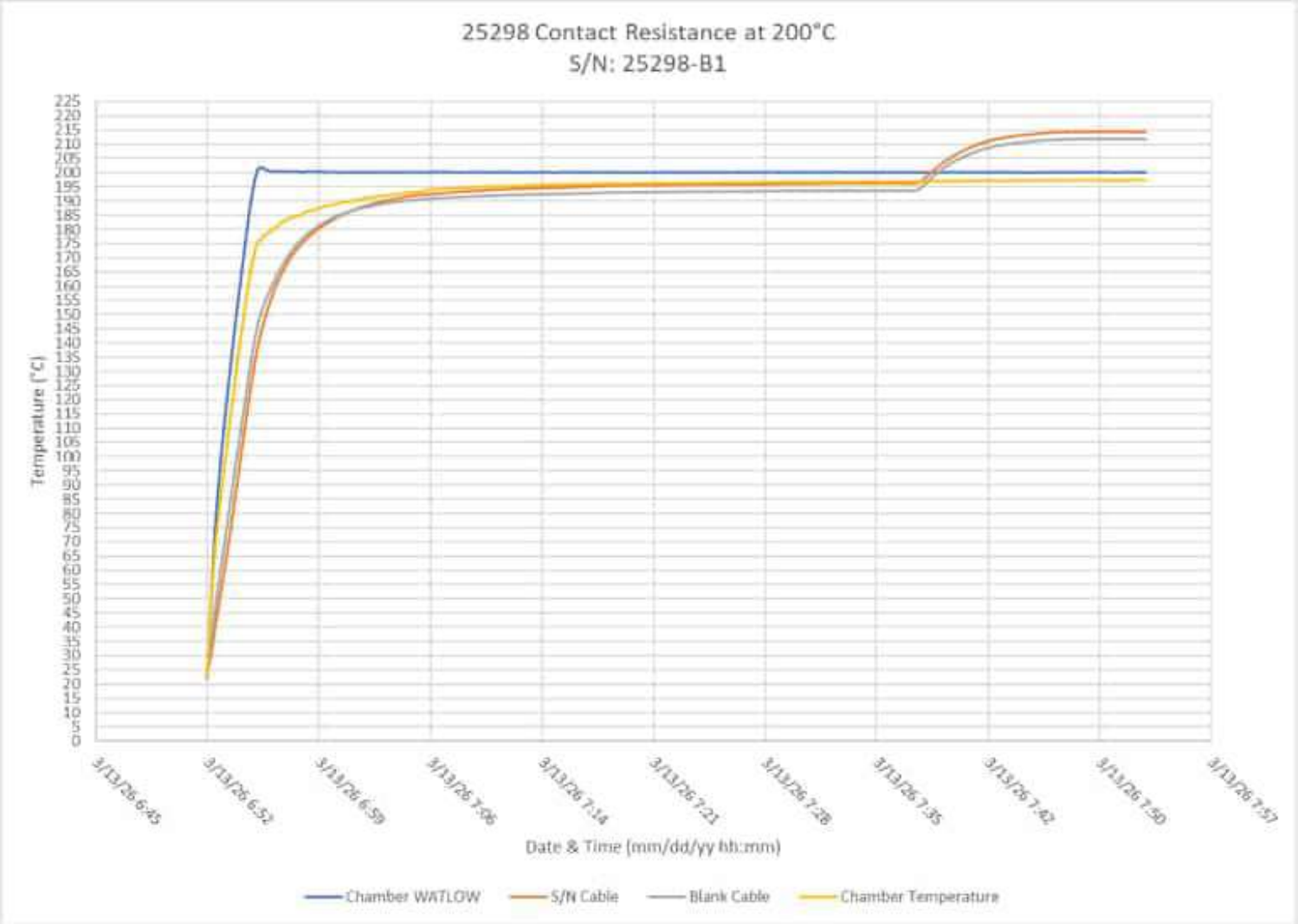
Test Name	Contact Resistance (200 °C)	Temp (°C)	24.04
Test Parameters	Test Current Level 1: 100 Amps; Test Current Level 2: 230 Amps	RH%	31.09

Test Current Levels (A)	
Level 1	100
Level 2	230

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	100	46.3	0.463
25298-B2		33.9	0.339
25298-B3		27.3	0.273
25298-B4		30.0	0.300

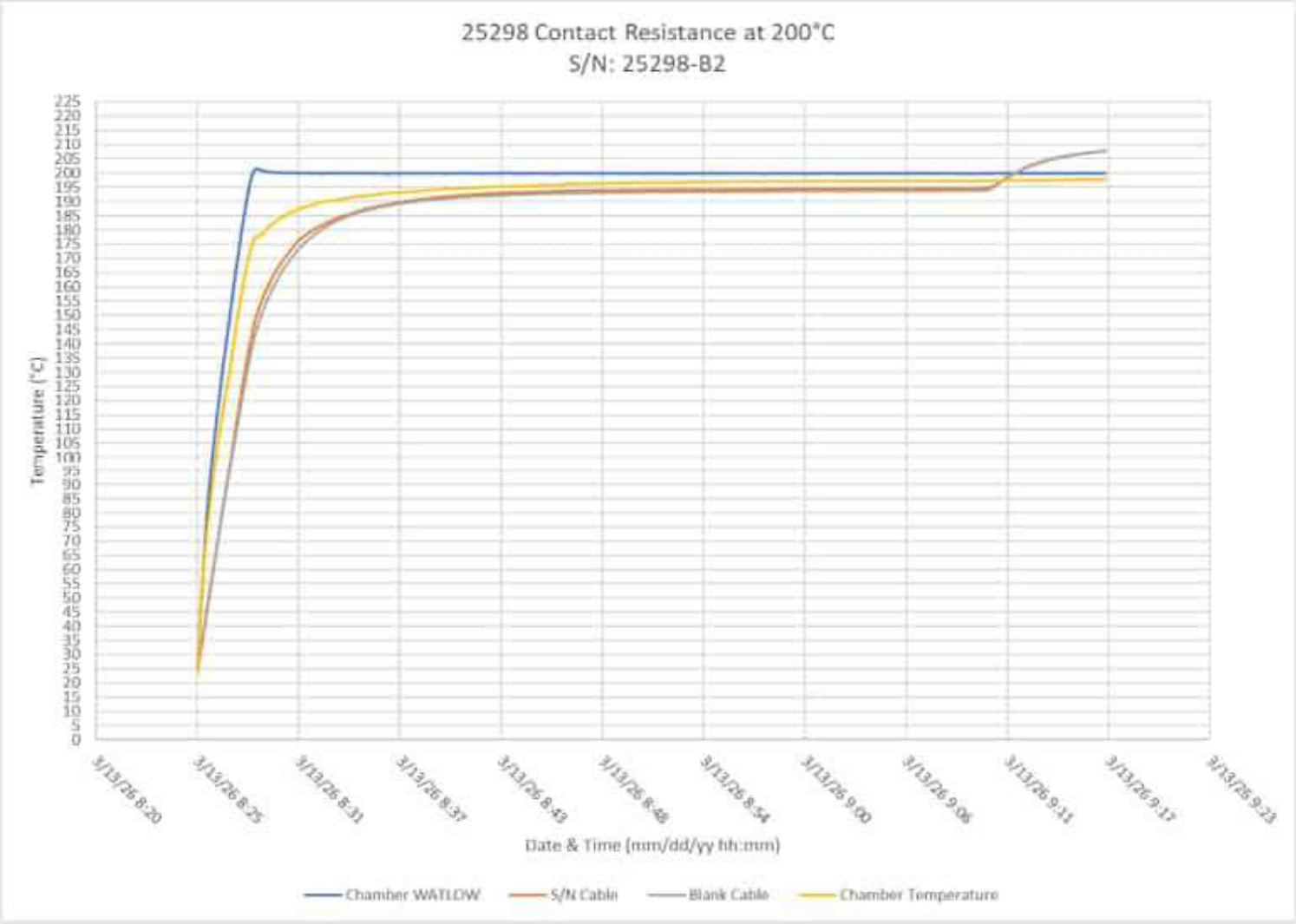
Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-B1	230	98.6	0.429
25298-B2		79.6	0.346
25298-B3		66.6	0.290
25298-B4		69.4	0.302

Contact Resistance (200 °C) Test Plots



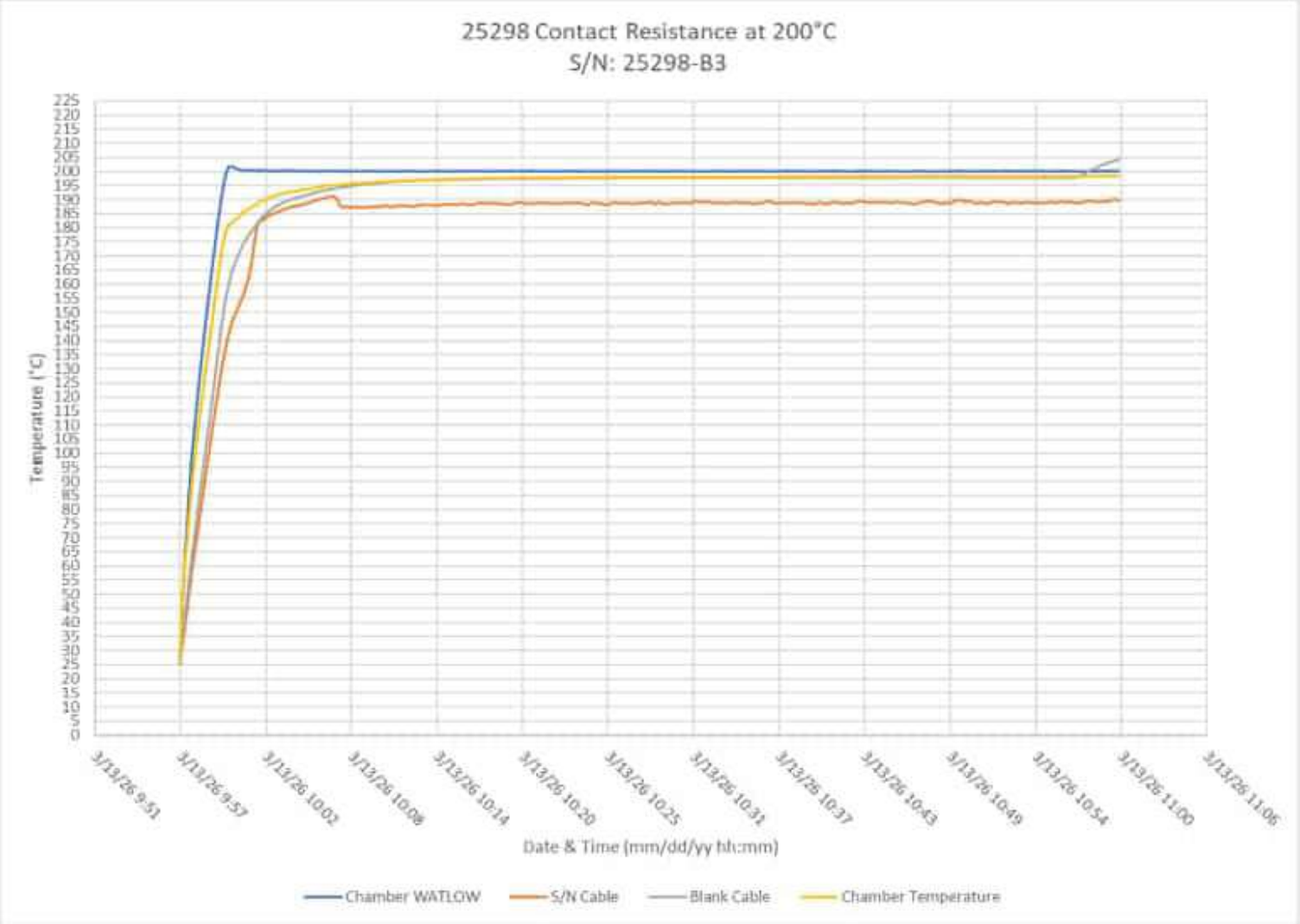
Description	Temperature Plot for Sample 25298-B1
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1

Contact Resistance (200 °C) Test Plots



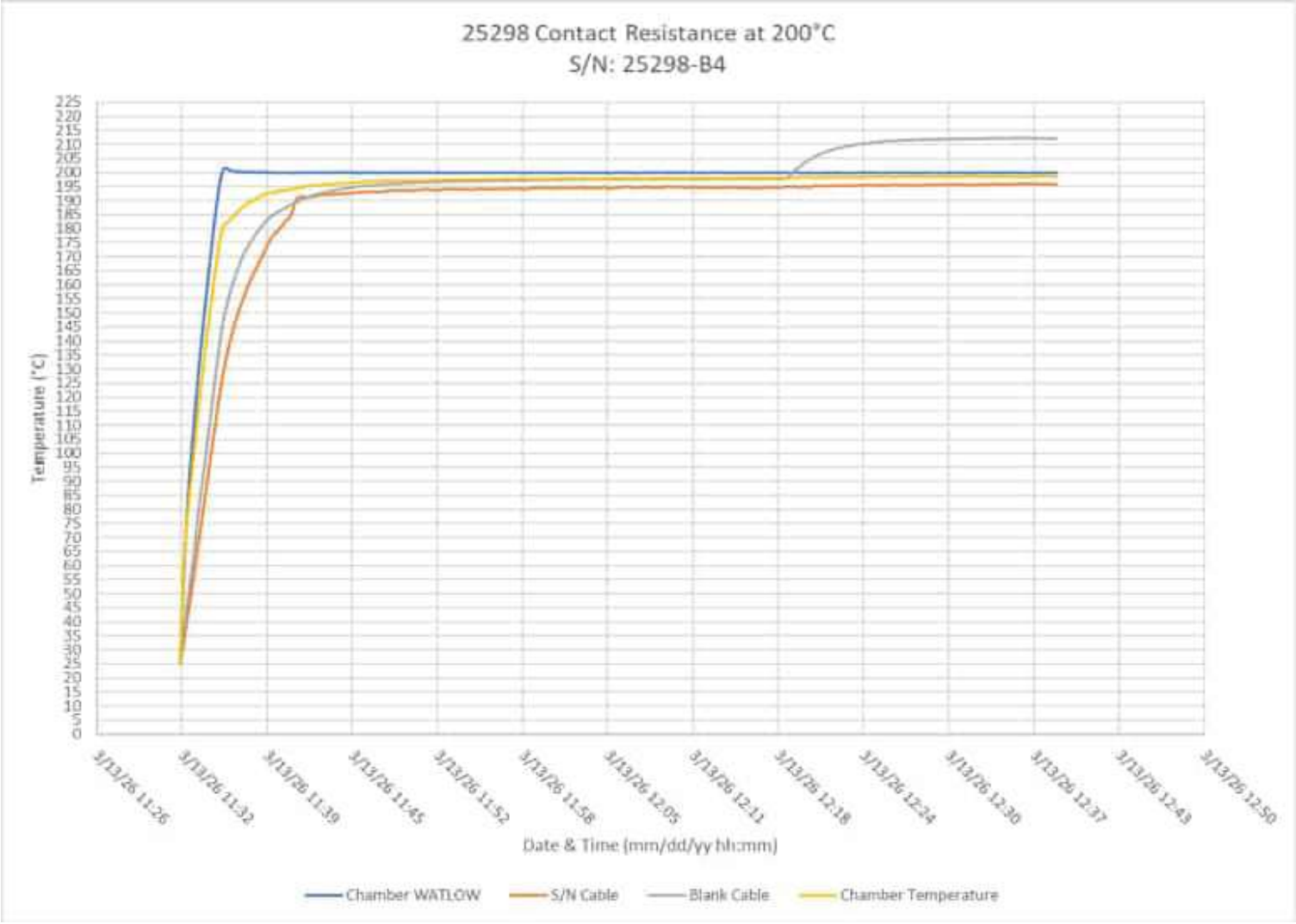
Description	Temperature Plot for Sample 25298-B2
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B2

Contact Resistance (200 °C) Test Plots



Description	Temperature Plot for Sample 25298-B3
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B3

Contact Resistance (200 °C) Test Plots



Description	Temperature Plot for Sample 25298-B4
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B4

Contact Resistance (200 °C) Test Photos



Description	Typical Test Setup
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-F-5-9
Serial No.	25298-B1

Tensile Strength

Test Name	Tensile Strength	**Test Start Date**	3/24/2026
Job Number	25298	**Test End Date**	3/25/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-B1, 25298-B2, 25298-B3, 25298-B4		
Equipment Used	CE061, CE089, TC079, CP040		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-08C		

Test Parameters

In accordance with EIA-364-08C,

a.) The Tensile Strength shall be determined by applying a plate to the upper load cell and the base.
b.) The sample shall be under tension at a rate of 0.5 in./min.
c.) Record the force in pounds.
d.) Test samples shall be tested until failure.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Heat shrink band stretch; indent/markings on crimp and barrel head.	**Pass**	**Fail**	**Record**
	X	-			-	-	X

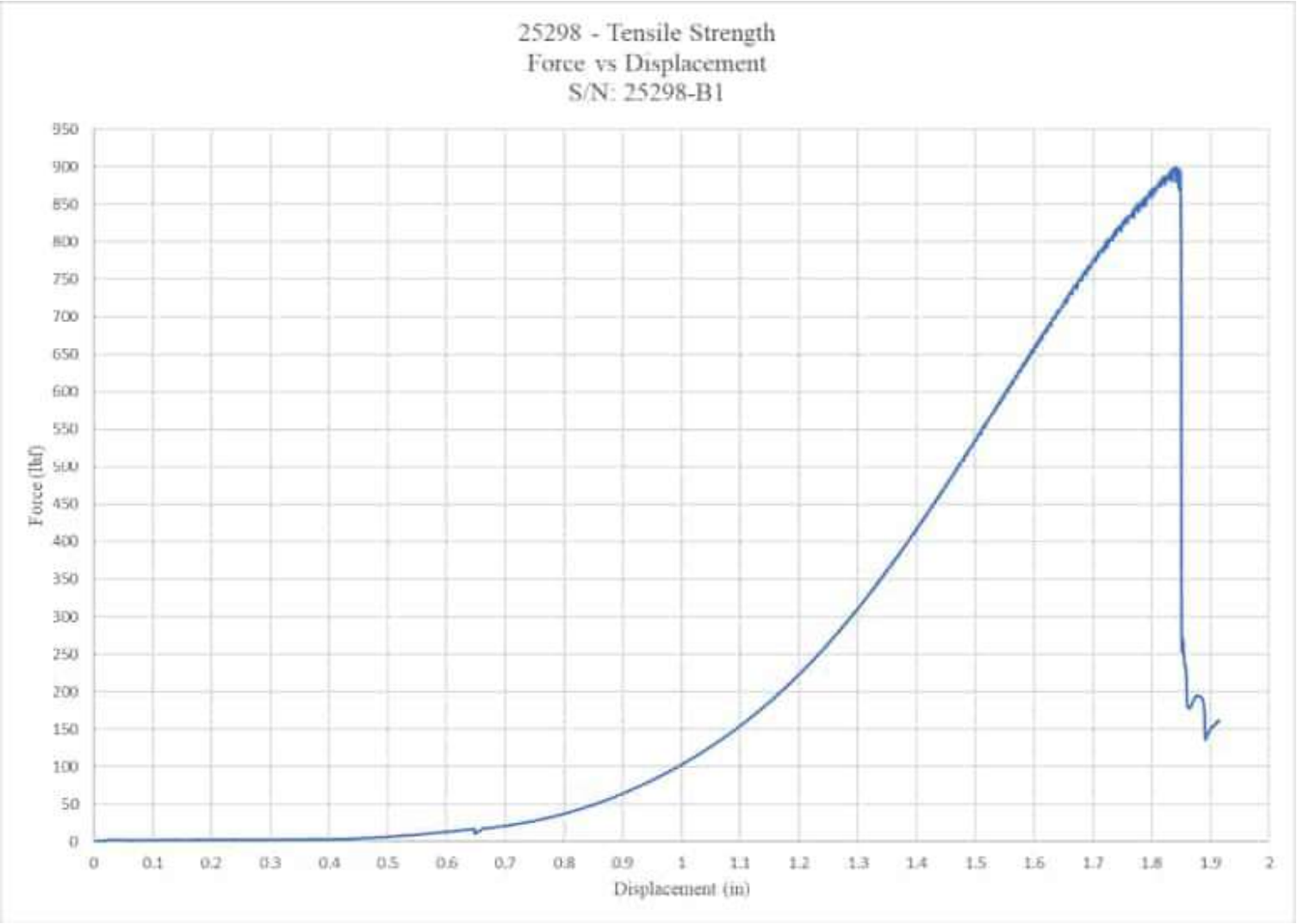
Test Setup Verified by:	Danny Tan	**Test Data Reviewed by:**	Danny Tan
Date:	3/24/2026	**Date:**	3/26/2026
If applicable, list any Test Deviations:	N/A		
Date:	N/A		

Tensile Strength Test Data

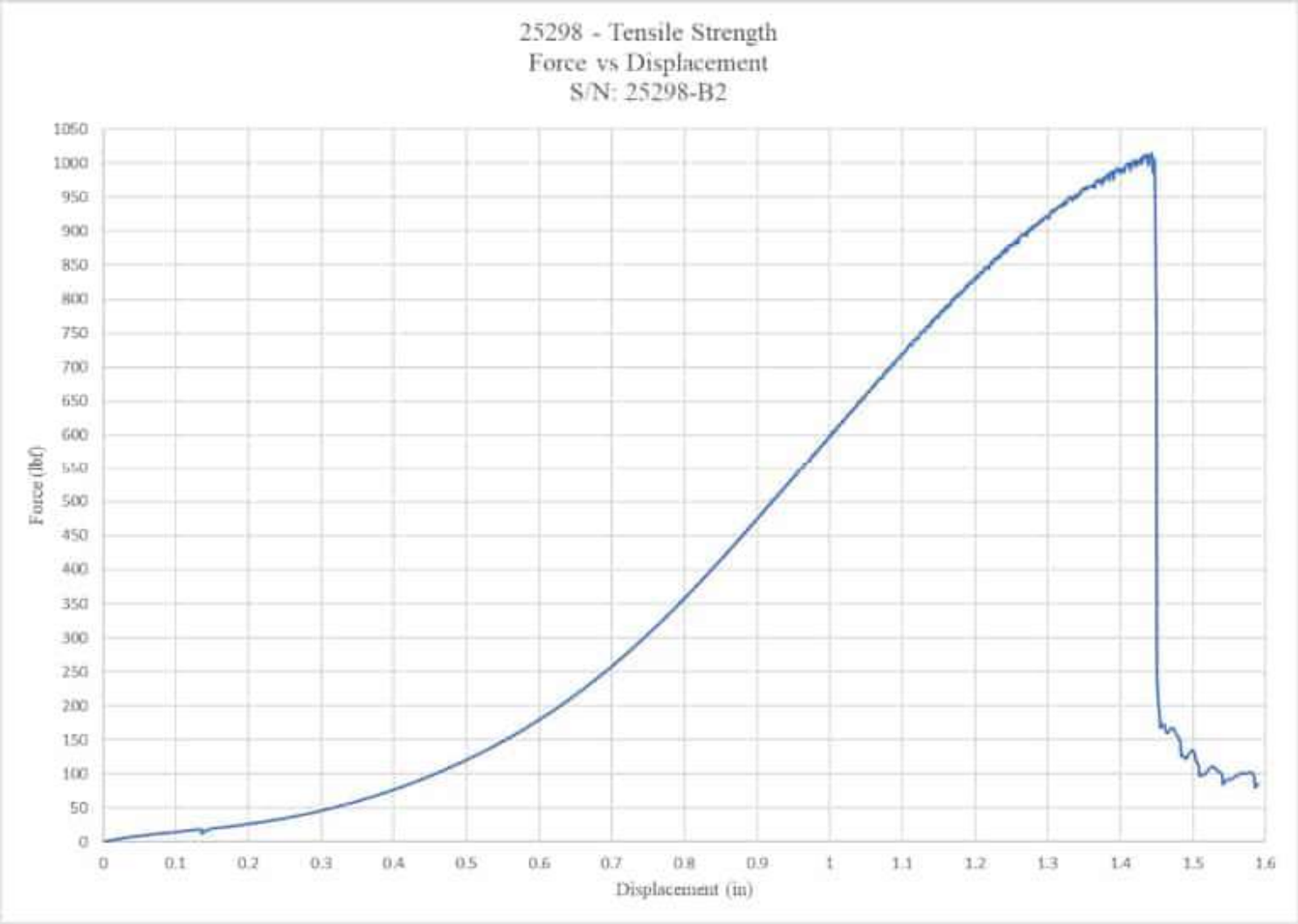
Test Name	Tensile Strength	Temp (°C)	23.45
Test Parameters	Test sample shall be tested until failure.	RH%	48.47

Test Observations	
Serial No.	Notes
25298-B1	Heat shrink band stretched; crimp barrel head has indent from vice grips.
25298-B2	Heat shrink band stretched; crimp barrel head has indent from vice grips.
25298-B3	Heat shrink band stretched; crimp barrel head has indent from vice grips.
25298-B4	Heat shrink band stretched; crimp barrel head has indent from vice grips.

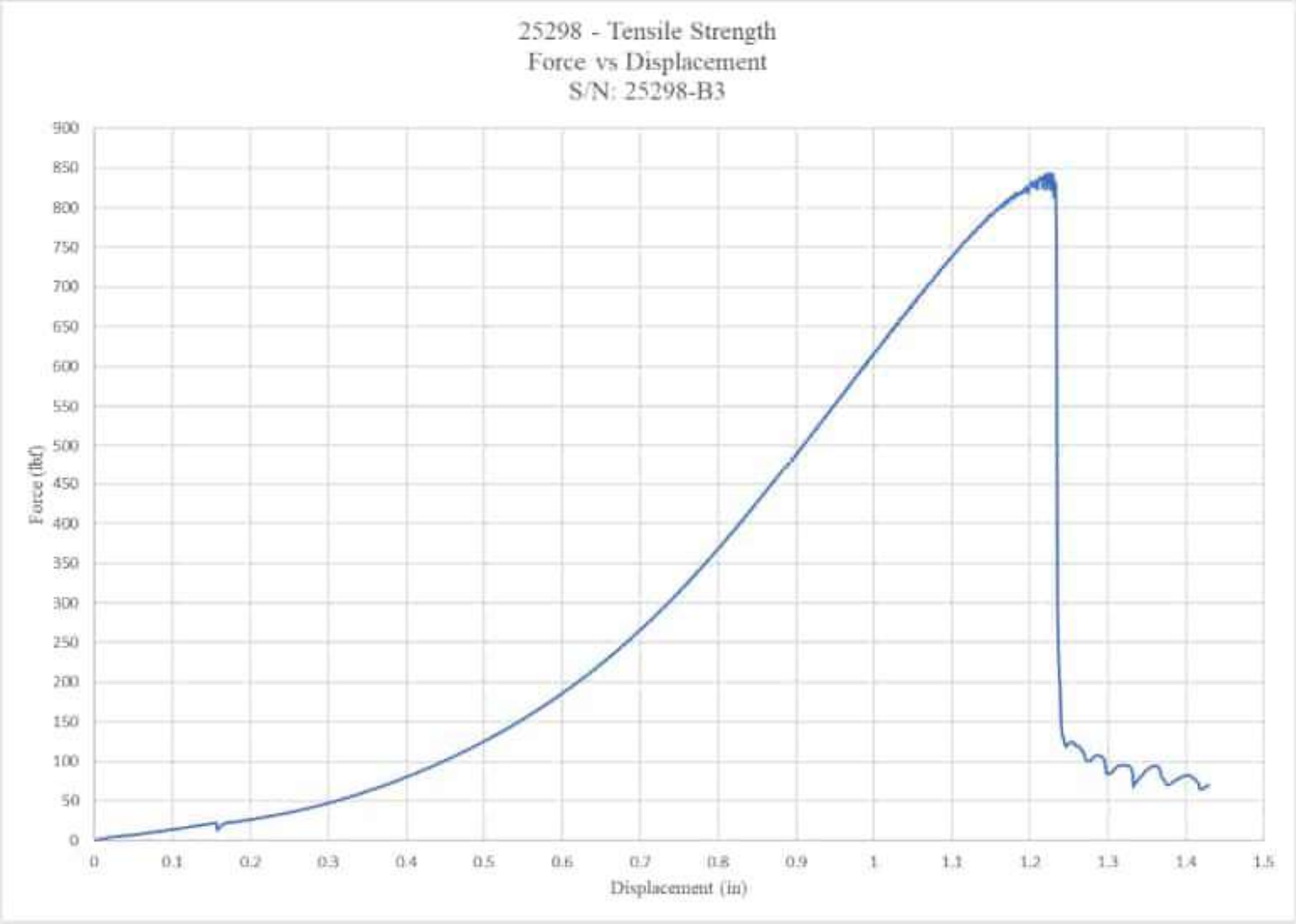
Test Data	
Serial No.	Maximum Force (lbf)
25298-B1	899.9140
25298-B2	1014.8884
25298-B3	843.6479
25298-B4	1087.2799



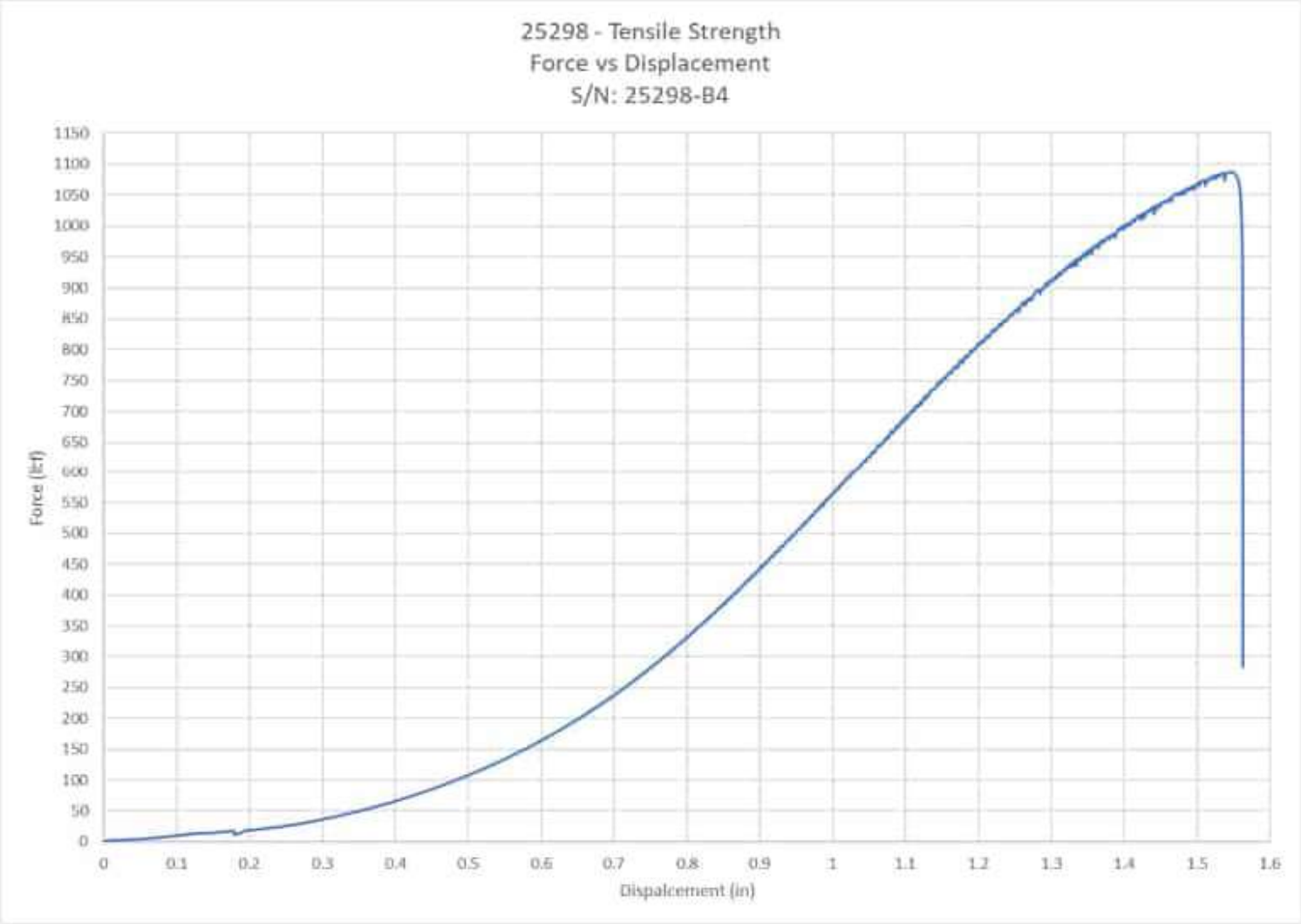
Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B2



Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B3



Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B4



Description	Typical Tensile Strength Setup
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Post Tensile Strength Full Length of Sample
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1, 25298-B2, 25298-B3, 25298-B4



Description	Post Tensile Strength Straight Wall Tubing
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1, 25298-B2, 25298-B3, 25298-B4



Description	Post Tensile Strength Crimp Barrel End 1
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1, 25298-B2, 25298-B3, 25298-B4



Description	Post Tensile Strength Crimp Barrel End 2
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1, 25298-B2, 25298-B3, 25298-B4



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B1



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B2



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B2



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B3



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B3



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B4



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	2
Part No.	961-053-N-F-5-9
Serial No.	25298-B4

Visual and Dimensional Examination

Test Name	Visual and Dimensional Examination	**Test Start Date**	9/3/2025
Job Number	25298	**Test End Date**	9/4/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	DM005, DM029		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-18B		

Test Parameters

Samples shall have no visual defects that will affect life, serviceability, or appearance.

Contacts, wires, bands, and sleeving shall be examined to ensure that there are no defects.

3X magnification may be used as a close-up for visual inspection.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	9/3/2025	**Date:**	9/4/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Visual and Dimensional Examination Test Data

Test Name	Visual and Dimensional Examination	Temp (°C)	24.58
Test Parameters	Samples shall show no signs of visual defects.	%RH	47.24%

Visual Observation
No visual damage.

Dimensional Examination					
Serial No.	Total Length (in)	Insulation Diameter (in)	Barrel Diameter-Big (in)	Barrel Diameter-Tip (in)	Heat Shrink Diameter (in)
25298-C1	52.1250	0.6555	0.5120	0.4095	0.8560
25298-C2	52.1250	0.6400	0.5360	0.4170	0.8480
25298-C3	52.2500	0.6280	0.5150	0.4055	0.8355
25298-C4	52.0000	0.6310	0.5285	0.4135	0.8585

Dimensional Examination	
Serial No.	Barrel Length (in)
25298-A1	2.0010
25298-A2	1.9990
25298-A3	1.9935
25298-A4	2.0110



Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C1



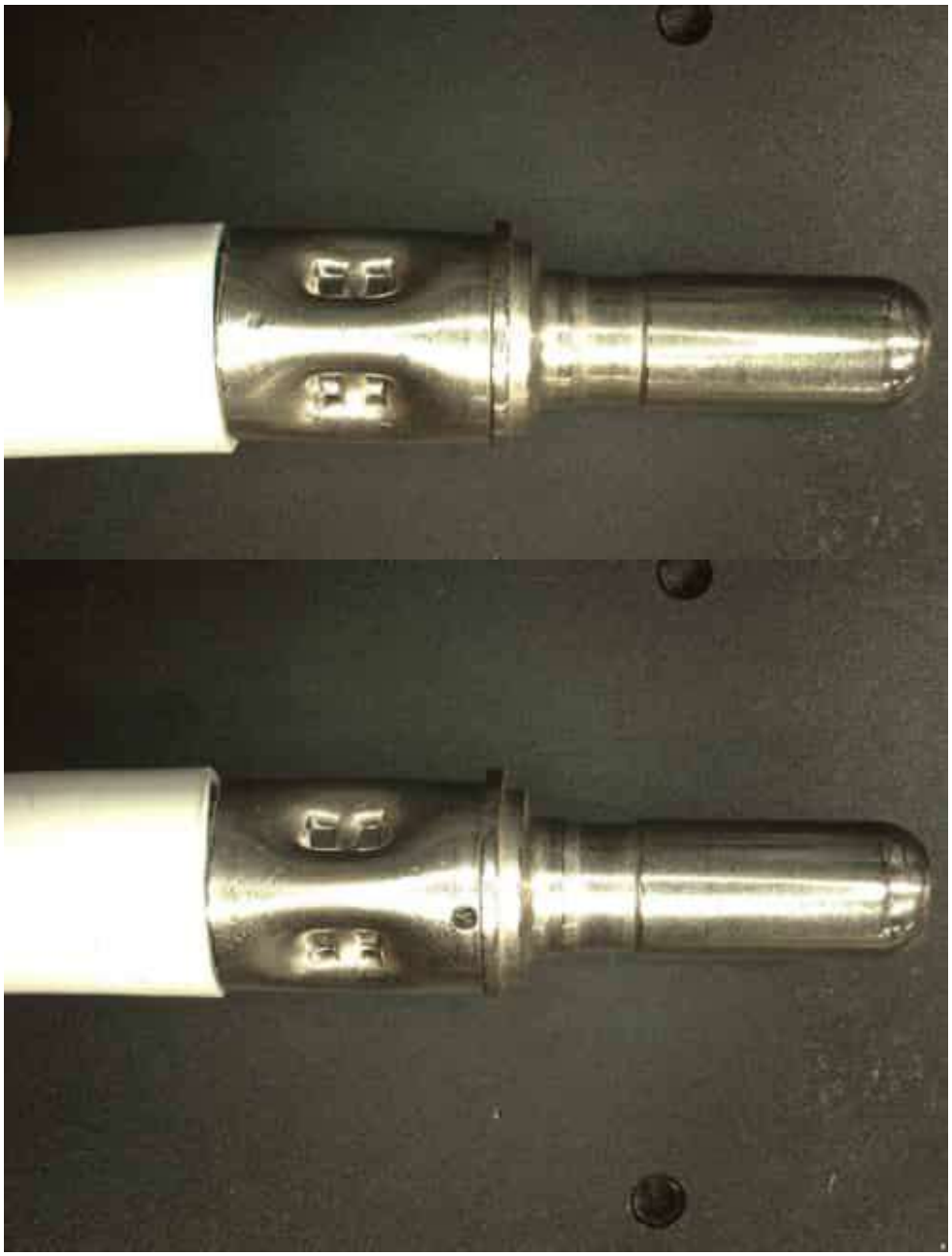
Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C2



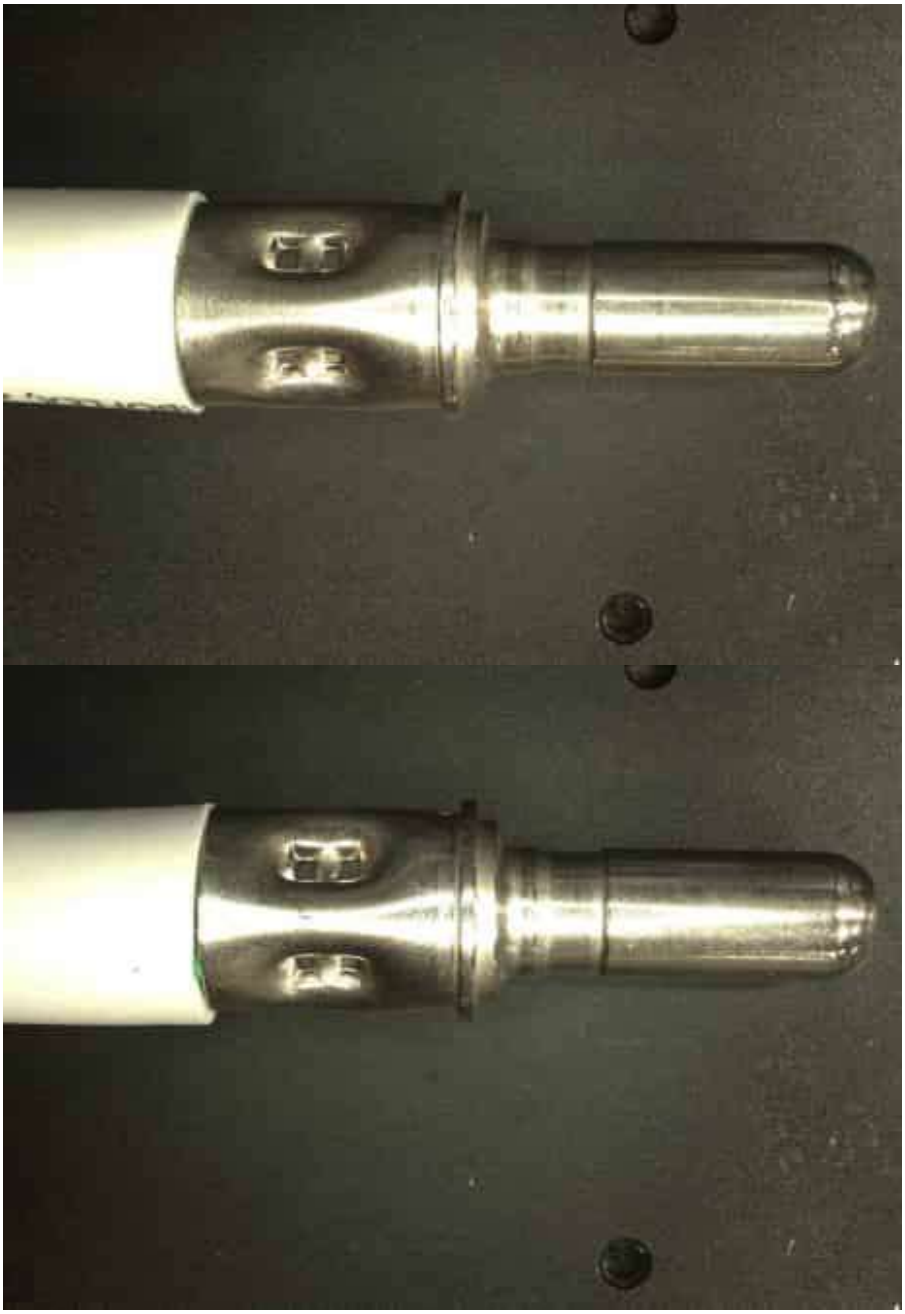
Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C3



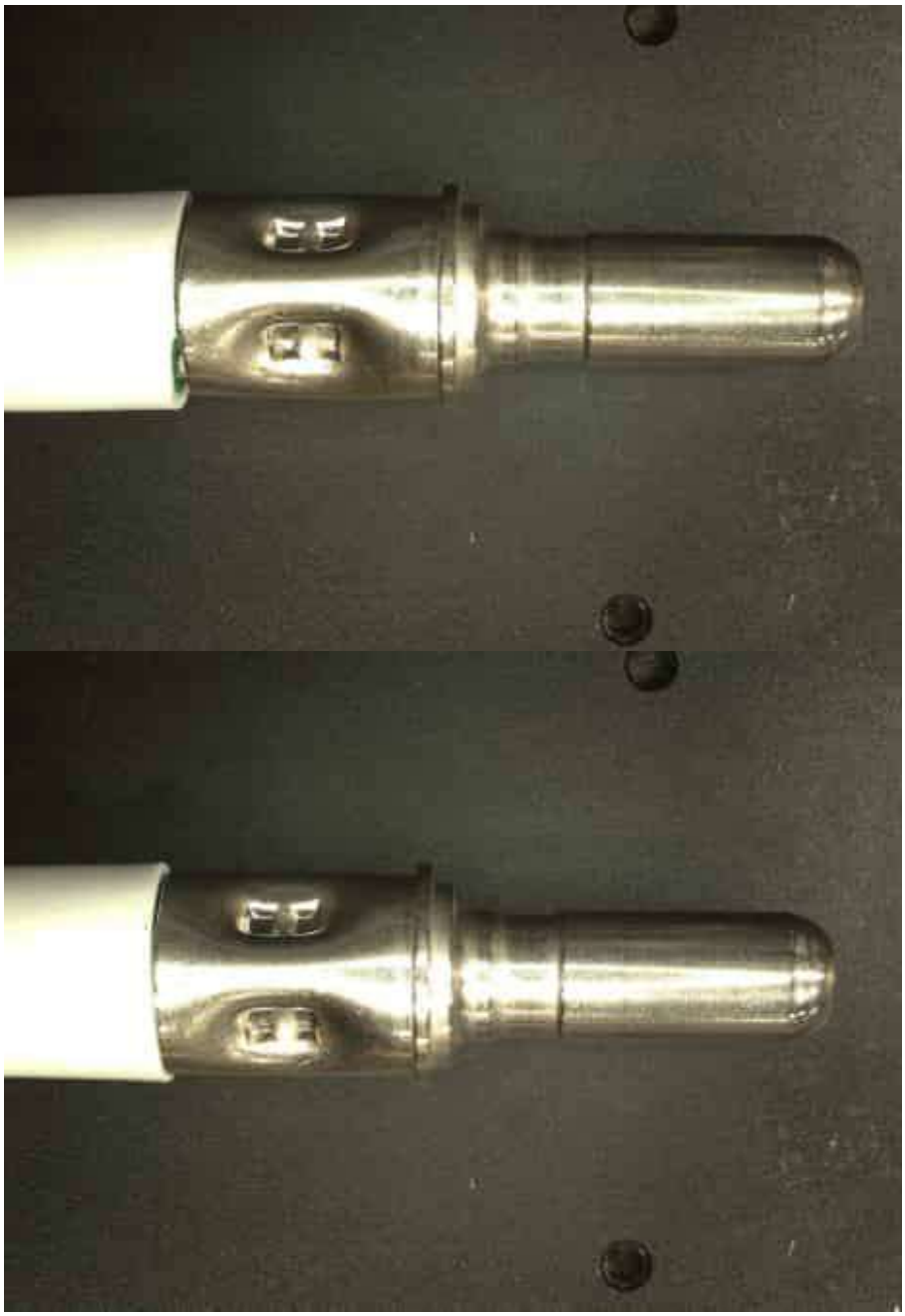
Description	Overview of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C4



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C1



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C2



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C3



Description	Magnification of Sample
Test Name	Visual and Dimensional Examination
Part Name	PwerLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	25298-C4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	9/12/2025
Job Number	25298	**Test End Date**	9/15/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	TC013, EM080, EM079, EM004, FC012, DM028, EM067, EM004, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Environmental conditions shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group C (2/0 AWG) are as follows:
  i.) Test Current Level 1: 185 Amps (DC)
  ii.) Test Current Level 2: 360 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Slit was cut open for voltage probes.	**Pass**	**Fail**	**Record**
	X	-			-	-	X

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Daniel Wong
Date:	9/10/2025	**Date:**	9/16/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

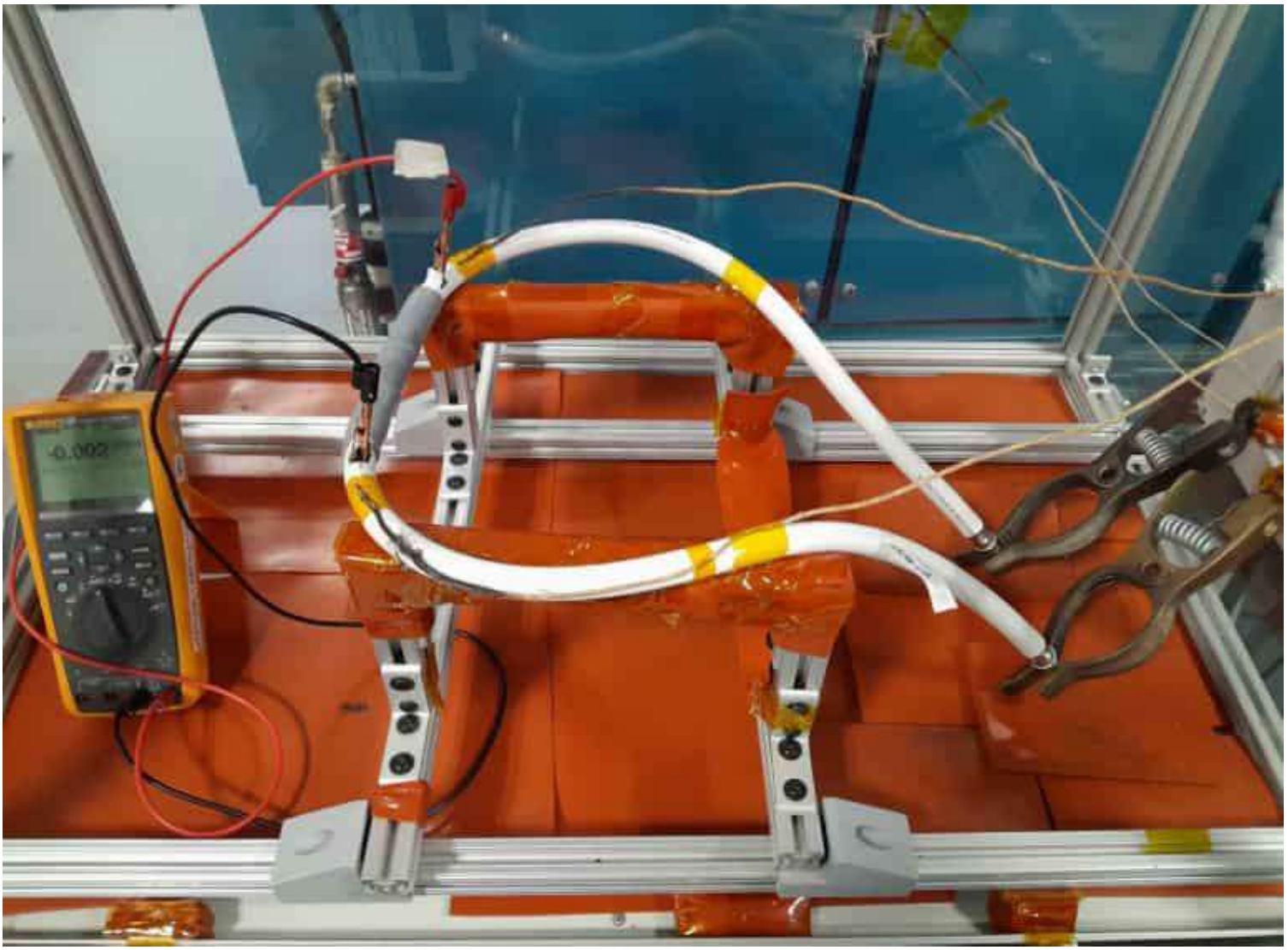
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.58
Test Parameters	Test Current Level 1: 185 Amps; Test Current Level 2: 360 Amps	RH%	46.86

Test Current Levels (A)	
Level 1	185
Level 2	360

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	185	13.8	0.075
25298-C2		12.9	0.070
25298-C3		12.7	0.069
25298-C4		13.7	0.074

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	360	31.6	0.088
25298-C2		30.0	0.083
25298-C3		29.6	0.082
25298-C4		31.5	0.088

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-C-5-9
Serial No.	252998-C2

Temperature Cycling

Test Name	Temperature Cycling	**Test Start Date**	9/23/2025
Job Number	25298	**Test End Date**	9/30/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	CE031, EM004, EM079, EM080, EM067, CE038, MA028, TC079		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-32H		

Test Parameters

In accordance with EIA-364-32H, Method A, Condition IV, Duration A,

a.) Temperature Cycling shall be from -65 °C to 200 °C.
b.) Duration shall be 5 cycles.
c.) 2 hours at each temperature extreme.
d.) Specimen transfer time shall be 2 minutes maximum.
e.) At the end of the 5th cycle, Contact Resistance shall be tested while the specimen is subjected to 200 °C.
f.) Test currents for group C (2/0 AWG) are as follows:
  i.) Test Current Level 1: 185 Amps (DC)
  ii.) Test Current Level 2: 360 Amps (DC)
g.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
h.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Pass/Fail Criteria:
No evidence of defects detrimental to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Brown smudges on insulation.	**Pass**	**Fail**	**Record**
	X	-			X	-	-

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	9/23/2025	**Date:**	9/30/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Temperature Cycling Test Data

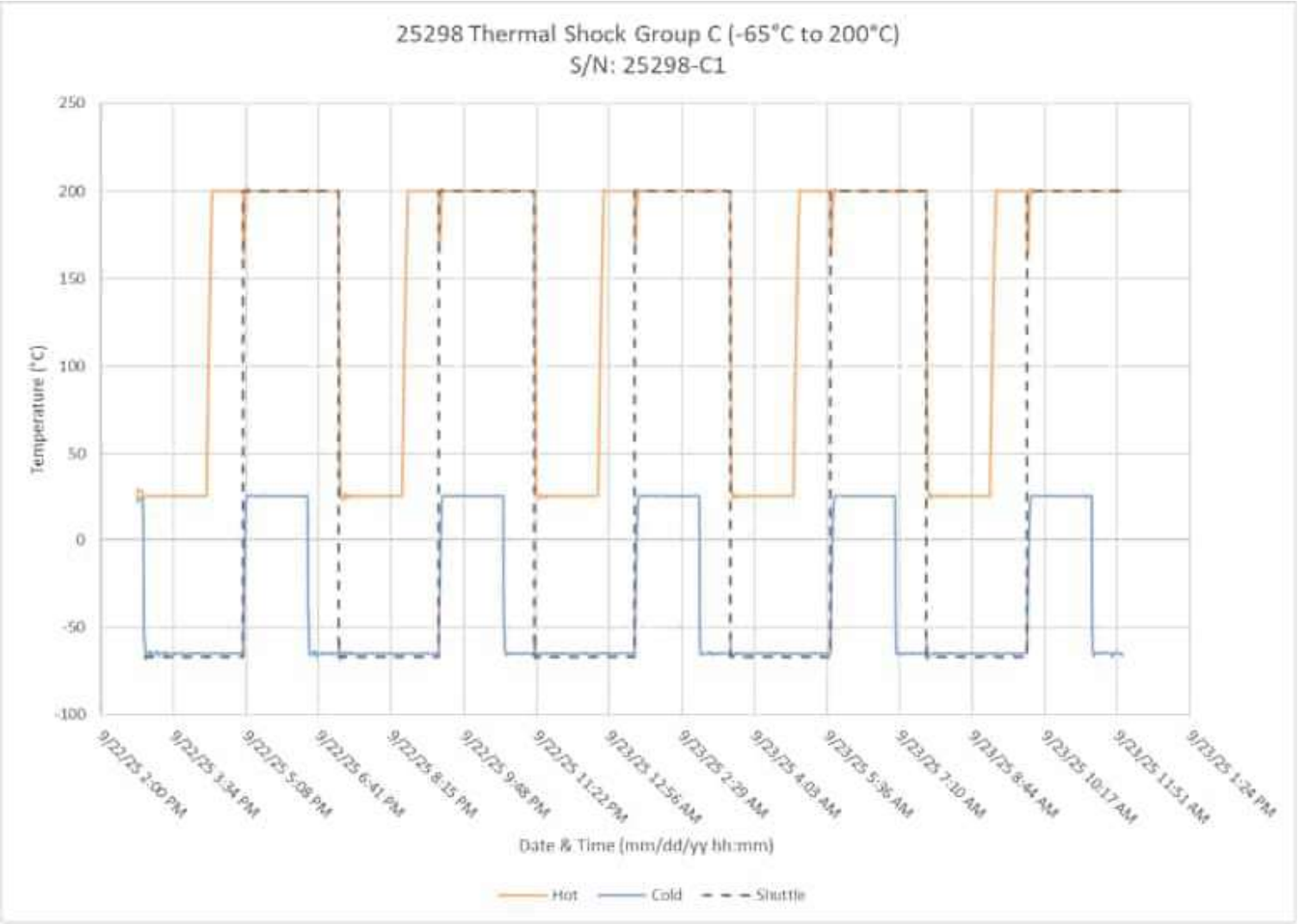
Test Name	Post Temperature Cycling (Contact Resistance (25 °C))	Temp (°C)	24.24
Test Parameters	Test Current Level 1: 185 Amps; Test Current Level 2: 360 Amps	RH%	45.97

Test Current Levels (A)	
Level 1	185
Level 2	360

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	185	13.8	0.075
25298-C2		12.9	0.070
25298-C3		12.7	0.069
25298-C4		29.2	0.158

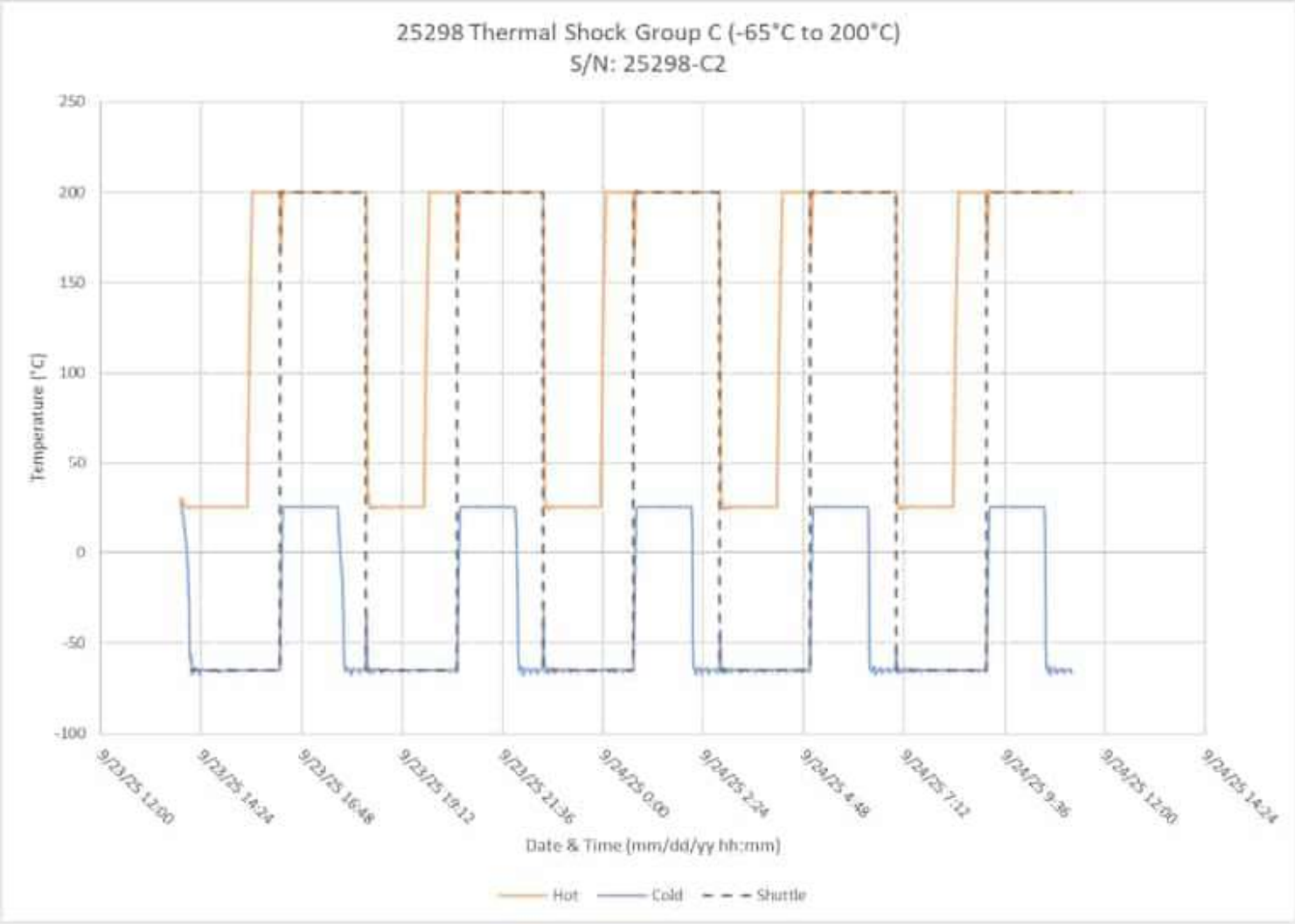
Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	360	31.6	0.088
25298-C2		30.0	0.083
25298-C3		29.6	0.082
25298-C4		57.4	0.159

Test Observations	
Serial No.	Notes
25298-C1	Brown smudges on insulation.
25298-C2	Brown smudges on insulation.
25298-C3	Brown smudges on insulation.
25298-C4	Brown smudges on insulation.

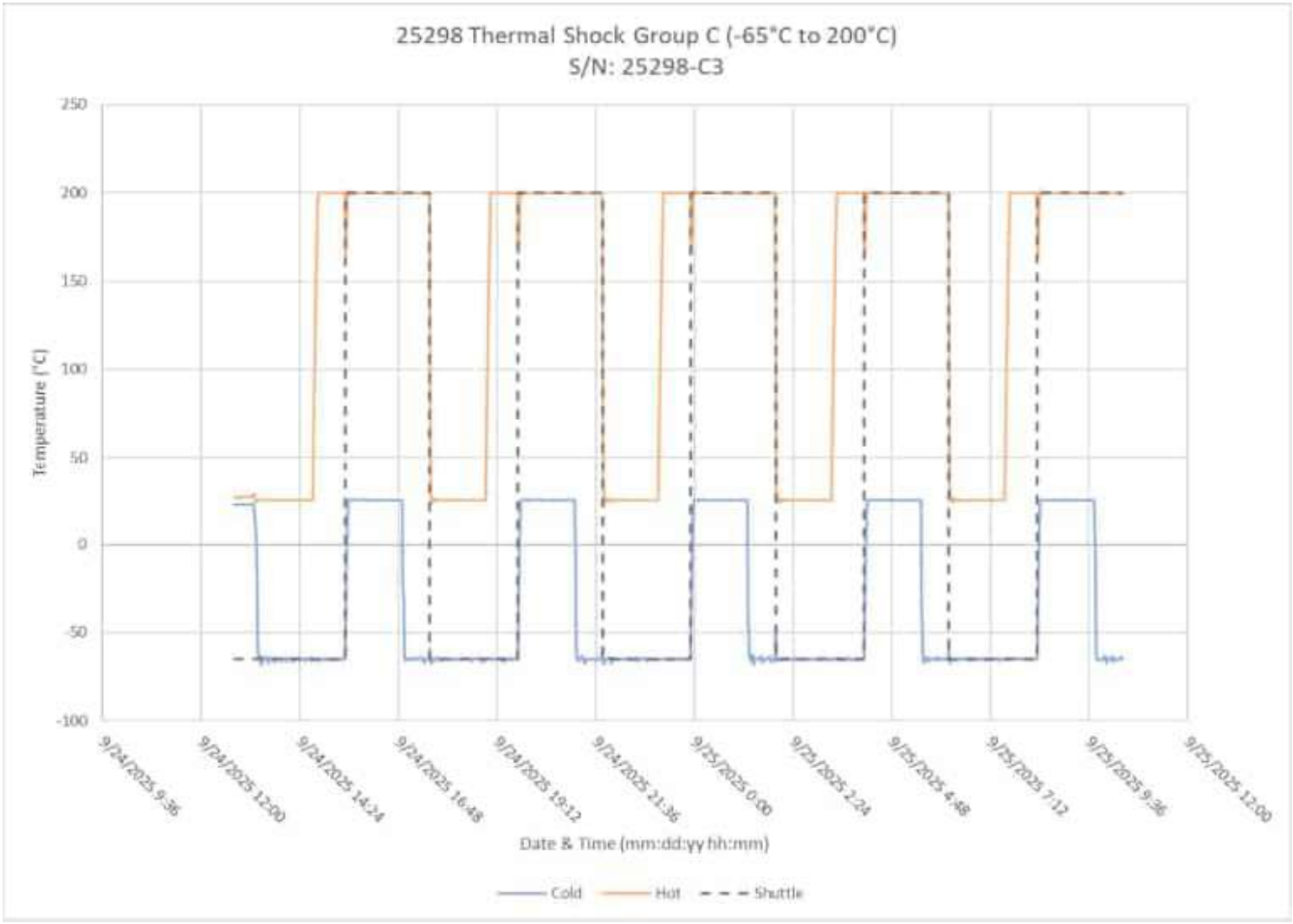


Description	Temperature Cycling Plot (25298-C1 depicted)
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1

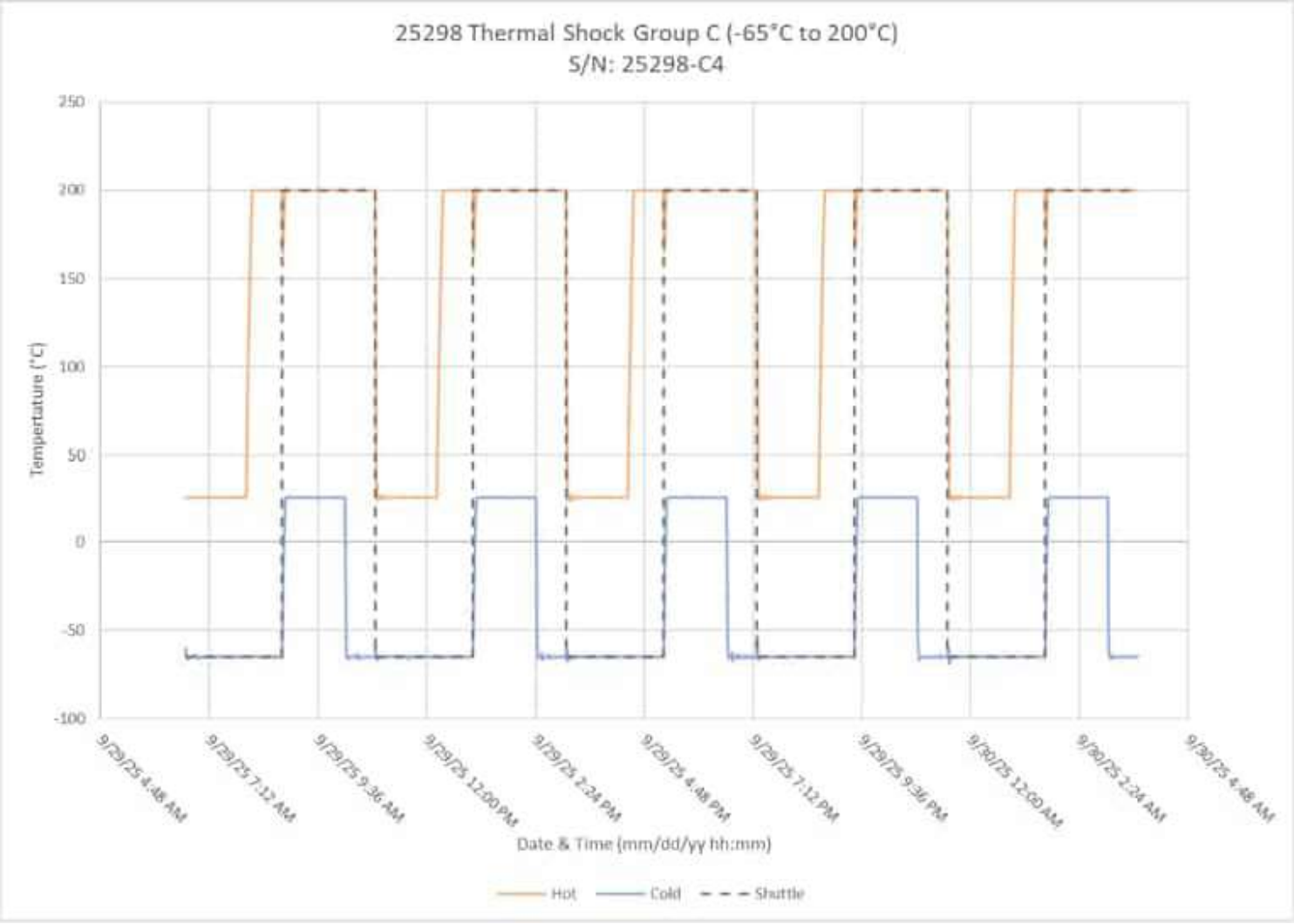
Temperature Cycling Test Plots



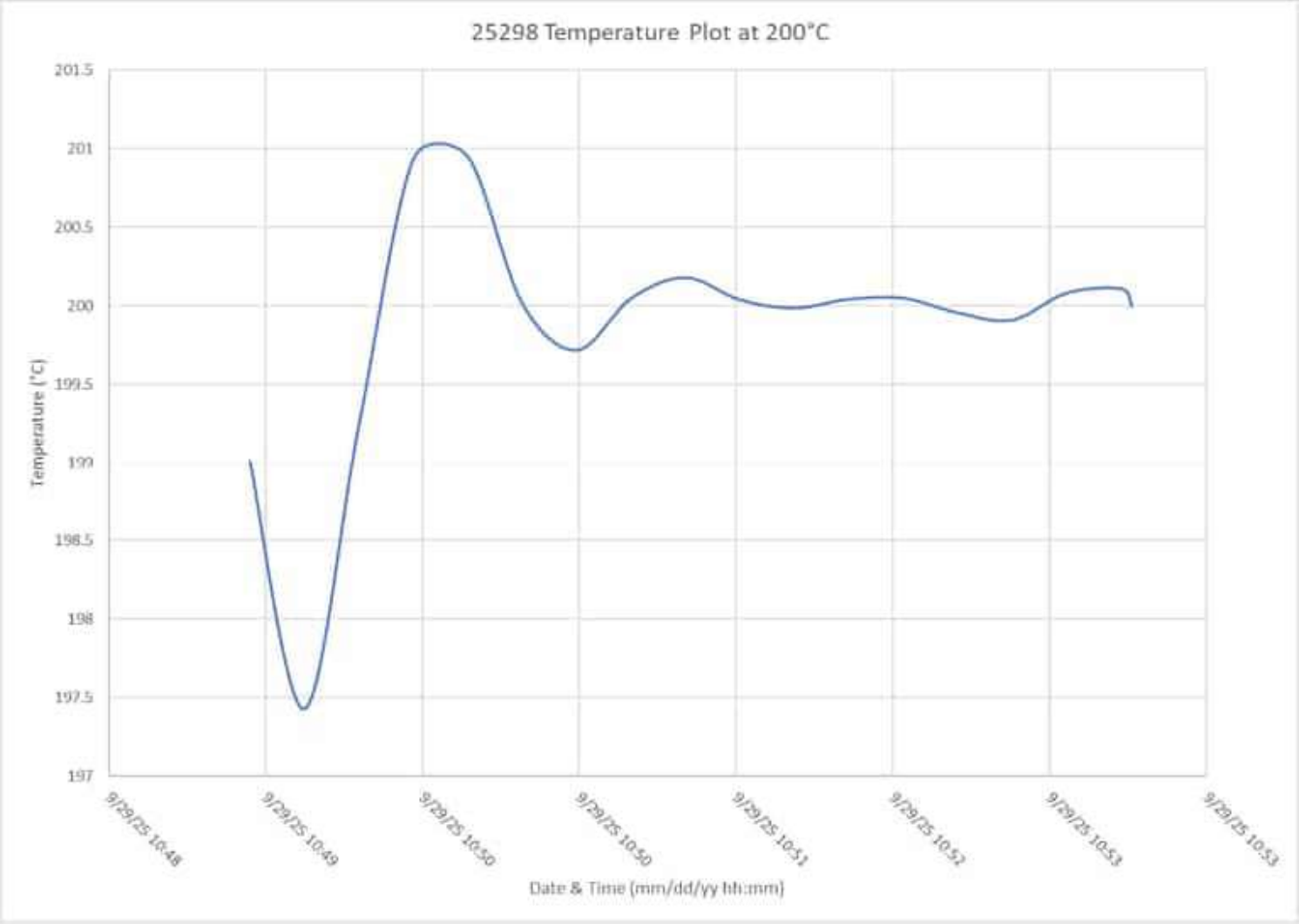
Description	Temperature Cycling Plot (25298-C2 depicted)
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C2



Description	Temperature Cycling Plot (25298-C3 depicted)
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C3



Description	Temperature Cycling Plot (25298-C4 depicted)
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C4



Description	Typical Temperature Plot at 200 °C Dwell
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C4



Description	Typical Temperature Cycling Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Typical Temperature Cycling Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Typical Temperature Cycling Setup
Test Name	Temperature Cycling
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	10/10/2025
Job Number	25298	**Test End Date**	10/13/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	TC013, EM080, EM079, EM004, FC012, DM028, EM067, EM004, TC082, TC079		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group C (2/0 AWG) are as follows:
  i.) Test Current Level 1: 185 Amps (DC)
  ii.) Test Current Level 2: 360 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	10/10/2025	**Date:**	10/13/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

Test Name	Contact Resistance (25 °C)	Temp (°C)	25.08
Test Parameters	Test Current Level 1: 185 Amps; Test Current Level 2: 360 Amps	RH%	41.70

Test Current Levels (A)	
Level 1	185
Level 2	360

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	185	21.4	0.116
25298-C2		21.4	0.116
25298-C3		19.7	0.106
25298-C4		22.4	0.121

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	360	49.4	0.137
25298-C2		49.8	0.138
25298-C3		45.5	0.126
25298-C4		50.9	0.141

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	252998-C1

Test Name	Vibration	**Test Start Date**	11/12/2025
Job Number	25298	**Test End Date**	12/1/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	SK07, AM05, AC034, AC035, TQ017, TQ030, CE100, EM049, TC078		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, MIL-STD-202		

Test Parameters

In accordance with MIL-STD-202, Method 201,

a.) Samples shall be visually inspected before mounting for Vibration.
b.) Samples shall be mounted where the fixed clamp points of the cable shall be 12 inches from the center. (6 in. ± 0.25 in. from the left and right).
c.) Samples shall also be elevated about 1 in. ± 0.15 in. from the surface of the vibration platform.
d.) Discontinuity monitoring required (100 mA max current; detecting discontinuities > 1 µs).
e.) Duration shall be 18 hours in each of two axes mutually perpendicular to each other and to the axis of the wire.
f.) The UUT shall have an amplitude of 0.03 inches, the frequency shall be varied uniformly between the approximate limits of 10 Hz and 55 Hz. The entire frequency range, from 10 Hz to 55 Hz and return to 10 Hz, shall be traversed in approximately 1 minute.

Pass/Fail Criteria:
No discontinuities > 1µs and no evidence of defects or damage to the mechanical or electrical performance.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			X	-	-

Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Carlos Nungaray
Date:	11/18/2025	**Date:**	12/8/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

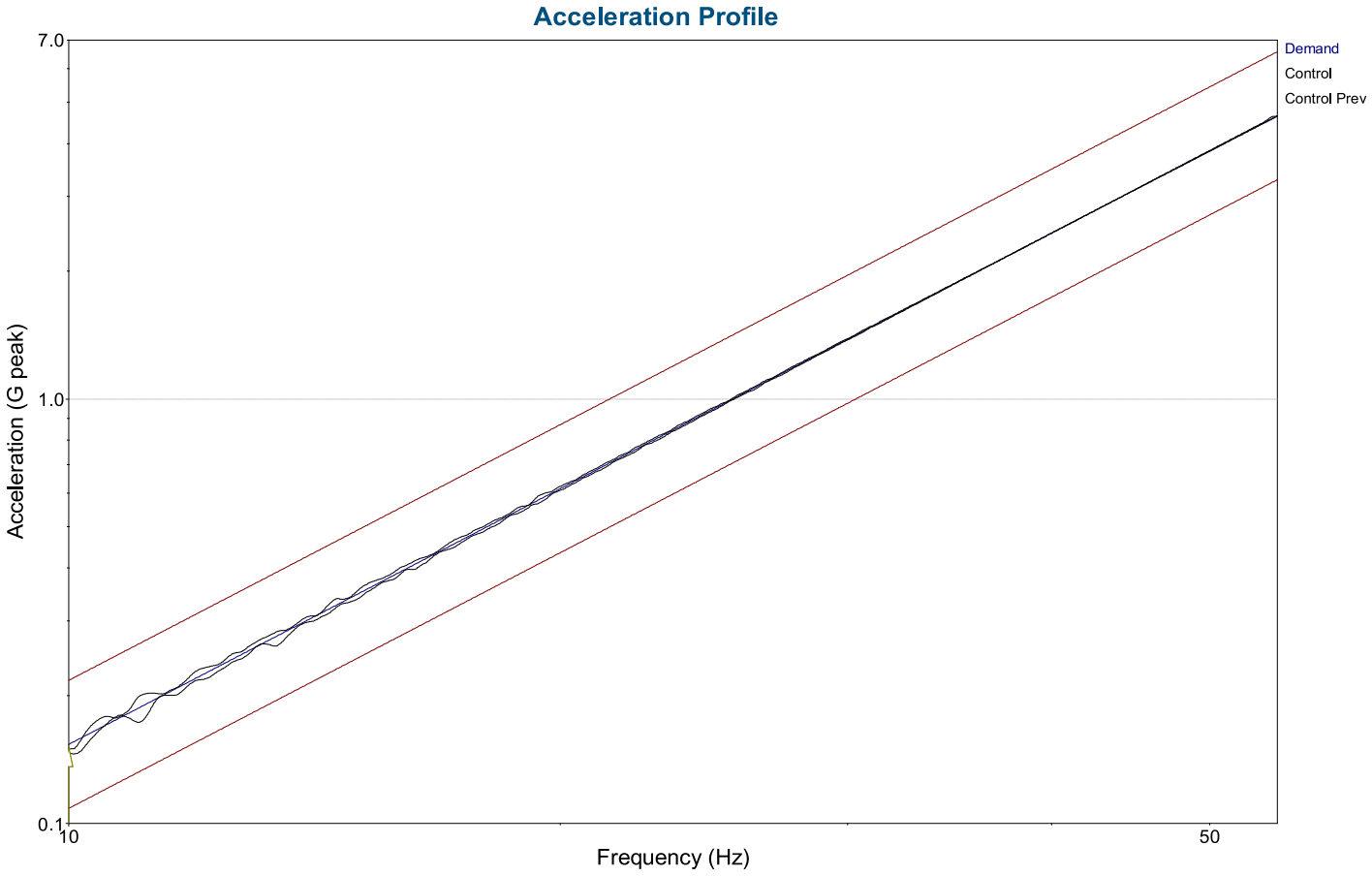
Group 3			
Test Name	Run #	Axis	Notes
Vibration	1	X	-
	2	Y	-
	3	Z	-

Test Name	Vibration	Temp (°C)	23.18
Test Parameters	Duration of 18 hours in all mutually perpendicular axes (X, Y, Z)	RH%	19.80

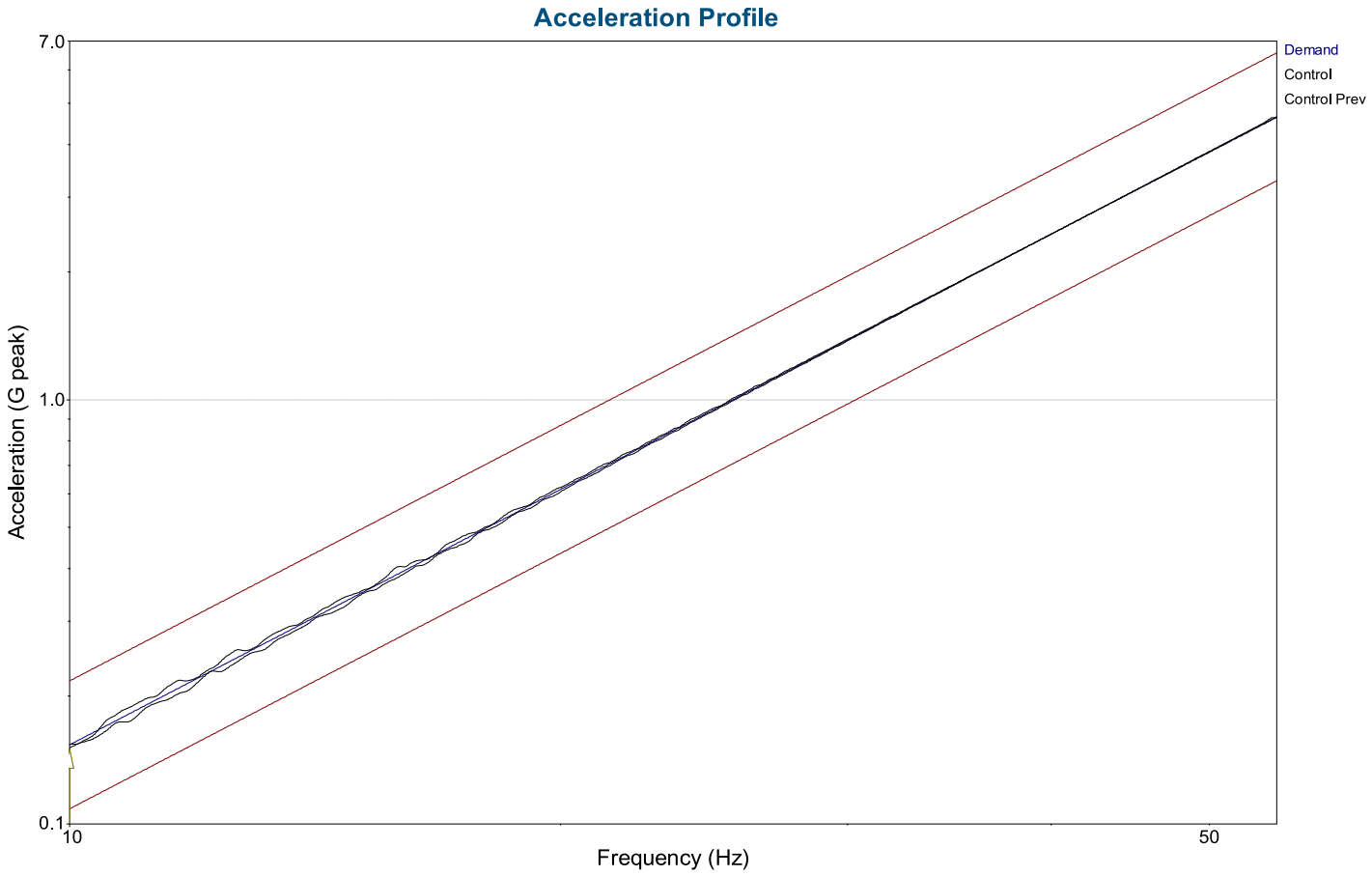
Test Observations		
Axis	Serial No.	Notes
X	25298-C1	No visual damage or discontinuities.
	25298-C2	No visual damage or discontinuities.
	25298-C3	No visual damage or discontinuities.
	25298-C4	No visual damage or discontinuities.

Test Observations		
Axis	Serial No.	Notes
Y	25298-C1	No visual damage or discontinuities.
	25298-C2	No visual damage or discontinuities.
	25298-C3	No visual damage or discontinuities.
	25298-C4	No visual damage or discontinuities.

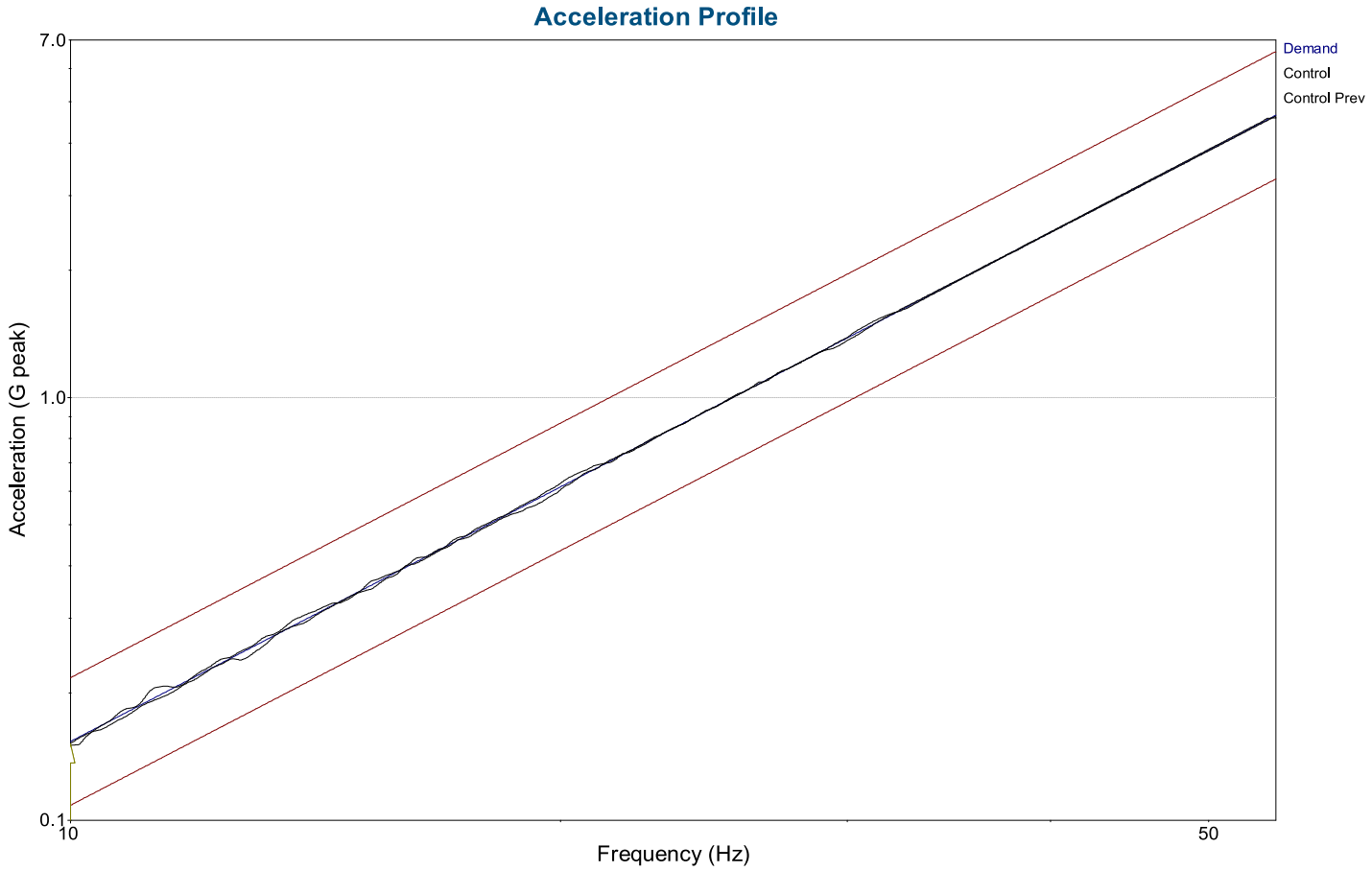
Test Observations		
Axis	Serial No.	Notes
Z	25298-C1	No visual damage or discontinuities.
	25298-C2	No visual damage or discontinuities.
	25298-C3	No visual damage or discontinuities.
	25298-C4	No visual damage or discontinuities.



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Group C
Duration	18:00:00
Axis	X



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Group C
Duration	18:00:00
Axis	Y



Description	Typical Vibration Plot
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Group C
Duration	18:00:00
Axis	Z



Description	Typical Overall Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Refer to Test Sample Identification



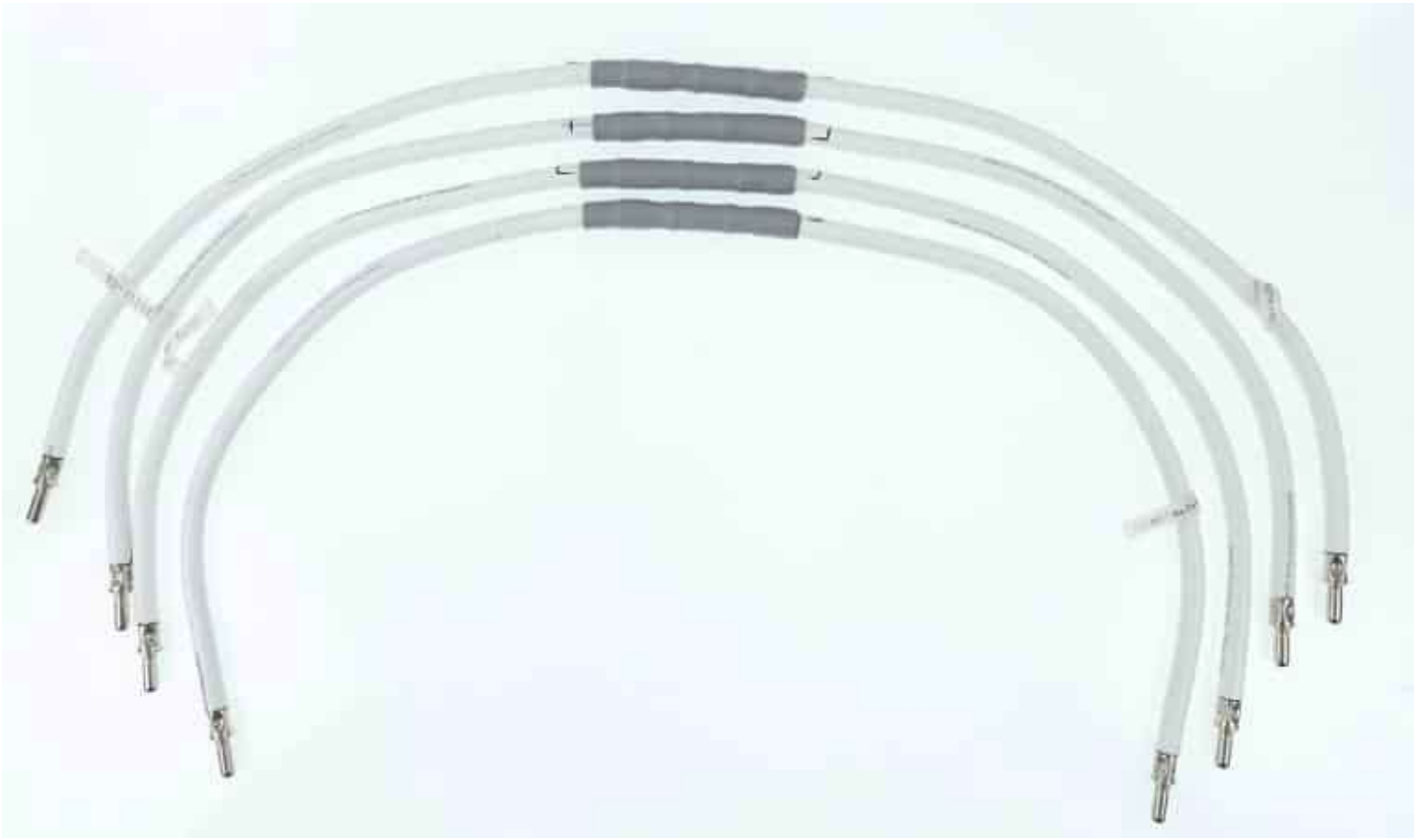
Description	Vibration X-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Refer to Test Sample Identification



Description	Vibration Y-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Refer to Test Sample Identification



Description	Vibration Z-Axis Setup
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Refer to Test Sample Identification



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	Refer to Test Sample Identification



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C2



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C3



Description	Post Vibration Test Samples
Test Name	Vibration
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	12/4/2025
Job Number	25298	**Test End Date**	12/5/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	EM038, TC014, FC013, EM079, EM080, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group C (2/0 AWG) are as follows:
  i.) Test Current Level 1: 185 Amps (DC)
  ii.) Test Current Level 2: 360 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	12/4/2025	**Date:**	12/8/2025

If applicable, list any Test Deviations:	N/A
Date:	N/A

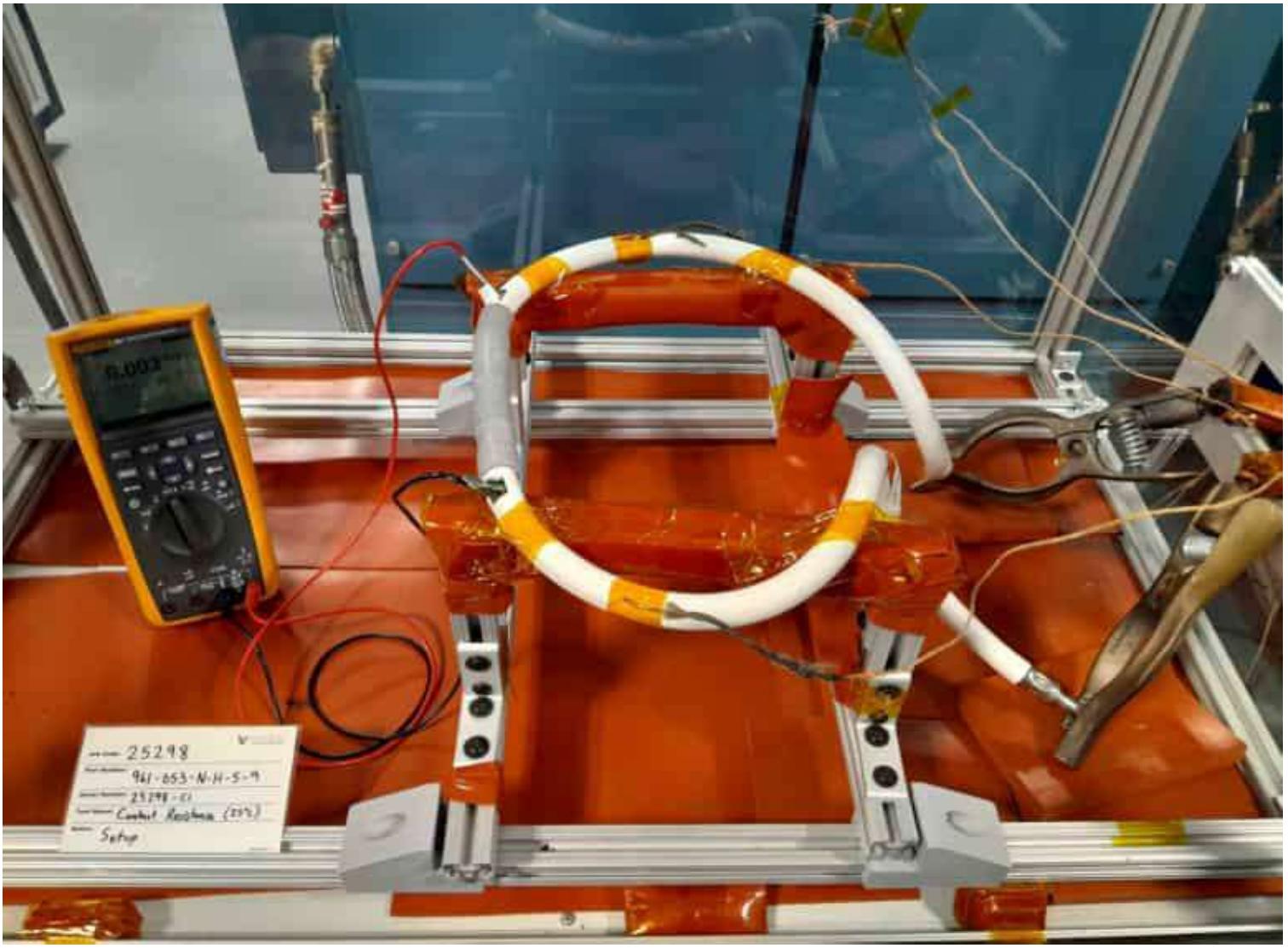
Contact Resistance (25 °C) Test Data

Test Name	Contact Resistance (25 °C)	Temp (°C)	23.10
Test Parameters	Test Current Level 1: 185 Amps; Test Current Level 2: 360 Amps	RH%	33.10

Test Current Levels (A)	
Level 1	185
Level 2	360

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	185	26.0	0.141
25298-C2		21.3	0.115
25298-C3		21.4	0.116
25298-C4		27.7	0.150

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	360	59.1	0.164
25298-C2		47.7	0.133
25298-C3		46.8	0.130
25298-C4		57.4	0.159



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	252998-C1

Test Name	Shock	**Test Start Date**	12/19/2025
Job Number	25298	**Test End Date**	12/29/2025
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	DM029, AC115, AC056, SK11, AM11, AM12, AM13, CE039, EM049, TC080		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-27D		

Test Parameters

In accordance with EIA-364-27D, Condition I,

a.) Peak acceleration: 30 Gs
b.) Samples shall be visually inspected before mounting it for Mechanical Shock.
c.) Samples shall be mounted where the fixed clamp points of the cable shall be 12 inches from the center. (6 in. ± 0.25 in. from the left and right).
d.) Shock shall be performed along the radial axis.
e.) Discontinuity monitoring required (100 mA max current; detecting discontinuities > 1 μs).

* Interested in the cable length from clamp to clamp.
* Excess cable can be routed and supported in any preferred methodology that isolates the section under test.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	Gray smudges and cuts along the insulation.	**Pass**	**Fail**	**Record**
	X	-			X	-	-

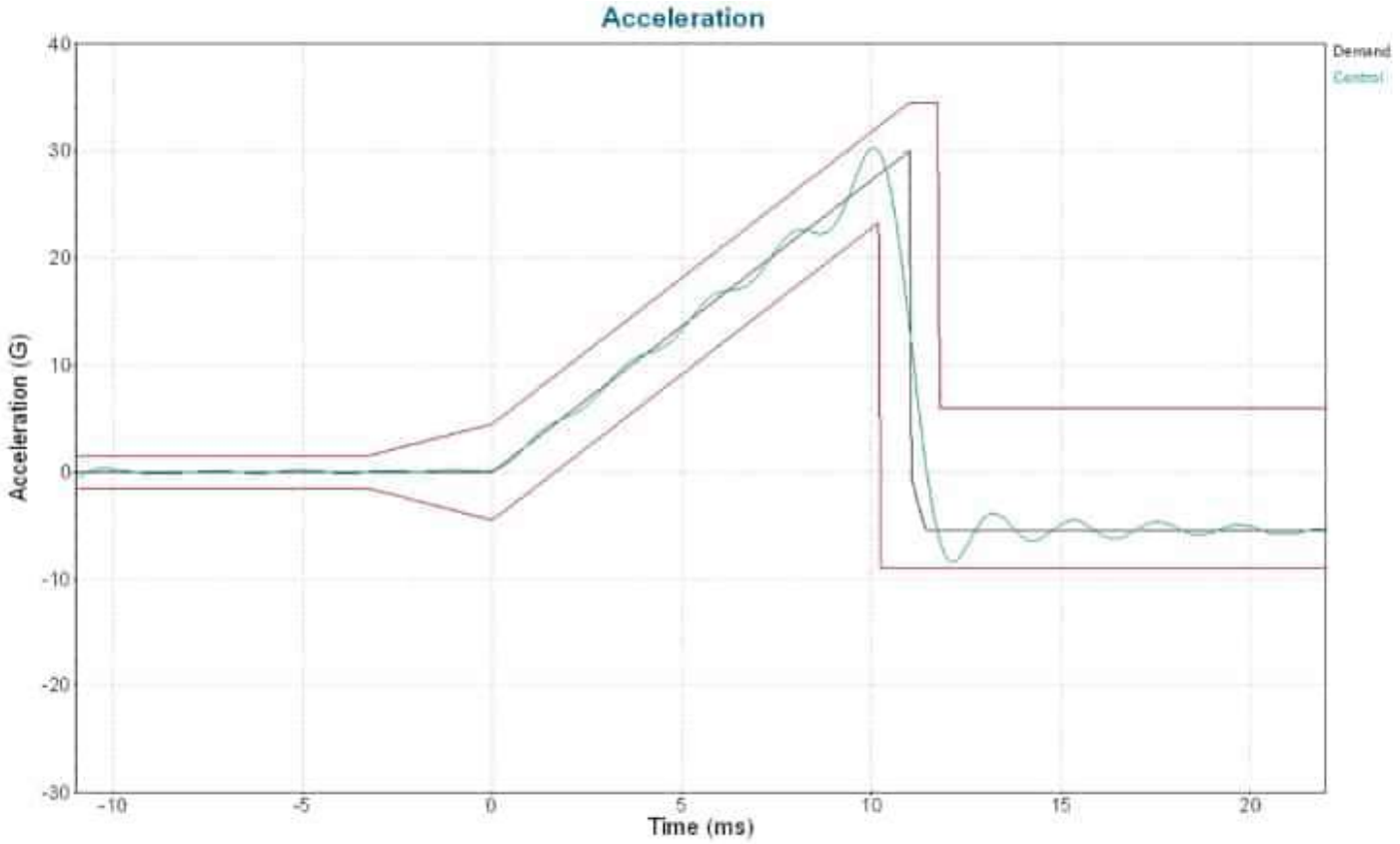
Test Setup Verified by:	Carlos Nungaray	**Test Data Reviewed by:**	Carlos Nungaray
Date:	12/19/2025	**Date:**	12/29/2025
If applicable, list any Test Deviations:	N/A		
Date:	N/A		

Group 3			
Test Name	Serial No.	Axis	Notes
Shock	25298-C1	Z	No Discontinuities
	25298-C2		No Discontinuities
	25298-C3		No Discontinuities
	25298-C4		No Discontinuities

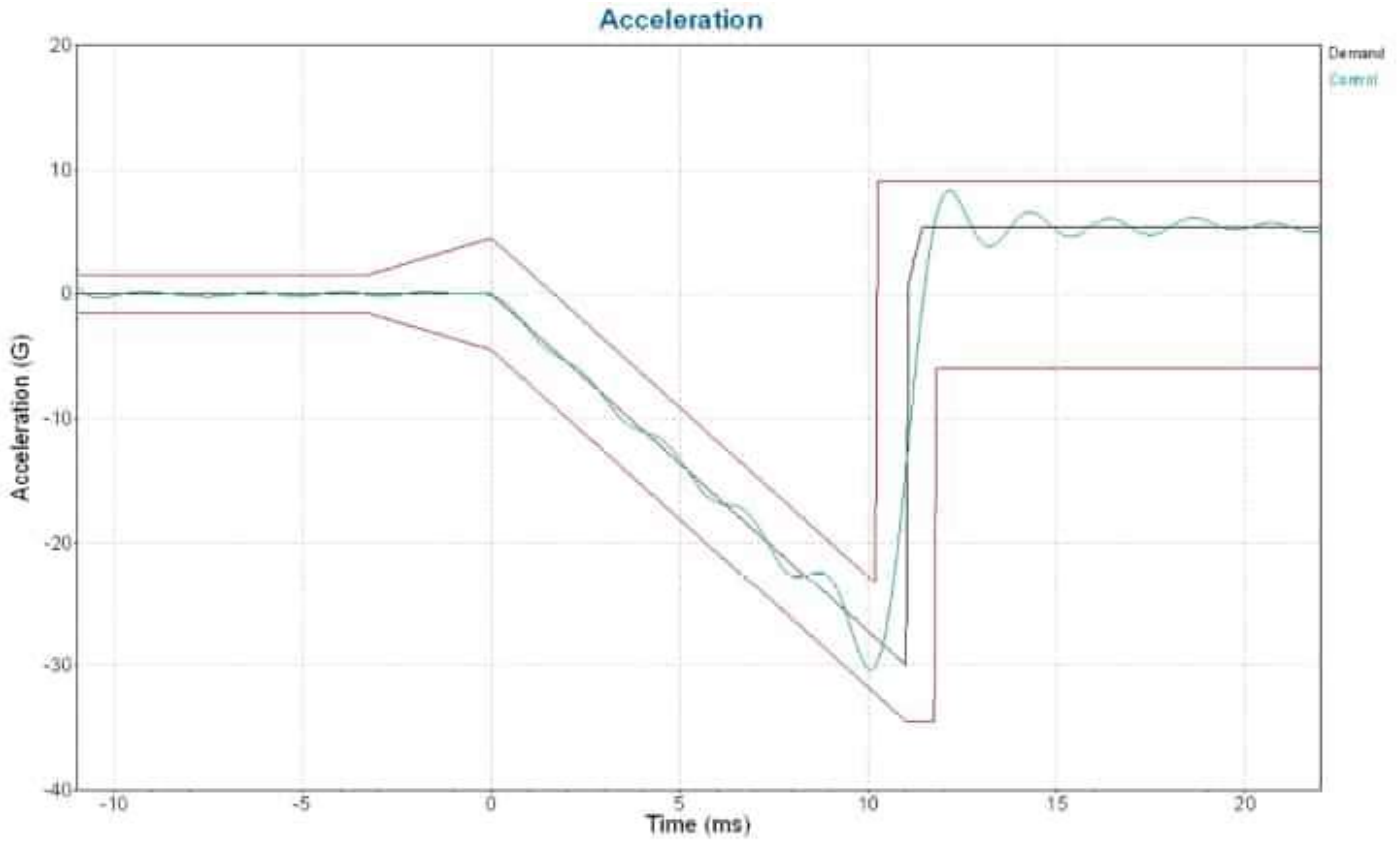
Shock Test Data

Test Name	Shock	Temp (°C)	23.67
Test Parameters	3 shocks performed along the radial axis in both the positive and negative direction	RH%	17.69

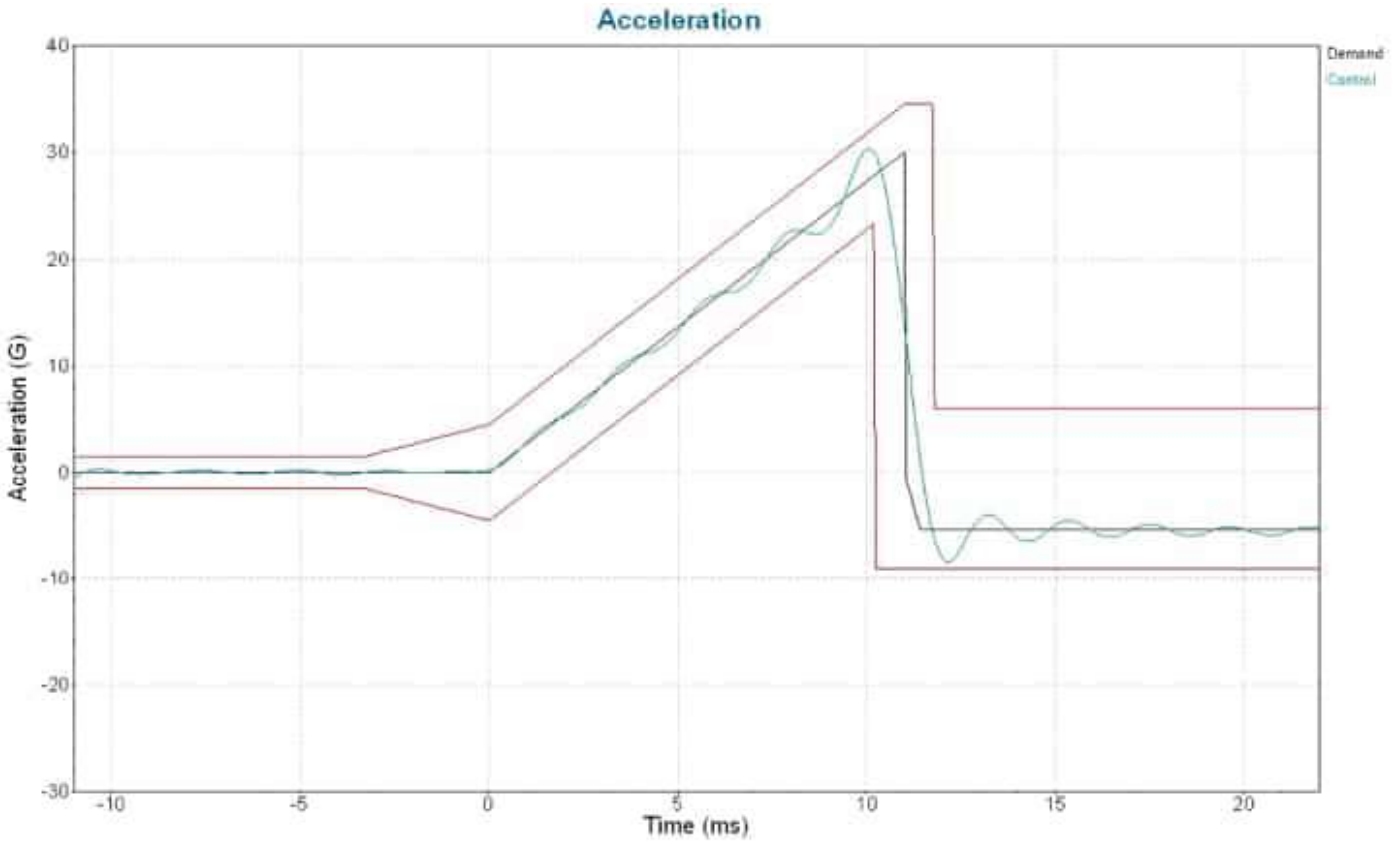
Test Observations		
Axis	Serial No.	Notes
Z	25298-C1	Gray smudges and cuts. No discontinuities.
	25298-C2	Gray smudges and cuts. No discontinuities.
	25298-C3	Gray smudges and cuts. No discontinuities.
	25298-C4	Gray smudges and cuts. No discontinuities.



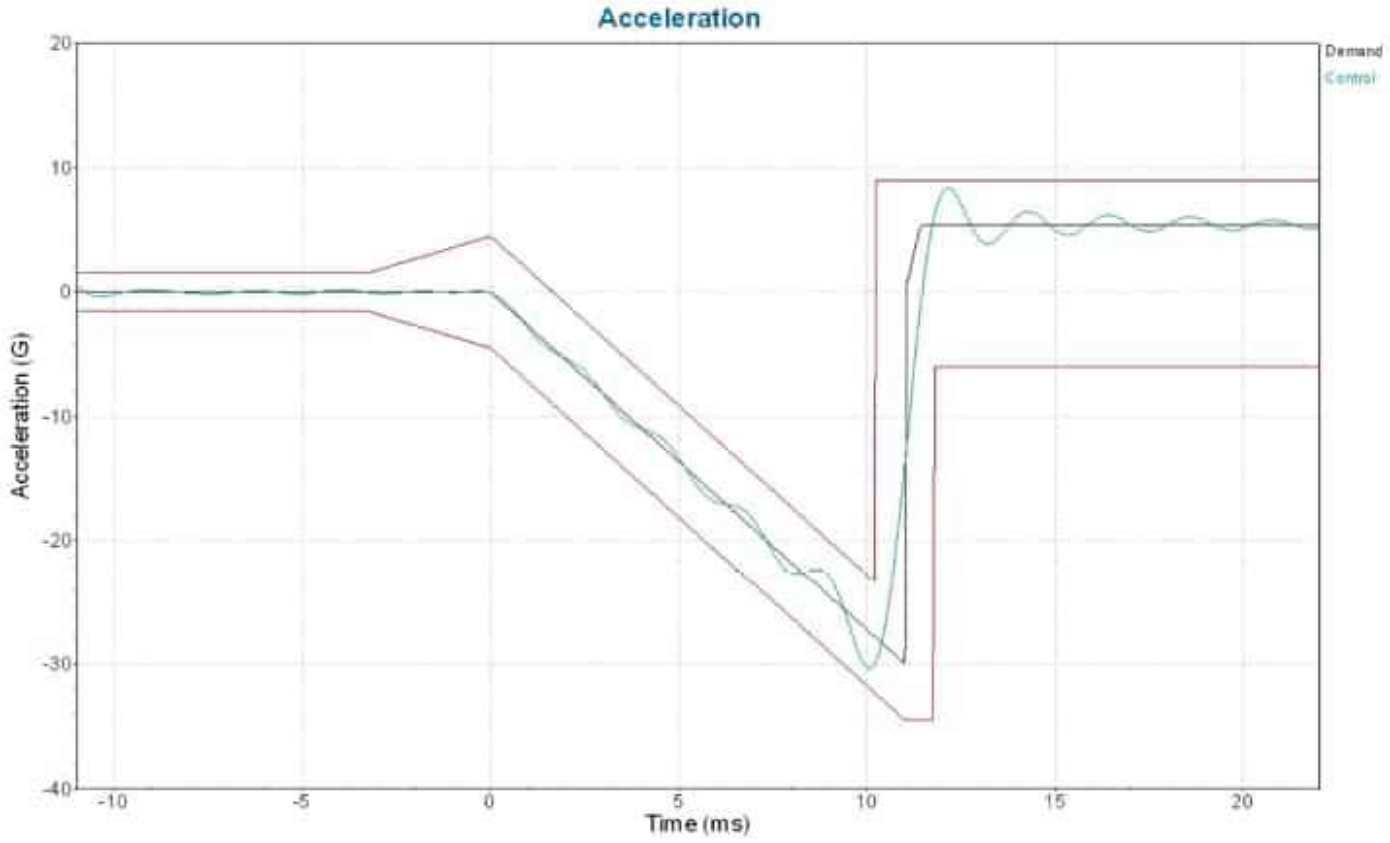
Description	Typical Shock Plot for Sample C1
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1
No. of Shocks	3
Axis	+ Z



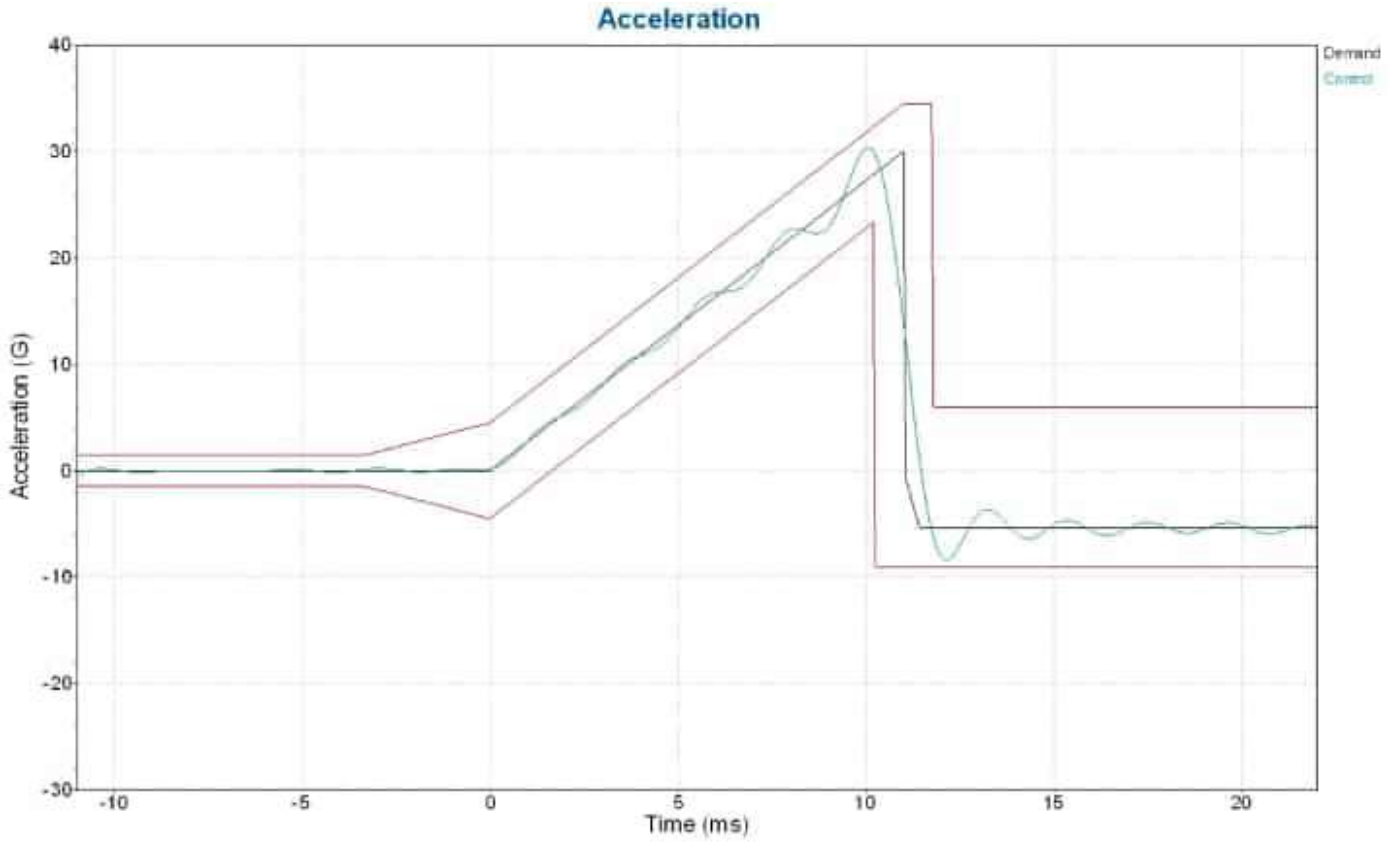
Description	Typical Shock Plot for Sample C1
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1
No. of Shocks	3
Axis	- Z



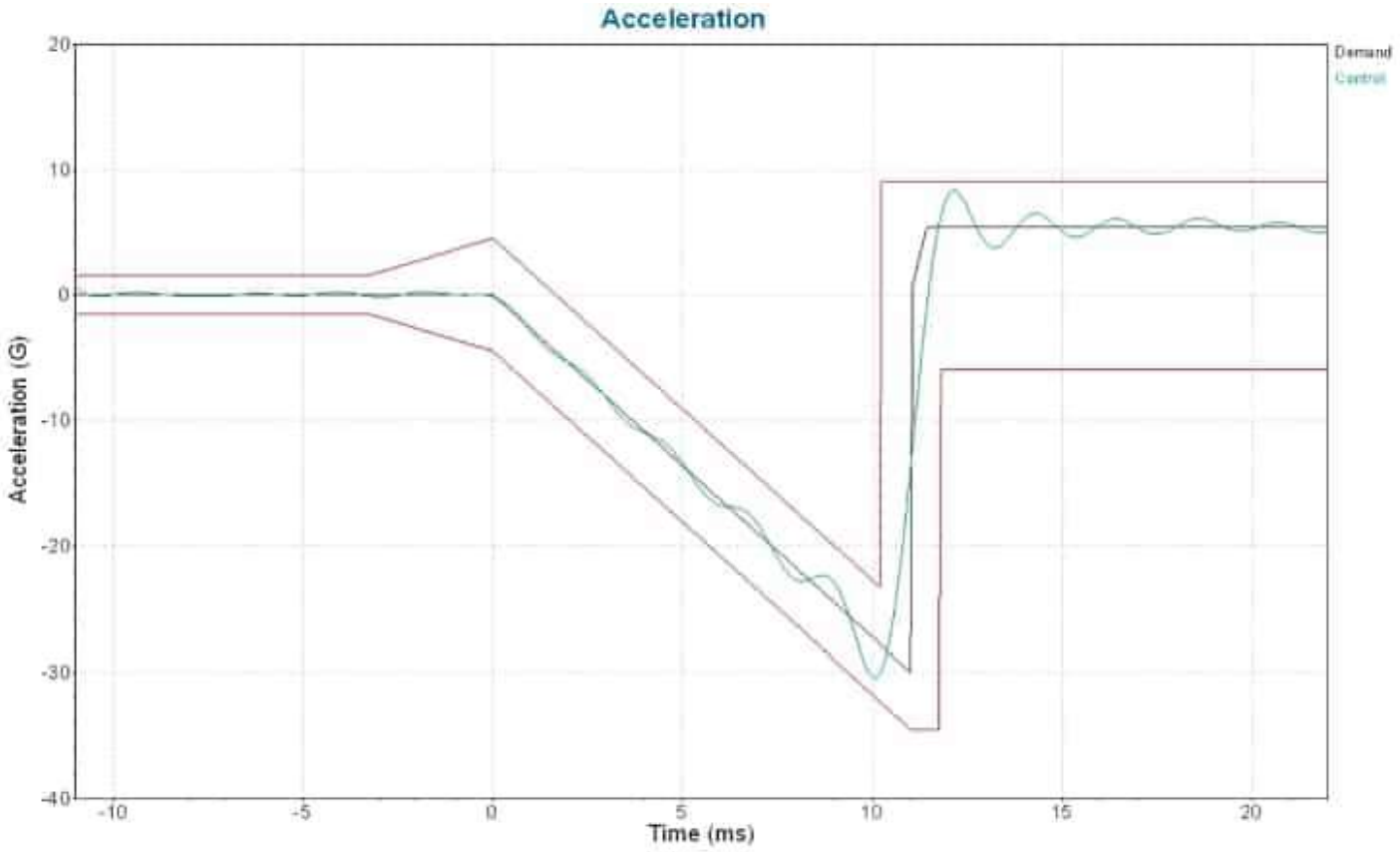
Description	Typical Shock Plot for Sample C2
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C2
No. of Shocks	3
Axis	+ Z



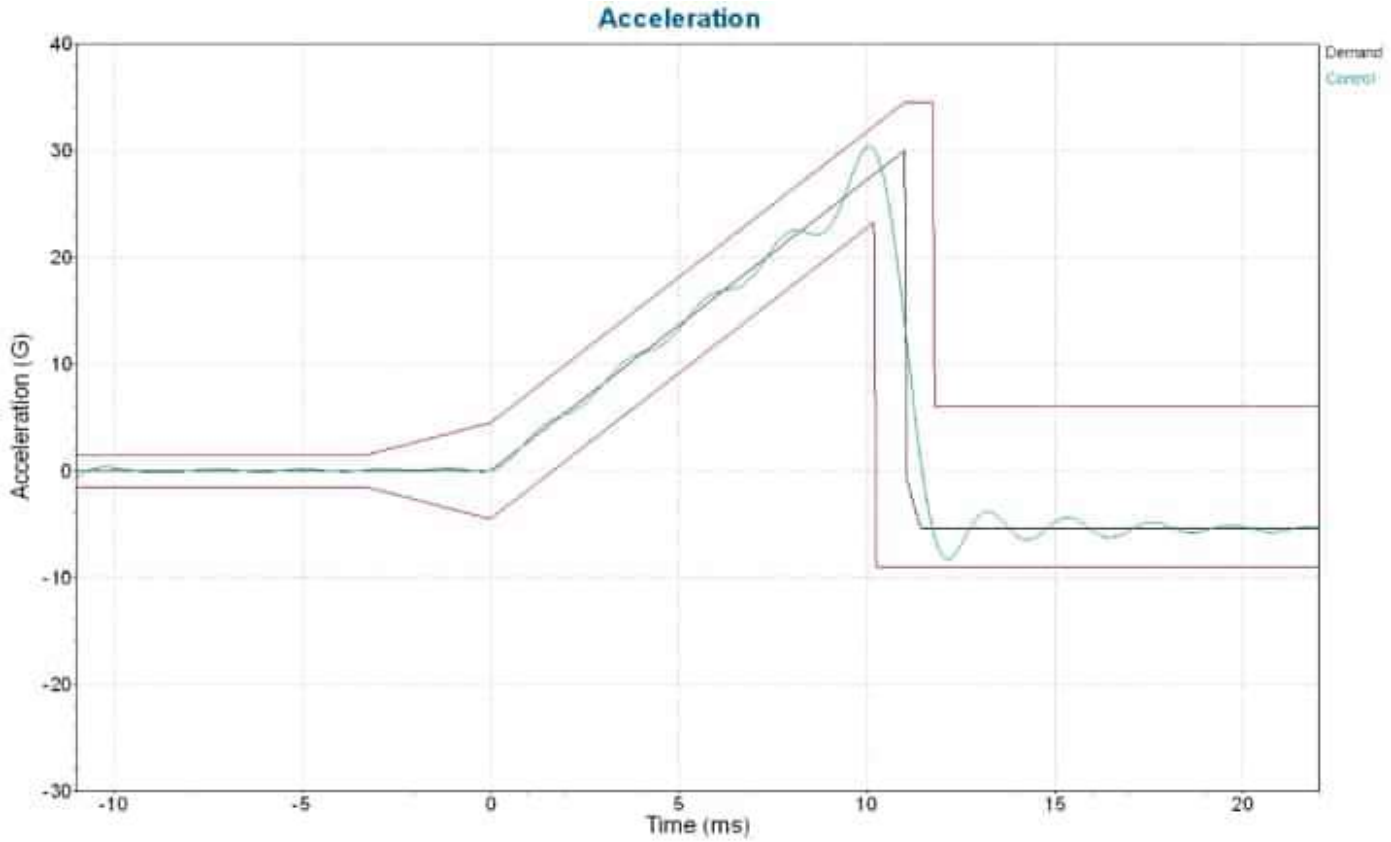
Description	Typical Shock Plot for Sample C2
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C2
No. of Shocks	3
Axis	- Z



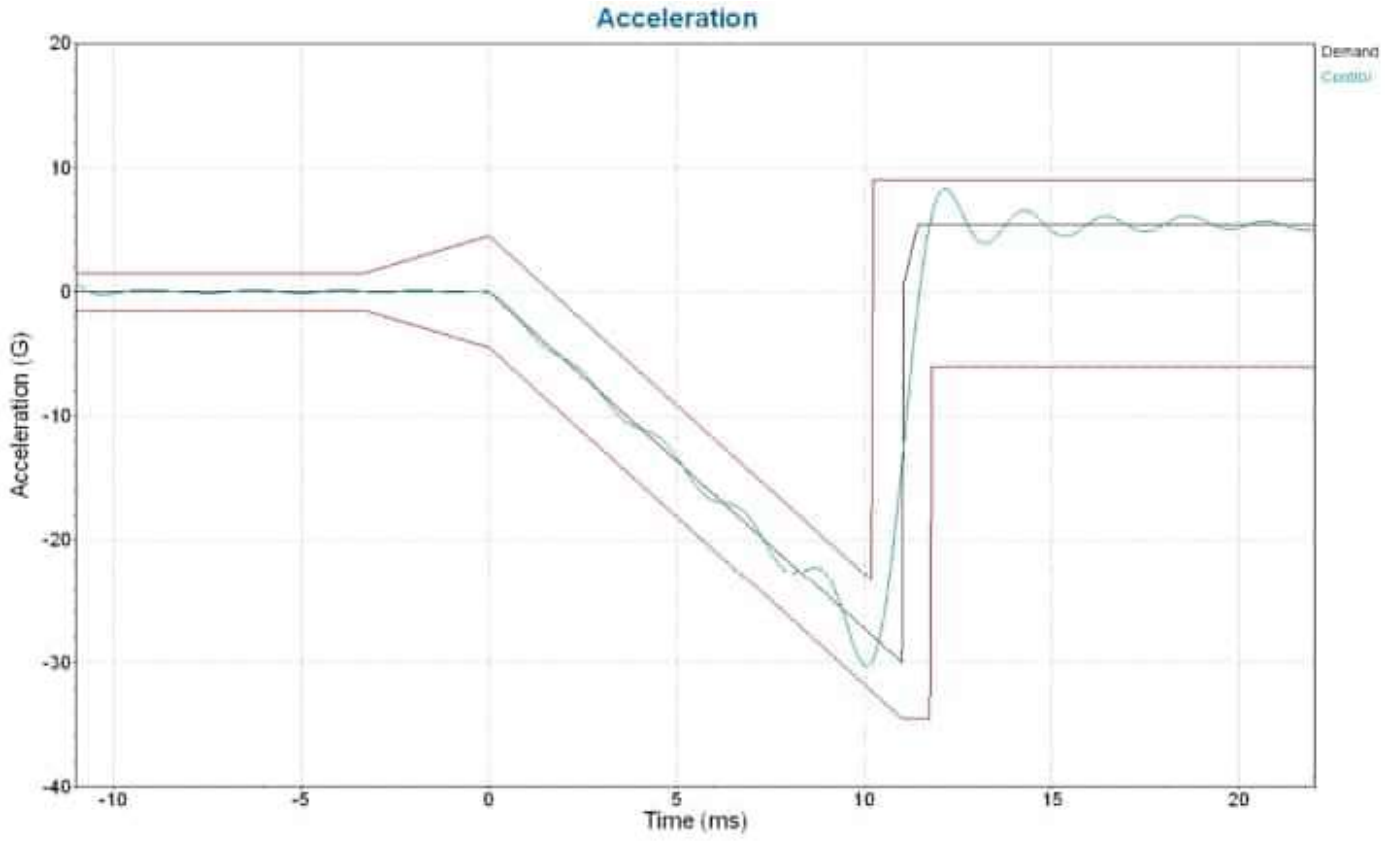
Description	Typical Shock Plot for Sample C3
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C3
No. of Shocks	3
Axis	+ Z



Description	Typical Shock Plot for Sample C3
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C3
No. of Shocks	3
Axis	- Z



Description	Typical Shock Plot for Sample C4
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C4
No. of Shocks	3
Axis	+ Z



Description	Typical Shock Plot for Sample C4
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C4
No. of Shocks	3
Axis	- Z



Description	Typical Overall Setup
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Typical Overall Setup
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C2



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C3



Description	Post Shock
Test Name	Shock
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C4

Contact Resistance (25 °C)

Test Name	Contact Resistance (25 °C)	**Test Start Date**	1/8/2026
Job Number	25298	**Test End Date**	1/9/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	EM038, TC014, FC013, EM079, EM080, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature per testing shall be at ambient conditions (25 °C ± 3 °C).
b.) Test currents for group C (2/0 AWG) are as follows:
  i.) Test Current Level 1: 185 Amps (DC)
  ii.) Test Current Level 2: 360 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	1/8/2026	**Date:**	1/30/2026

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (25 °C) Test Data

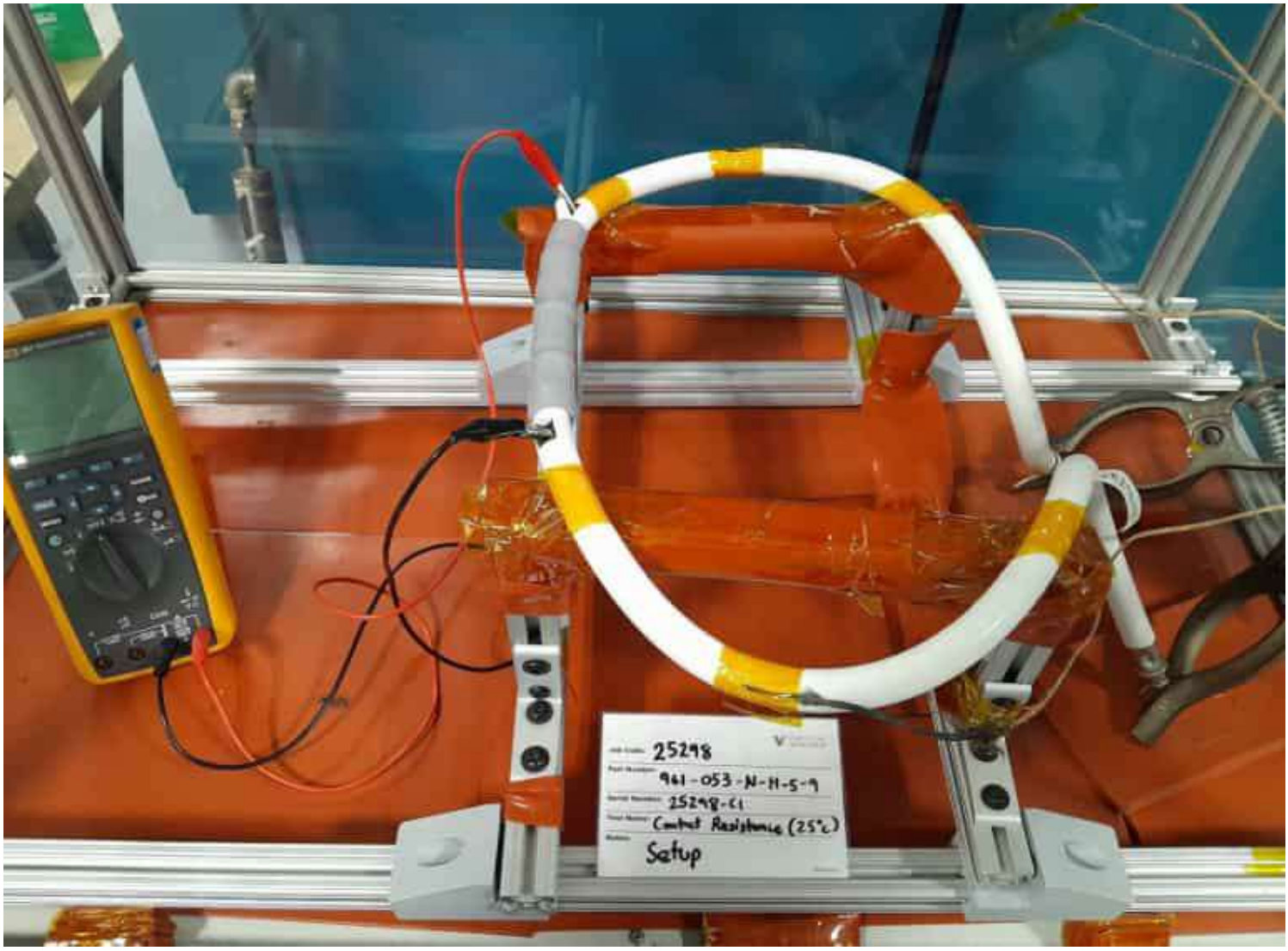
Test Name	Contact Resistance (25 °C)	Temp (°C)	23.10
Test Parameters	Test Current Level 1: 185 Amps; Test Current Level 2: 360 Amps	RH%	33.10

Test Current Levels (A)	
Level 1	185
Level 2	360

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	185	28.5	0.154
25298-C2		23.6	0.128
25298-C3		23.3	0.126
25298-C4		28.3	0.153

Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	360	64.4	0.179
25298-C2		54.3	0.151
25298-C3		53.7	0.149
25298-C4		62.7	0.174

Contact Resistance (25 °C) Test Photos



Description	Typical Contact Resistance Setup
Test Name	Contact Resistance (25 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1

Contact Resistance (200 °C)

Test Name	Contact Resistance (200 °C)	**Test Start Date**	3/13/2026
Job Number	25298	**Test End Date**	3/16/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	CE001, EM004, EM007, EM067, TC082		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-06D		

Test Parameters

In accordance with EIA-364-06D,

a.) Temperature shall be at specified conditions as stated in QTP-1513 (200 °C).
b.) Test currents for group C (2/0 AWG) are as follows:
  i.) Test Current Level 1: 185 Amps (DC)
  ii.) Test Current Level 2: 360 Amps (DC)
c.) Perform Contact Resistance initially using the Level 1 current. Measure the voltage drop.
d.) Perform Contact Resistance using the Level 2 current. Measure the voltage drop.

Sample conditions were altered:	**Yes**	**No**	**Notes:**	N/A	**Pass**	**Fail**	**Record**
	-	X			-	-	X

Test Setup Verified by:	Daniel Wong	**Test Data Reviewed by:**	Daniel Wong
Date:	3/13/2026	**Date:**	3/18/2026

If applicable, list any Test Deviations:	N/A
Date:	N/A

Contact Resistance (200 °C) Test Data

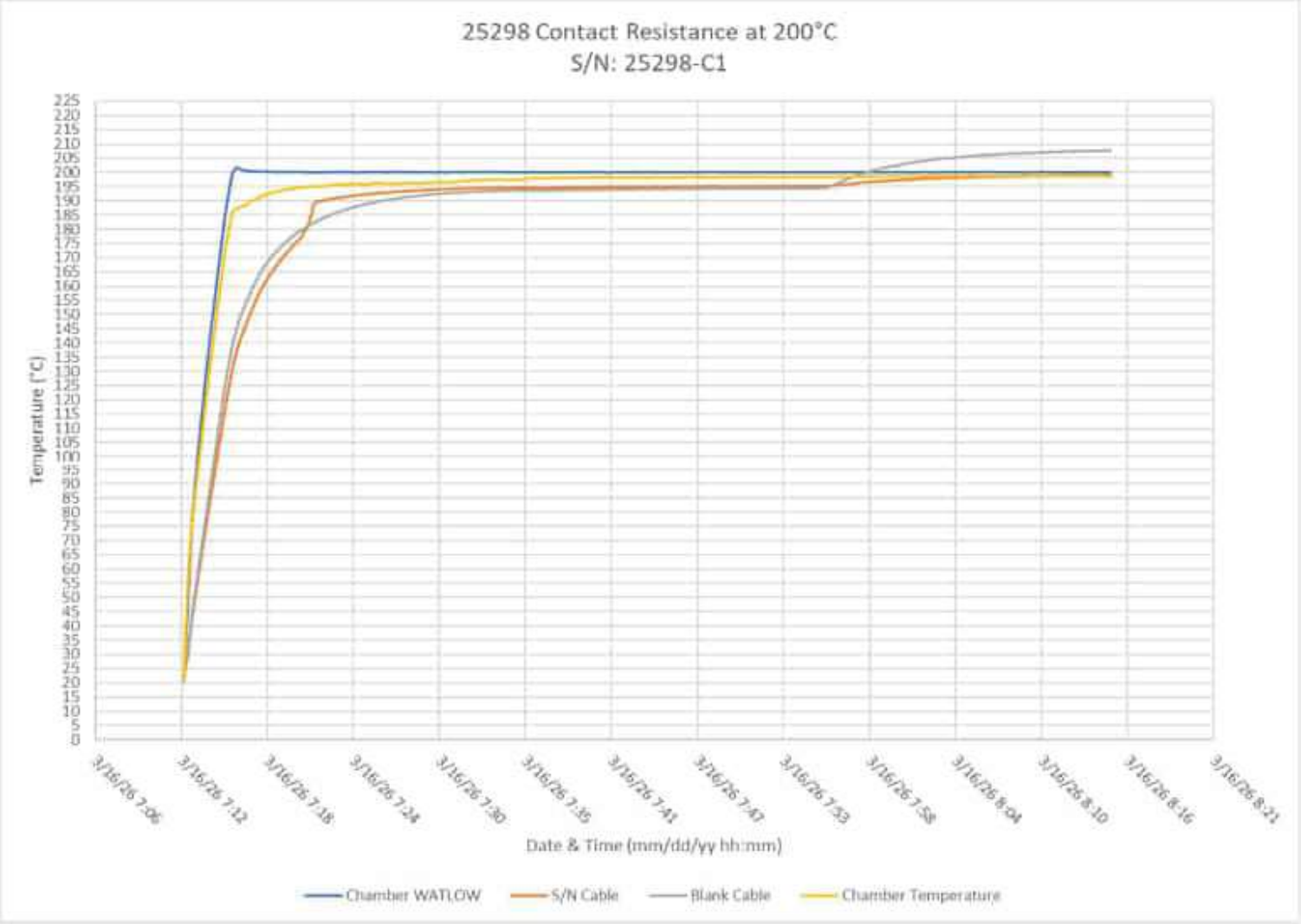
Test Name	Contact Resistance (200 °C)	Temp (°C)	24.02
Test Parameters	Test Current Level 1: 185 Amps; Test Current Level 2: 360 Amps	RH%	31.09

Test Current Levels (A)	
Level 1	185
Level 2	360

Level 1			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	185	32.7	0.177
25298-C2		31.3	0.169
25298-C3		29.8	0.161
25298-C4		35.2	0.190

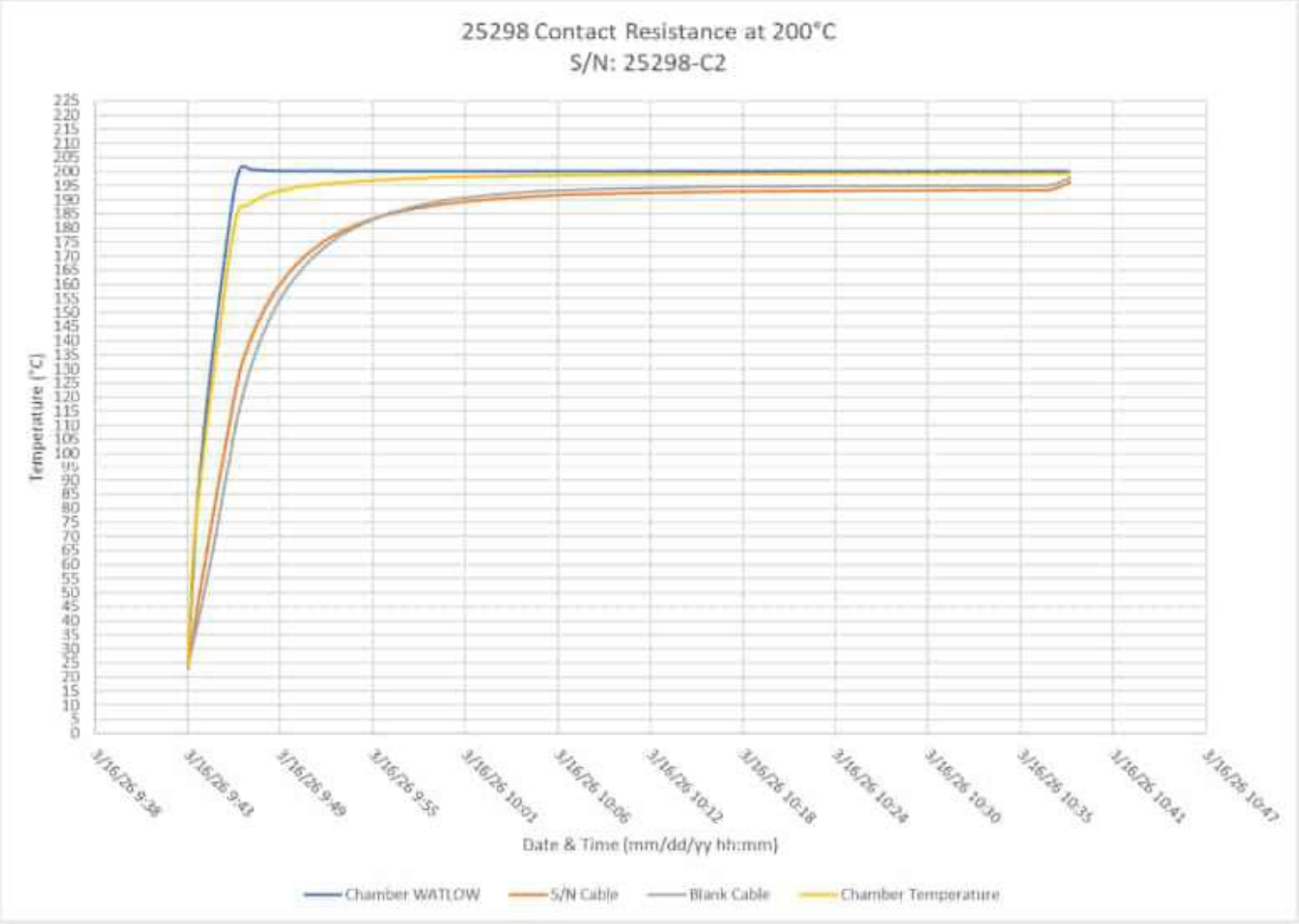
Level 2			
Serial No.	Current (A)	Voltage Drop (mV)	Resistance (mΩ)
25298-C1	360	66.2	0.184
25298-C2		63.2	0.176
25298-C3		58.2	0.162
25298-C4		72.3	0.201

Contact Resistance (200 °C) Test Plots



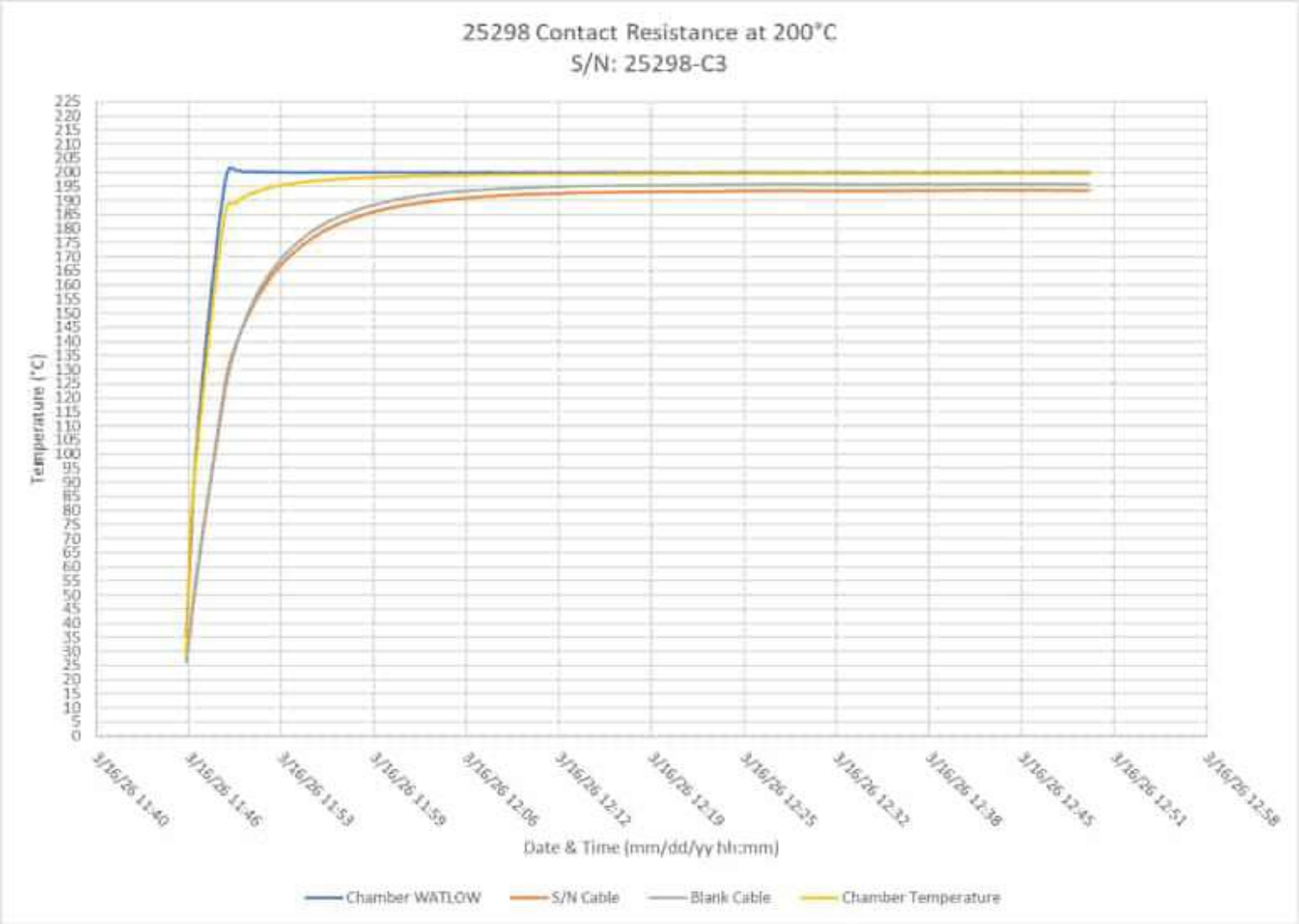
Description	Temperature Plot for Sample 25298-C1
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C1

Contact Resistance (200 °C) Test Plots



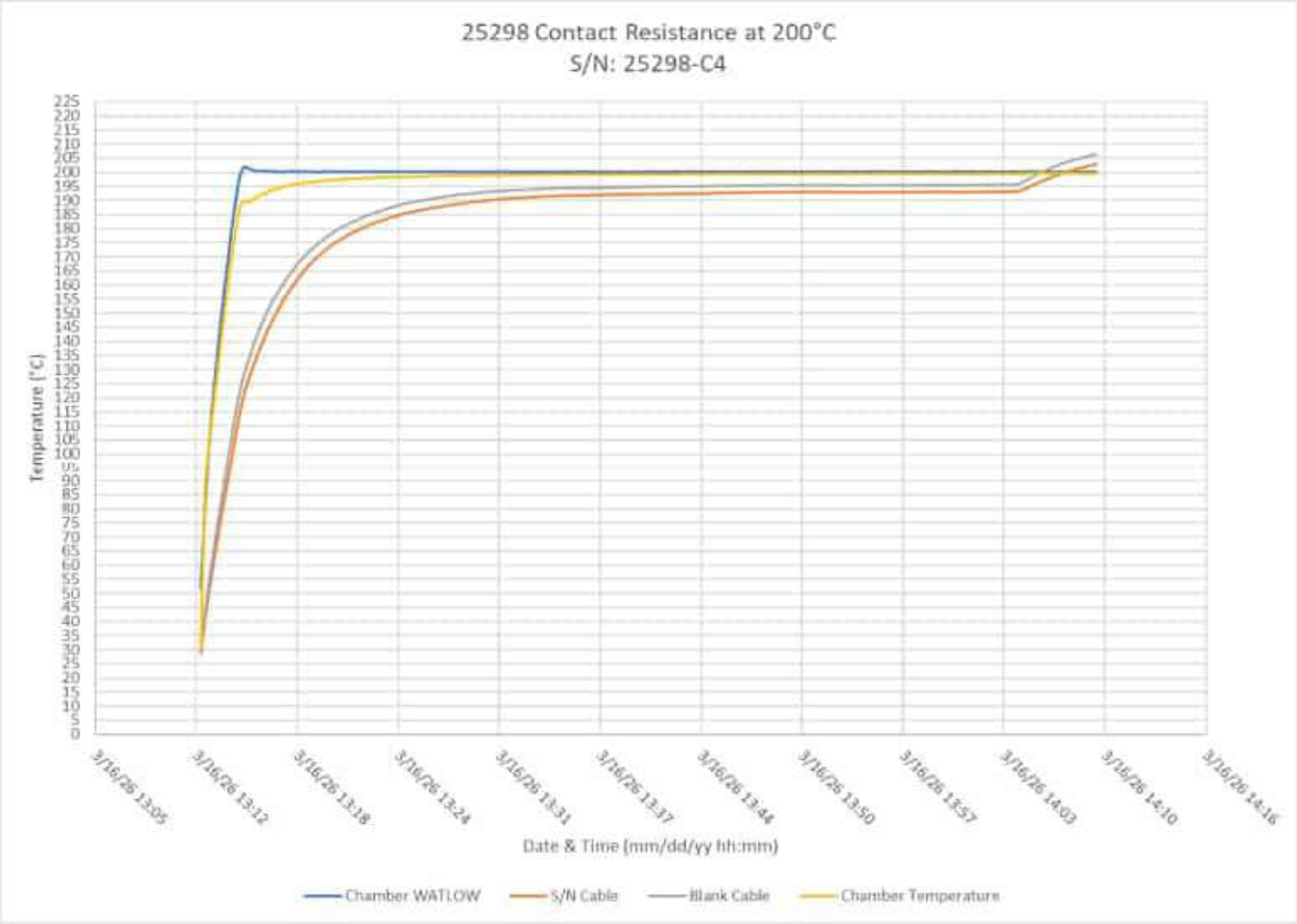
Description	Temperature Plot for Sample 25298-C2
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C2

Contact Resistance (200 °C) Test Plots



Description	Temperature Plot for Sample 25298-C3
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C3

Contact Resistance (200 °C) Test Plots



Description	Temperature Plot for Sample 25298-C4
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C4

Contact Resistance (200 °C) Test Photos



Description	Typical Test Setup
Test Name	Contact Resistance (200 °C)
Part Name	PwrLine HV
Test Group	1
Part No.	961-053-N-H-5-9
Serial No.	25298-C2

Test Name	Tensile Strength	**Test Start Date**	3/24/2026
Job Number	25298	**Test End Date**	3/25/2026
Client Job Number	N/A		
Test Performed by	Ron Nguyen		
Serial Number	25298-C1, 25298-C2, 25298-C3, 25298-C4		
Equipment Used	CE061, CE089, TC079, CP040		
Test Specification	QTP-1513 PwrLine HV Qual Rev. B, EIA-364-08C		

Test Parameters

In accordance with EIA-364-08C,

a.) The Tensile Strength shall be determined by applying a plate to the upper load cell and the base.
b.) The sample shall be under tension at a rate of 0.5 in./min.
c.) Record the force in pounds.
d.) Test samples shall be tested until failure.

Sample conditions were altered:	**Yes**	**No**	**Notes:**		**Pass**	**Fail**	**Record**
	X	-		Heat shrink band stretch; indent/markings on crimp and barrel head; crack on barrel.	-	-	X

Test Setup Verified by:	Danny Tan	**Test Data Reviewed by:**	Danny Tan
Date:	3/24/2026	**Date:**	3/26/2026

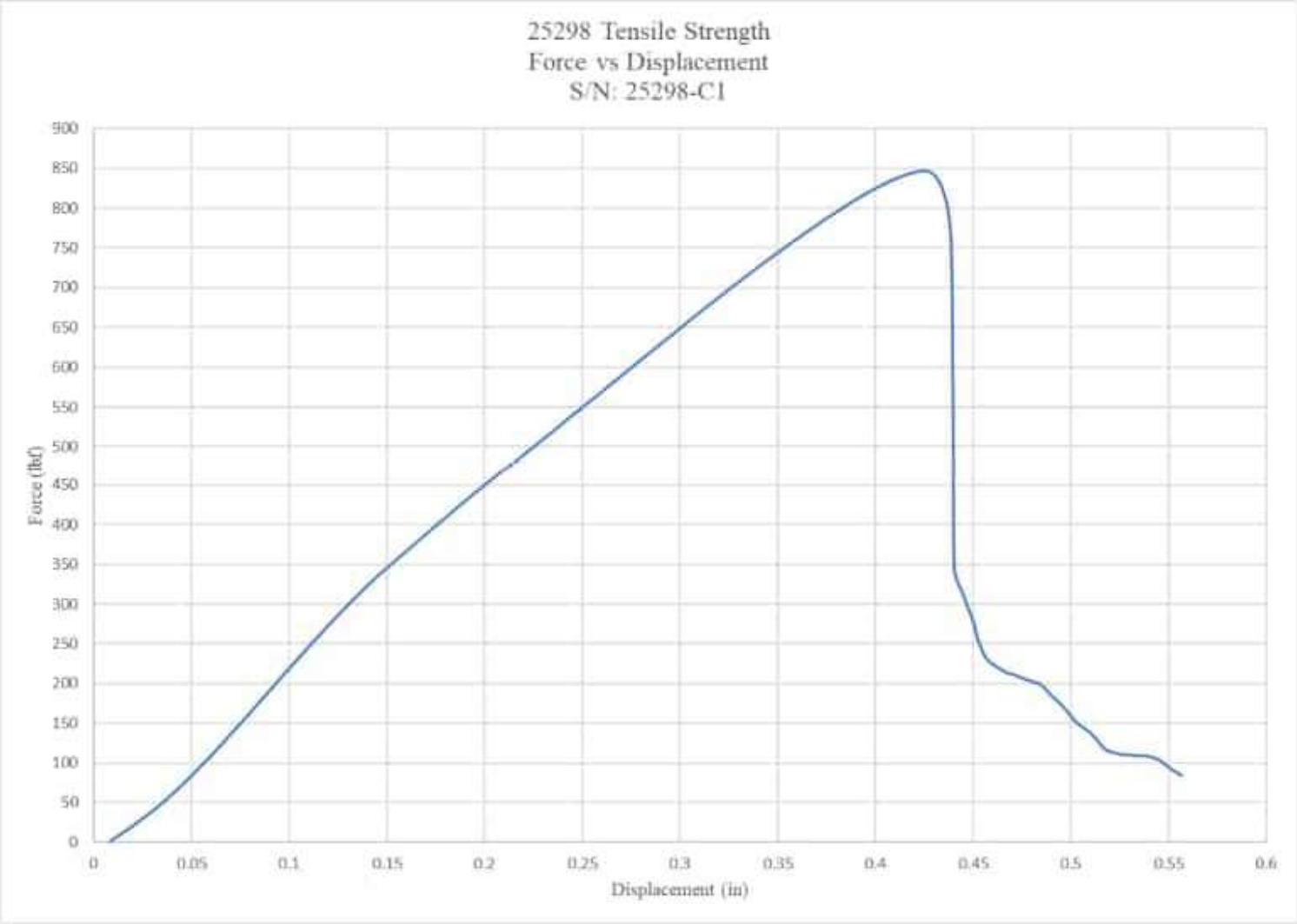
If applicable, list any Test Deviations:	N/A
Date:	N/A

Tensile Strength Test Data

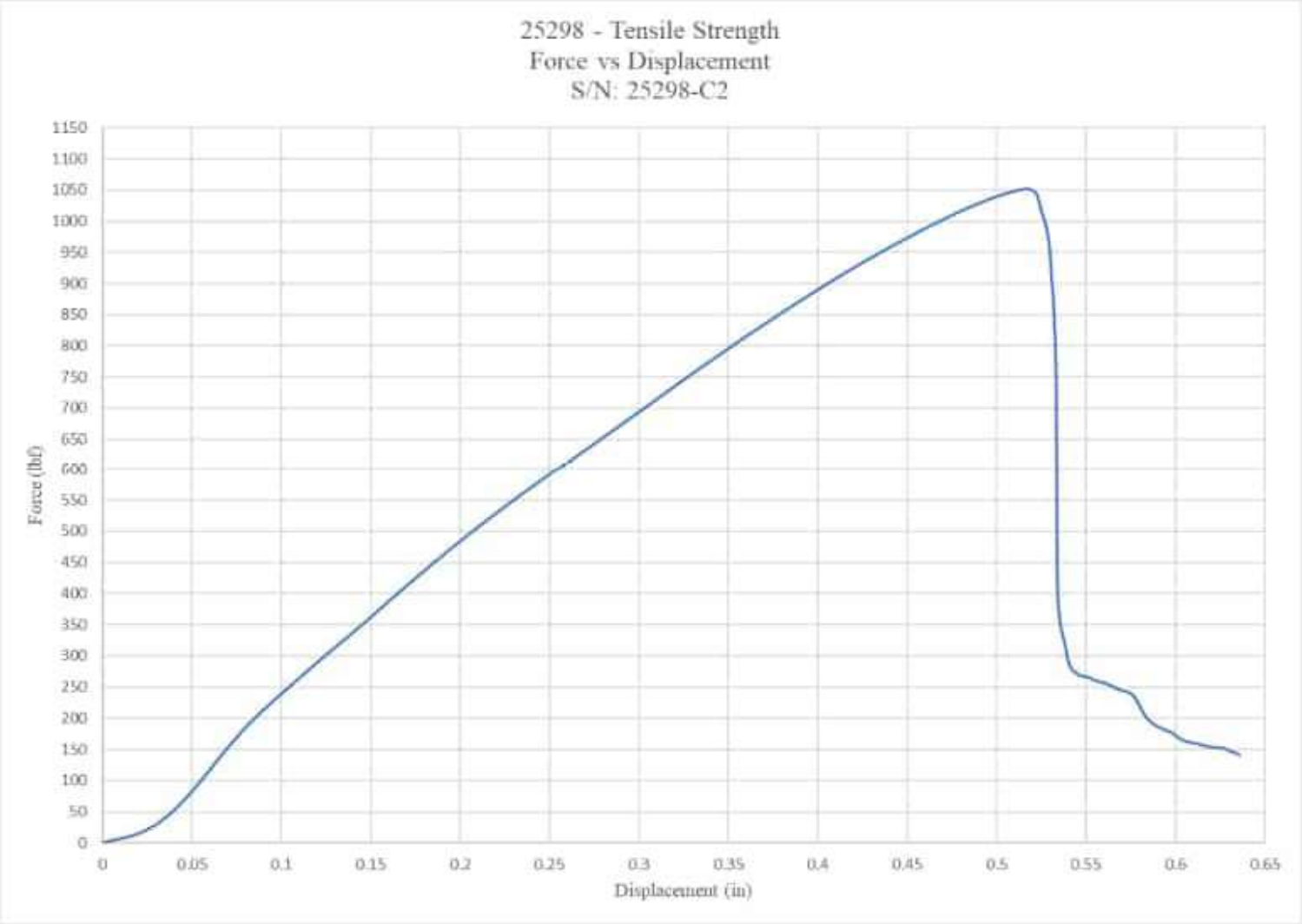
Test Name	Tensile Strength	Temp (°C)	23.45
Test Parameters	Test sample shall be tested until failure.	RH%	48.47

Test Observations	
Serial No.	Notes
25298-C1	Heat shrink band stretched; barrel pin head has indent from vice grips; crack on barrel.
25298-C2	Heat shrink band stretched; barrel pin head has indent from vice grips; crack on barrel.
25298-C3	Heat shrink band stretched; barrel pin head has indent from vice grips.
25298-C4	Heat shrink band stretched; barrel pin head has indent from vice grips.

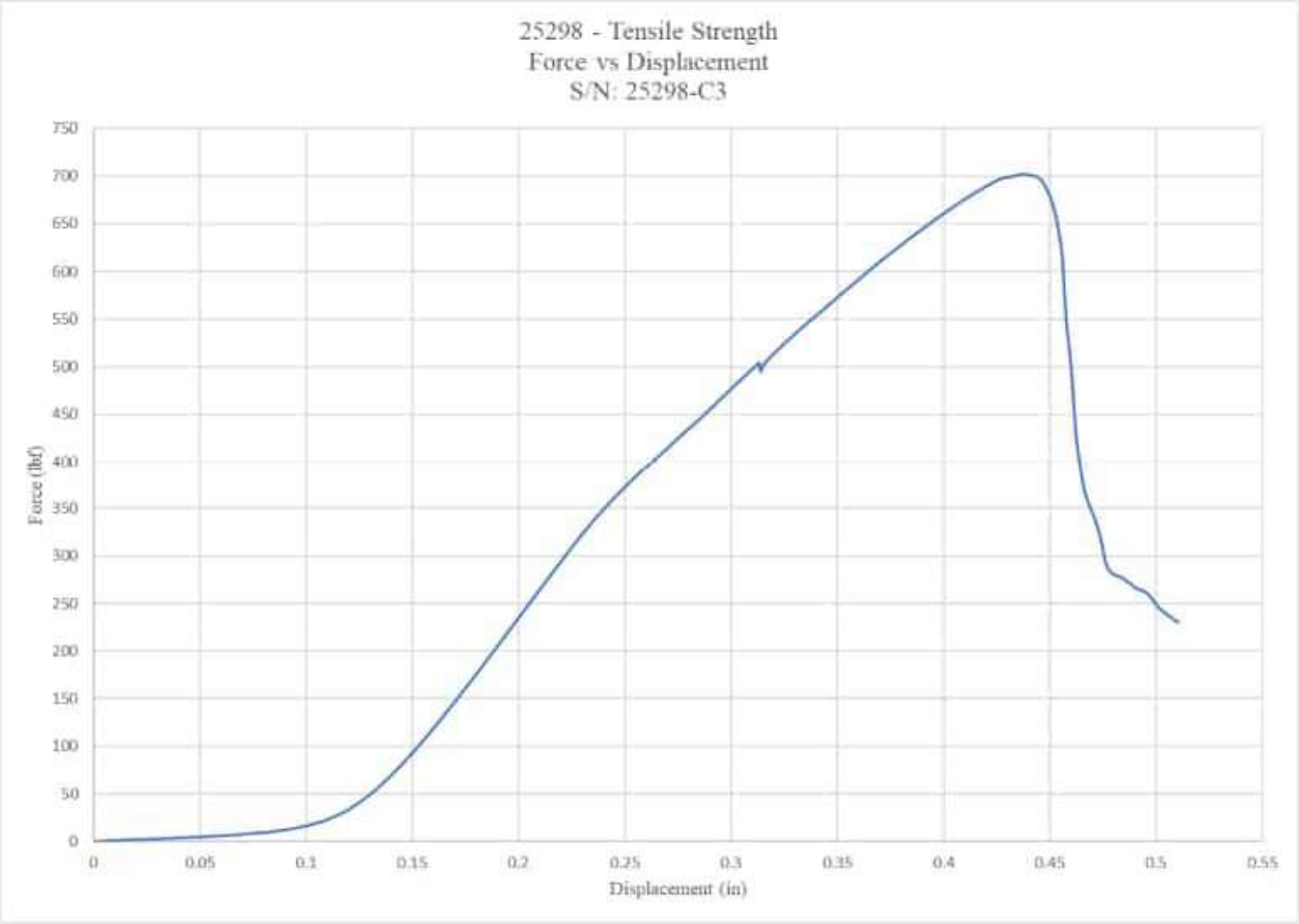
Test Data	
Serial No.	Maximum Force (lbf)
25298-C1	847.2589
25298-C2	1051.5520
25298-C3	702.2041
25298-C4	880.2131



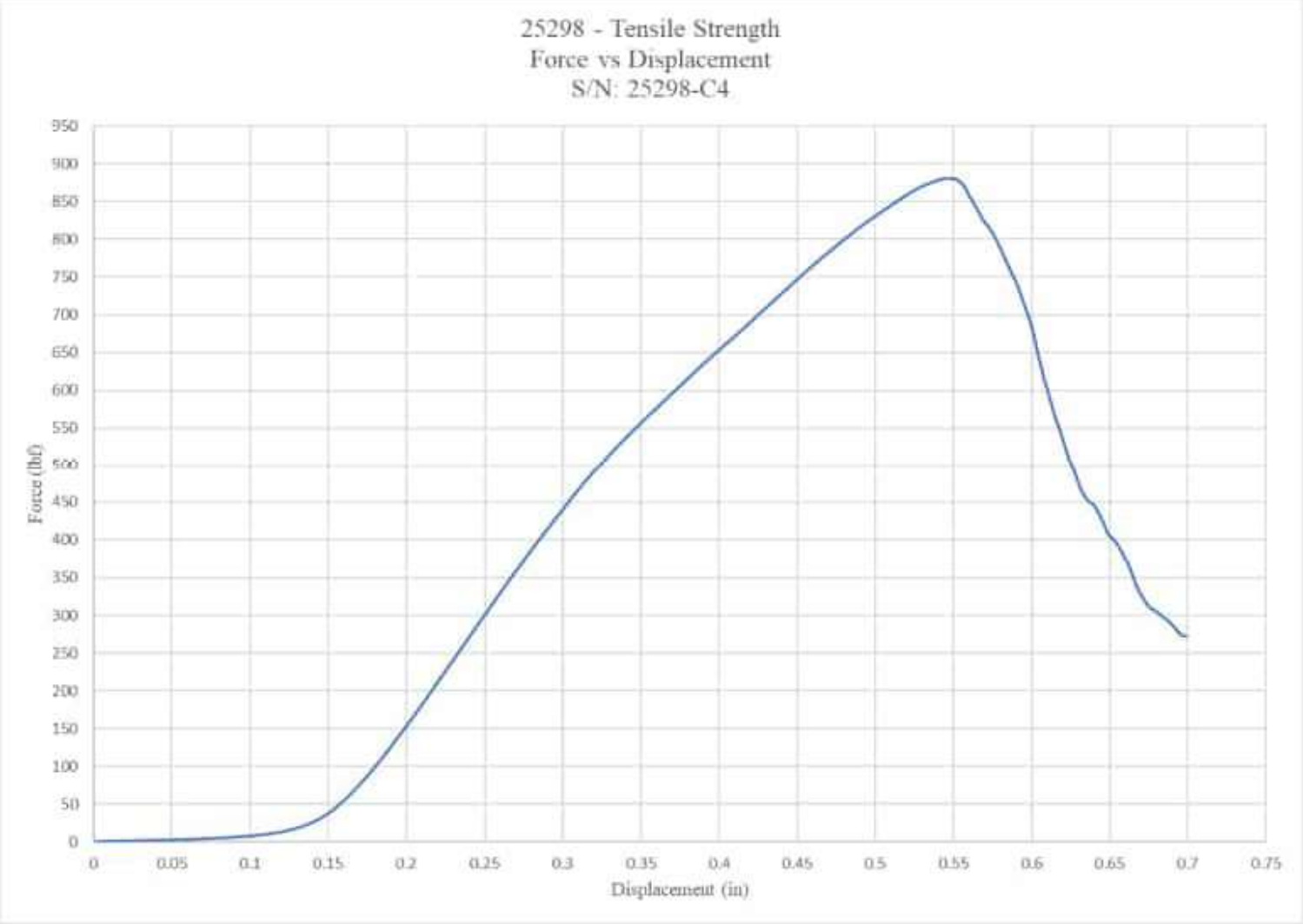
Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C2



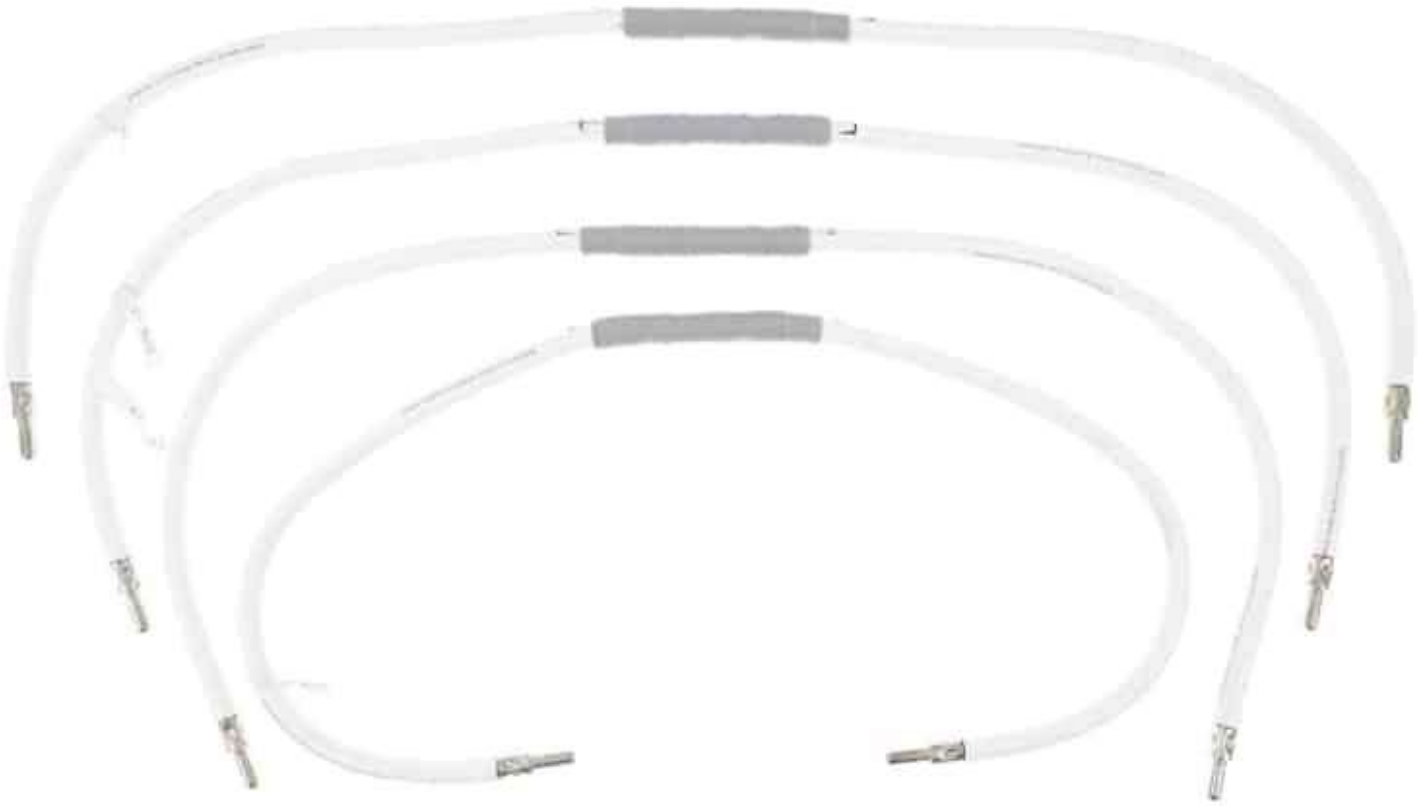
Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C3



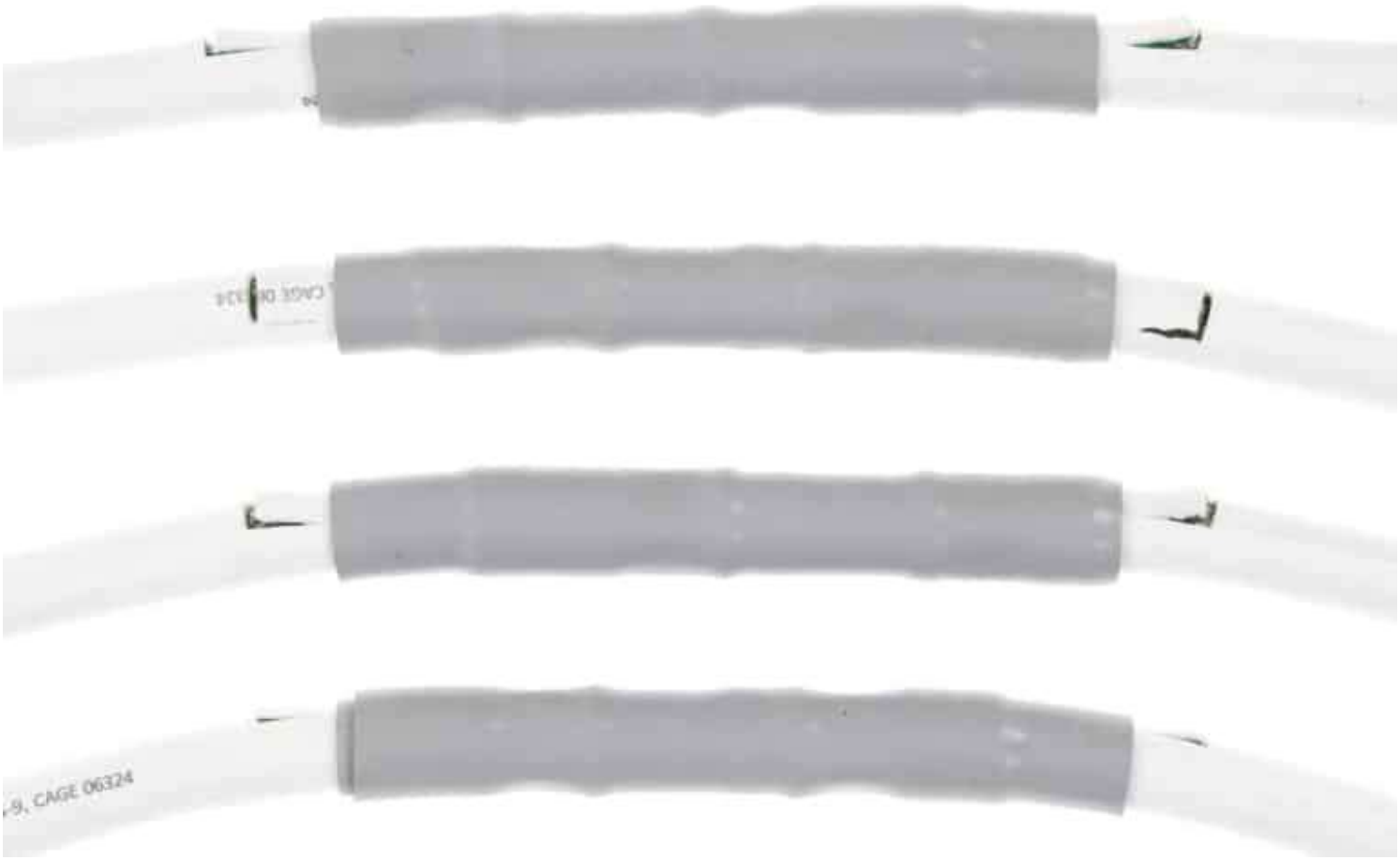
Description	Tensile Strength Test Plot
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C4



Description	Typical Tensile Strength Setup
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Post Tensile Strength Full Length of Sample
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1, 25298-C2, 25298-C3, 25298-C4



Description	Post Tensile Strength Straight Wall Tubing
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1, 25298-C2, 25298-C3, 25298-C4



Description	Post Tensile Strength Crimp Barrel End 1
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1, 25298-C2, 25298-C3, 25298-C4



Description	Post Tensile Strength Crimp Barrel End 2
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1, 25298-C2, 25298-C3, 25298-C4



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C1



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C2



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C2



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C3



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C3



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C4



Description	Post Tensile Strength Heat Shrink Barrel Removal
Test Name	Tensile Strength
Part Name	PwrLine HV
Test Group	3
Part No.	961-053-N-H-5-9
Serial No.	25298-C4

End of Report

Appendix

Date	Operator	Notes
7/8/2025	Lonnie Surratt	Received 2/0 wire and will begin to cut, strip and crimp these leads. Finished cutting and stripping 8, two foot leads. Crimped 4 socket contacts and 12 pin contacts to these leads.
8/11/2025	Lonnie Surratt	Received 3M tape needed for sample assembly. Will begin to assemble the #8 Wire leads for this project. Finished assembling the #8 gauge wire leads. Took pictures of each step and will upload to basecamp.
8/11/2025	Lonnie Surratt	Received 3M tape needed for sample assembly. Will begin to assemble the #8 Wire leads for this project. Finished assembling the #8 gauge wire leads. Took pictures of each step and will upload to basecamp.
8/12/2025	Lonnie Surratt	Assembling the size #2 gauge crimped wire leads with micro band and straight wall tubing. Finished assembling samples for the crimped #2 gauge Turbo Flex leads. Assembly includes mating the socket and pin wired contacts. Adding a micro band to the socket barrel to secure the mated connection. Add two wraps of 3M tape over the micro band. Finally adding two layers of straight wall tubing over the entire mated assembly. Performed this for 4 mated pairs of wired contacts.
8/13/2025	Lonnie Surratt	Assembling the last group of samples. These will be the #2/0 gauge crimped wire leads. Finished assembling the four, 2/0 Turbo Flex cables. Each cable set was coupled. Had a band attached to the socket barrel. 3M tape was added over the band with 2 wraps. Finally, 2 layers of straight wall tubing was added over the mated contacts.
8/13/2025	Lonnie Surratt	Assembling the last group of samples. These will be the #2/0 gauge crimped wire leads. Finished assembling the four, 2/0 Turbo Flex cables. Each cable set was coupled. Had a band attached to the socket barrel. 3M tape was added over the band with 2 wraps. Finally, 2 layers of straight wall tubing was added over the mated contacts.
8/13/2025	Lonnie Surratt	Assembling the last group of samples. These will be the #2/0 gauge crimped wire leads. Finished assembling the four, 2/0 Turbo Flex cables. Each cable set was coupled. Had a band attached to the socket barrel. 3M tape was added over the band with 2 wraps. Finally, 2 layers of straight wall tubing was added over the mated contacts.
8/14/2025	Mehrdad Mostoufi	Update meeting with the customer.
8/14/2025	Lonnie Surratt	Boxing up sample prep spare parts to be ready for shipment back to the customer after testing is completed.
8/29/2025	Ron Nguyen	Worked on compiling the scope of work. I have already completed with all the test parameters and am just waiting for the customer to confirm some floating questions that I had in regards to the vibration and shock testing.

9/3/2025	Ron Nguyen	Worked on revising and completing the scope of work as the customer uploaded a new QTP revision B onto Basecamp. Started to work on groups 1, 2, and 3 datasheets for visual and dimensional examination. Have all the format completed, just need to take the measurements, input the data, and upload the photos onto the datasheet.
9/3/2025	Daniel Wong	Labeling each sample. Photographing receiving sample conditions.
9/4/2025	Ron Nguyen	Worked on taking visual and dimensional examination measurements for group 1, 2, and 3 samples. Worked on compiling the datasheets for all 3 groups and added in all the photos into the project folder and datasheet. Completed the datasheets for all 3 groups and sent it out for review. Received feedback and will get to making those adjustments tomorrow. Waiting on customer to confirm the scope of work for approval before I begin additional testing which involves heat and electrical testing.
9/5/2025	Ron Nguyen	Worked on revising groups 1, 2, and 3's visual and dimensional examination datasheets. They are all completed and uploaded to Basecamp for the customer. Made folders for all the specific groups and testing. Uploaded the visual and dimensional examination photos onto Basecamp. Followed up with the customers in regards to the Scope of Work. Still waiting for a response.
9/8/2025	Ron Nguyen	Worked on preparing and gathering information in regards to the Contact Resistance testing at ambient conditions. Messaged the customer and created a layout drawing of how I was going to perform the Contact Resistance testing; however, they brought up questions in regards to the testing in which I brought answers and possible solutions to their concerns. Waiting on customer's response. Claimed and setup all equipment and samples. Ready for when the customer gives the okay to proceed with the testing.
9/9/2025	Ron Nguyen	Messaged customer in regards to their concern regarding the slit cut. Had to reclarify floating questions and the customer answered and cleared up the confusion. Cut little slit flaps in order to probe the wires of the cable. Completed the sample prep of group A, B, and C with the assistance of Carlos.
9/9/2025	Carlos Nungaray	Assisted Ron with sample prep.
9/9/2025	Carlos Nungaray	Assisted Ron with sample prep.

9/10/2025	Ron Nguyen	Worked on the Contact Resistance testing. Setup group A samples and got the setup reviewed by colleague. Looked through the QTP and the standards associated with the testing. Measured the voltage drop after the sample's temperature has stabilized. Completed group A sample 1 and 2 (levels 1 and 2). Currently working on group A sample 3.
9/10/2025	Carlos Nungaray	Assisted Ron with setup.
9/10/2025	Carlos Nungaray	Assisted Ron with setup and test.
9/11/2025	Ron Nguyen	Continued working on Contact Resistance (25C) testing for the group A and B samples. Completed all the group A samples and recorded the temperature, time, current, and voltage drop. Working on performing Contact Resistance for group B samples. Completed group B1 and B2 samples. Currently setting up for group B3 samples.
9/12/2025	Ron Nguyen	Continued working on the Contact Resistance testing for group B. Completed all these items and testing group 1C testing now. Running check out runs on all 3 thermal shock chambers to compensate for all our connectors and trained Carlos on how to perform thermal shock.
9/12/2025	Carlos Nungaray	Assisted Ron with photos.
9/12/2025	Carlos Nungaray	Cleaned and prepped samples for espec/thermal shock testing.
9/15/2025	Ron Nguyen	Continuing with testing group C. Completed testing C1, C2, and C3. Currently on the last connector, C4. Performed check out runs for thermal shock on the horizontal chamber. Created profile and running a check out run with a mock sample. Full cycle duration run. Gathered data from the ESPEC chamber and plotted the data from both ESPEC chambers. One Espec chamber stabilized at the specified desired temperature, but the other did not.
9/15/2025	Carlos Nungaray	Assisted Ron with sample prep for temp shock.
9/15/2025	Carlos Nungaray	Assisted Ron with sample prep.

9/16/2025	Ron Nguyen	Finished final Contact Resistance measurements. Took post photos of group C in Contact Resistance. Worked on Contact Resistance datasheets for groups 1, 2, and 3. Completed datasheets, sent it out for review before uploading to Basecamp for customer. Began a group B/C check out run on the ESPEC chamber. Plotted the data of the temperature cycling for groups B and C from the horizontal chamber and inspected the data to make sure the temperature and hours aligned with each other per QTP-1513. Will need to confirm the electrical portion of the temperature cycling after the 5th cycle with management tomorrow before I proceed.
9/17/2025	Ron Nguyen	Worked on revising the datasheet of Contact Resistance (25C) for groups 1, 2, and 3. Revised all data feedback and parameter wordings. Uploaded it to Basecamp for the customer. Plotted a group B/C ESPEC chamber temperature cycling check out run. Plot looks like it can hold temperature. Can resume testing once I get approval from upper management about a concern I had for this testing.
9/17/2025	Carlos Nungaray	Assisted Ron with sample prep.
9/18/2025	Mehrdad Mostoufi	Internal meeting to discuss Contact Resistance measurement at 200C and suggest solutions to the customer.
9/18/2025	Ron Nguyen	Talked to Mehrdad about the electrical testing concern that I had and we came up with some options in regards on how to perform it. Suggested these ideas with the customer and customer approved of the option where after the completion of the thermal shock testing, the specimen will be transferred to a chamber set at 200C and Contact Resistance will be measured with the wire leads outside the chamber. Created a heat chamber profile where I see if it can stabilize at 200C. Took out previous safety wire setup on group A connector and reconfigured the setup again.
9/19/2025	Ron Nguyen	Continued working on sample prepping all the group A, B, and C samples onto racks and into the chambers for the temperature cycling testing. Groups A and B are installed onto the testing racks and will be tested on Monday. Group C is installed into the horizontal thermal shock chamber and will be tested on Monday. Carlos and I moved the sun chamber next to the power supply so that post temperature cycling, the samples can be tested for Contact Resistance at 200C. Sent setup photos and uploaded it to the customer on Basecamp for confirmation.
9/22/2025	Ron Nguyen	Began temperature cycling for group A and C in the late afternoon. Began the 200C chamber bake out check out run. Took setup photos and started each respective temperature chamber. Troubleshooted a little of the horizontal chamber because testing did not start; however, that issue was resolved.

9/23/2025	Ron Nguyen	Worked on taking out Group A from the thermal shock chamber. This testing is moving towards it electrical testing. Group C's first sample was completed. Group B's 1 and 2 are currently undergoing thermal shock. Group C's 2nd sample is currently undergoing testing. Extracted all the data from group A's testing and plotted the graph of the temperature cycling. Obtained the data from sample C1.
9/24/2025	Ron Nguyen	Worked on setting up for the Contact Resistance testing at 200C. Completed with sample A1, A2, and A3. Took out sample C2 and placed in C3 for thermal shock. Took out sample B1/B2 and placed in B3/B4 for thermal shock testing. Took setup photos of each cycle. Extracted the thermal shock data for the previous samples.
9/24/2025	Daniel Wong	Assisting Ron with High Current Test setup under temperature.
9/25/2025	Mehrdad Mostoufi	Update meeting with the customer.
9/25/2025	Ron Nguyen	Continued performing the Contact Resistance testing with the samples at 200C. All of the group A samples are completed. Half of group B/C are completed. Remaining are 25298 - B3, B4, C3, C4. Setup 25298-C4 into the chamber and applied safety wire to it to prevent movement during shuttle transition. Extracted the temperature cycling data for C3 and B3/B4 samples. Plotted and graphed the temperature cycle testing within the chamber for all of sample group A, Sample B1 and B2 from sample group B, and sample C1 and C2 for sample group C. Organized working area so that testing can resume again on Monday when job boss returns.
9/29/2025	Ron Nguyen	Began the temperature cycling testing for sample 25298-C4. Extracted the samples 25298-B3 and 25298-B4 from the chamber to take post photos from within the chamber and on the Ortery. Obtained the temperature cycling data and plotted the data. Continued with the Contact Resistance testing at 200C for the remainder of the testing and now I am only just waiting on 25298-C4 to be completed so I can take the Contact Resistance post measurements. Started working on the datasheets for groups A, B, and C. Inputted in the data and information page; just need to input the plots which are already made and the setup photos. Took photos of each sample of groups A and B on the Ortery.

9/30/2025	Ron Nguyen	The last sample that experienced the temperature cycling (25298-C4) has completed and was moved on towards the Contact Resistance measurement at 200C. Inspected all UUTs that underwent testing. Took setup photos and post photos on the Ortery of all sample C. Moved towards plotting the remaining plots of the temperature cycling. Worked on the group A, B, C datasheets for temperature cycling. Completed it and sent it to reviewer to review.
9/30/2025	Daniel Wong	Reviewing DS103, 203, 303 (Temperature Cycling)
10/1/2025	Ron Nguyen	Worked on revising all the datasheets of group A, B, and C for the temperature cycling. Re-adjusted all graphs, plots, photos, and added additional information to the data page. Re-inspected the samples for any additional changes.
10/1/2025	Daniel Wong	Reviewing DS103, 203, 303 (Temperature Cycling) after Ron made edit changes.
10/2/2025	Ron Nguyen	Worked on revising all the datasheets for groups 1, 2, and 3. Fixed the part numbers on the photos. Fixed additional items on the datasheet per reviewers' feedback.
10/6/2025	Ron Nguyen	Worked on cleaning all the samples and replacing all the serial number tapes with new ones. Began the next testing which is Contact Resistance at 25C and have started and completed the first sample 25298-A1 at both voltage levels. Setup the 25298-A2 sample and will begin that tomorrow morning.
10/7/2025	Ron Nguyen	Continued with working on the Contact Resistance at 25C. Completed all the Contact Resistance (25C) for all of group A. Both test level 1 and 2 have been completed. Set up group B sample (25298-B1) and will begin this testing tomorrow morning. Worked on creating the fixtures for vibration on SolidWorks in correlation to Figure 4 on QTP-1513. 3D printed the fixture for a fit check, reworked some areas of the mock fixture and 3D printing new version to fit check tomorrow. Looked for material on McMaster and have everything in the cart; however, I sent a message to the customer regarding the mounting concern onto the shaker due to how long the cables are. Waiting for customer to follow up with a response.
10/8/2025	Ron Nguyen	Continued working on the Contact Resistance testing (25C). Completed 25298 - B1, B2, and B3. Have the connector setup for B4 and will begin that tomorrow morning. Re-worked some of the fixture clamp designs for the UUT for vibration and currently 3D printing new ones for a fit check. Worked on making the SolidWorks fixture design for group C and 3D printing out the model for a fit check.

10/9/2025	Ron Nguyen	Continued working on the Contact Resistance (25C) testing. Completed all of group B samples and completed 25298-C1. Have 25298-C2 setup and will work on performing this testing tomorrow morning. Worked on finalizing the vibration fixture clamps for the cables for groups A, B, and C. 3D printed the mock fixtures and fit checked the UUTs. Worked on creating the waterjet template file and scheduled a waterjet time with machine shop colleague to create these fixtures tomorrow.
10/10/2025	Jeremy Argueta	Assisted Job boss with sample transfer.
10/10/2025	Ron Nguyen	Continued working on the Contact Resistance testing. The testing is on its last sample. Went over to Rhett for waterjet assistance. Worked on re-working the SolidWorks model for the waterjet cut outs. Was able to cut out 2 pair of fixture sets of the sample.
10/13/2025	Ron Nguyen	Worked on final Contact Resistance testing and completed the testing. Post testing activity was performed (visual inspection and post photos). Worked on 3D printing the fixturing alignment template. Worked on and completed the Contact Resistance (25C) datasheet for groups 1, 2, and 3. Sent it to reviewer for feedback. Worked on making the new SolidWorks waterjet file for the remaining fixture plate clamps.
10/13/2025	Daniel Wong	Assisting Ron with taking post sample photos
10/14/2025	Ron Nguyen	Worked on drawing alignment holes on the fixture clamps. Made changes to the Contact Resistance datasheet for group 1, 2, and 3; then uploaded it to Basecamp. Worked on creating more waterjet profiles for the remaining fixture clamps of group 2 and 3. Will work on these tomorrow.
10/15/2025	Ron Nguyen	Worked on making the new waterjet profiles for the 6x48" aluminum material. Also worked on making individual files of group sets just in case it takes too long to cut it all in one go. Sent the file to Rhett and he said it would only take 2-1/2 hours to machine; however, it will be machined sometime this week. Worked on milling out the holes for the top parts of the fixtures.
10/16/2025	Rhett Butler	toolpath multiple fixtures for Ron, prove out paths. Show Ron how to operate.
10/16/2025	Ron Nguyen	Worked on milling out all samples for group A. Group A fixtures are now in the thread/insert stage which will be performed tomorrow. Rhett created CNC codes for each of the bottom pieces of the fixtures for sets A, B, and C and I will be using the CNC for cutting to reduce cutting time. Scheduled a waterjet cut with Rhett tomorrow for the remaining pieces. Worked on adjusting the hole sizes for the hole cut out on SolidWorks.

10/17/2025	Ron Nguyen	Worked on deburring the fixture clamps for group A and applied the threaded holes for the bottom fixture clamps for group A. Continued using the CNC to machined some parts when it was available. Broken off all the remaining waterjet group sets for A, B, and C and began deburring off the rough edges.
10/20/2025	Ron Nguyen	Continued working on the fixture clamps. Continued with using the CNC for cutting and deburring the rough edges. Reviewed on how to mount the sample with the fixture onto the shaker.
10/21/2025	Ron Nguyen	Continued working on making the fixture clamps. Milled all the top fixtures and now just need to deburr them and smoothen out the edges. Continued with using the CNC to complete all the bottom fixture cut outs. Taped them with the correct thread size. Currently deburring all parts before applying the inserts.
10/21/2025	Carlos Nungaray	Assisted Ron with fixturing/deburring 48 fixtures.
10/22/2025	Ron Nguyen	Continued working on all the deburring of the samples and have completed it. Samples are washed and preparing to put in the insert. Had a tutorial on how to apply inserts into the fixture clamp. Dried off washed fixture clamps.
10/22/2025	Daniel Wong	Assisting Ron with attaching inserts to fixturing. Hammering inserts into fixture.
10/23/2025	Ron Nguyen	Worked on sample prepping the fixture clamps onto the sample and applying silicone protection tape on the sample for the mount. Arranged the different fixture clamps to go with what sample.
10/23/2025	Daniel Wong	Continuation of attaching inserts to fixturing. Hammering inserts into fixture.
10/27/2025	Ron Nguyen	Worked on making adjustments to the vibration profile. Ran a bare check out run and everything looked good and in tolerance. Been working on mounting the samples on the slip vibration; however, I need to find the mounting holes that is able to secure the sample and fixture clamps at the appropriate length. Ordered more spacers in order to secure the ends at the 1 inch space and testing should be able to begin tomorrow for the x- and y-axis.
10/28/2025	Ron Nguyen	Worked on re-setting up the x-axis vibration setup for the cable samples. Secured the ends and clamped down the leading ends of the cable. Torqued every bolt onto the slip table. Installed discontinuity monitor wires for each of the cables in group A.

10/29/2025	Ron Nguyen	Started the vibration profile, took setup photos for the vibration setup, monitoring the sample time to time. Worked on fixing and adjusting the silicone tape wraps for fixture clamp mounting for groups B and C.
10/31/2025	Ron Nguyen	Completed the remaining hours from the 18 hour testing of the sine vibration test. Took post photos and looked at the data. Installed discontinuity wires for group B and group C.
11/3/2025	Ron Nguyen	Setup the group A samples in the y-axis orientation. Took initial setup photo of the y-axis setup and rewired the discontinuity monitors. Began the vibration test in the y-axis and it is currently in-progress.
11/3/2025	Carlos Nungaray	Assisted Ron with vibration setup.
11/4/2025	Ron Nguyen	Started up the shaker and amplifier for vibration. Continuing with the vibration in the Y-Axis of Group A.
11/5/2025	Ron Nguyen	Started up the chamber and ran the remaining y-axis of the group A samples. Took post photos and began setting up for the group B samples in the x-axis.
11/6/2025	Ron Nguyen	Worked on setting up Group B vibration test and started the vibration test in the x-axis.
11/7/2025	Ron Nguyen	Warmed up the amplifier and started the vibration test. Samples are still good and is still running in-progress in the x-axis of group B samples.
11/10/2025	Ron Nguyen	Orientated all the samples of group B in the Y-axis and began the vibration test.
11/11/2025	Ron Nguyen	Warmed up the amplifier and continued the vibration test.
11/12/2025	Ron Nguyen	Ran the remaining hours of the group B samples in the y-axis. Completed the group B y-axis sample run and took post photos. Began to set up for the group C, x-axis orientation. Completed the setup and started the testing. Test is currently in-progress.
11/13/2025	Ron Nguyen	Warmed up the amplifier and continued the run for the vibration profile of group C in the x-axis.

11/14/2025	Ron Nguyen	Warmed up amplifier and began the vibe profile. Completed with the group C vibration in the x-axis. Post photos have been taken and moving on towards setting up and running the sample in the y-axis. Setup has been complete for the y-axis and the group C samples are currently being ran.
11/17/2025	Ron Nguyen	Warmed up the amplifier and continued with the vibration test. Group C is still currently running in the (y-axis) and this should be completed by tomorrow. Assisted colleague with reworking a tool adapter for when I move all the samples into the z-axis.
11/18/2025	Ron Nguyen	Warmed up the amplifier and continued the remaining y-axis run for the group C samples. Post photos were taken after group C's completion. Worked with Carlos to put the head expander on the SK07 shaker and mounted all the group A samples for the z-axis vibration. Samples are currently on the shaker and vibration testing is in-progress. Started working on compiling the vibration datasheet for groups A, B, and C.
11/18/2025	Carlos Nungaray	Tear down slip setup on LDS and rotate to the vertical axis. Mount head expander. Perform bare fixture. Mount samples to head expander. Performed 2 hours of sine vibration test.
11/24/2025	Ron Nguyen	Worked on taking off all samples of group A off the shaker and assembled group B samples onto the shaker for testing. Began the group B vibration test in the z-axis. Performed post testing activity on group A samples by inspection and cleaning. Notes taken is that during the aftermath of vibration, it seems the insulation has shifted at the ends of the cables. Moving towards post testing activity pictures and informing the customer about the condition of the samples before moving on the Contact Resistance testing for group A.
11/25/2025	Ron Nguyen	Worked on continuing the vibration test in the z-axis for group B. Took post photos of group A samples on the Ortery and informed the customer about the circumstance of the samples. Customer approved to move forward with the Contact Resistance testing. Move forward with setting up the group A first sample onto the Contact Resistance setup.
11/26/2025	Ron Nguyen	Worked on running the remaining hours for the group B samples in the z-axis. Worked on the vibration datasheet for group A and completed it. Need to send it out for review. Worked on Contact Resistance testing for group A samples. Completed samples A1, A2, and A3. Remaining group A samples will be completed on Monday.

12/1/2025	Ron Nguyen	Continued with Group A Contact Resistance testing. Completed all of group A Contact Resistance testing. Unmounted all samples of group B from the shaker and setup all the group C samples for the z-axis. Group C samples are currently being ran.
12/2/2025	Ron Nguyen	Warmed up the shaker and continued with the group C vibration testing. Post pictures of Group B post vibration has been taken and removed all the silicone tape. Setup and began the Contact Resistance testing for group B. Samples for group B that has been finished testing so far are: B-1 and B-2. Worked on the Group B vibration datasheet and completed it. Working in-progress on Group C vibration datasheet as the testing is almost done and should be completed by tomorrow. Brainstormed a concept on how to mount the samples onto the cube for shock testing.
12/3/2025	Ron Nguyen	Continued with the final 8 hours of the vibration in the z-axis for group C and completed it. Worked on group B's Contact Resistance testing which consisted of completing 25298-B3 and 25298-B4. Group B is now complete and moving on towards group C. Worked on the vibration datasheet for groups A, B, and C. Worked on the Contact Resistance datasheet for groups A and B.
12/4/2025	Ron Nguyen	Worked on unmounting the group C samples from the shaker. Performed post testing activity on the group C samples and took off all the silicone tape on the samples. Cleaned the samples and mounted them onto the Contact Resistance area. Group C sample 25298-C1 has completed Contact Resistance testing and need to finish off C2, C3, and C4 tomorrow. Talked to colleague to discuss about possible ideas on how to mount the samples for shock and we think it is best to make a fixture/adapter for the tombstone fixture. Had meeting with the customer to provide updates in regards to project. Worked on making the shock fixture on SolidWorks.
12/4/2025	Daniel Wong	Assisting with Photographing post sample condition.
12/4/2025	Daniel Wong	Assisting with Designing a 3D printed fixture that will level the mounted wires on the shaker. Measuring Shaker/ troubleshooting design.
12/5/2025	Ron Nguyen	Worked on setting up the different group C samples to complete the Contact Resistance testing. Samples C-2, C-3, C-4 are completed. Worked on finishing up the shock fixture design on SolidWorks and 3D printing a mock fixture to check for alignment.

12/8/2025	Ron Nguyen	Worked on and completed the vibration datasheets for group A, B, and C. Sent them out for colleague to review and provide feedback. Worked on and completed the Contact Resistance datasheets for group A, B, and C. Sent them out for colleague to review and provide feedback.
12/8/2025	Art Sandoval	Removing Head expander off SK07
12/8/2025	Art Sandoval	Removing Head expander off SK07
12/8/2025	Daniel Wong	Reviewing Three Contact Resistance data sheets.
12/15/2025	Carlos Nungaray	Reviewed 105, 205, and 305 datasheets.
12/16/2025	Ryan Wong	Review IR test setup.
12/17/2025	Ron Nguyen	Worked on creating the chamber temperature plots and revised the datasheets. Uploaded vibration and Contact Resistance datasheet for the customer on Basecamp for all 3 groups.
12/18/2025	Ron Nguyen	Worked on setting up a bare fixture run for the shock testing in the z-axis. Ran a bare fixture run in both the positive and negative direction (3 shocks each). Reviewed the data and it is in tolerance. Sample prepping group A to be ready for shock testing.
12/18/2025	Ryan Wong	Review mechanical shock test parameters.
12/19/2025	Ron Nguyen	Worked on setting up for the shock testing. Mounted the samples and took setup photos and will send to customer for approval before I run the test.
12/19/2025	Daniel Wong	Assisting Ron with Preparing samples for Vibration Testing. Applying Silicon Tap 6 inches apart from the center and 12 inches between silicon. Ensuring silicon taps will fit p-clamps.
12/22/2025	Ron Nguyen	Worked on setting up for shock testing until I noticed that the parameters were different in the new QTP revision and it was not mentioned. Confirmed with the customer about testing parameters to see if the shock testing was either 30G or 300G. The customer confirmed it was 30G shock. Unmounted the samples and performed the 30G shock test per EIA-364-27, Condition I. Sent the data to the customer and the customer approved of the profile and shock bare fixture run data. Re-mounted the sample and will begin testing again tomorrow morning.

12/23/2025	Ron Nguyen	Worked on performing the shock testing for all of group A samples and the first 2 samples of group B. Completed 25298-A1, 25298-A2, 25298-A3, 25298-A4, 25298-B1, 25298-B2. Setup, took photos, and ran the shock test. Shock test 30G, 3 shocks in the positive and 3 shocks in the negative.
12/23/2025	Carlos Nungaray	Assisted job boss.
12/24/2025	Ron Nguyen	Worked on setting up and running the vibration testing for samples 25298-B3, 25298-B4, 25298-C1, and 25298-C2. Will complete 25298-C3 and 25298-C4 on the following Monday.
12/24/2025	Carlos Nungaray	Assisted job boss with testing.
12/29/2025	Ron Nguyen	Worked on completing the remaining shock testing for 25298-C3 and 25298-C4 and took setup photos. Unmounted all the samples and fixtures from the shaker and proceeded with post testing activity. Removing all the silicone tape from the samples to prepare for post photos under the Ortery.
12/29/2025	Carlos Nungaray	Assisted job boss with testing.
12/29/2025	Daniel Wong	Removing Silicon tape from test samples. Photographing post sample conditions.
12/30/2025	Ron Nguyen	Worked on and completed groups A, B, and C's shock datasheet. Formulated all the plots and inputted in all the testing photos into the datasheet. Sent the datasheet out for colleague to review before I upload it to the customer on Basecamp.
12/31/2025	Ron Nguyen	Setup for Contact Resistance for group A sample A1. Ready for testing on Friday.
1/2/2026	Ron Nguyen	Worked on Contact Resistance at ambient temperature on Group A samples. Completed group A sample 1 and 2. Currently working on sample 3 in group A.
1/5/2026	Ron Nguyen	Worked on continuing with the Contact Resistance testing. Completed all of group A samples and took photos of the testing and recorded all the data. Moving forward with setting up and testing group B samples.

1/6/2026	Ron Nguyen	Took post photos of sample A4 and completed group A in Contact Resistance. Moving towards setting up and testing group B samples. Have completed group B's sample: B1, B2, and the first Contact Resistance of B3. Will complete the remainder of B3 and B4 tomorrow.
1/7/2026	Ron Nguyen	Worked on Contact Resistance at ambient temperature, measured and recorded the resistance value. Setup and took post photos. Completed all of group B Contact Resistance testing, moving onto group C now.
1/8/2026	Ron Nguyen	Worked on performing Contact Resistance on Group C connectors. Completed the Contact Resistance testing for group C samples C1, C2, and the first current of C3. Will complete the rest of the group C testing tomorrow. Setup, took setup photos, and ran the test.
1/9/2026	Ron Nguyen	Continued with the remaining Contact Resistance testing for group C. Completed all of the group C testing, took setup photos and recorded all of temperature and electrical data. Worked on making the revisions for the datasheet for group's A, B, and C. Upload it to the customer on Basecamp.
1/13/2026	Ron Nguyen	Worked on Group's A, B, and C datasheet for Contact Resistance and ambient temperature.
1/14/2026	Daniel Wong	Assisting Ron with Photographing post sample conditions.
1/27/2026	Ron Nguyen	Worked on taking post photos of the Contact Resistance test. Took all photos (front and back) for groups A, B, and C.
1/30/2026	Ron Nguyen	Worked on Contact Resistance datasheet for groups A, B, and C. Completed it and sent it out for review and feedback.
2/2/2026	Ron Nguyen	Worked on different methods on how to run the tensile strength testing for the samples by either using the Instron clamps or making a separate fixture to adapt it to the Instron. Currently waiting on sun chamber for the next testing.
3/6/2026	Ron Nguyen	Worked on preparing a setup for Contact Resistance at 200C. Got information on how to perform the test to avoid any burning wires for measurements once temperature is reached. Will begin the test for group A on Monday.
3/9/2026	Ron Nguyen	Worked on completing the setup for Contact Resistance at 200C; however, there was no thermal measurement equipment so I informed quality and they will be working on calibration tomorrow.

3/10/2026	Alan Alvarez	Assist Job Boss. Make 3 K-type fiberglass Thermocouples.
3/10/2026	Ron Nguyen	Worked with Alan to make thermocouples that can withstand 200C for the Contact Resistance at temperature testing. Informed Margarito to calibrate the thermocouple ports. Everything is good to go and I can begin the testing tomorrow.
3/11/2026	Ron Nguyen	Worked on setting up and performing the Contact Resistance at 200C. Cable clamp burnt off from the equipment so I had to strip the cable from Vertical Laboratory's power supply and insert new cables to the clamp harness. Completed with the fix and began the test for 25298-A1 at current level 1 = 45A and current level 2 = 90A. Will continue with Group A, B, and C tomorrow.
3/11/2026	Carlos Nungaray	Assist job with cable clamp.
3/12/2026	Ron Nguyen	Worked on performing Contact Resistance at elevated temperature (200C) for group A and completed it. Moving onto Group B tomorrow.
3/13/2026	Ron Nguyen	Worked on setting up and performing Contact Resistance at elevated temperature back and forth. Completed group B Contact Resistance testing. Will work on group C next week.
3/16/2026	Ron Nguyen	Worked on Group C Contact Resistance at elevated temperature (200C) and completed it. Worked on taking setup photos and running the tests with both current levels 1 and 2.
3/16/2026	Daniel Wong	Photographing post sample conditions for Ron. Assisting Ron with Contact resistance at temperature. Performing the last sample for Ron at 200C with a current of 165A then after stabilizing current was ramp to 360A.
3/17/2026	Ron Nguyen	Worked on creating a fixture to mount onto the Instron for the last testing for this project which is tensile test. Created a top and bottom fixture plate on SolidWorks and currently 3D printing the parts for a fit check. Researched necessary items to purchase for the creation of the fixture plate on McMaster. Worked on the Contact Resistance at temperature (200C) datasheet and completed compiling all the temperature plots for group A.
3/17/2026	Daniel Wong	Assisting With photographing group C post sample conditions.

3/18/2026	Ron Nguyen	Plotted all the Group B and C data from the WATLOW to produce a time vs temperature plot. Worked on and completed the Contact Resistance (200C) datasheet for group A, B, and C. Sent it out for review and awaiting feedback before uploading it to Basecamp. Received the feedback from colleague and uploaded the datasheets to Basecamp for customer. Worked on tensile strength fixture re-work for another fit check. Currently 3D printing a mock fixture plate for the fit check and it should be completed by tomorrow morning.
3/18/2026	Daniel Wong	Reviewing DS109, 209, 309 Contact Resistance data sheet.
3/19/2026	Ron Nguyen	Worked on fit checking the fixture plate that was 3D printed the day prior. Everything was perfect for the setup. Went to machine shop to waterjet and deburred the plate. Once completed, a dummy wire was used to test out the fixture plate being pulled by tensile tester to see if any issues occur. According to the data and observations, the samples mounted on the fixture plate began to slip overtime and did not produce a break in the wire. The reason for the fixture plate is with respect to the QTP and scope of work. Took a picture of the setup and will inform the customer of the issues resulting with performing tensile testing using a plate. Instead, we will suggest using fixed adapters that are compatible with the Instron and can withhold the slip of the sample. There are some missing adapter pieces so they must be ordered.
3/19/2026	Danny Tan	Discussed Crimp Tensile Strength test setup with Ron.
3/19/2026	Ryan Wong	Assist with tensile test setup.
3/20/2026	Ron Nguyen	Worked on setting up fixture adapters onto the Instron so I can properly produce a valid check out run involving a tensile strength test to failure. Tried one iteration of a check out wire and it began to slip with the current setup. Using 2 mandrills instead in order to compensate for the slip instead and so far the check out run shows that the dummy wire is still being fixed and stationed at its current position. Dummy wire is stronger than expected so will use another brittle wire in order to see a breaking point as another check out run.
3/20/2026	Ryan Wong	Assist with tensile test setup.
3/23/2026	Ron Nguyen	Sent customer updated typical setup and sent them a follow up message in regards to setup. Customer confirmed of the setup as he approves of clamping grip point at the crimp barrel. Setup sample 25298-A1 on the tensile tester and sent a setup photo for customer to approve. Customer approved of the testing and allowed me to proceed with the testing.

3/24/2026	Ron Nguyen	Prepared tensile strength setup for test samples. Performed tensile strength testing on groups A and B and completed them to failure. Worked on groups C samples; however, we encounter an issue with the grip of the cables/crimp contact of the sample. Tried different setups and adaptations. The cable itself for group C is too big and thick that there needs to be new adaptations in order for the sample to fit and be mounted on the Instron. Not only that, if we stretched it out all the way, the Instron will not have enough distance remaining to stretch out the sample. Moved group C sample to big Instron and will test it there.
3/24/2026	Danny Tan	Worked with Ron on Crimp Tensile test setup. Reviewed and approved test setup. Suggested alteration to test setup for larger gauge wire.
3/25/2026	Ron Nguyen	Worked on group C sample tensile strength testing. Set up the sample with new mounting adapters, performed the test, and completed it. Setup, Initial setup photos, video recording of the testing, saving data in designated folders. Informed the customer that testing is complete on Basecamp and moved forward with compiling the datasheet for groups A, B, and C. Plotted all the data for groups A, B, and C which have 4 samples each group. Worked on the datasheet and only need to input in the testing photos for groups A, B, and C and it will then be sent out for review before uploading it to Basecamp for the customer.
3/25/2026	Danny Tan	Checked test setup on alternate Instron for increased travel capacity.
3/26/2026	Ron Nguyen	Took post photos of group A, B and C samples after tensile strength testing. Took post photos of the entire sample, middle heat shrink band, and both ends of the crimp barrel and plug head for all groups. Completed the tensile strength datasheet for group A, B, C, and sent them out for review. Inputted some testing photos items onto Basecamp folders. Still in progress with catching up on this. Communicated with the customer in regards to post test of tensile test. Customer wants to proceed with removing the heat shrink and proceed with internal inspection.
3/27/2026	Ron Nguyen	Finished uploading all testing photos to their designated folder and changed the name of the testing for each photo.
3/30/2026	Ron Nguyen	Worked on extracting the heat shrink from the sample in order to examine the interior failures of the sample post tensile strength testing. Cut out the heat shrink and then took photos and observation notes on the Ortery. Group A conductor wires ripped, group B conductors only showed minor scratches, group C showed cracks on the barrel contact. Informed the customer and uploaded all photos on Basecamp.
3/31/2026	Ron Nguyen	Worked on compiling and re-working the datasheets of tensile strength for group A, B, and C. Completed it and uploaded it to Basecamp for the customer. Informed quality that the datasheets are ready for a report.