REPORT NUMBER: SPNCAP-CAL-25-006

NEW CAR ASSESSMENT PROGRAM (NCAP)
SIDE IMPACT POLE TEST

KIA Georgia, INC
2025 KIA EV6
5 Door SUV

NHTSA No: O20254200

PREPARED BY:
CALSPAN CORPORATION
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June 5, 2026

FINAL REPORT

PREPARED FOR:
U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF CRASHWORTHINESS STANDARDS
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Prepared by: _____ Date: June 5, 2026
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FINAL REPORT ACCEPTANCE BY OCWS:

_____
Division Chief, New Car Assessment Program
NHTSA, Office of Crashworthiness Standards

Date: _____

_____
COTR, New Car Assessment Program
NHTSA, Office of Crashworthiness Standards

Date: _____

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15. *Supplementary Notes*

16. *Abstract*

A 32.20 km/h (20 mph), 75° oblique impact Side NCAP Test was conducted on the subject 2025 KIA EV6 5 Door SUV in accordance with the specifications of the Office of Crashworthiness Standards Side NCAP Pole Laboratory Test Procedure for the generation of consumer information on vehicle side pole crash protection. This test was conducted at Calspan Corporation's Transportation Test Operations facility in Buffalo, New York on August 12, 2025.

The impact velocity of the vehicle was 32.00 km/h, and the ambient temperature at the struck (driver's) side of the target vehicle was 21°C. The target vehicle's maximum post-test static crush was 242 mm located at level 3. The test vehicle's occupant performance data is as follows:

M easurement Description	Driver ATD (SID-IIs) (Serial No.300)		
	Units	Threshold	Result
Head Injury Criteria (HIC36)		1000	150.769
Resultant Lower Spine Acceleration	G	82	57.238
Total Pelvic Force (sum of acetabular and iliac forces)	N	5525	2546.750
Maximum Thoracic Rib Deflection	mm	38	20.176
Maximum Abdominal Rib Deflection	mm	45*	26.153

The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.

17. *Key Words*	18. *Distribution Statement*
New Car Assessment Program (NCAP) Side Impact Pole Part 572V SID-IIs	Copies of this report are available from: National Highway Traffic Safety Administration Technical Information Services Division, 1200 New Jersey Ave. SE Washington, D.C. 20590

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Form DOT F1700.7 (8-72)

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SECTION 1

TEST PURPOSE AND PROCEDURE

This side impact test was conducted as part of the MY 2025 New Car Assessment Program Side Impact Test Program, sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. 693JJ920D000016. The purpose of this test is to generate comparative side impact performance in a 2025 KIA EV6 5 Door SUV. The side impact test was conducted in accordance with the Office of Crashworthiness Standard's Side NCAP Pole Laboratory Test Procedure, dated March 2020.

SECTION 2

SUMMARY OF TEST RESULTS

A rigid pole side impact test was conducted on a 2025 KIA EV6 5 Door SUV. The subject vehicle was towed into the rigid pole at an angle of 75º and a velocity of 32.00 km/h. The test was conducted by Calspan Corporation's Transportation Test Operations facility in Buffalo, New York on August 12, 2025. Pre-test and post-test photographs of the test vehicle and side impact dummy (SID-IIs) are included in Appendix A of this report.

One Part 572V (SID-IIs) dummy was placed in the driver designated seating position according to instructions specified in the OCWS Side NCAP Pole Laboratory Test Procedure, dated March 2020. The side impact event was documented by 11 cameras. Camera locations and other pertinent camera information are included on page 3-11 in this report.

The Part 572V (SID-IIs) dummy was instrumented accordingly:

Head CG tri-axial accelerometers
Thorax upper, middle, and lower rib displacement potentiometers
Abdomen upper and lower rib displacement potentiometers
Lower spine tri-axial accelerometers
Iliac load cell
Acetabulum load cell

Appendix B contains the dummy response data. Dummy configuration and performance verification data can be found in Appendix C of this report. Appendix D identifies all serial numbers, manufacturers, and calibration dates for test equipment, dummy sensors, potentiometers, and load cells used to collect data during the test.

Injury readings for the SID-IIs dummy were recorded as follows:

INJURY READINGS

Measurement Description	Driver ATD (SID-IIs)		
	Units	IARV	Result
Head Injury Criteria (HIC36)		1000	150.769
Resultant Lower Spine Acceleration	G	82	57.238
Total Pelvic Force (sum of acetabular and iliac forces)	N	5525	2546.750
Maximum Thoracic Rib Deflection	mm	38	20.176
Maximum Abdominal Rib Deflection	mm	45*	26.153

*Proposed IARV

Supplemental restraint information was recorded as follows:

SUPPLEMENTAL RESTRAINT INFORMATION

Restraint Type	Left Front (Driver) Occupant Location 1		Left Rear (Passenger) Occupant Location 4	
	Mounted	Deployed	Mounted	Deployed
Front Airbag	Yes	No		
Knee Airbag	Yes	No		
Side Airbag 1 - Curtain	Yes	Yes	Yes	Yes
Side Airbag 2 - Torso/Pelvis Airbag	Yes	Yes	Yes	Yes
Seat Belt Pretensioner	Yes	Yes	Yes	Yes
Seat Belt Load Limiter	Yes	Yes	Yes	Yes
Other				

GENERAL COMMENTS:

1. P1 serial number - 300

Data Anomalies:

- Left Sill A-Pillar Y Acceleration, Exceeded calibration range and saturated at 38.7 ms
- Left Lower A-Pillar Y Acceleration, Exceeded calibration range at 75.6 ms
- Left Middle B-Pillar Y Acceleration, Exceeded calibration range and saturated at 13.6 ms

SECTION 3

OCCUPANT AND VEHICLE INFORMATION

This section contains information reporting for the following Data Sheets:

Data Sheet No. 1 - General Test and Vehicle Parameter Data

Data Sheet No. 2 - Seat, Seat Belt, Steering Wheel Adjustment and Fuel Systems Data

Data Sheet No. 3 - Dummy Longitudinal Clearance Dimensions

Data Sheet No. 4 - Dummy Lateral Clearance Dimensions

Data Sheet No. 5 - Camera and Instrumentation Data

Data Sheet No. 6 – Test Vehicle Accelerometer Locations

Data Sheet No. 7- Rigid Pole Load Cell Data

Data Sheet No. 8 - Post-Test Observations

Data Sheet No. 9 - Test Vehicle Profile Measurements

Data Sheet No. 10 - Test Vehicle Exterior Crush Measurements

Data Sheet No. 11 - Vehicle Damage Profile Distances

Data Sheet No. 12 - FMVSS No. 301 Static Rollover Results

Data Sheet No. 13 - Dummy / Vehicle Temperature and Humidity Stabilization Data

Data Sheet No. 305-1 - General Test and Parameter Data for Indicant FMVSS No. 305 Testing

Data Sheet No. 305-2 - Pre-Impact Data for Indicant FMVSS No. 305 Testing

Data Sheet No. 305-3 - Pre-Impact Electrical Isolation Measurements and Calculations for Indicant FMVSS No. 305 Testing

Data Sheet No. 305-4 - Post-Impact Data for Indicant FMVSS No. 305 Testing

Data Sheet No. 305-5 - Static Rollover Test Data for Indicant FMVSS No. 305 Testing

DATA SHEET NO. 1
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2025 KIA EV6 5 Door SUV
NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test
Test Date: 08/12/2025

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	O20254200
Model Year	2025
Make	KIA
Model	EV6
Body Style	SUV
VIN	5XYC34JA6SG006174
Body Color	Wolf Gray
Odometer Reading (km/mi)	20 mi
Engine Displacement (L)	N/A
Type / No. Cylinders	N/A
Engine Placement	Electric Vehicle
Transmission Type	Automatic
Transmission Speeds	Direct Drive
Overdrive	Yes
Final Drive	Rear Wheel Drive
Roof Rack	No
Sunroof / T-Top	No
Running Boards	No
Tilt Steering Wheel	Yes
Power Seats	Yes
Anti-Lock Brakes (ABS)	Yes

Traction Control System (TCS)	Yes
Auto-Leveling System	No
Automatic Door Locks (ADL)	Yes
Power Window Auto-Reverse	Yes
Other Optional Feature	N/A
Driver Front Airbag	Yes
Driver Curtain Airbag	Yes
Driver Head/Torso Airbag	No
Driver Torso Airbag	No
Driver Torso / Pelvis Airbag	Yes
Driver Pelvis Airbag	No
Driver Knee Airbag	Yes
Rear Pass. Curtain Airbag	Yes
Rear Pass. Head / Torso Airbag	No
Rear Pass. Torso Airbag	No
Rear Pass. Torso / Pelvis Airbag	Yes
Rear Pass. Pelvis Airbag	No
Driver Seat Belt Pretensioner	Yes
Rear Pass. Seat Belt Pretensioner	Yes
Driver Load Limiter	Yes
Rear Pass. Load Limiter	Yes
Other Safety Restraint	N/A

Does owner's manual provide instructions to turn off automatic door locks? No

DATA FROM CERTIFICATION LABEL

Manufactured By	KIA Georgia, INC
Date of Manufacture	MAY/01/25
Vehicle Type	MPV

GVWR (KG)	2475
GAWR Front (KG)	1280
GAWR Rear (KG)	1440

VEHICLE SEATING AND WEIGHT CAPACITY DATA

Measured Parameter	Front	Rear	Third	Total	
Designated Seating Capacity (DSC)	2	3	N/A	5	
Vehicle Capacity Weight (VCW) (kg)				375	(A)
DSC x 68.0 kg				340	(B)
Cargo Weight (RCLW) (kg)				35	(A-B)

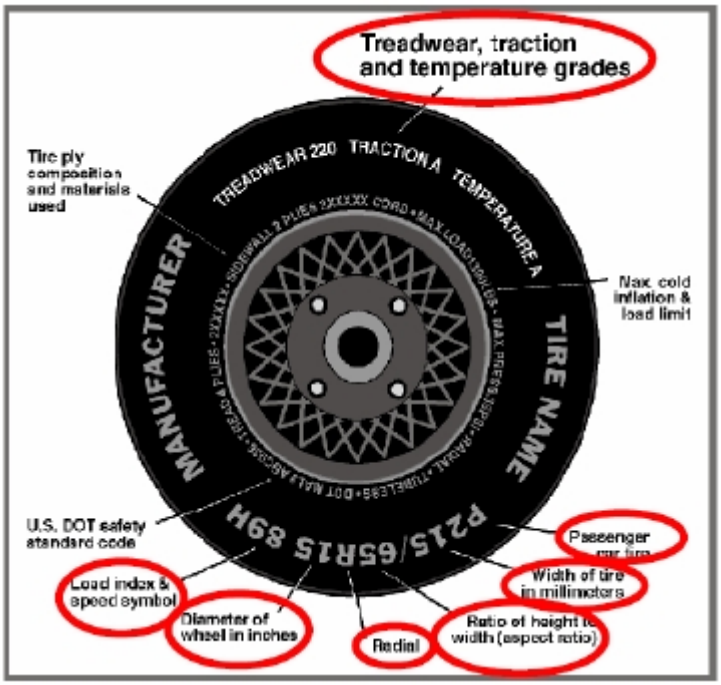
VEHICLE SEAT TYPE

Seating Location	Type Of Seat Pan				Type Of Seat Back		
	Bucket	Bench	Split Bench	Contour	Fixed	Adjustable	
						W/ Lever	W/ Knob
Front	X						X
Rear or Second Row Seat			X			X	
Third Row seat	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DATA SHEET NO. 1 … (CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

Collected for year, make, model, & VIN, all items circled in red, tire manufacturer and tire name



VEHICLE TIRE INFORMATION

Measured Parameter	Front	Rear
Maximum Tire Pressure (kPa)	350	350
Cold Pressure (kPa)	250	250
Recommended Tire Size	235/55R19	235/55R19
Tire Size on Vehicle	235/55R19	235/55R19
Tire Manufacturer	Nexen	Nexen
Tire Model	N'Fera Supreme	N'Fera Supreme
Treadwear	560	560
Traction	A	A
Temperature Grades	A	A
Tire Plies Sidewall	2 Polyester	2 Polyester
Tire Plies Body	2 Polyester, 2 Steel, 1 Polyamide	2 Polyester, 2 Steel, 1 Polyamide
Load Index / Speed Symbol	101H	101H
Tire Material	Rubber	Rubber
DOT Safety Code Left	1UAL3JKKH0125	1UAL3JKKH0125
DOT Safety Code Right	1UAL3JKKH0125	1UAL3JKKH0125

DATA SHEET NO. 1 … (CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2025 KIA EV6 5 Door SUV | NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test | Test Date: 08/12/2025

TIRE PRESSURES

	Units	LF	RF	LR	RR
As Delivered	kPa	248	248	248	248
Tire Placard	kPa	250	250	250	250
Owner's Manual	kPa	250	250	250	250
As Tested	kPa	250	250	250	250

TEST VEHICLE WEIGHTS

	Units	As Delivered (UVW)			As Tested (ATW)			Fully Loaded		
		Front	Rear	Total	Front	Rear	Total	Front	Rear	Total
Left	kg	456	544		490	554		475	582	
Right	kg	458	528		463	558		464	553	
Ratio	%	46.0	54.0		46.2	53.8		45.3	54.7	
Totals	kg	914	1072	1986	953	1112	2065	939	1135	2074

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value	
Total As Delivered Weight (UVW)	kg	1986	(A)
Actual Weight of 1 P572V (SID-IIs) ATD Used	kg	50	(B)
Rated Cargo / Luggage Weight (RCLW)	kg	35	(C)
Calculated Vehicle Target Weight (TVTW)	kg	2071	(A+B+C)

Does the measured As Test Vehicle Weight lie within the required weight range

(i.e. Calculated Test Vehicle Target Weight – 4.5 kg to – 9 kg)? [X] **Yes** [ ] **No**

TEST VEHICLE ATTITUDES AND CG

Measurement Description	Units	As Delivered	As Tested	Fully Loaded	Meets Rqmt***
Driver Door Sill Angle (front-to-rear)*	Deg	+0.45	+0.45	+0.35	Yes
Front Passenger Sill Angle (front-to-rear)*	Deg	-0.65	-0.50	+0.45	Yes
Front Bumper-Line Angle (left-to-right)**	Deg	-0.25	0.00	+0.10	Yes
Rear Bumper-Line Angle (left-to-right)**	Deg	+0.60	+0.70	+0.70	Yes
Vehicle CG (Aft of Front Axle)	mm	1568	1564	1589	
Vehicle CG (Left (+) / Right (-) from Longitudinal Centerline)	mm	6	9	16	

* ND = Nose Down (-), NU = Nose Up (+)
** LD = Left Down (-), LU = Left Up (+)
*** The “As Tested” vehicle attitude measurements must be equal to or between the “As Delivered” and “Fully Loaded” vehicle attitude measurements. Indicate “Yes” or “No” for Meets Requirement”

DATA SHEET NO. 1 … (CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

WEIGHT OF BALLAST AND VEHICLE COMPONENTS REMOVED TO MEET TVTW

Component Description	Weight (kg)
Trunk Carpeting	22
Passenger Side Front and Rear Door Trim	7
Left and Right Tail Lights	6
Frunk Storage Compartment	6
Rear Underbody Shields	2
Ballast / Equipment Added	0

Test Height – Adjustable Suspension Setting, if Applicable	N/A

TEST SURFACE MARKING

	Distance from 75° Impact Location Line (mm)
Fore 25 mm target	613
Aft 25 mm target	613

DATA SHEET NO. 2
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

SEAT POSITIONING

The driver's seat, front center seat (if applicable), and right front passenger's seat should be set to the forward-most, mid-height, mid-angle position. The struck-side rear passenger's seat, rear center seat, and non-struck side rear passenger's seats should be set to the rear-most, lowest, mid-angle position.

SCRL ANGLE RANGE

Seat	SCRL(°)		
	Max	Min	Mid
Driver Seat	21.7	13.4	17.6
Front Passenger Seat	16.6	13.3	15.0
Front Center Seat			
Struck Side Rear Seat	Fixed	Fixed	Fixed
Non-Struck Side Rear Seat	Fixed	Fixed	Fixed
Rear Center Seat	Fixed	Fixed	Fixed

SEAT HEIGHT AND ANGLE

Seat	As Tested SCRL Angle (Mid) (°)	As Tested SCRP Height (mm)	SCRP Height Position	SCRP Height (mm)		
				Rearmost	Mid-Fore / Aft	Forward-Most
Driver Seat	17.6	50	Max	72	78	84
			Mid	38	44	50
			Min	4	10	16
Front Passenger Seat	15.0	22	Max	-	-	-
			Mid	12	17	22
			Min	-	-	-
Front Center Seat*			Max			
			Mid			
			Min			
Struck Side Rear Seat	Fixed	Fixed	Max			
			Mid			
			Min			
Non-Struck Side Rear Seat	Fixed	Fixed	Max			
			Mid			
			Min			
Rear Center Seat*	Fixed	Fixed	Max			
			Mid			
			Min			

**If applicable*

DATA SHEET NO. 2 … (CONTINUED)
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

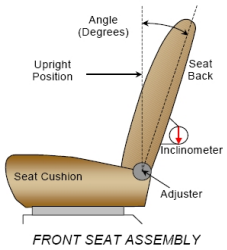
Test Vehicle: 2025 KIA EV6 5 Door SUV | NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test | Test Date: 08/12/2025

SEAT FORE / AFT POSITION

Seat	Total Fore / Aft Travel		Test Position from Forward most Position	
	mm	Detents*	mm	Detents*
Driver Seat	260	Power	0	Power
Front Passenger Seat	240	25 (0-24)	0	0
Front Center Seat				
Struck Side Rear Seat	Fixed	Fixed	Fixed	Fixed
Non-Struck Side Rear Seat	Fixed	Fixed	Fixed	Fixed
Rear Center Seat	Fixed	Fixed	Fixed	Fixed

SEAT BACK ANGLE ADJUSTMENT

The driver's seat back is positioned such that the dummy's head is level. The front center and front passenger's seat backs are positioned in a similar manner as the driver's seat back. The struck-side rear passenger seat back is positioned in accordance with the information provided by the manufacturer on Form No. 1 for the 5th percentile female dummy in a Side NCAP MDB test. The rear center and non-struck side rear passenger's seat back are set to match the struck-side rear seat back.



FRONT SEAT ASSEMBLY

Seat	Total Seat Back Angle Range		Test Position from Most Upright	
	Degrees	Detents*	Degrees	Detents*
Driver Seat	64	Power	-5.75	Power
Front Passenger Seat	60.3	30 (0-29)	-6.0	9
Front Center Seat				
Struck Side Rear Seat	23.0	12 (0-11)	0	0
Non-Struck Side Rear Seat	23.8	12 (0-11)	0	0
Rear Center Seat	23.0	12 (0-11)	0	0

SEAT BELT ANCHORAGE ADJUSTMENT

Seat belt anchorages are adjusted in accordance with the information provided by the manufacturer on Form No. 1. Zero is defined as the uppermost detent

Seat	Total # of Positions	Placed in Position #
Driver Seat	4 (0-3)	0

HEAD RESTRAINT ADJUSTMENT

The driver's head restraint is adjusted to the lowest and most full forward in-use position.

Seat	Total # of Positions	Placed in Position #
Driver Seat	5 (0-4)	Lowermost

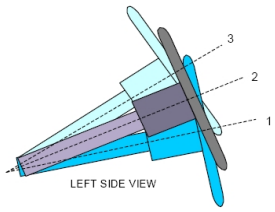
DATA SHEET NO. 2 … (CONTINUED)
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

STEERING COLUMN POSITIONS

Steering wheel and column adjustments are made so that the steering wheel hub is at the center of its geometric locus it describes when it moves through its full range of motion.

	Degrees	Fore / Aft Position (mm)
Lowermost position No. 1	22.0	
Geometric center position No. 2	24.4	
Uppermost position No. 3	26.8	
Telescoping Steering Wheel Travel		54
Test Position	24.4	27

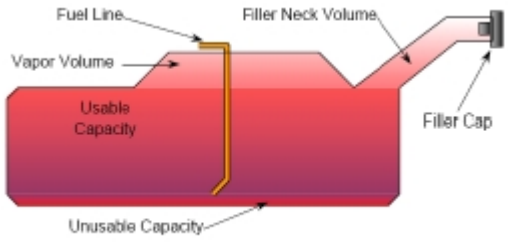


STEERING COLUMN ASSEMBLY

FUEL PUMP

Describe the fuel pump type, details about how it operates, and the location of the fuel filler neck

The vehicle is equipped with an electric charge port. The charge port is on the left rear bumper of the vehicle.



VEHICLE FUEL TANK ASSEMBLY

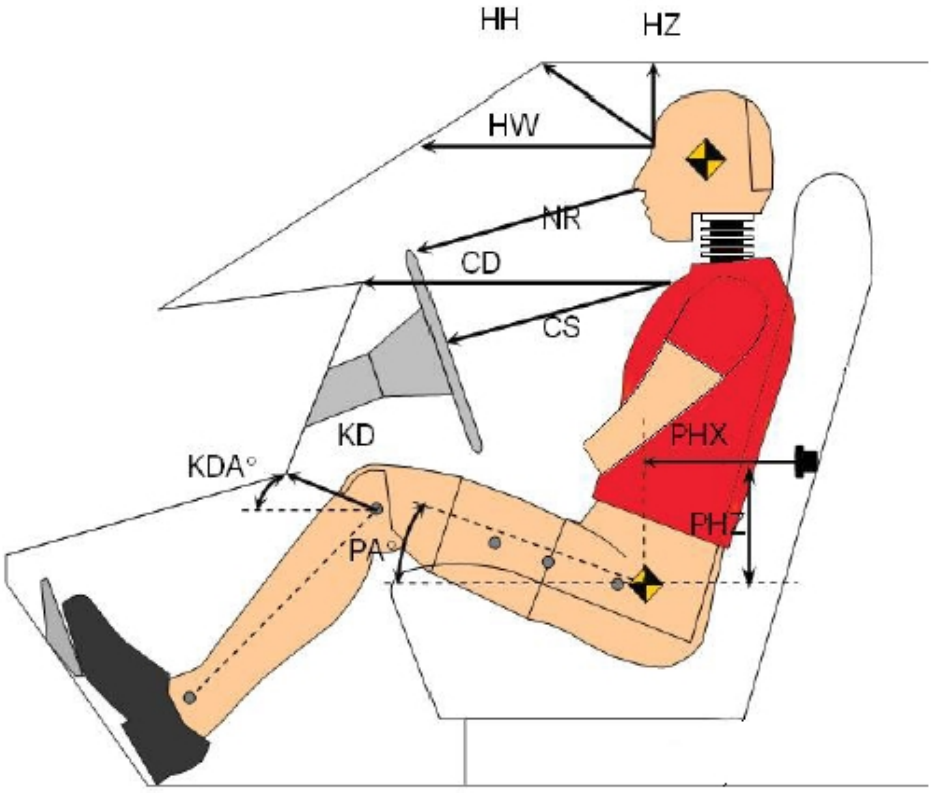
FUEL TANK CAPACITY

Description	Liters
Usable Capacity of “Standard Tank” - see Form No. 1	
Usable Capacity of “Optional Tank” - see Form No. 1	
Usable Capacity of “Standard Tank” - see Owner’s Manual	
Usable Capacity of “Optional Tank” - see Owner’s Manual	
93% of Usable Capacity	
Actual Amount of Solvent Used in Test	Electric Vehicle
1/3 of Usable Capacity	

Is the Actual Amount of Solvent Used in the test equal to 93% ±1% of the Usable Capacity stated in Form No. 1? ☐ **Yes** ☐ **No** ☒ **N/A**

DATA SHEET NO. 3
DUMMY LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025



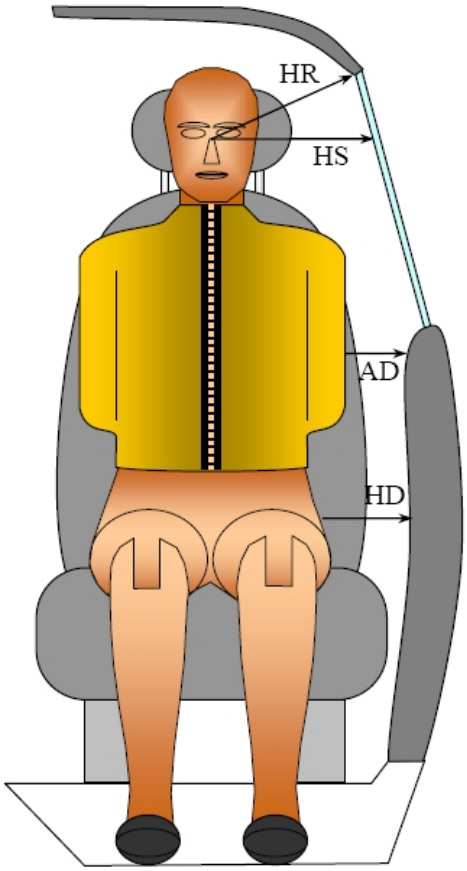
Left Side View

DUMMY LONGITUDINAL CLEARANCE DIMENSION INFORMATION

Driver Code	Description	Driver (Serial No. 300)	
		Length (mm)	Angle (°)
HH	Head to Header	240	
HW	Head to Windshield	550	
HZ	Head to Roof Liner	166	
NR	Nose to Rim	230	
CD	Chest to Dash	465	
CS	Chest to Steering Wheel	178	
KD(L) / KDA(L)◦	Left Knee to Dash	157	30.8
KD(R) / KDA(R)◦	Right Knee to Dash	113	35.7
PAX◦	Pelvic Tilt Angle (X-Axis)		18.8
PAY◦	Pelvic Tilt Angle (Y-Axis)		0.2
PHX	Hip Point to Striker (X-Axis)	363	
PHZ	Hip Point to Striker (Z-Axis)	186	

DATA SHEET NO. 4
DUMMY LATERAL CLEARANCE DIMENSIONS

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025



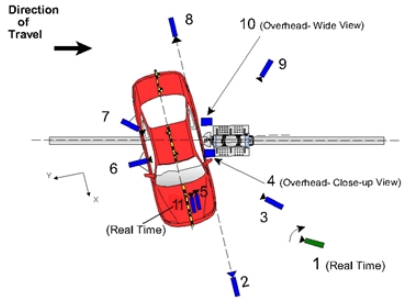
FRONT VIEW OF DUMMY

DUMMY LATERAL CLEARANCE DIMENSION INFORMATION

Code	Measurement Description	Units	Driver – Length (Serial No. 300)
HR	Head to Side Header	mm	221
HS	Head to Side Window	mm	348
AD	Arm to Door	mm	185
HD	H-Point to Door	mm	181

DATA SHEET NO. 5
CAMERA AND INSTRUMENTATION DATA

Test Vehicle: 2025 KIA EV6 5 Door SUV
NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test
Test Date: 08/12/2025



CAMERA LOCATIONS AND DATA

No.	Camera View	Location (mm)			Lens (mm)	Speed (fps)
		X	Y	Z		
1	Real-time (24 - 30 fps) pan view of impact				Zoom	1000
2	Front ground level - impact view	7760	0	-1490	28	1000
3	Impact side 45º - forward pole view	5030	-720	-1420	24	1000
4	Overhead Close-up view of impact	0	0	-9375	28	1000
5	Onboard - dummy front view				25	1000
6	Onboard - dummy side view				12.5	1000
7	Onboard - dummy rear oblique view				12.5	1000
8	Rear ground level - impact view	-8890	0	-1482	28	1000
9	Impact side 45º - rearward pole view	-3921	-4100	-1536	24	1000
10	Overhead wide - view of impact	0	0	-9375	12.5	1000
11	Real-time (24 - 30 fps) - dummy front view				Zoom	60

Notes: *Reference - From Point of Impact for X and Y; from Ground for Z*
+X = Forward of vehicle, +Y = Right of vehicle, +Z = Down
** All measurements accurate to ± 6 mm. Vehicle is at a 75º angle to the rigid pole.*

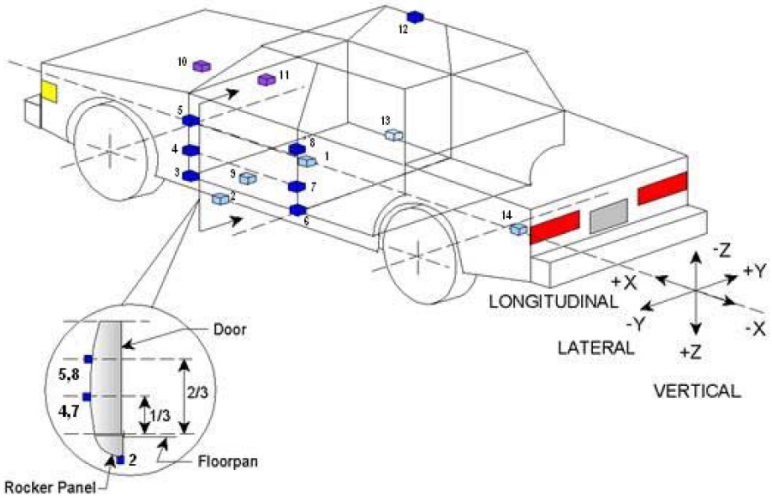
Comments: All cameras operated as intended.

INSTRUMENTATION

Description	Number of Channels
Driver Dummy Channels	16
Vehicle Structure Accelerometers	18
Pole Load Cells	8
Total	42

DATA SHEET NO. 6
TEST VEHICLE ACCELEROMETER LOCATIONS

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025



TEST VEHICLE ACCELEROMETER LOCATIONS

No.	Accelerometer Location	Coordinates (mm)		
		X	Y	Z
1	Vehicle CG	2505	54	-195
2	Left Floor Sill	2844	-668	82
3	A-Pillar Sill	3247	-645	44
4	A-Pillar Low	3306	-635	-110
5	A-Pillar Mid	3261	-645	-578
6	B-Pillar Sill	2215	-666	76
7	B-Pillar Low	2227	-667	-170
8	B-Pillar Mid	2189	-663	-477
9	Seat	2486	-559	104
10	Engine	3881	-40	-108
11	Firewall	3795	-16	-469
12	Roof	2220	558	-1029
13	Right Floor Sill	2874	666	88
14	Rear Deck	816	-67	-112

Reference: *X – Rear surface of vehicle (+ forward)*
Y – Vehicle centerline (+ to right)
Z – Ground plane (+ down)

DATA SHEET NO. 7
RIGID POLE LOAD CELL DATA

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

POLE BARRIER



RIGID POLE LOAD CELL LOCATION

ID	Units	Height From Ground
1	mm	200
2	mm	590
3	mm	750
4	mm	1075
5	mm	1260
6	mm	1740
7	mm	1920
8	mm	2300

DATA SHEET NO. 8
POST-TEST OBSERVATIONS

Test Vehicle: 2025 KIA EV6 5 Door SUV NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test Test Date: 08/12/2025

TEST DUMMY INFORMATION AND CONTACT POINTS

Dummy Body Part	Driver Seat Dummy (SID-IIs)
Face	Torso/Pelvis Airbag
Top of Head	Curtain Airbag
Left Side of Head	Curtain Airbag, Torso/Pelvis Airbag
Back of Head	Curtain Airbag, Headrest
Left Shoulder	Torso/Pelvis Airbag, Seatback
Upper Torso	Seatback
Lower Torso	Seatback
Left Hip	Torso/Pelvis Airbag, Seat Pan, Seatback
Left Knee	Door Trim

POST-TEST DOOR PERFORMANCE

Description	Struck Side		Non-Struck Side		Rear Hatch/ Other
	Front	Rear	Front	Rear	
Remained Closed and Operational	No	No	Yes	Yes	Yes
Total Separation from Vehicle at Hinges or Latches	No	No	No	No	No
Latch or Hinge Systems Pulled Out of Their Anchorages	No	No	No	No	No
Disengaged from Latched Position	No	No	No	No	No
Latch Separated from Striker	No	No	No	No	No
Jammed Shut	Yes	Yes	No	No	No
If Door Opened at Striker, Width of Opening at Striker (mm)	0	0	0	0	0

POST-TEST SEAT PERFORMANCE

Description	Struck Side		Non-Struck Side	
	Front	Rear	Front	Rear
Seat Movement Along Seat Track	No	No	No	No
Seat Disengagement from Floor Pan	No	No	No	No
Seat Back Movement from Initial Position	No	No	No	No
Seat Back Collapse	No	No	No	No

DATA SHEET NO. 8 … (CONTINUED)
POST-TEST OBSERVATIONS

Test Vehicle: 2025 KIA EV6 5 Door SUV NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test Test Date: 08/12/2025

POST-TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	B-Pillar buckled
Sill Separation	None
Windshield Damage	Cracked throughout
Side Window Damage	Driver window cracked throughout
Other Notable Effects	None

SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

Restraint Type	Struck Side Driver		Struck Side Rear Passenger	
	Mounted	Deployed	Mounted	Deployed
Front Airbag	Yes	No		
Knee Airbag	Yes	No		
Side Airbag 1 - Curtain	Yes	Yes	Yes	Yes
Side Airbag 2 - Torso/Pelvis Airbag	Yes	Yes	Yes	Yes
Seat Belt Pretensioner	Yes	Yes	Yes	Yes
Seat Belt Load Limiter	Yes	Yes	Yes	Yes
Other				

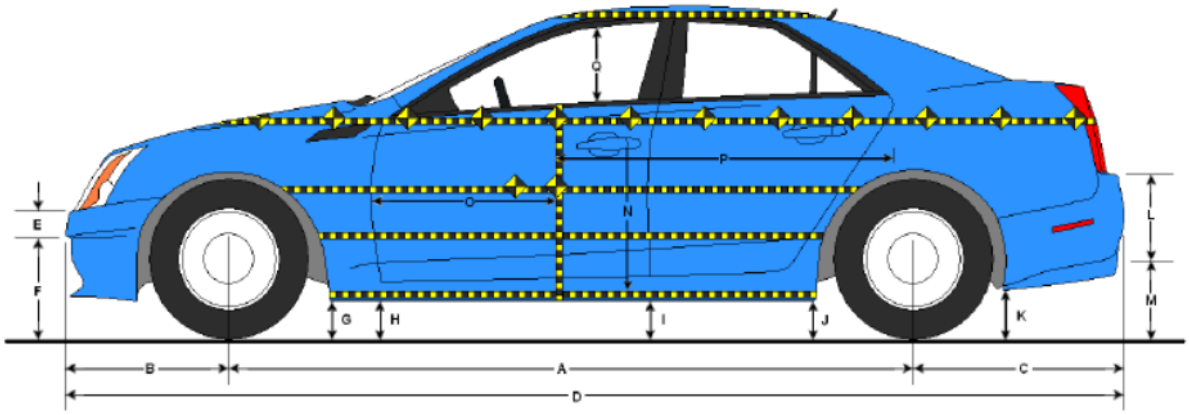
VEHICLE SPEED, VEHICLE ANGLE AT IMPACT AND IMPACT POINT LOCATION DATA

Measured Parameter	Units	Tolerance	Value
Vertical Impact Ref Line - Aft of Front Axle, Intended Impact Pt	mm		1155
Actual Impact Point - Aft of Front Axle	mm		1161
Horizontal Offset (+ forward / - rearward)	mm	+/- 38*	-6
Angle Between Vehicle's Longitudinal Centerline and Line of Forward Motion	deg	75 +/- 3	75
Trap No. 1 Velocity - Primary	kph	31.4 to 33.0	32.00
Trap No. 2 Velocity - Redundant	kph	31.4 to 33.0	32.02

*Of Intended Impact Point

DATA SHEET NO. 9
TEST VEHICLE PROFILE MEASUREMENTS

Test Vehicle: 2025 KIA EV6 5 Door SUV
NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test
Test Date: 08/12/2025



LEFT SIDE VIEW

VEHICLE PRE- AND POST-TEST MEASUREMENT INFORMATION

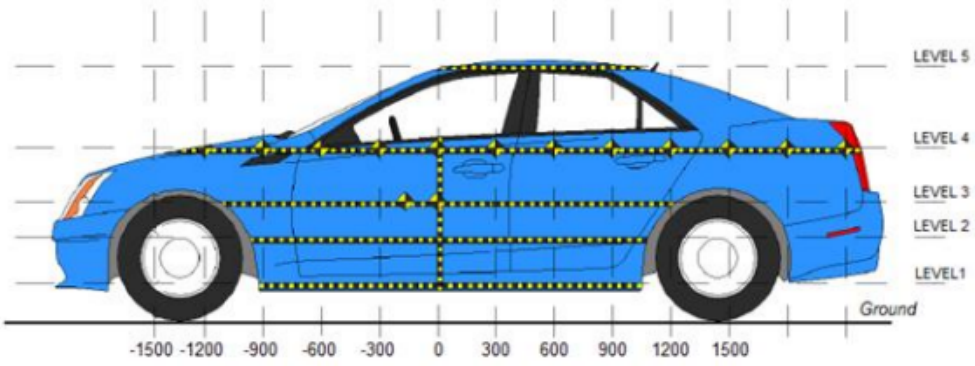
No.	Measurement Description	Pre-Test	Post-Test	Change
A	Vehicle Wheelbase	2904	2884	-20
B	Front Axle to FSOV	842	855	13
C	Rear Axle to RSOV	943	945	2
D	Total Vehicle Length at Centerline	4689	4684	-5
E	Front Bumper Thickness	130	130	0
F	Front Bumper Bottom to Ground	468	469	1
G	Sill Height at Front Wheel Well	186	190	4
H	Sill Height at Front Door Leading Edge	186	194	8
I	Sill Height at B Pillar	191	194	3
J1	Sill Height at Rear Wheel Well	200	210	10
J2	Pinch Weld Height at Rear Wheel Well	191	199	8
K	Sill Height Aft of Rear Wheel Well	255	249	-6
L	Rear Bumper Thickness	80	80	0
M	Rear Bumper Bottom to Ground	428	419	-9
N	Sill Height to Window Bottom Sill	831	835	4
O	Front Door Leading Edge to Impact CL	586	561	-25
P	Rear Door Trailing Edge to Impact CL	1606	1579	-27
Q	Front Window Opening	354	349	-5
R	Right Side Length	4598	4602	4
S	Left Side Length	4600	4583	-17
T	Vehicle Width at B-Pillars	1859	1838	-21
U	Front Wheel Track width	1624	1635	11
V	Rear Wheel Track Width	1636	1642	6

* All measurements in mm with tolerance of ± 3mm

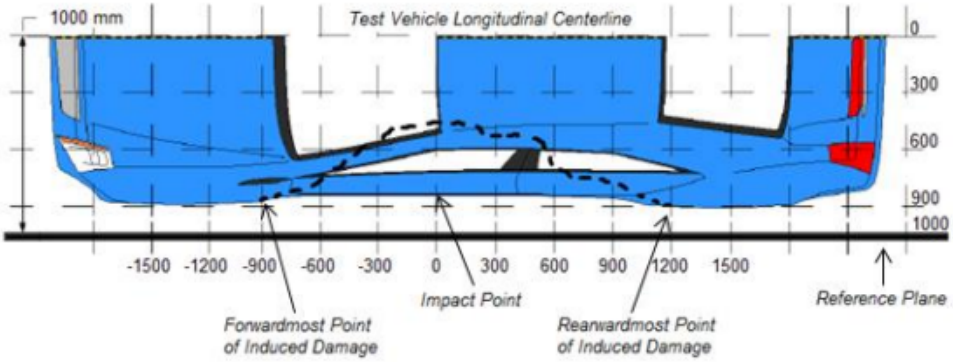
DATA SHEET NO.10
TEST VEHICLE EXTERIOR CRUSH MEASUREMENTS

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

MAXIMUM EXTERIOR CRUSH MEASUREMENTS



Left Side View



Overhead View

Level	Measurement Description	Units	Height Above Ground	Maximum Exterior Static Crush	Distance from Impact
1	Sill Top	mm	277	194	0
2	Occupant H-Point	mm	630	239	0
3	Mid-Door	mm	681	242	0
4	Window Sill	mm	1020	153	0
5	Window Top	mm	1465	19	150

NOTE: *The above measurements should be taken along the vertical impact reference line. Vehicle measurements forward of the vertical impact reference line are negative.*

DATA SHEET NO.10 … (CONTINUED)
VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle: 2025 KIA EV6 5 Door SUV NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test Test Date: 08/12/2025

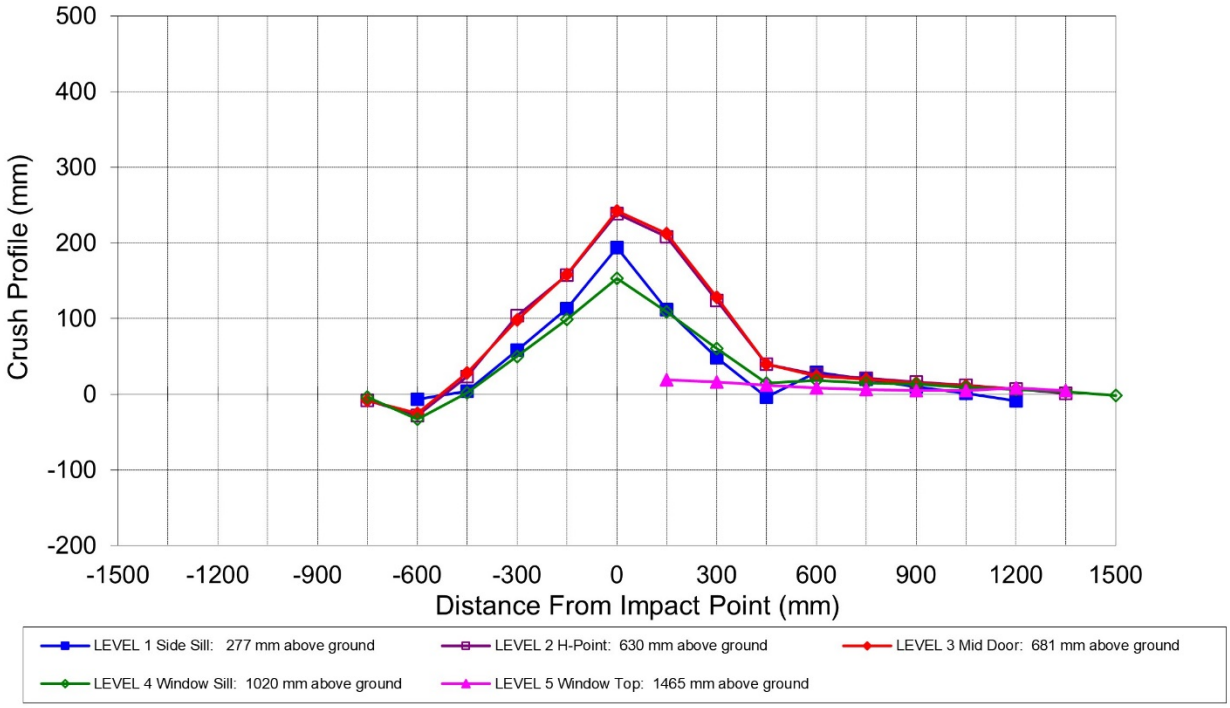
EXTERIOR CRUSH MEASUREMENTS AT EACH LEVEL

	Pre-Test					Post-Test					Crush				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
-1500															
-1350															
-1200															
-1050															
-900															
-750		933	935	790			941	943	794			-8	-8	-4	
-600	888	925	925	804		895	953	950	837		-7	-28	-25	-33	
-450	889	923	924	823		885	900	896	821		4	23	28	2	
-300	890	926	927	815		832	822	829	765		58	104	98	50	
-150	893	929	930	822		780	772	772	723		113	157	158	99	
0	896	930	932	826		702	691	690	673		194	239	242	153	
150	898	930	932	830	610	786	722	720	721	591	112	208	212	109	19
300	894	929	931	832	619	846	805	803	772	603	48	124	128	60	16
450	893	928	930	834	618	897	888	890	819	606	-4	40	40	15	12
600	891	925	926	835	614	862	899	902	817	606	29	26	24	18	8
750	889	920	922	833	609	869	899	902	818	603	20	21	20	15	6
900	887	917	919	832	602	877	901	904	819	597	10	16	15	13	5
1050	886	918	919	831	593	885	906	908	822	588	1	12	11	9	5
1200	889	923	924	835	582	898	916	917	829	574	-9	7	7	6	8
1350		928	932	847	563		927	929	844	558		1	3	3	5
1500				866					868					-2	

NOTE: *Pre-test measurements are taken when the vehicle is in the "As Tested" weight condition. Vehicle measurements forward of the vertical impact reference line are negative. The crush profile grid is established prior to the test based on an estimated impact point. The final distance from impact is determined after the final dummy positioning and the pole is aligned with the center of gravity of the dummy's head.*

DATA SHEET NO.10 … (CONTINUED)
TEST VEHICLE EXTERIOR CRUSH MEASUREMENTS

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

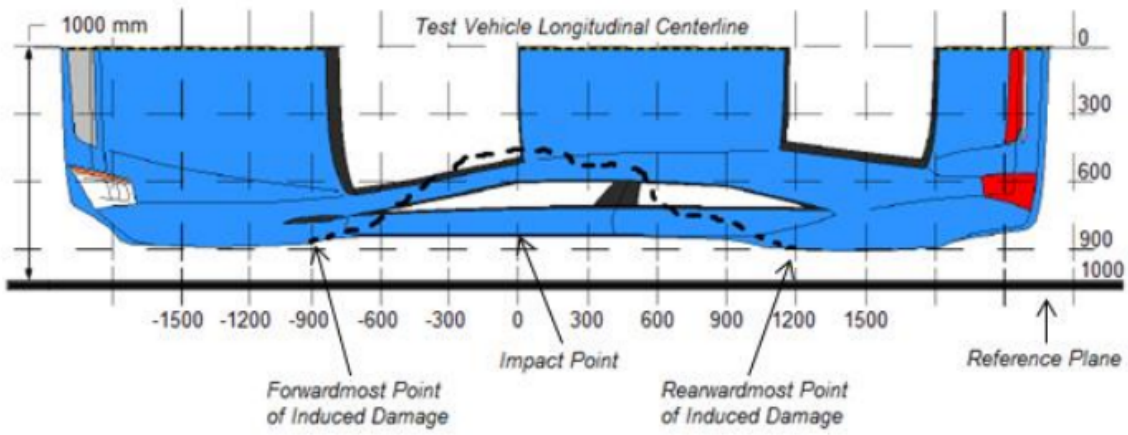


Vehicle Exterior Crush Measurements - Visual Representation

DATA SHEET NO.11
VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

For guidance regarding damage profile distance measurements, please refer to the latest version of the *NHTSA Test Reference Guide, Volume 1: Vehicle Tests.*



Overhead View

VEHICLE DAMAGE PROFILE DISTANCES

DPD	Distance From Impact Point (mm)	Level	Post-Test (mm)	Pre-Test (mm)	Crush (mm)
1	-750	3	57	65	-8
2	-330	3	158	74	84
3	90	3	292	68	224
4	510	3	105	72	33
5	930	3	95	81	14
6	1350	3	71	68	3

DATA SHEET NO.12
FMVSS NO.301 STATIC ROLLOVER RESULTS

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

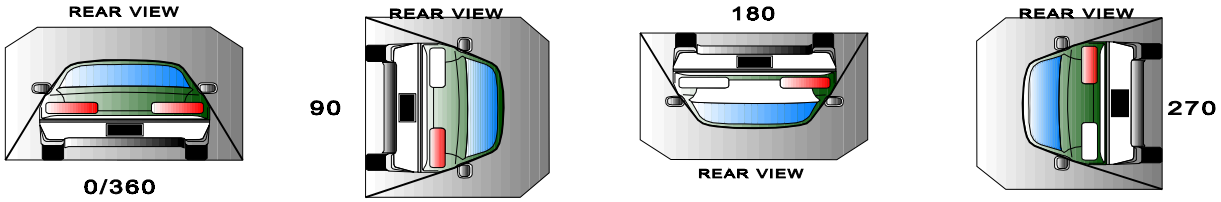
Test Time: 9:33AM Temperature: 21.0 °C

A. From impact until vehicle motion ceases: 0 oz
(Maximum allowable is 1 oz.)

B. For the 5-minute period after motion ceases: 0 oz
(Maximum allowable is 5 oz.)

C. For the following 25 minutes: 0 oz
(Maximum allowable is 1 oz.)

D. Spillage Detail: Electric Vehicle



ROLLOVER SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°			
90° to 180°			
180° to 270°			
270° to 360°			

FMVSS 301 SPILLAGE TABLE

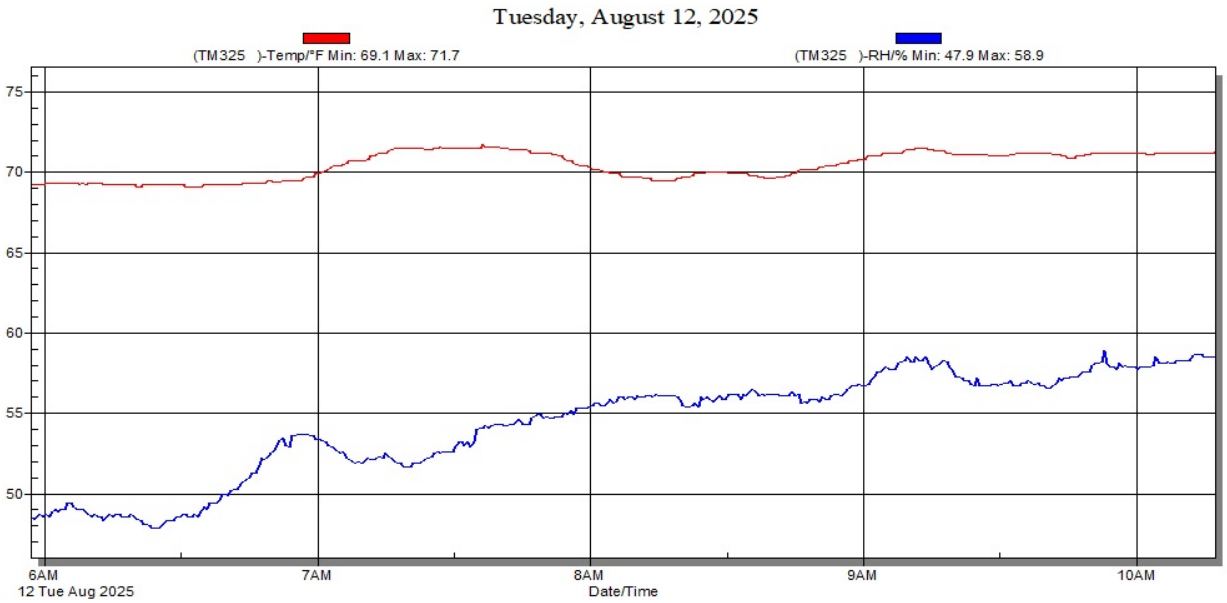
Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0° to 90°				
90° to 180°				
180° to 270°				
270° to 360°				

SOLVENT SPILLAGE LOCATION TABLE

Test Phase	Spillage Location
0° to 90°	
90° to 180°	
180° to 270°	
270° to 360°	

DATA SHEET NO. 13
DUMMY / VEHICLE TEMPERATURE AND HUMIDITY STABILIZATION DATA

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025



Temperature and Humidity Stabilization Chart/Data for Dummies and Test Vehicle

DATA SHEET NO. 305-1
GENERAL TEST AND VEHICLE PARAMETER DATA FOR INDICANT FMVSS NO. 305 TESTING

Test Vehicle: 2025 KIA EV6 5 Door SUV NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test Test Date: 08/12/2025

ELECTRIC VEHICLE PROPULSION SYSTEM

Measured Parameter	Value
Type of Electric Vehicle (Electric/Gas-Electric Hybrid/Fuel Cell-Electric Hybrid)	Electric
Propulsion Battery Type	Lithium-Ion
Nominal Voltage (Volts)	697
Is this Vehicle equipped with an Automatic Propulsion Battery Disconnect?	Yes
Physical Location of Automatic Propulsion Battery Disconnect, if applicable	Inside Battery Rear Side
Auxiliary Battery Type	Lead-Acid

PROPULSION BATTERY SYSTEM DATA (COTR SUPPLIED)

Measured Parameter	Value
Electrolyte Fluid Type	LiPF6 salt, Carbonate solvent
Electrolyte Fluid Specific Gravity	1.2 g/cm3
Electrolyte Fluid Kinematic Viscosity (centistokes)	3.87 cP @ 25˚C
Electrolyte Fluid Color	Transparent & Pale Yellow
Propulsion Battery Coolant Type, Color and Specific Gravity (if applicable)	Water-Cooled, Pink
Location of Battery Modules (Inside or Outside of Passenger Compartment?)	Outside

PROPULSION BATTERY STATE OF CHARGE

Measured Parameter	Units	Value
For all battery types: Voltage Range corresponding to **useable energy** of the battery:		
Minimum State of Charge	V	480
Maximum State of Charge	V	826
95% of Maximum	V	784.7
Test Voltage *	V	792
For batteries that are rechargeable ONLY by an energy source on the vehicle: Voltage range corresponding to **useable energy** of the battery:		
Minimum State of Charge	V	
Maximum State of Charge	V	
95% of Maximum	V	
Test Voltage *	V	

* *For all battery types-No less than 95% of Maximum Operating Voltage; for batteries that are rechargeable ONLY by an energy source on the vehicle-maximum practicable state of charge within normal operating range*.

DATA SHEET NO. 305-2
PRE-IMPACT DATA FOR INDICANT FMVSS NO. 305 TESTING

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

VEHICLE CHASSIS GROUND PT(S) LOCATION(S) & PROPULSION BATTERY SYSTEM

Measured Parameter	Value
Details of Vehicle Chassis Ground Points & Locations	Chassis ground was located on the battery module casing
Details of Propulsion Battery Components	Battery is located on the underside of the vehicle chassis under the passenger compartment

DATA SHEET NO. 305-3
PRE-IMPACT ELECTRICAL ISOLATION MEASUREMENTS AND CALCULATIONS FOR INDICANT FMVSS NO. 305 TESTING

Test Vehicle:	2025 KIA EV6 5 Door SUV	NHTSA No.:	O20254200
Test Program:	NCAP Side Pole Impact Test	Test Date:	08/12/2025

VOLTMETER INFORMATION

Measured Parameter	Units	Value
Make & Model		Fluke 1587
Serial No.		49210189
Internal Impedance Value	MΩ	10
Resolution	V	0.001
Last Calibration Date		04/22/2025

NOTES:

- *The voltmeter used in this test shall measure DC values and have an internal impedance of at least 10 M Ω*
- *An oscilloscope meeting the above requirements may need to be used to adequately measure voltage in some vehicles.*

PROPULSION BATTERY VOLTAGE, RESISTANCE & ELECTRICAL ISOLATION MEASUREMENTS & CALCULATIONS

Measured Parameter	Symbol	Units	Value
Normal operating voltage range specified by the manufacturer	V_b	V	480-826
Propulsion Battery Voltage: (ready to drive position)	V_b	V	792.0
Propulsion Battery to Vehicle Chassis	V_1	V	556.0
Propulsion Battery to Vehicle Chassis	V_2	V	552.0
Propulsion Battery to Vehicle Chassis Across Known Resistor	R_o	Ω	403,000
Propulsion Battery to Vehicle Chassis with R_o installed	V_1'	V	121.4
Propulsion Battery to Vehicle Chassis with R_o installed	V_2'	V	122.3
$_{i1}= R_o*(1+V_2/V_1)*[(V_1-V_1')/V_1']$	R_{i1}	Ω	2,875,021
$R_{i2}= R_o*(1+V_1/V_2)*[(V_2-V_2')/V_2']$	R_{i2}	Ω	2,842,134
Lesser value of R_{i1} and R_{i2}	R_i	Ω	2,842,134
Electrical Isolation Value (Minimum E.I. Value is 500 Ω/V)	R_i/V_b	Ω/V	3,589

Is the Electrical Isolation Value ≥ 500 Ω/V (Yes/No)? [X] Yes [ ] No (Fail)

NOTES:

- *The measurement shall be made with the propulsion battery connected to the vehicle propulsion system, and the vehicle in the "ready-to-drive" (propulsion motor(s) activated) position.*
- *If the voltage measurement is not at the voltage or within the normal operating voltage range specified by the manufacturer, the battery must be charged.*
- *The known resistance Ro (in Ohms) should be approximately 500 times the nominal operating voltage of the vehicle (in volts) per SAE J1766*

If measured voltage is zero and results in a division by zero, record "Zero Volts." This "zero voltage" condition is considered as being compliant

DATA SHEET NO. 305-4
POST-IMPACT DATA FOR INDICANT FMVSS NO. 305 TESTING

Test Vehicle: 2025 KIA EV6 5 Door SUV NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test Test Date: 08/12/2025

VOLTMETER INFORMATION

Measured Parameter	Units	Value
Make & Model		Fluke 1587
Serial No.		49210189
Internal Impedance Value	MΩ	10
Resolution	V	0.001
Last Calibration Date		04/22/2025

NOTES:

- *The voltmeter used in this test shall measure DC values and have an internal impedance of at least 10 M Ω*
- *An oscilloscope meeting the above requirements may need to be used to adequately measure voltage in some vehicles.*

ELECTRICAL ISOLATION MEASUREMENTS & IMPACT CALCULATIONS

Parameter	Value	Units		Value		Value	
V_b =	5.6	V	Time:	2	Minutes	12	Seconds
V_1 =	43.0	V	Time:	2	Minutes	19	Seconds
V_2 =	26.0	V	Time:	2	Minutes	23	Seconds
R_o =	403,000	Ω					
V_1' =	1.0	V	Time:	2	Minutes	30	Seconds
V_2' =	1.4	V	Time:	2	Minutes	35	Seconds
R_{i1} =	27,160,326	Ω	Time:	2	Minutes	30	Seconds
R_{i2} =	18,792,643	Ω	Time:	2	Minutes	35	Seconds
R_i =	18,792,643	Ω/V	Time:	2	Minutes	35	Seconds
R_i/V_b =	3,355,829	Ω/V	Time:	2	Minutes	35	Seconds

Is the Electrical Isolation Value ≥ 500 Ω/V (Yes/No)? X Yes No (Fail)

NOTES:

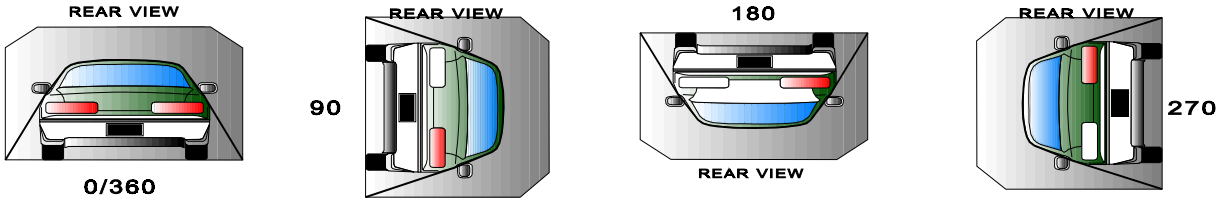
- *R_{i1}= R_o*(1+V_2/V_1)*[(V_1-V_1')/V_1'], R_{i2}= R_o*(1+V_1/V_2)*[(V_2-V_2')/V_2'], R_i = Lesser value of R_{i1} and R_{i2}*
- *If measured voltage is zero and results in a division by zero, record "Zero Volts." This "zero voltage" condition is considered as being compliant*
- *Minimum Electrical Isolation Value is 500 Ω/V*

PROPULSION BATTERY SYSTEM COMPONENTS

Measured Parameter	Comments	Passed	Failed
Propulsion Battery Module movement within the passenger compartment	None	X	
Intrusion of an outside Propulsion Battery Component into the passenger compartment	None	X	
Is propulsion battery electrolyte spillage visible in the passenger compartment?	None	X	

DATA SHEET NO. 305-5
STATIC ROLLOVER TEST DATA FOR INDICANT FMVSS NO. 305 TESTING

Test Vehicle: 2025 KIA EV6 5 Door SUV
Test Program: NCAP Side Pole Impact Test
NHTSA No.: O20254200
Test Date: 08/12/2025



Rear View

DETERMINATION OF PROPULSION BATTERY ELECTROLYTE COLLECTION TIME PERIOD

Rollover Stage	Rotation Time (spec. 1 -3 min)		FMVSS 301 Hold Time	Total Time		Next Whole Minute Interval
	Minutes	Seconds	Minutes	Minutes	Seconds	Minutes
0° to 90°	1	12	5	6	12	7
90° to 180°	1	11	5	6	11	7
180° to 270°	1	2	5	6	2	7
270° to 360°	1	10	5	6	10	7

ACTUAL TEST VEHICLE PROPULSION BATTERY ELECTROLYTE SPILLAGE

Rollover Stage	Propulsion Battery Electrolyte Spillage	Units	Spillage Location
0° to 90°	0	Liters	No Spillage
90° to 180°	0	Liters	No Spillage
180° to 270°	0	Liters	No Spillage
270° to 360°	0	Liters	No Spillage
Total Spillage	0	Liters	No Spillage

** FMVSS 305 Requirements: Maximum allowable propulsion battery electrolyte spillage is **5.0 Liters***

Is the total spillage of propulsion battery electrolyte greater than 5.0 Liters? [ ] Yes (Fail) [X] No
Is propulsion battery electrolyte spillage visible in the passenger compartment? [ ] Yes (Fail) [X] No

VOLTMETER INFORMATION

Measured Parameter	Units	Value
Make & Model		Fluke 1587
Serial No.		49210189
Internal Impedance Value	MΩ	10
Resolution	V	0.001
Last Calibration Date		04/22/2025

NOTES:

- *The voltmeter used in this test shall measure DC values and have an internal impedance of at least 10 M Ω*
- *An oscilloscope meeting the above requirements may need to be used to adequately measure voltage in some vehicles.*

DATA SHEET NO. 305-5
STATIC ROLLOVER TEST DATA FOR INDICANT FMVSS NO. 305 TESTING (CONT'D)

Test Vehicle: 2025 KIA EV6 5 Door SUV NHTSA No.: O20254200
Test Program: NCAP Side Pole Impact Test Test Date: 08/12/2025

ELECTRICAL ISOLATION MEASUREMENTS & CALCULATIONS

Parameter	Rollover Stage	Value	Units	R_o=404,900	Minutes	Seconds
V_b =	90°	5.6	V	Time:	3	34
	180°	5.6	V		9	19
	270°	5.6	V		15	22
	360°	5.6	V		22	15
V_1 =	90°	3.2	V	Time:	3	42
	180°	1.4	V		9	28
	270°	1.9	V		15	30
	360°	1.9	V		22	20
V_2 =	90°	2.8	V	Time:	3	47
	180°	5.0	V		9	34
	270°	4.8	V		15	35
	360°	4.5	V		22	37
V_1' =	90°	0.0	V	Time:	3	54
	180°	0.0	V		9	49
	270°	0.0	V		15	44
	360°	0.0	V		22	45
V_2' =	90°	0.0	V	Time:	4	4
	180°	0.2	V		9	59
	270°	0.0	V		15	52
	360°	0.0	V		22	54
R_{i1} =	90°	Zero Volts	Ω	Time:	3	54
	180°	Zero Volts	Ω		9	49
	270°	Zero Volts	Ω		15	44
	360°	Zero Volts	Ω		22	45
R_{i2} =	90°	Zero Volts	Ω	Time:	4	4
	180°	12,380,160	Ω		9	59
	270°	Zero Volts	Ω		15	52
	360°	Zero Volts	Ω		22	54
R_i =	90°	Zero Volts	Ω	Time:	4	4
	180°	12,380,160	Ω		9	59
	270°	Zero Volts	Ω		15	52
	360°	Zero Volts	Ω		22	54
R_i/V_b =	90°	Zero Volts	Ω/V	Time:	4	4
	180°	2,210,743	Ω/V		9	59
	270°	Zero Volts	Ω/V		15	52
	360°	Zero Volts	Ω/V		22	54

Is the Electrical Isolation Value ≥ 500 Ω/V (Yes/No)? X Yes ____ No (Fail)

APPENDIX A

PHOTOGRAPHS

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Figure A-1: As Delivered Right Front ¾ View of Test Vehicle



Figure A-2: As Delivered Left Rear ¾ View of Test Vehicle

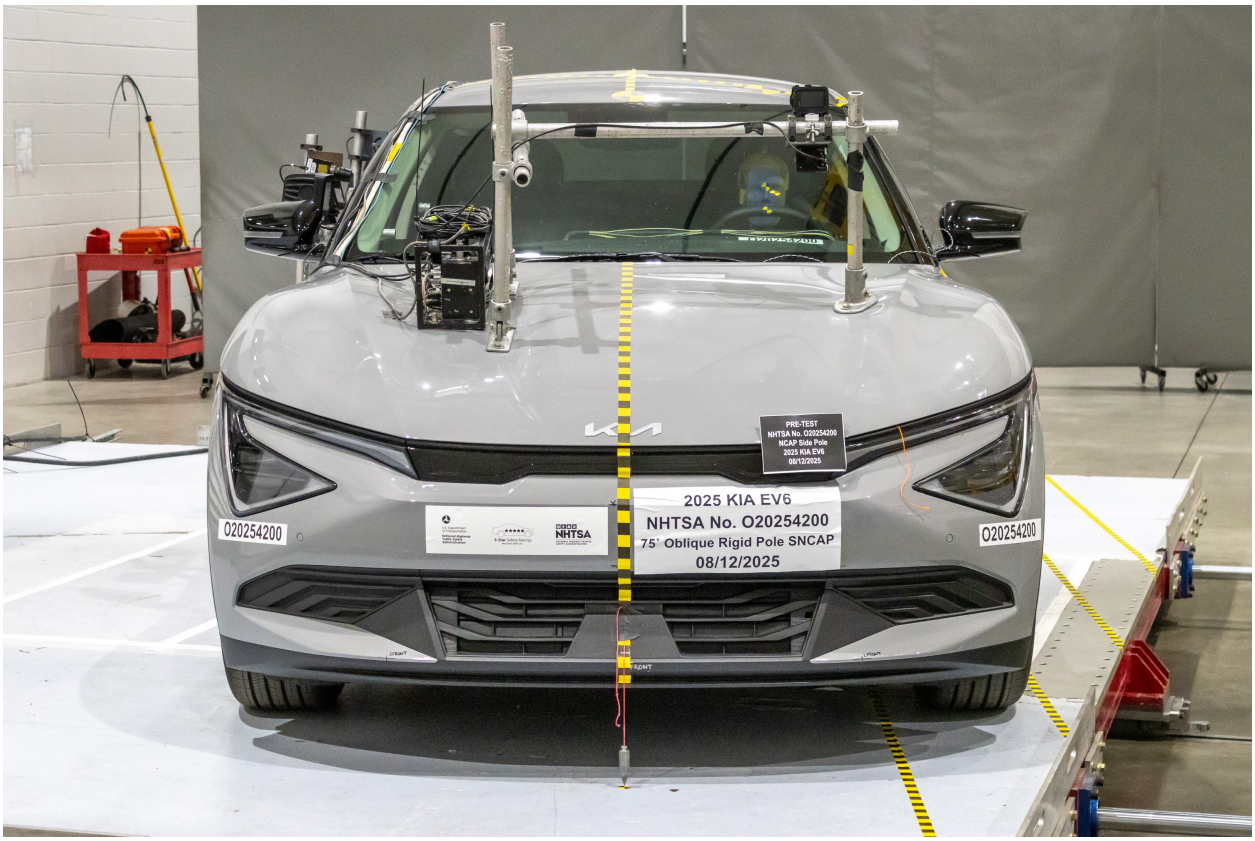


Figure A-3: Pre-Test Frontal View of Test Vehicle

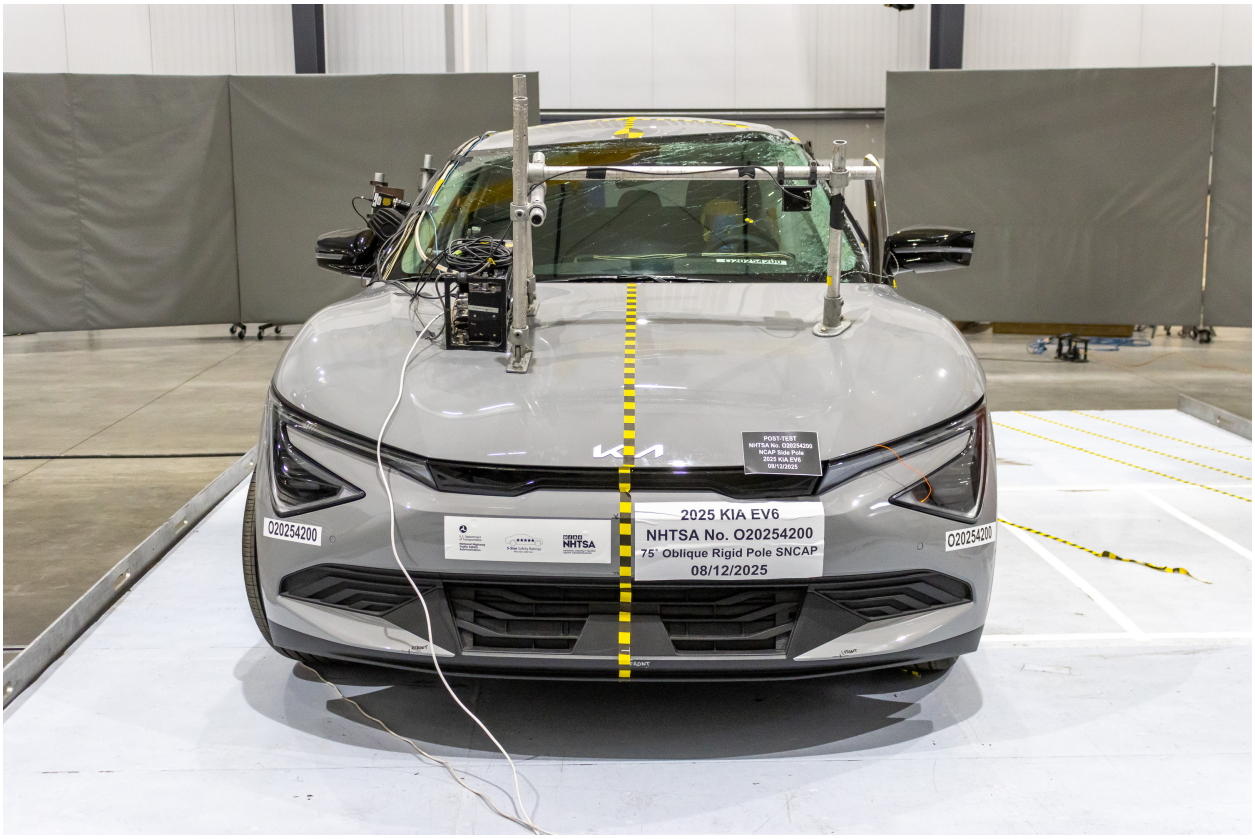


Figure A-4: Post-Test Frontal View of Test Vehicle



Figure A-5: Pre-Test Left Front ¾ View of Test Vehicle



Figure A-6: Post-Test Left Front ¾ View of Test Vehicle



Figure A-7: Pre-Test Left Side View of Test Vehicle

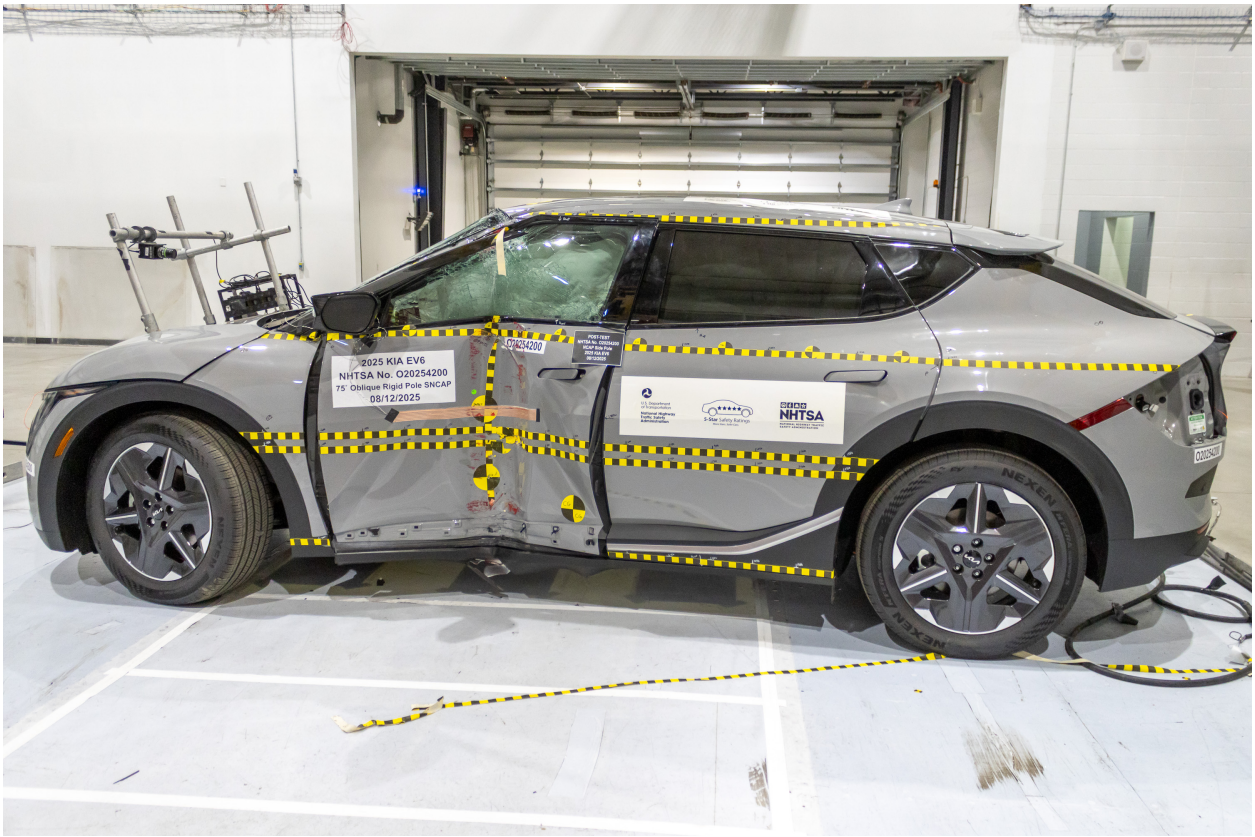


Figure A-8: Post-Test Left Side View of Test Vehicle

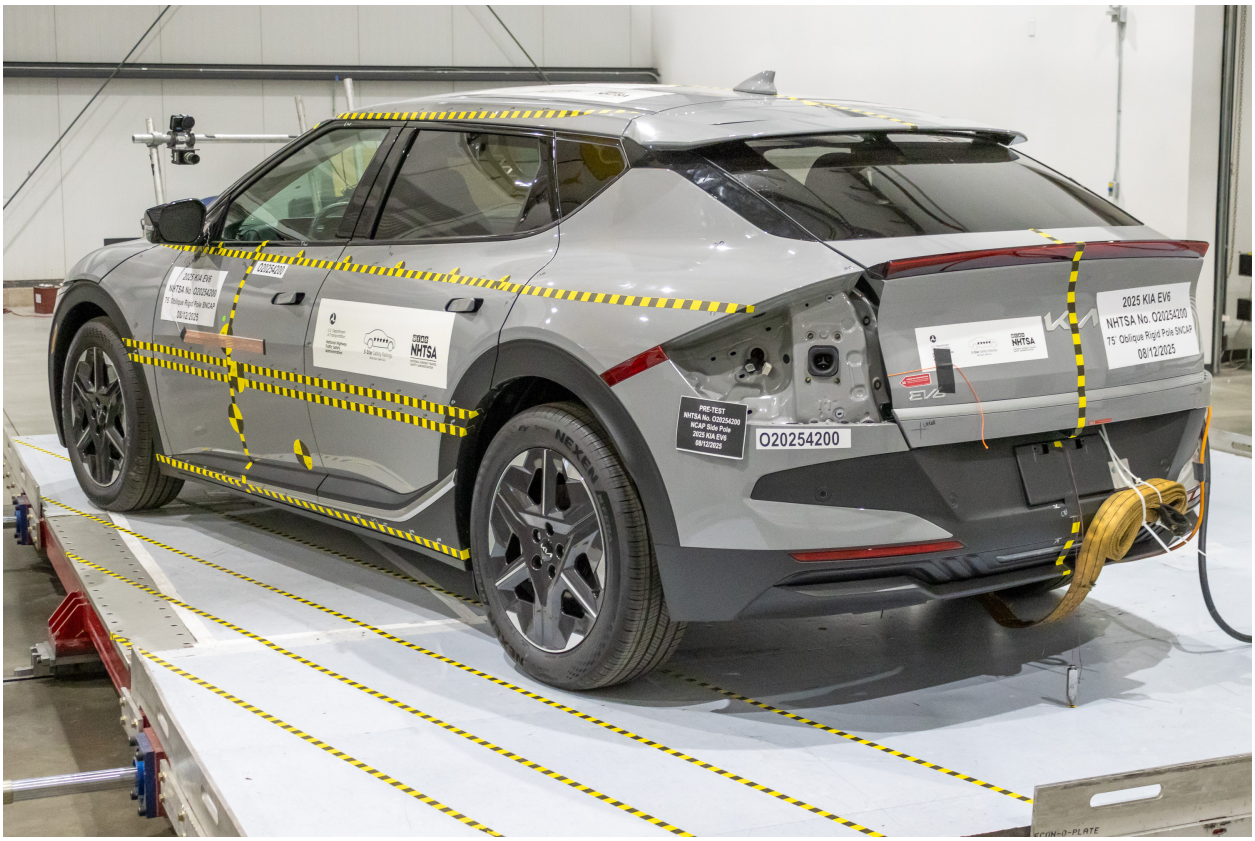


Figure A-9: Pre-Test Left Rear ¾ View of Test Vehicle

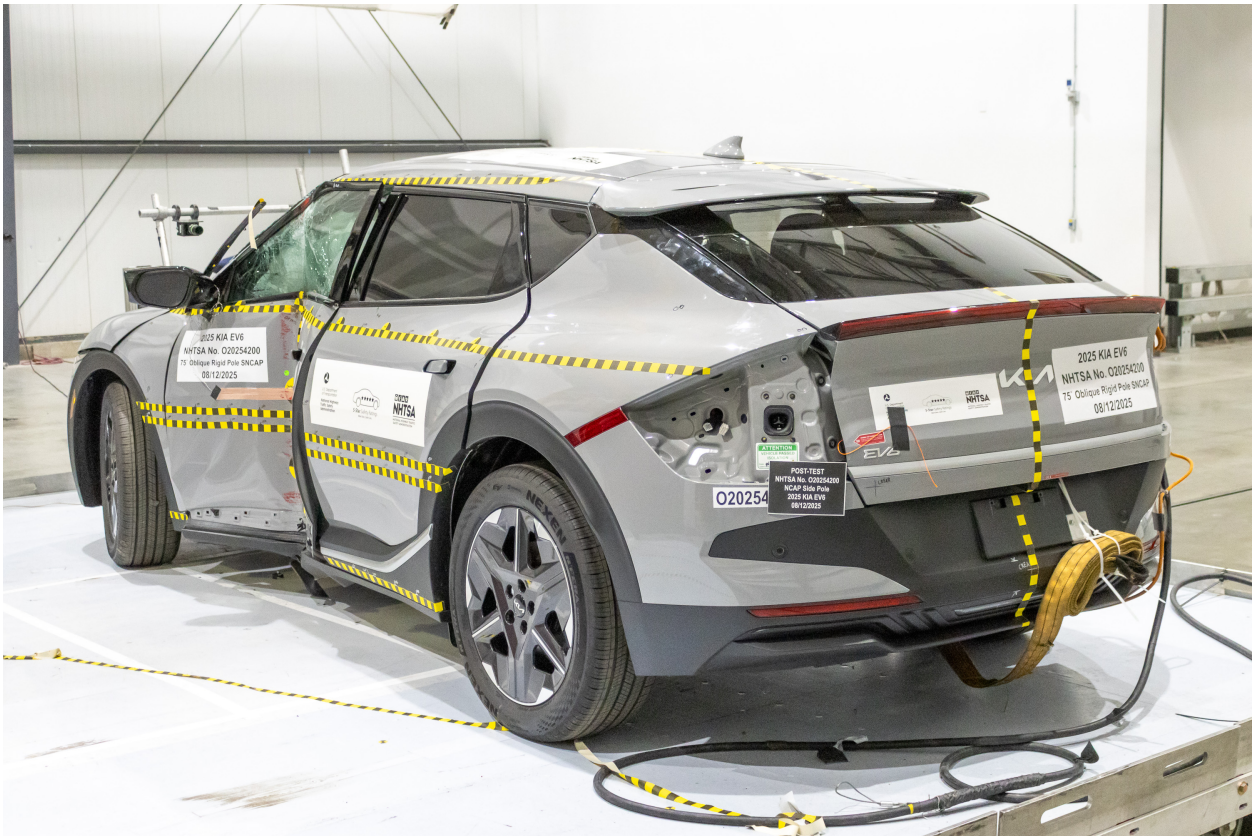


Figure A-10: Post-Test Left Rear ¾ View of Test Vehicle

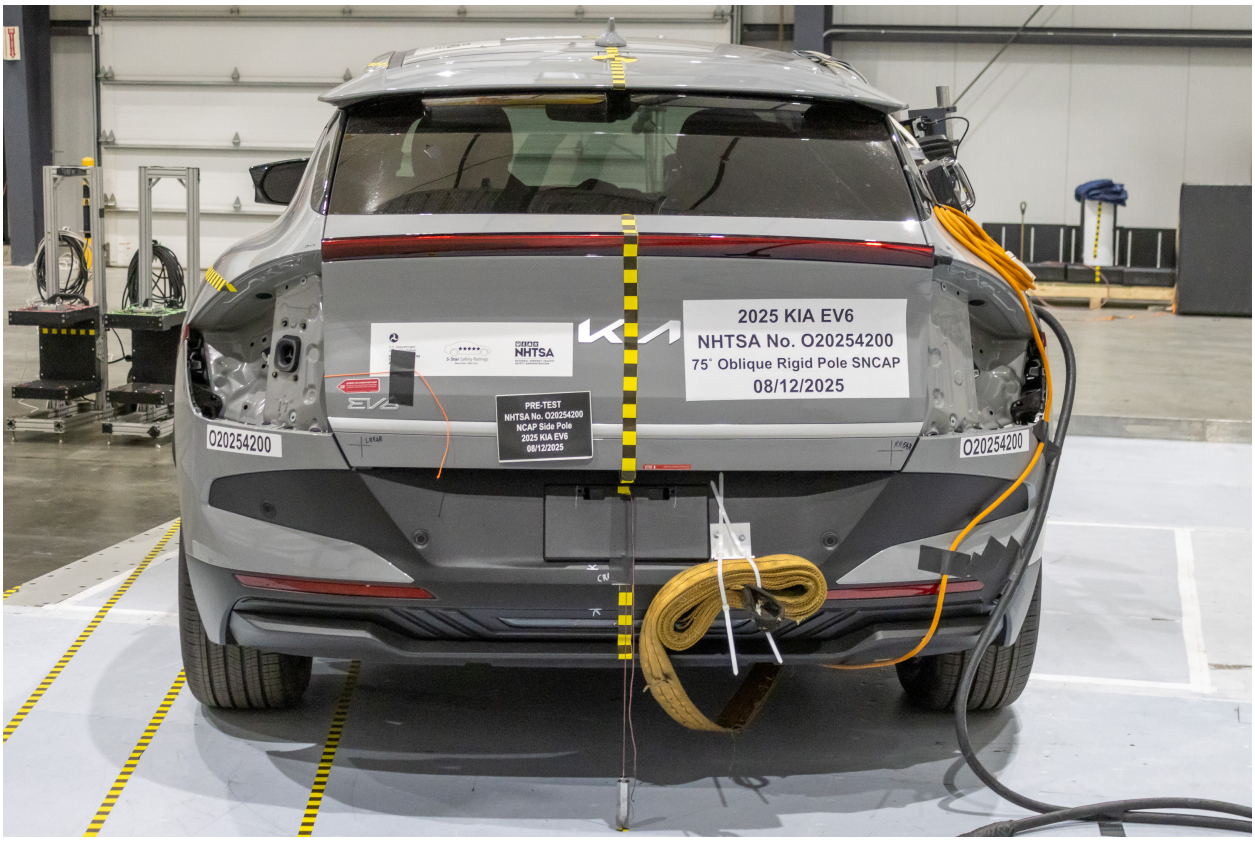


Figure A-11: Pre-Test Rear View of Test Vehicle

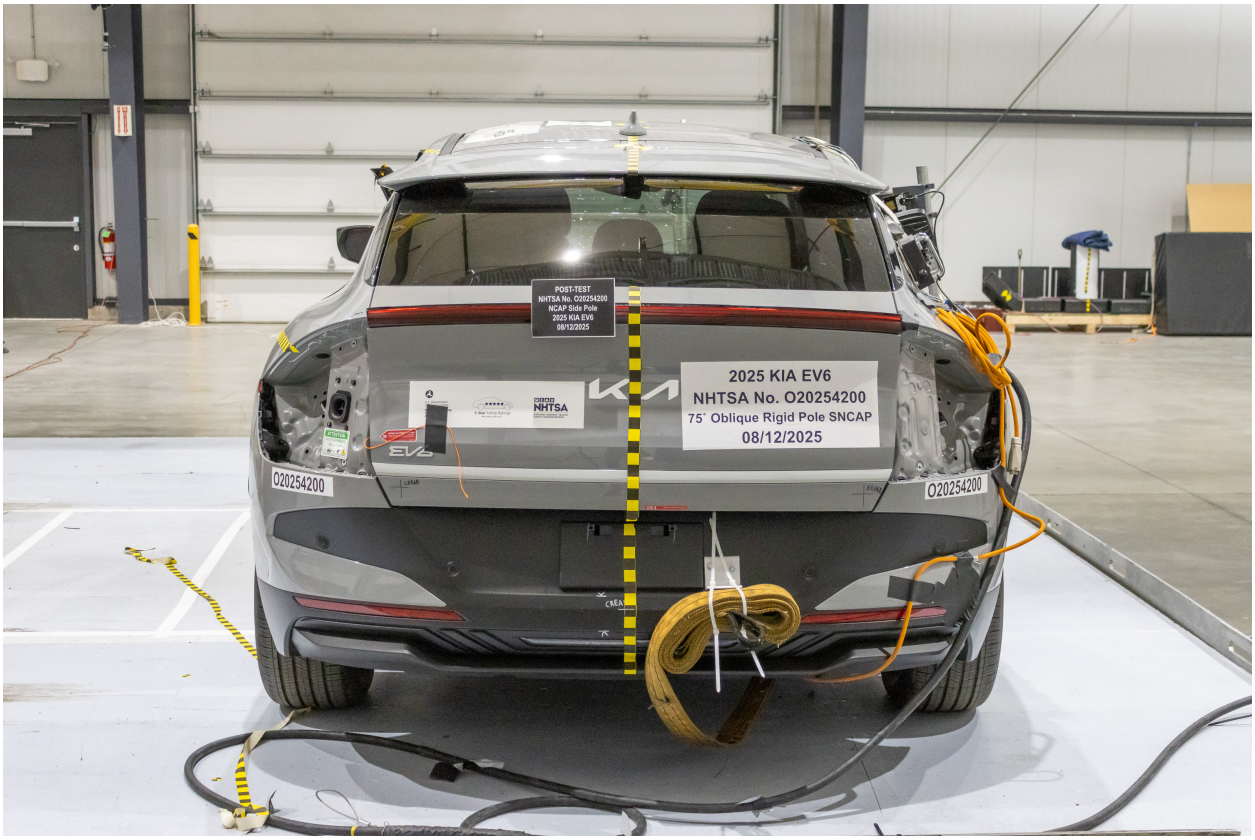


Figure A-12: Post-Test Rear View of Test Vehicle



Figure A-13: Pre-Test Right Side View of Test Vehicle



Figure A-14: Post-Test Right Side View of Test Vehicle

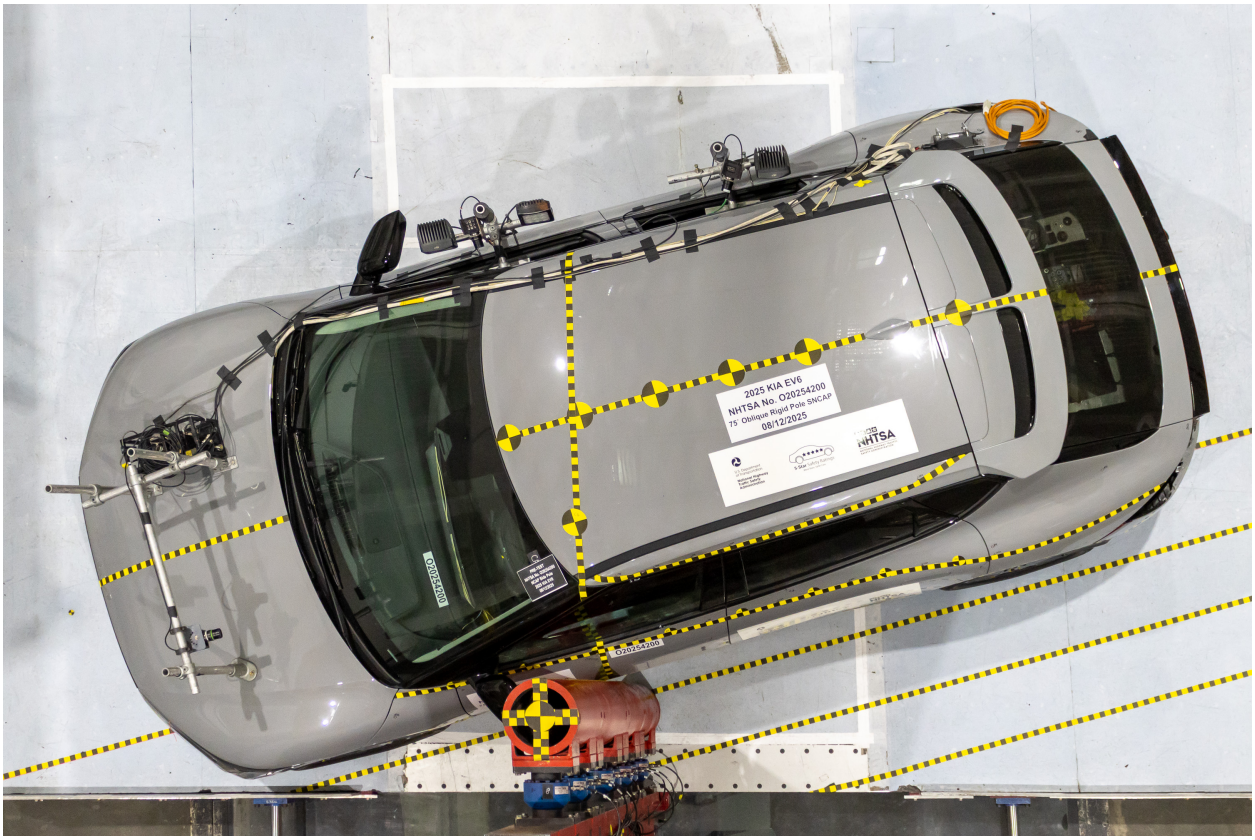


Figure A-15: Pre-Test Overhead View of Test Area

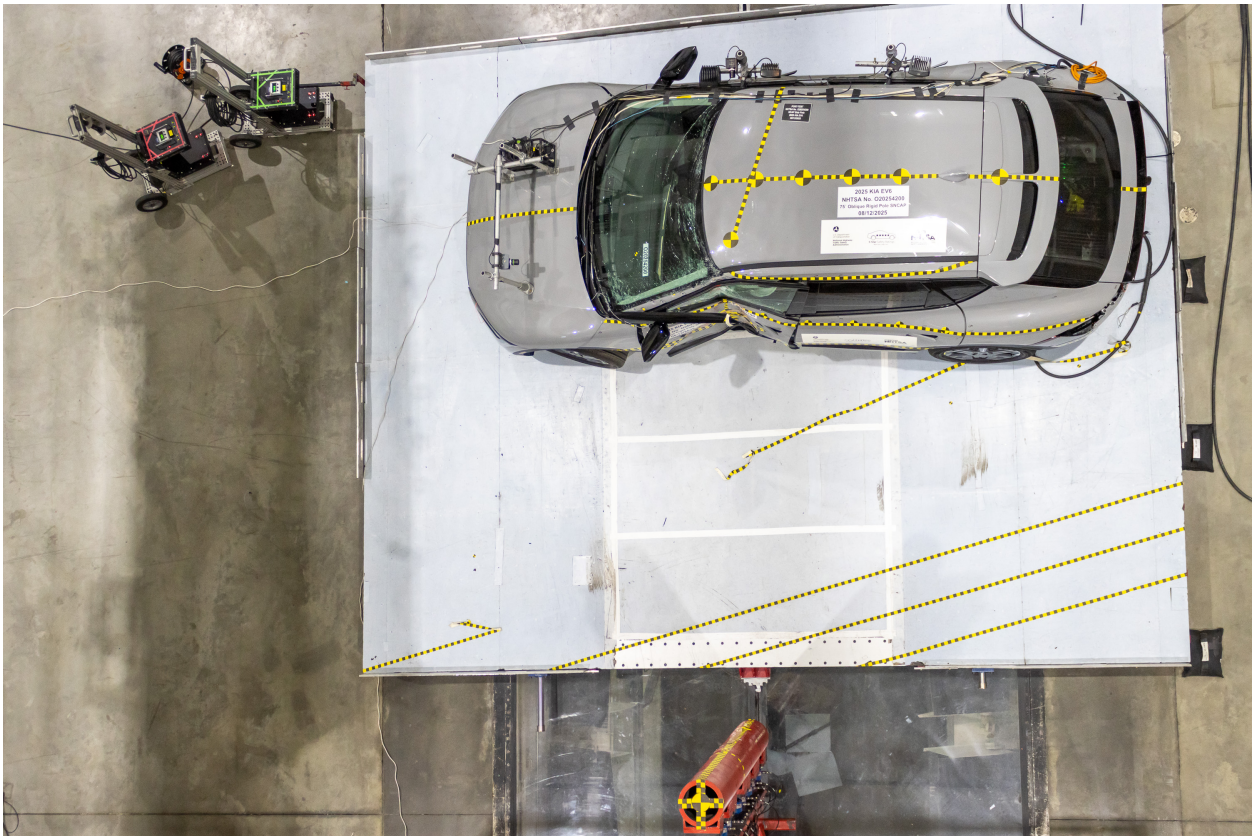


Figure A-16: Post-Test Overhead View of Test Area



Figure A-17: Pre-Test Left Side View of Pole Positioned Against Side of Vehicle



Figure A-18: Pre-Test Right Side View of Pole Positioned Against Side of Vehicle



Figure A-19: Pre-Test Close-Up View of Impact Point Target



Figure A-20: Post-Test Close-Up View of Impact Point Target Showing Impact Location

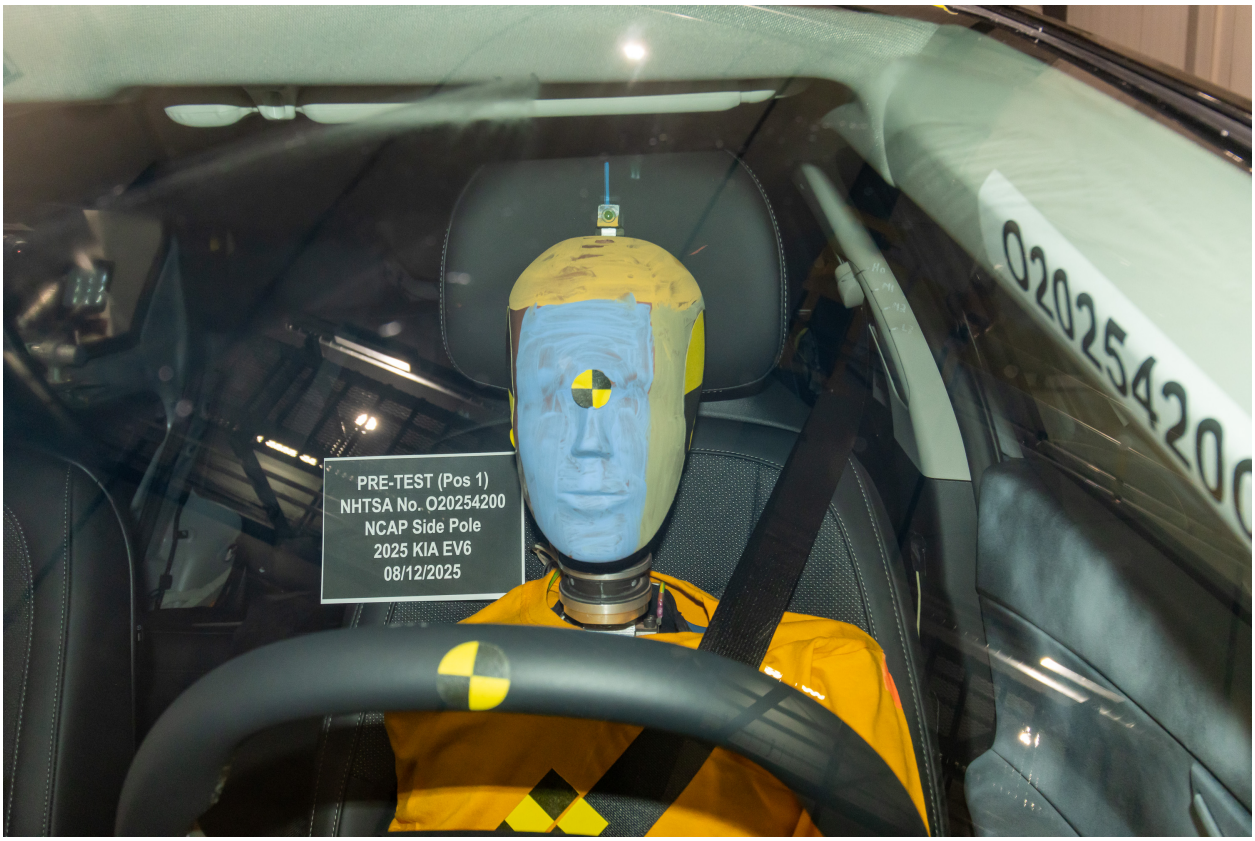


Figure A-21: Pre-Test Front Close-Up View of Dummy Head and Chest



Figure A-22: Post-Test Front Close-Up View of Dummy



Figure A-23: Pre-Test Left Side View of Dummy Showing Belt and Chalking



Figure A-24: Pre-Test Left Side View of Dummy Shoulder and Door Top View



Figure A-25: Post-Test Left Side View of Dummy Shoulder and Door Top View



Figure A-26: Pre-Test Frontal View of Seat Back Prior to Dummy Positioning

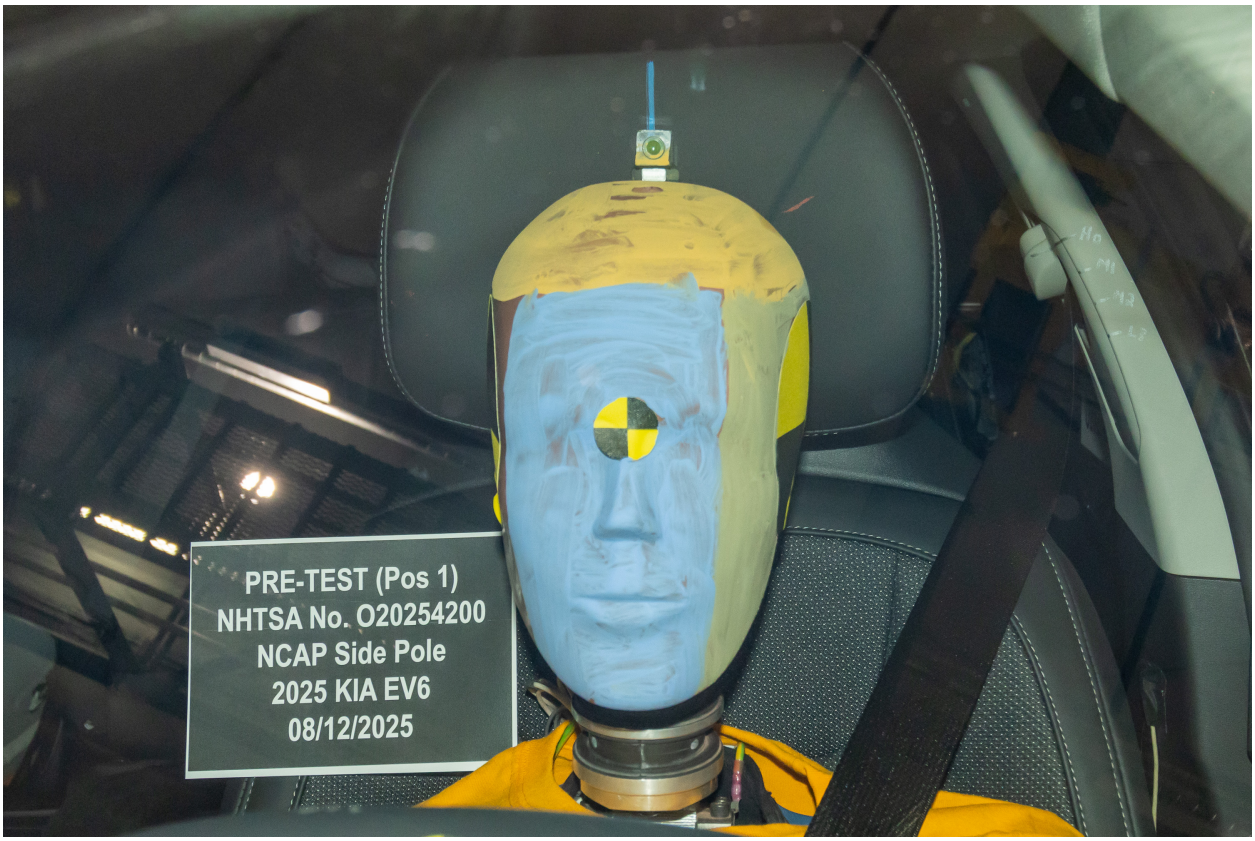


Figure A-27: Pre-Test Frontal Close-Up View of Dummy Head / Shoulders in Relation to Head Restraint



Figure A-28: Pre-Test Frontal View of Seat Pan Prior to Dummy Positioning



Figure A-29: Pre-Test Overhead View of Dummy Thighs on Seat Pan



Figure A-30: Pre-Test Left Side View of Dummy's Neck Showing Position of Adjustable Neck Bracket



Figure A-31: Pre-Test Left Side View of Dummy's Head Showing Dummy's Head is Level



Figure A-32: Pre-Test Placement of Dummy's Feet



Figure A-33: Pre-Test View of Belt Anchorage for Dummy



Figure A-34: Pre-Test Left Side View of Steering Wheel



Figure A-35: Pre-Test View of Disengaged Parking Brake



Figure A-36: Pre-Test View of Parking Brake



Figure A-37: Pre-Test Close-Up Left Side View of Driver Seat Track



Figure A-38: Pre-Test Close-Up Left Side View of Driver Seat Back



Figure A-39: Pre-Test Close-Up View of Driver Seat Back or Head Restraint

Photo Not Available

Figure A-40: Pre-Test Dummy and Door Clearance View



Figure A-41: Post-Test Dummy and Door Clearance View



Figure A-42: Pre-Test Right Side View of Dummy and Front Seat of Occupant Compartment



Figure A-43: Post-Test Right Side View of Dummy and Front Seat of Occupant Compartment



Figure A-44: Pre-Test Inner Door Panel View



Figure A-45: Post-Test Inner Door Panel View Showing Dummy Contact Location



Figure A-46: Post-Test Dummy Close-Up Head Contact with Vehicle Interior View



Figure A-47: Post-Test Dummy Close-Up Head Contact with Side Airbag View



Figure A-48: Post-Test Dummy Close-Up Torso Contact with Vehicle Interior View



Figure A-49: Post-Test Dummy Close-Up Torso Contact with Side Airbag View



Figure A-50: Post-Test Dummy Close-Up Pelvis Contact with Vehicle Interior View



Figure A-51: Post-Test Dummy Close-Up Pelvis Contact with Side Airbag View



Figure A-52: Post-Test Dummy Close-Up Knee Contact with Vehicle Interior View



Figure A-53: Pre-Test Right Side View of Dummy and Rear Seat of Occupant Compartment



Figure A-54: Post-Test Inner Rear Passenger Torso Air Bag Deployment View



Figure A-55: Pre-Test Charging Port



Figure A-56: Post-Test Charging Port



Figure A-57: Close-Up View of Vehicle's Certification Label

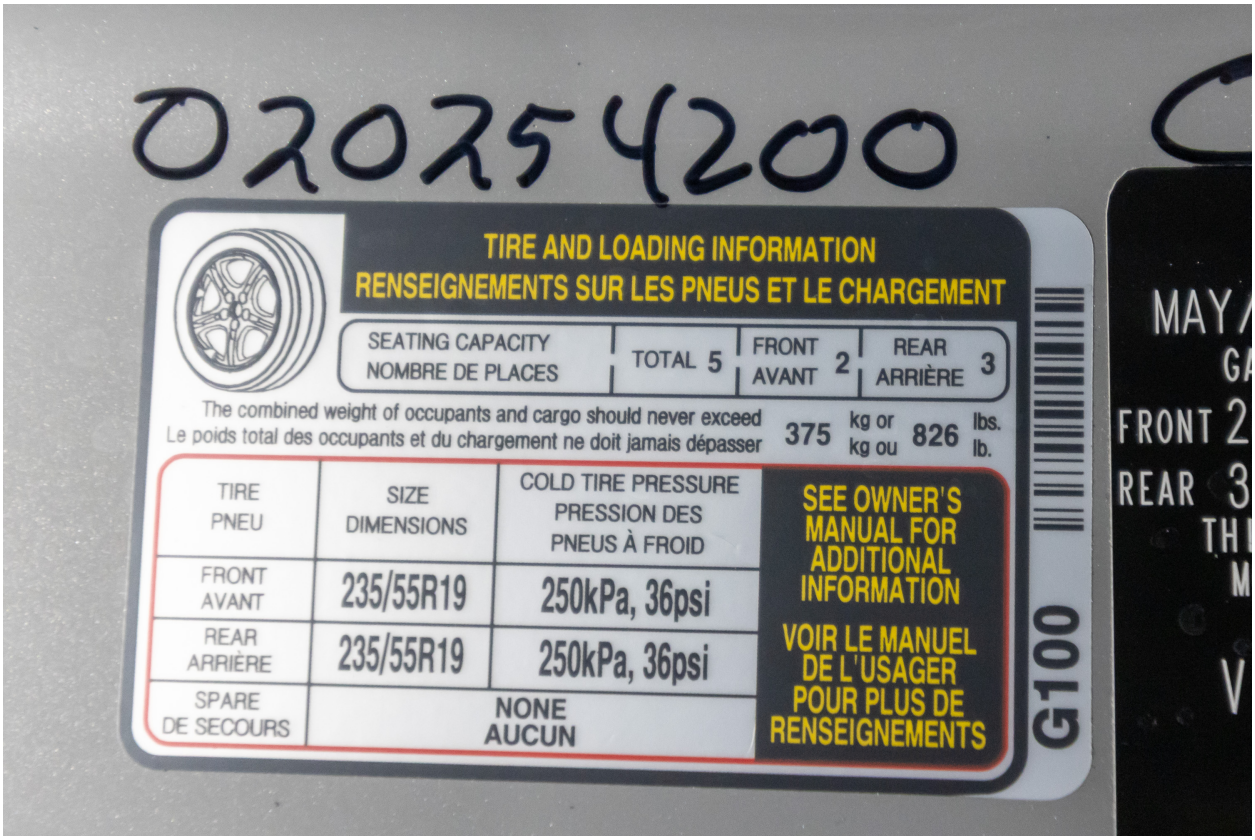


Figure A-58: Close-Up View of Vehicle's Tire Information Placard or Label

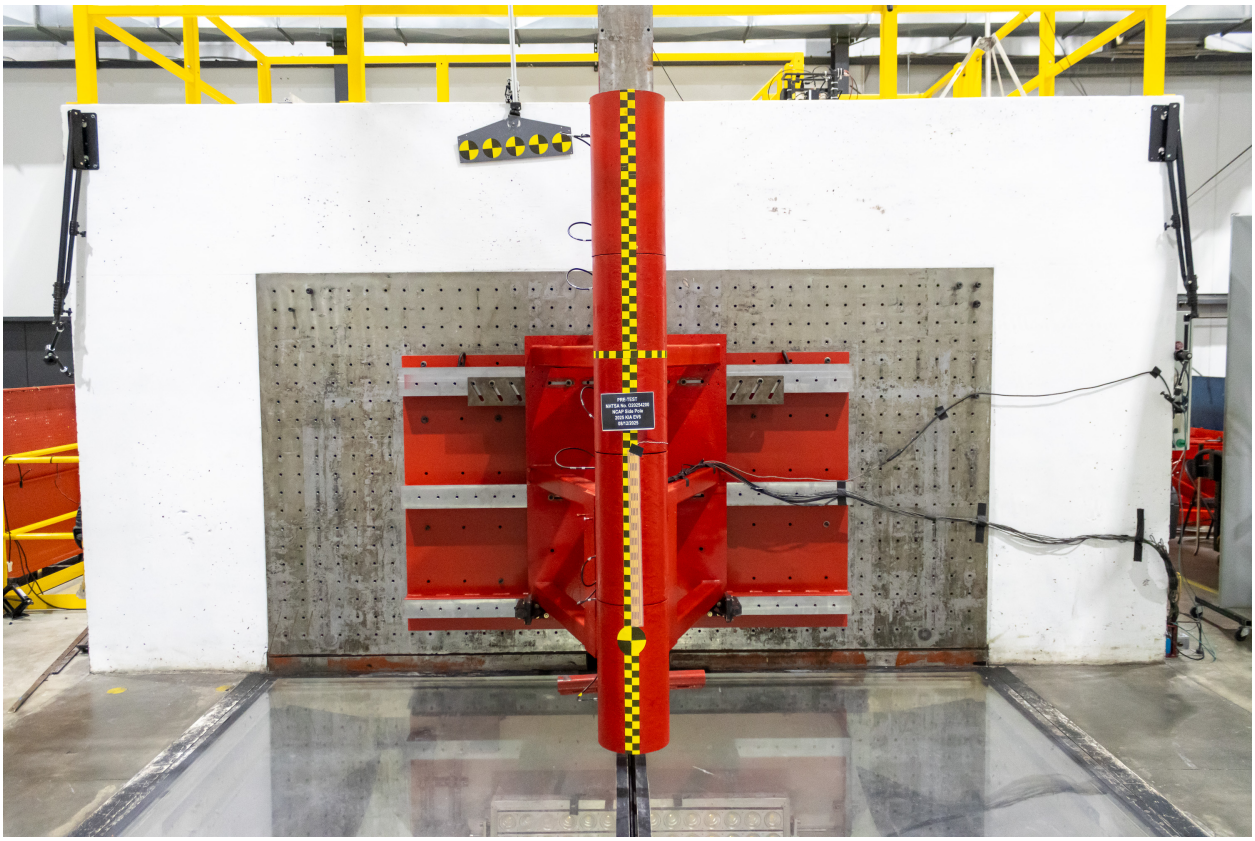


Figure A-59: Pre-Test Pole Barrier Front View

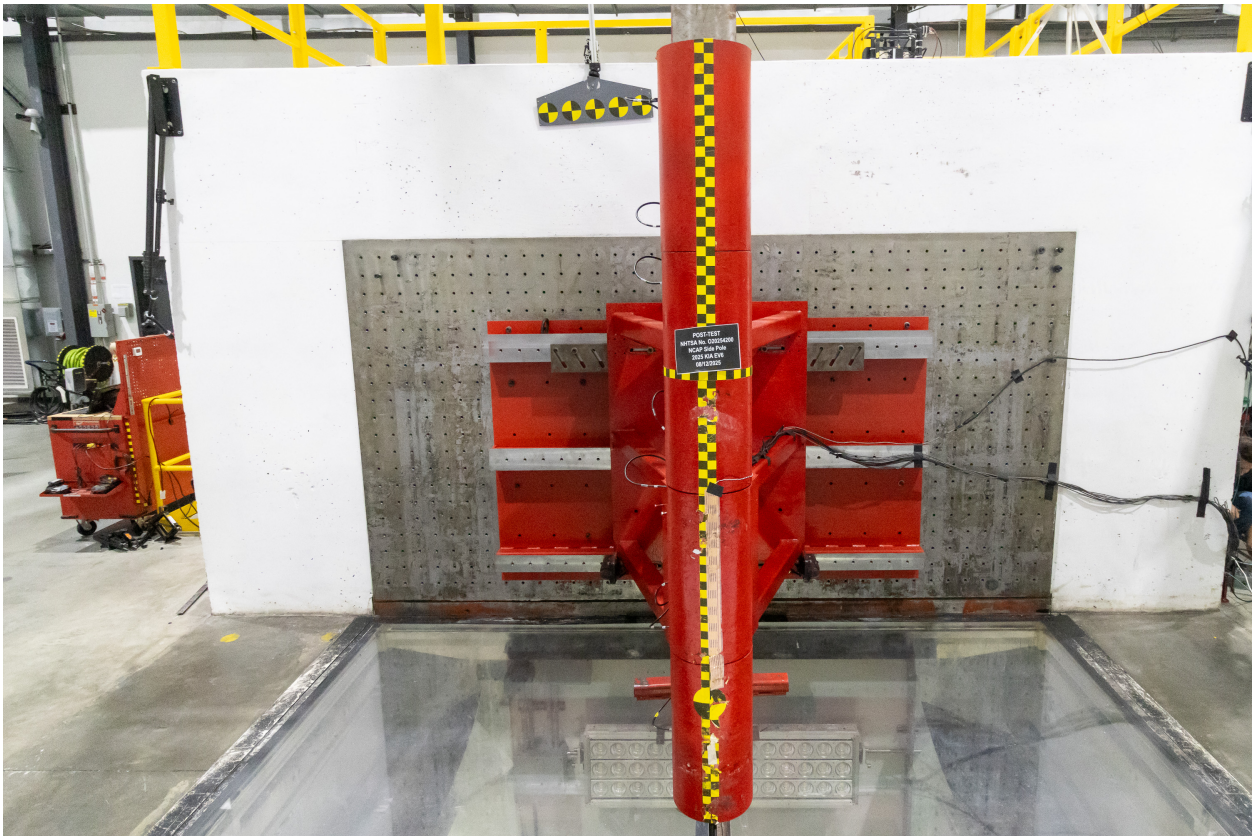


Figure A-60: Post-Test Pole Barrier Front View

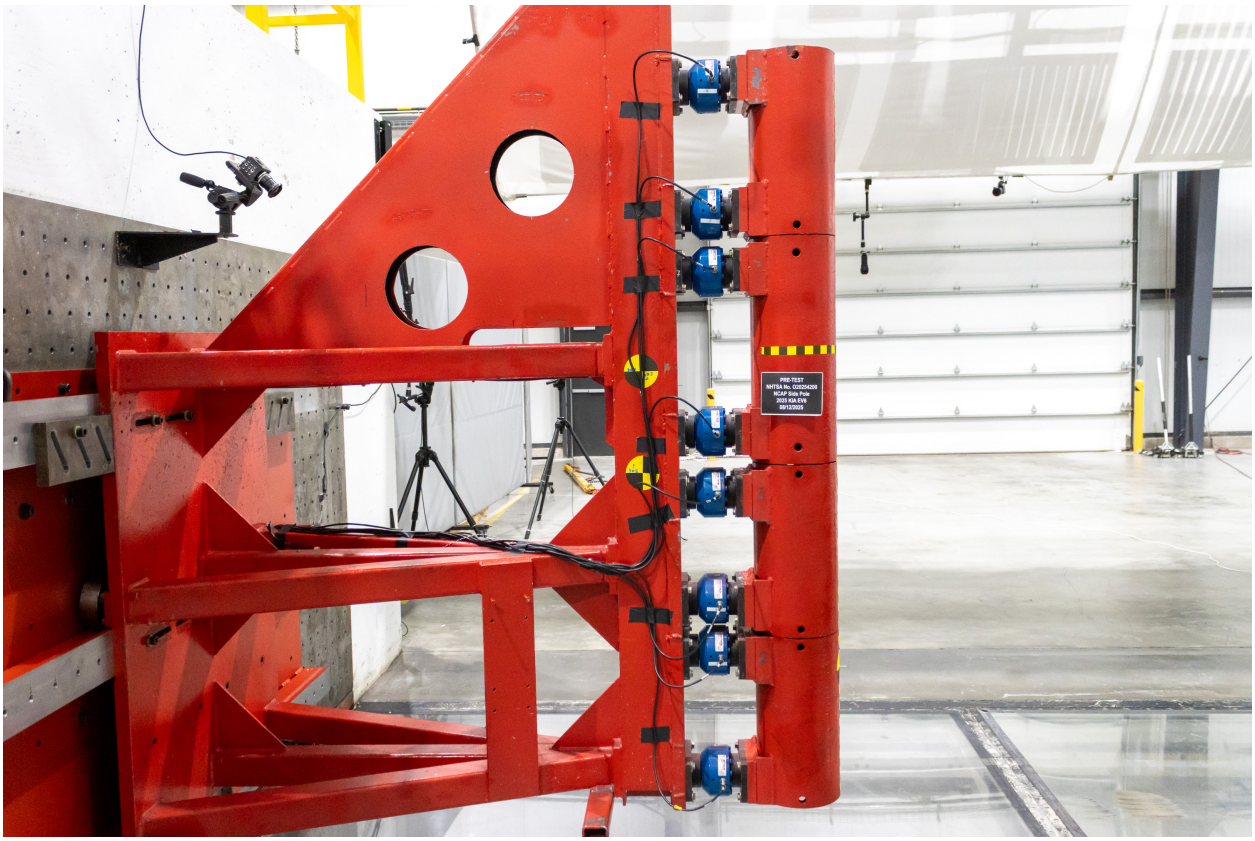


Figure A-61: Pre-Test Pole Barrier Side View

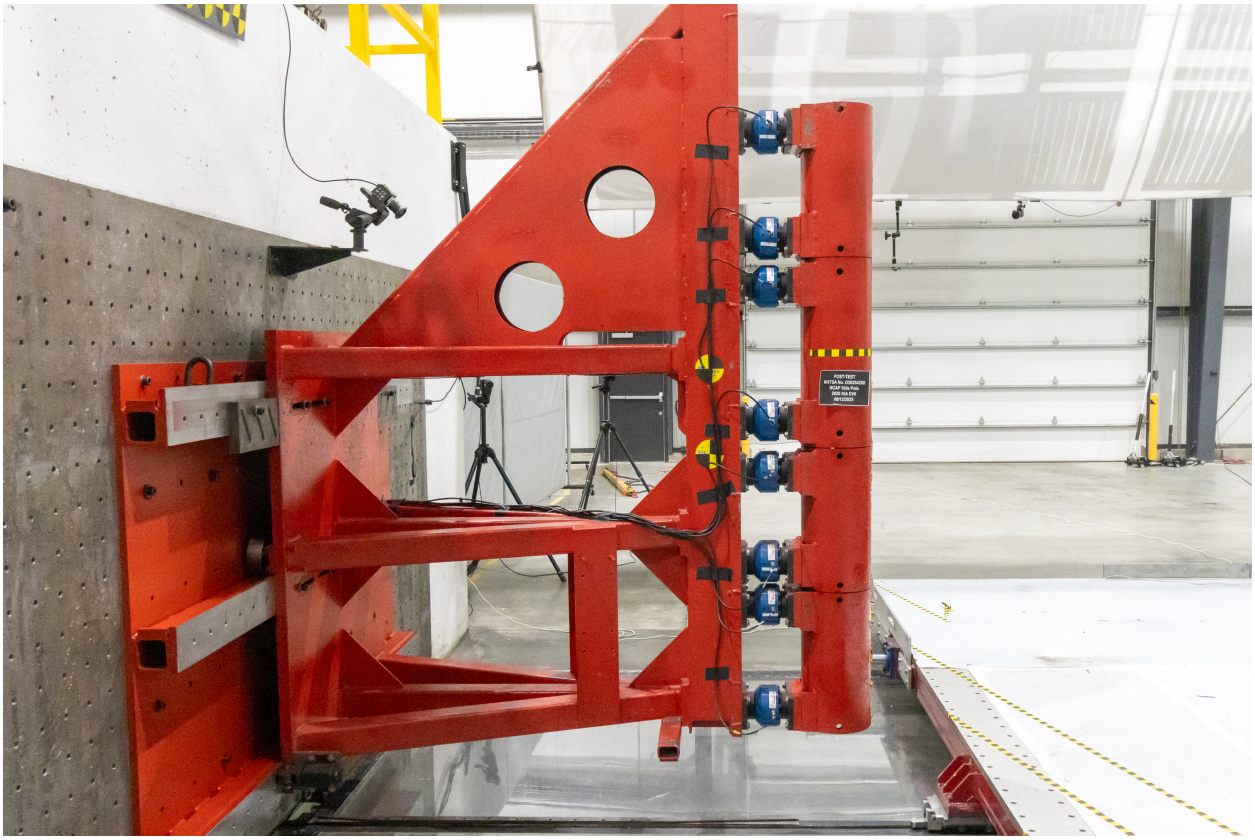


Figure A-62: Post-Test Pole Barrier Side View

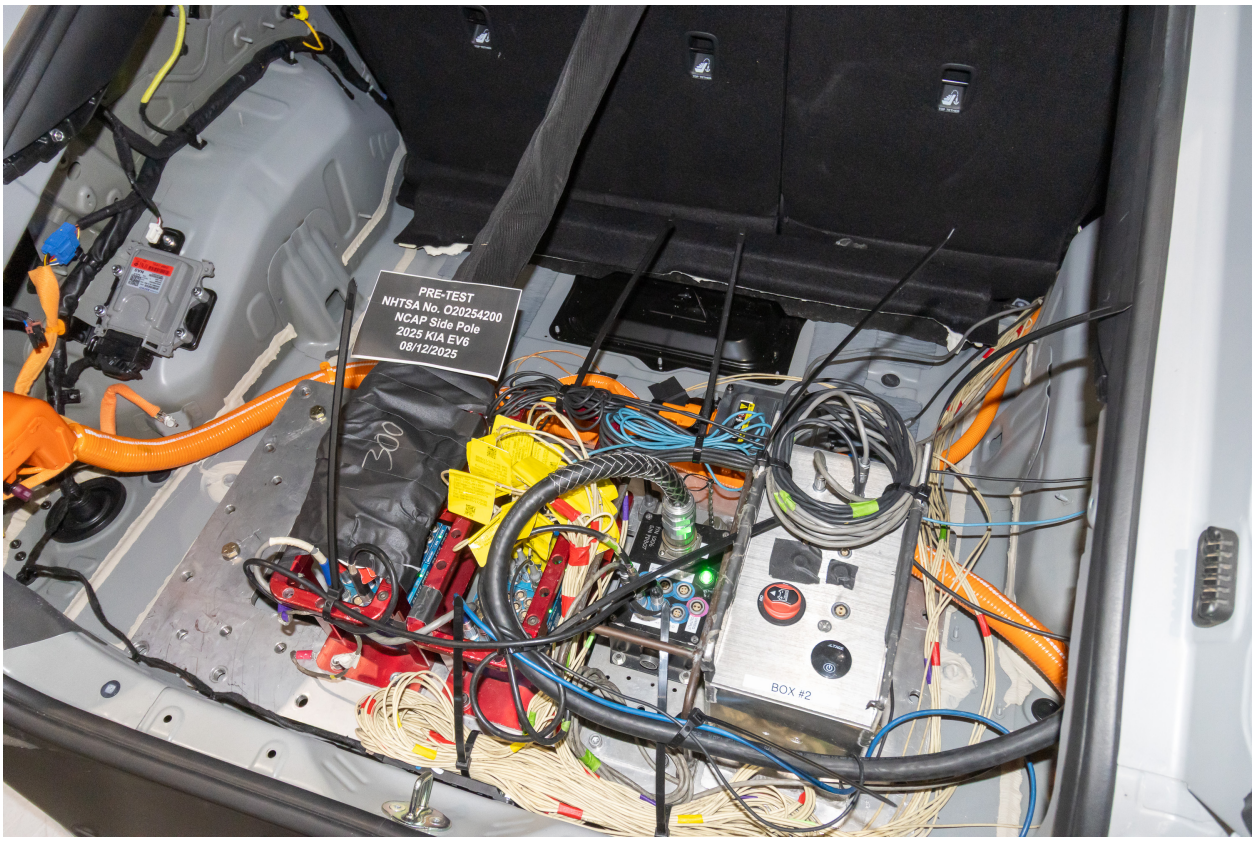


Figure A-63: Pre-Test Ballast View



Figure A-64: Post-Test Primary and Redundant Speed Trap Read-Out



Figure A-65: FMVSS No. 301 Static Rollover 0 Degrees

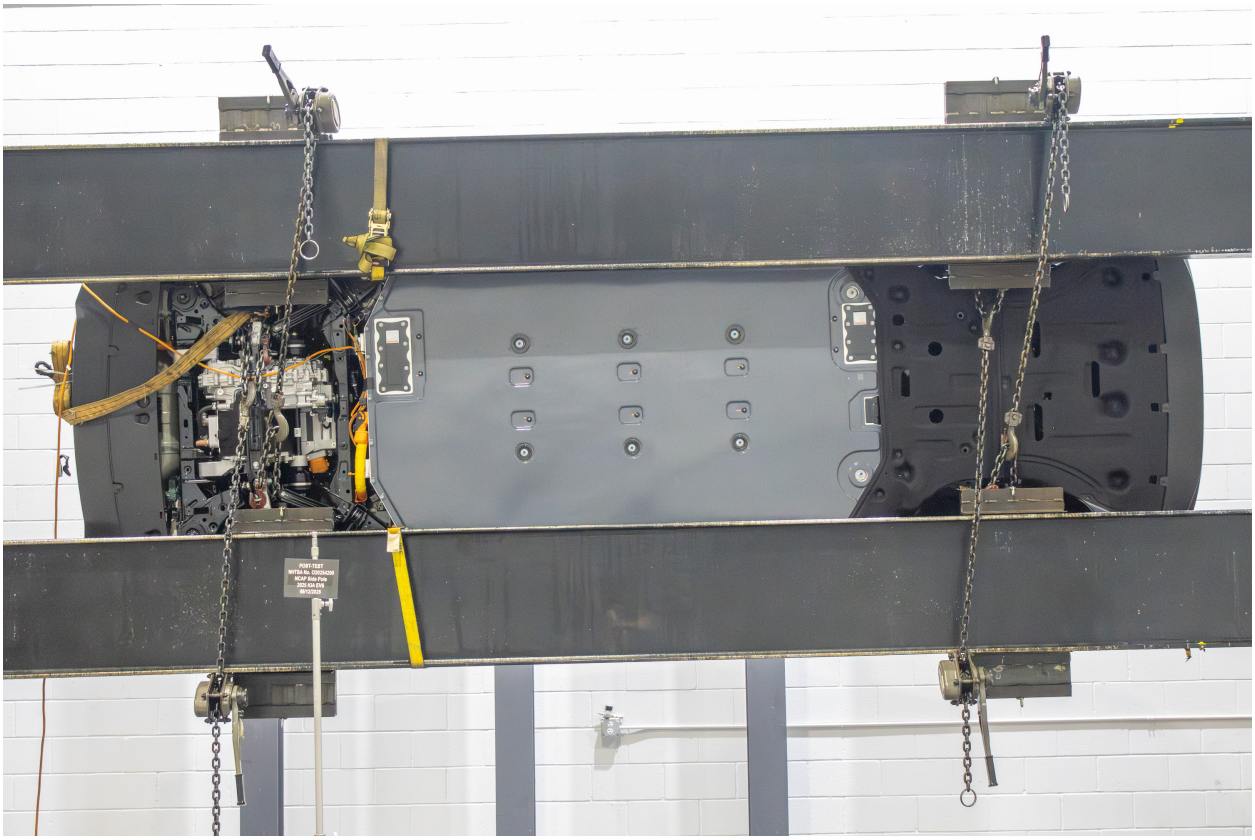


Figure A-66: FMVSS No. 301 Static Rollover 90 Degrees

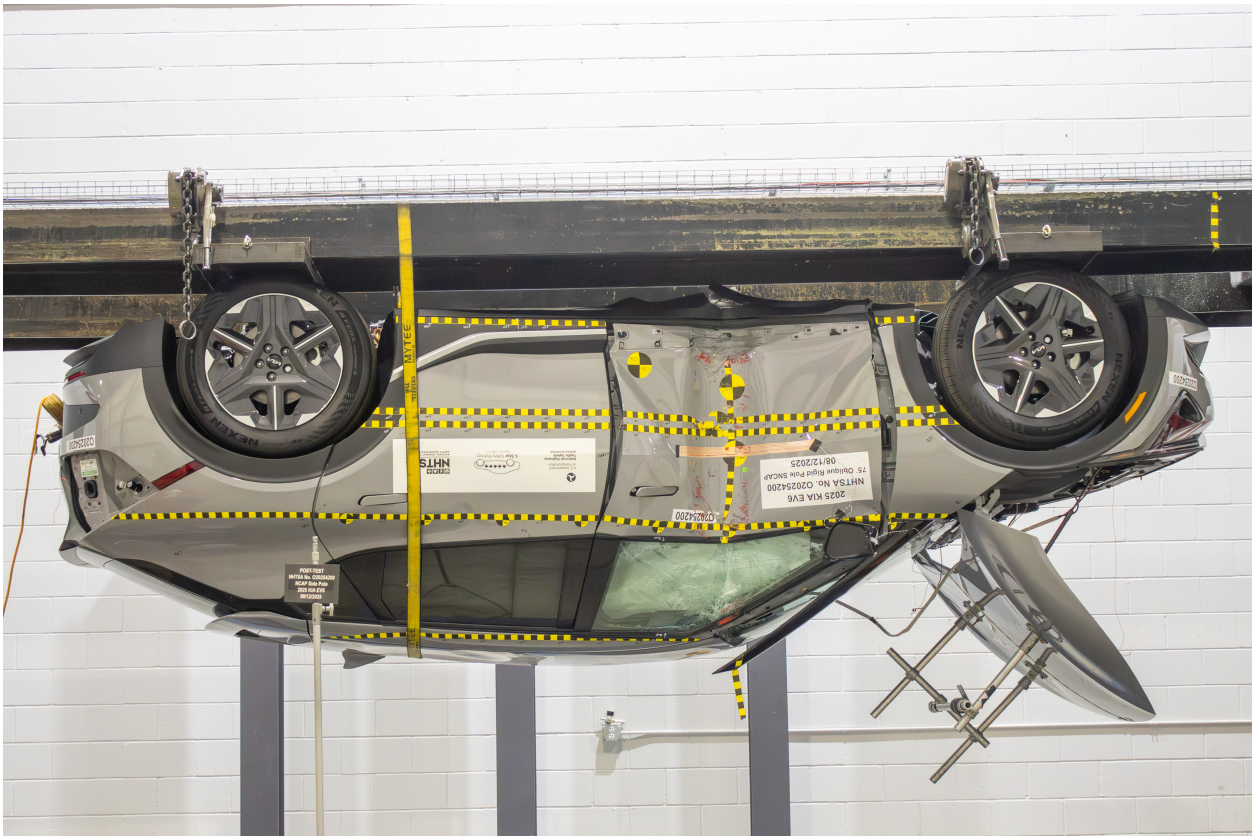


Figure A-67: FMVSS No. 301 Static Rollover 180 Degrees



Figure A-68: FMVSS No. 301 Static Rollover 270 Degrees

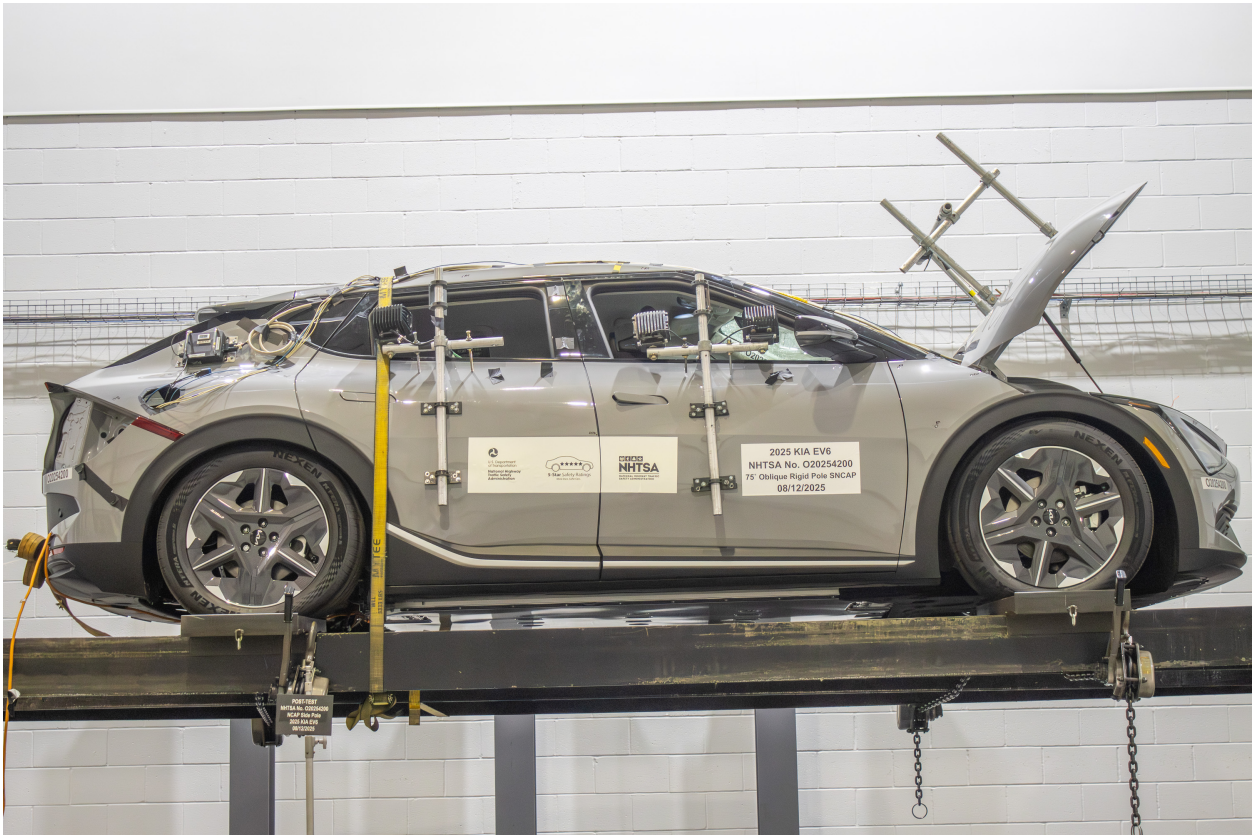


Figure A-69: FMVSS No. 301 Static Rollover 360 Degrees

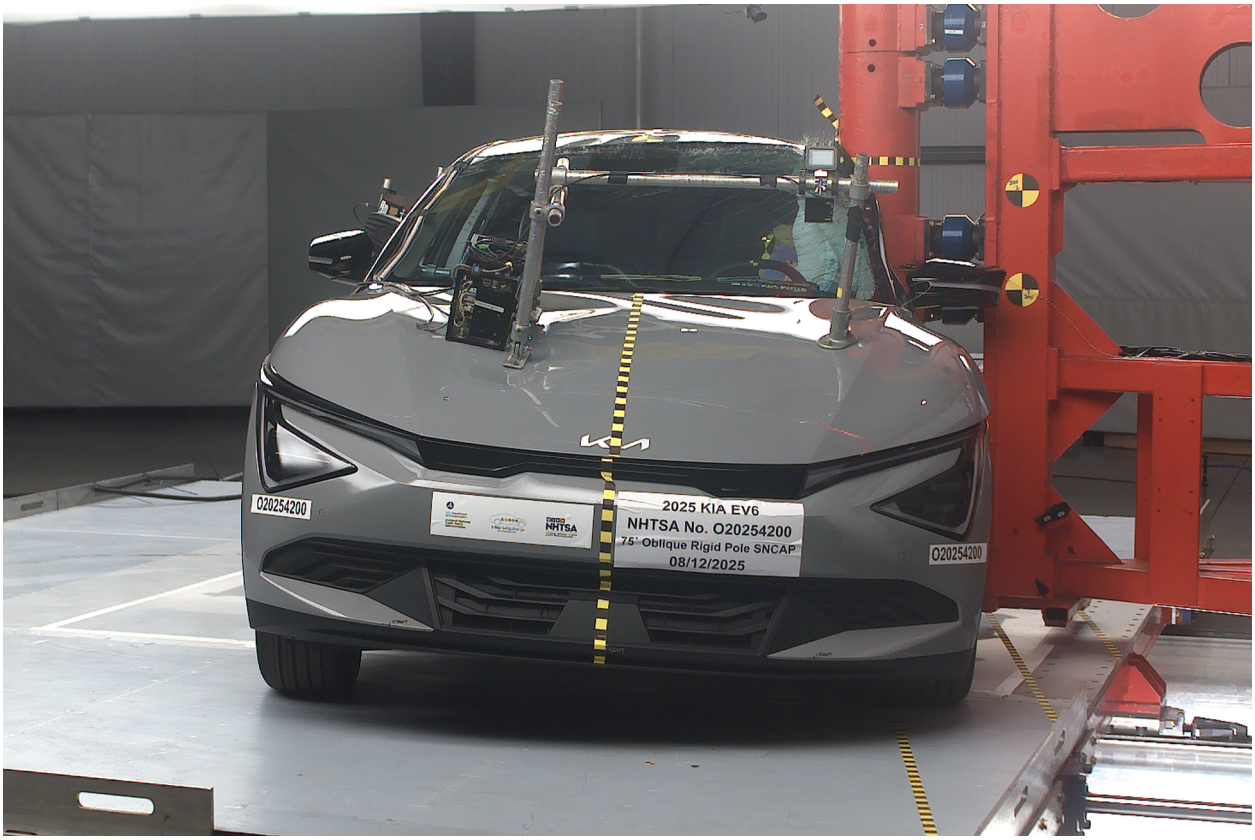
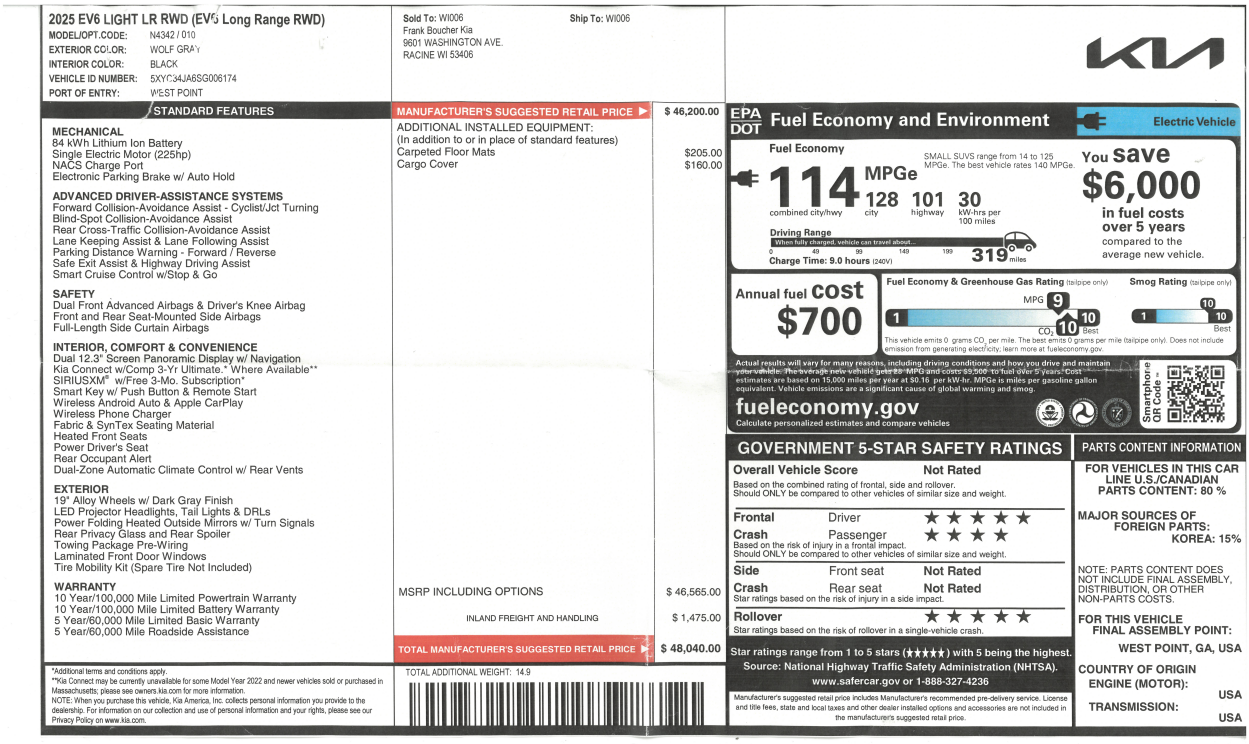


Figure A-70: Impact Event



2025 EV6 LIGHT LR RWD (EV6 Long Range RWD)
MODEL/OPT.CODE: N4342 / 010
EXTERIOR COLOR: WOLF GRAY
INTERIOR COLOR: BLACK
VEHICLE ID NUMBER: 5XYC34JA6SG006174
PORT OF ENTRY: WEST POINT

Sold To: WI006
Frank Boucher Kia
9601 WASHINGTON AVE.
RACINE WI 53406

Ship To: WI006

STANDARD FEATURES

MECHANICAL
84 kWh Lithium Ion Battery
Single Electric Motor (225hp)
NACS Charge Port
Electronic Parking Brake w/ Auto Hold

ADVANCED DRIVER-ASSISTANCE SYSTEMS
Forward Collision-Avoidance Assist - Cyclist/Jct Turning
Blind-Spot Collision-Avoidance Assist
Rear Cross-Traffic Collision-Avoidance Assist
Lane Keeping Assist & Lane Following Assist
Parking Distance Warning - Forward / Reverse
Safe Exit Assist & Highway Driving Assist
Smart Cruise Control w/Stop & Go

SAFETY
Dual Front Advanced Airbags & Driver's Knee Airbag
Front and Rear Seat-Mounted Side Airbags
Full-Length Side Curtain Airbags

INTERIOR, COMFORT & CONVENIENCE
Dual 12.3" Screen Panoramic Display w/ Navigation
Kia Connect w/Comp 3-Yr Ultimate.* Where Available**
SIRIUSXM® w/Free 3-Mo. Subscription*
Smart Key w/ Push Button & Remote Start
Wireless Android Auto & Apple CarPlay
Wireless Phone Charger
Fabric & SynTex Seating Material
Heated Front Seats
Power Driver's Seat
Rear Occupant Alert
Dual-Zone Automatic Climate Control w/ Rear Vents

EXTERIOR
19" Alloy Wheels w/ Dark Gray Finish
LED Projector Headlights, Tail Lights & DRLs
Power Folding Heated Outside Mirrors w/ Turn Signals
Rear Privacy Glass and Rear Spoiler
Towing Package Pre-Wiring
Laminated Front Door Windows
Tire Mobility Kit (Spare Tire Not Included)

WARRANTY
10 Year/100,000 Mile Limited Powertrain Warranty
10 Year/100,000 Mile Limited Battery Warranty
5 Year/60,000 Mile Limited Basic Warranty
5 Year/60,000 Mile Roadside Assistance

*Additional terms and conditions apply.
**Kia Connect may be currently unavailable for some Model Year 2022 and newer vehicles sold or purchased in Massachusetts; please see owners.kia.com for more information.
NOTE: When you purchase this vehicle, Kia America, Inc. collects personal information you provide to the dealership. For information on our collection and use of personal information and your rights, please see our Privacy Policy on www.kia.com.

MANUFACTURER'S SUGGESTED RETAIL PRICE ▶	$ 46,200.00
ADDITIONAL INSTALLED EQUIPMENT: (In addition to or in place of standard features)	
Carpeted Floor Mats	$205.00
Cargo Cover	$160.00
MSRP INCLUDING OPTIONS	$ 46,565.00
INLAND FREIGHT AND HANDLING	$ 1,475.00
TOTAL MANUFACTURER'S SUGGESTED RETAIL PRICE ▶	$ 48,040.00

TOTAL ADDITIONAL WEIGHT: 14.9

EPA DOT Fuel Economy and Environment — Electric Vehicle

Fuel Economy
114 MPGe combined city/hwy
128 city | 101 highway | 30 kW-hrs per 100 miles
SMALL SUVS range from 14 to 125 MPGe. The best vehicle rates 140 MPGe.
Driving Range — When fully charged, vehicle can travel about... 319 miles
Charge Time: 9.0 hours (240V)

You save $6,000 in fuel costs over 5 years compared to the average new vehicle.

Annual fuel COST $700

Fuel Economy & Greenhouse Gas Rating (tailpipe only): MPG 9; CO_2 10 Best
Smog Rating (tailpipe only): 10 Best

This vehicle emits 0 grams CO_2 per mile. The best emits 0 grams per mile (tailpipe only). Does not include emission from generating electricity, learn more at fueleconomy.gov.

Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 19 MPG and costs $5,500 to fuel over 5 years. Cost estimates are based on 15,000 miles per year at $0.16 per kW-hr. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of global warming and smog.

fueleconomy.gov
Calculate personalized estimates and compare vehicles
Smartphone QR Code

GOVERNMENT 5-STAR SAFETY RATINGS

Overall Vehicle Score: Not Rated
Based on the combined rating of frontal, side and rollover.
Should ONLY be compared to other vehicles of similar size and weight.

Frontal Crash — Driver ★★★★★ / Passenger ★★★★
Based on the risk of injury in a frontal impact.
Should ONLY be compared to other vehicles of similar size and weight.

Side Crash — Front seat: Not Rated / Rear seat: Not Rated
Star ratings based on the risk of injury in a side impact.

Rollover ★★★★★
Star ratings based on the risk of rollover in a single-vehicle crash.

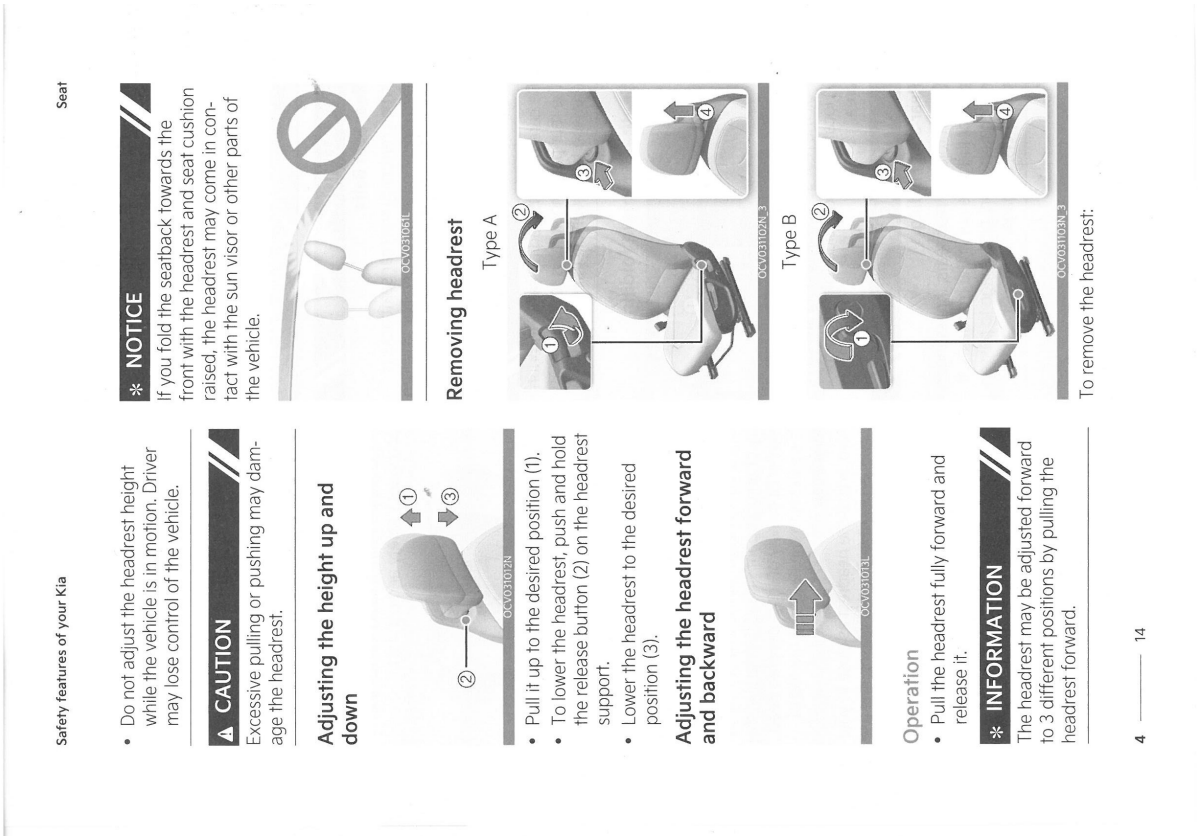
Star ratings range from 1 to 5 stars (★★★★★) with 5 being the highest.
Source: National Highway Traffic Safety Administration (NHTSA).
www.safercar.gov or 1-888-327-4236

Manufacturer's suggested retail price includes Manufacturer's recommended pre-delivery service. License and title fees, state and local taxes and other dealer installed options and accessories are not included in the manufacturer's suggested retail price.

PARTS CONTENT INFORMATION

FOR VEHICLES IN THIS CAR LINE U.S./CANADIAN PARTS CONTENT: 80 %
MAJOR SOURCES OF FOREIGN PARTS: KOREA: 15%
NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.
FOR THIS VEHICLE FINAL ASSEMBLY POINT: WEST POINT, GA, USA
COUNTRY OF ORIGIN
ENGINE (MOTOR): USA
TRANSMISSION: USA

Figure A-71: Monroney Label



Seat

NOTICE
If you fold the seatback towards the front with the headrest and seat cushion raised, the headrest may come in contact with the sun visor or other parts of the vehicle.

OCV031051L

Removing headrest

Type A

OCV031052N_3

Type B

OCV031053N_3

To remove the headrest:

Safety features of your Kia

- Do not adjust the headrest height while the vehicle is in motion. Driver may lose control of the vehicle.

CAUTION
Excessive pulling or pushing may damage the headrest.

Adjusting the height up and down

OCV031070N

- Pull it up to the desired position (1).
- To lower the headrest, push and hold the release button (2) on the headrest support.
- Lower the headrest to the desired position (3).

Adjusting the headrest forward and backward

OCV031073L

Operation
- Pull the headrest fully forward and release it.

INFORMATION
The headrest may be adjusted forward to 3 different positions by pulling the headrest forward.

4 14

Figure A-72: Head Restraint Use and Adjustment Information from Vehicle Owner's Manual



Figure A-73: Post-Test View of Shattered Vehicle Inner Door Panel



Figure 305-1: Auxiliary Power Module Warning Label

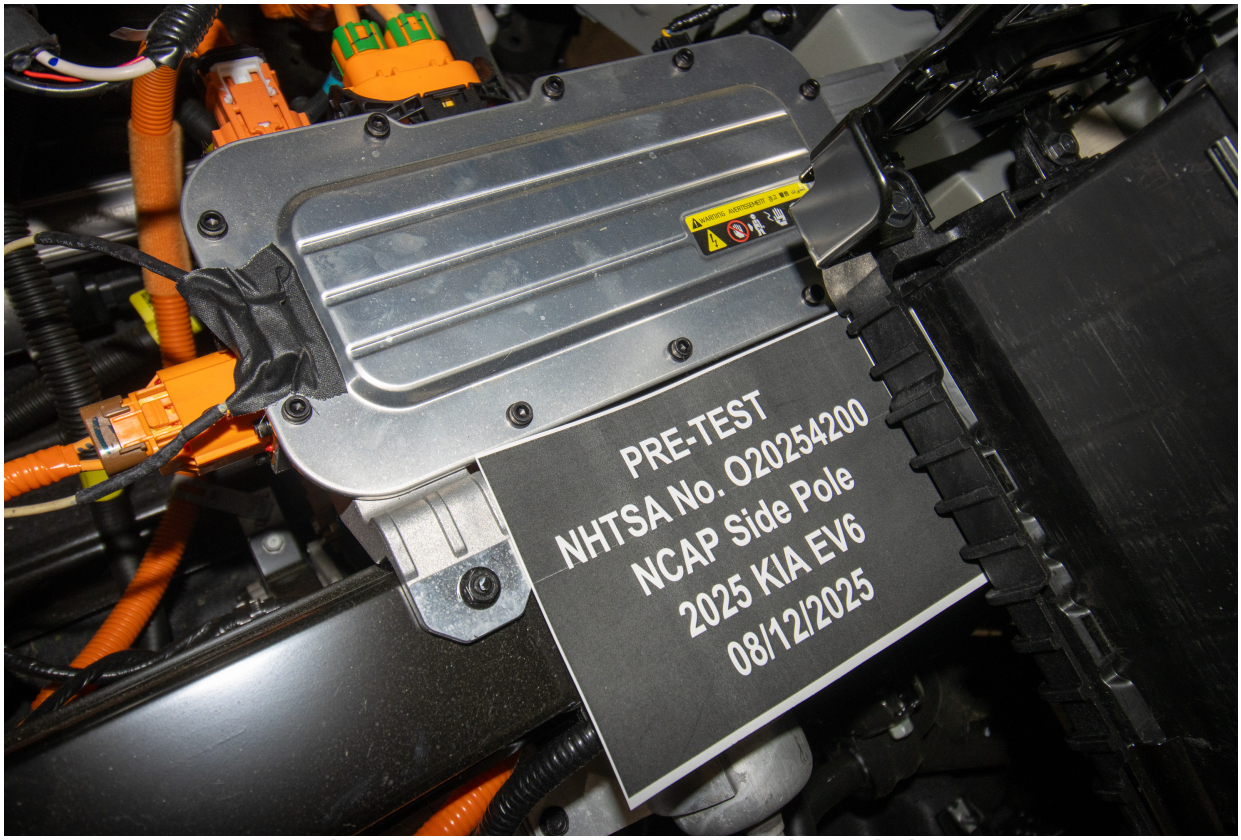


Figure 305-2: Power Inverter Warning Label



Figure 305-3 First Responder Warning Label

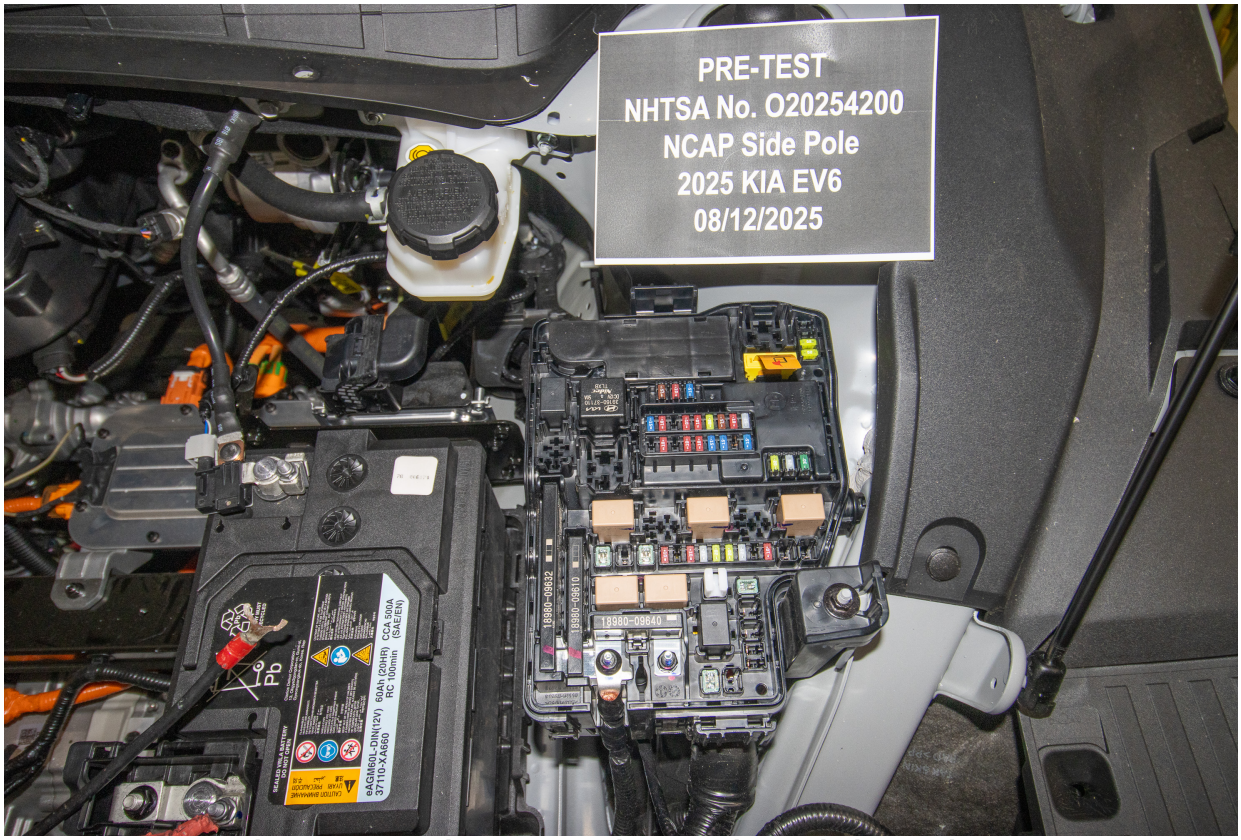


Figure 305-4: First Responder Warning Label Location



Figure 305-5: Other Vehicle Label Related to Electric Propulsion System



Figure 305-6: Manual High Voltage Service Disconnect in Place



Figure 305-7: Manual High Voltage Service Disconnect Removed (Show Plug)

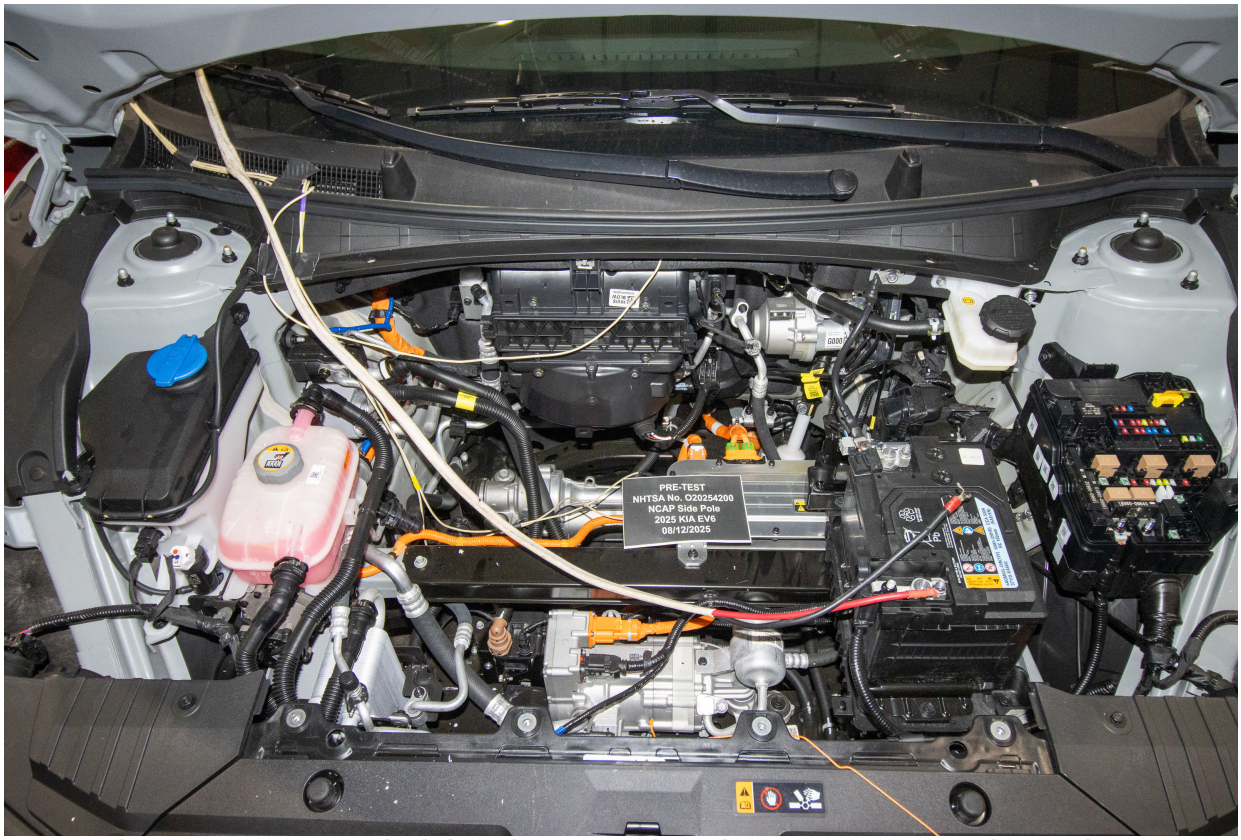


Figure 305-8: Manual High Voltage Service Disconnect Removed Location

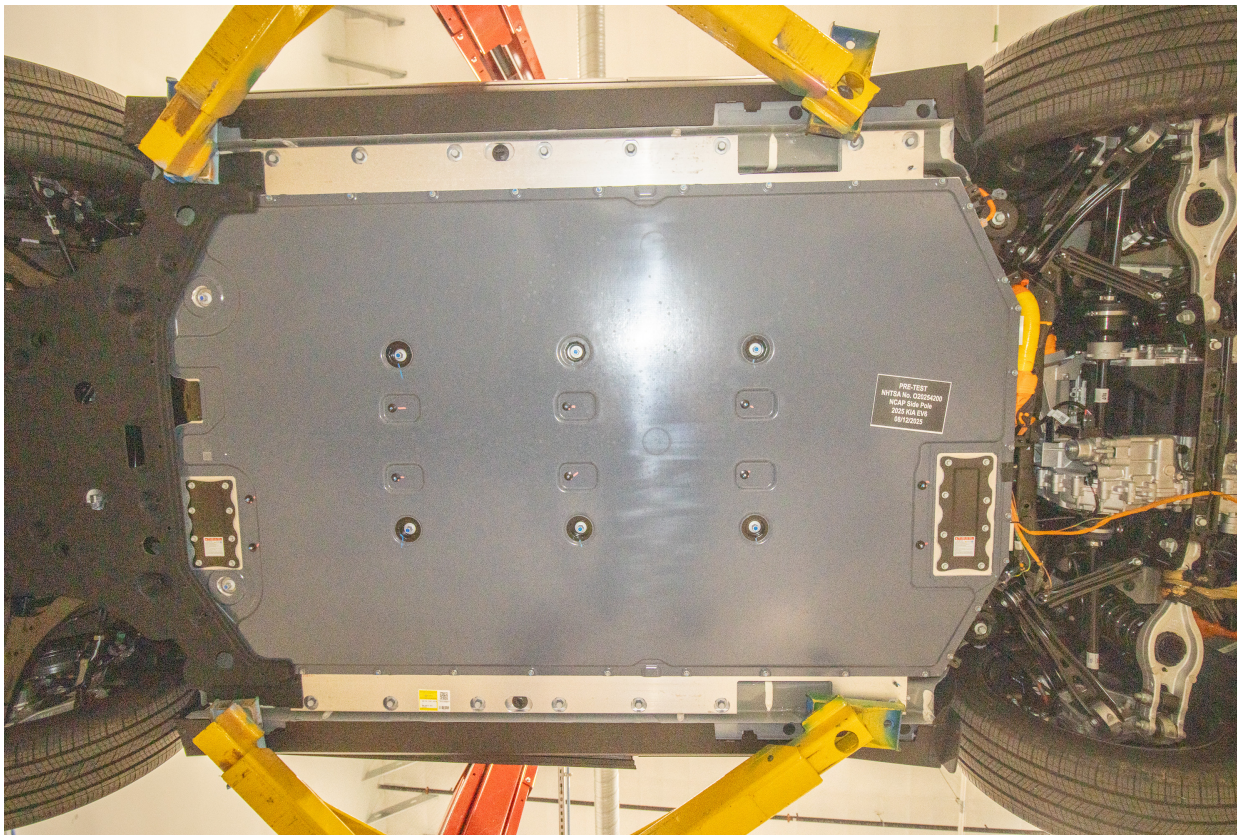


Figure 305-9: Pre-Impact View of Propulsion Battery



Figure 305-10: Post-Impact Front View of Propulsion Battery



Figure 305-11: Post-Impact Rear View of Propulsion Battery (if any part of it is visible)

Photo Not Applicable

Figure 305-12: Pre-Impact View of Battery Box(s) or Container(s) Which Holds Individual Battery Modules



Figure 305-13: Post-Impact View of Battery Box(s) or Container(s) Which Holds Individual Battery Modules

Figure 305-14: Pre-Impact View of Propulsion Battery Module(s)

Photo Not Applicable

Figure 305-15: Post-Impact View of Propulsion Battery Module(s)

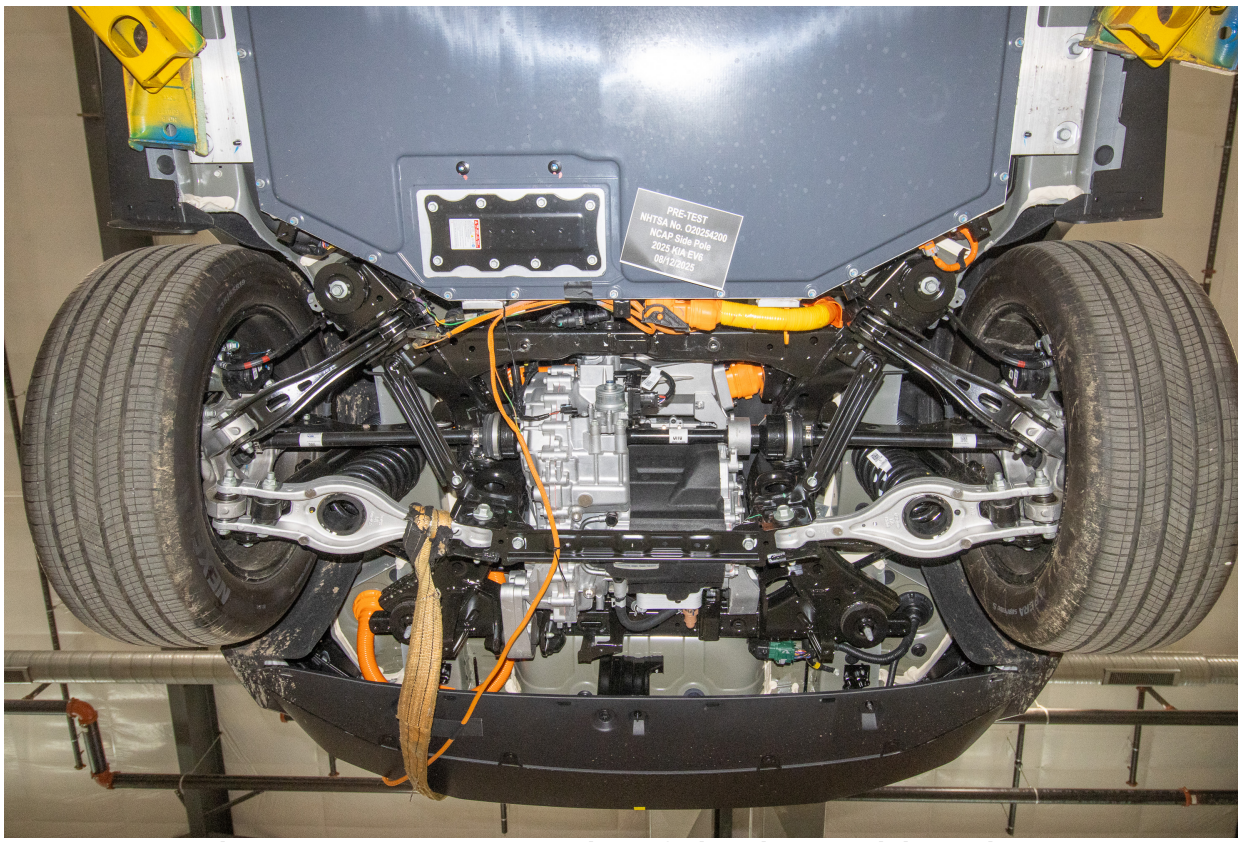


Figure 305-16: Pre-Impact View of Electric Propulsion Drive

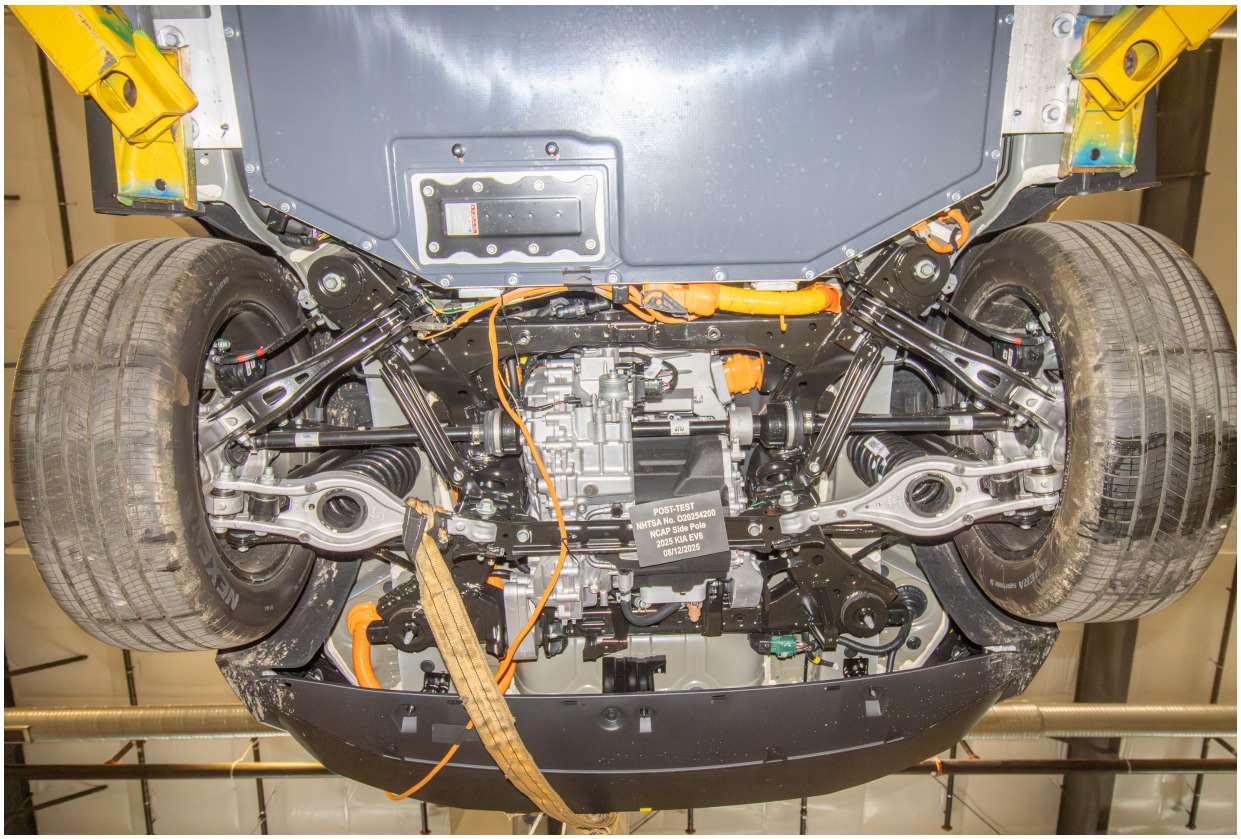


Figure 305-17: Post-Impact View of Electric Propulsion Drive



Figure 305-18: Pre-Impact View of High Voltage Interconnects

Figure 305-19: Pre-Impact View of Propulsion Battery Venting System

Figure 305-20: Pre-Impact View of Other Visible Electric Propulsion Components



Figure 305-21: Pre-Impact View of Ground Lead Attached



Figure 305-22: Pre-Impact View of High Voltage Leads Attached



Figure 305-23: Pre-Impact Close Up View of High Voltage Leads Attached

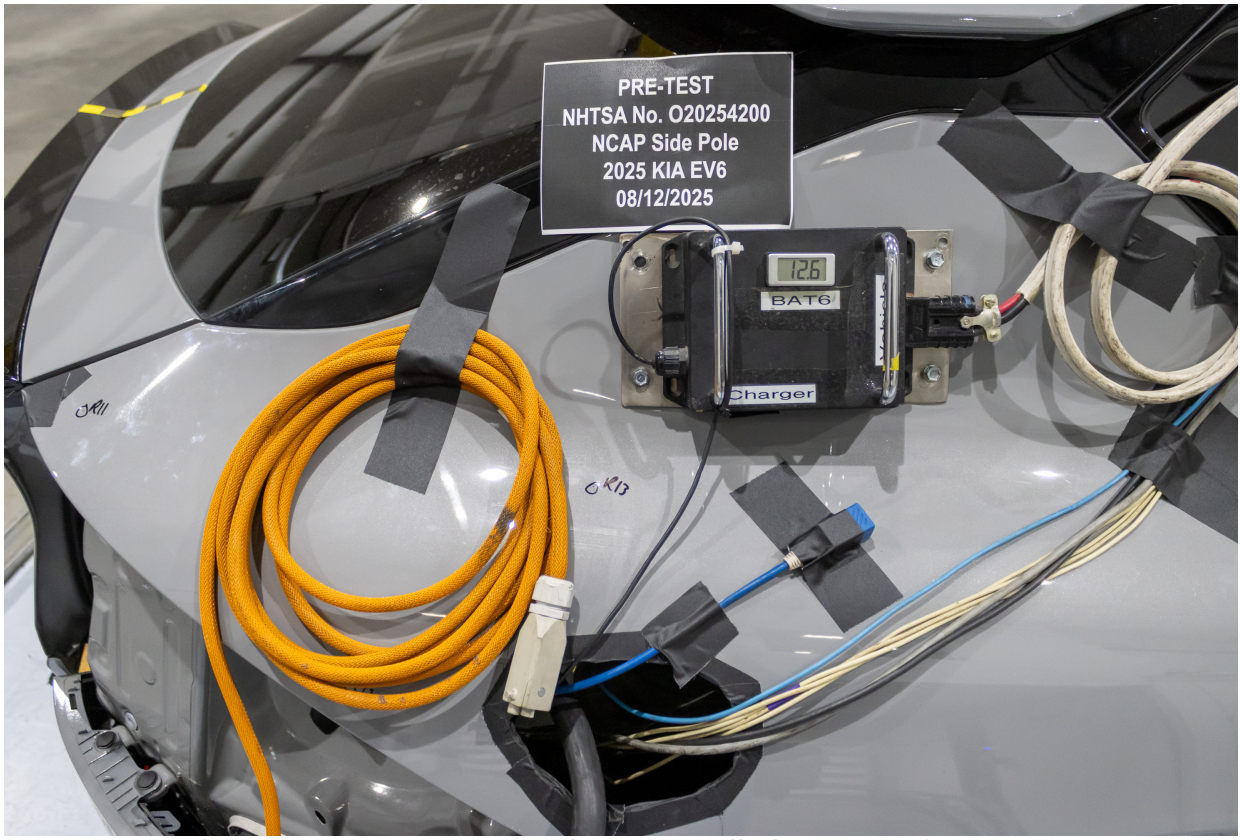


Figure 305-24: Pre-Impact View of Installed Test Interface Port

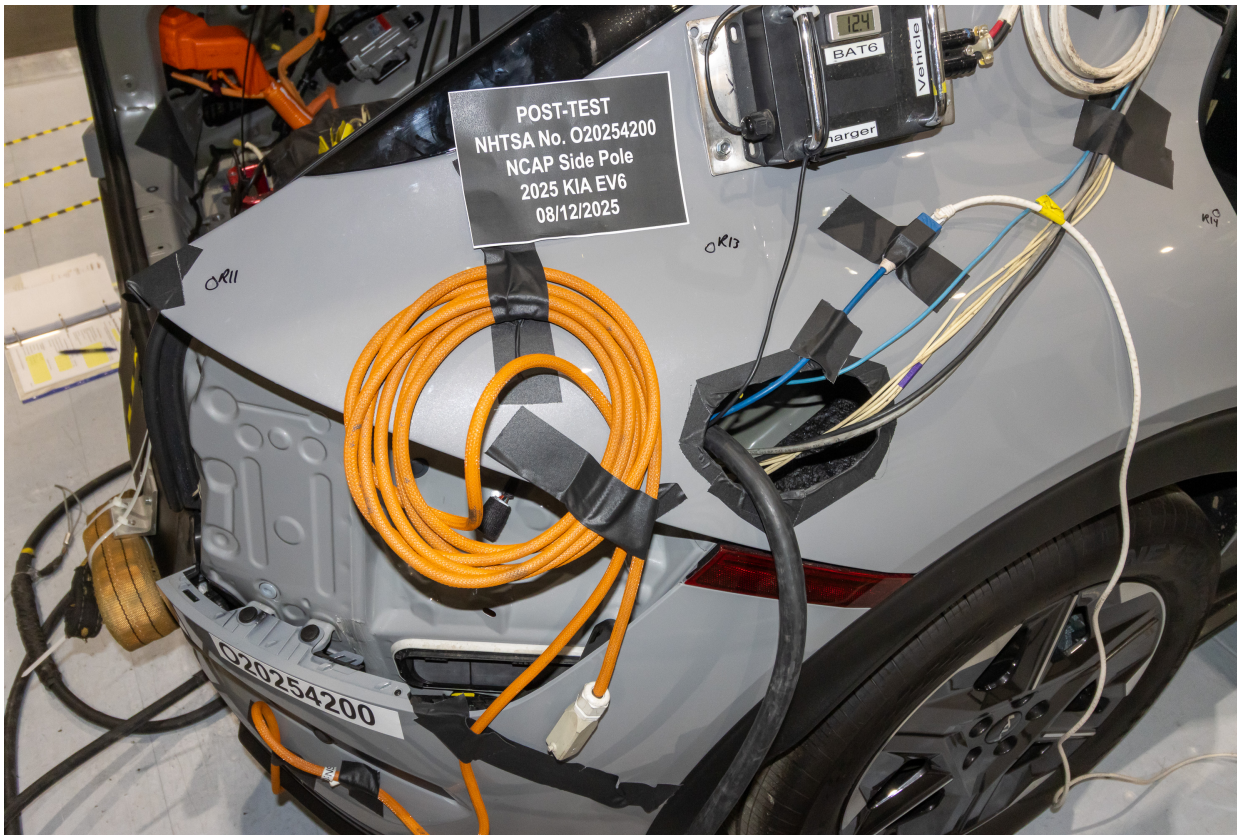


Figure 305-25: Post-Impact View of Installed Test Interface Port

Photo Not Applicable

Figure 305-26: Pre-Impact View of Other Test Devices

Photo Not Applicable

Figure 305-27: Post-Impact View of Other Test Devices

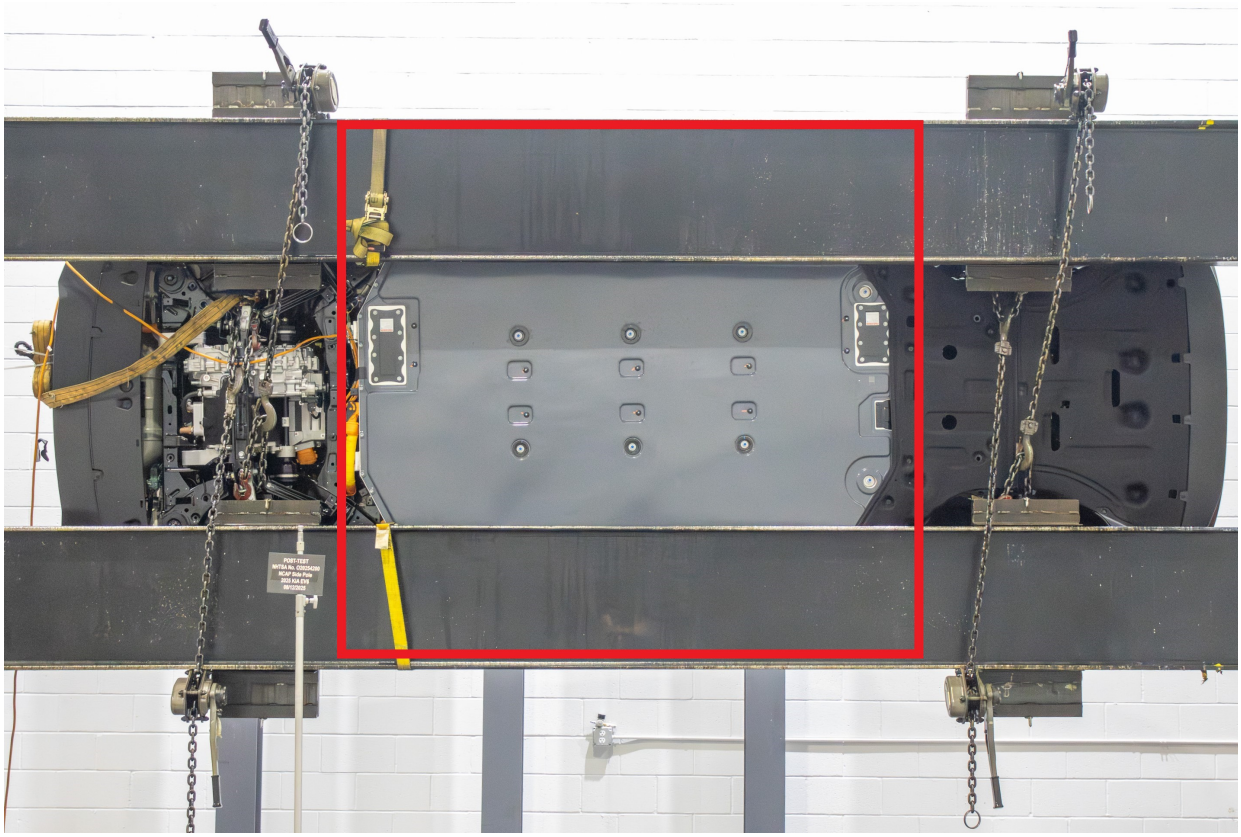


Figure 305-28: FMVSS No. 305 Static Rollover 90 Degrees

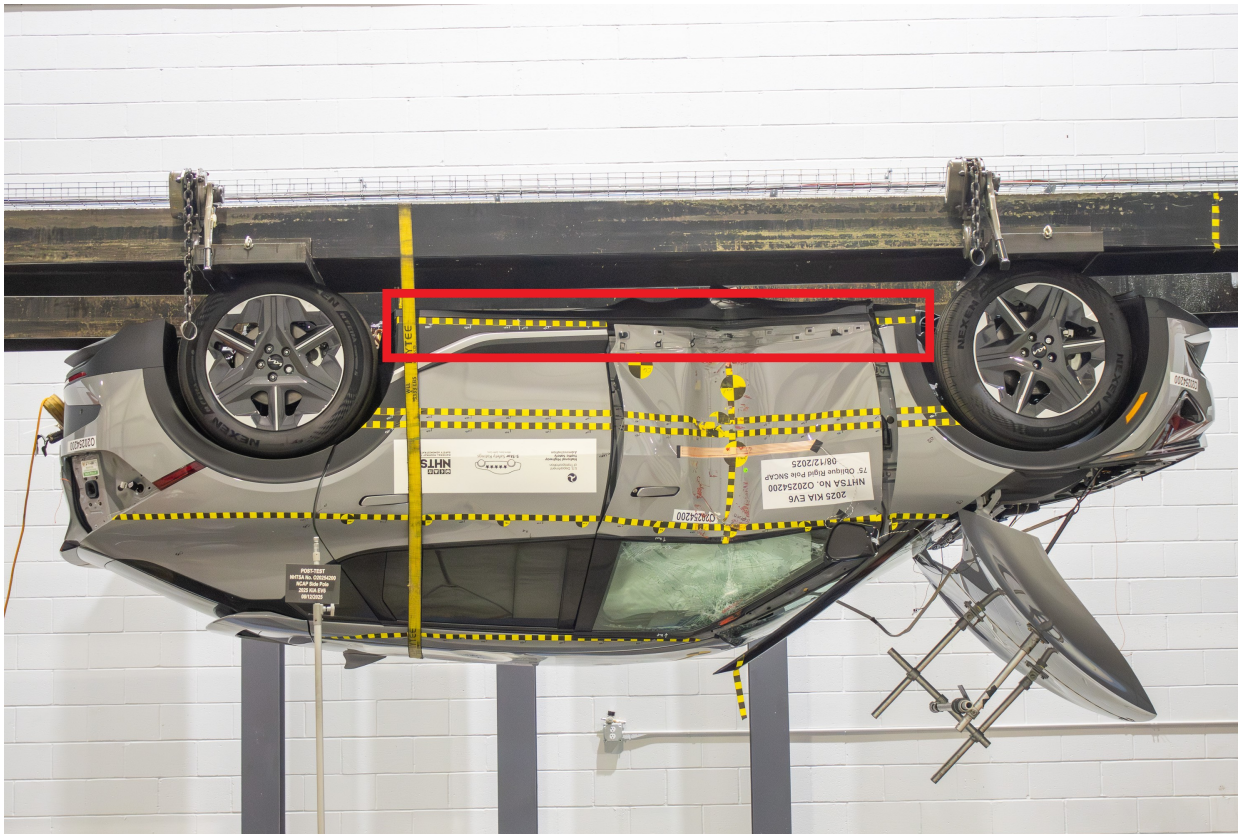


Figure 305-29: FMVSS No. 305 Static Rollover 180 Degrees

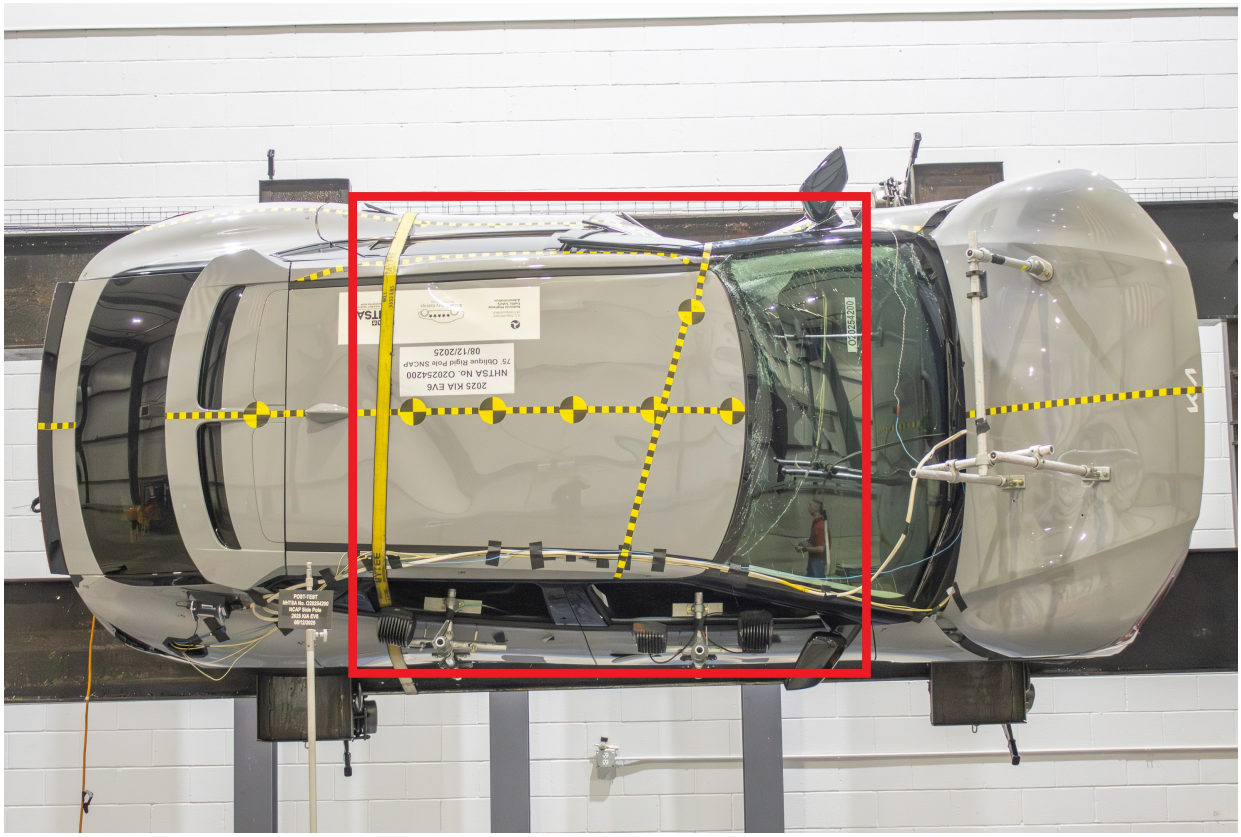


Figure 305-30: FMVSS No. 305 Static Rollover 270 Degrees

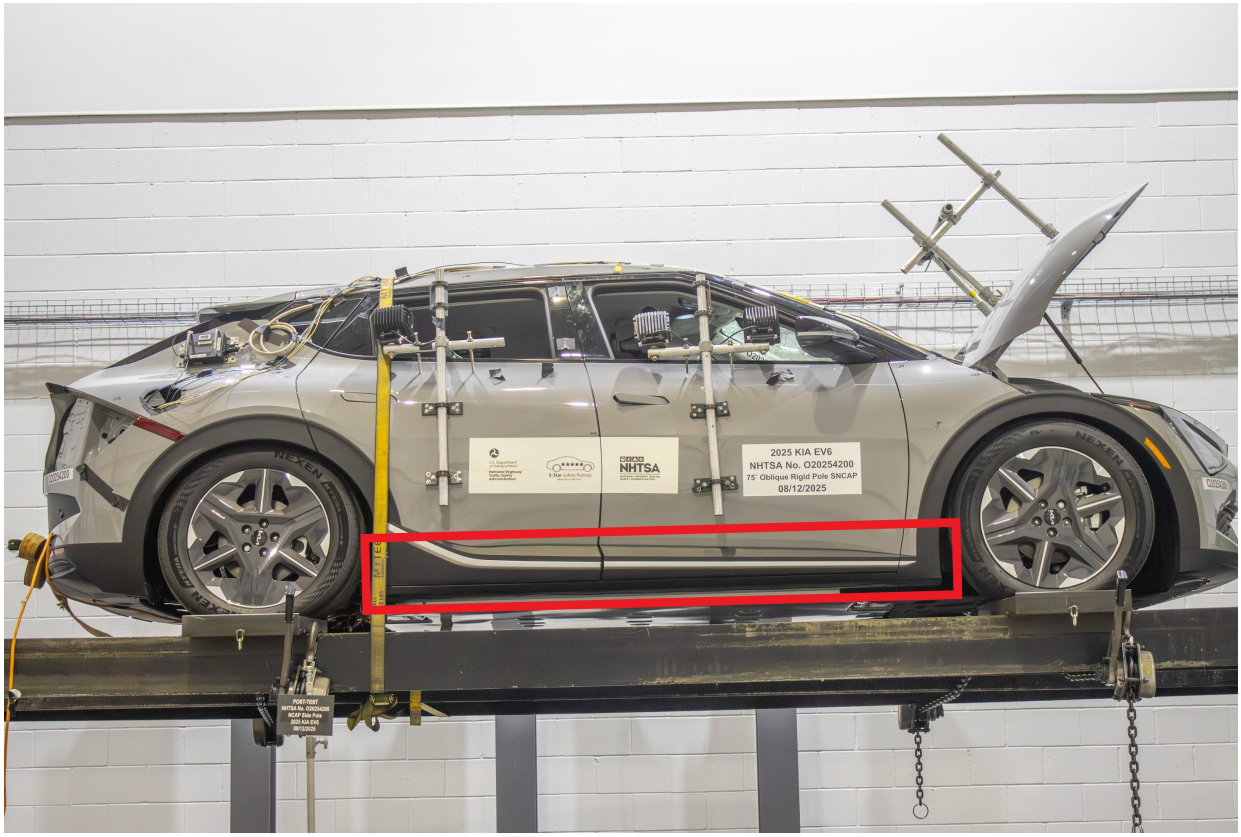


Figure 305-31: FMVSS No. 305 Static Rollover 360 Degrees



Figure 305-32: Pre-Impact View of the Vehicle Passenger Compartment Adjacent to Propulsion Battery



Figure 305-33: Post-Impact View of the Vehicle Passenger Compartment Adjacent to Propulsion Battery

Photo Not Applicable

Figure 305-34: Post-Impact Propulsion Battery System Mounting and-or Intrusion Failure(s)



Figure 305-35: Post-Impact View of Battery Component Intrusion (if applicable)

Figure 305-36: Post-Impact View of Battery Module Movement or Retention Loss (if applicable)



Figure 305-37: Post-Impact View of Propulsion Battery Electrolyte Spillage Location (if applicable)

Figure 305-38: Post-Impact View of Propulsion Battery Electrolyte Spillage Location (after rollover)



Figure 305-39: Pre-Impact Charging Port View

Figure 305-38: Post-Impact Charging Port View

APPENDIX B
VEHICLE AND DUMMY RESPONSE DATA PLOTS

Table of Data Plots
Driver Dummy Instrumentation Plots

Fig.	Description	Page
Plot 1	Driver Head Acceleration (X) Primary vs. Time	B-4
Plot 2	Driver Head Acceleration (Y) Primary vs. Time	B-4
Plot 3	Driver Head Acceleration (Z) Primary vs. Time	B-4
Plot 4	Driver Head Resultant Primary vs. Time	B-4
Plot 5	Driver Lower Spine T12 Acceleration (X) vs. Time	B-5
Plot 6	Driver Lower Spine T12 Acceleration (Y) vs. Time	B-5
Plot 7	Driver Lower Spine T12 Acceleration (Z) vs. Time	B-5
Plot 8	Driver Lower Spine T12 Resultant Acceleration vs. Time	B-5
Plot 9	Driver Iliac Wing Force on Impact Side (Y) vs. Time	B-6
Plot 10	Driver Acetabulum Force on Impact Side (Y) vs. Time	B-6
Plot 11	Driver Total Pelvis Force on Impact Side (Y) vs. Time	B-6

The following additional dummy and vehicle response data can be found in the R&D section of the NHTSA website at www.NHTSA.gov

Additional Driver Dummy Instrumentation Data

Driver Head Acceleration Redundant (X)
Driver Head Acceleration Redundant (Y)
Driver Head Acceleration Redundant (Z)
Driver Upper Thorax Rib Deflection (Y)
Driver Middle Thorax Rib Deflection (Y)
Driver Lower Thorax Rib Deflection (Y)
Driver Upper Abdomen Rib Deflection (Y)
Driver Lower Abdomen Rib Deflection (Y)

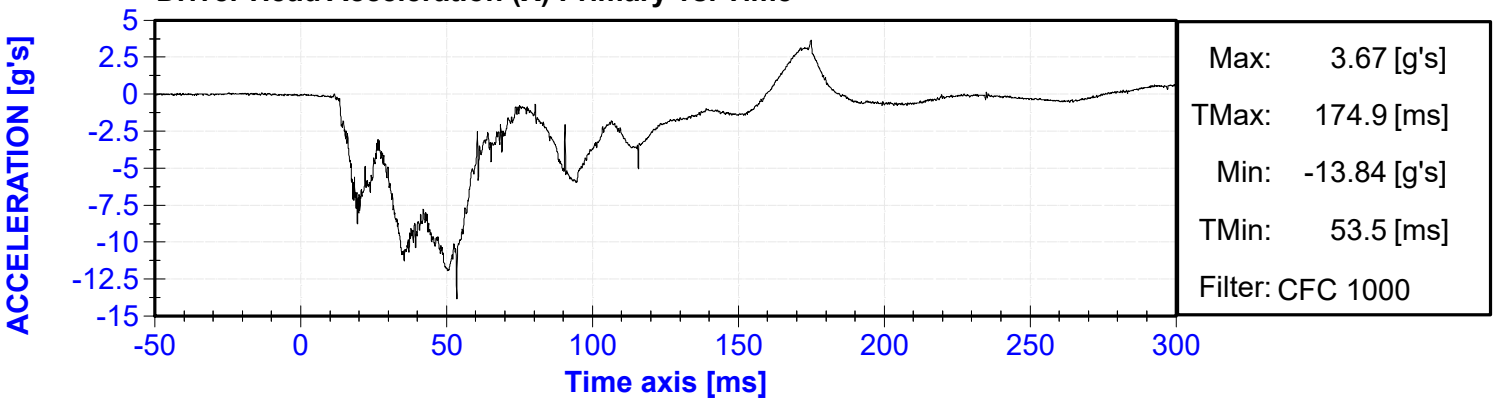
Vehicle Instrumentation Data

Vehicle Center of Gravity Acceleration (X)
Vehicle Center of Gravity Acceleration (Y)
Vehicle Center of Gravity Acceleration (Z)
Left Floor Sill Acceleration (Y)
Left A-Pillar Sill Acceleration (Y)
Left Lower A-Pillar Acceleration (Y)
Left Mid A-Pillar Acceleration (Y)
Left B-Pillar Sill Acceleration (Y)
Left Lower B-Pillar Acceleration (Y)
Left Mid B-Pillar Acceleration (Y)
Driver Seat Track at Dummy Hip Point Acceleration (Y)
Engine Top Acceleration (X)
Engine Top Acceleration (Y)
Firewall Center Acceleration (Y)
Right Roof at Vertical Impact Reference Line Acceleration (Y)
Right Sill at Vertical Impact Reference Line Acceleration (Y)
Rear Floorpan Behind Rear Axle at Centerline Acceleration (X)
Rear Floorpan Behind Rear Axle at Centerline Acceleration (Y)

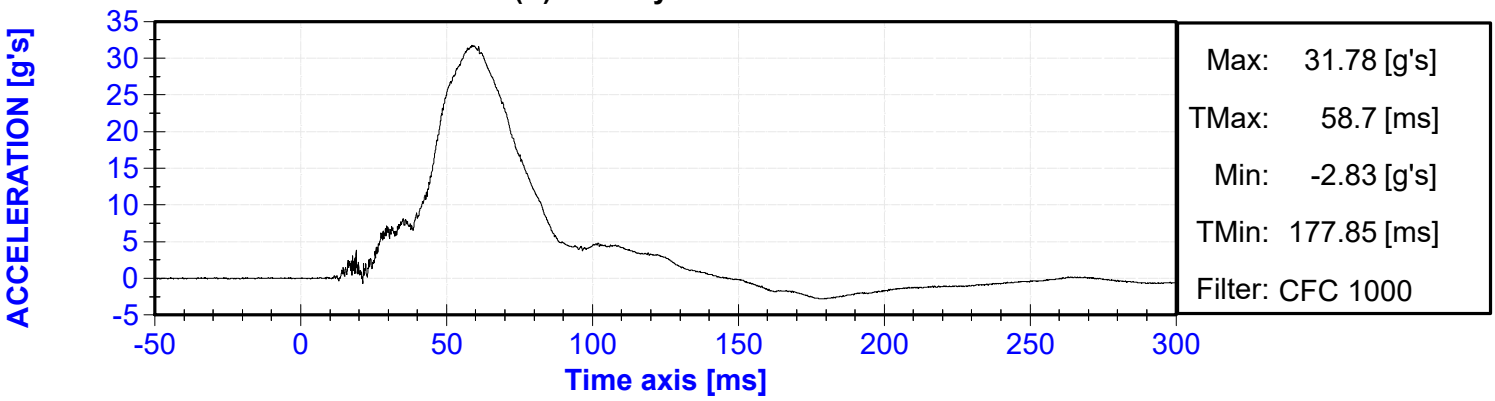
Pole Instrumentation Data

Load Cell Pole Barrier #1 Force (Y)
Load Cell Pole Barrier #2 Force (Y)
Load Cell Pole Barrier #3 Force (Y)
Load Cell Pole Barrier #4 Force (Y)
Load Cell Pole Barrier #5 Force (Y)
Load Cell Pole Barrier #6 Force (Y)
Load Cell Pole Barrier #7 Force (Y)
Load Cell Pole Barrier #8 Force (Y)

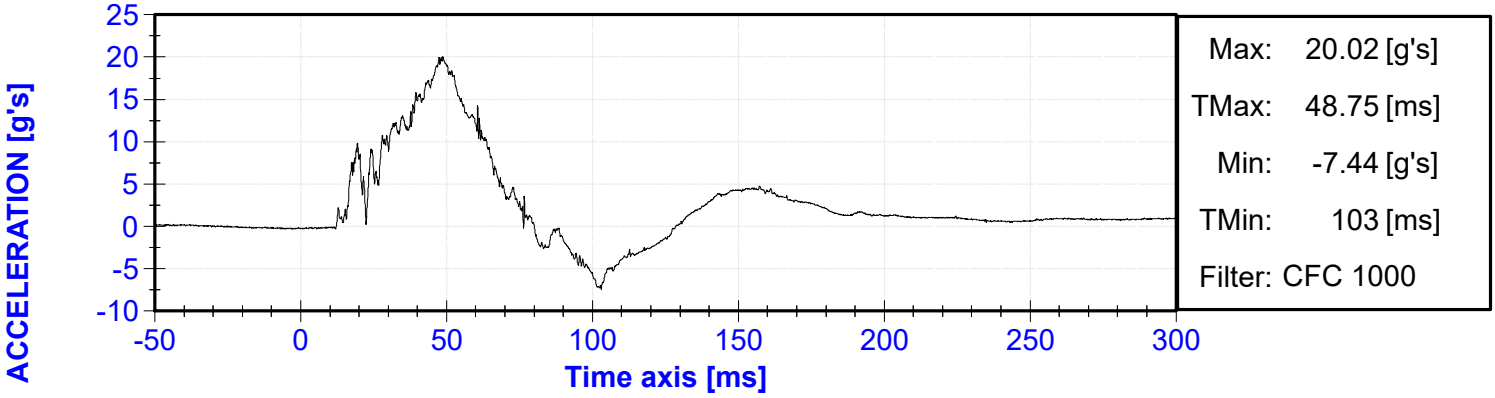
Driver Head Acceleration (X) Primary vs. Time



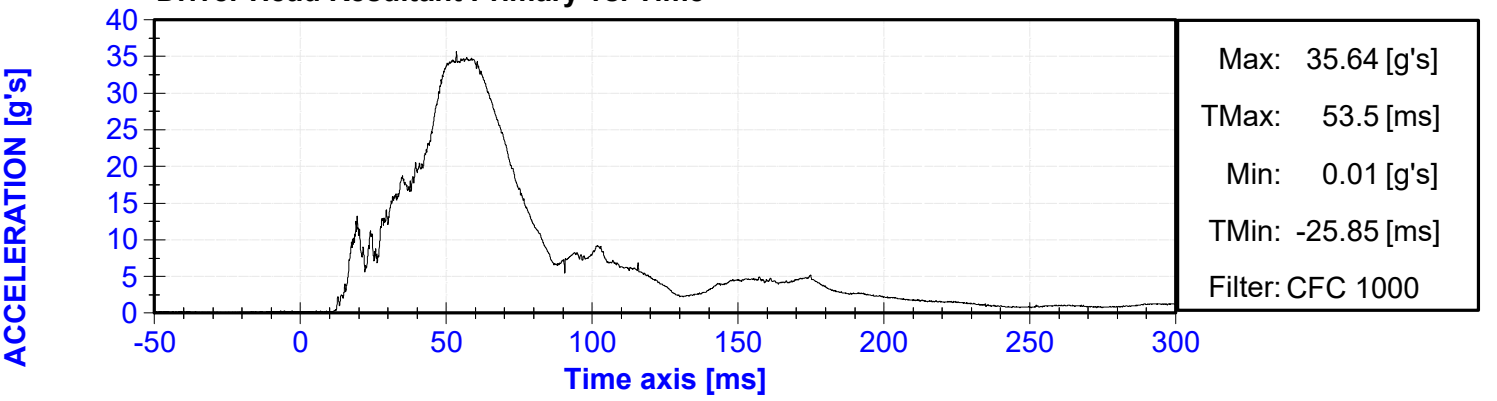
Driver Head Acceleration (Y) Primary vs. Time

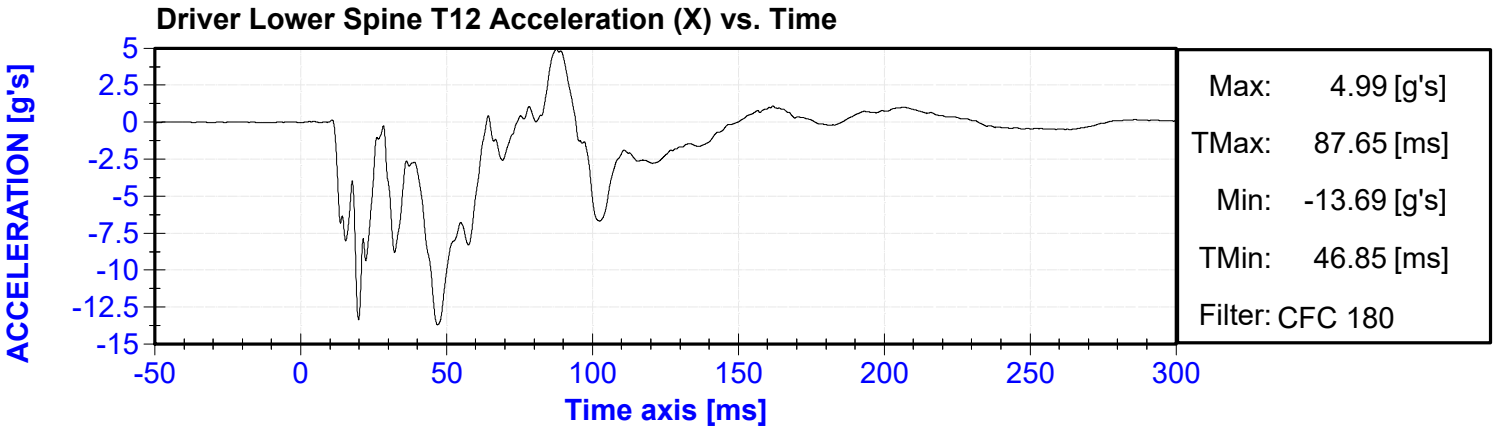


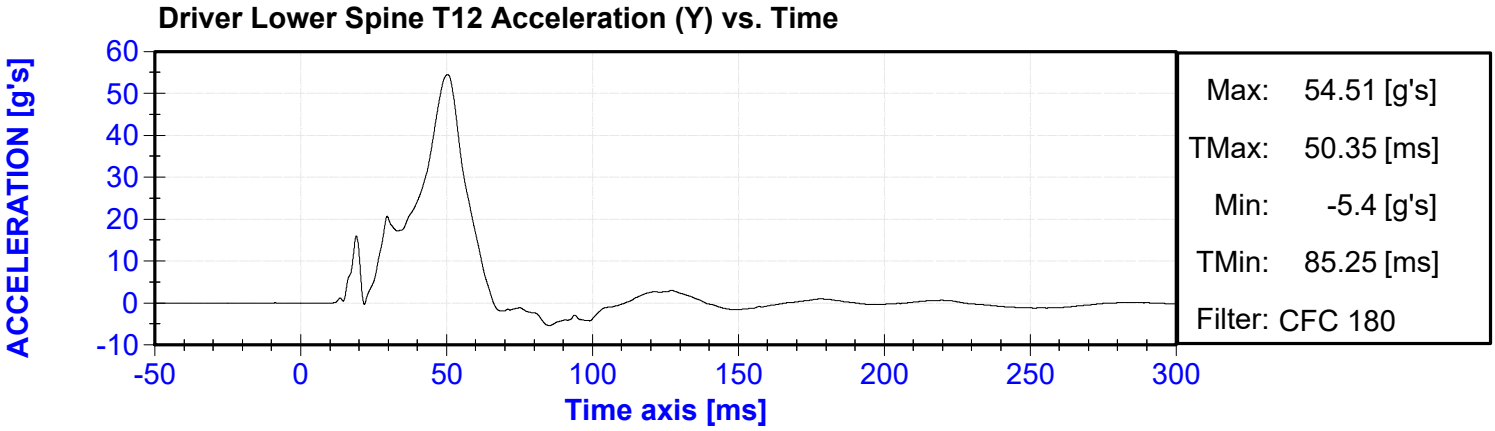
Driver Head Acceleration (Z) Primary vs. Time

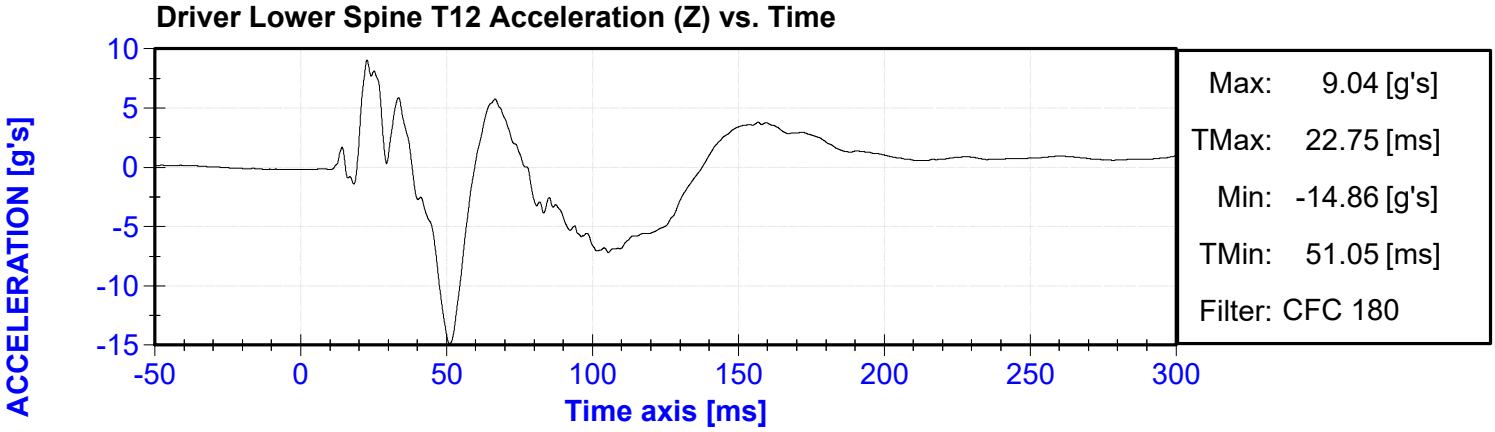


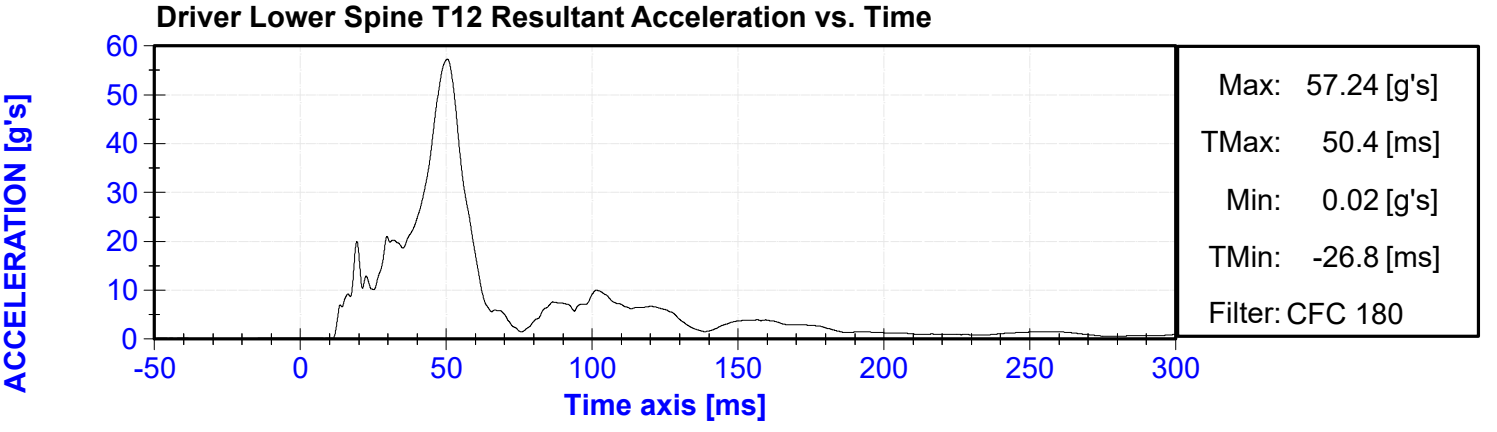
Driver Head Resultant Primary vs. Time



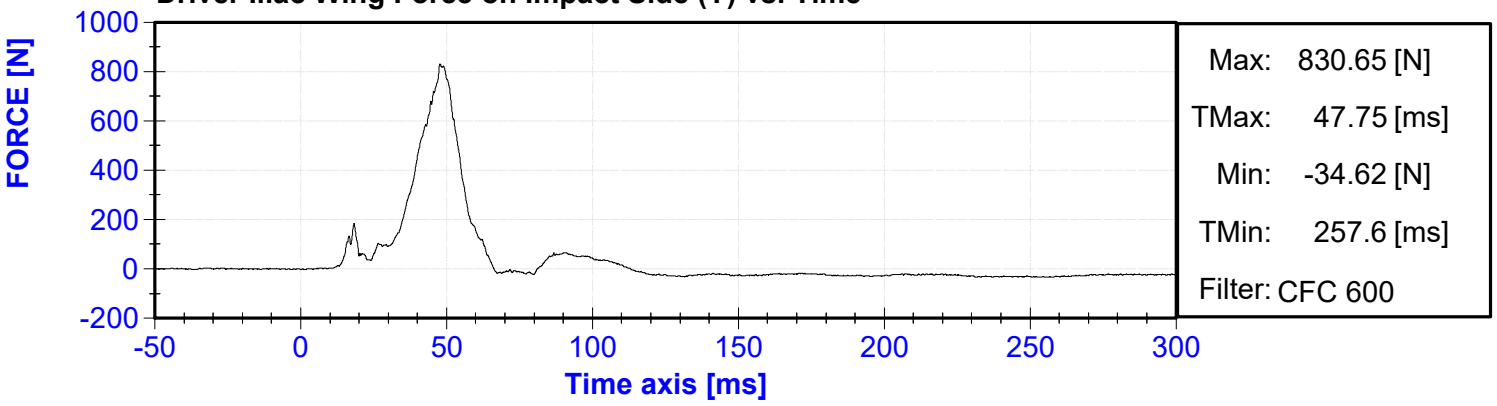

Driver Lower Spine T12 Acceleration (X) vs. Time
ACCELERATION [g's]
Time axis [ms]
Max: 4.99 [g's]
TMax: 87.65 [ms]
Min: -13.69 [g's]
TMin: 46.85 [ms]
Filter: CFC 180


Driver Lower Spine T12 Acceleration (Y) vs. Time
ACCELERATION [g's]
Time axis [ms]
Max: 54.51 [g's]
TMax: 50.35 [ms]
Min: -5.4 [g's]
TMin: 85.25 [ms]
Filter: CFC 180

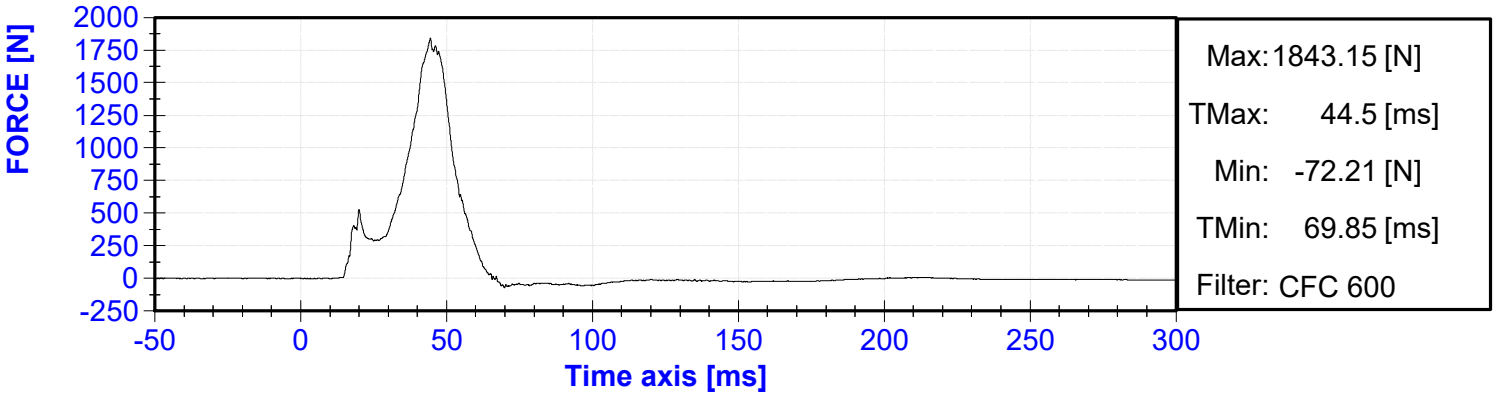

Driver Lower Spine T12 Acceleration (Z) vs. Time
ACCELERATION [g's]
Time axis [ms]
Max: 9.04 [g's]
TMax: 22.75 [ms]
Min: -14.86 [g's]
TMin: 51.05 [ms]
Filter: CFC 180


Driver Lower Spine T12 Resultant Acceleration vs. Time
ACCELERATION [g's]
Time axis [ms]
Max: 57.24 [g's]
TMax: 50.4 [ms]
Min: 0.02 [g's]
TMin: -26.8 [ms]
Filter: CFC 180

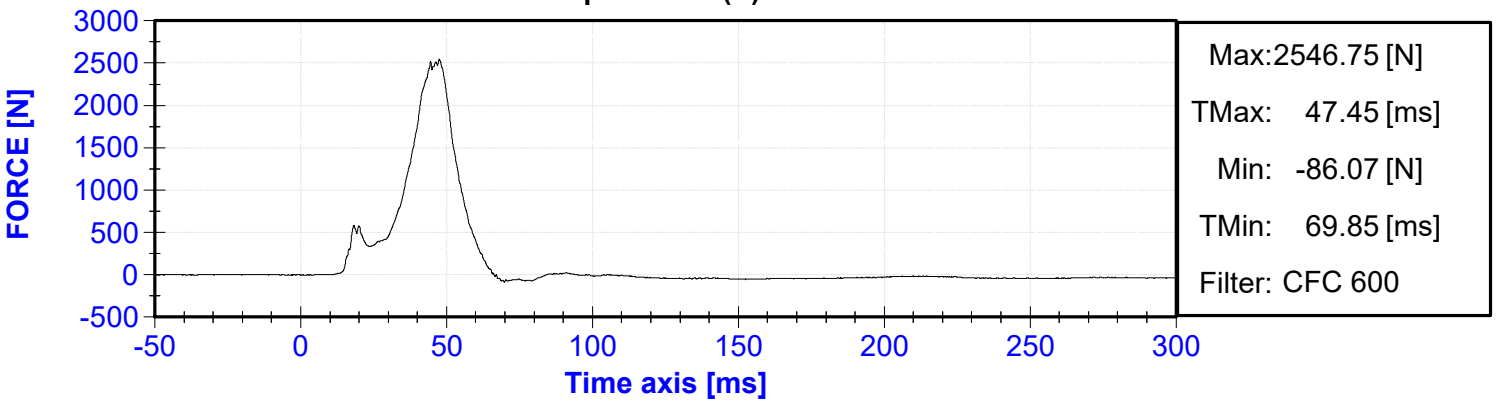
Driver Iliac Wing Force on Impact Side (Y) vs. Time



Driver Acetabulum Force on Impact Side (Y) vs. Time



Driver Total Pelvis Force on Impact Side (Y) vs. Time



APPENDIX C

DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

CALIBRATION TEST RESULTS

PRE-TEST

SID-IIS 5TH PERCENTILE FEMALE - DRIVER ATD

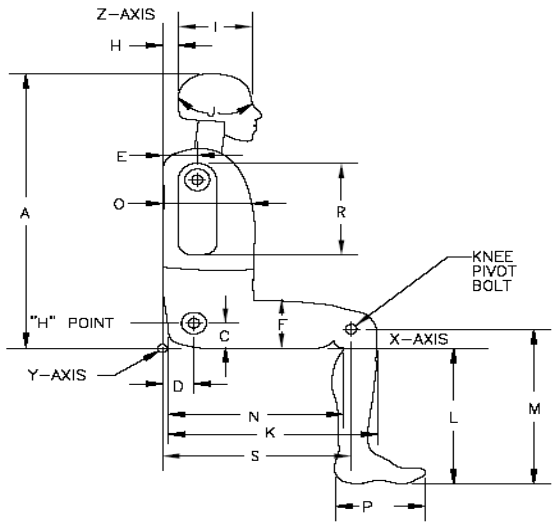
SERIAL NO:300

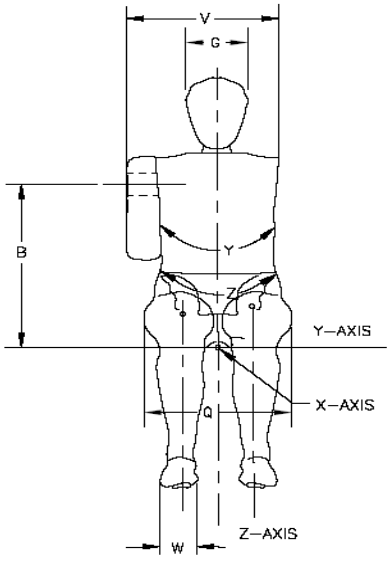
(CONFIGURED FOR LEFT SIDE IMPACT)

External Measurements - SID-IIs

Technician: J. Rios Date: 07/31/2025

Dummy Serial Number: 300





Symbol	Description	Specification (mm)		Result (mm)	Pass/Fail
A	Sitting Height	772	788	779	Pass
B	Shoulder Pivot Height	437	453	441	Pass
C	H-point Height	79	89	83	Pass
D	H-point from seatback	141	151	144	Pass
E	Shoulder Pivot from Backline	97	107	105	Pass
F	Thigh Clearance	119	135	126	Pass
G	Head Breadth	140	148	144	Pass
H	Head Back from Backline	40	46	43	Pass
I	Head Depth	178	188	182	Pass
J	Head Circumference	541	551	548	Pass
K	Buttock to Knee Length	514	540	526	Pass
L	Popliteal Height	343	369	362	Pass
M	Knee Pivot to floor height	392	409	405	Pass
N	Buttock Popliteal Length	416	442	428	Pass
O	Chest Depth w/o jacket	195	211	204	Pass
P	Foot Length	216	232	225	Pass
Q	Hip Breadth (w/pelvic plugs)	313	323	318	Pass
R	Arm Length	249	259	251	Pass
S	Knee Joint to seatback	477	493	485	Pass
V	Shoulder Width	341	357	350	Pass
W	Foot Width	78	94	81	Pass
Y	Chest Circumference w/jacket	851	881	872	Pass
Z	Waist Circumference	761	791	774	Pass

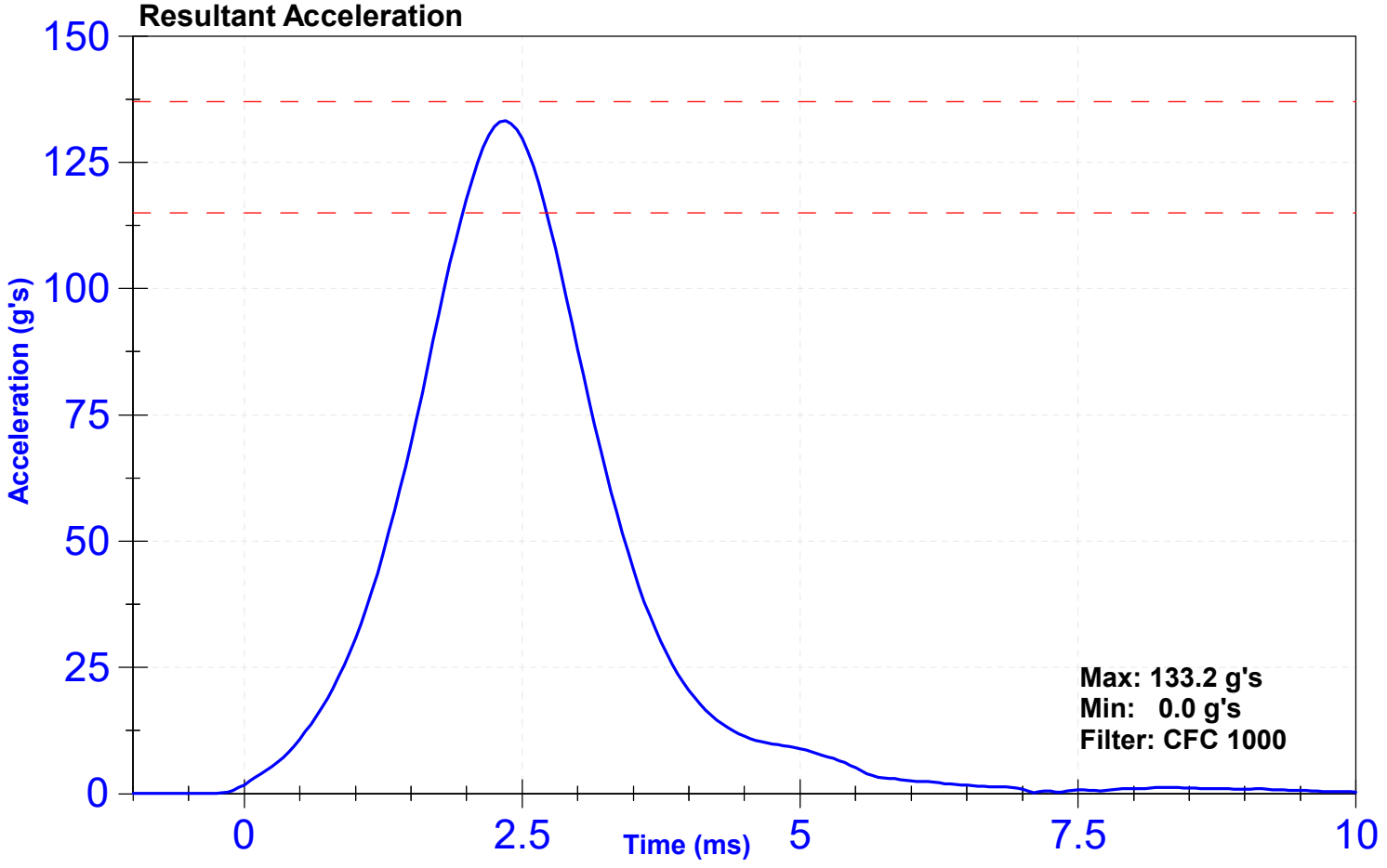
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

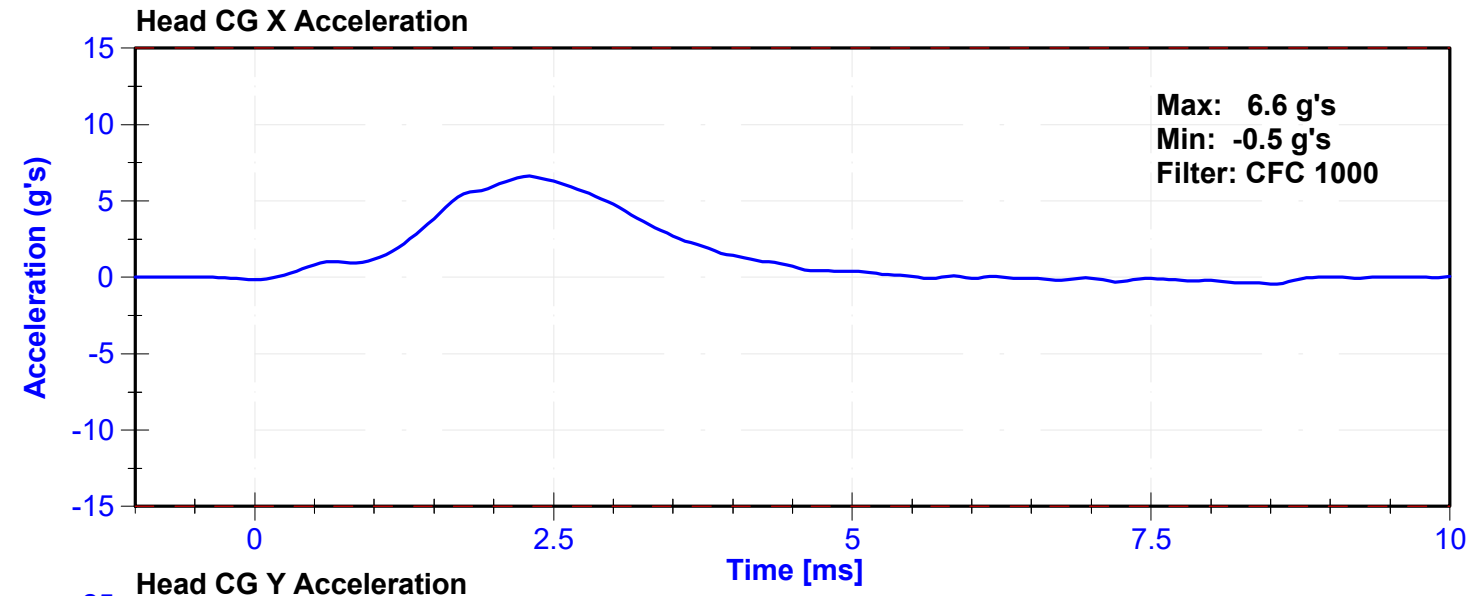
Results

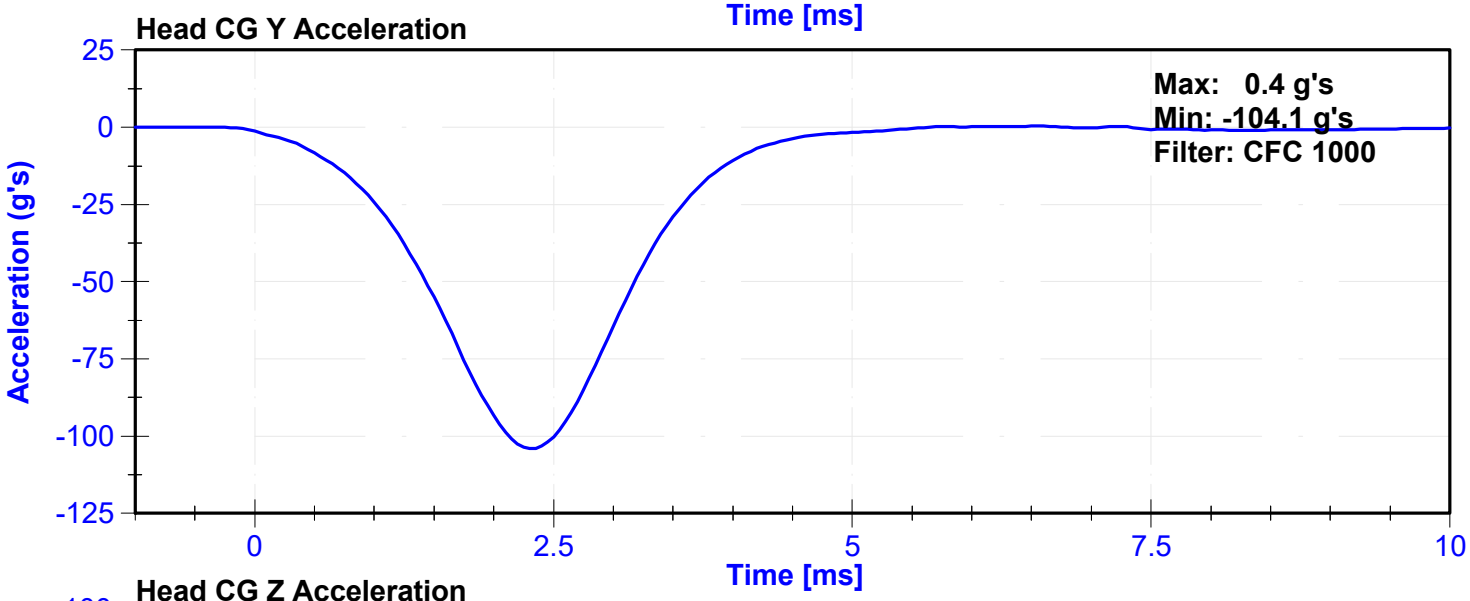
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.2	Pass
Humidity	10	70	%	49	Pass
Resultant Acceleration	115	137	g's	133.2	Pass
Oscillation	0	15	%	1.3	Pass
Fore-Aft Acceleration	-15	15	g's	6.6	Pass

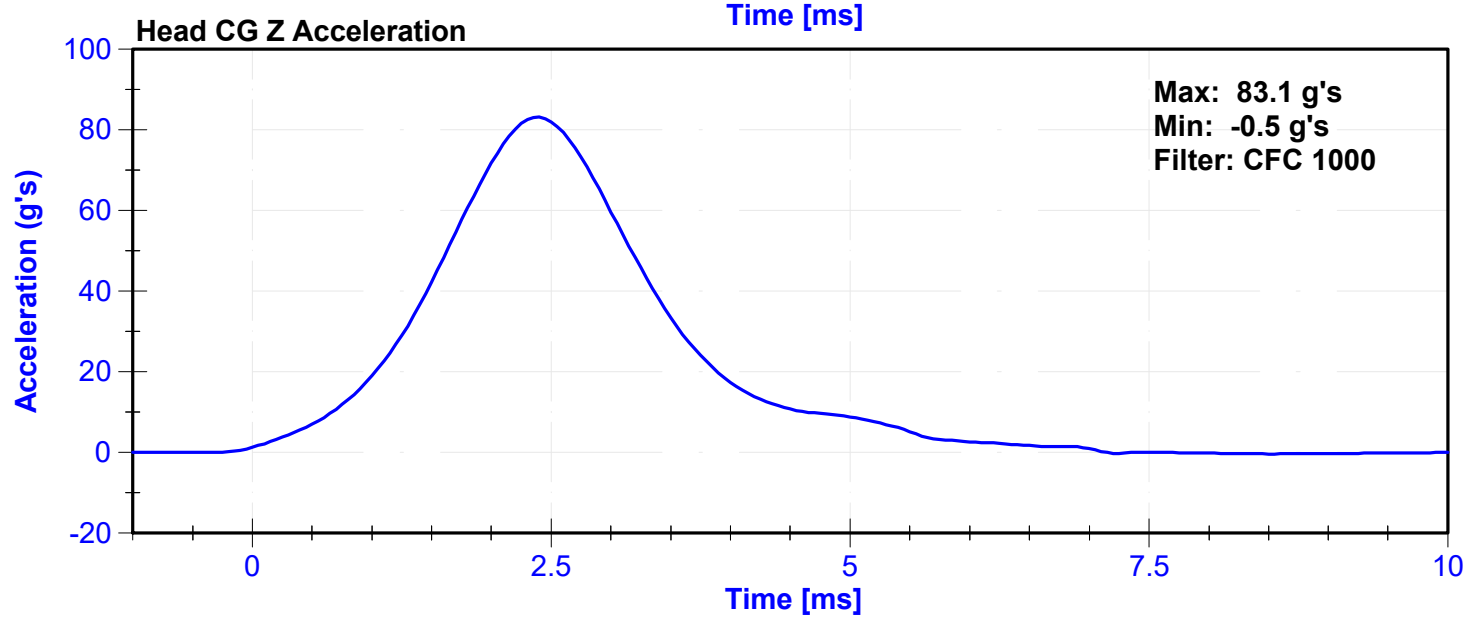
Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibratio Date	Calibratio Due Date
X Accelerometer	Endevco	P59018	7/11/2025	1/7/2026
Y Accelerometer	Endevco	P79189	7/11/2025	1/7/2026
Z Accelerometer	Endevco	P79587	7/11/2025	1/7/2026




Head CG X Acceleration
Max: 6.6 g's
Min: -0.5 g's
Filter: CFC 1000
Acceleration (g's)
Time [ms]


Head CG Y Acceleration
Max: 0.4 g's
Min: -104.1 g's
Filter: CFC 1000
Acceleration (g's)
Time [ms]


Head CG Z Acceleration
Max: 83.1 g's
Min: -0.5 g's
Filter: CFC 1000
Acceleration (g's)
Time [ms]

ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

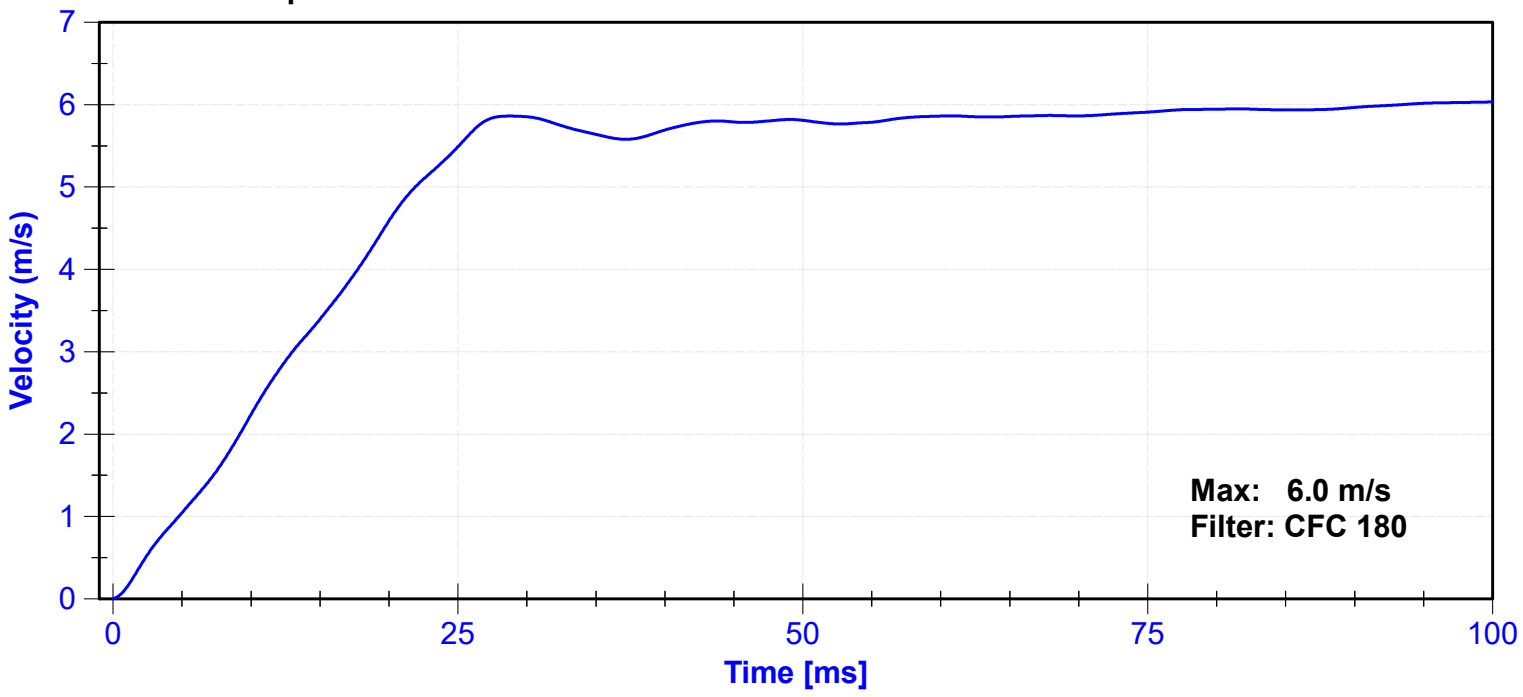
Results

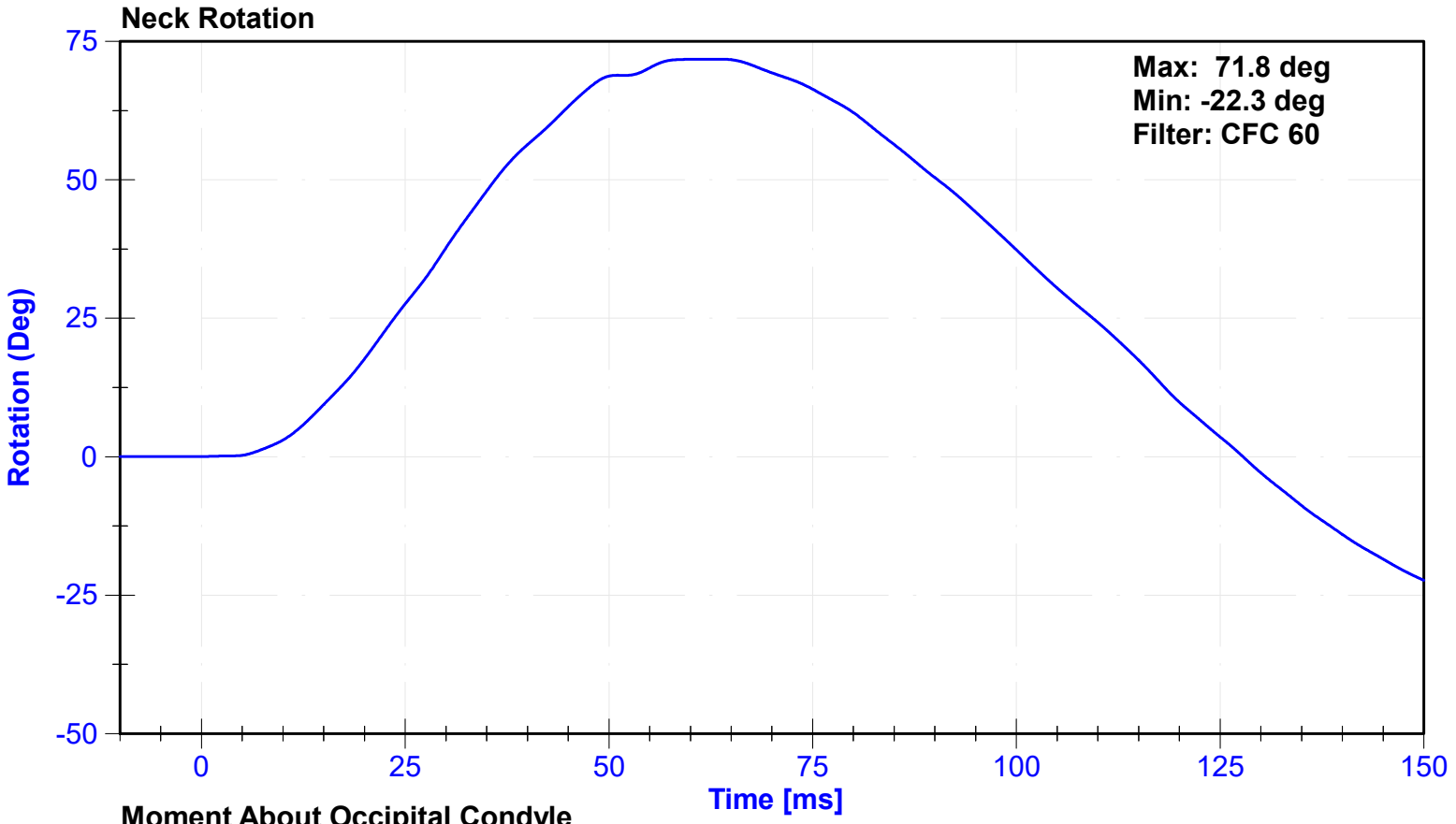
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	51	Pass
Velocity	5.51	5.63	m/s	5.554	Pass
Pendulum Impulse at 10ms	2.2	2.8	m/s	2.24	Pass
Pendulum Impulse at 15ms	3.3	4.1	m/s	3.40	Pass
Pendulum Impulse at 20ms	4.4	5.4	m/s	4.59	Pass
Pendulum Impulse at 25ms	5.4	6.1	m/s	5.49	Pass
Pendulum Impulse from 25 to 100ms	5.5	6.2	m/s	6.03	Pass
Neck Rotation	71	81	deg	71.8	Pass
Time at Maximum Rotation	50	70	ms	63.6	Pass
Moment about the OC	36	44	Nm	42.6	Pass
Moment Decay to 0 Nm	102	126	ms	113.6	Pass

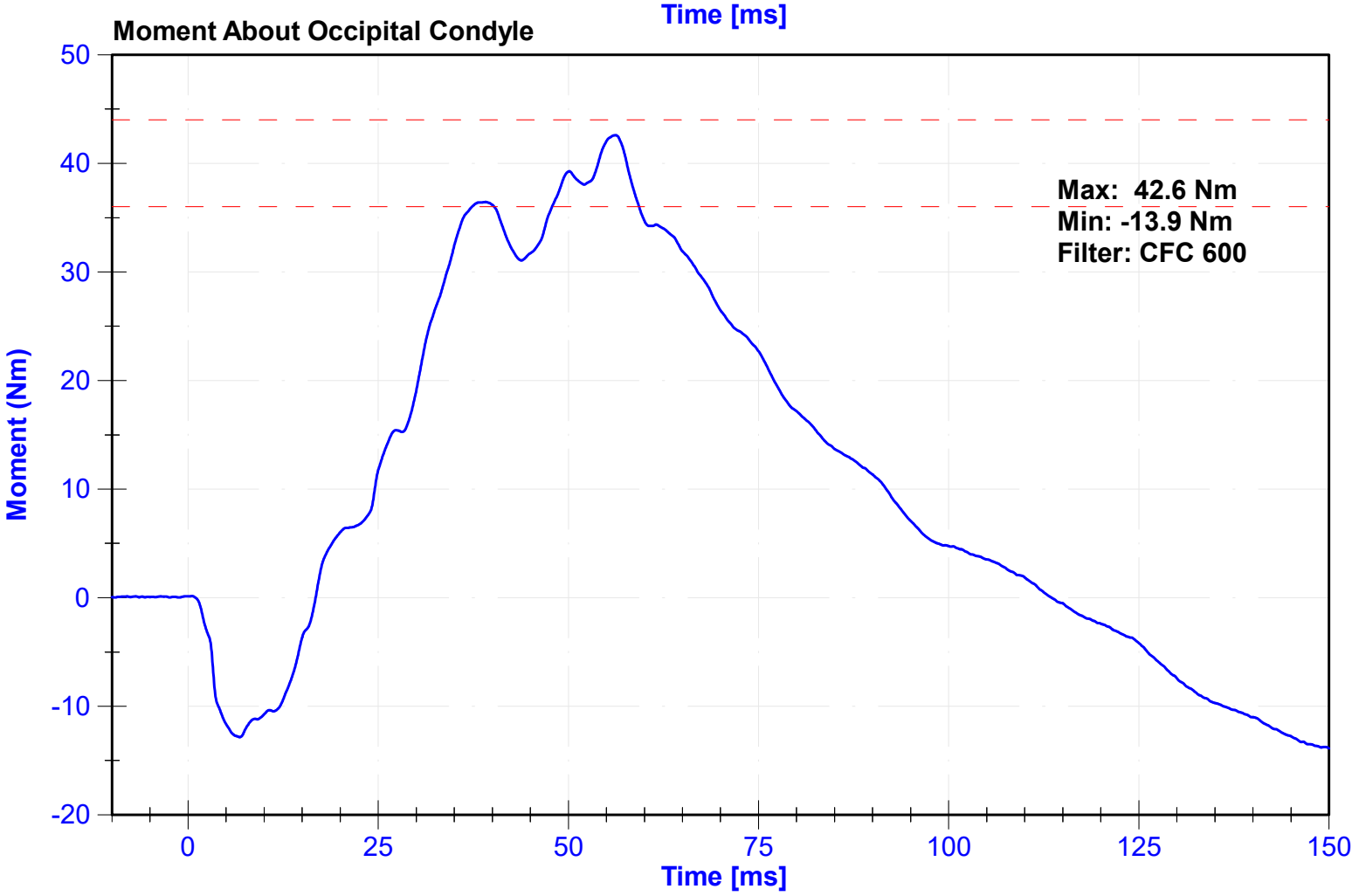
Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	7231C-750	10/17/2024	10/17/2025
Pendulum Potentiometer	Servo	4961	9/23/2024	9/23/2025
Condyle Potentiometer	Servo	DS185	9/23/2024	9/23/2025
Upper Neck Load Cell	Kistler	M555A6CFM_1935H01698-FY	4/17/2025	4/17/2026

Pendulum Impulse




Neck Rotation
Max: 71.8 deg
Min: -22.3 deg
Filter: CFC 60
Rotation (Deg)
75
50
25
0
-25
-50
0
25
50
75
100
125
150
Time [ms]


Moment About Occipital Condyle
Max: 42.6 Nm
Min: -13.9 Nm
Filter: CFC 600
Moment (Nm)
50
40
30
20
10
0
-10
-20
0
25
50
75
100
125
150
Time [ms]

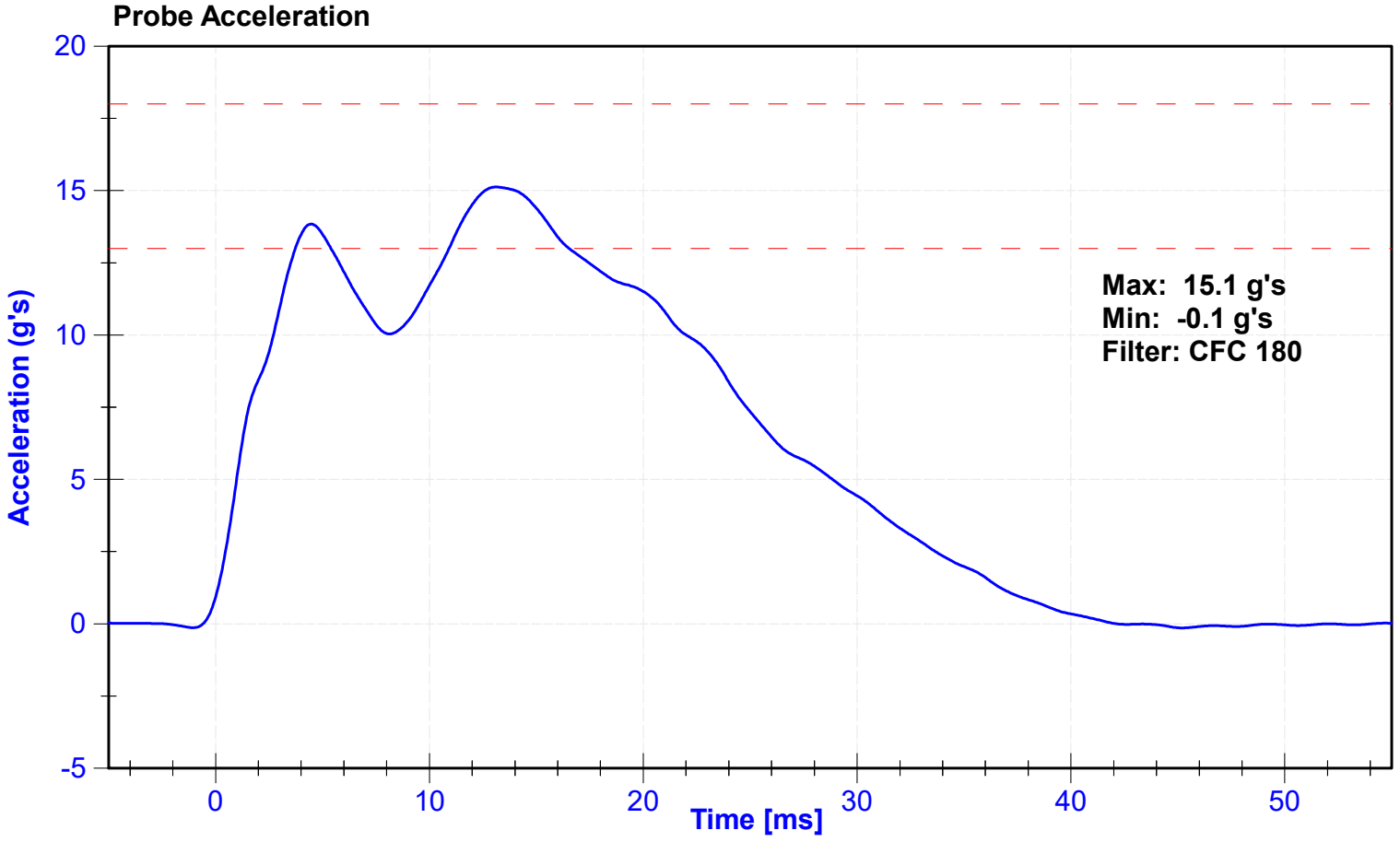
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

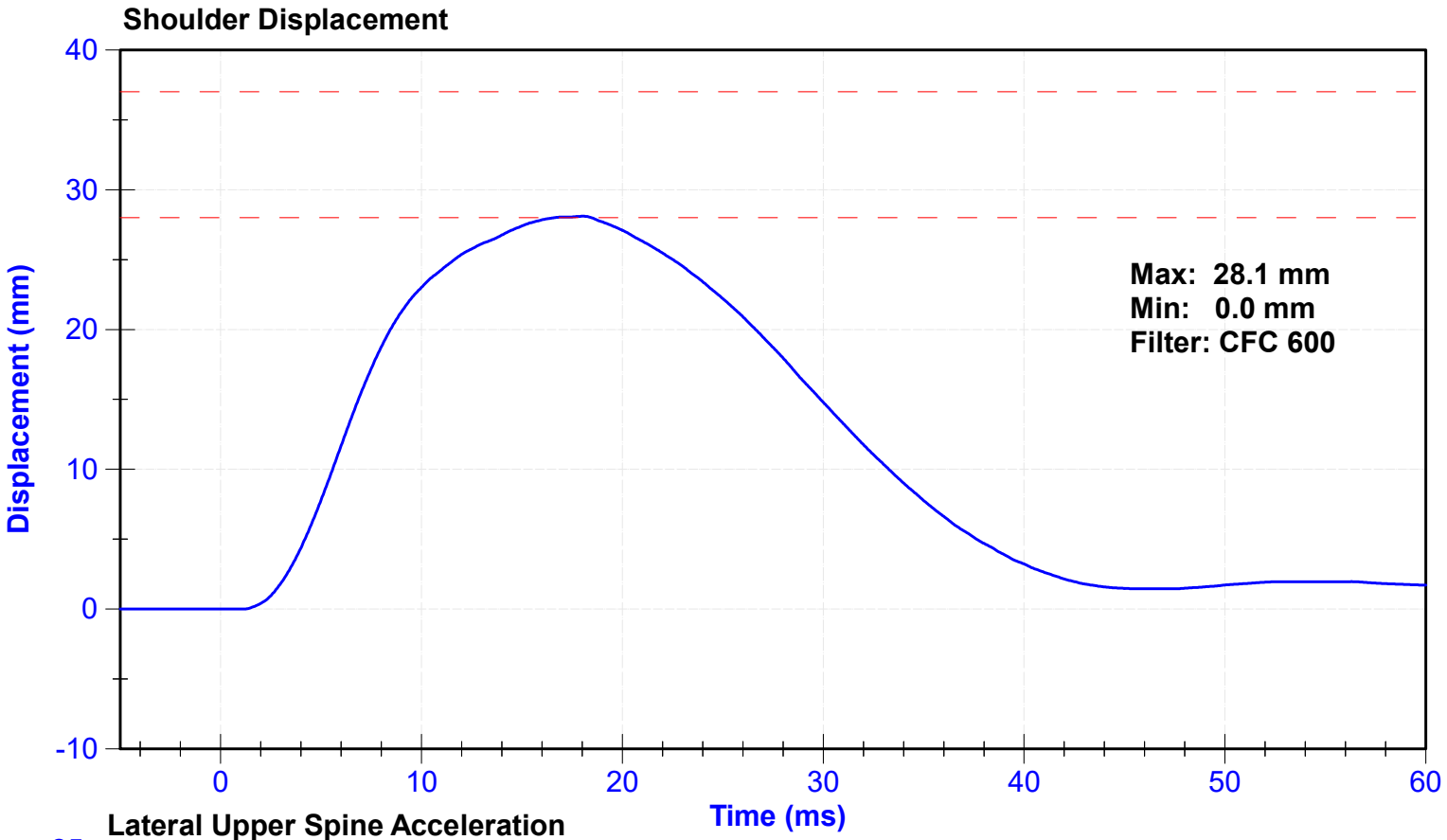
Results

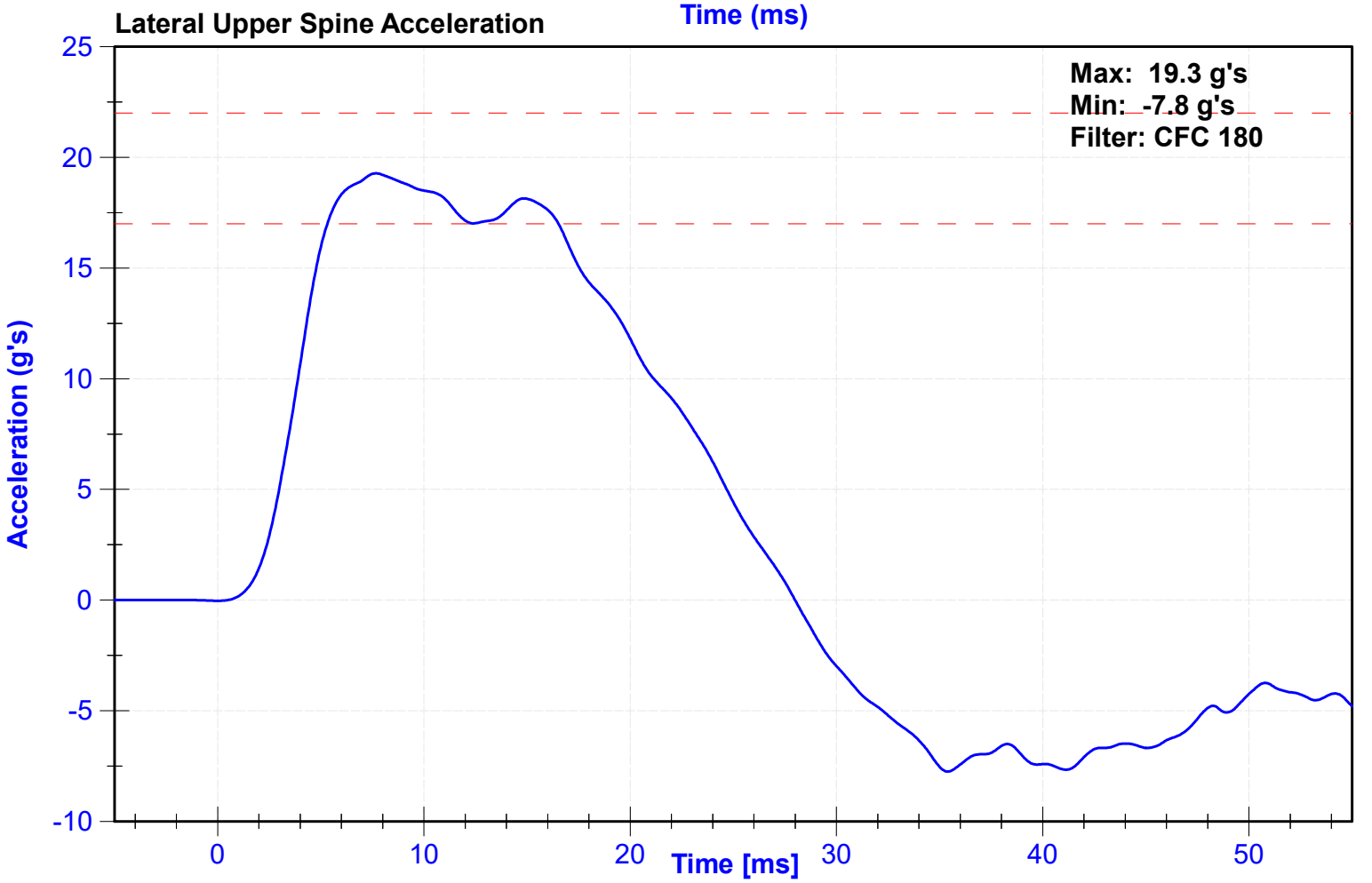
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	46	Pass
Velocity	4.2	4.4	m/s	4.27	Pass
Probe Acceleration	13	18	g's	15.1	Pass
Shoulder Deflection	28	37	mm	28.1	Pass
Lateral Upper Spine Acceleration	17	22	g's	19.3	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Shoulder Potentiometer	Servo	053GFE	7/10/2025	1/8/2026
Upper Spine Y Accelerometer	Endevco	P52018	7/11/2025	1/7/2026




Shoulder Displacement
Displacement (mm)
Time (ms)
Max: 28.1 mm
Min: 0.0 mm
Filter: CFC 600


Lateral Upper Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 19.3 g's
Min: -7.8 g's
Filter: CFC 180

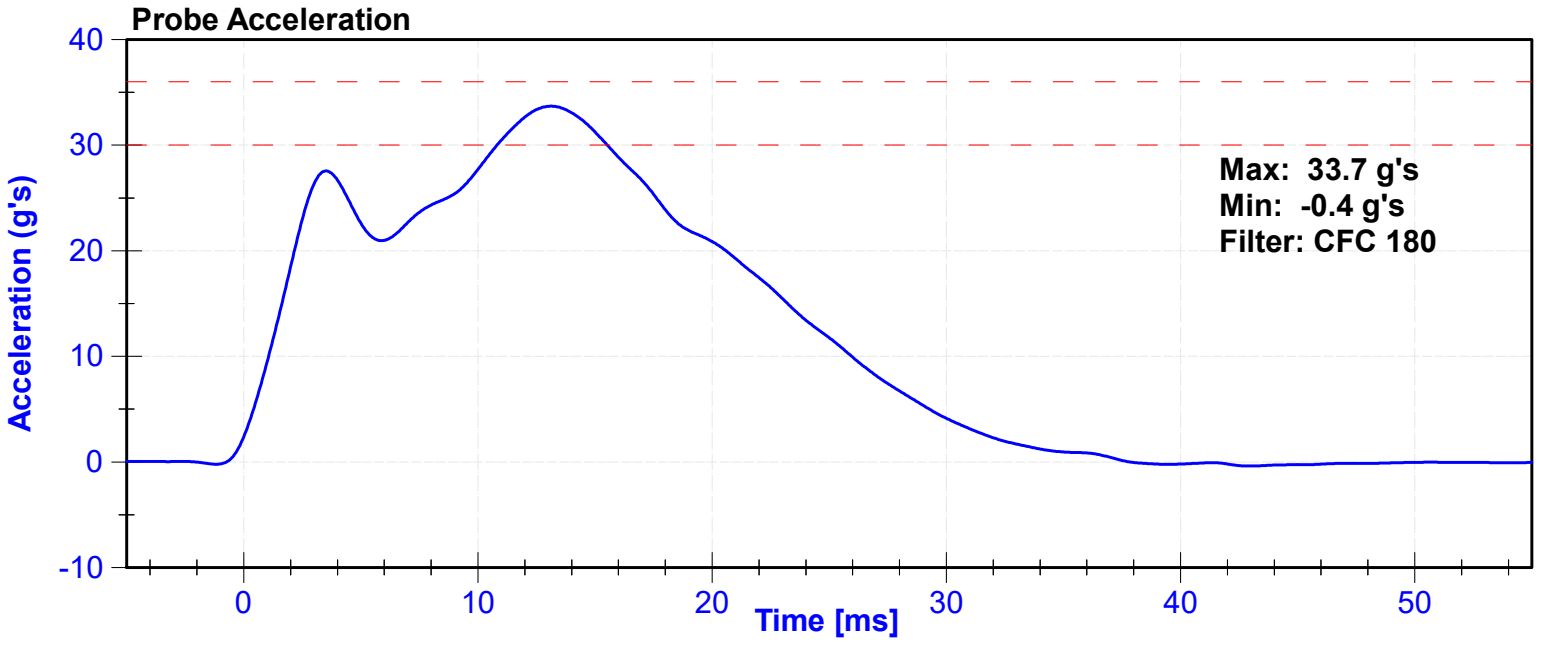
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

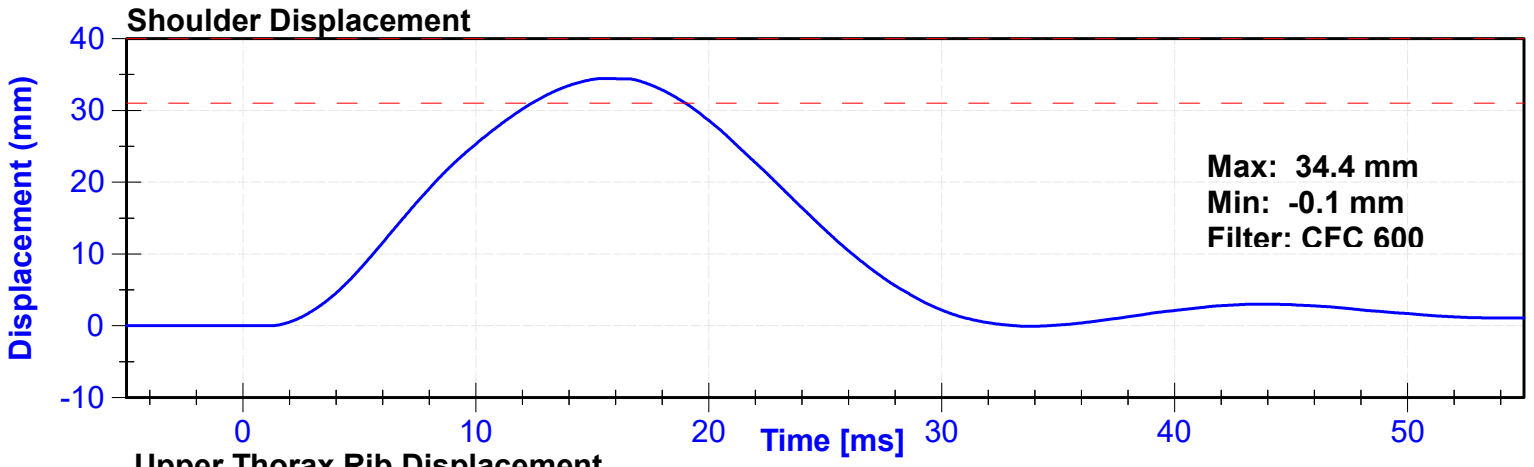
Results

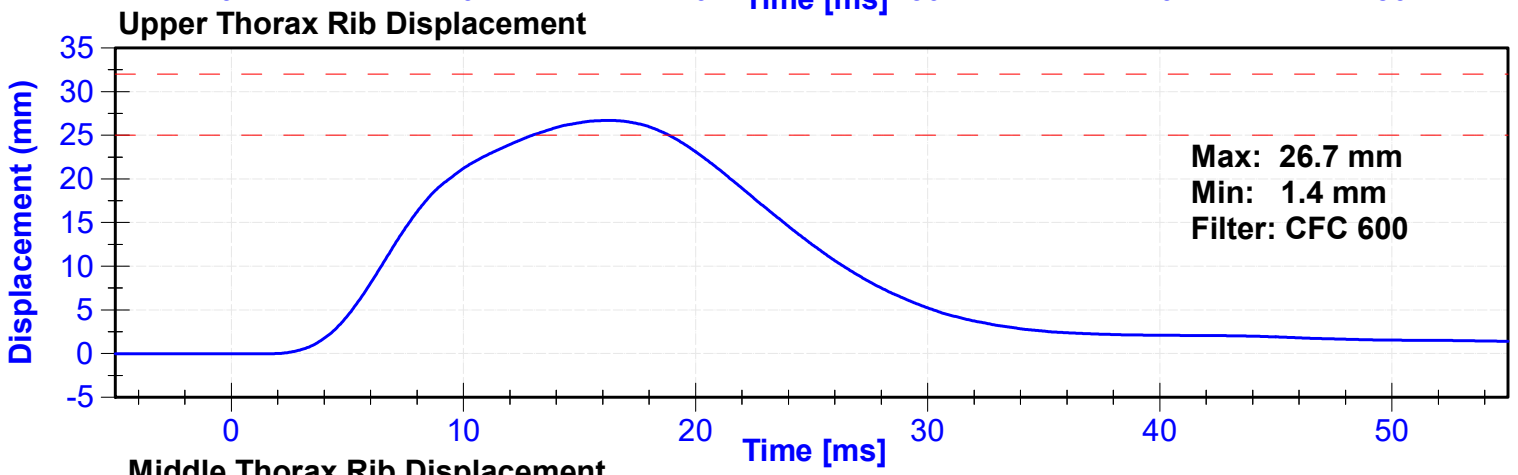
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	46	Pass
Velocity	6.6	6.8	m/s	6.66	Pass
Probe Acceleration after 5 ms	30	36	g's	33.7	Pass
Lateral Upper Spine Acceleration	34	43	g's	36.9	Pass
Lateral Lower Spine Acceleration	29	37	g's	36.2	Pass
Shoulder Deflection	31	40	mm	34.4	Pass
Upper Thorax Rib Deflection	25	32	mm	26.7	Pass
Mid Thorax Rib Deflection	30	36	mm	30.2	Pass
Lower Thorax Rib Deflection	32	38	mm	32.1	Pass

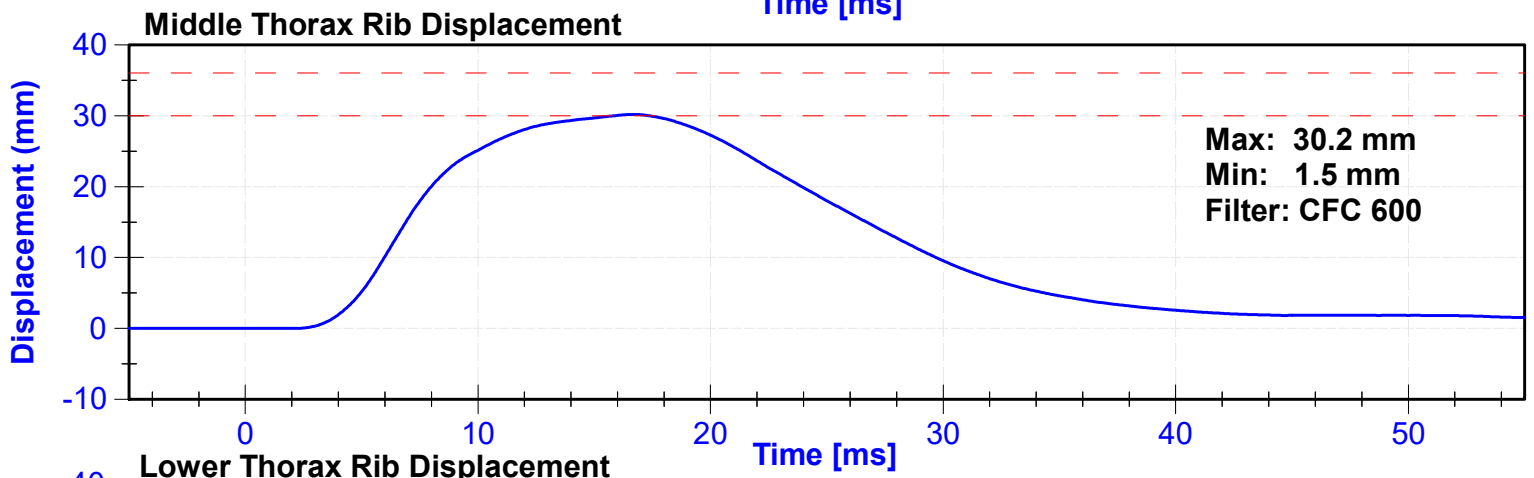
Transducer Calibrations

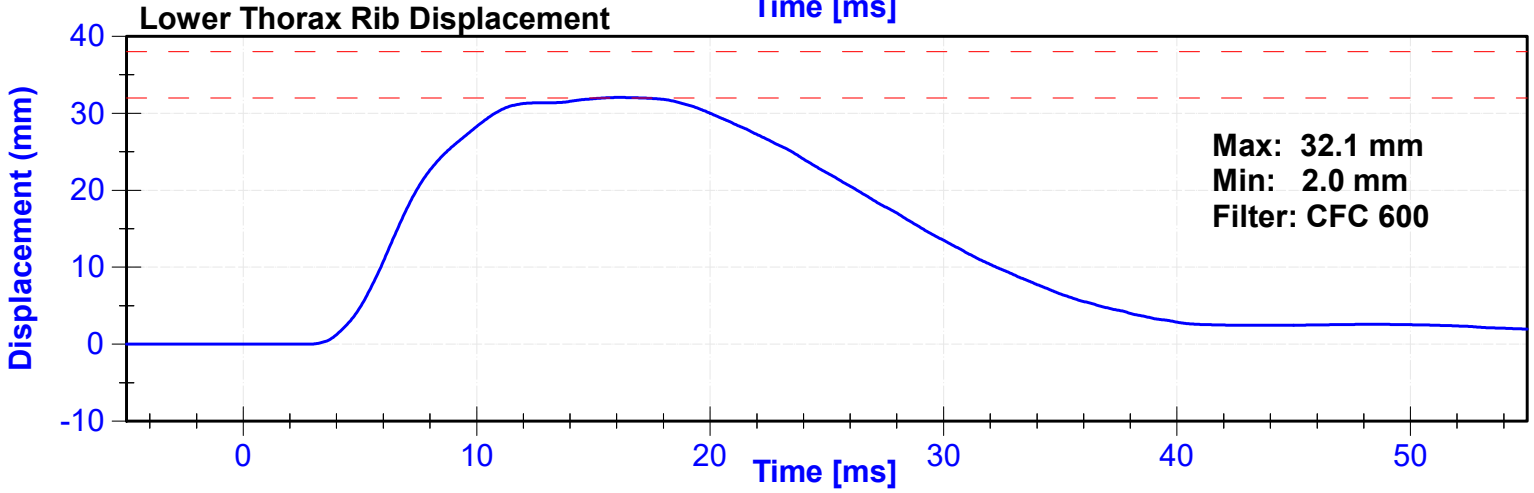
Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Upper Spine T1 Y Accelerometer	Endevco	P52018	7/11/2025	1/7/2026
Upper Spine T12 Y Accelerometer	Endevco	P17283	7/11/2025	1/7/2026
Shoulder Potentiometer	Servo	053GFE	7/10/2025	1/8/2026
Upper Thorax Rib Potentiometer	Servo	2316GFE	7/10/2025	1/8/2026
Middle Thorax Rib Potentiometer	Servo	085GFE	7/10/2025	1/8/2026
Lower Thorax Rib Potentiometer	Servo	1156GFE	7/10/2025	1/8/2026

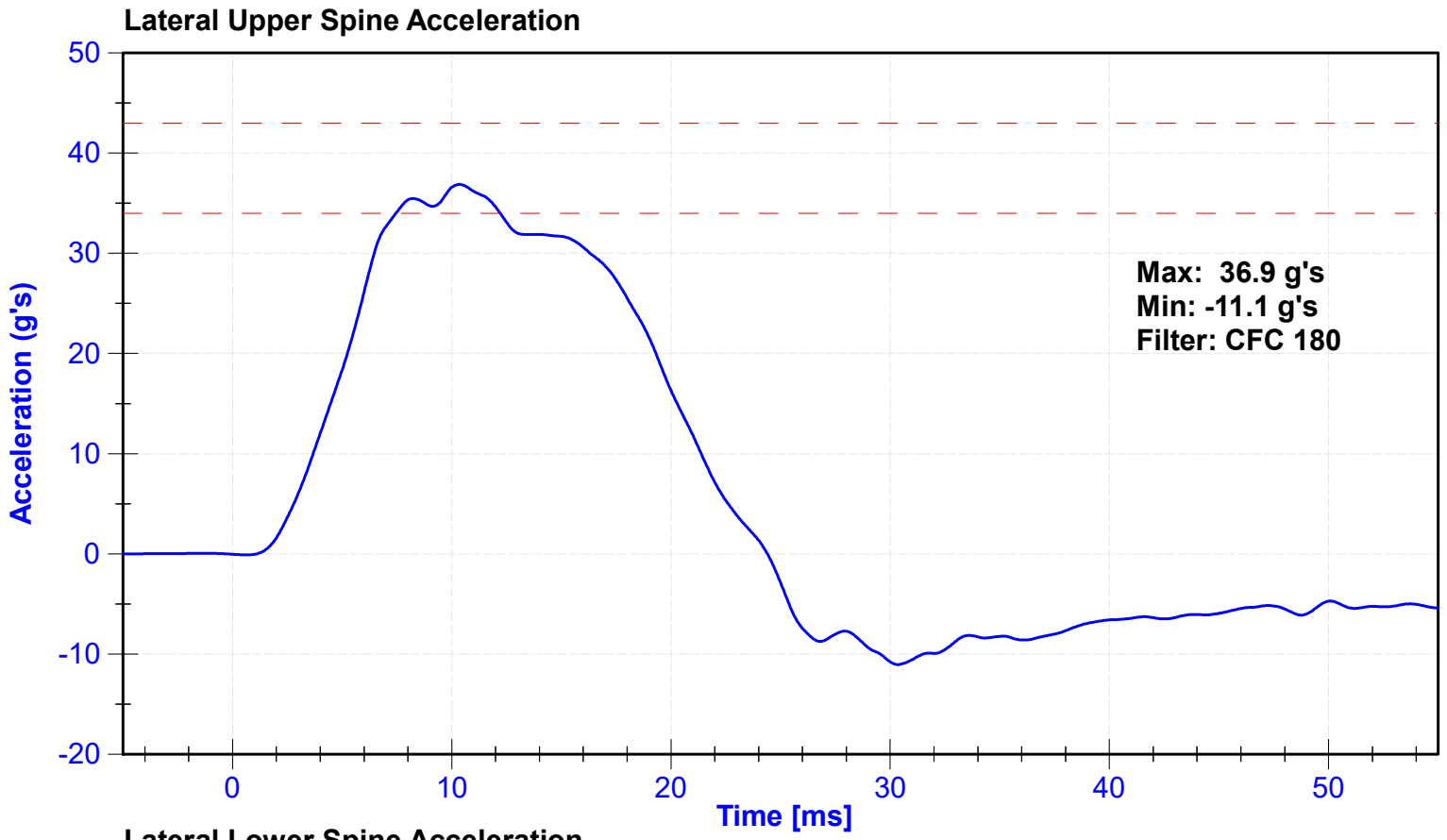


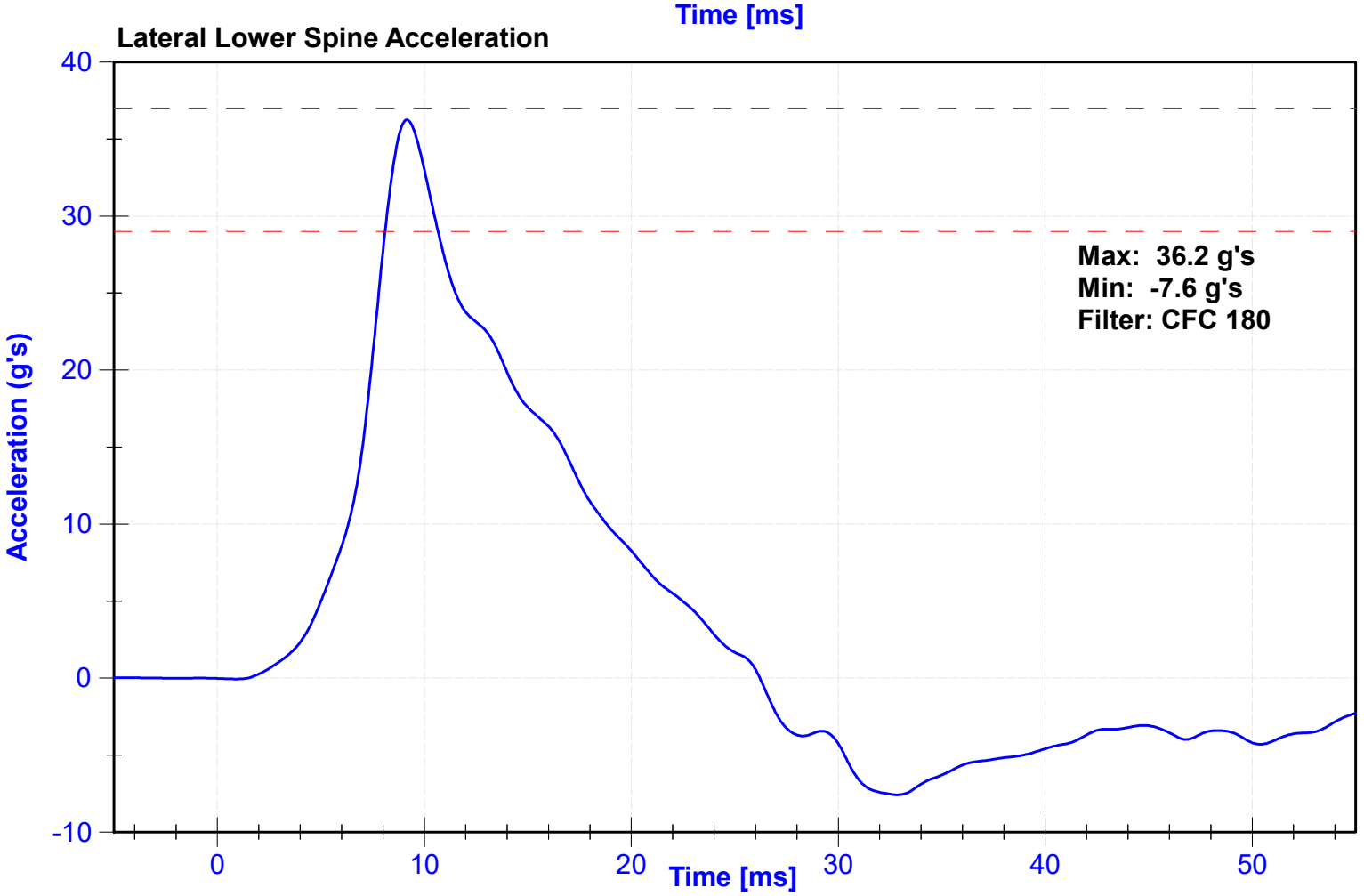

Shoulder Displacement
Displacement (mm)
Time [ms]
Max: 34.4 mm
Min: -0.1 mm
Filter: CFC 600


Upper Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 26.7 mm
Min: 1.4 mm
Filter: CFC 600


Middle Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 30.2 mm
Min: 1.5 mm
Filter: CFC 600


Lower Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 32.1 mm
Min: 2.0 mm
Filter: CFC 600


Lateral Upper Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 36.9 g's
Min: -11.1 g's
Filter: CFC 180


Lateral Lower Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 36.2 g's
Min: -7.6 g's
Filter: CFC 180

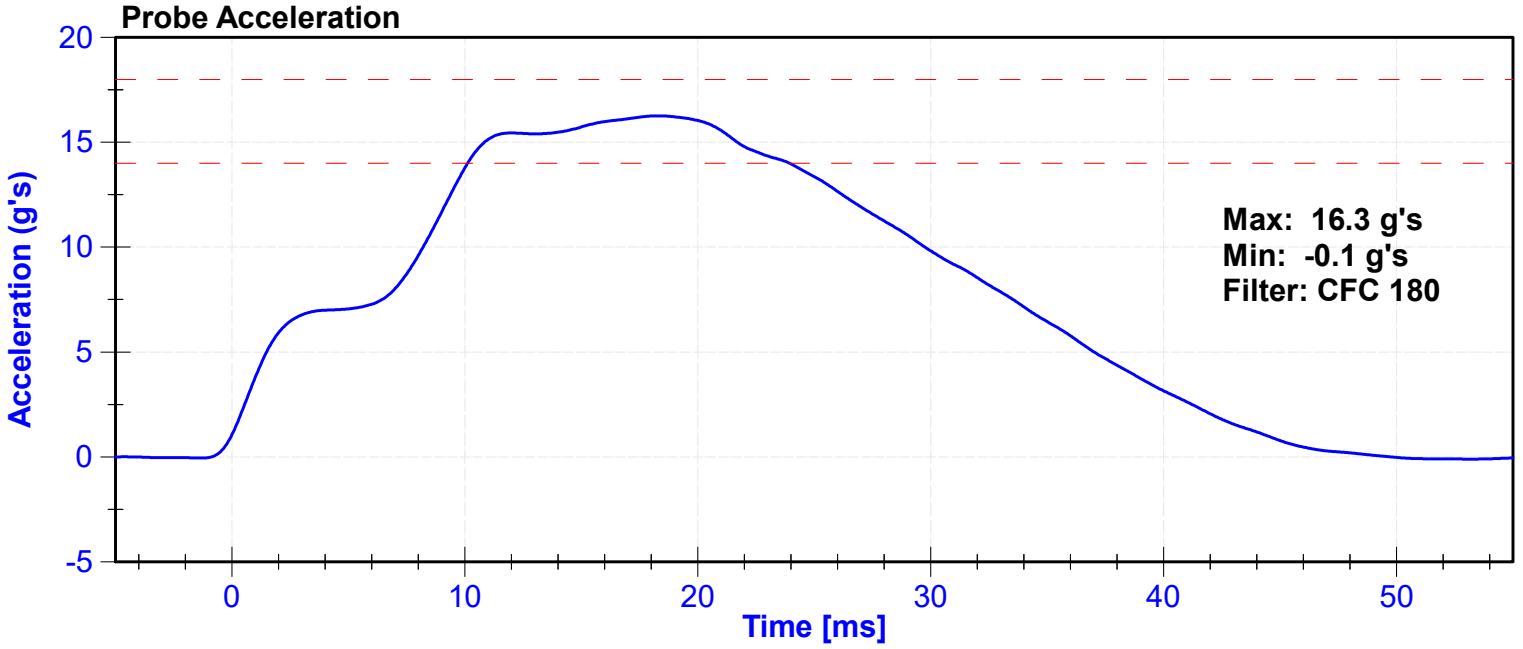
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

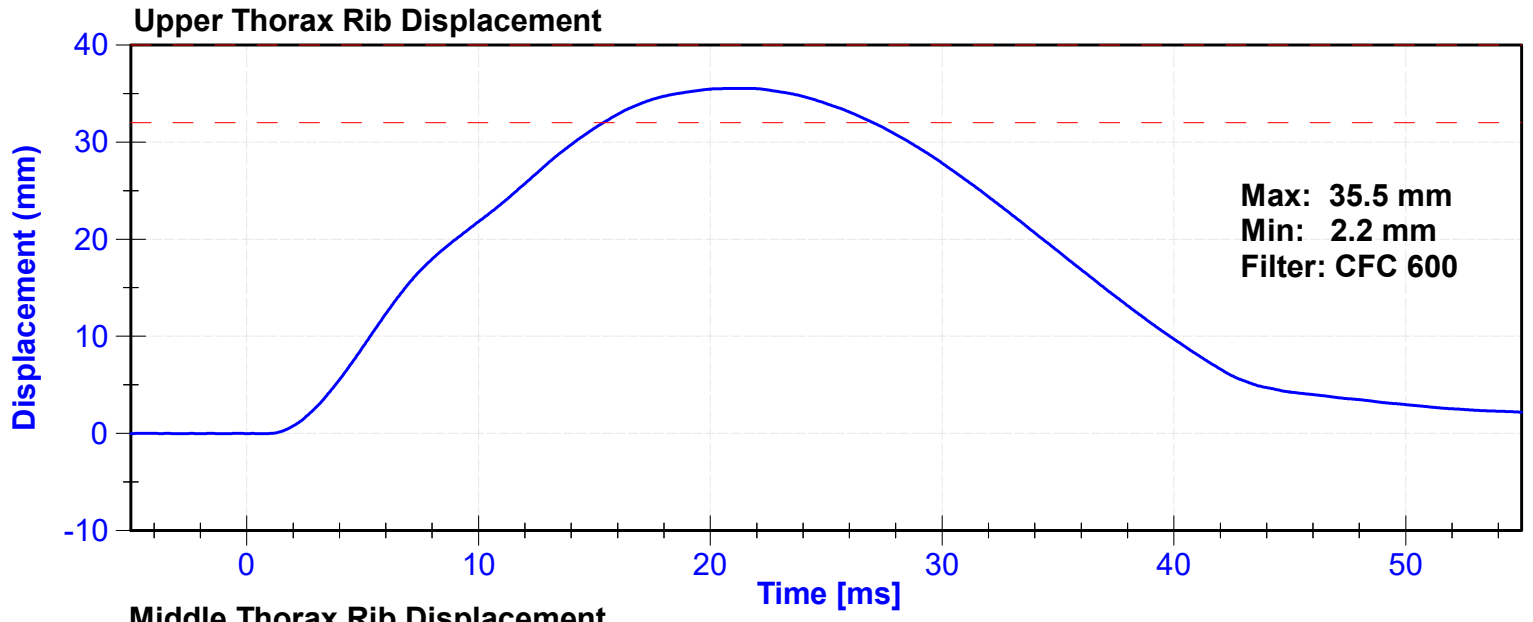
Results

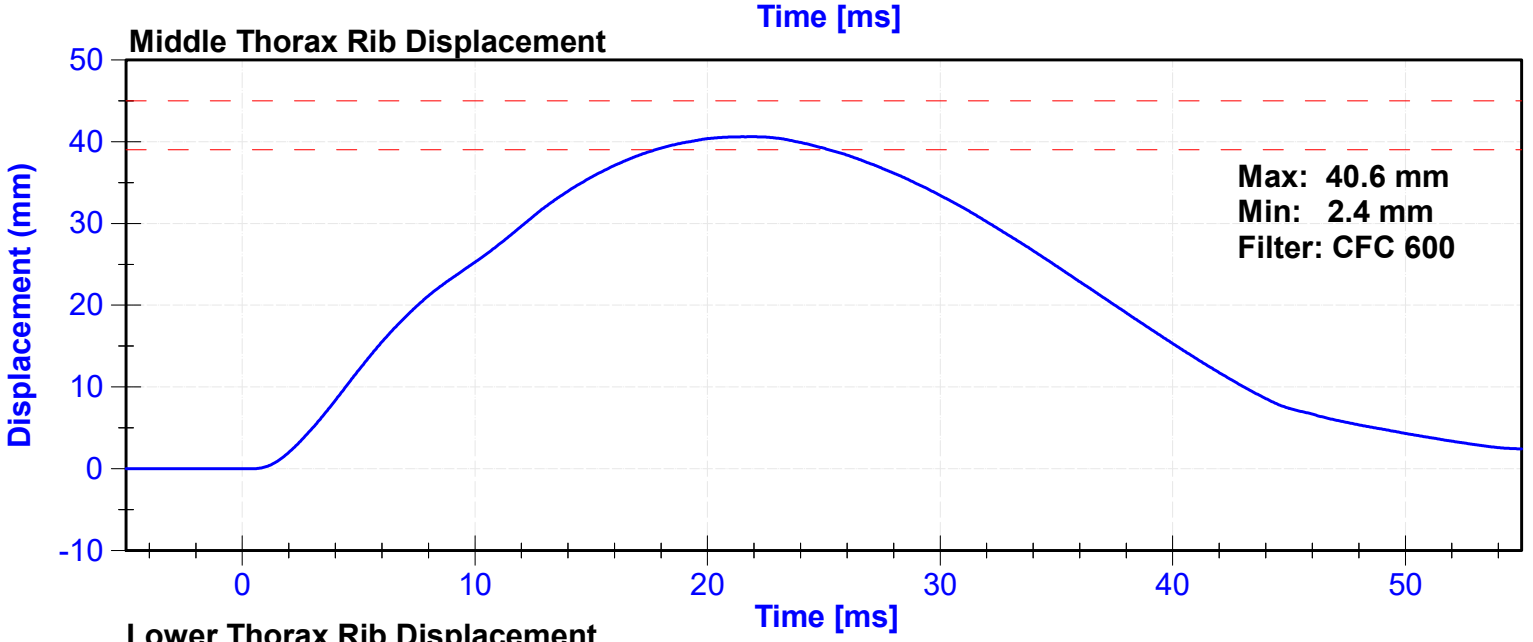
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	46	Pass
Velocity	4.2	4.4	m/s	4.27	Pass
Probe Acceleration	14	18	g's	16.3	Pass
Lateral Upper Spine Acceleration	13	17	g's	14.8	Pass
Lateral Lower Spine Acceleration	7	11	g's	10.3	Pass
Upper Thorax Rib Deflection	32	40	mm	35.5	Pass
Middle Thorax Rib Deflection	39	45	mm	40.6	Pass
Lower Thorax Rib Deflection	35	43	mm	38.2	Pass

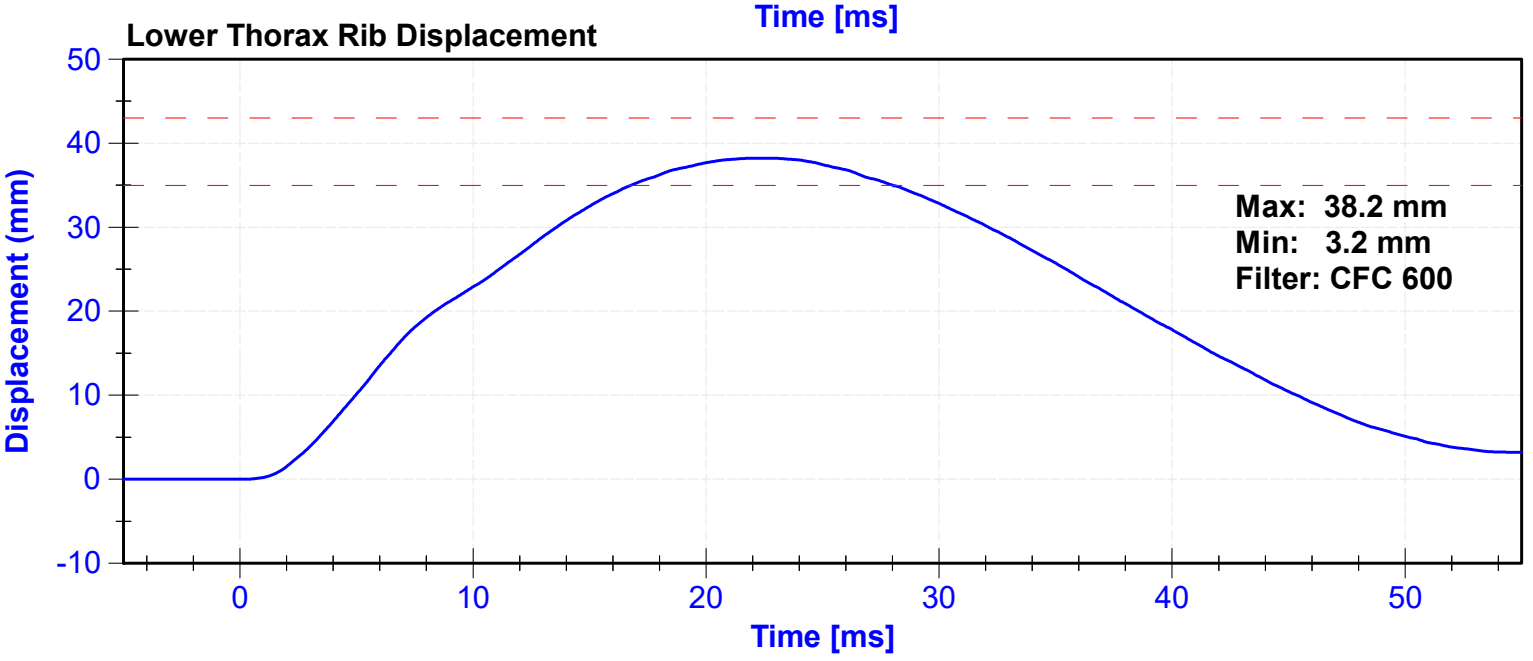
Transducer Calibrations

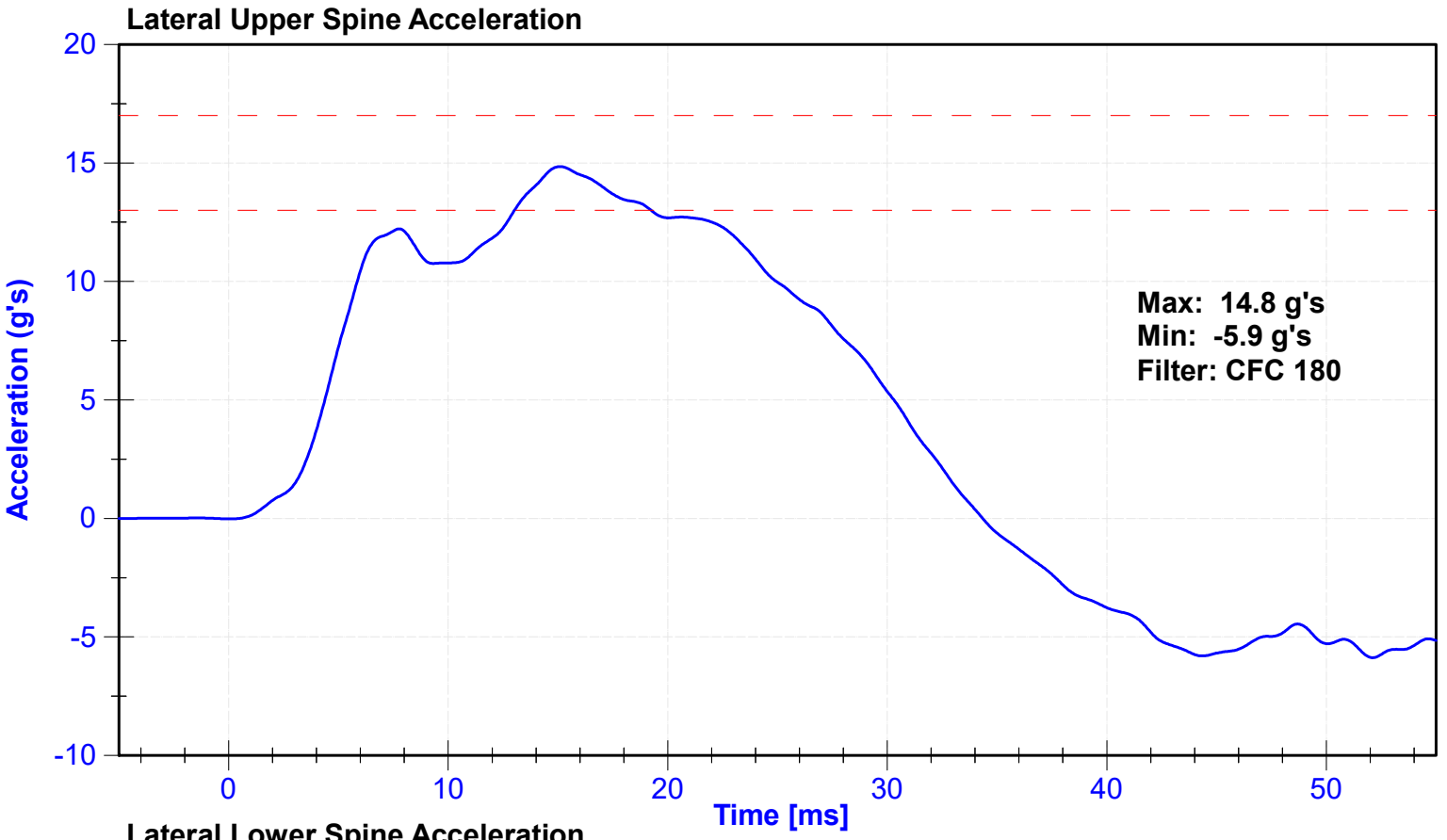
Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Upper Spine Y Accelerometer	Endevco	P52018	7/11/2025	1/7/2026
Lower Spine Y Accelerometer	Endevco	P17283	7/11/2025	1/7/2026
Upper Thorax Rib Potentiometer	Servo	2316GFE	7/10/2025	1/8/2026
Middle Thorax Rib Potentiometer	Servo	085GFE	7/10/2025	1/8/2026
Lower Thorax Rib Potentiometer	Servo	1156GFE	7/10/2025	1/8/2026

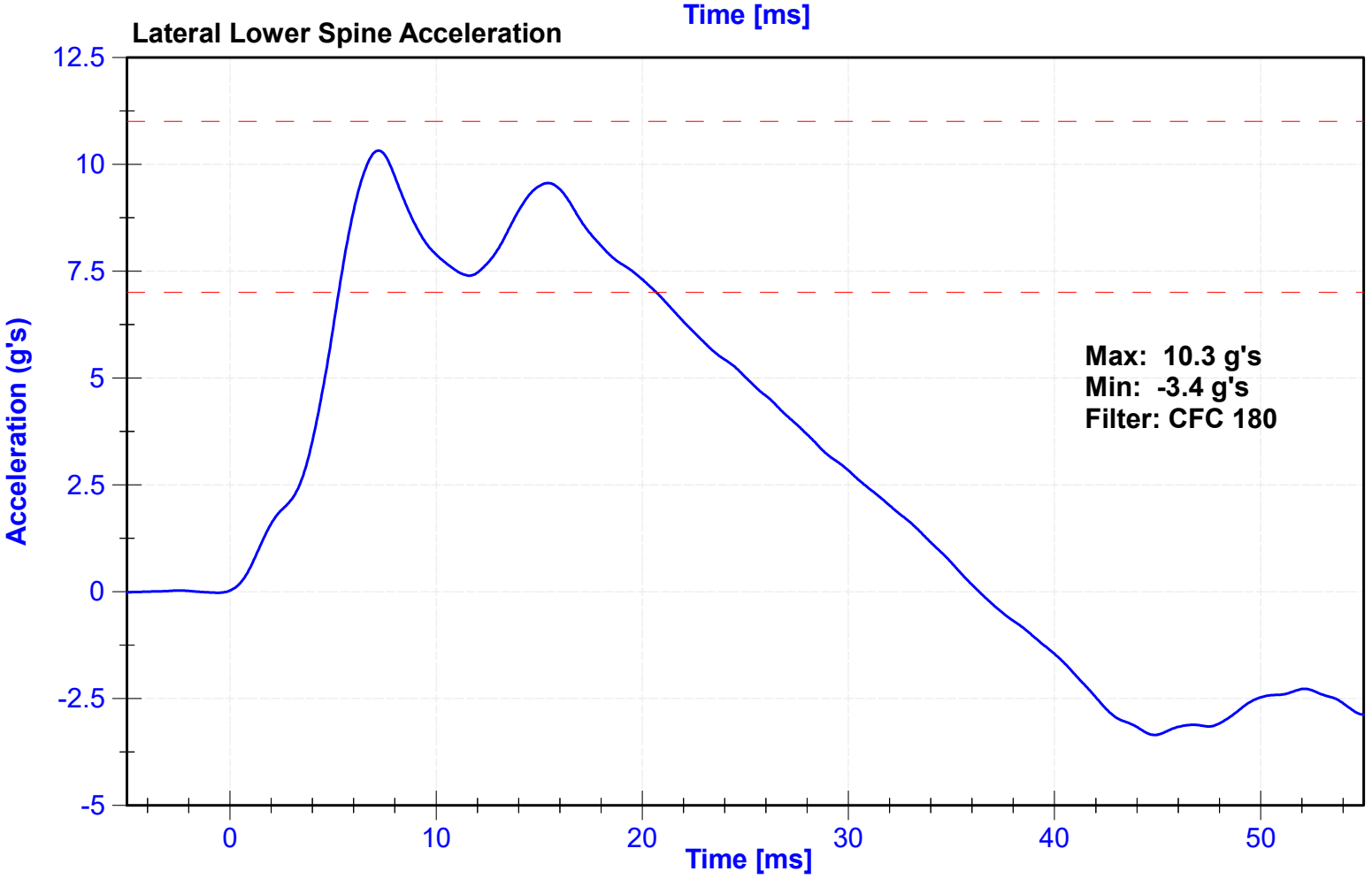



Upper Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 35.5 mm
Min: 2.2 mm
Filter: CFC 600


Middle Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 40.6 mm
Min: 2.4 mm
Filter: CFC 600


Lower Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 38.2 mm
Min: 3.2 mm
Filter: CFC 600


Lateral Upper Spine Acceleration
Acceleration (g's)
20
15
10
5
0
-5
-10
0
10
20
30
40
50
Time [ms]
Max: 14.8 g's
Min: -5.9 g's
Filter: CFC 180


Lateral Lower Spine Acceleration
Acceleration (g's)
12.5
10
7.5
5
2.5
0
-2.5
-5
0
10
20
30
40
50
Time [ms]
Max: 10.3 g's
Min: -3.4 g's
Filter: CFC 180

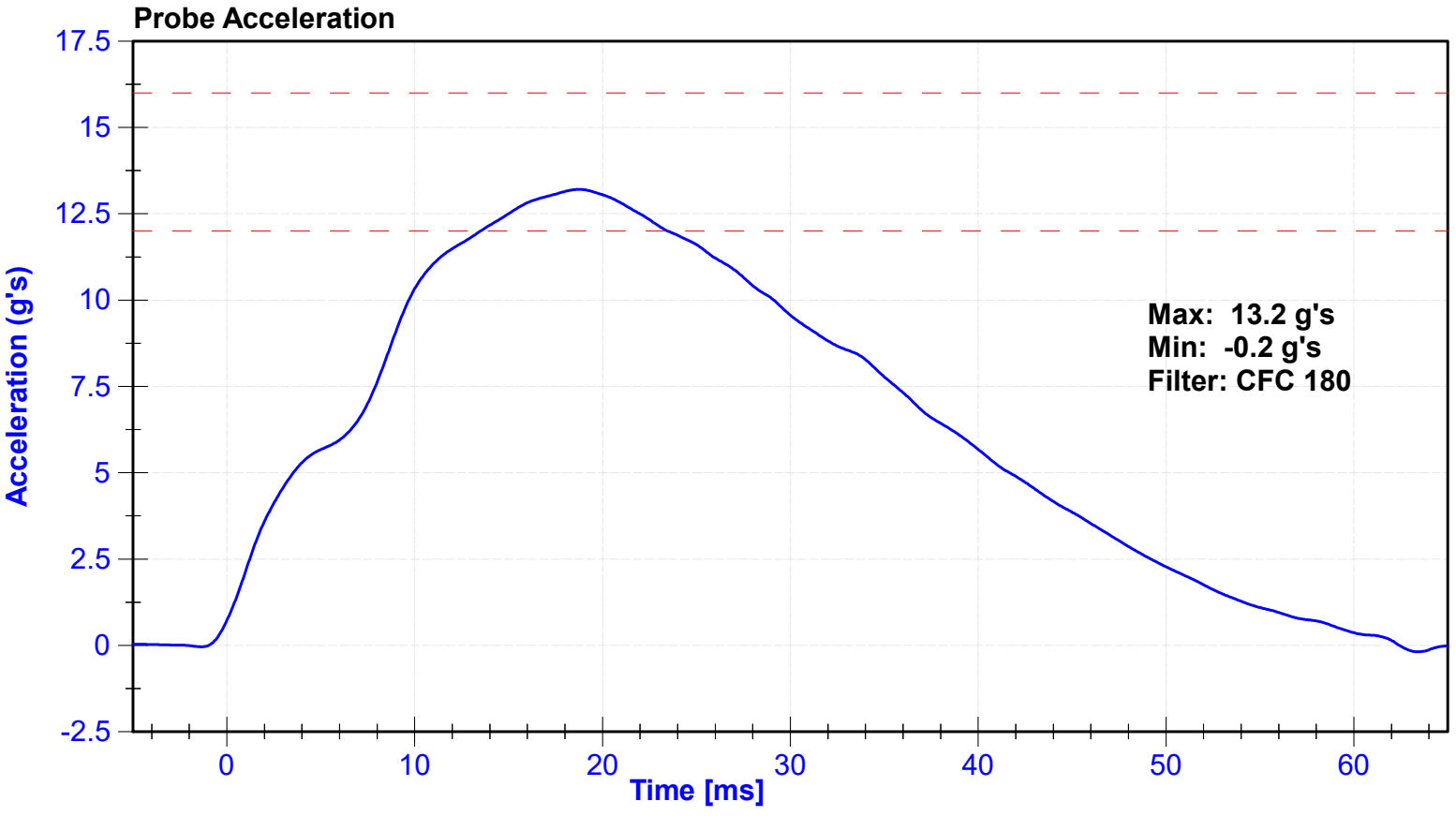
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

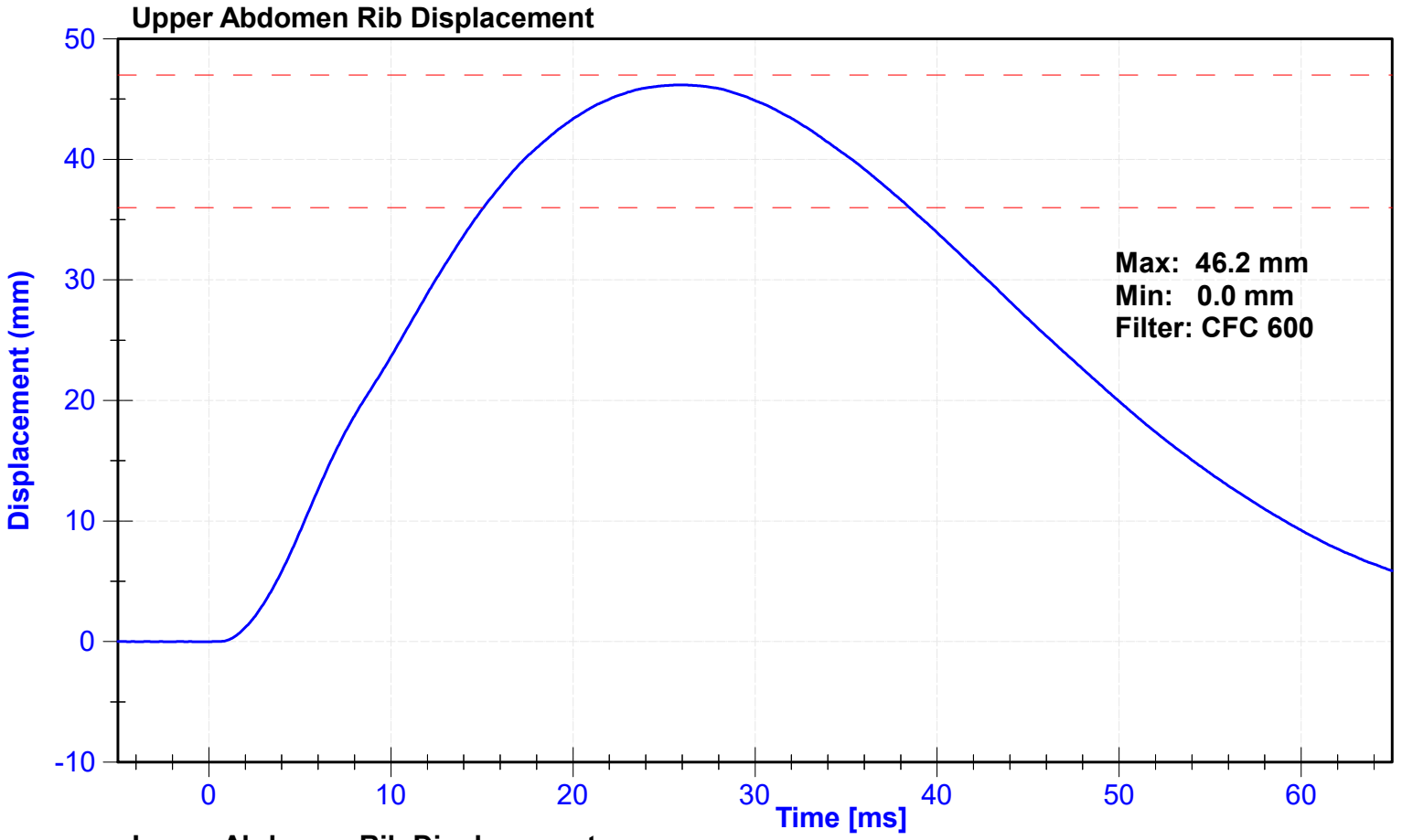
Results

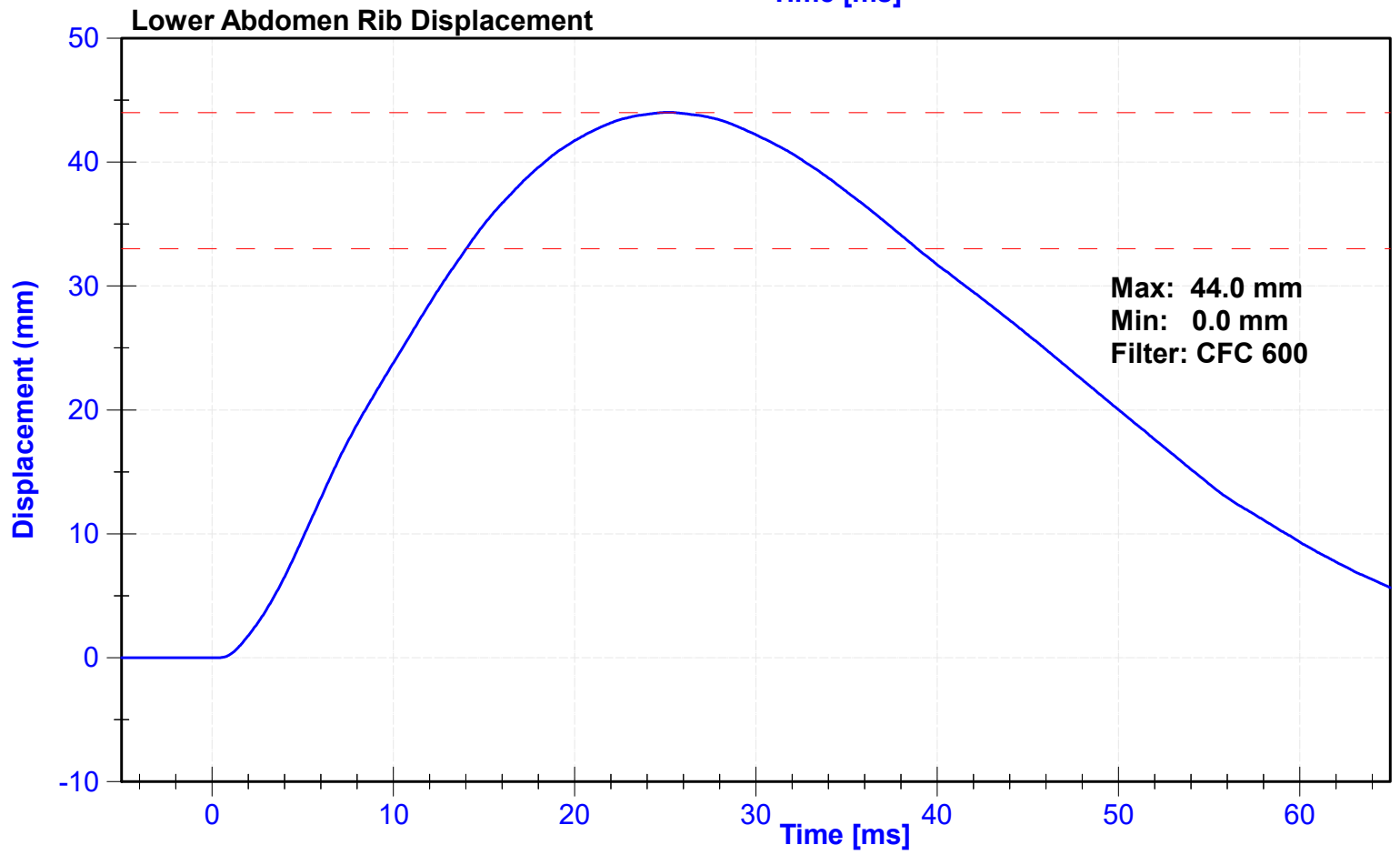
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	46	Pass
Velocity	4.2	4.4	m/s	4.20	Pass
Probe Acceleration	12	16	g's	13.2	Pass
Lateral Lower Spine Acceleration	9	14	g's	11.6	Pass
Upper Abdomen Rib Deflection	36	47	mm	46.2	Pass
Lower Abdomen Rib Deflection	33	44	mm	44.0	Pass

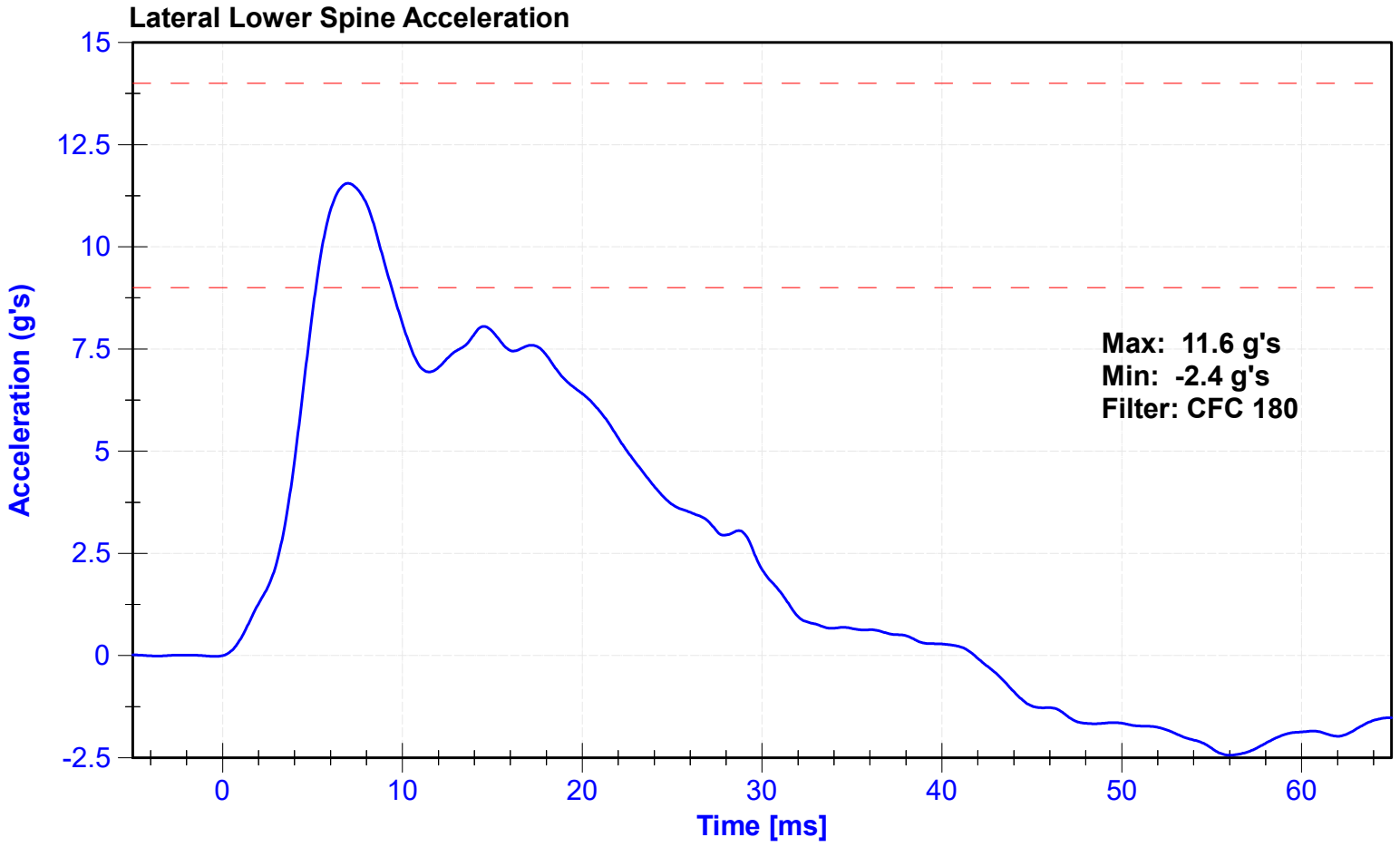
Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Probe Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Lower Spine Y Accelerometer	Endevco	P17283	7/11/2025	1/7/2026
Upper Abdomen Rib Potentiometer	Servo	074GFE	7/10/2025	1/8/2026
Lower Abdomen Rib Potentiometer	Servo	075GFE	7/10/2025	1/8/2026




Upper Abdomen Rib Displacement
Displacement (mm)
50
40
30
20
10
0
-10
0
10
20
30
40
50
60
Time [ms]
Max: 46.2 mm
Min: 0.0 mm
Filter: CFC 600


Lower Abdomen Rib Displacement
Displacement (mm)
50
40
30
20
10
0
-10
0
10
20
30
40
50
60
Time [ms]
Max: 44.0 mm
Min: 0.0 mm
Filter: CFC 600


Lateral Lower Spine Acceleration
Acceleration (g's)
15
12.5
10
7.5
5
2.5
0
-2.5
0
10
20
30
40
50
60
Time [ms]
Max: 11.6 g's
Min: -2.4 g's
Filter: CFC 180

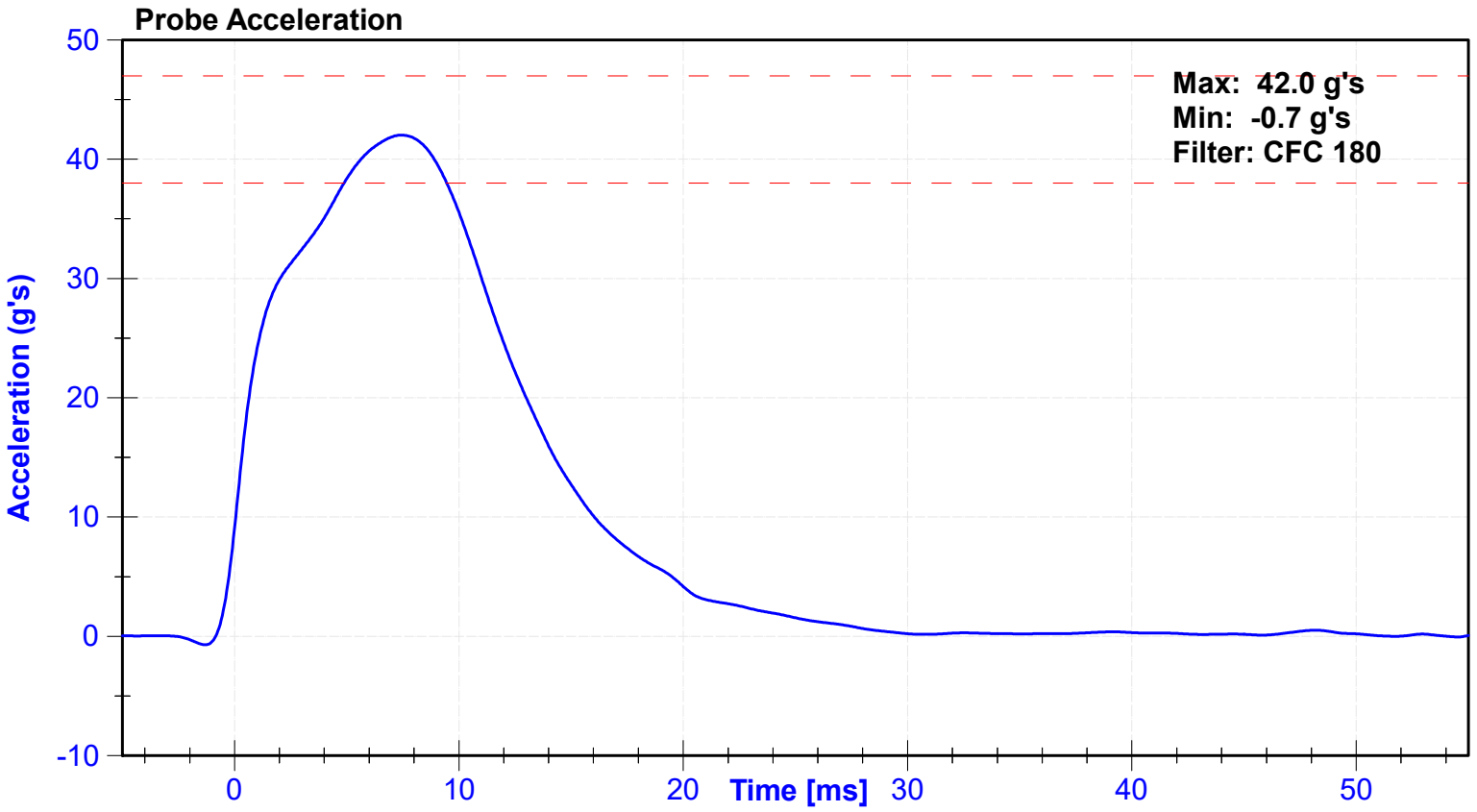
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

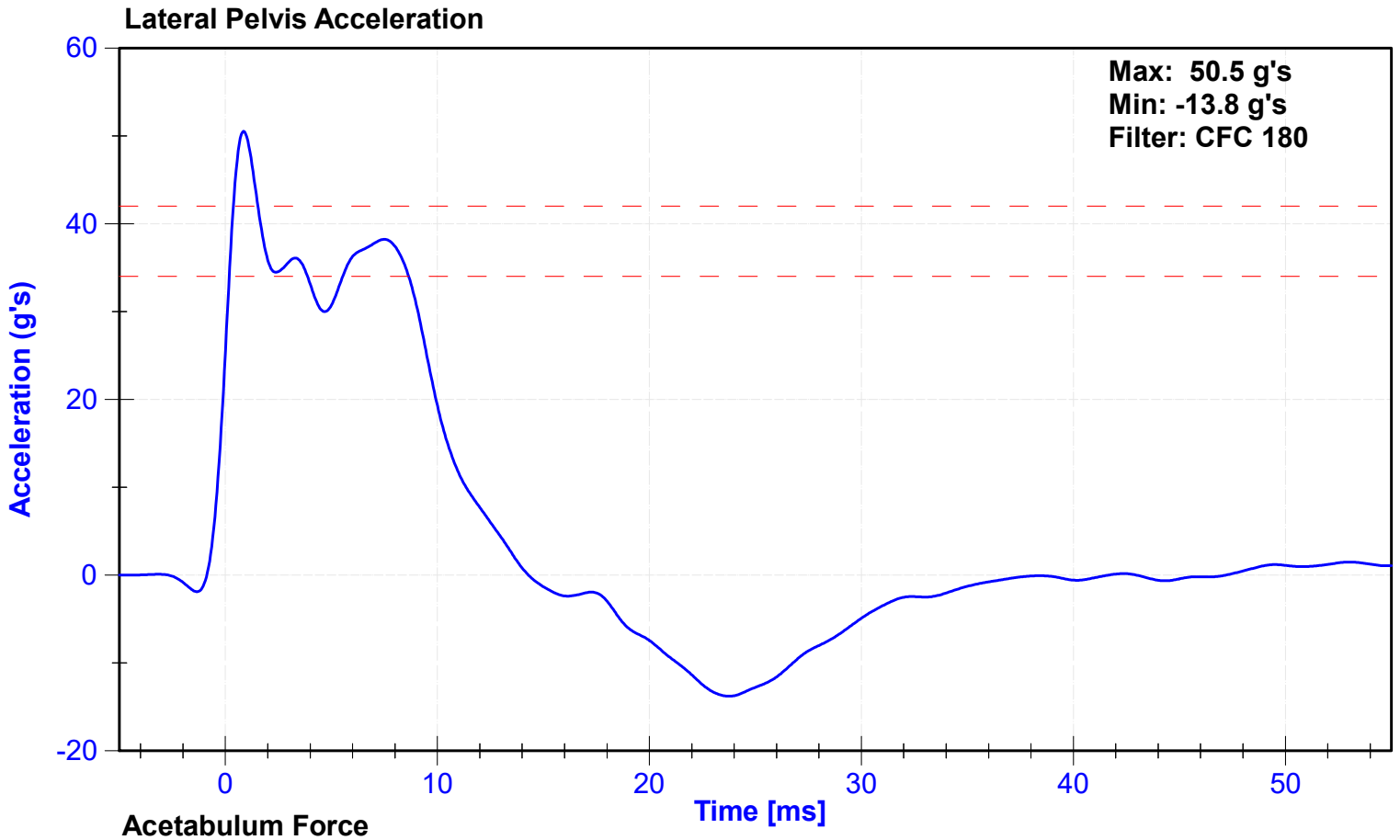
Results

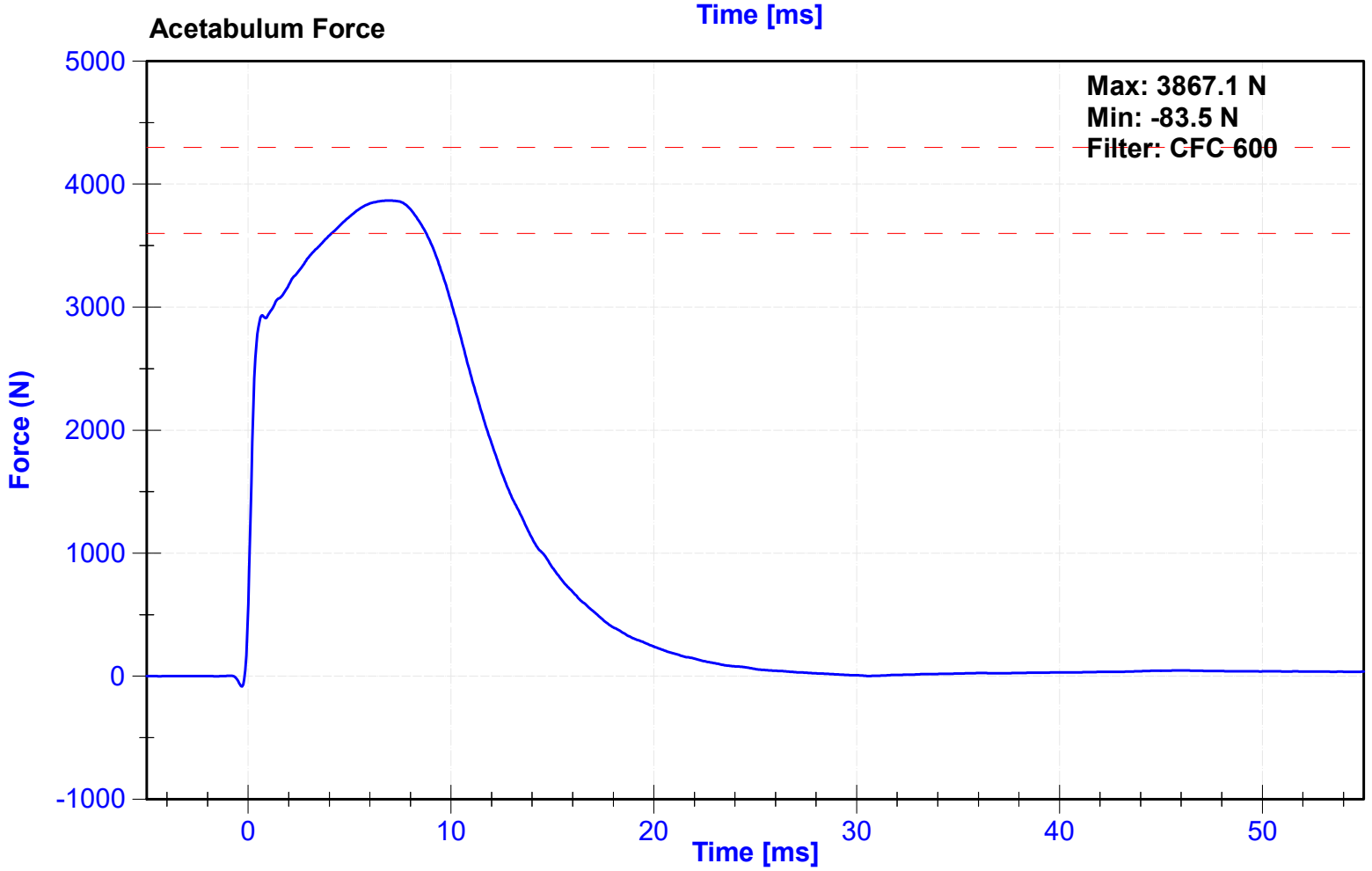
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	46	Pass
Velocity	6.6	6.8	m/s	6.68	Pass
Probe Acceleration	38	47	g's	42.0	Pass
Lateral Pelvis Acceleration after 6ms	34	42	g's	38.2	Pass
Acetabulum Force	3600	4300	N	3867.1	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Pelvis Y Accelerometer	Endevco	P51731	7/11/2025	1/7/2026
Acetabulum Load Cell	Denton	275-FY	10/28/2024	10/28/2025
Certification Plug	SACO			N/A
Crash Test Plug	SACO			N/A




Lateral Pelvis Acceleration
Max: 50.5 g's
Min: -13.8 g's
Filter: CFC 180
Acceleration (g's)
60
40
20
0
-20
0
10
20
30
40
50
Time [ms]


Acetabulum Force
Max: 3867.1 N
Min: -83.5 N
Filter: CFC 600
Force (N)
5000
4000
3000
2000
1000
0
-1000
0
10
20
30
40
50
Time [ms]

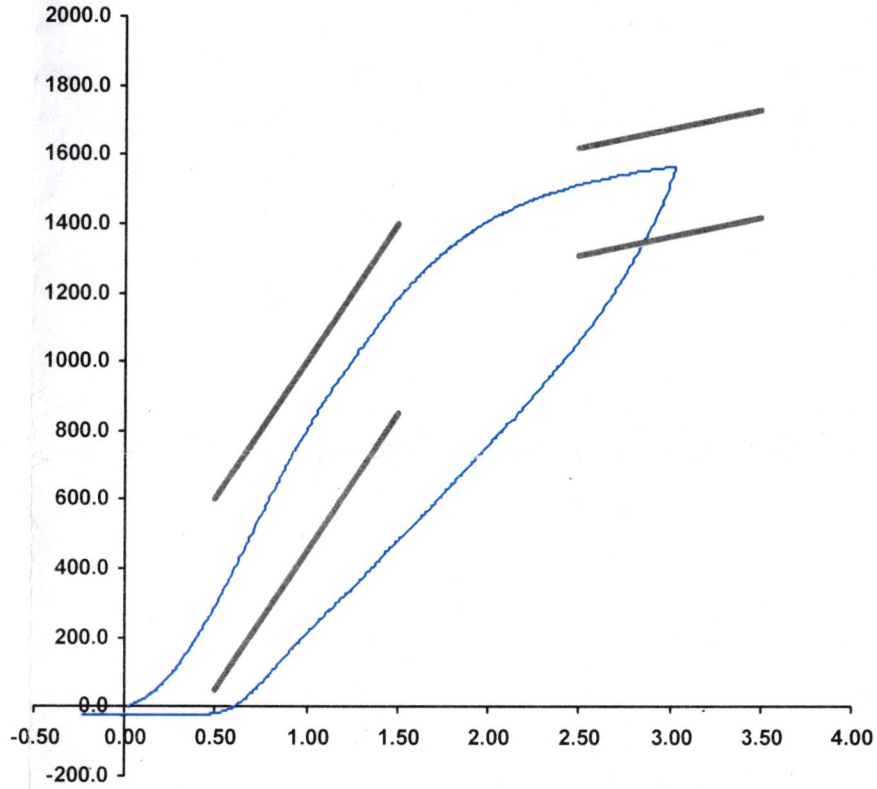
SACO RESEARCH

SID-IIs Pelvis Plug Certification Test

Plug S/N 16969
Test Number 23816
Report Number 23873
Test Date 8/3/2022 11:54:17 AM

	Test Results	Spec Min	Spec Max
Force @ 0.5 mm (N)	310	50	600
Force @ 1.5 mm (N)	1,188	850	1,400
Force @ 2.5 mm (N)	1,517	1,306	1,618
Force @ 3.0 mm (N)	1,567	1,361	1,673

Force (-N) vs Extension (-mm)



Testing Machine STM-20 5965542
Load Cell S/N (FI360947), Units (LBS) 1000

Crosshead Speed (mm / min) or Rate 12.7
Extension or Position Measured by XHD_100 (XHD100)

Notes:
Impact 300 7.31.25

Operator

Part Number 180-4450

Template No 107 03-Aug-22
SACO Research

By : DC Date : 8/3/22

SACO Research 41735 Elm St, #401 Murrieta, CA 92562 Tel 310-694-2082 FAX

SACO RESEARCH

SID-IIs Pelvis Plug Certification Test

Plug S/N 16955
Test Number 23802
Report Number 23859
Test Date 8/3/2022 11:23:03 AM

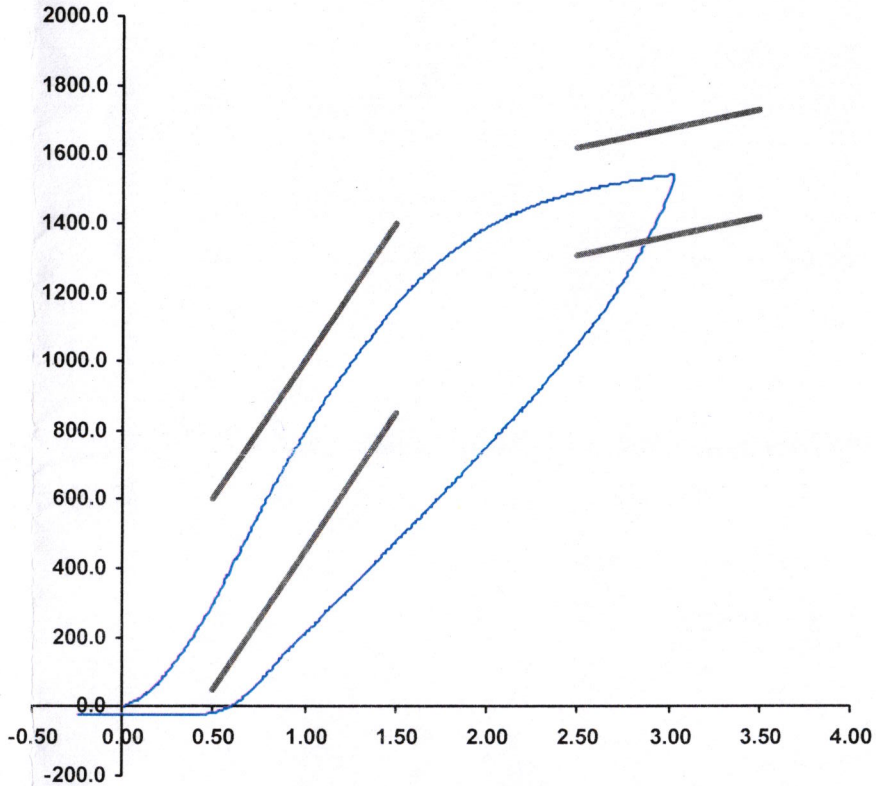
	Test Results	Spec Min	Spec Max
Force @ 0.5 mm (N)	304	50	600
Force @ 1.5 mm (N)	1,169	850	1,400
Force @ 2.5 mm (N)	1,493	1,306	1,618
Force @ 3.0 mm (N)	1,542	1,361	1,673

Testing Machine STM-20 5965542
Load Cell S/N (FI360947), Units (LBS) 1000

Crosshead Speed (mm / min) or Rate 12.7
Extension or Position Measured by XHD_100 (XHD100)

Notes:
Non-Impact 300 7.31.25

Force (-N) vs Extension (-mm)



Operator

Part Number 180-4450

Template No 107 03-Aug-22
SACO Research

By : DC Date : 8/3/22

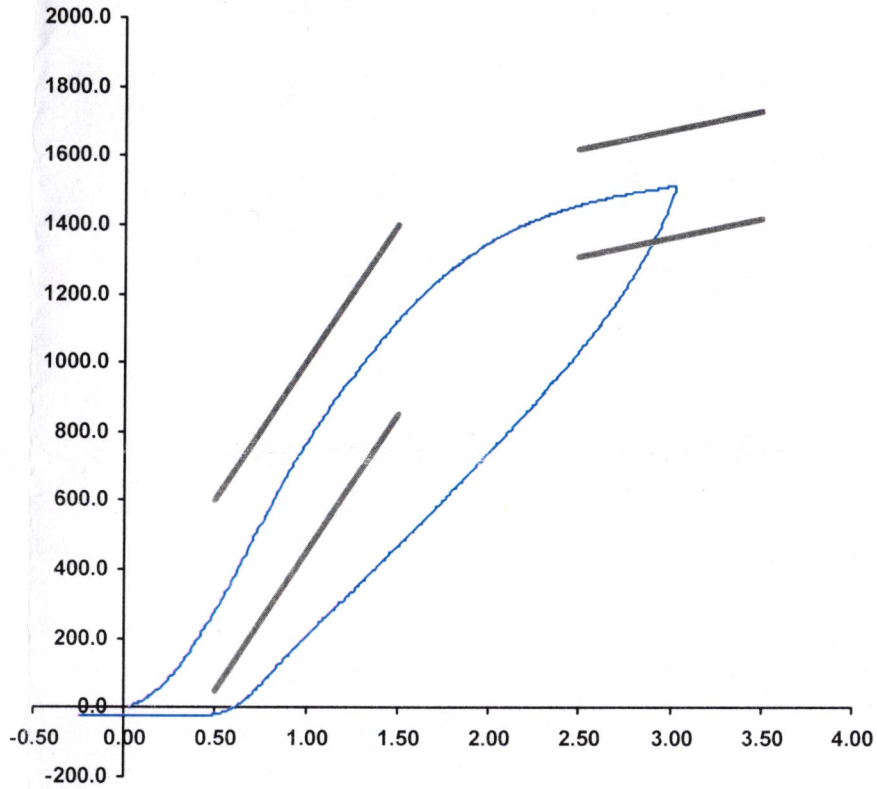
SACO RESEARCH

SID-IIs Pelvis Plug Certification Test

Plug S/N 16947
Test Number 23794
Report Number 23851
Test Date 8/3/2022 11:01:46 AM

	Test Results	Spec Min	Spec Max
Force @ 0.5 mm (N)	285	50	600
Force @ 1.5 mm (N)	1,125	850	1,400
Force @ 2.5 mm (N)	1,460	1,306	1,618
Force @ 3.0 mm (N)	1,513	1,361	1,673

Force (-N) vs Extension (-mm)



Testing Machine STM-20 5965542
Load Cell S/N (FI360947), Units (LBS) 1000

Crosshead Speed (mm / min) or Rate 12.7
Extension or Position Measured by XHD_100 (XHD100)

Notes:
Cert. 300 7.31.25

Operator

Part Number 180-4450

Template No 107 03-Aug-22
SACO Research

By : DC Date : 8/3/22

SACO Research 41735 Elm St, #401 Murrieta, CA 92562 Tel 310-694-2082 FAX

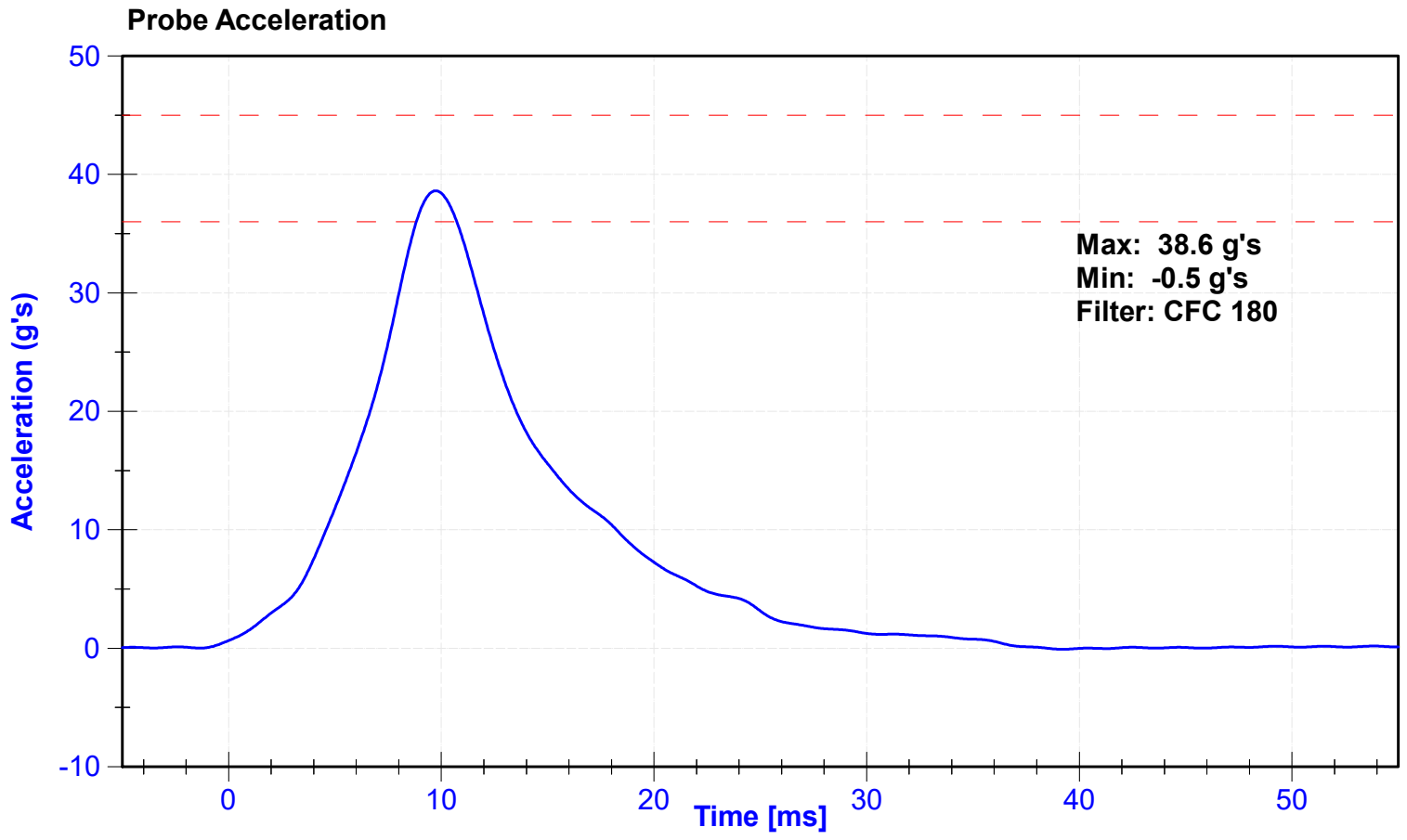
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

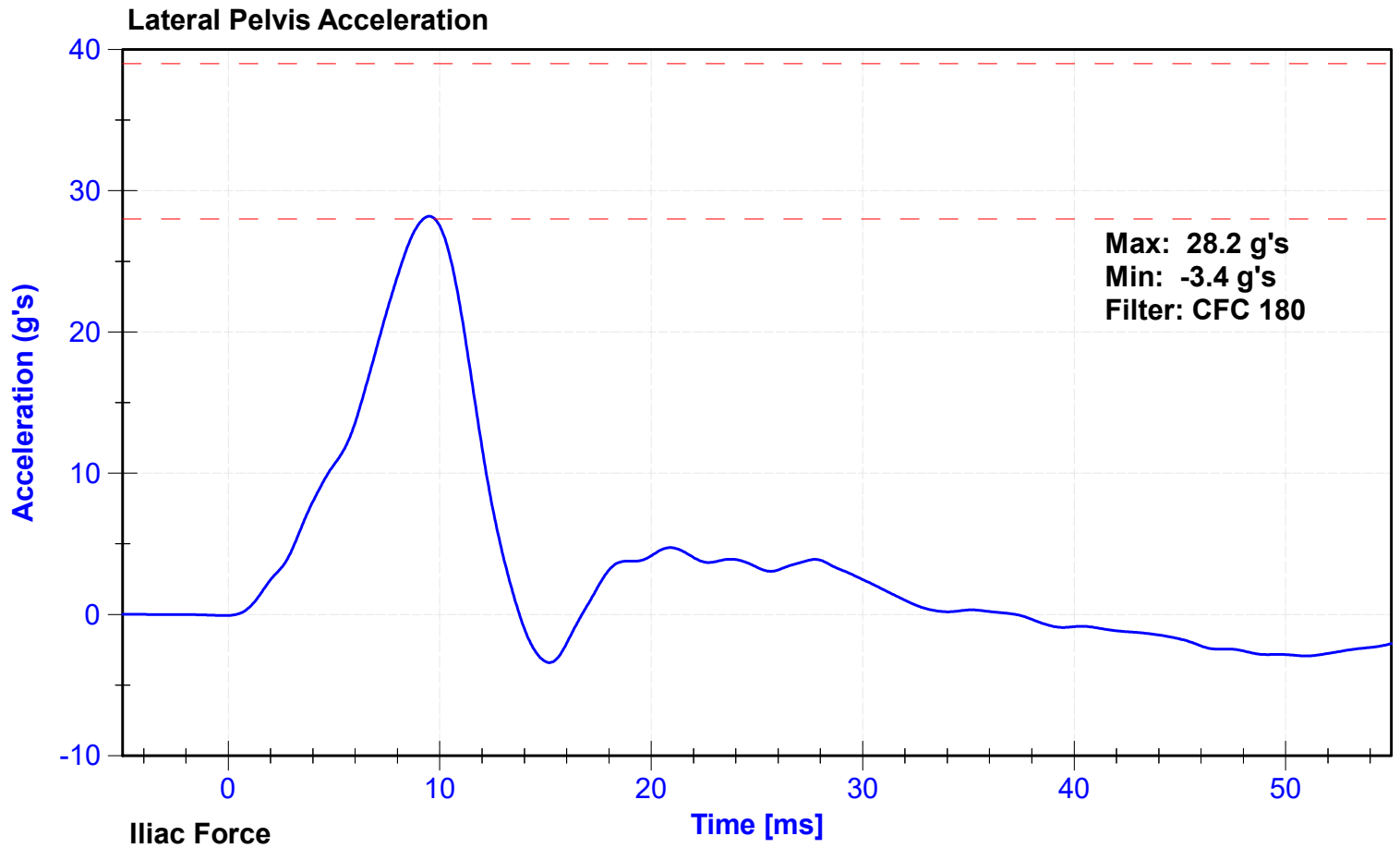
Results

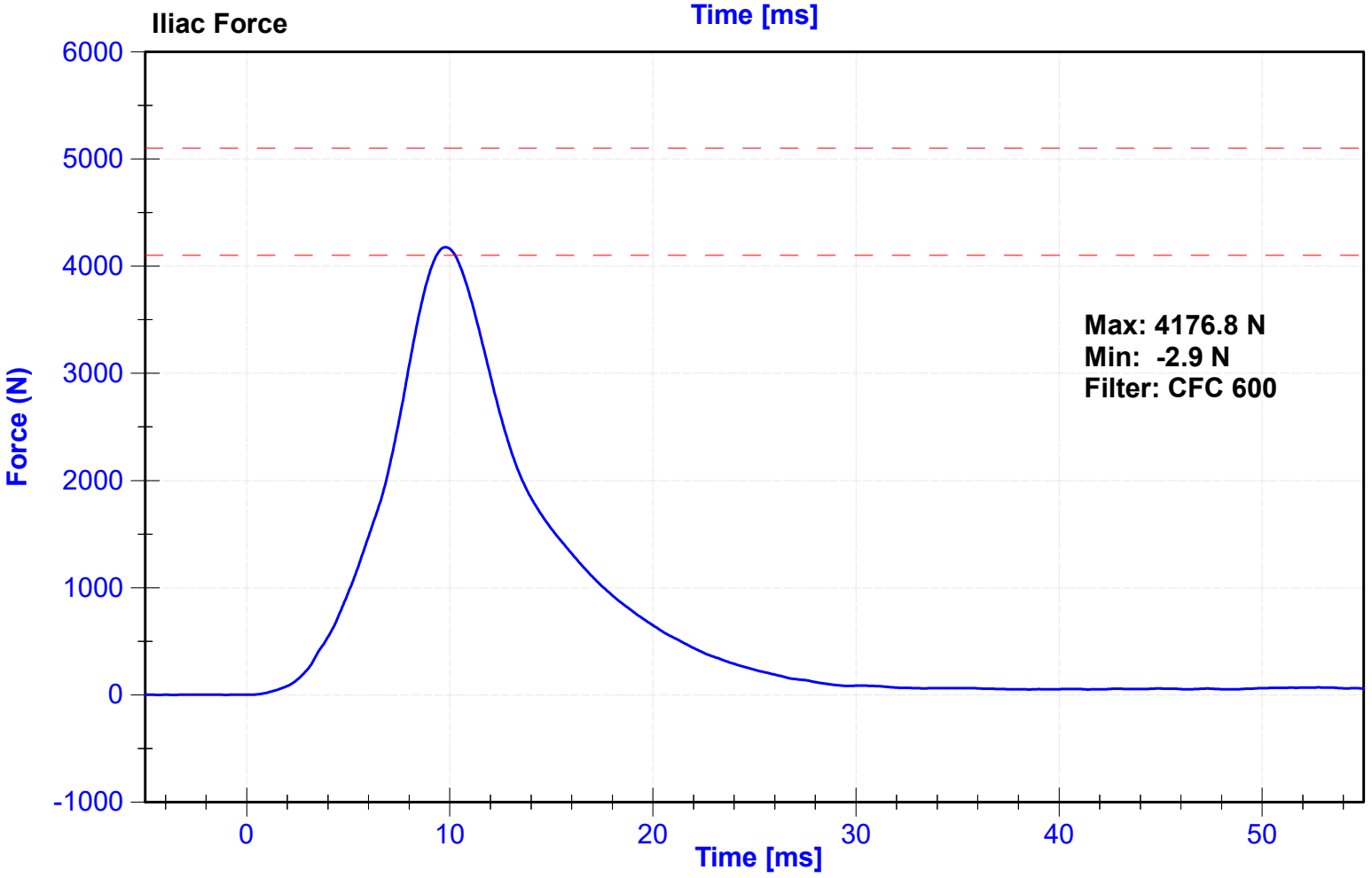
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	46	Pass
Velocity	4.2	4.4	m/s	4.20	Pass
Probe Acceleration	36	45	g's	38.6	Pass
Lateral Pelvis Acceleration	28	39	g's	28.2	Pass
Iliac Force	4100	5100	N	4176.8	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Pelvis Y Accelerometer	Endevco	P51731	7/11/2025	1/7/2026
Iliac Load Cell	Denton	279-FY	10/28/2024	10/28/2025




Lateral Pelvis Acceleration
Acceleration (g's)
40
30
20
10
0
-10
0
10
20
30
40
50
Time [ms]
Max: 28.2 g's
Min: -3.4 g's
Filter: CFC 180


Iliac Force
Force (N)
6000
5000
4000
3000
2000
1000
0
-1000
0
10
20
30
40
50
Time [ms]
Max: 4176.8 N
Min: -2.9 N
Filter: CFC 600

CALIBRATION TEST RESULTS

POST-TEST

SID-IIS 5TH PERCENTILE FEMALE - DRIVER ATD

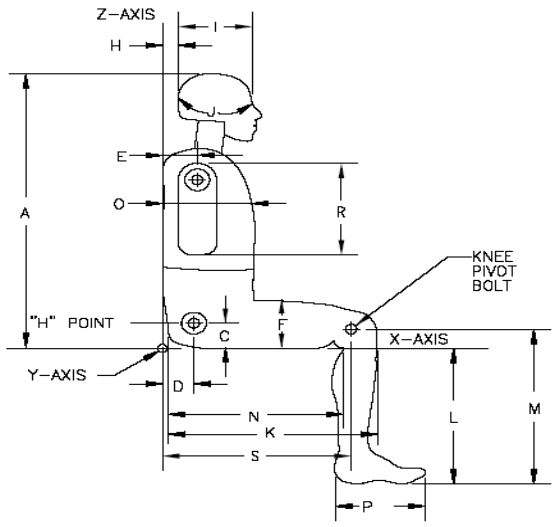
SERIAL NO:300

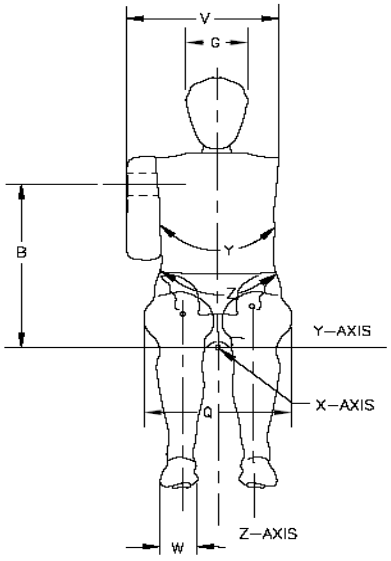
(CONFIGURED FOR LEFT SIDE IMPACT)

External Measurements - SID-IIs

Technician: J. Rios Date: 8/14/2025

Dummy Serial Number: 300





Symbol	Description	Specification (mm)		Result (mm)	Pass/Fail
A	Sitting Height	772	788	785	Pass
B	Shoulder Pivot Height	437	453	443	Pass
C	H-point Height	79	89	83	Pass
D	H-point from seatback	141	151	146	Pass
E	Shoulder Pivot from Backline	97	107	105	Pass
F	Thigh Clearance	119	135	128	Pass
G	Head Breadth	140	148	144	Pass
H	Head Back from Backline	40	46	42	Pass
I	Head Depth	178	188	184	Pass
J	Head Circumference	541	551	547	Pass
K	Buttock to Knee Length	514	540	522	Pass
L	Popliteal Height	343	369	361	Pass
M	Knee Pivot to floor height	392	409	404	Pass
N	Buttock Popliteal Length	416	442	434	Pass
O	Chest Depth w/o jacket	195	211	207	Pass
P	Foot Length	216	232	225	Pass
Q	Hip Breadth (w/pelvic plugs)	313	323	322	Pass
R	Arm Length	249	259	252	Pass
S	Knee Joint to seatback	477	493	483	Pass
V	Shoulder Width	341	357	351	Pass
W	Foot Width	78	94	81	Pass
Y	Chest Circumference w/jacket	851	881	869	Pass
Z	Waist Circumference	761	791	775	Pass

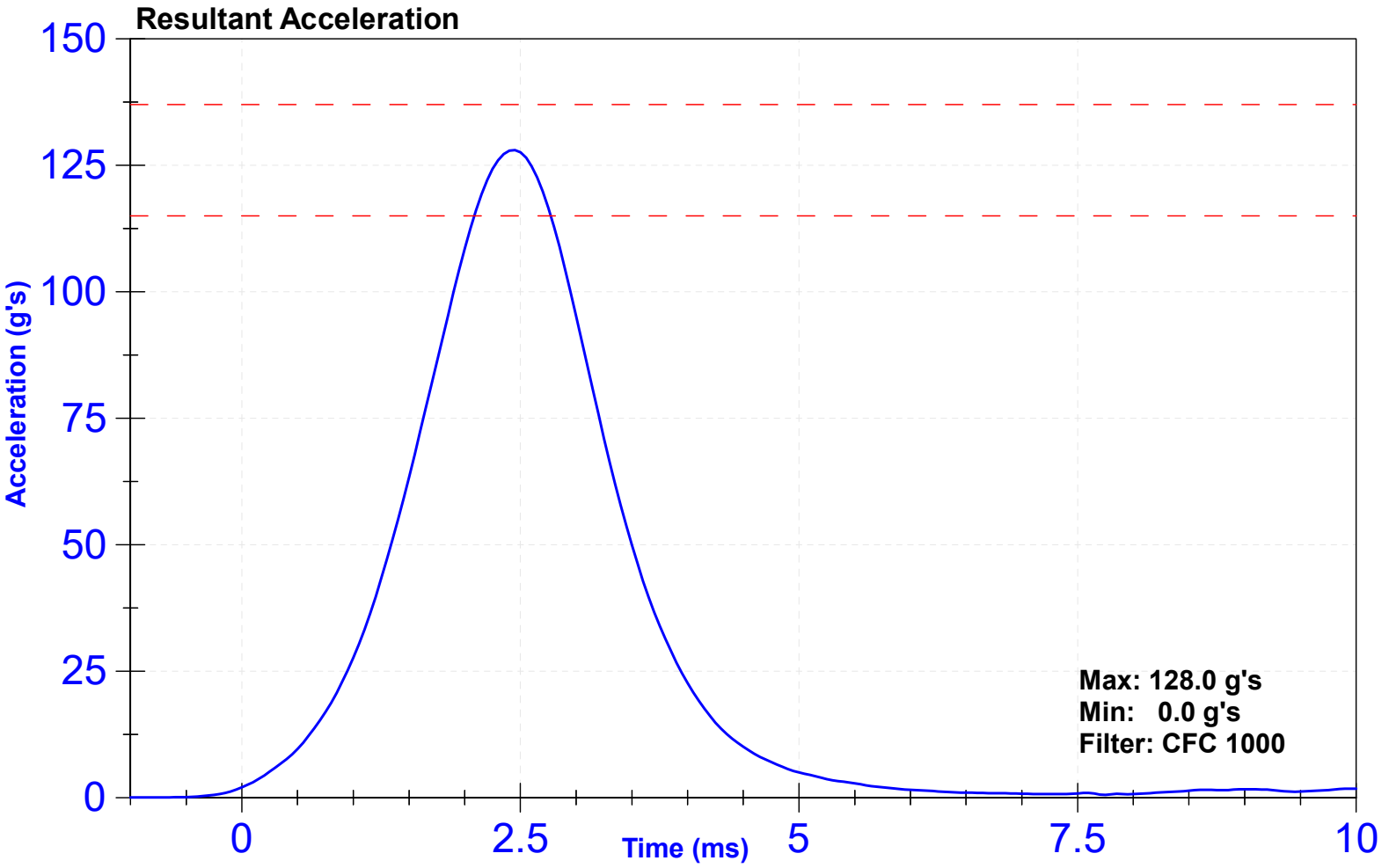
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

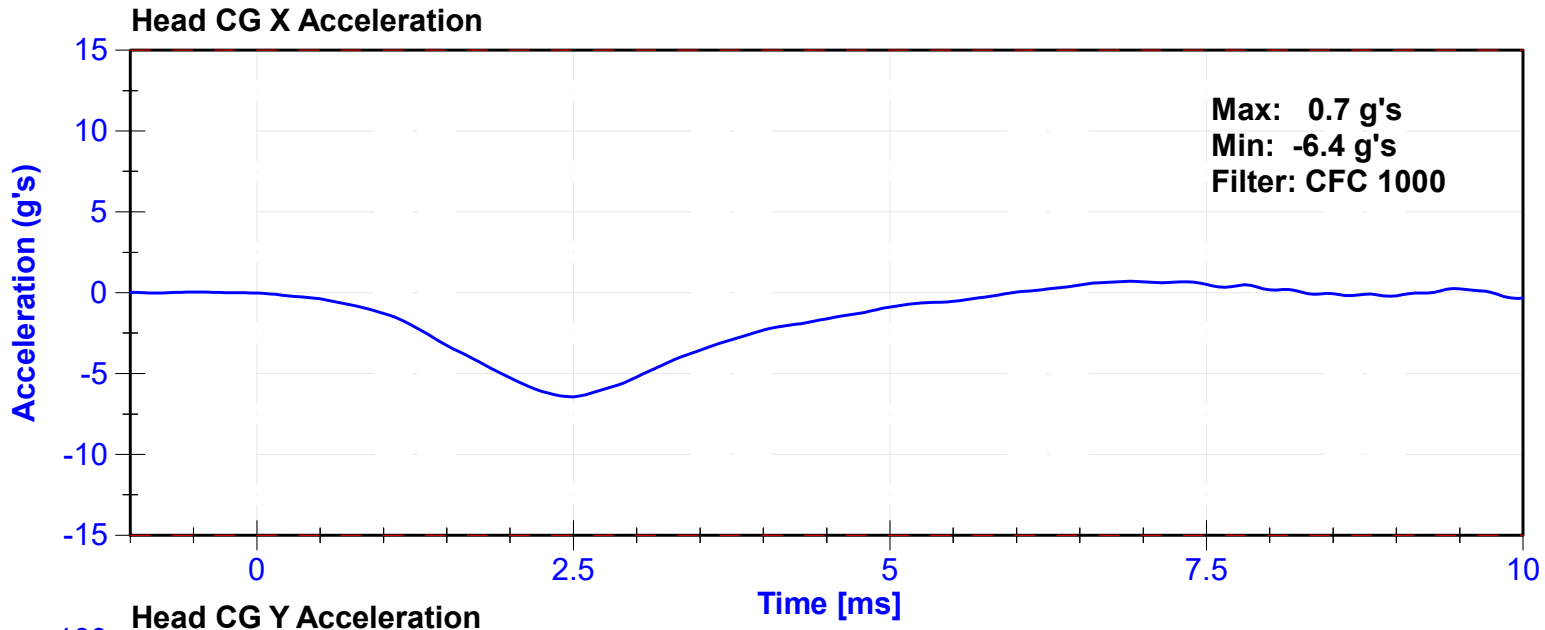
Results

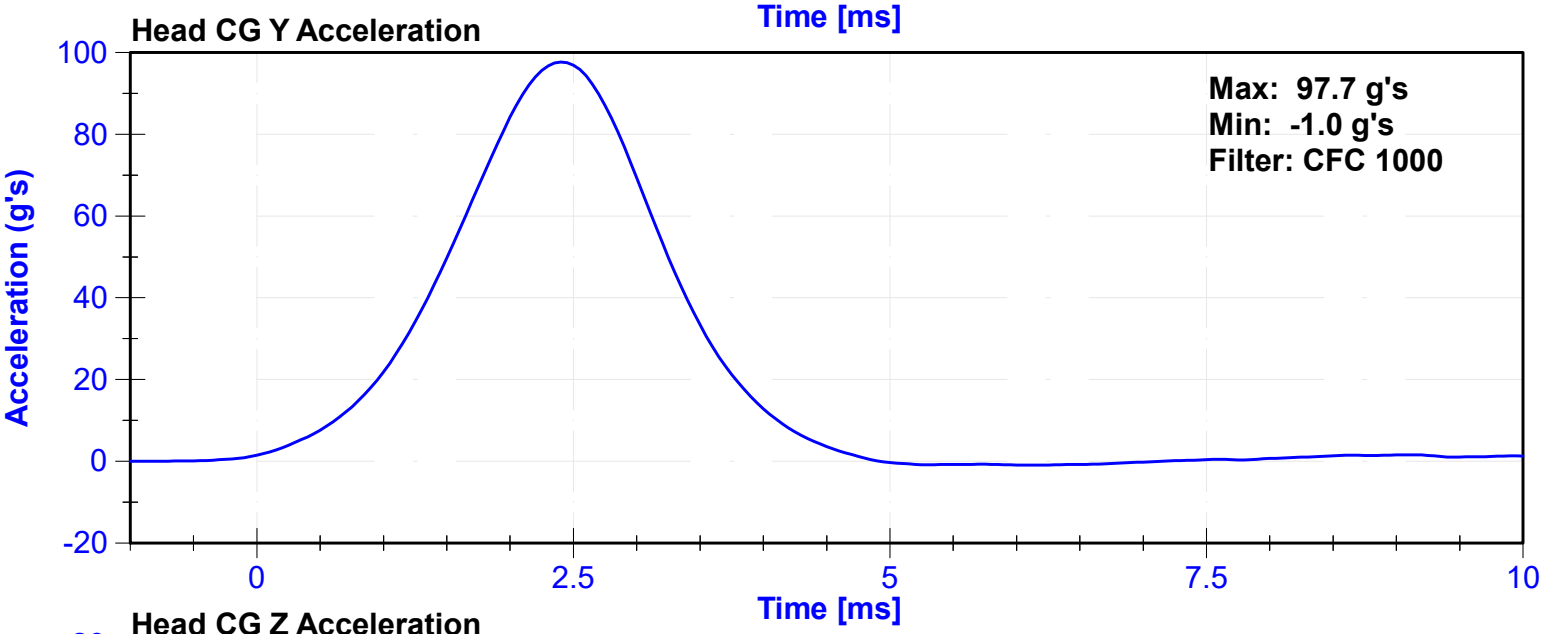
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.8	Pass
Humidity	10	70	%	56	Pass
Resultant Acceleration	115	137	g's	128.0	Pass
Oscillation	0	15	%	2.1	Pass
Fore-Aft Acceleration	-15	15	g's	-6.4	Pass

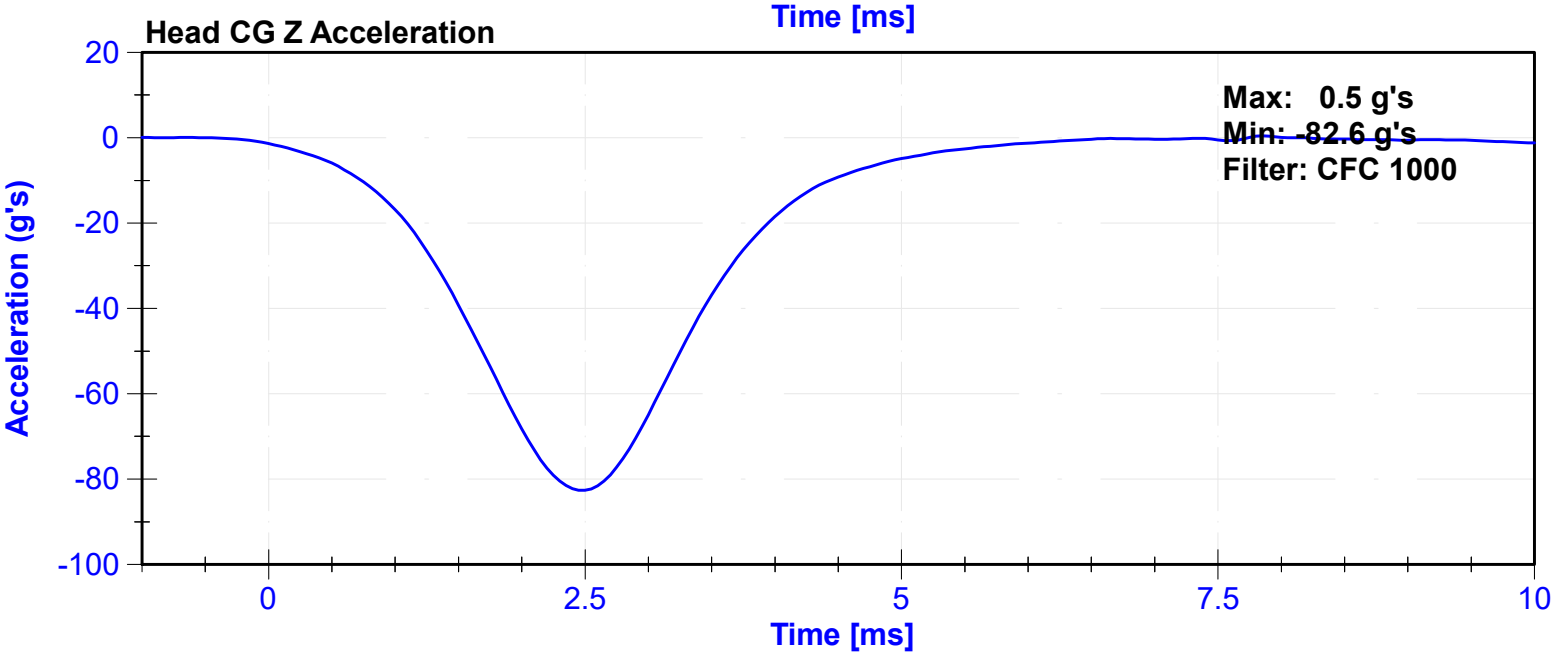
Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibratio Date	Calibratio Due Date
X Accelerometer	Endevco	P59018	7/11/2025	1/7/2026
Y Accelerometer	Endevco	P79189	7/11/2025	1/7/2026
Z Accelerometer	Endevco	P51682	8/13/2025	2/9/2026




Head CG X Acceleration
Max: 0.7 g's
Min: -6.4 g's
Filter: CFC 1000
Acceleration (g's)
15
10
5
0
-5
-10
-15
0
2.5
5
7.5
10
Time [ms]


Head CG Y Acceleration
Max: 97.7 g's
Min: -1.0 g's
Filter: CFC 1000
Acceleration (g's)
100
80
60
40
20
0
-20
0
2.5
5
7.5
10
Time [ms]


Head CG Z Acceleration
Max: 0.5 g's
Min: -82.6 g's
Filter: CFC 1000
Acceleration (g's)
20
0
-20
-40
-60
-80
-100
0
2.5
5
7.5
10
Time [ms]

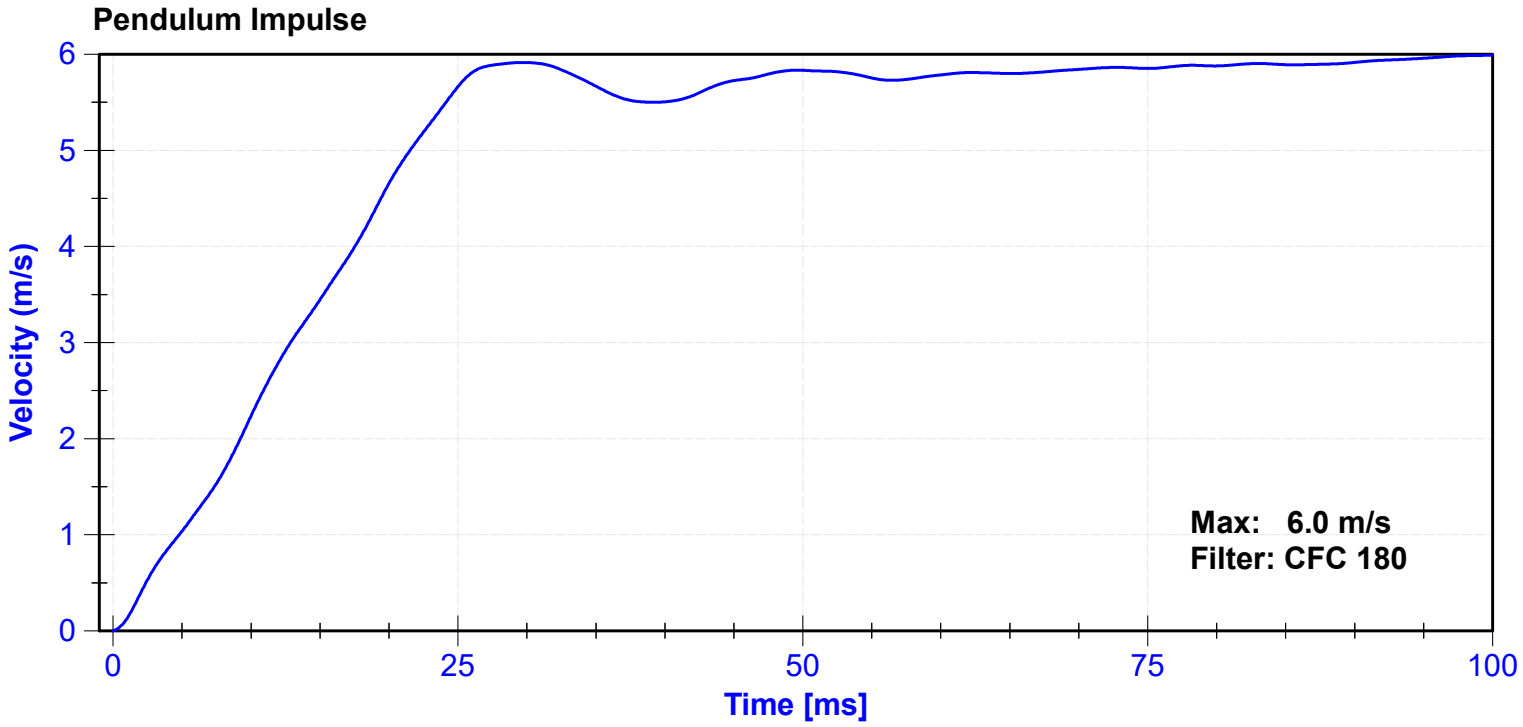
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

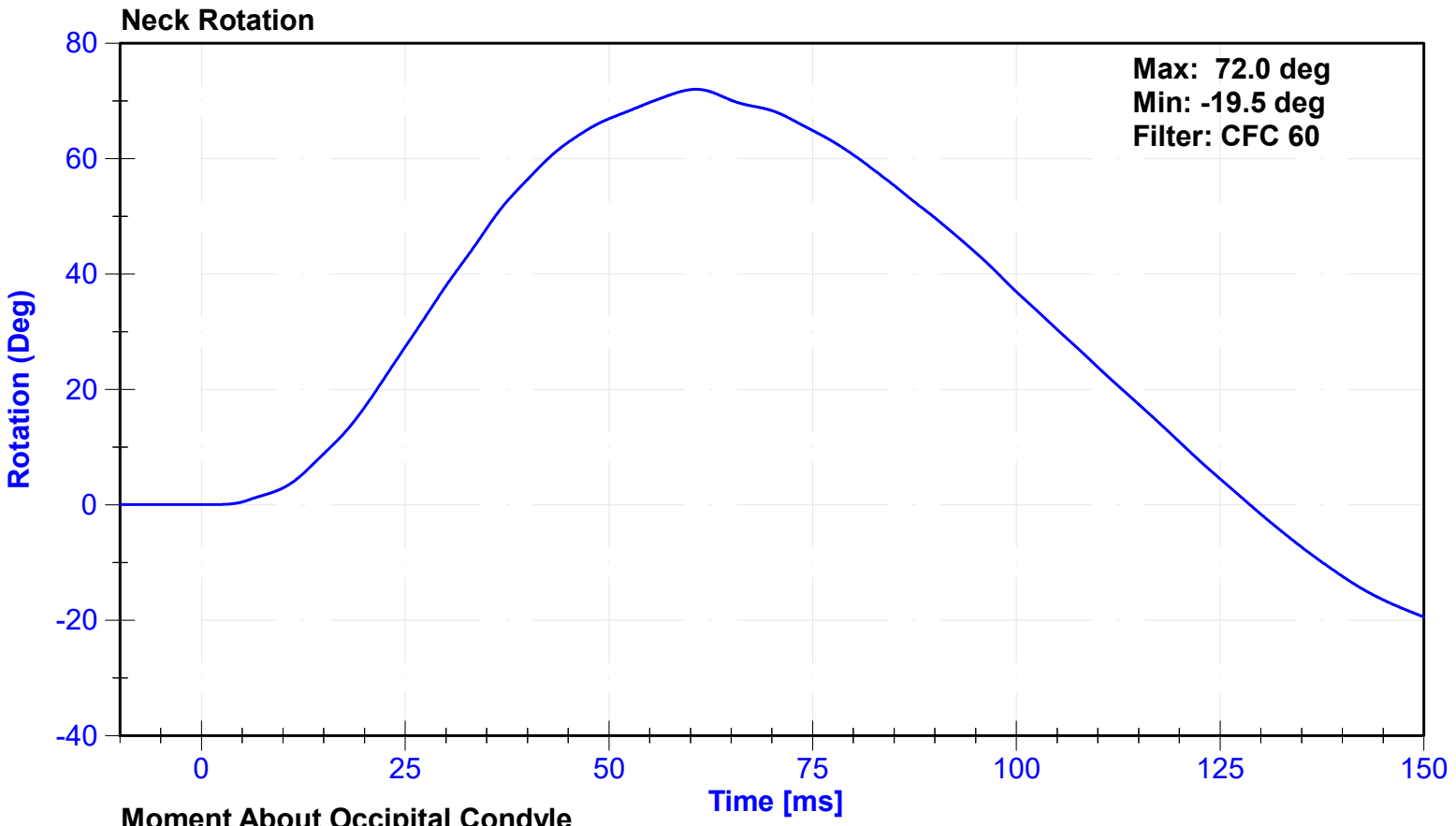
Results

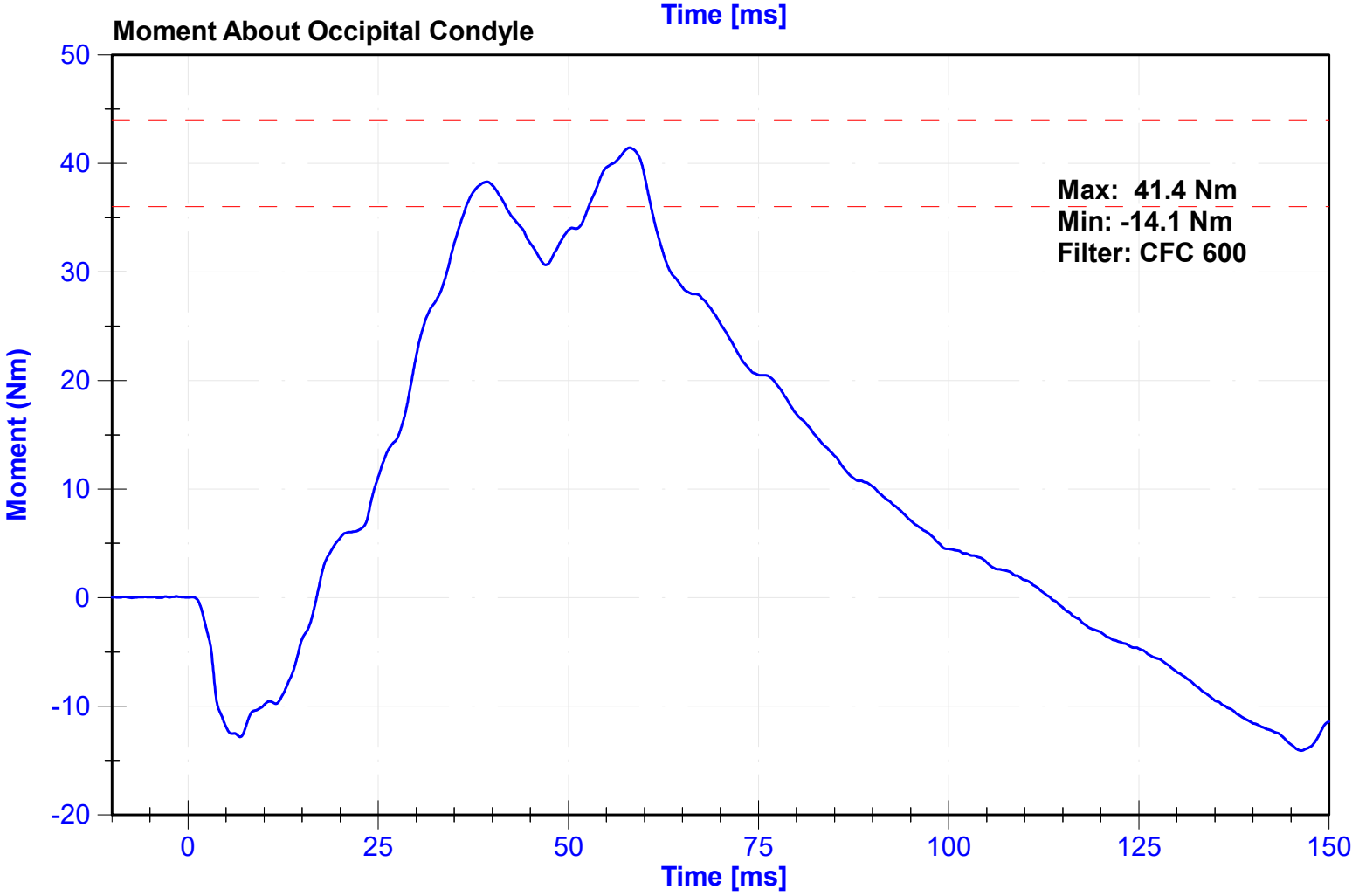
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	22.1	Pass
Humidity	10	70	%	59	Pass
Velocity	5.51	5.63	m/s	5.552	Pass
Pendulum Impulse at 10ms	2.2	2.8	m/s	2.24	Pass
Pendulum Impulse at 15ms	3.3	4.1	m/s	3.45	Pass
Pendulum Impulse at 20ms	4.4	5.4	m/s	4.66	Pass
Pendulum Impulse at 25ms	5.4	6.1	m/s	5.66	Pass
Pendulum Impulse from 25 to 100ms	5.5	6.2	m/s	5.99	Pass
Neck Rotation	71	81	deg	72.0	Pass
Time at Maximum Rotation	50	70	ms	60.7	Pass
Moment about the OC	36	44	Nm	41.4	Pass
Moment Decay to 0 Nm	102	126	ms	113.4	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	7231C-750	10/17/2024	10/17/2025
Pendulum Potentiometer	Servo	4961	9/23/2024	9/23/2025
Condyle Potentiometer	Servo	DS185	9/23/2024	9/23/2025
Upper Neck Load Cell	Humanetics	1716A_851-FY	7/7/2025	7/7/2026




Neck Rotation
Max: 72.0 deg
Min: -19.5 deg
Filter: CFC 60
Rotation (Deg)
80
60
40
20
0
-20
-40
0
25
50
75
100
125
150
Time [ms]


Moment About Occipital Condyle
Max: 41.4 Nm
Min: -14.1 Nm
Filter: CFC 600
Moment (Nm)
50
40
30
20
10
0
-10
-20
0
25
50
75
100
125
150
Time [ms]

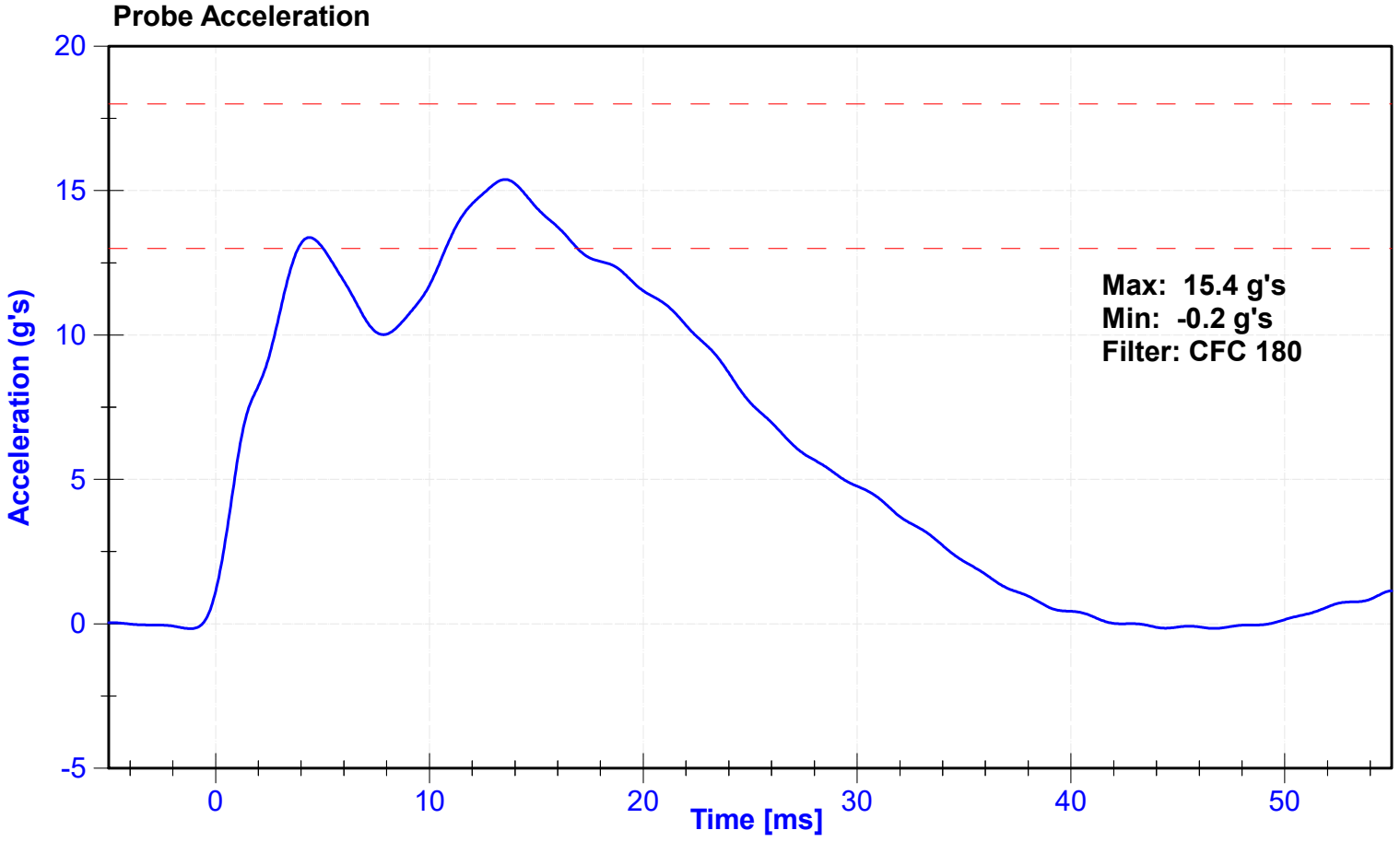
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

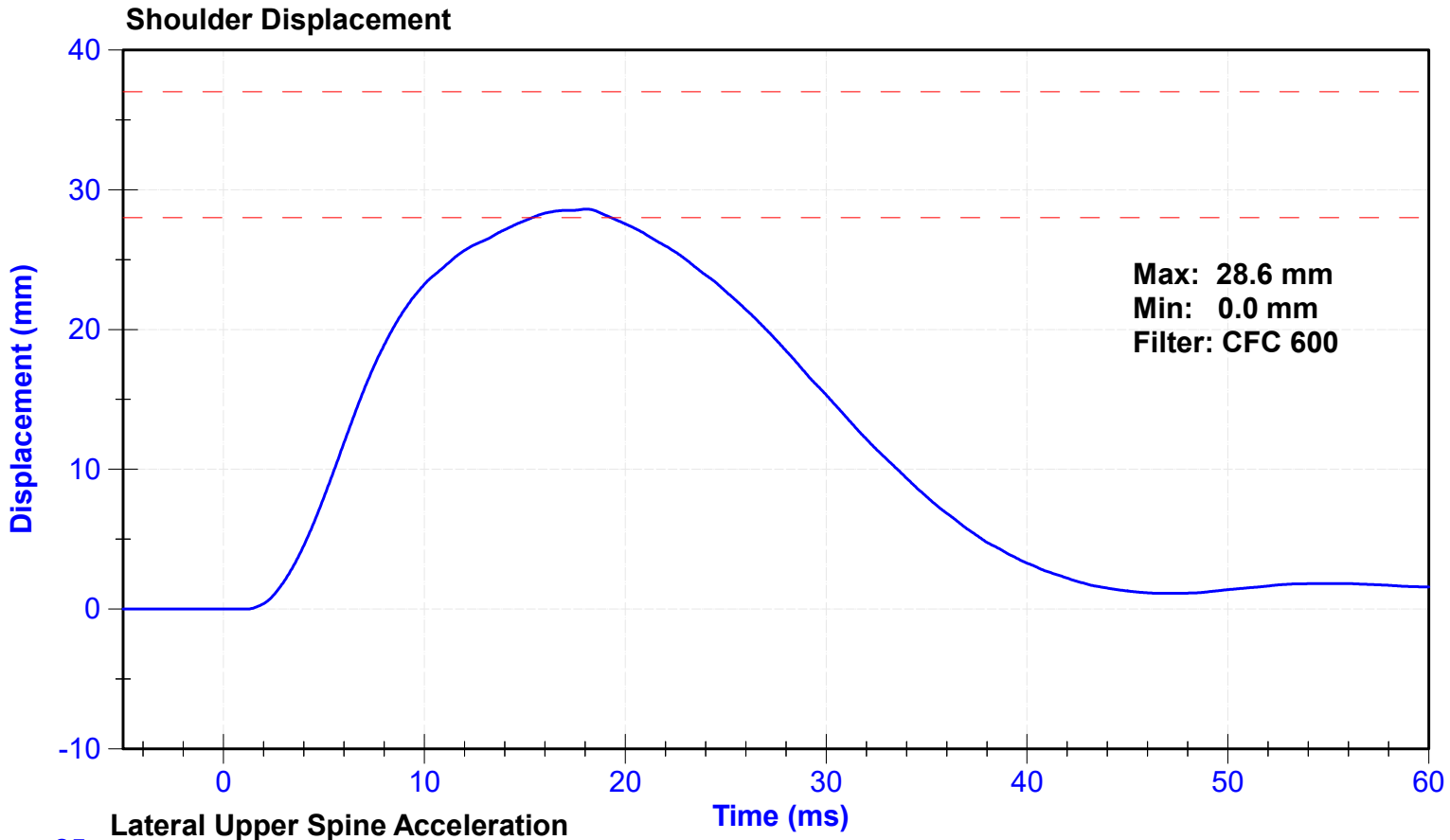
Results

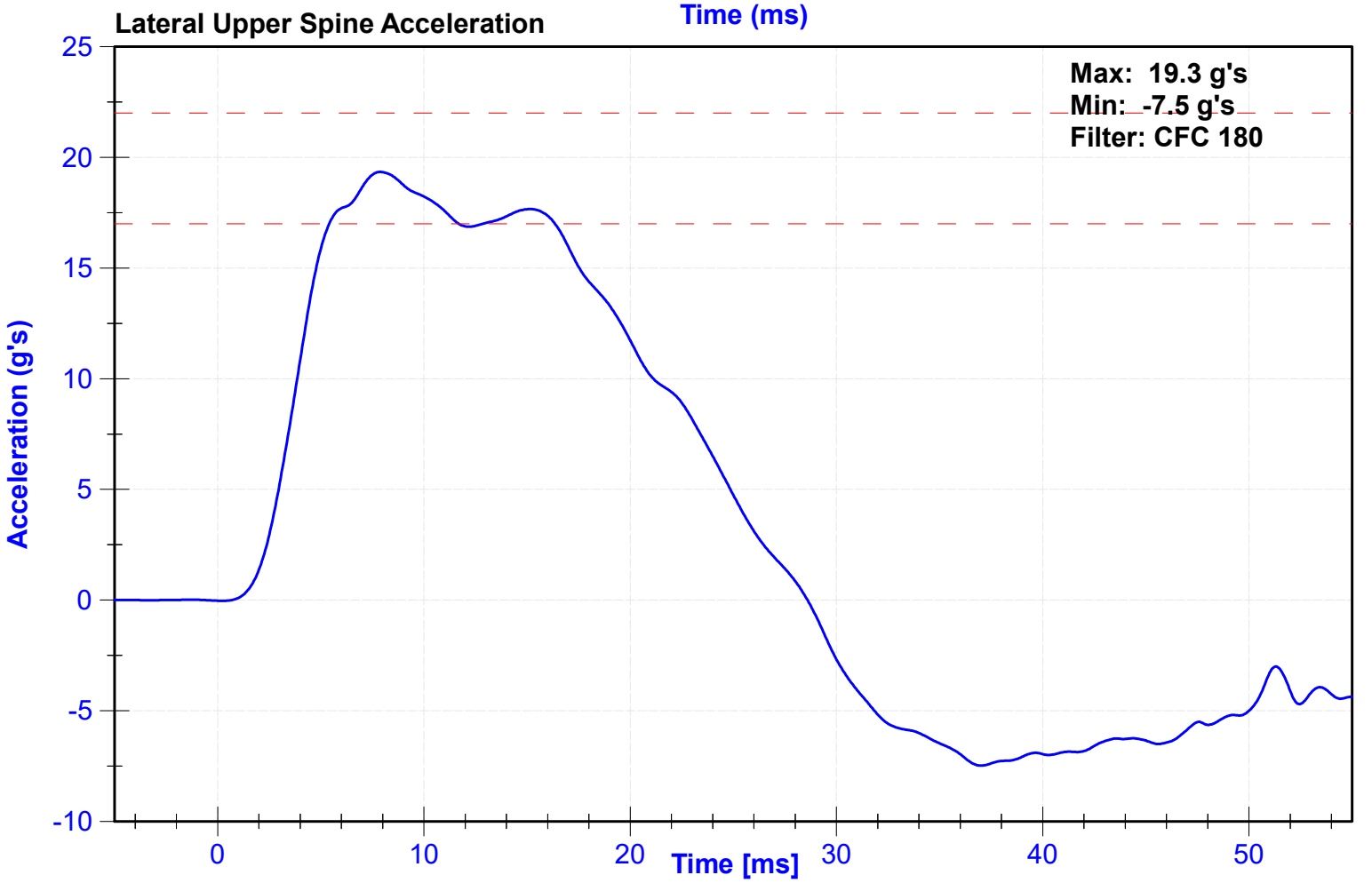
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.9	Pass
Humidity	10	70	%	56	Pass
Velocity	4.2	4.4	m/s	4.27	Pass
Probe Acceleration	13	18	g's	15.4	Pass
Shoulder Deflection	28	37	mm	28.6	Pass
Lateral Upper Spine Acceleration	17	22	g's	19.3	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Shoulder Potentiometer	Servo	053GFE	7/10/2025	1/8/2026
Upper Spine Y Accelerometer	Endevco	P52018	7/11/2025	1/7/2026




Shoulder Displacement
Displacement (mm)
Time (ms)
Max: 28.6 mm
Min: 0.0 mm
Filter: CFC 600


Lateral Upper Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 19.3 g's
Min: -7.5 g's
Filter: CFC 180

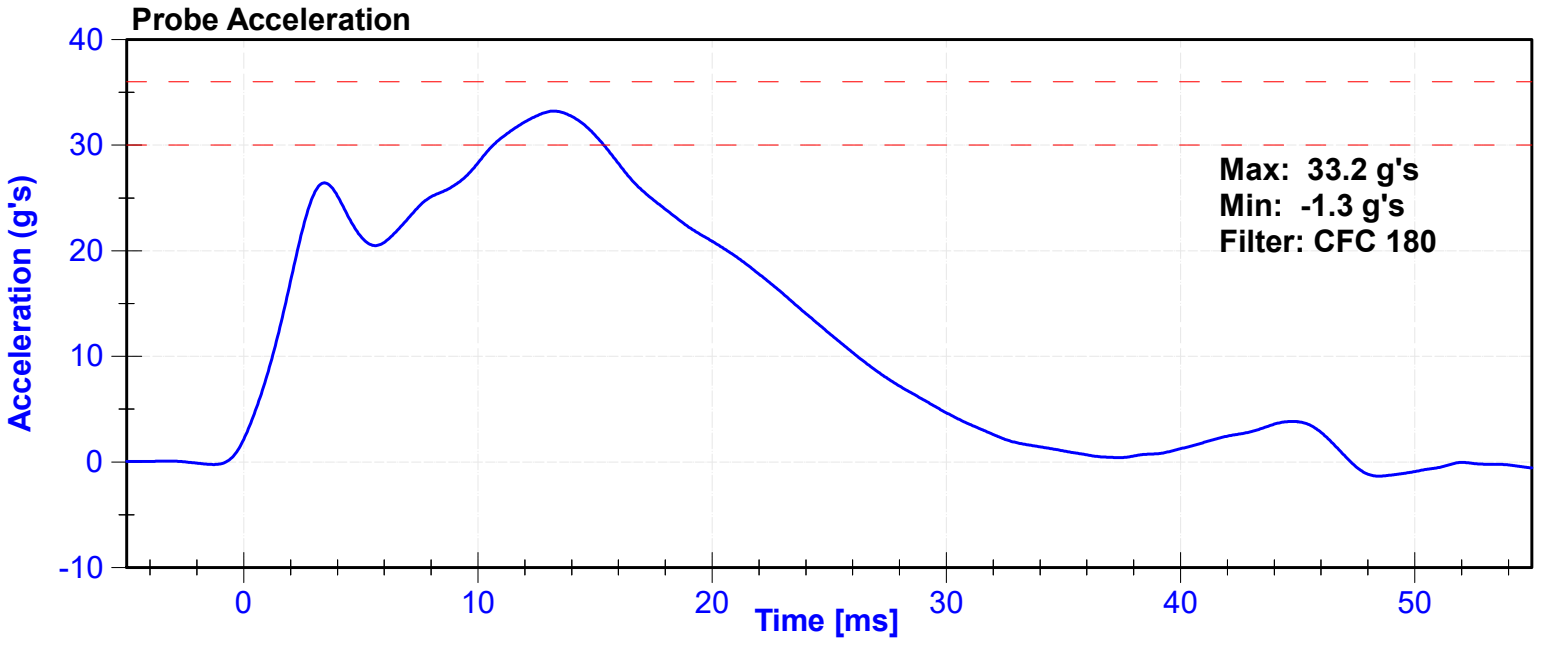
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

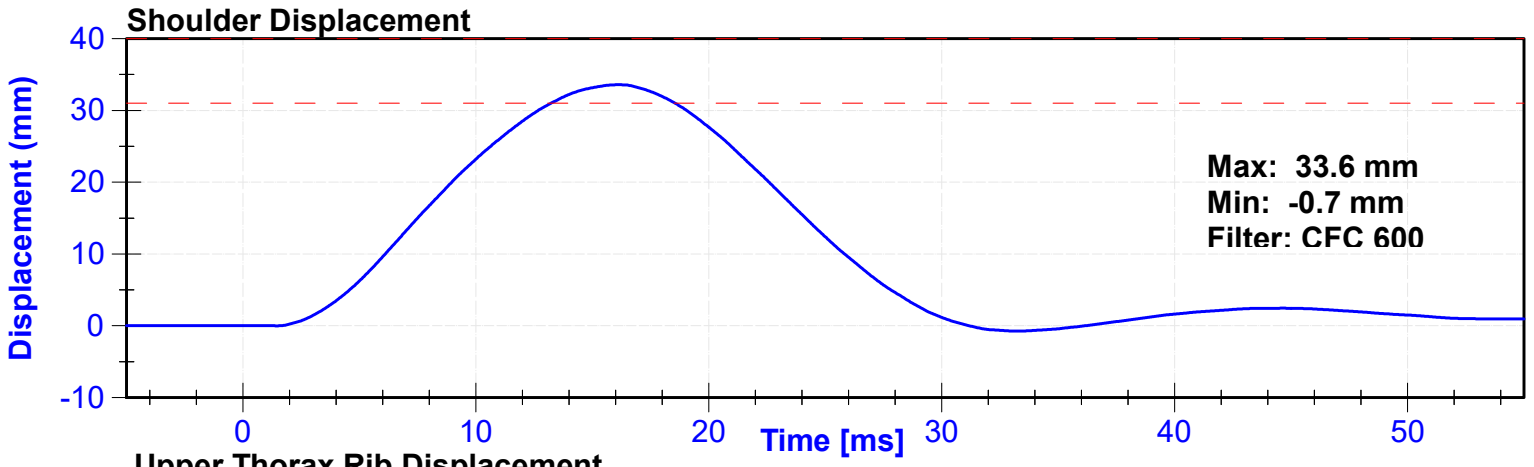
Results

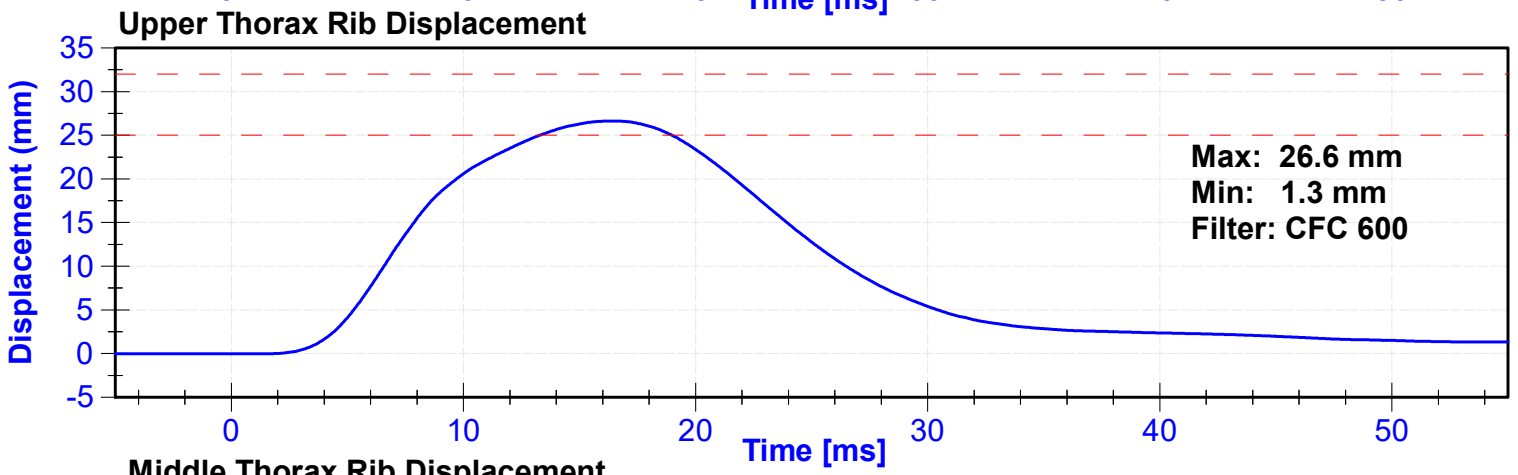
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.9	Pass
Humidity	10	70	%	56	Pass
Velocity	6.6	6.8	m/s	6.68	Pass
Probe Acceleration after 5 ms	30	36	g's	33.2	Pass
Lateral Upper Spine Acceleration	34	43	g's	37.1	Pass
Lateral Lower Spine Acceleration	29	37	g's	37.0	Pass
Shoulder Deflection	31	40	mm	33.6	Pass
Upper Thorax Rib Deflection	25	32	mm	26.6	Pass
Mid Thorax Rib Deflection	30	36	mm	30.5	Pass
Lower Thorax Rib Deflection	32	38	mm	33.2	Pass

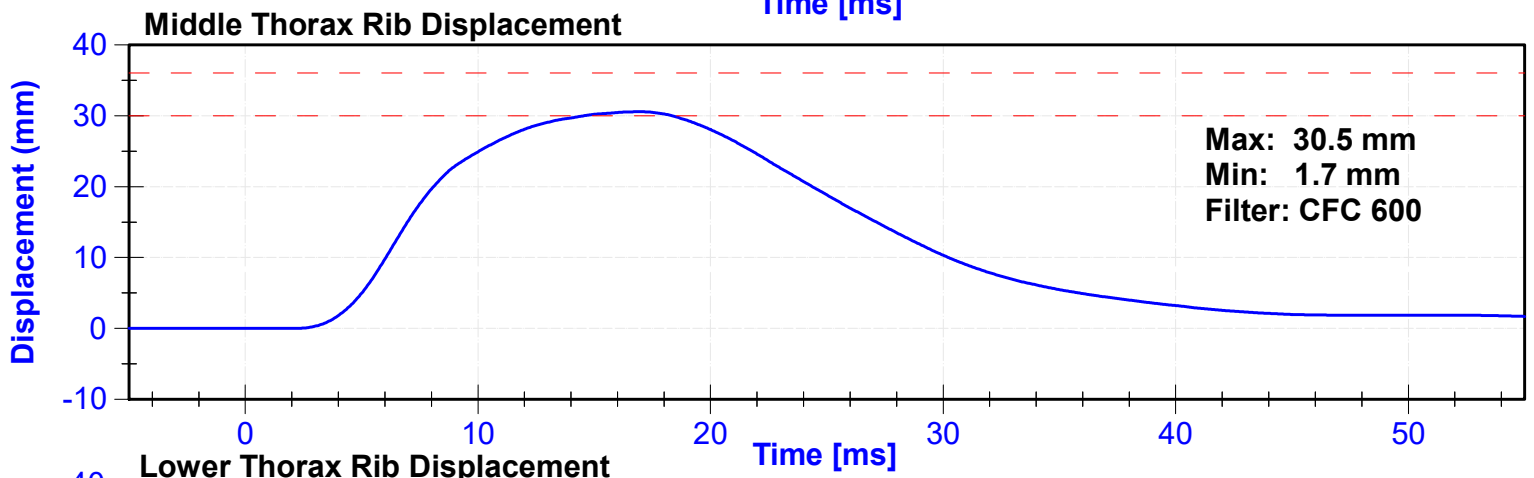
Transducer Calibrations

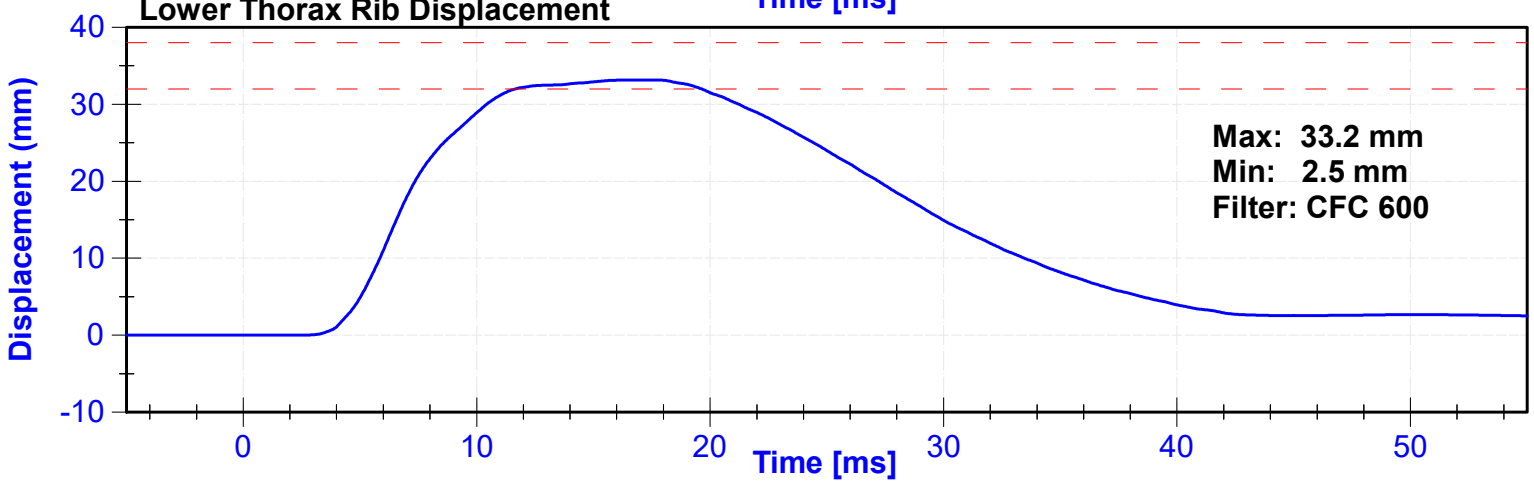
Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Upper Spine T1 Y Accelerometer	Endevco	P52018	7/11/2025	1/7/2026
Upper Spine T12 Y Accelerometer	Endevco	P17283	7/11/2025	1/7/2026
Shoulder Potentiometer	Servo	053GFE	7/10/2025	1/8/2026
Upper Thorax Rib Potentiometer	Servo	2316GFE	7/10/2025	1/8/2026
Middle Thorax Rib Potentiometer	Servo	085GFE	7/10/2025	1/8/2026
Lower Thorax Rib Potentiometer	Servo	1156GFE	7/10/2025	1/8/2026

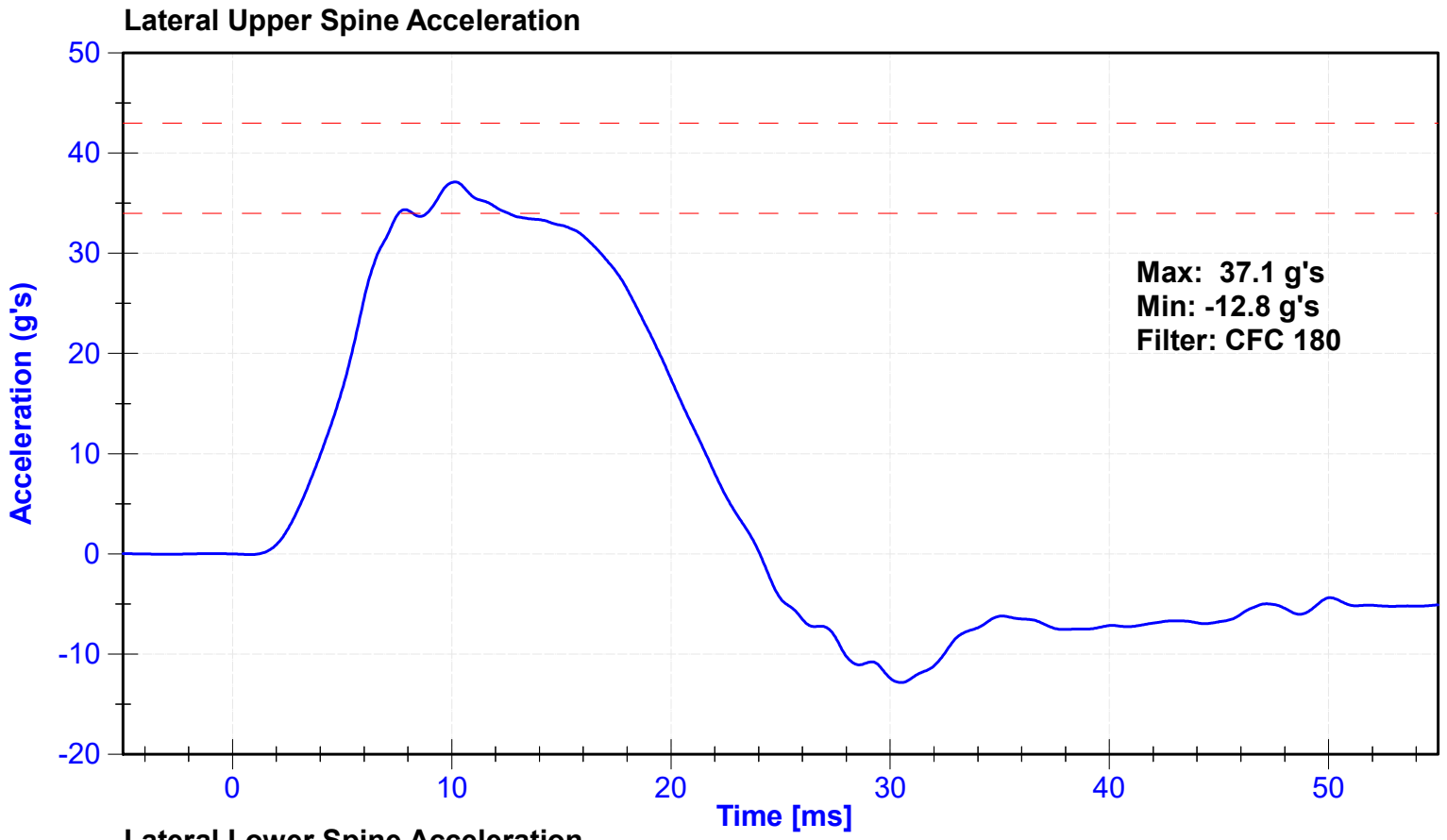


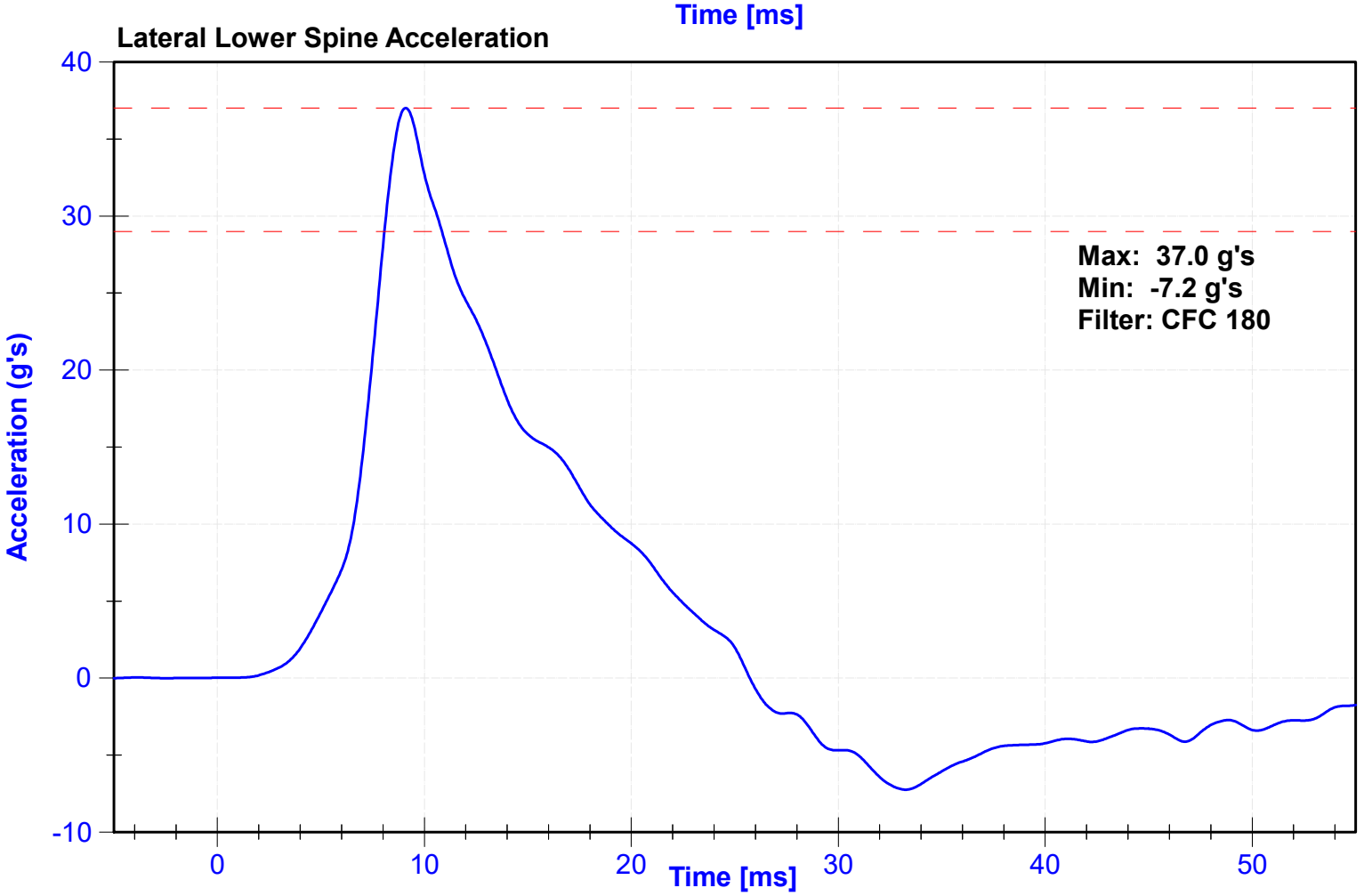

Shoulder Displacement
Displacement (mm)
Time [ms]
Max: 33.6 mm
Min: -0.7 mm
Filter: CFC 600


Upper Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 26.6 mm
Min: 1.3 mm
Filter: CFC 600


Middle Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 30.5 mm
Min: 1.7 mm
Filter: CFC 600


Lower Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 33.2 mm
Min: 2.5 mm
Filter: CFC 600


Lateral Upper Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 37.1 g's
Min: -12.8 g's
Filter: CFC 180


Lateral Lower Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 37.0 g's
Min: -7.2 g's
Filter: CFC 180

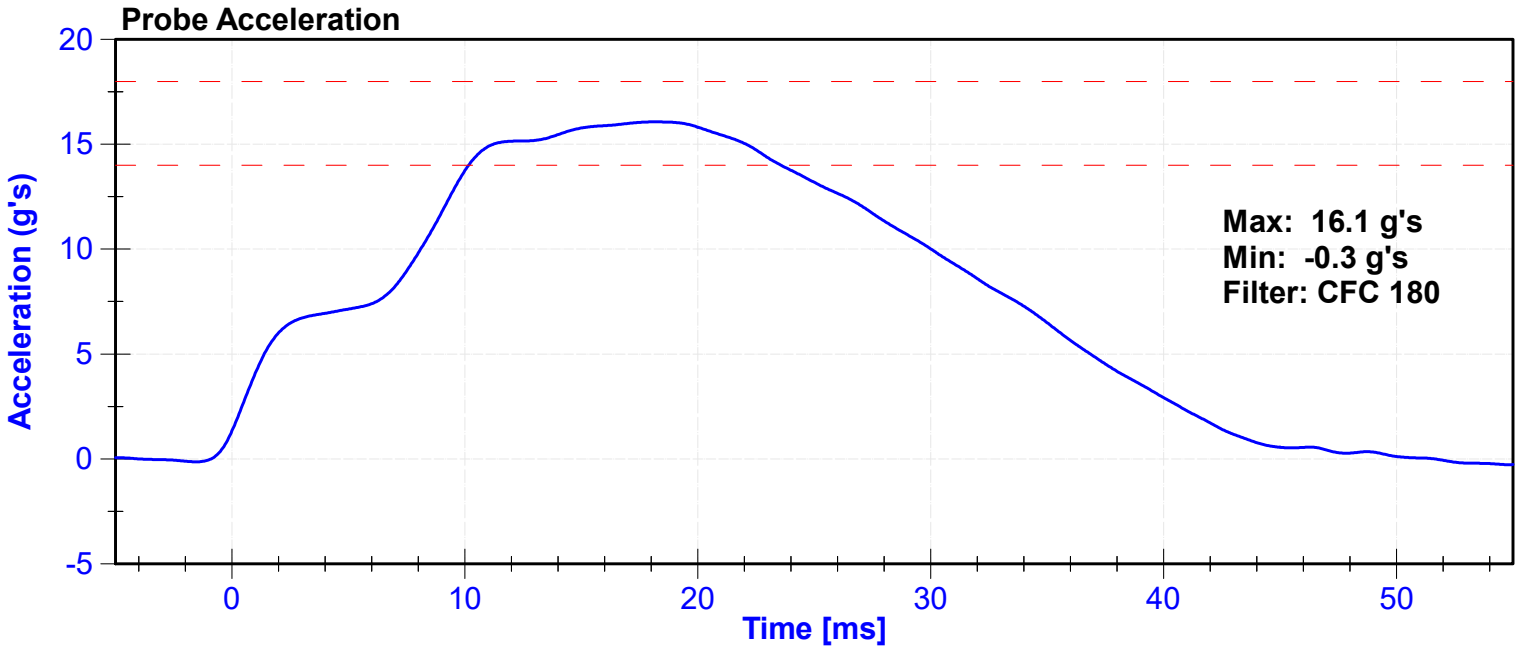
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

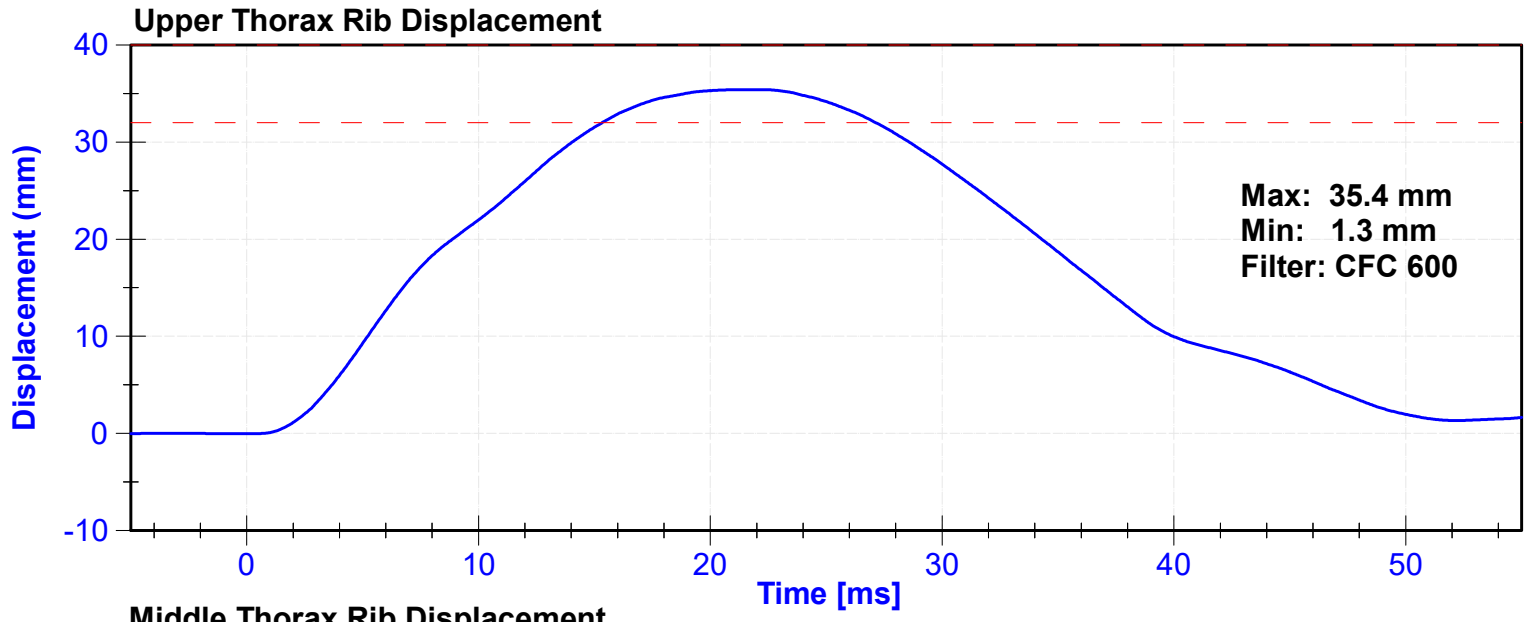
Results

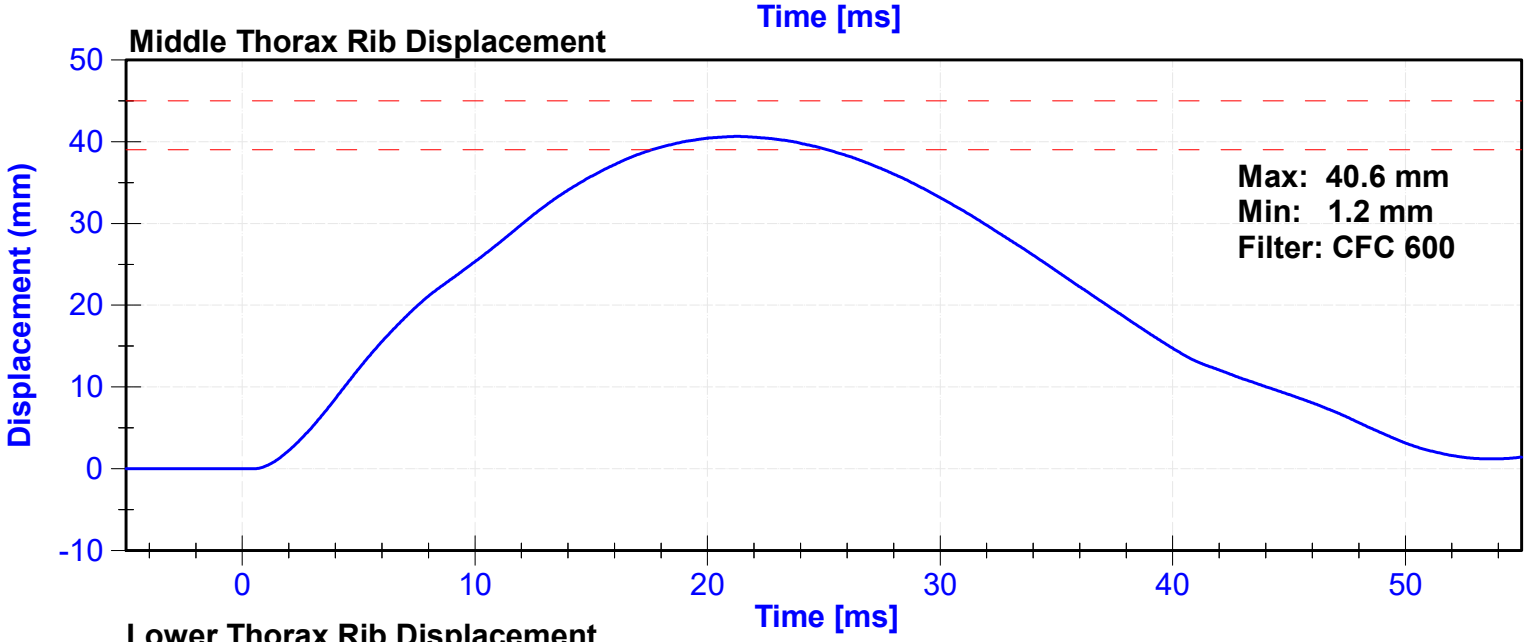
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.9	Pass
Humidity	10	70	%	56	Pass
Velocity	4.2	4.4	m/s	4.27	Pass
Probe Acceleration	14	18	g's	16.1	Pass
Lateral Upper Spine Acceleration	13	17	g's	13.6	Pass
Lateral Lower Spine Acceleration	7	11	g's	10.4	Pass
Upper Thorax Rib Deflection	32	40	mm	35.4	Pass
Middle Thorax Rib Deflection	39	45	mm	40.6	Pass
Lower Thorax Rib Deflection	35	43	mm	38.0	Pass

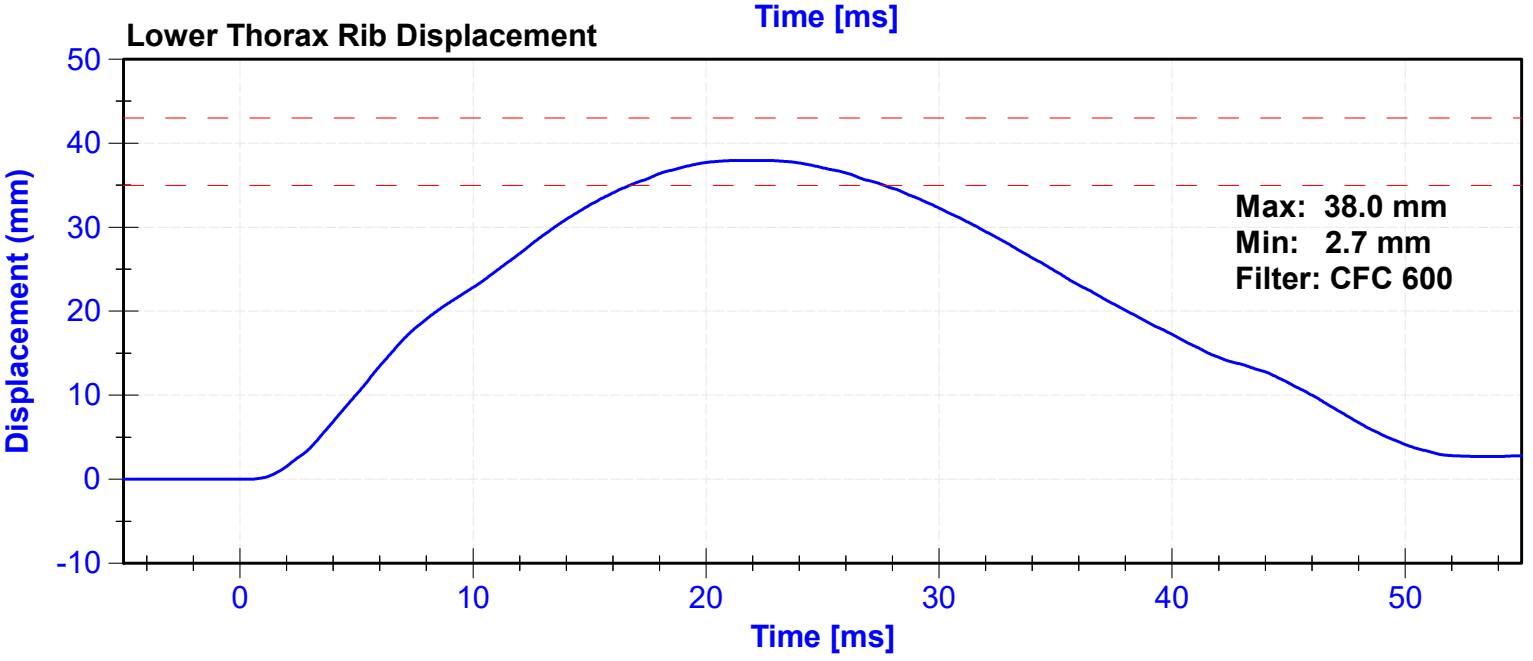
Transducer Calibrations

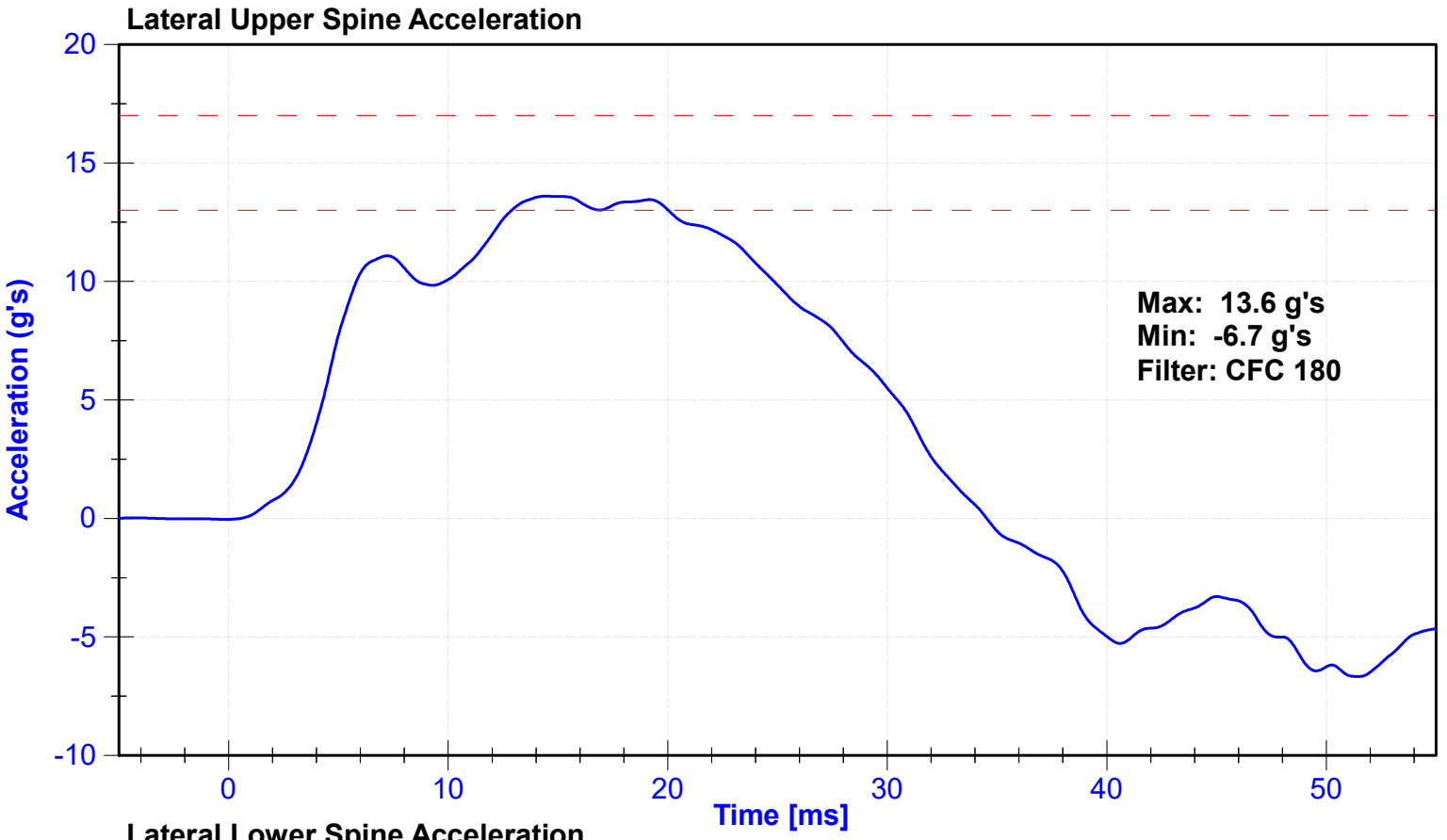
Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Upper Spine Y Accelerometer	Endevco	P52018	7/11/2025	1/7/2026
Lower Spine Y Accelerometer	Endevco	P17283	7/11/2025	1/7/2026
Upper Thorax Rib Potentiometer	Servo	2316GFE	7/10/2025	1/8/2026
Middle Thorax Rib Potentiometer	Servo	085GFE	7/10/2025	1/8/2026
Lower Thorax Rib Potentiometer	Servo	1156GFE	7/10/2025	1/8/2026

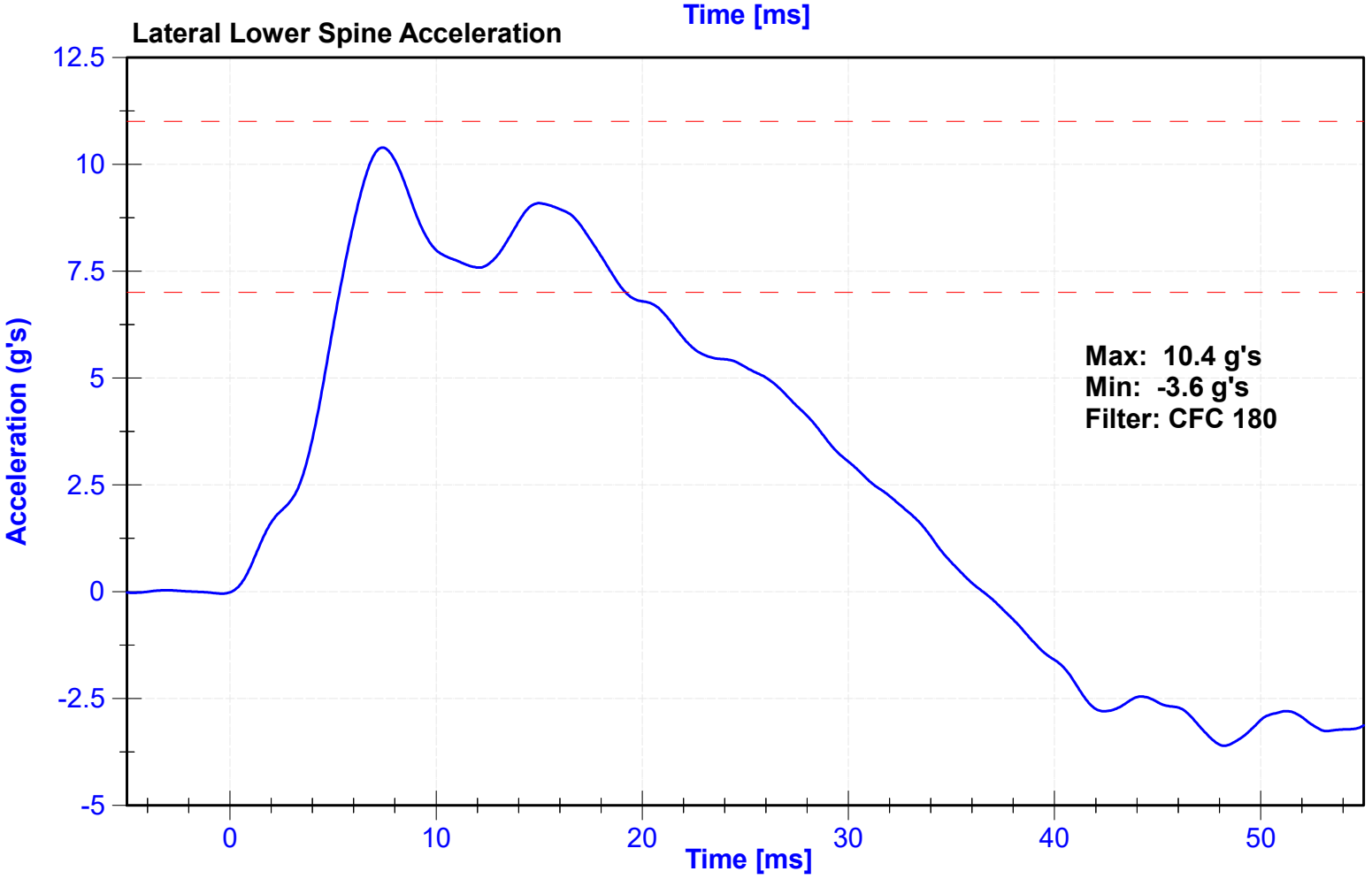



Upper Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 35.4 mm
Min: 1.3 mm
Filter: CFC 600


Middle Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 40.6 mm
Min: 1.2 mm
Filter: CFC 600


Lower Thorax Rib Displacement
Displacement (mm)
Time [ms]
Max: 38.0 mm
Min: 2.7 mm
Filter: CFC 600


Lateral Upper Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 13.6 g's
Min: -6.7 g's
Filter: CFC 180


Lateral Lower Spine Acceleration
Acceleration (g's)
Time [ms]
Max: 10.4 g's
Min: -3.6 g's
Filter: CFC 180

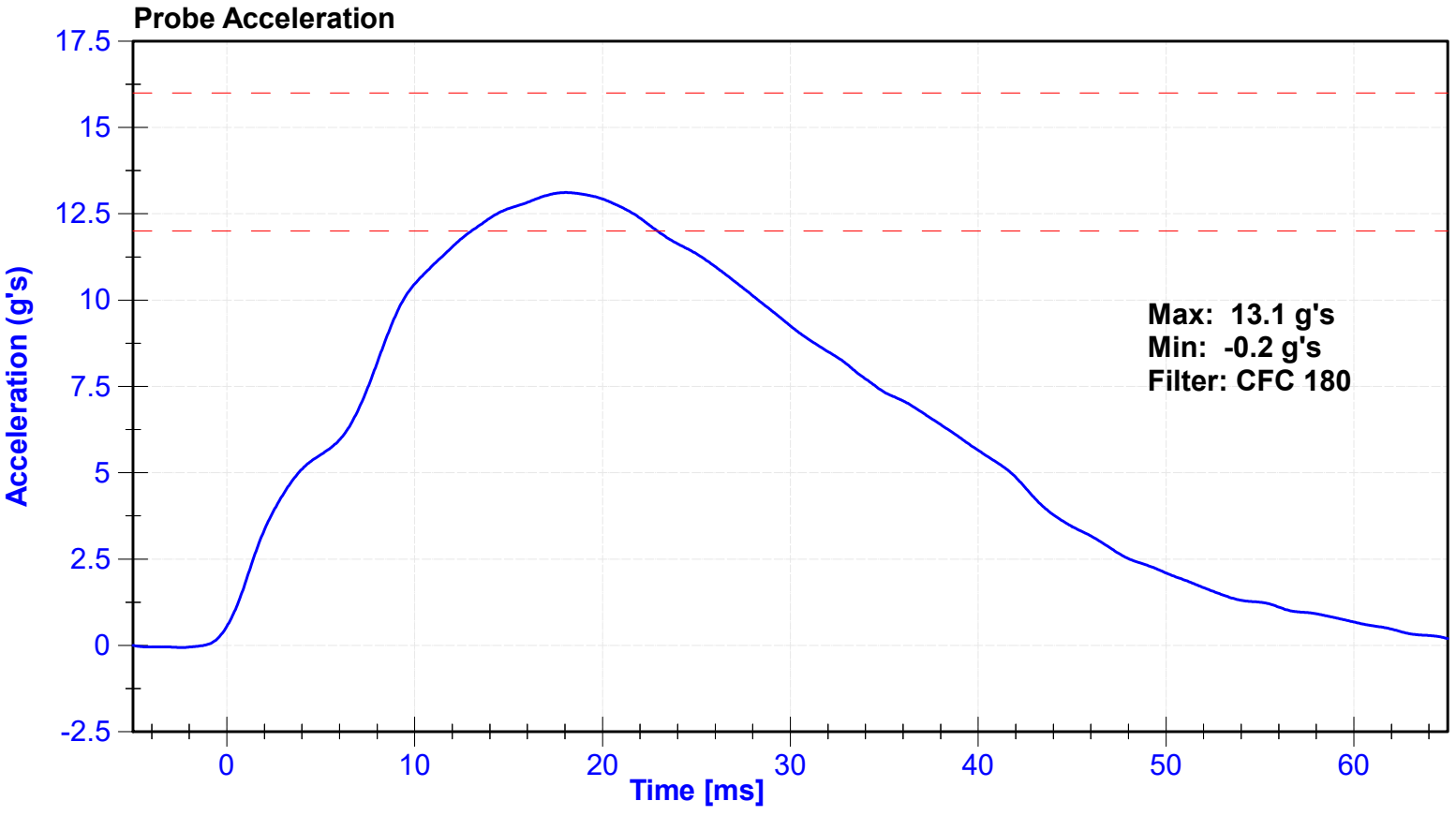
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

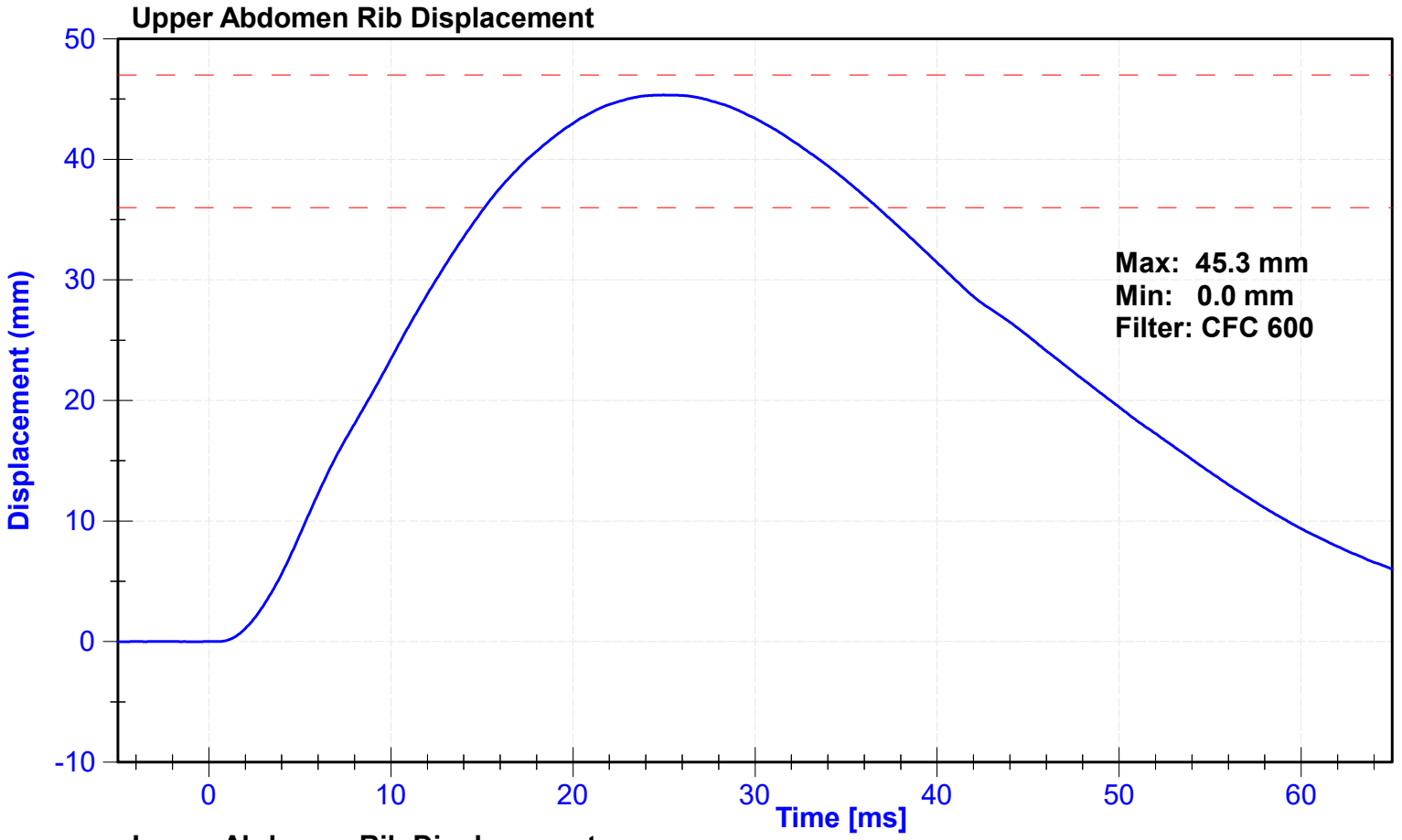
Results

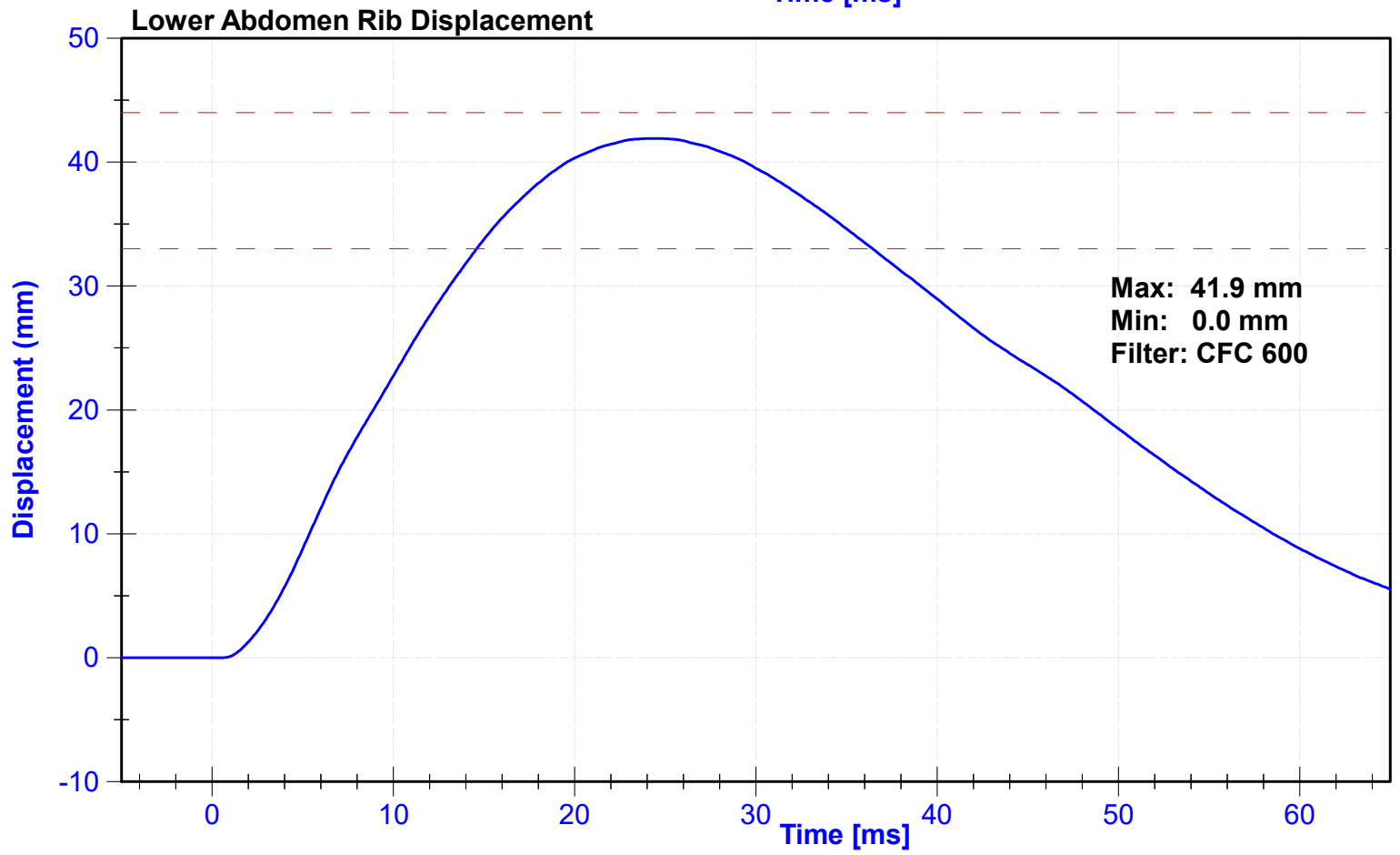
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.9	Pass
Humidity	10	70	%	56	Pass
Velocity	4.2	4.4	m/s	4.23	Pass
Probe Acceleration	12	16	g's	13.1	Pass
Lateral Lower Spine Acceleration	9	14	g's	12.4	Pass
Upper Abdomen Rib Deflection	36	47	mm	45.3	Pass
Lower Abdomen Rib Deflection	33	44	mm	41.9	Pass

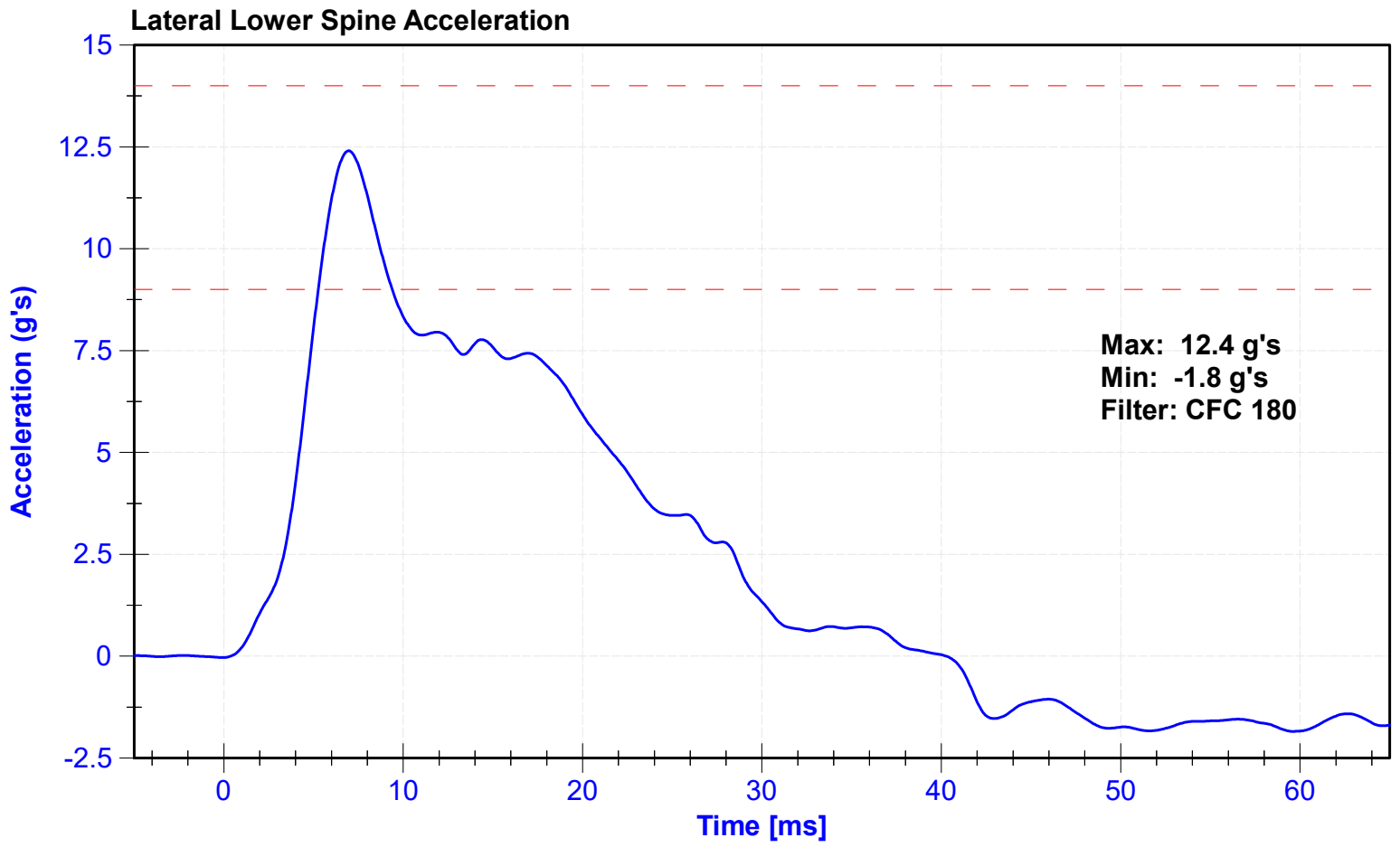
Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Probe Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Lower Spine Y Accelerometer	Endevco	P17283	7/11/2025	1/7/2026
Upper Abdomen Rib Potentiometer	Servo	074GFE	7/10/2025	1/8/2026
Lower Abdomen Rib Potentiometer	Servo	075GFE	7/10/2025	1/8/2026




Upper Abdomen Rib Displacement
Displacement (mm)
50
40
30
20
10
0
-10
0
10
20
30
40
50
60
Time [ms]
Max: 45.3 mm
Min: 0.0 mm
Filter: CFC 600


Lower Abdomen Rib Displacement
Displacement (mm)
50
40
30
20
10
0
-10
0
10
20
30
40
50
60
Time [ms]
Max: 41.9 mm
Min: 0.0 mm
Filter: CFC 600


Lateral Lower Spine Acceleration
Acceleration (g's)
15
12.5
10
7.5
5
2.5
0
-2.5
0
10
20
30
40
50
60
Time [ms]
Max: 12.4 g's
Min: -1.8 g's
Filter: CFC 180

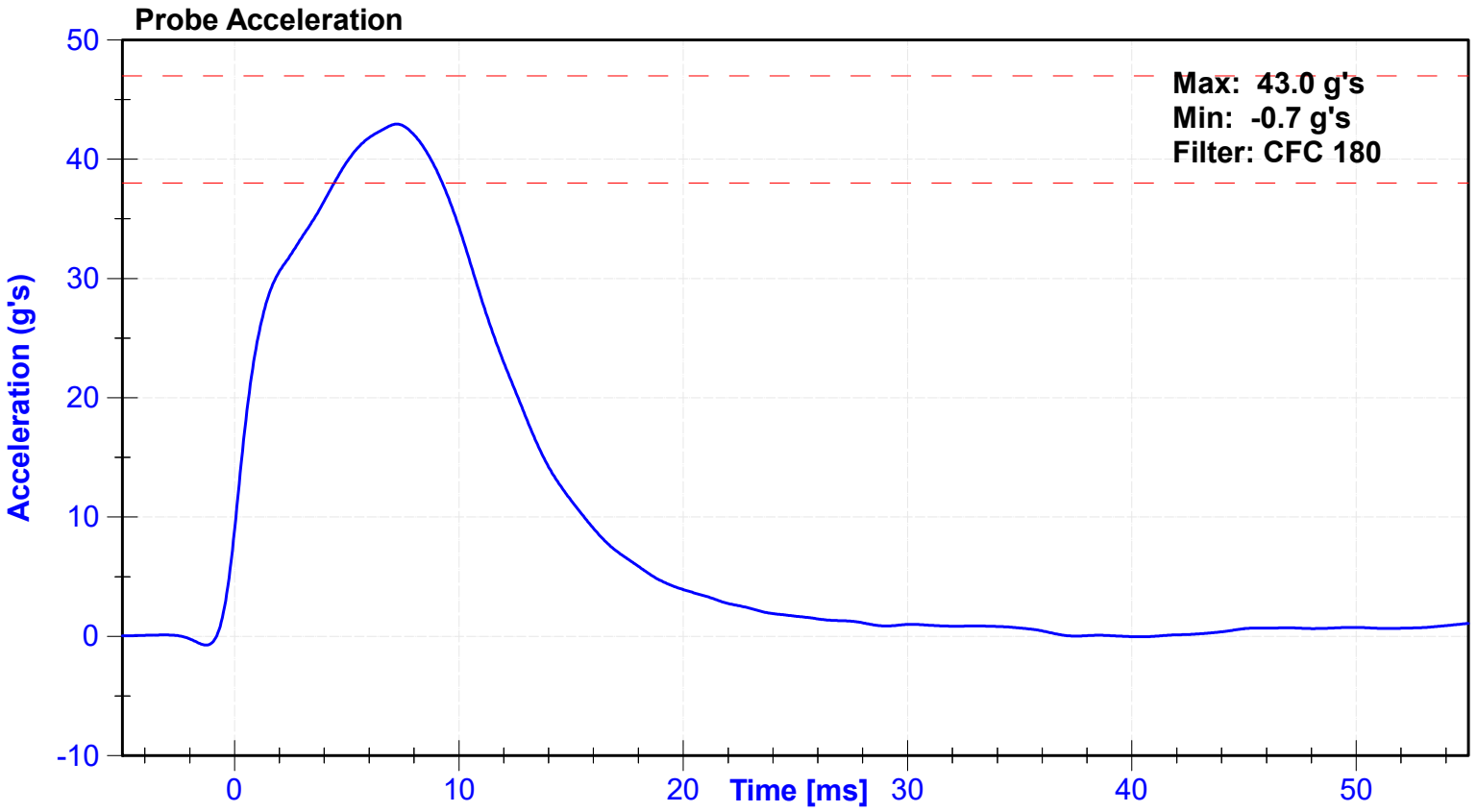
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

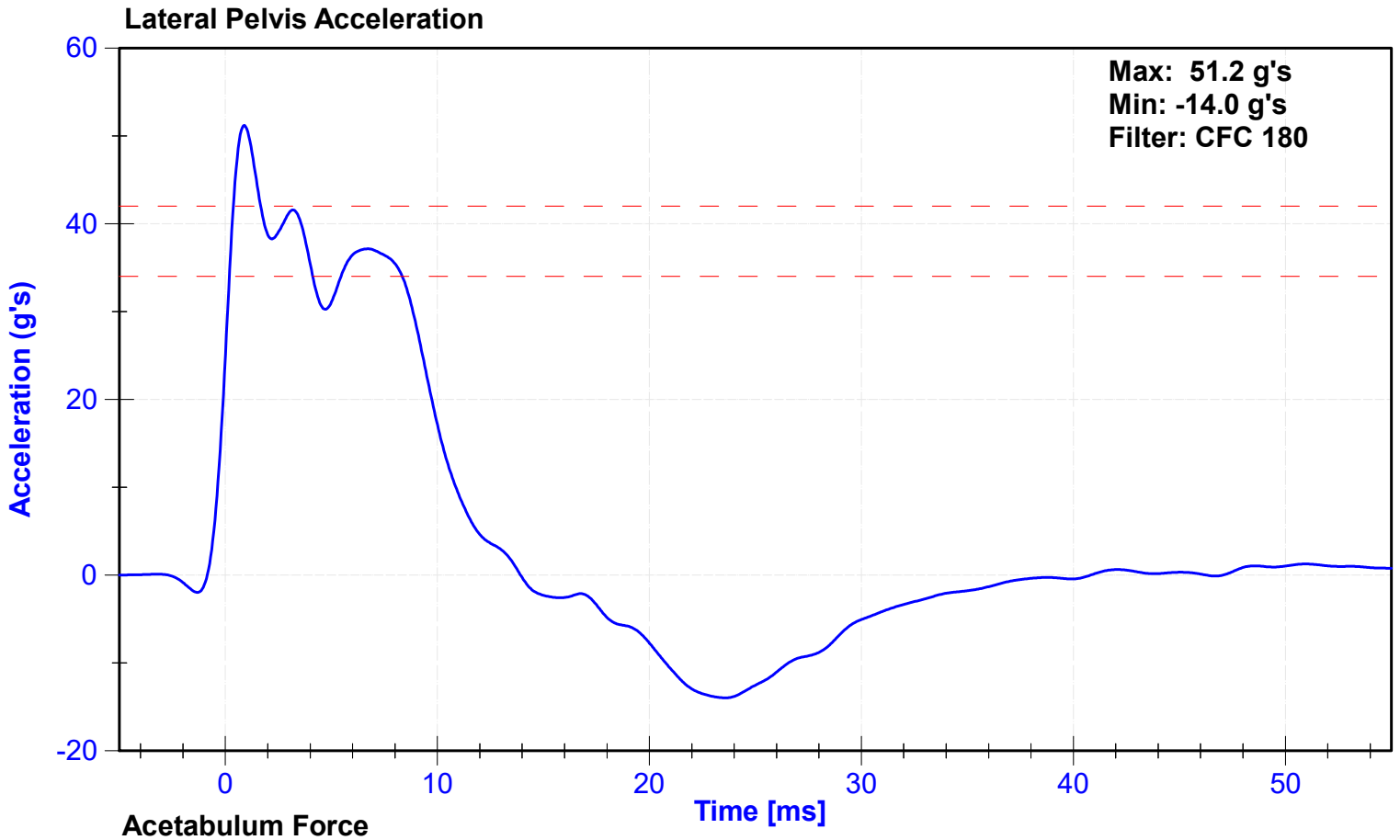
Results

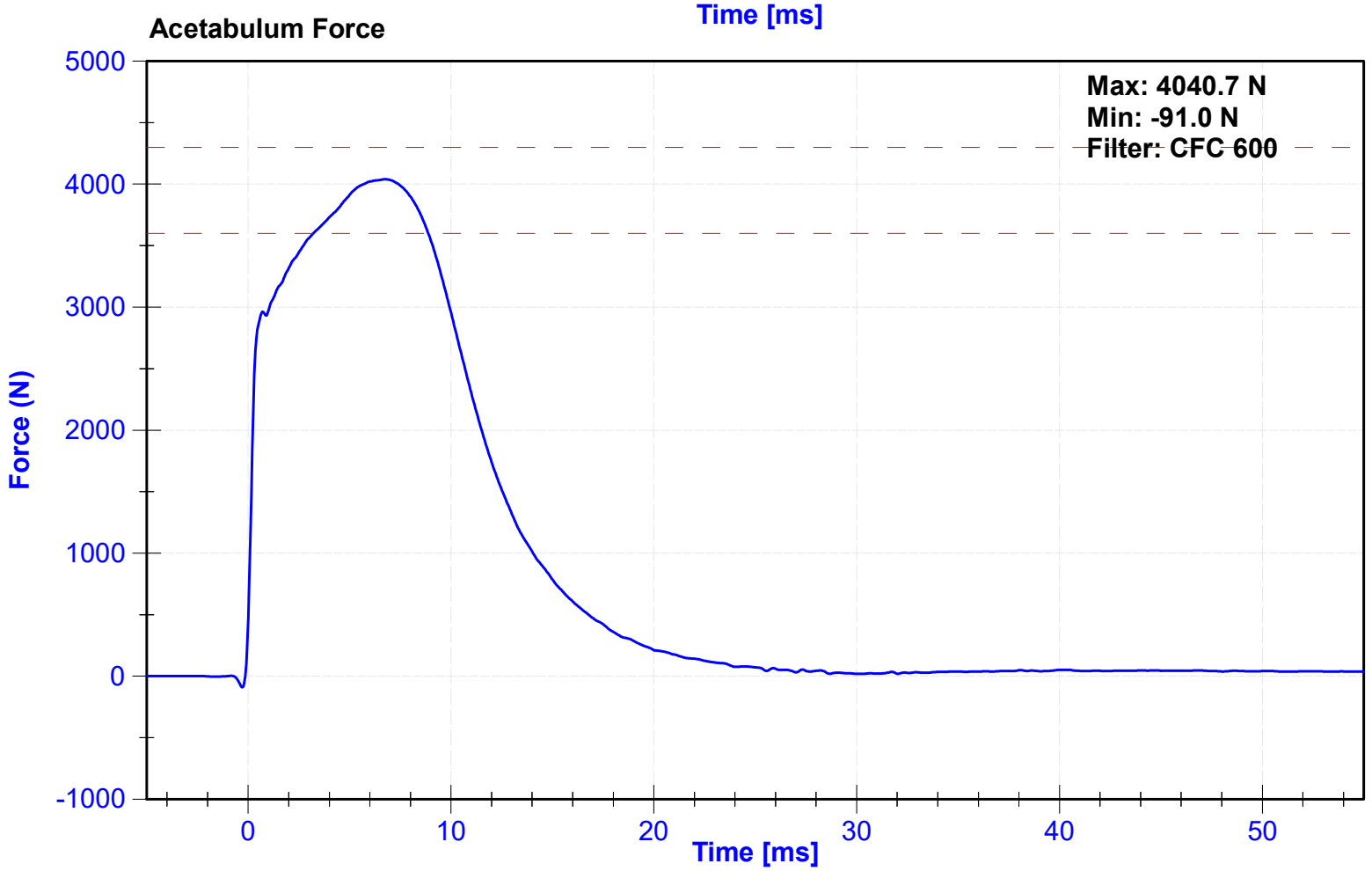
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.9	Pass
Humidity	10	70	%	56	Pass
Velocity	6.6	6.8	m/s	6.69	Pass
Probe Acceleration	38	47	g's	43.0	Pass
Lateral Pelvis Acceleration after 6ms	34	42	g's	37.1	Pass
Acetabulum Force	3600	4300	N	4040.7	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Pelvis Y Accelerometer	Endevco	P51731	7/11/2025	1/7/2026
Acetabulum Load Cell	Denton	275-FY	10/28/2024	10/28/2025
Certification Plug	SACO			N/A
Crash Test Plug	SACO			N/A




Lateral Pelvis Acceleration
Max: 51.2 g's
Min: -14.0 g's
Filter: CFC 180
Acceleration (g's)
60
40
20
0
-20
0
10
20
30
40
50
Time [ms]


Acetabulum Force
Max: 4040.7 N
Min: -91.0 N
Filter: CFC 600
Force (N)
5000
4000
3000
2000
1000
0
-1000
0
10
20
30
40
50
Time [ms]

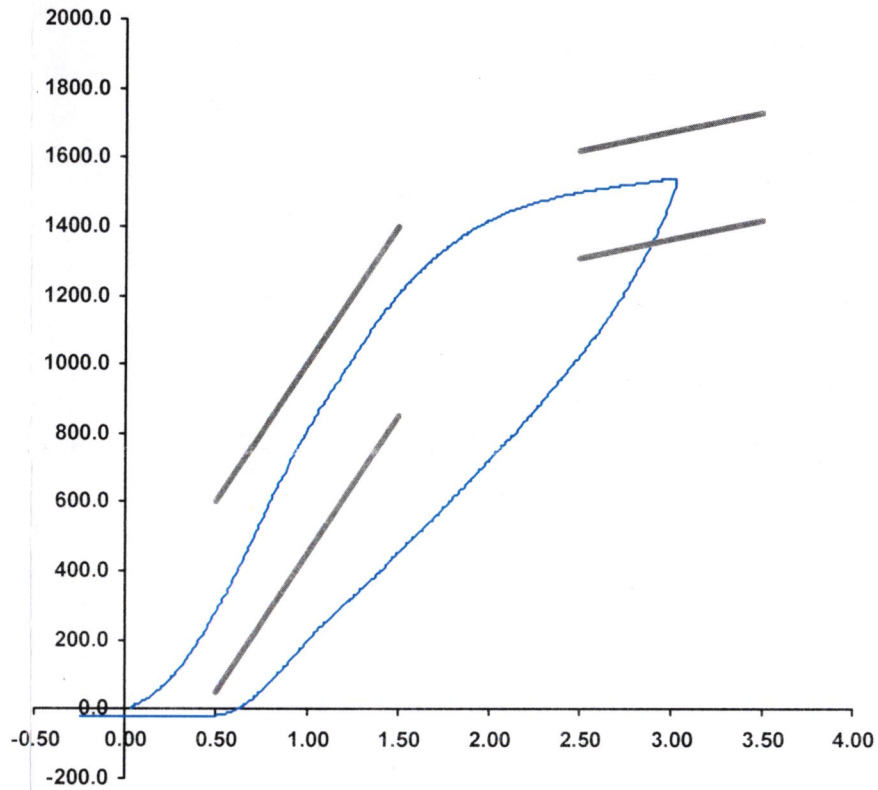
SACO RESEARCH

SID-IIs Pelvis Plug Certification Test

Plug S/N 17028
Test Number 23926
Report Number 23983
Test Date 8/19/2022 12:40:30 PM

	Test Results	Spec Min	Spec Max
Force @ 0.5 mm (N)	288	50	600
Force @ 1.5 mm (N)	1,207	850	1,400
Force @ 2.5 mm (N)	1,500	1,306	1,618
Force @ 3.0 mm (N)	1,538	1,361	1,673

Force (-N) vs Extension (-mm)



Testing Machine STM-20 5965542
Load Cell S/N (FI360947), Units (LBS) 1000

Crosshead Speed (mm / min) or Rate 12.7
Extension or Position Measured by XHD_100 (XHD100)

Notes:
Cert 300 8.13.25

Operator

Part Number 180-4450

Template No 107 19-Aug-22
SACO Research

By : DC Date : 8/19/22

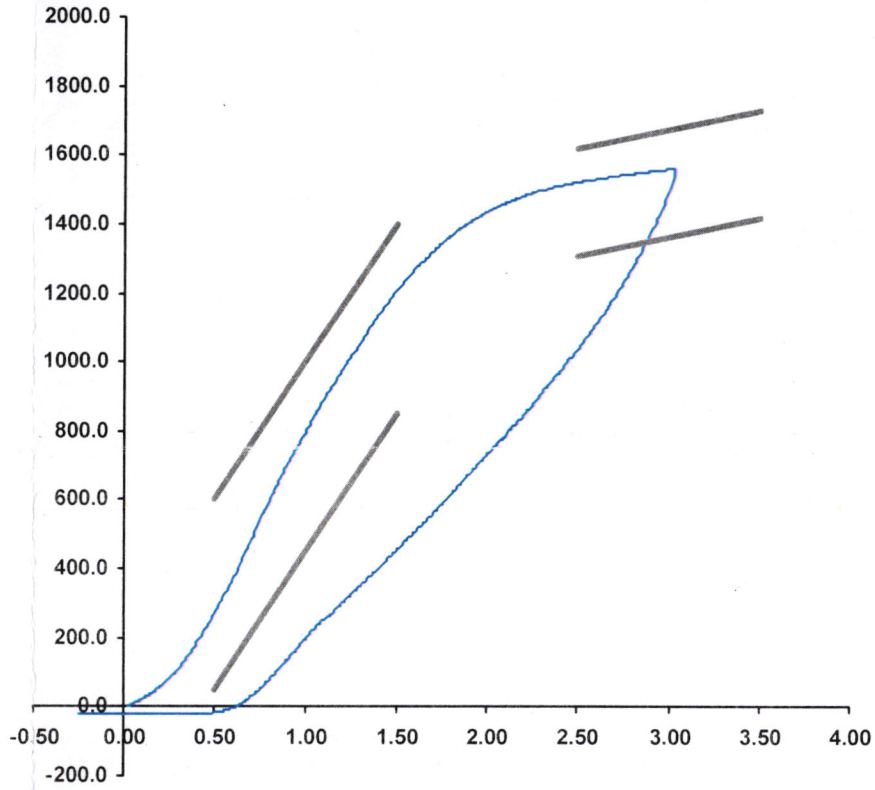
SACO RESEARCH

SID-IIs Pelvis Plug Certification Test

Plug S/N 17027
Test Number 23925
Report Number 23982
Test Date 8/19/2022 12:37:41 PM

	Test Results	Spec Min	Spec Max
Force @ 0.5 mm (N)	277	50	600
Force @ 1.5 mm (N)	1,214	850	1,400
Force @ 2.5 mm (N)	1,522	1,306	1,618
Force @ 3.0 mm (N)	1,561	1,361	1,673

Force (-N) vs Extension (-mm)



Testing Machine STM-20 5965542
Load Cell S/N (FI360947), Units (LBS) 1000

Crosshead Speed (mm / min) or Rate 12.7
Extension or Position Measured by XHD_100 (XHD100)

Notes:
Non-Impact 300 8.13.25

Operator

Part Number 180-4450

Template No 107 19-Aug-22
SACO Research

By : DC Date : 8/17/2022

SACO Research 41735 Elm St, #401 Murrieta, CA 92562 Tel 310-694-2082 FAX

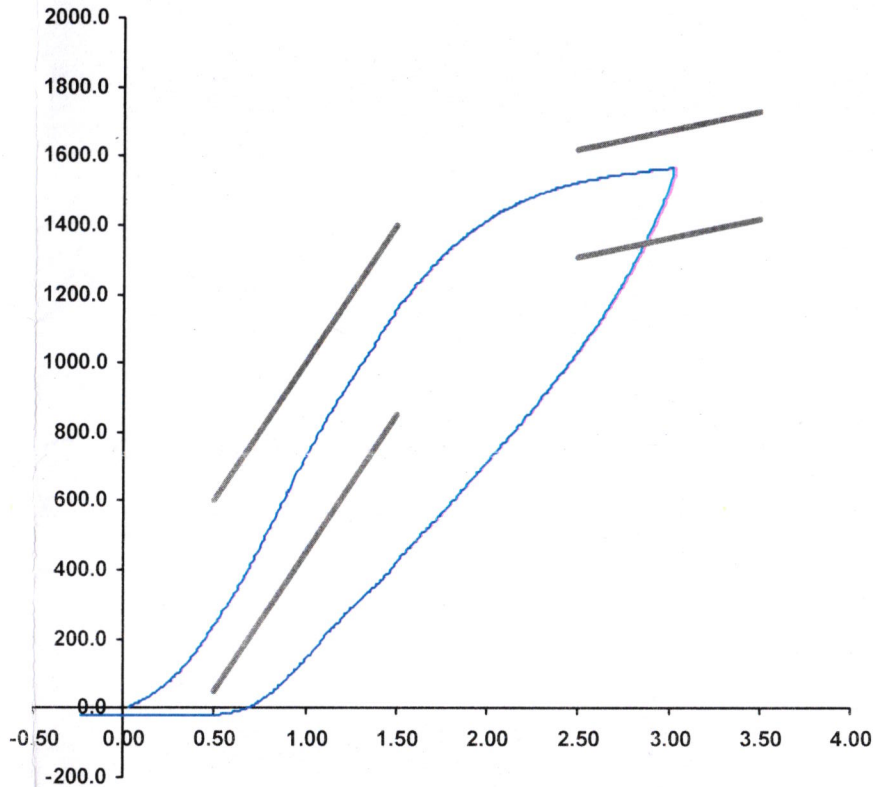
SACO RESEARCH

SID-IIs Pelvis Plug Certification Test

Plug S/N 17026
Test Number 23924
Report Number 23981
Test Date 8/19/2022 12:35:15 PM

	Test Results	Spec Min	Spec Max
Force @ 0.5 mm (N)	246	50	600
Force @ 1.5 mm (N)	1,156	850	1,400
Force @ 2.5 mm (N)	1,524	1,306	1,618
Force @ 3.0 mm (N)	1,565	1,361	1,673

Force (-N) vs Extension (-mm)



Testing Machine STM-20 5965542
Load Cell S/N (FI360947), Units (LBS) 1000

Crosshead Speed (mm / min) or Rate 12.7
Extension or Position Measured by XHD_100 (XHD100)

Notes:
Impact 300 8.13.25

Operator

Part Number 180-4450

Template No 107 19-Aug-22
SACO Research

By : DC Date : 8/19/22

SACO Research 41735 Elm St, #401 Murrieta, CA 92562 Tel 310-694-2082 FAX

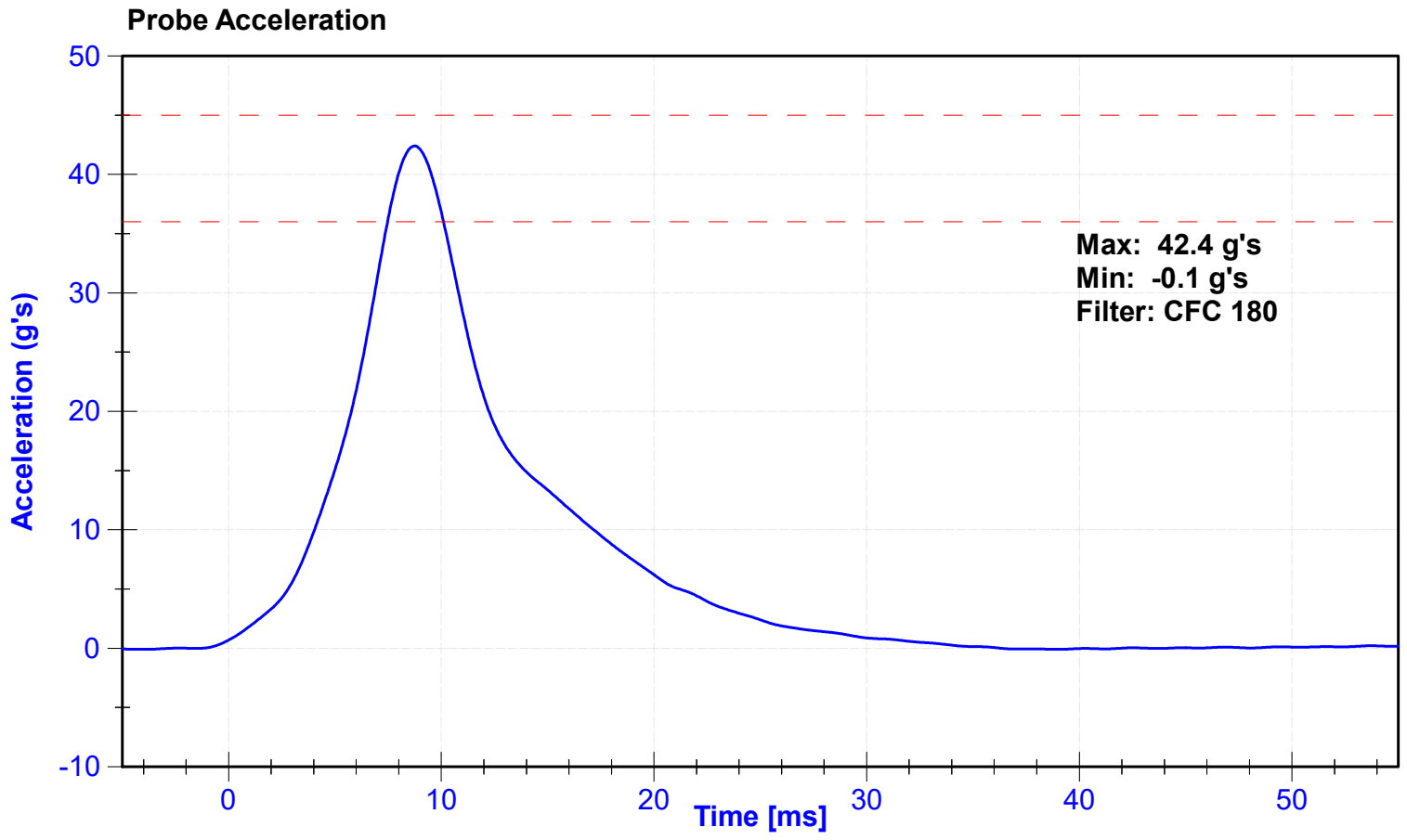
ATD Manufacturer	FTSS	Test Technician	Z. Nyhart
ATD Serial Number	300	Laboratory Supervisor	J. Kinderman

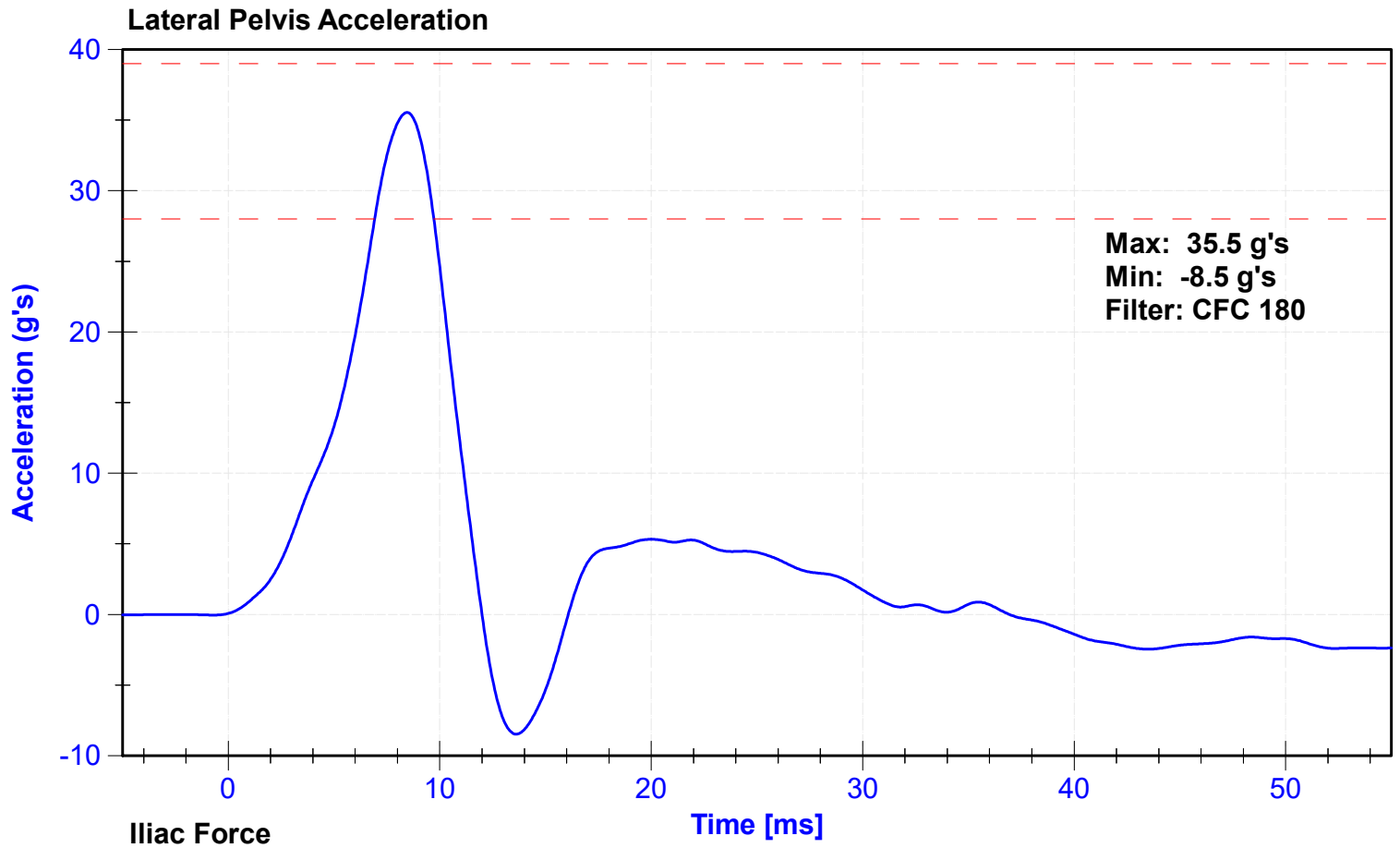
Results

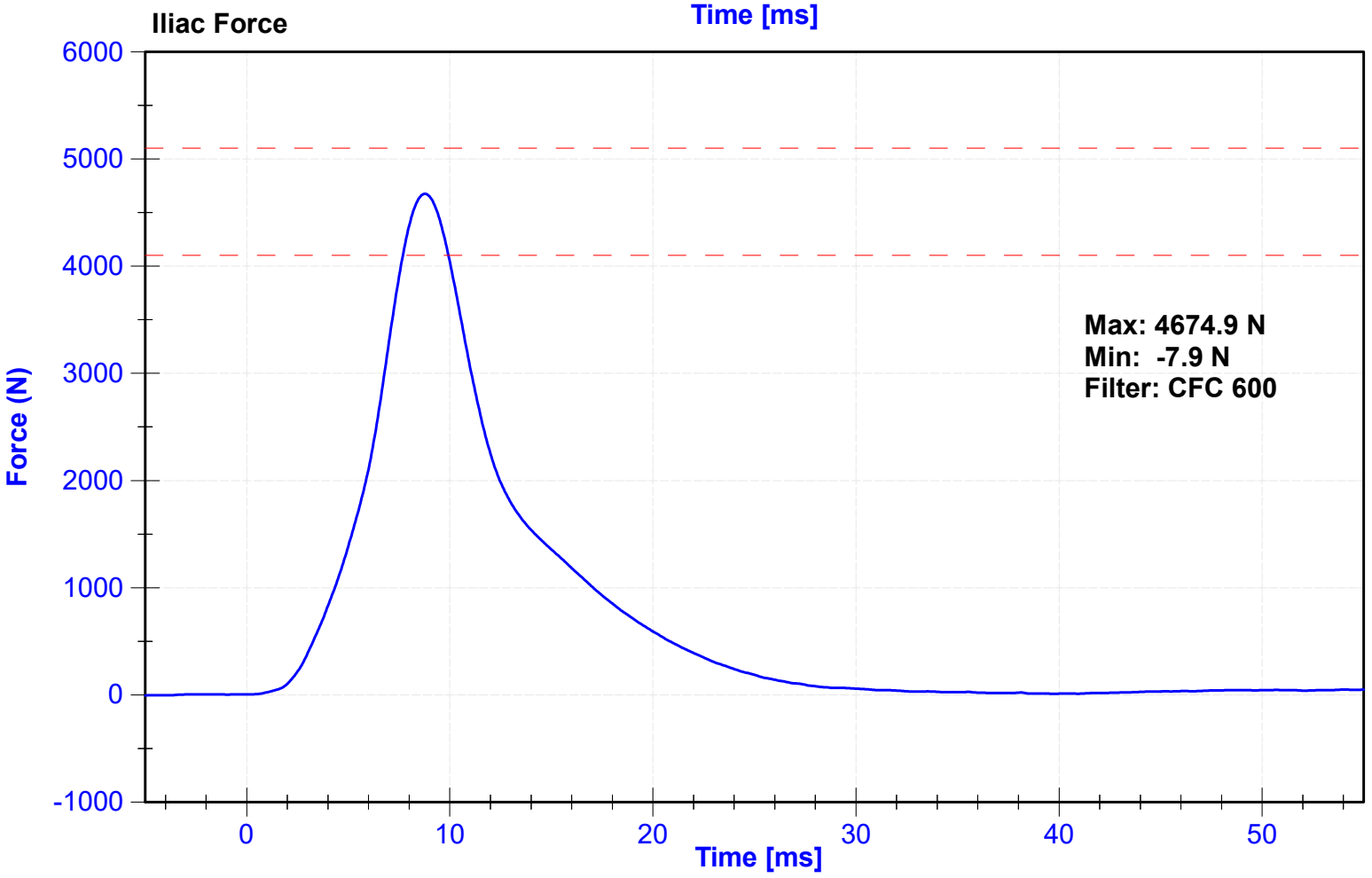
Test Parameter	Minimum Specification	Maximum Specification	Unit	Result	Pass/Fail
Temperature	20.6	22.2	ºC	21.9	Pass
Humidity	10	70	%	56	Pass
Velocity	4.2	4.4	m/s	4.27	Pass
Probe Acceleration	36	45	g's	42.4	Pass
Lateral Pelvis Acceleration	28	39	g's	35.5	Pass
Iliac Force	4100	5100	N	4674.9	Pass

Transducer Calibrations

Channel	Manufacturer	Serial Number	Calibration Date	Calibration Due Date
Pendulum Accelerometer	Endevco	18566	5/7/2025	11/3/2025
Pelvis Y Accelerometer	Endevco	P51731	7/11/2025	1/7/2026
Iliac Load Cell	Denton	279-FY	10/28/2024	10/28/2025




Lateral Pelvis Acceleration
Acceleration (g's)
40
30
20
10
0
-10
0
10
20
30
40
50
Time [ms]
Max: 35.5 g's
Min: -8.5 g's
Filter: CFC 180


Iliac Force
Force (N)
6000
5000
4000
3000
2000
1000
0
-1000
0
10
20
30
40
50
Time [ms]
Max: 4674.9 N
Min: -7.9 N
Filter: CFC 600

APPENDIX D

TEST EQUIPMENT AND INSTRUMENTATION CALIBRATION DATA

Table 1 – Dummy Instrumentation (SID-IIs)

				SID-IIs S/N: 300		
				Serial Number	**Manufacturer**	**Calibration Date**
Head Accelerometers			X	P59018	Endevco	07/11/2025
			Y	P79189	Endevco	07/11/2025
			Z	P79587	Endevco	07/11/2025
Head Accelerometers - Redundant			X	P49182	Endevco	07/11/2025
			Y	T28133	Endevco	07/15/2025
			Z	P52025	Endevco	07/11/2025
Displacement Potentiometer	Shoulder		Y			
	Thoracic Rib	Upper	Y	2316GFE	Servo	07/10/2025
		Middle	Y	085GFE	Servo	07/10/2025
		Lower	Y	1156GFE	Servo	07/10/2025
	Abdominal Rib	Upper	Y	074GFE	Servo	07/10/2025
		Lower	Y	075GFE	Servo	07/10/2025
Lower Spine Accelerometers (T12)			X	P64003	Endevco	07/11/2025
			Y	P17283	Endevco	07/11/2025
			Z	P52071	Endevco	07/11/2025
Acetabulum Load Cell			Y	275-FY	Denton	10/28/2024
Lilac Wing Load Cell			Y	279-FY	Denton	10/28/2024
Pelvis Plug (Struck Side)				16969	SACO	08/03/2022
Pelvis Plug (Non-Struck Side)				16955	SACO	08/03/2022

Table 2 – Vehicle Instrumentation

Vehicle Instrumentation		Serial Number	Manufacturer	Calibration Date
Vehicle Center of Gravity	X	G23630	Endevco	07/17/2025
Vehicle Center of Gravity	Y	G25239	Endevco	07/17/2025
Vehicle Center of Gravity	Z	A413597	Measurement Specialties	07/17/2025
Left Floor Sill	Y	G27029	Endevco	06/17/2025
A-Pillar Sill	Y	A279992	Measurement Specialties	07/14/2025
A-Pillar Low	Y	G25848	Endevco	06/24/2025
A-Pillar Mid	Y	A315809	Measurement Specialties	06/20/2025
B-Pillar Sill	Y	G23688	Endevco	06/20/2025
B-Pillar Low	Y	A428028	Measurement Specialties	01/27/2025
B-Pillar Mid	Y	G23692	Endevco	07/21/2025
Driver Seat	Y	G25972	Endevco	06/24/2025
Engine Top	X	A284324	Measurement Specialties	05/16/2025
Engine Top	Y	G25873	Endevco	05/29/2025
Firewall	Y	G24238	Endevco	07/09/2025
Right Roof	Y	G22702	Endevco	07/08/2025
Right Floor Sill	Y	A405534	Measurement Specialties	06/20/2025
Rear Floorpan	X	G23865	Endevco	05/15/2025
Rear Floorpan	Y	G23860	Endevco	05/15/2025

Table 3 – Pole Instrumentation

Pole Instrumentation	Serial Number	Manufacturer	Calibration Date
Load Cell 1	1220AF-1277329-F0	Interface	07/24/2025
Load Cell 2	1220AF-1117017-F0	Interface	07/24/2025
Load Cell 3	1220AF-1117025-F0	Interface	07/24/2025
Load Cell 4	1220AF-1130989-F0	Interface	07/24/2025
Load Cell 5	1220AF-1281288-F0	Interface	07/24/2025
Load Cell 6	1220AF-1281285-F0	Interface	07/24/2025
Load Cell 7	1220AF-1117035-F0	Interface	07/24/2025
Load Cell 8	1220AF-1117011-F0	Interface	07/24/2025