

FINAL REPORT NUMBER: SPNCAP-TRC-25-002

**NEW CAR ASSESSMENT PROGRAM (NCAP)
SIDE IMPACT POLE TEST**

**NISSAN MOTOR CO., LTD.
2025 Nissan Murano
NHTSA NUMBER: M20255205**

**PREPARED BY:
Transportation Research Center Inc.
10820 State Route 347
P. O. Box B-67
East Liberty, OH 43319**



Report Date: July 15, 2025

FINAL REPORT

**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Office of Crashworthiness Standards
Mail Code: NRM-110
1200 New Jersey Ave, SE
Washington, D.C. 20590**

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings, and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof.

If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement.

Report Prepared By: ILO Project Operations Group

Report Approved By: _____



John Shultz

Approval Date: July 15, 2025

FINAL REPORT ACCEPTANCE BY OCWS:

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

Date: _____

FINAL REPORT ACCEPTANCE BY OCWS:

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

Date: _____

Technical Report Documentation Page

1. Report No. SPNCAP-TRC-25-002	2. Government Accession No.	3. Recipient's Catalog No.																									
4. Title and Subtitle Final Report of New Car Assessment Program Side Impact Pole Testing of 2025 Nissan Murano NHTSA No.: M20255205		5. Report Date July 15, 2025																									
		6. Performing Organization Code TRC Inc.																									
7. Author(s) John Shultz, Project Manager		8. Performing Organization Report No. 250409																									
9. Performing Organization Name and Address Transportation Research Center Inc. 10820 State Route 347 East Liberty, OH 43319		10. Work Unit No.																									
		11. Contract or Grant No. 693JJ920D000018																									
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Office of Crashworthiness Standards Mail Code NRM-110 1200 New Jersey Ave, SE Washington, DC 20590		13. Type of Report and Period Covered Final Test Report April 9, 2025 – July 15, 2025																									
		14. Sponsoring Agency Code NRM-110																									
15. Supplemental Notes																											
16. Abstract A 32.2 km/h (20 mph), 75° oblique impact Side NCAP Test was conducted on the subject vehicle, a 2025 Nissan Murano, 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 by Transportation Research Center Inc. in East Liberty, Ohio, on April 9, 2025. The impact velocity was 32.11 km/h, and the ambient temperature at the struck (left) side of the target vehicle at the time of impact was 20.3° C. The test vehicle's post-test maximum crush was 304 mm at Level 2. The test or target vehicle's performance is given below: <table border="1"> <thead> <tr> <th></th><th>Unit</th><th>Threshold</th><th>Front SID-IIs</th></tr> </thead> <tbody> <tr> <td>Head Injury Criteria (HIC₃₆):</td><td>NA</td><td>1000</td><td>201.610</td></tr> <tr> <td>Resultant Lower Spine Acceleration:</td><td>g's</td><td>82</td><td>37.680</td></tr> <tr> <td>Total Pelvic Force: (sum of acetabular and iliac forces)</td><td>N</td><td>5525</td><td>2499.130</td></tr> <tr> <td>Maximum Thoracic Rib Deflection</td><td>mm</td><td>38*</td><td>16.040</td></tr> <tr> <td>Maximum Abdomen Rib Deflection</td><td>mm</td><td>45*</td><td>16.290</td></tr> </tbody> </table> * Proposed IARV The doors on the struck side did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.					Unit	Threshold	Front SID-IIs	Head Injury Criteria (HIC ₃₆):	NA	1000	201.610	Resultant Lower Spine Acceleration:	g's	82	37.680	Total Pelvic Force: (sum of acetabular and iliac forces)	N	5525	2499.130	Maximum Thoracic Rib Deflection	mm	38*	16.040	Maximum Abdomen Rib Deflection	mm	45*	16.290
	Unit	Threshold	Front SID-IIs																								
Head Injury Criteria (HIC ₃₆):	NA	1000	201.610																								
Resultant Lower Spine Acceleration:	g's	82	37.680																								
Total Pelvic Force: (sum of acetabular and iliac forces)	N	5525	2499.130																								
Maximum Thoracic Rib Deflection	mm	38*	16.040																								
Maximum Abdomen Rib Deflection	mm	45*	16.290																								
17. Key Words New Car Assessment Program (NCAP) Side Impact Pole Part 572V SID-IIs		18. Distribution Statement Copies of this report are available from: National Highway Traffic Safety Administration Technical Information Services Division 1200 New Jersey Ave Washington, DC 20590																									
19. Security Classification (of this report) Unclassified	20. Security Classification (of this page) Unclassified	21. Number of Pages 126	22. Price																								

TABLE OF CONTENTS

<u>Section</u>		<u>Page No.</u>
1	Test Purpose and Procedure	1
2	Summary of Test Results	2
3	Occupant and Vehicle Information	4
<u>Data Sheet No.</u>		<u>Page No.</u>
1	General Test and Vehicle Parameter Data	5
2	Seat, Seat Belt, Steering Wheel Adjustment and Fuel Systems Data	9
3	Dummy Longitudinal Clearance Dimensions	12
4	Dummy Lateral Clearance Dimensions	13
5	Camera and Instrumentation Data	14
6	Vehicle Accelerometer Data	15
7	Rigid Pole Load Cell Data	16
8	Post-Test Observations	17
9	Vehicle Profile Measurements	19
10	Vehicle Exterior Crush Measurements	20
11	Vehicle Damage Profile Distances	23
12	FMVSS No. 301 Fuel Integrity Post-Impact Data	24
13	Dummy/Vehicle Temperature and Humidity Stabilization Data	25
<u>Appendix</u>		<u>Page No.</u>
A	Photographs	A-1
B	Vehicle and Dummy Response Data Plots	B-1
C	Dummy Configuration and Performance Verification Data	C-1
D	Test Equipment And Instrumentation Calibration Data	D-1

SECTION 1

TEST PURPOSE AND PROCEDURE

TEST PURPOSE AND PROCEDURE

This side impact test was conducted as part of the MY25 New Car Assessment Program Side Impact Test Program, sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. 693JJ920D000018. The purpose of this test is to generate comparative side impact performance in a 2025 Nissan Murano manufactured by NISSAN MOTOR CO., LTD.. 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 model year 2025 Nissan Murano. The subject vehicle was towed into the rigid pole at an angle of 75° and a velocity of 32.11 km/h. The side impact test was conducted by Transportation Research Center Inc. in East Liberty, OH, on April 9, 2025. Pre-test and post-test photographs of the test vehicle and the 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. Camera locations and other pertinent camera information are included in this report.

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

- Primary and Redundant Head CG Triaxial Accelerometers
- Thorax Upper, Middle, and Lower Rib Displacement Potentiometers
- Abdomen Upper and Lower Rib Displacement Potentiometers
- Lower Spine (T12) Triaxial Accelerometers
- Iliac Load Cell
- Acetabulum Load Cell

Appendix B contains the vehicle and dummy response data. Dummy configuration and performance verification data can be found in Appendix C of this report. Appendix D contains the test equipment and instrumentation calibration data.

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

Measurement Description	Driver ATD (SID-IIs)		
	Units	IARV	Result
Head Injury Criteria (HIC ₃₆)	NA	1000	201.610
Lower Spine Acceleration Resultant	G	82	37.680
Total Pelvic Force (sum of acetabular and iliac forces)	N	5525	2499.130
Maximum Thoracic Rib Deflection	mm	38*	16.040
Maximum Abdominal Rib Deflection	mm	45*	16.290

* Proposed IARV

Supplemental restraint information is given below:

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

GENERAL COMMENTS

Vehicle CG AX; CF at 48.0 ms

Vehicle CG AY; CF at 48.0 ms

Vehicle CG AZ; CF at 48.0 ms

Left Floor Sill AY; CF at 24.0 ms

SECTION 3
OCCUPANT AND VEHICLE INFORMATION

DATA SHEET NO. 1
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	M20255205
Model Year	2025
Make	Nissan
Model	Murano
Body Style	MPV
VIN	5N1AZ3BJ4SC103517
Body Color	Scarlet Ember
Odometer Reading (km/mi)	14.0 mi
Engine Displacement (L)	2.0
Type/No. Cylinders	Straight / 4
Engine Placement	Transverse
Transmission Type	Automatic
Transmission Speeds	9
Overdrive	No
Final Drive	FWD
Roof Rack	No
Sunroof/T-Top	No
Running Boards	Yes
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	No
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	No
Driver Load Limiter	Yes
Rear Pass. Load Limiter	No
Other	No

Does owner's manual provide instructions to turn off automatic door locks?

No

DATA FROM CERTIFICATION LABEL

Manufactured By	NISSAN MOTOR CO., LTD.
Date of Manufacture	07/24
Vehicle Type	MPV

GVWR (kg)	2540
GAWR Front (kg)	1365
GAWR Rear (kg)	1260

VEHICLE SEATING AND WEIGHT CAPACITY DATA

	Front	Rear	Third	Total
Designated Seating Capacity (DSC)	2	3	N/A	5
Vehicle Capacity Weight (VCW) (kg)				408.0
DSC X 68.0 kg				340.0
Rated Cargo and Luggage Weight (RCLW) (kg)				68.0

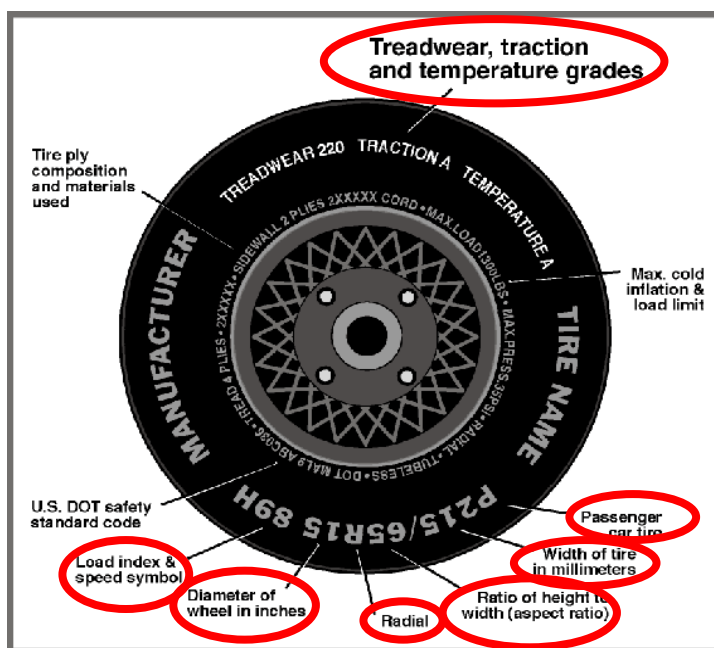
VEHICLE SEAT TYPE

Seating Location	Type of Seat Pan				Type of Seat Back		
	Bucket	Bench	Split Bench	Contoured	Fixed	Adjustable	
						W/ Lever	W/ Knob
Front Seat	Yes	N/A	N/A		N/A	N/A	Yes
Rear or Second Row Seat	N/A	N/A	Yes	N/A	Yes	N/A	N/A
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 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025



DATA FROM TIRE PLACARD

Measured Parameter	Front	Rear
Maximum Tire Pressure (kPa)	300	300
Cold Pressure (kPa)	240	240
Recommended Tire Size	255/55R20	255/55R20
Tire Size on Vehicle	255/55R20	255/55R20
Tire Manufacturer	Bridgestone	Bridgestone
Tire Model	Alenza	Alenza
Treadwear	500	500
Traction	A	A
Temperature Grades	A	A
Tire Plies Sidewall	2	2
Tire Plies Body	4	4
Load Index/Speed Symbol	107 H	107 H
Tire Material	Polyester, Steel, Nylon	Polyester, Steel, Nylon
DOT Safety Code Left	HH9W48 4624	HH9W48 4624
DOT Safety Code Right	HH9W48 4624	HH9W48 4624

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

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

TIRE PRESSURES

	Units	LF	RF	LR	RR
As Delivered	kPa	276	276	283	303
Tire Placard	kPa	240	240	240	240
Owner's Manual	kPa	240	240	240	240
As Tested	kPa	240	240	240	240

TEST /VEHICLE AXLE WEIGHTS

	Units	As Delivered (UVW)			As Tested (ATW)			Fully Loaded		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	573.4	369.2		599.0	418.8		591.4	417.2	
Right	kg	550.8	382.2		543.6	423.2		560.6	423.4	
Ratio	%	59.9	40.1		57.6	42.4		57.8	42.2	
Totals	kg	1124.2	751.4	1875.6	1142.6	842.0	1984.6	1152.0	840.6	1992.6

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total As Delivered Weight (UVW)	kg	1875.6
Actual Weight of 1 P572V ATD (SID-ILs) Dummy Used	kg	49.0
Rated Cargo/Luggage Weight (RCLW)	kg	68.0
Calculated Vehicle Target Weight (TVTW)	kg	1992.6

(A)
 (B)
 (C)
 (A+B+C)

Does the measured As Tested Vehicle Weight lie within the required weight range (i.e. Calculated Test Vehicle Target Weight – 4.5 kg to 9 kg)? ☒ YES ☐ NO

TEST VEHICLE ATTITUDES AND CG

	Units	As Delivered	As Tested	Fully Loaded	Meets Requirement***
Driver Door Sill Angle (front-to-rear)*	Deg.	0.6	0.7	+0.8	Yes
Front Passenger Sill Angle (front-to-rear)*	Deg.	0.2	0.3	+0.4	Yes
Front Bumper-Line Angle (left-to-right)**	Deg.	0.0	0.0	-0.1	Yes
Rear Bumper-Line Angle (left-to-right)**	Deg.	0.1	0.0	-0.2	Yes
Vehicle CG (Aft of Front Axle)	mm	1124	1190	1183	
Vehicle CG (Left (+) / Right (-) from longitudinal Centerline)	mm	+4	+22	+10	

*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 Requirements".

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

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
Test Date: 4/9/2025

WEIGHT OF BALLAST AND VEHICLE COMPONENTS REMOVED TO MEET TVTW

Component Description	Weight (kg)
Ballast: Steel plate	52.0
Components Removed: None	0.0

Test height adjustable suspension setting, if applicable:

N/A

TEST SURFACE MARKINGS

	Distance from 75° Impact Location Line (mm)
Fore 25 mm target	1835
Aft 25 mm target	1830

DATA SHEET NO. 2

SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

SEAT POSITIONING

The driver 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	22.0	18.7	20.4
Front Passenger Seat	16.0	11.4	13.7
Front Center Seat*	N/A	N/A	N/A
Struck Side Rear Seat	Fixed	Fixed	Fixed
Non-Struck Side Rear Seat	Fixed	Fixed	Fixed
Rear Center Seat*	Fixed	Fixed	Fixed

* If applicable.

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	20.4	239	Max	222	234	248
			Mid	213	225	239
			Min	203	215	230
Front Passenger Seat	13.7	233	Max	N/A	N/A	N/A
			Mid	211	221	233
			Min	N/A	N/A	N/A
Front Center Seat*	N/A	N/A	Max	N/A	N/A	N/A
			Mid	N/A	N/A	N/A
			Min	N/A	N/A	N/A
Struck Side Rear Seat	N/A	N/A	Max	N/A	N/A	N/A
			Mid	N/A	N/A	N/A
			Min	N/A	N/A	N/A
Non-Struck Side Rear Seat	N/A	N/A	Max	N/A	N/A	N/A
			Mid	N/A	N/A	N/A
			Min	N/A	N/A	N/A
Rear Center Seat*	N/A	N/A	Max	N/A	N/A	N/A
			Mid	N/A	N/A	N/A
			Min	N/A	N/A	N/A

* If applicable.

DATA SHEET NO. 2 (CONTINUED)

SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

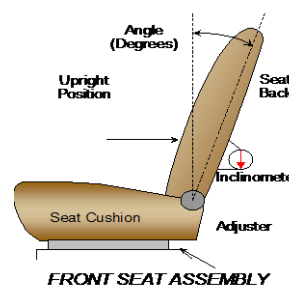
SEAT FORE/AFT POSITION

Seat	Total Fore/Aft Travel		Test Position from Forward most Position	
	mm	Detents*	mm	Detent*
Driver Seat	260	Power	0	Power
Front Passenger Seat	260	Power	0	Power
Front Center Seat*	N/A	N/A	N/A	N/A
Struck Side Rear Seat	N/A	N/A	N/A	N/A
Non-Struck Side Rear Seat	N/A	N/A	N/A	N/A
Rear Center Seat*	N/A	N/A	N/A	N/A

* If applicable.

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 is set to match the struck-side rear seat back.



Seat	Total Seat Back Angle Range		Test Position from Most Upright	
	Degrees	Detents*	Degrees	Detent*
Driver Seat w/ Seated Dummy	84	Power	1.4	Power
Front Passenger Seat	84	Power	1.4	Power
Front Center Seat*	N/A	N/A	N/A	N/A
Struck Side Rear Seat	N/A	N/A	N/A	N/A
Non-Struck Side Rear Seat	N/A	N/A	N/A	N/A
Rear Center Seat*	N/A	N/A	N/A	N/A

* If applicable.

SEAT BELT ANCHORAGE ADJUSTMENT

Seat belt anchorages are adjusted with the information provided by the manufacturer on Form No. 1

	Total # of Positions	Placed in Position #
Driver Seat	4	0

HEAD RESTRAINT ADJUSTMENT

Head restraints are adjusted to the lowest and most full forward in-use position.

	Total # of Positions	Placed in Position #
Driver Seat	4	0

DATA SHEET NO. 2 (CONTINUED)

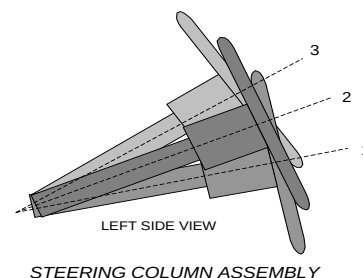
SEAT, SEAT BELT, STEERING WHEEL ADJUSTMENT AND FUEL SYSTEMS DATA

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel geometric locus it describes when moved through its full range of motion.

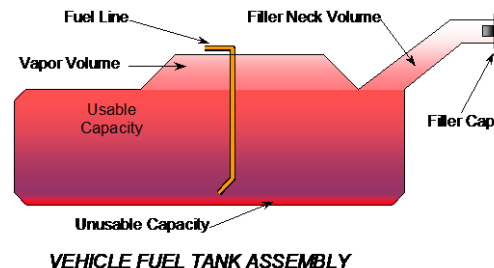


	Degrees	Fore/Aft Position, mm
Lowermost, Position No. 1	67.4	
Geometric Center, Position No. 2	64.7	
Uppermost, Position No. 3	61.9	
Telescoping Steering Wheel Travel		42
Test Position	64.7	21

FUEL PUMP

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

- 1) Approximately 1 second after turning the ignition switch ON
- 2) When engine is running



FUEL TANK CAPACITY

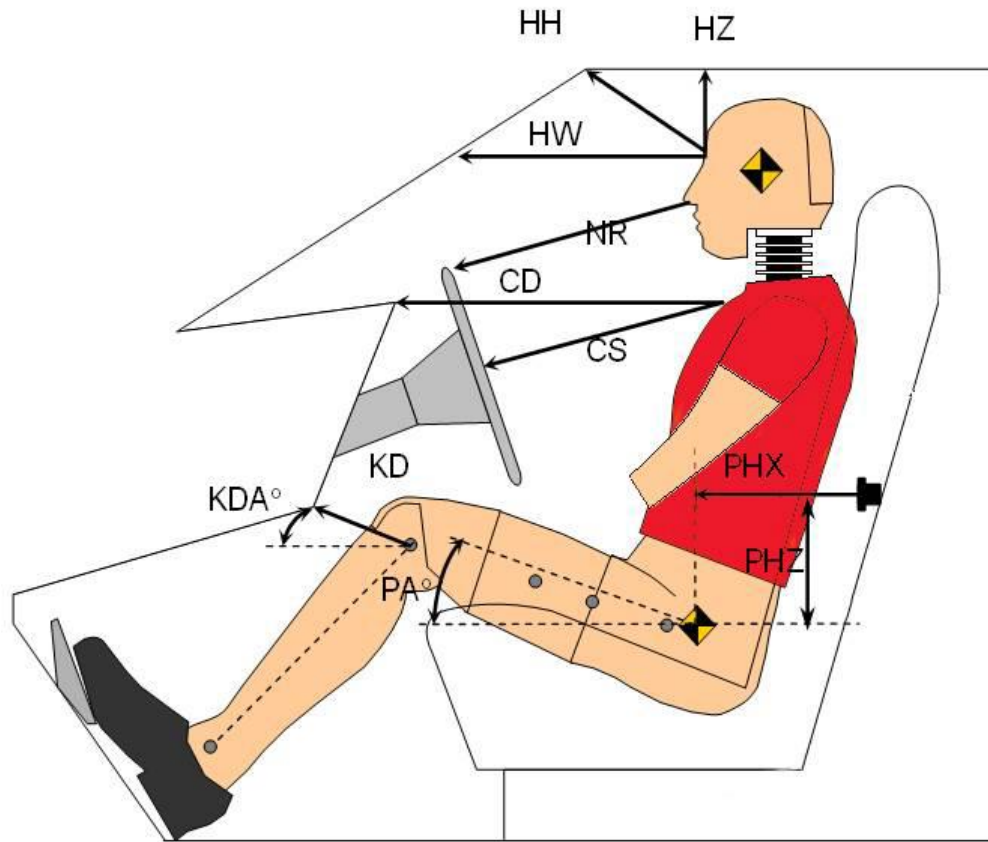
	Liters
Usable Capacity of "Standard Tank" (see Form No. 1)	70.8
Usable Capacity of "Optional" Tank (see Form No. 1)	N/A
Usable Capacity of Standard Tank (see Owner's Manual)	70.8
Usable Capacity of Optional Tank (see Owner's Manual)	N/A
93% of Usable Capacity	65.8
Actual Amount of Solvent Used in Test	65.8
1/3 of Usable Capacity	23.6

Is the Actual Amount of Solvent Used in the test equal to 93% $\pm$ 1% of the Usable Capacity stated in on Form No. 1? ☒ YES ☐ NO

DATA SHEET NO. 3
DUMMY LONGITUDINAL CLEARANCE DIMENSIONS

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

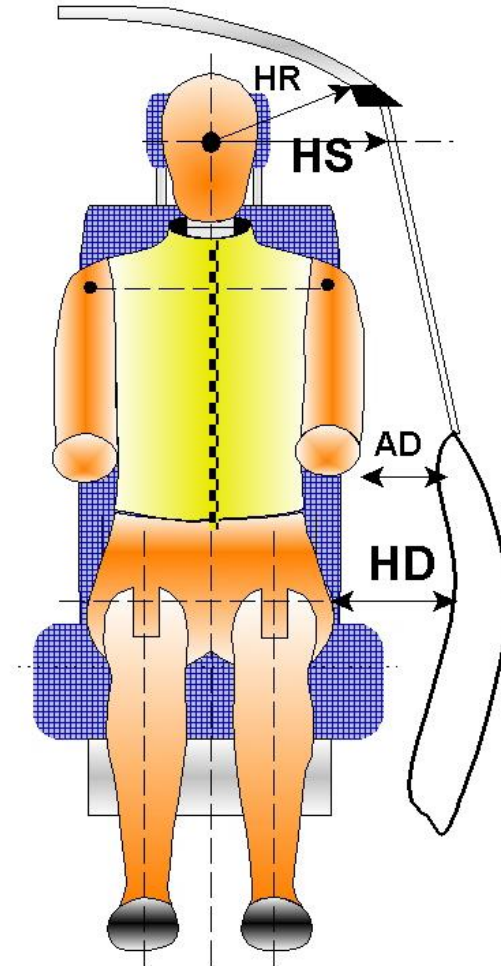


Code	Measurement Description	Driver	
		Length (mm)	Angle (°)
HH	Head to Header	374	
HW	Head to Windshield	824	
HZ	Head to Visor	225	
NR	Nose to Rim	286	
CD	Chest to Dashboard	470	
CS	Chest to Steering Wheel	198	
KDL/KDLA°	Left Knee to Dash	164	0.0
KDR/KDRA°	Right Knee to Dash	159	0.0
PAX°	Pelvic Tilt Angle (X-axis)		19.7
PAY°	Pelvic Tilt Angle (Y-axis)		0.2
PHX	Hip Point to Striker (X-Axis)	370	
PHZ	Hip Point to Striker (Z-Axis)	120	

DATA SHEET NO. 4
DUMMY LATERAL CLEARANCE DIMENSIONS

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
Test Date: 4/9/2025

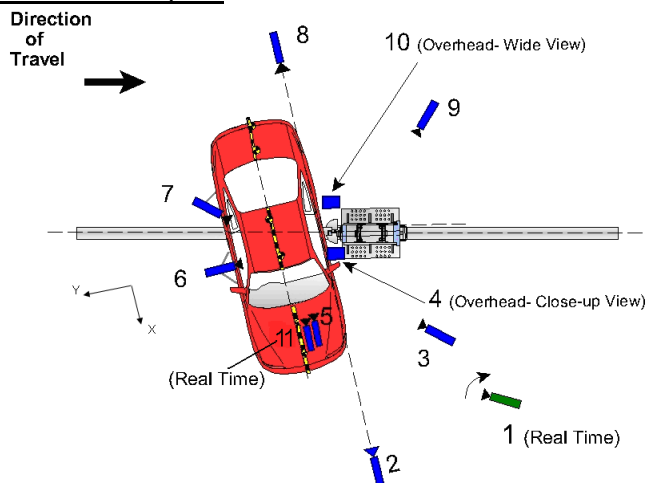


Code	Measurement Description	Length (mm)
HR	Head to Side Header	291
HS	Head to Side Window	390
AD	Arm to Door	192
HD	Hip Point to Door	260

DATA SHEET NO. 5
CAMERA AND INSTRUMENTATION DATA

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025



REFERENCE: (from point of impact for X and Y; from ground for Z)
 + X = Forward of vehicle, + Y = Right of vehicle, + Z = Down

Camera No.	View	Coordinates (mm)			Lens Length (mm)	Operating Frame Rate (fps)
		X	Y	Z		
1	Real time (24-30 fps) pan view of impact				Zoom	30
2	Front ground level – impact view	5717	-1037	-1706	20	1000
3	Impact side 45° – forward pole view	2648	-2156	-1817	8.5	1000
4	Overhead Close-up view of impact	0	120	-4650	28	1000
5	Onboard – dummy front view				25	1000
6	Onboard – dummy side view				8.5	1000
7	Onboard – dummy rear oblique view				8.5	1000
8	Rear ground level – impact view	-6530	2120	-1728	8.5	1000
9	Impact side 45° – rearward pole view	-4750	-1315	-1742	20	1000
10	Overhead wide view of impact	0	0	-4650	18	1000
11	Real time dummy front view				Zoom	60

All measurements accurate to +/- 6 mm.

NOTE: Vehicle was at a 75° angle to the rigid pole.

If applicable, explain why camera(s) did not run: N/A

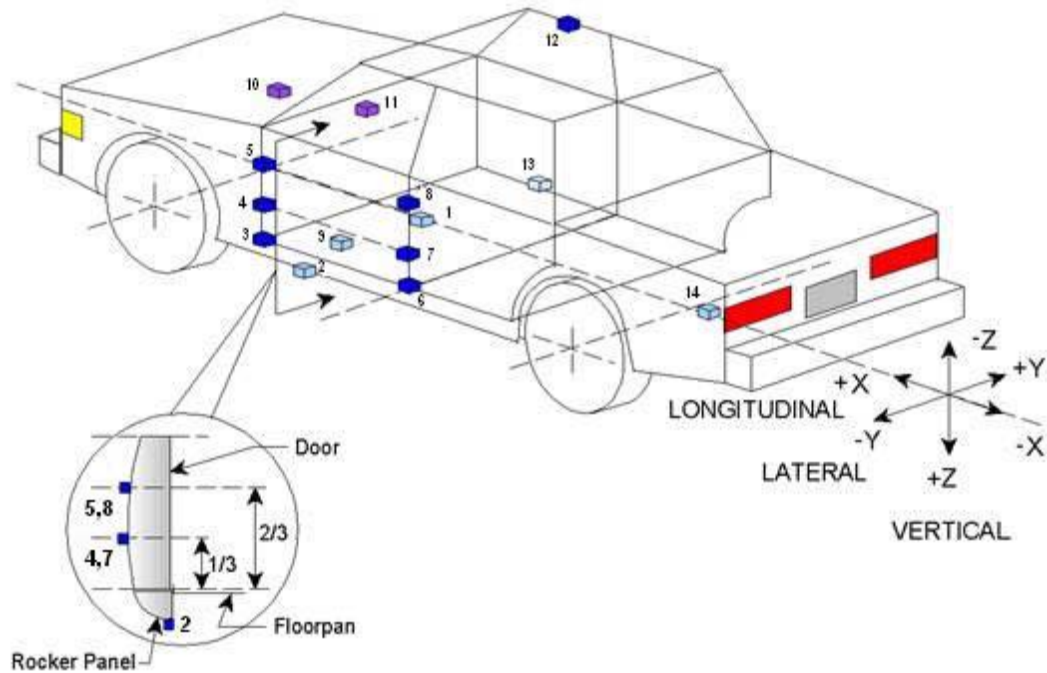
INSTRUMENTATION

	Number of Channels
Driver Dummy	16
Vehicle Structure	18
Pole Load Cells	8
TOTAL	42

**DATA SHEET NO. 6
VEHICLE ACCELEROMETER DATA**

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
Test Date: 4/9/2025



Accelerometer/Sensor Location				
	ID	Coordinates (mm)		
		X	Y	Z
1	Vehicle CG	2926	105	-442
2	Left Floor Sill	2873	-739	-464
3	A-Pillar Sill	3307	-786	-582
4	A-Pillar Low	3330	-899	-674
5	A-Pillar Mid	3334	-878	-1046
6	B-Pillar Sill	1997	-776	-470
7	B-Pillar Low	2220	-882	-733
8	B-Pillar Mid	2176	-867	-1090
9	Driver Seat Track	2522	-577	-497
10	Engine Top	3984	5	-890
11	Firewall	3884	23	-1028
12	Right Roof	2491	705	-1646
13	Right Floor Sill	2867	759	-465
14	Rear Floorpan	845	0	-532

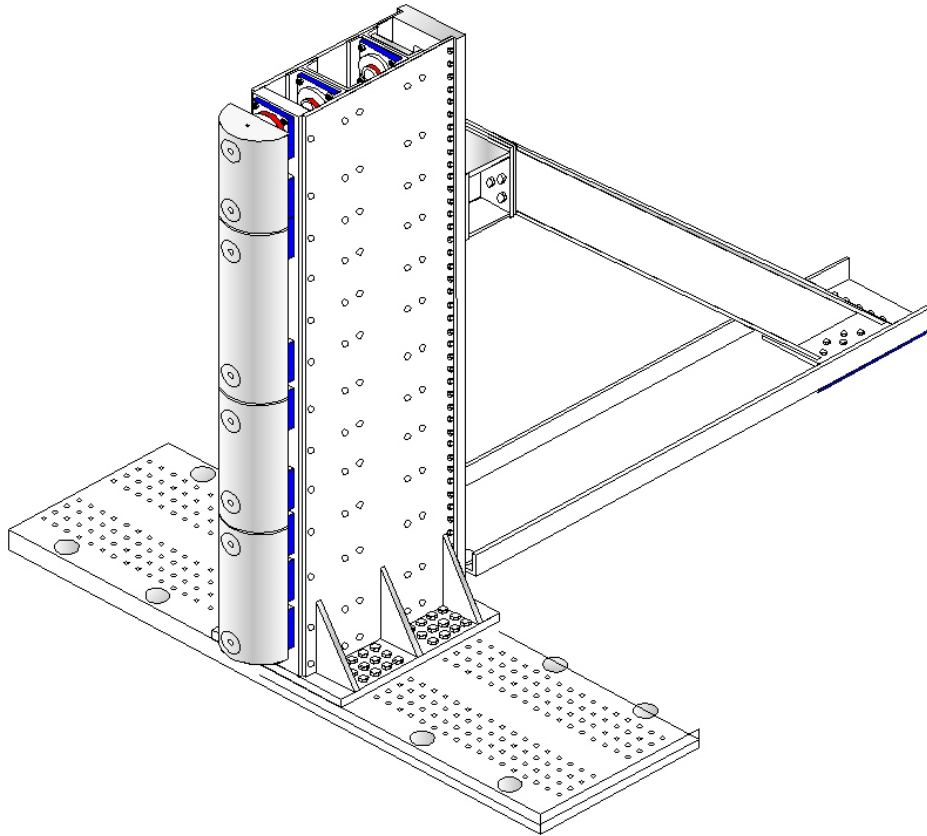
Reference: X - Test Vehicle Rear Bumper (+ forward)
Y - Test Vehicle Centerline (+ to right)
Z - Ground Plane (+ down)

DATA SHEET NO. 7
RIGID POLE LOAD CELL DATA

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
Test Date: 4/9/2025

FOIL 300K RIGID POLE



Load Cell Locations	
ID	Height From Top of Carrier (mm)
1	87
2	468
3	648
4	978
5	1168
6	1651
7	1816
8	2057

**DATA SHEET NO. 8
POST-TEST OBSERVATIONS**

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
Test Date: 4/9/2025

TEST DUMMY INFORMATION AND CONTACT POINTS

Dummy Body Part	Driver SID-IIs Dummy
Face	SCAB
Top of Head	SCAB
Left Side of Head	SCAB
Back of Head	Head Rest
Left Shoulder	SAB
Upper Torso	SAB, Side Seat Bolster
Lower Torso	Side Seat Bolster
Left Hip	SAB
Left Knee	Door Panel

POST-TEST DOOR PERFORMANCE

Description	Struck Side		Non-Struck Side		Rear Hatch/ Other Door
	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, Record Width of Opening at Striker (mm)	N/A	N/A	N/A	N/A	N/A

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

POST-TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	Good
Sill Separation	None
Windshield Damage	Separated from A pillar and cracked
Side Window Damage	Front window is broken
Other Notable Effects	None

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

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

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 Curtain Airbag	Yes	Yes	Yes	Yes
Side Torso/Pelvis Airbag	Yes	Yes	Yes	Yes
Side Torso Airbag	No	N/A	No	N/A
Seat Belt Pretensioner	Yes	Yes	No	N/A
Seat Belt Load Limiter	Yes	No	No	N/A
Other	No	N/A	No	N/A

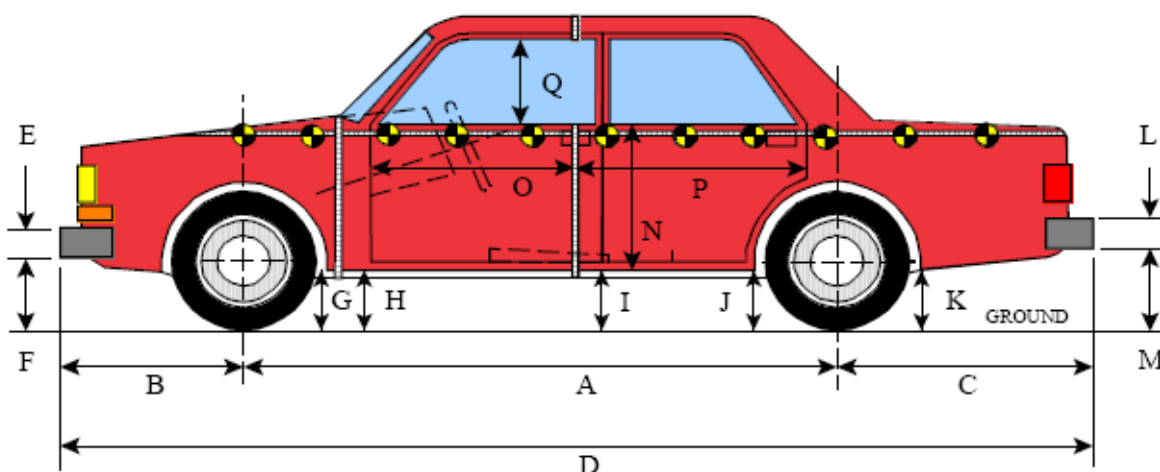
VEHICLE SPEED, VEHICLE ANGLE AT IMPACT AND IMPACT POINT LOCATION DATA

Measured Parameter	Units	Tolerance	Value
Vertical Impact Reference Line (Aft of Front Axle) (Intended Impact Point)	mm		1190
Actual Impact Point (Aft of Front Axle)	mm		1190
Horizontal Offset (+ forward / - rearward)	mm	+/- 38 of Intended Impact point	0
Angle Between Vehicle's Longitudinal Centerline and Line of Motion	degrees	75 +/- 3	75
Trap No. 1 Velocity (Primary)	km/h	31.4 to 33.0	32.11
Trap No. 2 Velocity (Redundant)	km/h	31.4 to 33.0	32.15

DATA SHEET NO. 9
VEHICLE PROFILE MEASUREMENTS

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025



LEFT SIDE VIEW

All MEASUREMENTS IN (mm) WITH TOLERANCE OF ± 3 mm

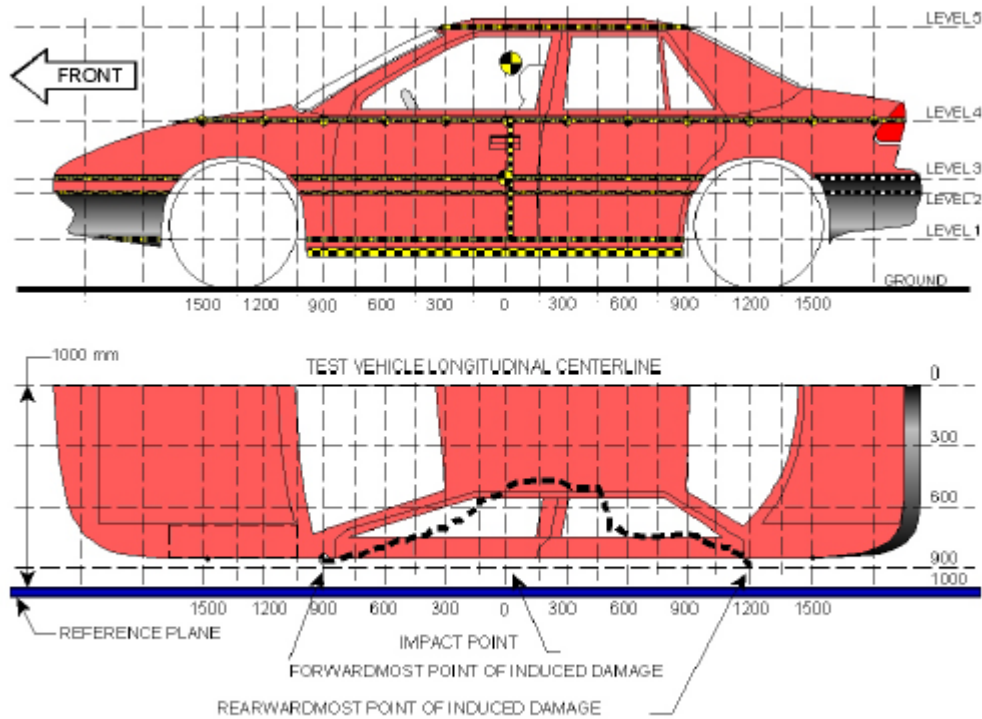
VEHICLE PRE- AND POST-TEST MEASUREMENT INFORMATION

Code	Measurement Description	Pre-Test	Post-Test	Change
A	Wheelbase	2805	2800	-5
B	Front Axle to Front Surface of Vehicle	1076	1060	-16
C	Rear Axle to Rear Surface of Vehicle	1009	1010	1
D	Total Length at Centerline	4890	4870	-20
E	Front Bumper Thickness	100	100	0
F	Front Bumper Bottom to Ground	517	530	13
G	Sill Height at Front Wheel Well	340	314	-26
H	Sill Height at Front Door Leading Edge	340	327	-13
I	Sill Height at B-Pillar	359	385	26
J1	Sill Height at Rear Wheel Well	369	410	41
J2	Pinch Weld Height at Rear Wheel Well	322	355	33
K	Sill Height Aft of Rear Wheel Well	455	503	48
L	Rear Bumper Thickness	87	88	1
M	Rear Bumper Bottom to Ground	619	653	34
N	Sill Height to Bottom of Front Window Sill	1010	1005	-5
O	Front Door Leading Edge to Impact CL	661	600	-61
P	Rear Door Trailing Edge to Impact CL	1524	1450	-74
Q	Front Window Opening	430	390	-40
R	Right Side Length	4785	4784	-1
S	Left Side Length	4790	4752	-38
T	Vehicle Width at B-Pillars	1950	1882	-68
U	Front Wheel Track Width	1695	1694	-1
V	Rear Wheel Track Width	1695	1695	0

DATA SHEET NO. 10
VEHICLE EXTERIOR CRUSH MEASUREMENTS

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025



NOTE: All measurements are in millimeters (mm)

MAXIMUM EXTERIOR CRUSH MEASUREMENTS

Level	Measurement Description	Height Above Ground	Maximum Exterior Static Crush	Distance from Impact
1	Sill Top	474	266	150
2	Occupant H-Point	778	304	150
3	Mid-Door	721	301	150
4	Window Sill	1153	240	150
5	Window Top	1633	75	0

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 EXTERIOR CRUSH MEASUREMENTS

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
Test Date: 4/9/2025

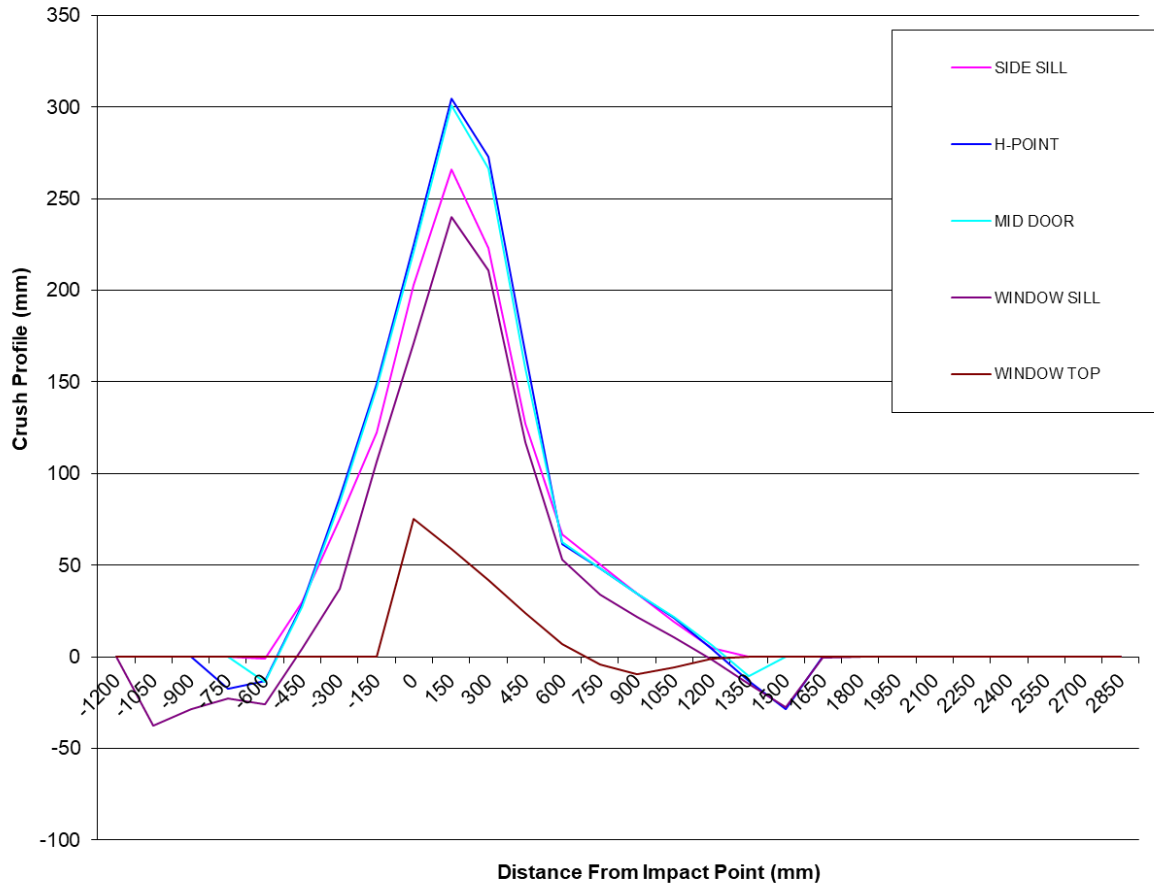
	Pre-Test					Post-Test					Crush				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
-1050	0	0	0	861	0	0	0	0	899	0	0	0	0	-38	0
-900	0	0	0	867	0	0	0	0	896	0	0	0	0	-29	0
-750	0	990	0	873	0	0	1007	0	895	0	0	-17	0	-22	0
-600	977	990	990	877	0	978	1004	1004	903	0	-1	-14	-14	-26	0
-450	969	987	986	881	0	940	958	958	876	0	29	29	28	5	0
-300	962	984	982	884	0	887	897	898	846	0	75	87	84	38	0
-150	956	981	980	888	0	834	832	833	781	0	122	149	147	107	0
0	952	979	977	888	653	749	754	756	717	578	203	225	221	171	75
150	948	976	974	890	667	682	672	673	650	608	266	304	301	240	59
300	945	973	972	892	669	722	701	705	681	627	223	272	267	211	42
450	942	970	969	892	669	814	805	811	775	645	128	165	158	117	24
600	938	968	965	892	666	871	906	903	839	659	67	62	62	53	7
750	935	965	962	891	661	885	916	914	857	665	50	49	48	34	-4
900	935	964	962	890	653	900	929	927	868	662	35	35	35	22	-9
1050	948	969	968	888	639	929	948	946	877	644	19	21	22	11	-5
1200	961	977	978	892	618	956	973	972	893	619	5	4	6	-1	-1
1350	0	984	986	905	0	0	998	997	919	0	0	-14	-11	-14	0
1500	0	986	0	917	0	0	1015	0	944	0	0	-29	0	-27	0
1650	0	0	0	925	0	0	0	0	926	0	0	0	0	-1	0

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)
VEHICLE EXTERIOR CRUSH MEASUREMENTS

Test Vehicle: 2025 Nissan Murano
Test Program: SPNCAP Side Impact

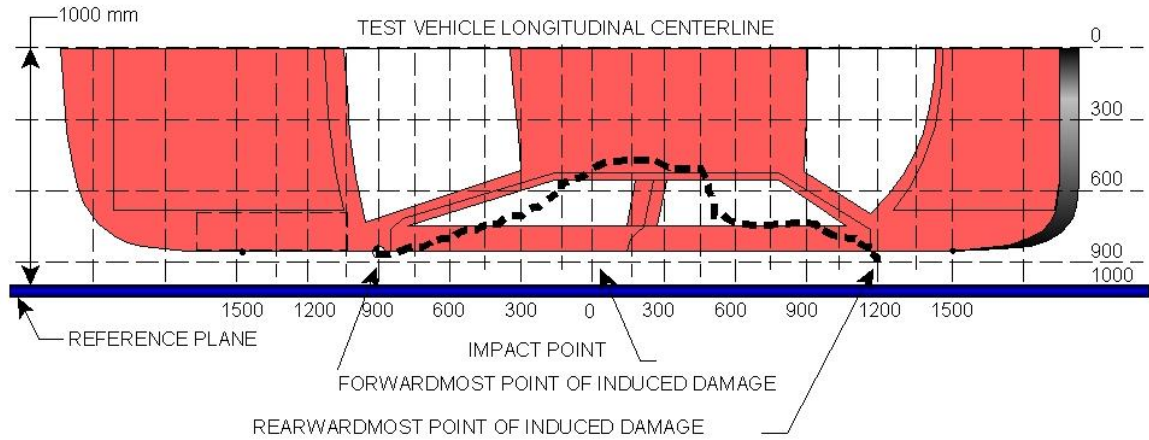
NHTSA No.: M20255205
Test Date: 4/9/2025



DATA SHEET NO. 11
VEHICLE DAMAGE PROFILE DISTANCES

Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025



VEHICLE DAMAGE PROFILE DISTANCES

DPD	Distance From Impact Point (mm)	Level	Post-Test (mm)	Pre-Test (mm)	Crush (mm)
1 ¹	1200	3	972	978	0
2	900	1	900	935	35
		2	929	964	
		3	927	962	
3	600	1	871	938	67
4	150	2	672	976	304
5	-150	2	832	981	149
6 ¹	-450	1	940	969	29
		2	958	987	

¹DPD 1 and 6 are defined as zero crush since the crush does not extend to the end of the vehicle.

DATA SHEET NO. 12

FMVSS NO. 301 FUEL SYSTEM INTEGRITY POST-IMPACT DATA

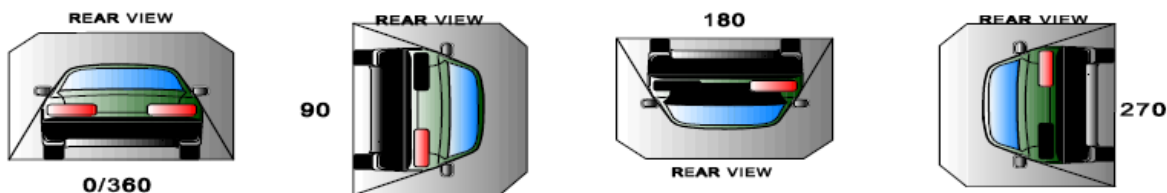
Test Vehicle: 2025 Nissan Murano
 Test Program: SPNCAP Side Impact

NHTSA No.: M20255205
 Test Date: 4/9/2025

Test Time: 15:20 Temperature: 20.4°C

- A. From impact until vehicle motion ceases: 0 oz.
 (Maximum allowable is 1 ounce)
- B. For the 5 minute period after motion ceases: 0 oz.
 (Maximum allowable is 5 ounces)
- C. For the following 25 minutes: 0 oz.
 (Maximum allowable is 1 ounce/minute)
- D. Spillage Details: None

FMVSS 301 STATIC ROLLOVER DATA



ROLLOVER SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0 to 90	90	330	420
90 to 180	90	330	840
180 to 270	90	330	1260
270 to 360	90	330	1680

FMVSS NO. 301 ROLLOVER SPILLAGE TABLE

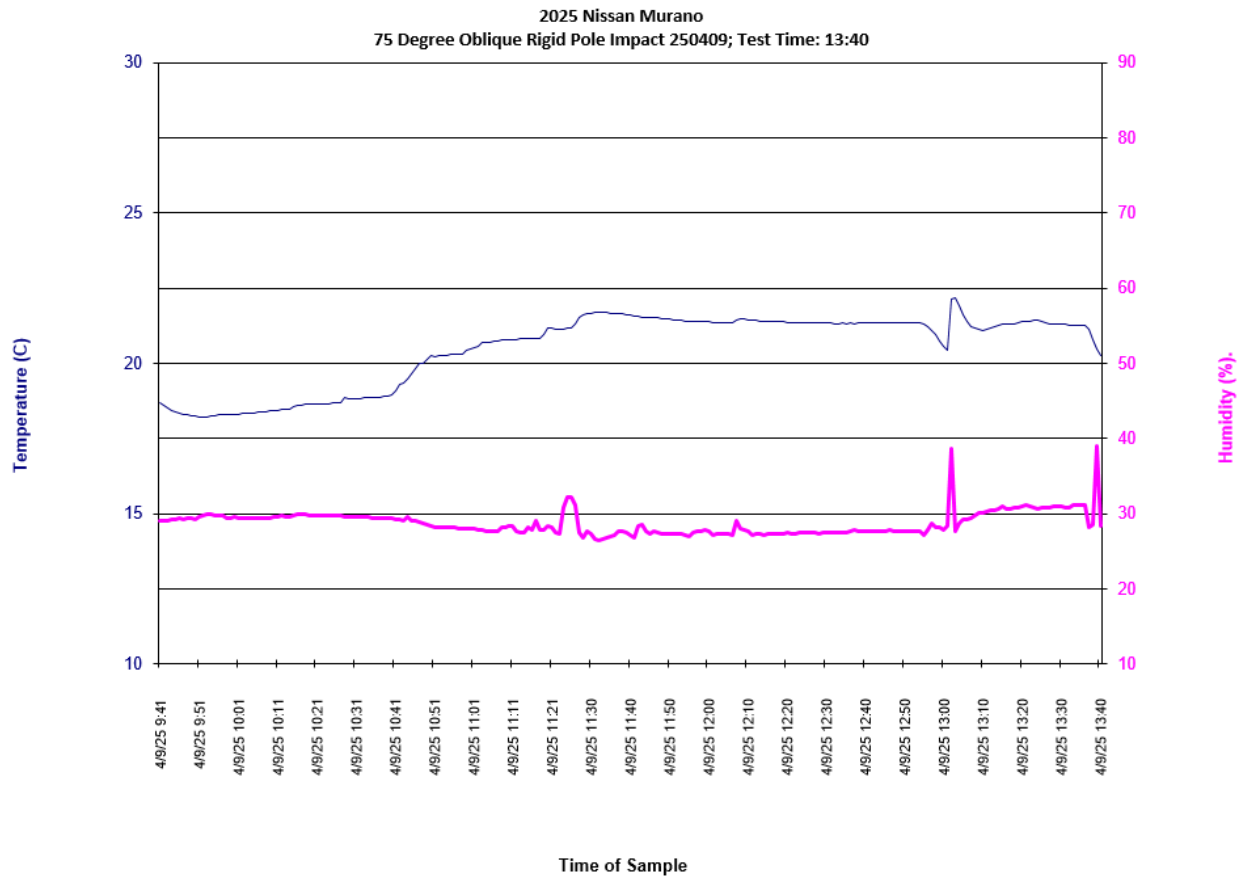
Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0 to 90	0	0	0	0
90 to 180	0	0	0	0
180 to 270	0	0	0	0
270 to 360	0	0	0	0

ROLLOVER SOLVENT SPILLAGE LOCATION TABLE

Test Phase	Spillage Location
0 to 90	None
90 to 180	None
180 to 270	None
270 to 360	None

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

Test Vehicle: 2025 Nissan Murano NHTSA No.: M20255205
Test Program: SPNCAP Side Impact Test Date: 4/9/2025



APPENDIX A
PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

No.	Description	Page
1	As Delivered Right Front $\frac{3}{4}$ View of Test Vehicle	A-4
2	As Delivered Left Rear $\frac{3}{4}$ View of Test Vehicle	A-4
3	Pre-Test Frontal View of Test Vehicle	A-5
4	Post-Test Frontal View of Test Vehicle	A-5
5	Pre-Test Left Front $\frac{3}{4}$ View of Test Vehicle	A-6
6	Post-Test Left Front $\frac{3}{4}$ View of Test Vehicle	A-6
7	Pre-Test Left Side View of Test Vehicle	A-7
8	Post-Test Left Side View of Test Vehicle	A-7
9	Pre-Test Left Rear $\frac{3}{4}$ View of Test Vehicle	A-8
10	Post-Test Left Rear $\frac{3}{4}$ View of Test Vehicle	A-8
11	Pre-Test Rear View of Test Vehicle	A-9
12	Post-Test Rear View of Test Vehicle	A-9
13	Pre-Test Right Side View of Test Vehicle	A-10
14	Post-Test Right Side View of Test Vehicle	A-10
15	Pre-Test Overhead View of Test Area	A-11
16	Post-Test Overhead View of Test Area	A-11
17	Pre-Test Left Side View of Pole Positioned Against Side of Vehicle	A-12
18	Pre-Test Right Side View of Pole Positioned Against Side of Vehicle	A-12
19	Pre-Test Close-Up View of Impact Point Target	A-13
20	Post-Test Close-Up View of Impact Point Target Showing Impact Location	A-13
21	Pre-Test Front Close-Up View of Dummy Head and Chest	A-14
22	Post-Test Front Close-Up View of Dummy	A-14
23	Pre-Test Left Side View of Dummy Showing Belt and Chalking	A-15
24	Pre-Test Left Side View of Dummy Shoulder and Door Top View	A-16
25	Post-Test Left Side View of Dummy Shoulder and Door Top View	A-16
26	Pre-Test Front View of Seat Back Prior to Dummy Positioning	A-17
27	Pre-Test Front Close-Up View of Dummy Head and Shoulders in Relation to Head Restraint	A-17
28	Pre-Test Front View of Seat Pan Prior to Dummy Positioning	A-18
29	Pre-Test Overhead View of Dummy Thighs on Seat Pan	A-18
30	Pre-Test Left Side View of Dummy's Neck Showing Position of Adjustable Neck Bracket	A-19
31	Pre-Test Left Side View of Dummy's Head Showing Dummy's Head is Level	A-19
32	Pre-Test Placement of Dummy's Feet	A-20
33	Pre-Test View of Belt Anchorage for Dummy	A-20
34	Pre-Test Left Side View of Steering Wheel	A-21
35	Pre-Test View of Disengaged Parking Brake	A-21

TABLE OF PHOTOGRAPHS (CONTINUED)

No.	Description	Page
36	Pre-Test View of Parking Brake	A-22
37	Pre-Test Close-Up Left Side View of Driver Seat Track	A-22
38	Pre-Test Close-Up Left Side View of Driver Seat Back	A-23
39	Pre-Test Close-Up View of Driver Seat Back or Head Restraint	A-23
40	Pre-Test Dummy and Door Clearance View	A-24
41	Post-Test Dummy and Door Clearance View	A-24
42	Pre-Test Right Side View of Dummy and Front Seat of Occupant Compartment	A-25
43	Post-Test Right Side View of Dummy and Front Seat of Occupant Compartment	A-25
44	Pre-Test Inner Driver Door Panel View	A-26
45	Post-Test Inner Driver Door Panel View Showing Dummy Contact Location	A-26
46	Post-Test Dummy Close-Up Head Contact with Vehicle Interior View	A-27
47	Post-Test Dummy Close-Up Head Contact with Side Airbag View	A-28
48	Post-Test Dummy Close-Up Torso Contact with Vehicle Interior View	A-28
49	Post-Test Dummy Close-Up Torso Contact with Side Airbag View	A-29
50	Post-Test Dummy Close-Up Pelvis Contact with Vehicle Interior View	A-29
51	Post-Test Dummy Close-Up Pelvis Contact with Side Airbag View	A-30
52	Post-Test Dummy Close-Up Knee Contact with Vehicle Interior View	A-30
53	Post-Test Right Side View of Dummy and Rear Seat of Occupant Compartment	A-31
54	Post-Test Inner Rear Passenger Torso Air Bag Deployment View	A-31
55	Pre-Test View of Fuel Filler Cap or Fuel Filler Neck	A-32
56	Post-Test View of Fuel Filler Cap or Fuel Filler Neck	A-32
57	Close-Up View of Vehicle's Certification Label	A-33
58	Close-Up View of Vehicle's Tire Information Placard or Label	A-33
59	Pre-Test Pole Barrier Front View	A-34
60	Post-Test Pole Barrier Front View	A-34
61	Pre-Test Pole Barrier Side View	A-35
62	Post-Test Pole Barrier Side View	A-35
63	Pre-Test Ballast View	A-36
64	Post-Test Primary and Redundant Speed Trap Read-Out	A-36
65	FMVSS No. 301 Static Rollover 0 Degrees	A-37
66	FMVSS No. 301 Static Rollover 90 Degrees	A-37
67	FMVSS No. 301 Static Rollover 180 Degrees	A-38
68	FMVSS No. 301 Static Rollover 270 Degrees	A-38
69	FMVSS No. 301 Static Rollover 360 Degrees	A-39
70	Impact Event	A-39
71	Monroney Label	A-40
72	Head Restraint Use and Adjustment Information from Vehicle Owner's Manual	A-40
73	Post-Test View of Shattered Vehicle Inner Door Panel	A-41



No. 001 As Delivered Right Front $\frac{3}{4}$ View of Test Vehicle



No. 002 As Delivered Left Rear $\frac{3}{4}$ View of Test Vehicle



No. 003 Pre-Test Frontal View of Test Vehicle



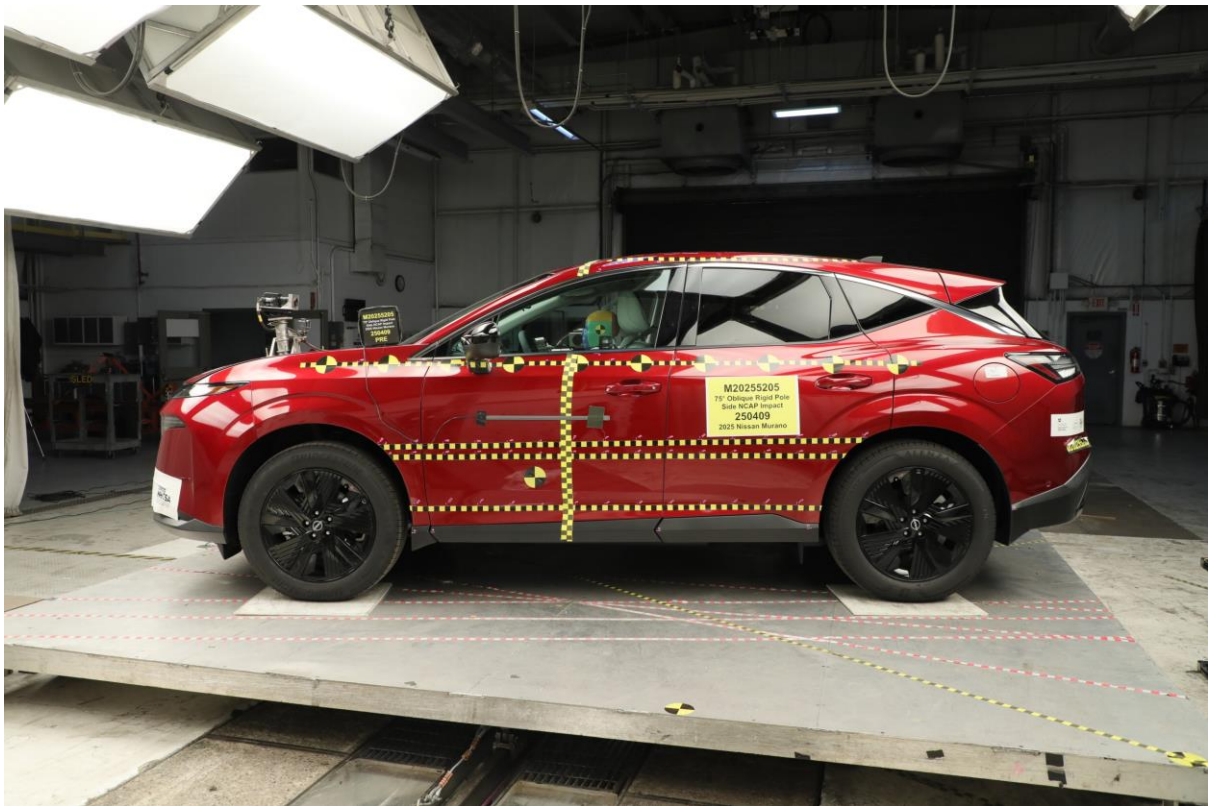
No. 004 Post-Test Frontal View of Test Vehicle



No. 005 Pre-Test Left Front $\frac{3}{4}$ View of Test Vehicle



No. 006 Post-Test Left Front $\frac{3}{4}$ View of Test Vehicle



No. 007 Pre-Test Left Side View of Test Vehicle



No. 008 Post-Test Left Side View of Test Vehicle



No. 009 Pre-Test Left Rear $\frac{3}{4}$ View of Test Vehicle



No. 010 Post-Test Left Rear $\frac{3}{4}$ View of Test Vehicle



No. 011 Pre-Test Rear View of Test Vehicle



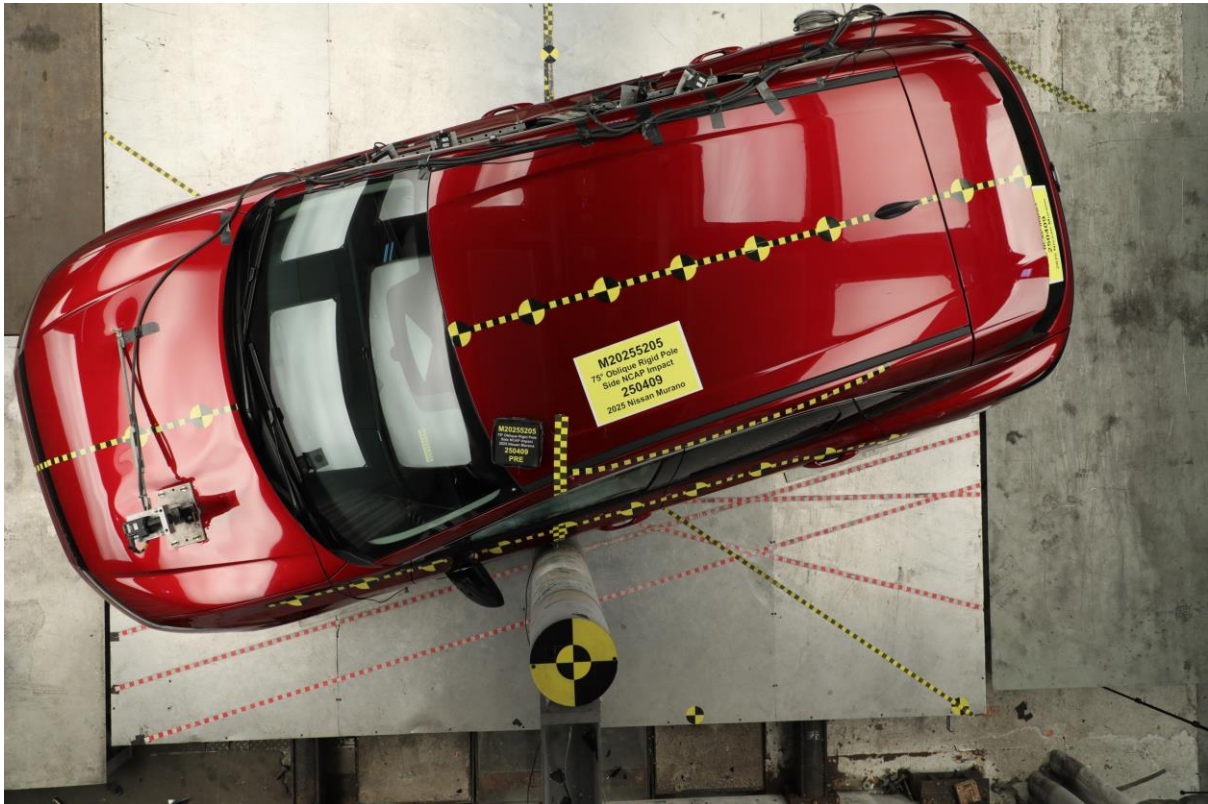
No. 012 Post-Test Rear View of Test Vehicle



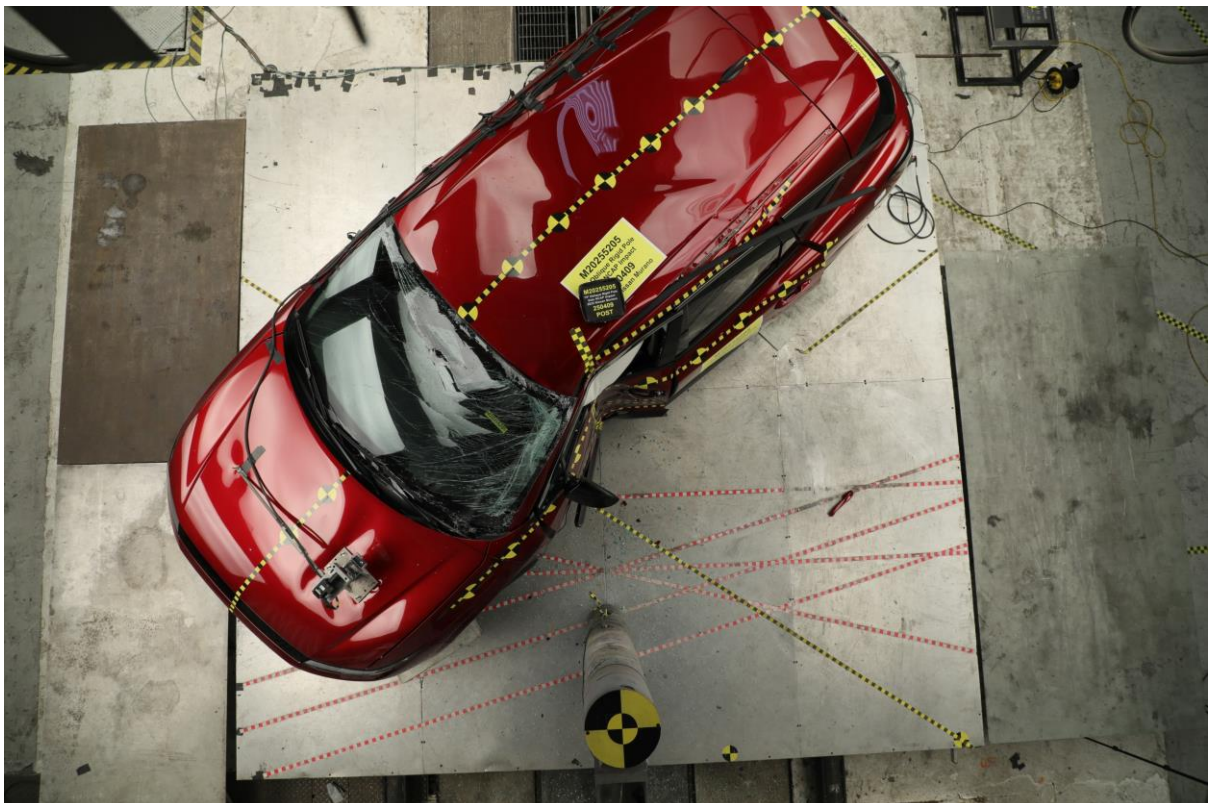
No. 013 Pre-Test Right Side View of Test Vehicle



No. 014 Post-Test Right Side View of Test Vehicle



No. 015 Pre-Test Overhead View of Test Area



No. 016 Post-Test Overhead View of Test Area



No. 017 Pre-Test Left Side View of Pole Positioned Against Side of Vehicle



No. 018 Pre-Test Right Side View of Pole Positioned Against Side of Vehicle



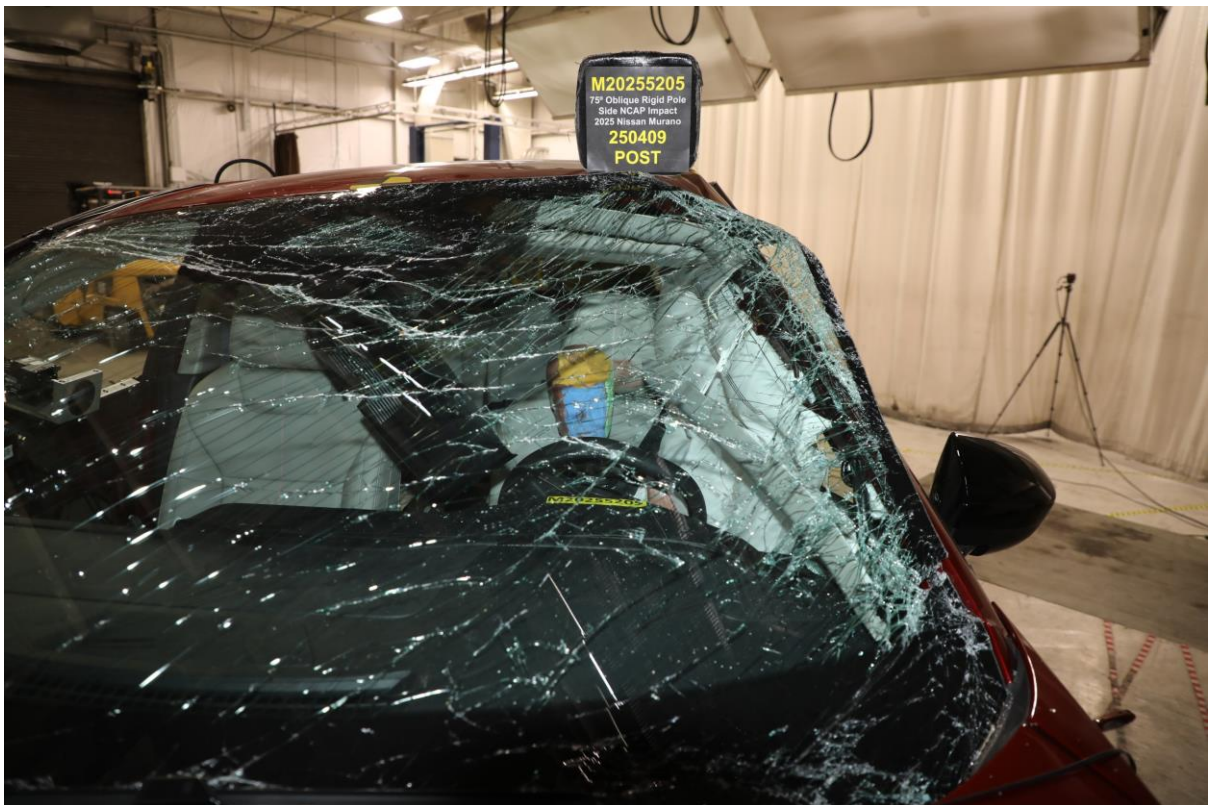
No. 019 Pre-Test Close-Up View of Impact Point Target



No. 020 Post-Test Close-Up View of Impact Point Target Showing Impact Location



No. 021 Pre-Test Front Close-Up View of Dummy Head and Chest



No. 022 Post-Test Front Close-Up View of Dummy



No. 023 Pre-Test Left Side View of Dummy Showing Belt and Chalking

Intentionally Left Blank



No. 024 Pre-Test Left Side View of Dummy Shoulder and Door Top View



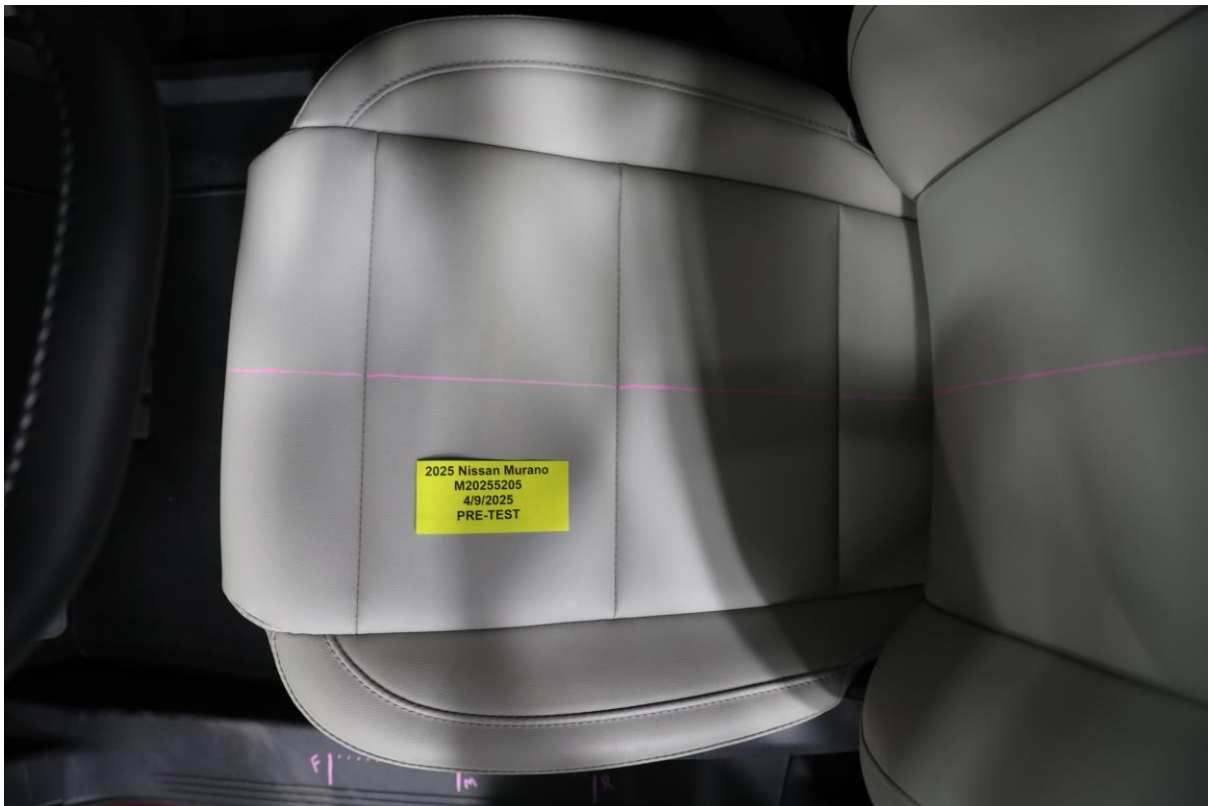
No. 025 Post-Test Left Side View of Dummy Shoulder and Door Top View



No. 026 Pre-Test Front View of Seat Back Prior to Dummy Positioning



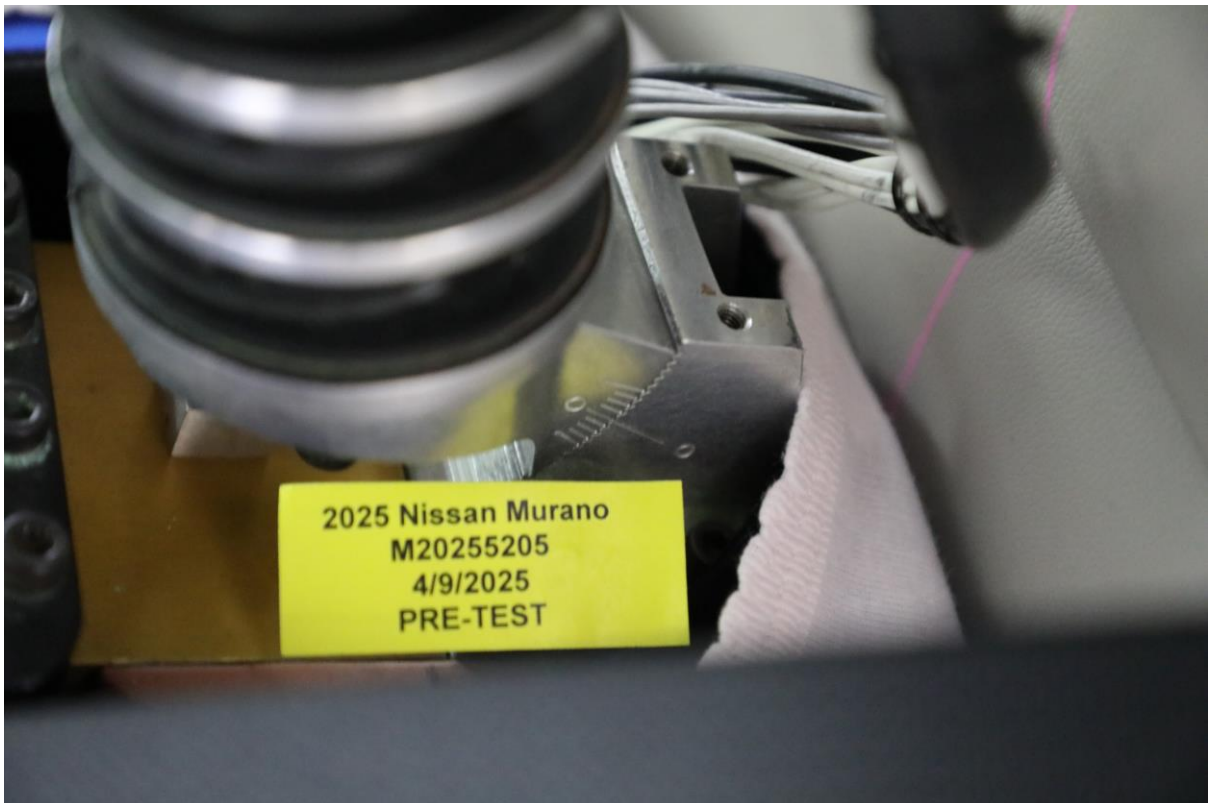
No. 027 Pre-Test Front Close-Up View of Dummy Head and Shoulders in Relation to Head Restraint



No. 028 Pre-Test Front View of Seat Pan Prior to Dummy Positioning



No. 029 Pre-Test Overhead View of Dummy Thighs on Seat Pan



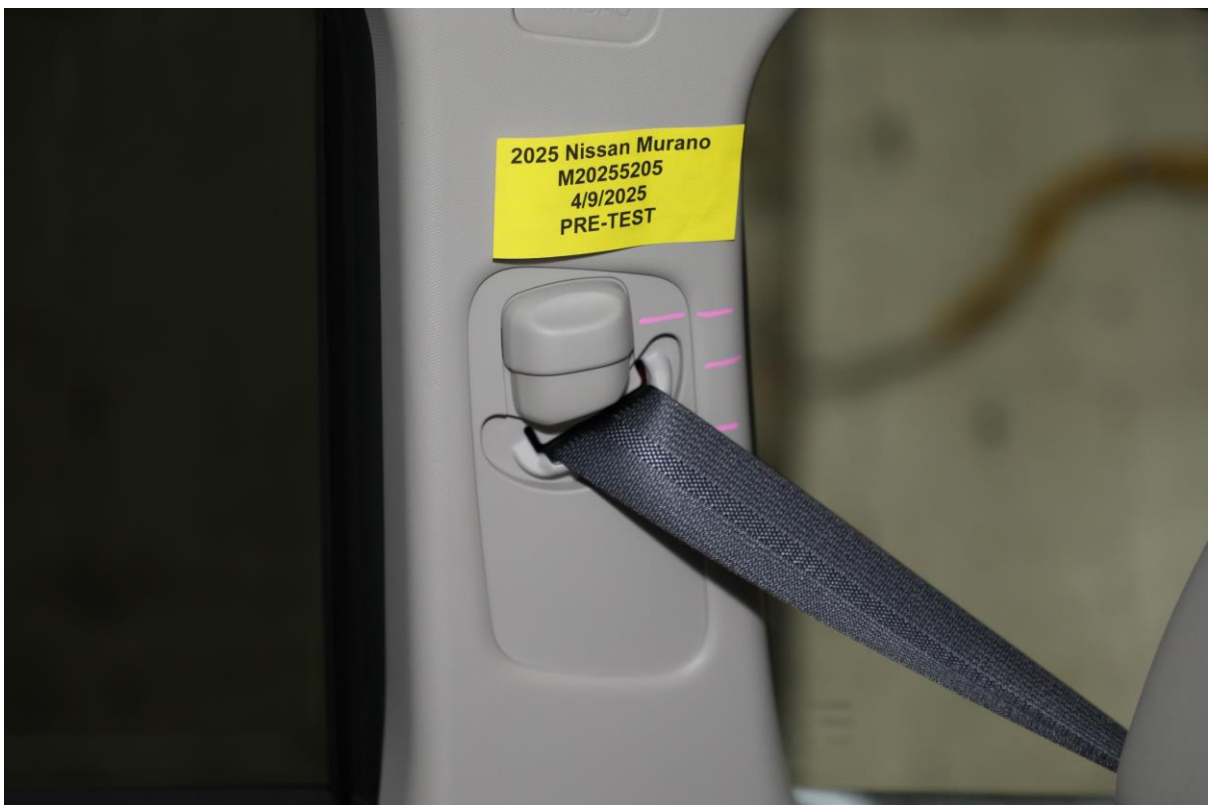
No. 030 Pre-Test Left Side View of Dummy Neck Showing Position of Adjustable Neck Bracket



No. 031 Pre-Test Left Side View of Dummy Head Showing Dummy Head is Level



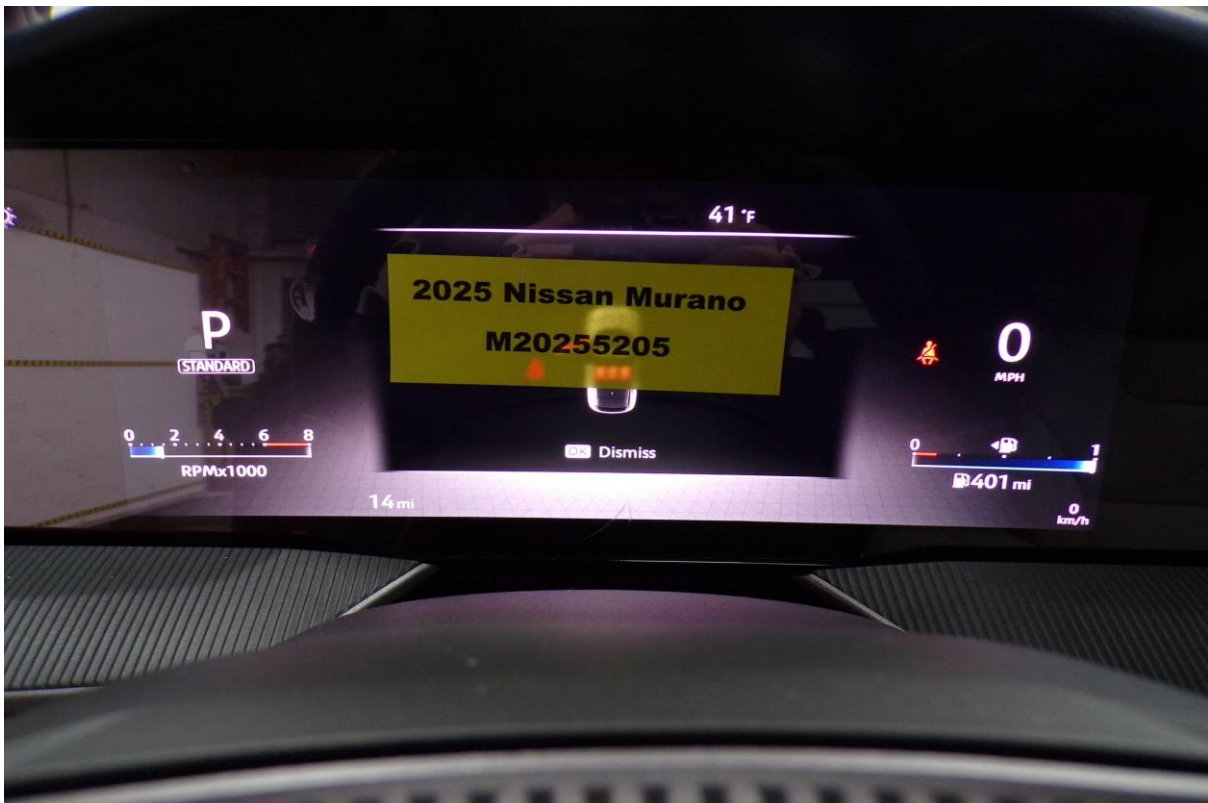
No. 032 Pre-Test Placement of Dummy Feet



No. 033 Pre-Test View of Belt Anchorage for Dummy



No. 034 Pre-Test Left Side View of Steering Wheel



No. 035 Pre-Test View of Disengaged Parking Brake



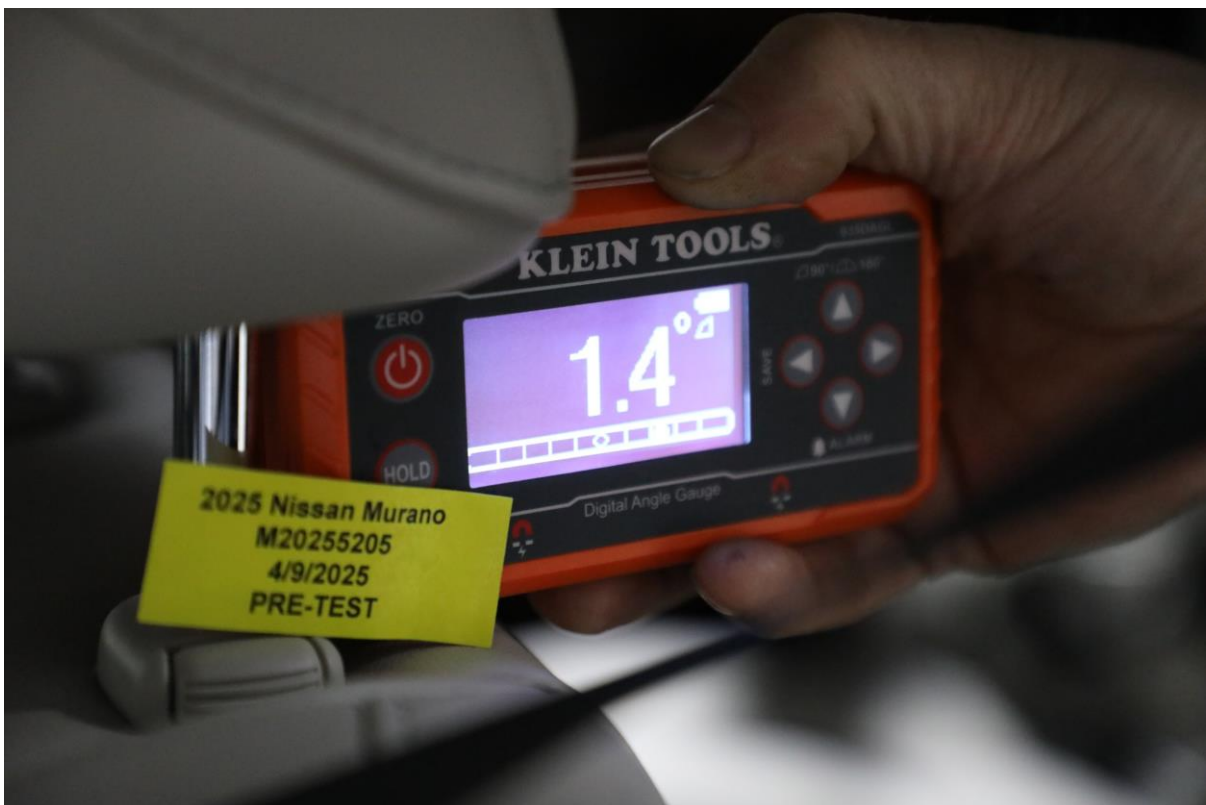
No. 036 Pre-Test View of Parking Brake



No. 037 Pre-Test Close-Up Left Side View of Driver Seat Track



No. 038 Pre-Test Close-Up Left Side View of Driver Seat Back



No. 039 Pre-Test Close-Up View of Driver Seat Back or Head Restraint



No. 040 Pre-Test Dummy and Door Clearance View



No. 041 Post-Test Dummy and Door Clearance View



No. 042 Pre-Test Right Side View of Dummy and Front Seat of Occupant Compartment



No. 043 Post-Test Right Side View of Dummy and Front Seat of Occupant Compartment



No. 044 Pre-Test Inner Door Panel View



No. 045 Post-Test Inner Door Panel View Showing Dummy Contact Location



No. 046 Post-Test Dummy Close-Up Head Contact with Vehicle Interior View

Intentionally Left Blank



No. 047 Post-Test Dummy Close-Up Head Contact with Side Airbag View



No. 048 Post-Test Dummy Close-Up Torso Contact with Vehicle Interior View



No. 049 Post-Test Dummy Close-Up Torso Contact with Side Airbag View



No. 050 Post-Test Dummy Close-Up Pelvis Contact with Vehicle Interior View



No. 051 Post-Test Dummy Close-Up Pelvis Contact with Side Airbag View



No. 052 Post-Test Dummy Close-Up Knee Contact with Vehicle Interior View



No. 053 Post-Test Right Side View of Dummy and Rear Seat of Occupant Compartment



No. 054 Post-Test Inner Rear Passenger Torso Air Bag Deployment View



No. 055 Pre-Test View of Fuel Filler Cap or Fuel Filler Neck



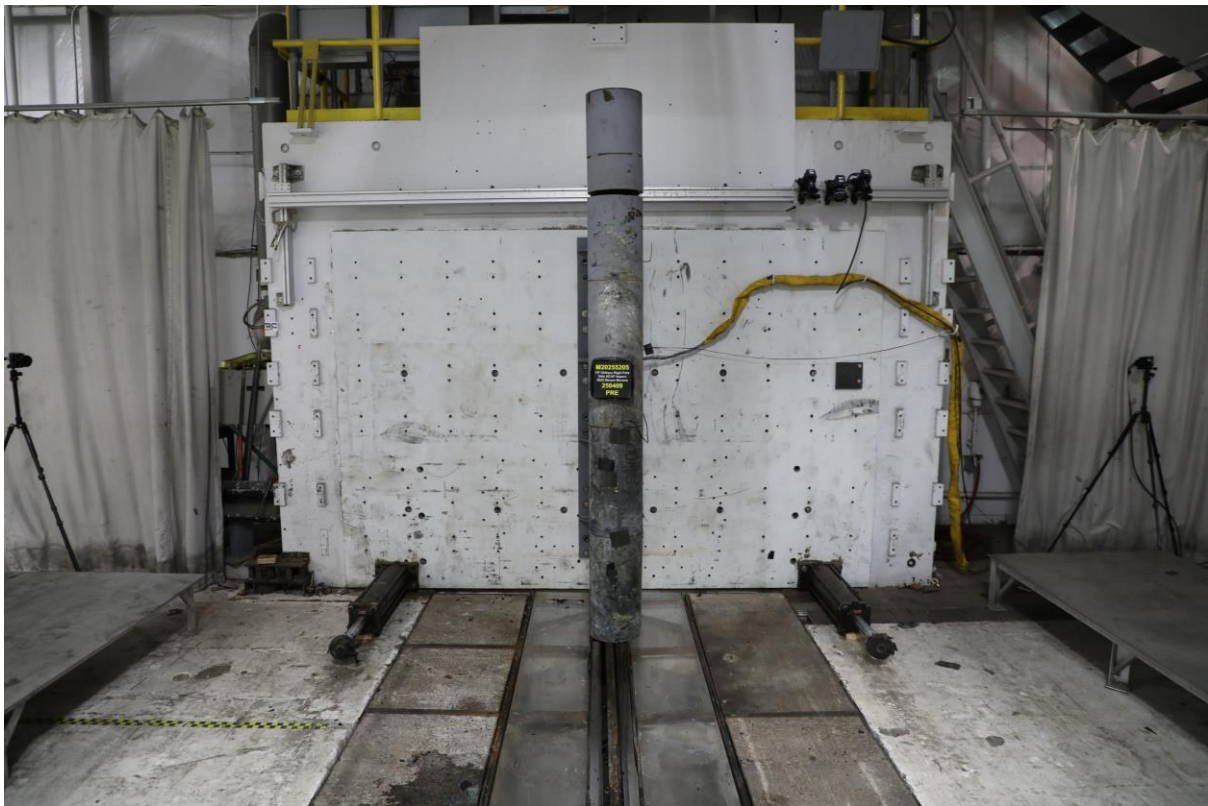
No. 056 Post-Test View of Fuel Filler Cap or Fuel Filler Neck



No. 057 Close-Up View of Vehicle Certification Label



No. 058 Close-Up View of Vehicle Tire Information Placard or Label



No. 059 Pre-Test Pole Barrier Front View



No. 060 Post-Test Pole Barrier Front View



No. 061 Pre-Test Pole Barrier Side View



No. 062 Post-Test Pole Barrier Side View



No. 063 Pre-Test Ballast View



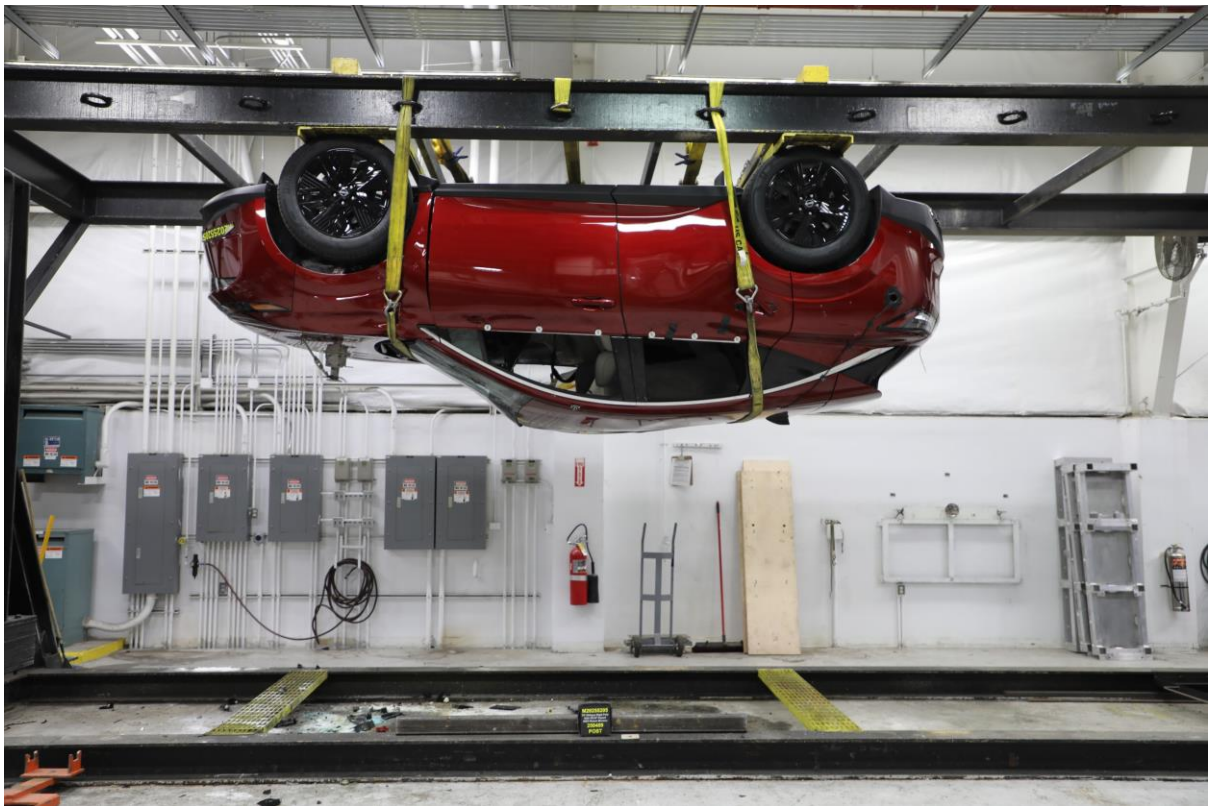
No. 064 Post-Test Primary and Redundant Speed Trap Read Out



No. 065 FMVSS No. 301 Static Rollover 0 Degrees



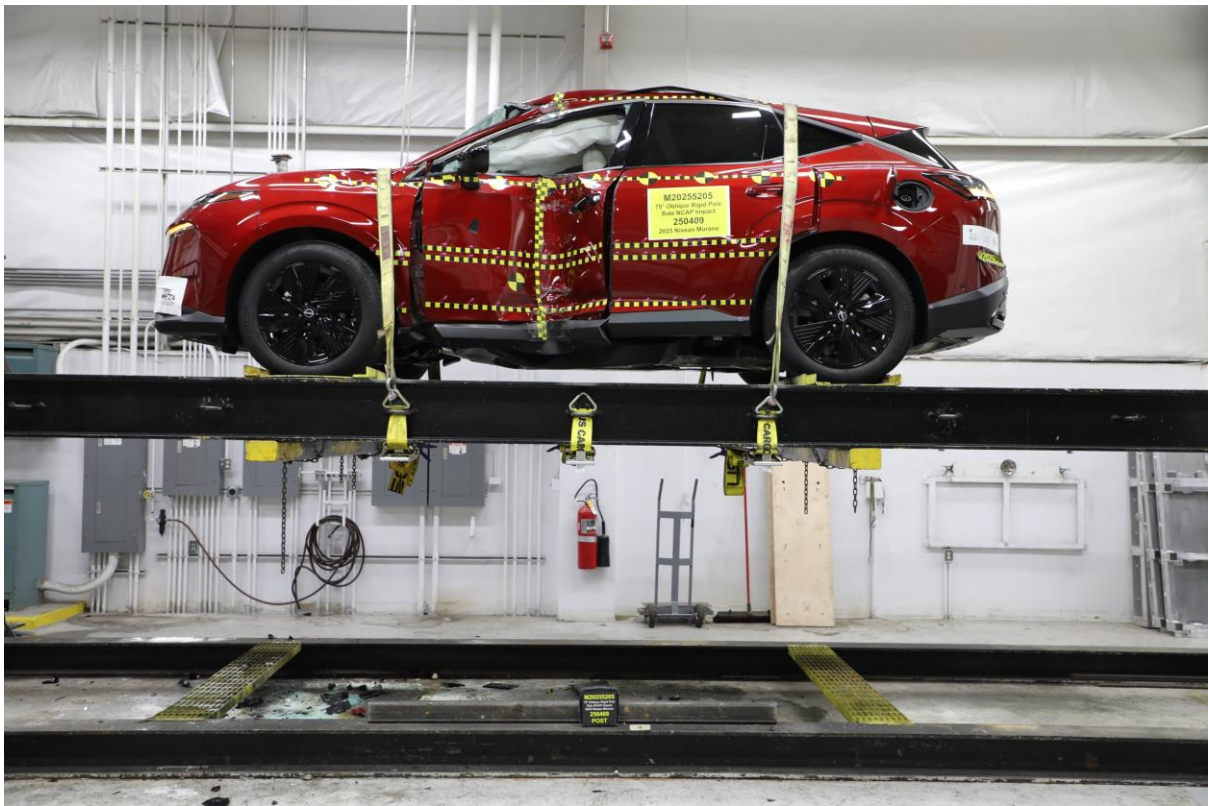
No. 066 FMVSS No. 301 Static Rollover 90 Degrees



No. 067 FMVSS No. 301 Static Rollover 180 Degrees



No. 068 FMVSS No. 301 Static Rollover 270 Degrees



No. 069 FMVSS No. 301 Static Rollover 360 Degrees



No. 070 Impact Event

Nissan
Maintenance
Care

2025 NISSAN MURANO
SV FWD

Scan QR code for general model information & options

ENERGETIC ELEGANCE

Standard Equipment Included at No Extra Charge

NISSAN MAINTENANCE CARE
3 Scheduled Oil Changes incl. within 2 yrs/24,000 miles (whichever occurs first)+

MECHANICAL & PERFORMANCE
2.5L DOHC 16-valve Turbocharged Engine
241 hp, 260 lb-ft torque
1-Speed Automatic Transmission
Front and Rear Disc Brakes
Ride Mode Selector

SAFETY & SECURITY
Nissan Advanced Air Bag System
Seat Anchors and Tethers for Children (LATCH)
Brake Assist
RearView Monitor
Automatic Emergency Braking with Pedestrian Detection
Blind Spot Warning
Rear Cross Traffic Alert
Lane Departure Warning
High Beam Assist
Rear Automatic Braking
Blind Spot Intervention®
Intelligent Forward Collision Warning
Intelligent Lane Intervention

COMFORT & CONVENIENCE
Dual-zone Automatic Temperature Control
Remote Engine Start System with Intelligent Climate Control***
Leatherette-appointed Seats
Heated Front Seats
TailorFit™ Leatherette-wrapped Steering Wheel
Wireless Charging Pad
Power Liftgate
Rear Door Alert
ProPILOT Assist
Steering Assist
Intelligent Cruise Control
Traffic Sign Recognition
Tire Repair Kit

AUDIO & INFOTAINMENT
NissanConnect®
Wireless Apple CarPlay®+
Wireless Android Auto™+
12.3" Color Touch-screen Display
12.3" Digital Dashboard

+See your Dealer for terms, conditions and limitations
+Optional Equipment Replaces Standard Where Applicable
+***Federal/State/Local Laws may apply. Review before using

Manufacturer's Suggested Retail Base Price: \$40,470.00

Options Included by Manufacturer

Splash Guards/Grained	255.00
Premium Paint	425.00
Carpeted Floor Mats and Cargo Mat, Seatback Protector, and Cargo Blocks	510.00

DESTINATION CHARGES 1,390.00

Total \$43,050.00

EPA DOT Fuel Economy and Environment

Fuel Economy

23 MPG
combined city highway
4.3 gallons per 100 miles

Small SUVs range from 14 to 118 MPG. The best vehicle rates 140 MPG.

You spend \$2,000 more in fuel costs over 5 years compared to the average new vehicle.

Annual fuel cost \$2,300

Fuel Economy & Greenhouse Gas Rating (tailpipe only) Smog Rating (tailpipe only)

1 5 10 Best
10 5 1 Best

This vehicle emits 387 grams CO₂ per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel also create emissions. Learn more at fuelconomy.gov

fueleconomy.gov
Calculate personalized estimates and compare vehicles

GOVERNMENT 5-STAR SAFETY RATINGS

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

Frontal Crash	Driver	Not Rated
	Passenger	Not Rated

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

Based on the risk of injury in a side impact.

Rollover Not Rated
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

Parts Content Information for Vehicles in this Carline:
U.S./CANADIAN PARTS CONTENT: 50%

NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS.

FOR THIS VEHICLE:
FINAL ASSEMBLY POINT: SMYRNA, TN, USA
COUNTRY OF ORIGIN: ENGINE: JAPAN
TRANSMISSION: US

This Vehicle qualifies for Nissan's **Security+Plus Extended Protection Plan**. The only service agreement backed by Nissan Extended Services North America. Ask your dealer for details, or call 1-800-NISSAN-1 for more information.

Dealer: DDPRE NISSAN, 1377 KETTERING LOOP, ONTARIO, CA 91761

VIN: 5N1AZ2BL45C103517
MDL: 23115-103517 NBL-K
OPT: C-00892610392

Transport Method: TRUCK

This vehicle is equipped with bumpers that can withstand an impact of 2.5 miles per hour with no damage to the vehicle's body and safety systems, although the bumper and related components may sustain damage. The bumper system on this vehicle conforms to the current federal bumper standard of 2.5 miles per hour.

*Does not include dealer installed options and accessories, local taxes or license fees. This label has been applied pursuant to federal law. Do not remove prior to delivery to the ultimate purchaser.

No. 071 Monroney Label

LRS2300

LRS2299

LRS2302

ADJUSTABLE HEAD RESTRAINT/HEADREST COMPONENTS

1. Removable head restraint/headrest
2. Multiple notches
3. Lock knob
4. Stalks

NON-ADJUSTABLE HEAD RESTRAINT/HEADREST COMPONENTS

1. Removable head restraint/headrest
2. Single notch
3. Lock knob
4. Stalks

REMOVE

Use the following procedure to remove the head restraint/headrest:

1. Pull the head restraint/headrest up to the highest position.
2. Push and hold the lock knob.
3. Remove the head restraint/headrest from the seat.

18 **Safety-Seats, seat belts and supplemental restraint system**

No. 072 Head Restraint Use and Adjustment Information from Vehicle Owner Manual

PHOTO NOT APPLICABLE

No. 073 Post-Test View of Shattered Vehicle Inner Door Panel

APPENDIX B
VEHICLE AND DUMMY RESPONSE DATA PLOTS

TABLE OF DATA PLOTS

No.	Description	Page
1	Driver Head Acceleration (X) vs. Time	B-4
2	Driver Head Acceleration (Y) vs. Time	B-4
3	Driver Head Acceleration (Z) vs. Time	B-4
4	Driver Head Acceleration Resultant vs. Time	B-4
5	Driver Lower Spine T12 Acceleration (X) vs. Time	B-5
6	Driver Lower Spine T12 Acceleration (Y) vs. Time	B-5
7	Driver Lower Spine T12 Acceleration (Z) vs. Time	B-5
8	Driver Lower Spine T12 Acceleration Resultant vs. Time	B-5
9	Driver Iliac Wing Force on Impact Side (Y) vs. Time	B-6
10	Driver Acetabulum Force on Impact Side (Y) vs. Time	B-6
11	Driver Total Pelvis Force on Impact Side (Y) vs. Time	B-6

The following additional data for this test can be obtained from the Research and Development section of the NHTSA website. The website can be found at: www.nhtsa.gov.

Additional Driver Dummy Instrumentation Data

Driver Head Acceleration (X) Redundant
Driver Head Acceleration (Y) Redundant
Driver Head Acceleration (Z) Redundant
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)
Driver Head Angular Velocity (X)
Driver Head Angular Velocity (Y)
Driver Head Angular Velocity (Z)

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

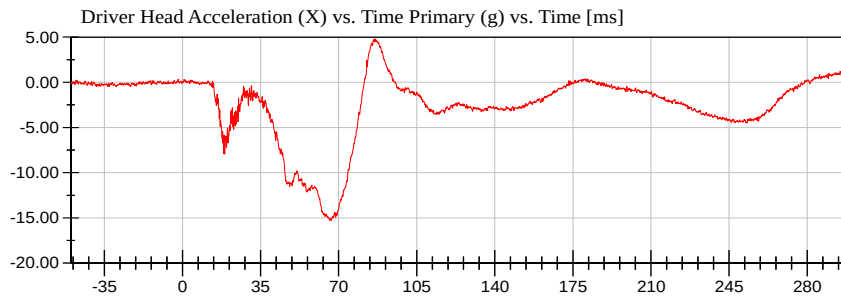
NHTSA

Test Lab: CTF

Test Number: 250409 (M20255205)

Position #1 SID IIs Dummy (297)

Test Date: 04/9/2025



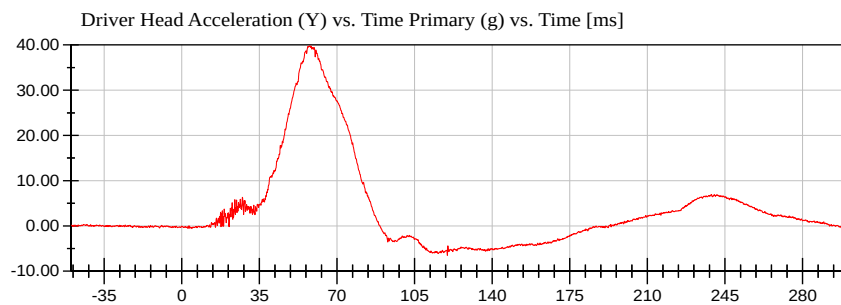
<Max>

4.81 g at 86.25 ms

<Min>

-15.30 g at 66.60 ms

CFC_1000



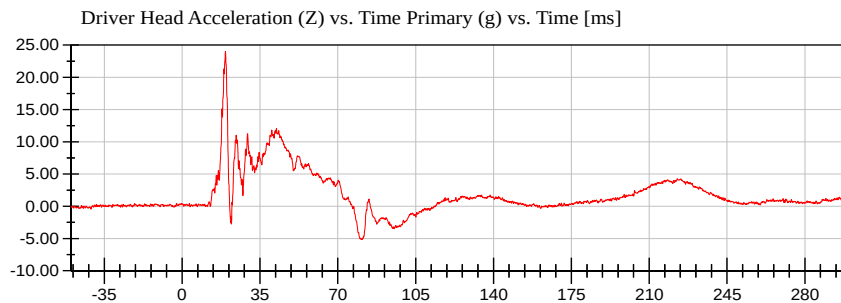
<Max>

39.81 g at 57.80 ms

<Min>

-6.54 g at 119.80 ms

CFC_1000



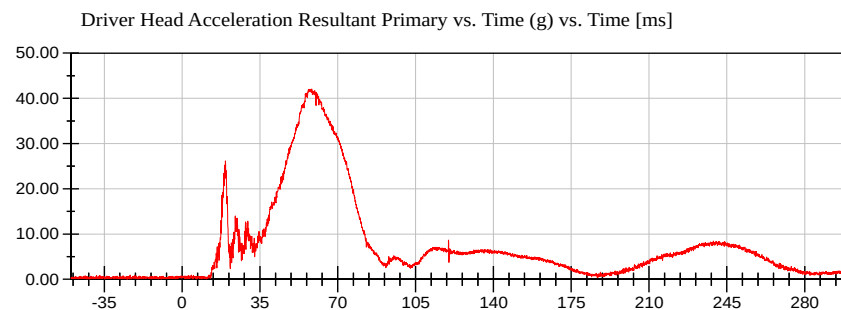
<Max>

24.02 g at 19.50 ms

<Min>

-5.16 g at 80.45 ms

CFC_1000



<Max>

42.08 g at 58.30 ms

<Min>

0.07 g at -43.00 ms

CFC_1000



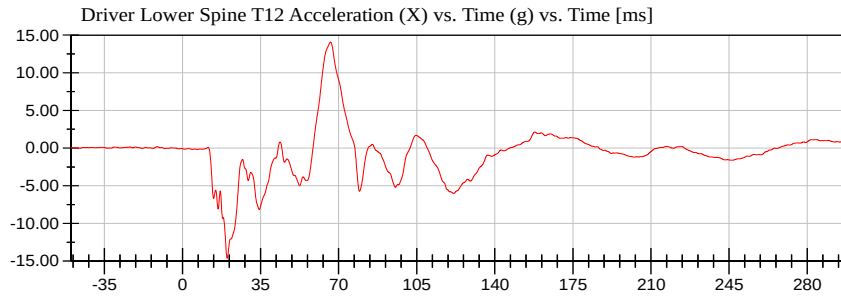
NHTSA

Test Lab: CTF

Test Number: 250409 (M20255205)

Position #1 SID IIs Dummy (297)

Test Date: 04/9/2025



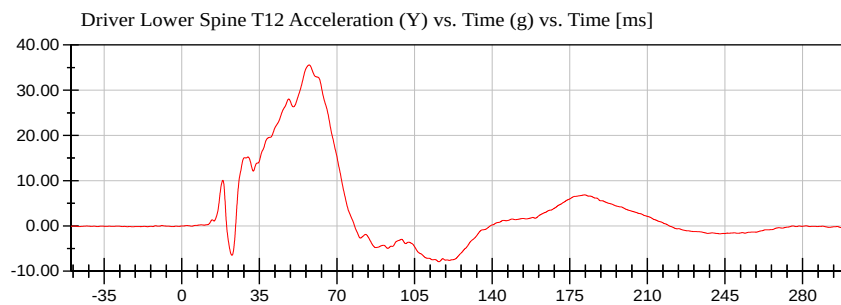
<Max>

14.07 g at 66.40 ms

<Min>

-14.62 g at 20.05 ms

CFC_180



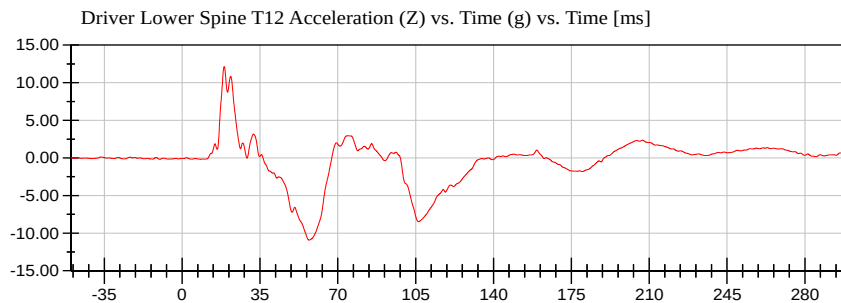
<Max>

35.59 g at 57.45 ms

<Min>

-7.92 g at 116.00 ms

CFC_180



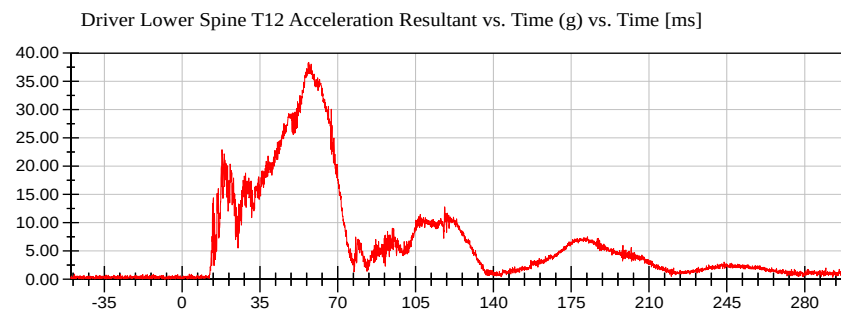
<Max>

12.14 g at 18.90 ms

<Min>

-10.93 g at 57.10 ms

CFC_180



<Max>

38.35 g at 56.95 ms

<Min>

0.07 g at -44.25 ms

CFC 180



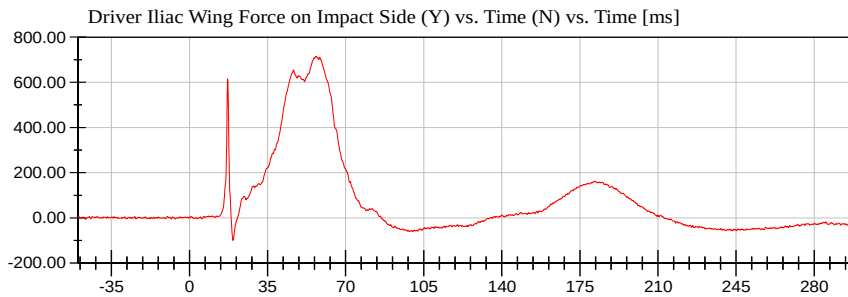
NHTSA

Test Lab: CTF

Test Number: 250409 (M20255205)

Position #1 SID IIs Dummy (297)

Test Date: 04/9/2025



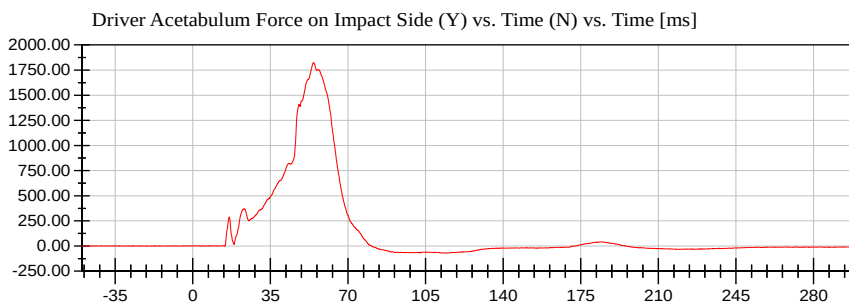
<Max>

714.78 N at 56.70 ms

<Min>

-100.09 N at 19.45 ms

CFC_600



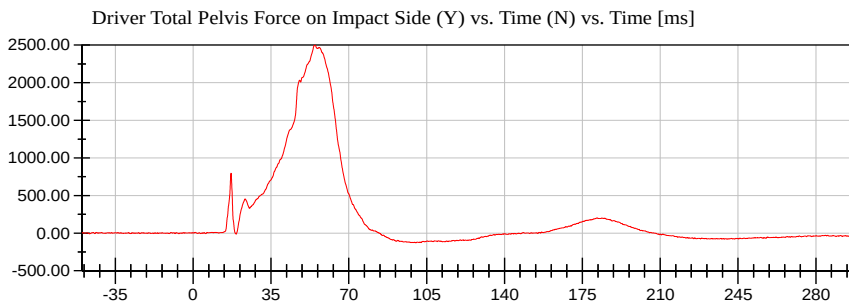
<Max>

1,824.04 N at 54.40 ms

<Min>

-71.34 N at 114.60 ms

CFC_600



<Max>

2,499.13 N at 54.80 ms

<Min>

-127.75 N at 100.15 ms

CFC_600



APPENDIX C
DUMMY CONFIGURATION AND PERFORMANCE VERIFICATION DATA

TABLE OF CALIBRATION MEASUREMENTS AND PLOTS
SID-IIs (Driver) Dummy
Description

Table 1. External Measurements

Table 2. Head Drop Test

Resultant Head Acceleration (G's) vs. Time (ms)
Head (X) Acceleration (G's) vs. Time (ms)
Head (Y) Acceleration (G's) vs. Time (ms)
Head (Z) Acceleration (G's) vs. Time (ms)

Table 3. Lateral Neck Pendulum Test

Pendulum Velocity (m/s) vs. Time (ms)
Flexion Angle (°) vs. Time (ms)
Moment About Occipital Condyle (Nm) vs. Time (ms)

Table 4. Shoulder Impact Test

Impactor Acceleration (G's) vs. Time (ms)
Shoulder Displacement (mm) vs. Time (ms)
Upper Spine Acceleration (G's) vs. Time (ms)

Table 5. Thorax (With Arm) Impact Test

Impactor Acceleration (G's) vs. Time (ms)
Shoulder Displacement (mm) vs. Time (ms)
Upper Rib Displacement (mm) vs. Time (ms)
Middle Rib Displacement (mm) vs. Time (ms)
Lower Rib Displacement (mm) vs. Time (ms)
Upper Spine Acceleration (G's) vs. Time (ms)
Lower Spine Acceleration (G's) vs. Time (ms)

Table 6. Thorax (Without Arm) Impact Test

Impactor Acceleration (G's) vs. Time (ms)
Upper Rib Displacement (mm) vs. Time (ms)
Middle Rib Displacement (mm) vs. Time (ms)
Lower Rib Displacement (mm) vs. Time (ms)
Upper Spine Acceleration (G's) vs. Time (ms)
Lower Spine Acceleration (G's) vs. Time (ms)

Table 7. Abdomen Impact Test

Impactor Acceleration (G's) vs. Time (ms)
Upper Abdominal Rib Displacement (mm) vs. Time (ms)
Lower Abdominal Rib Displacement (mm) vs. Time (ms)
Lower Spine Acceleration (G's) vs. Time (ms)

Table 8. Pelvis Plug Quasi-Static Test (Optional*)

Table 9. Pelvis Acetabulum Impact Test

Impactor Acceleration (G's) vs. Time (ms)
Pelvis (Y) Acceleration (G's) vs. Time (ms)
Acetabulum Force (N) vs. Time (ms)

Table 10. Pelvis Iliac Impact Test

Impactor Acceleration (G's) vs. Time (ms)
Pelvis (Y) Acceleration (G's) vs. Time (ms)
Iliac Force (N) vs. Time (ms)

Pre-Test Calibration Sheets
Driver S/N 297

Transportation Research Center Inc.
SIDIIs Dummy - Level D
External Dimensions
Serial No. 297 Calibration No. 74

Symbol	Description	Specification	Results	Pass
		mm	mm	
A	Sitting Height	772.0 - 788.0	780	Yes
B	Shoulder Pivot Height	437.0 - 453.0	450	Yes
C	H-Point Height	79.0 - 89.0	85	Yes
D	H-Point from Seat Back	141.0 - 151.0	147	Yes
E	Shoulder Pivot from Backline	97.0 - 107.0	102	Yes
F	Thigh Clearance	119.0 - 135.0	130	Yes
G	Head Breadth	140.0 - 148.0	147	Yes
H	Head Back from Backline	40.0 - 46.0	45	Yes
I	Head Depth	178.0 - 188.0	183	Yes
J	Head Circumference	541.0 - 551.0	544	Yes
K	Buttock to Knee Length	514.0 - 540.0	528	Yes
L	Popliteal Height	343.0 - 369.0	353	Yes
M	Knee Pivot to Floor Height	393.0 - 409.0	400	Yes
N	Buttock Popliteal Length	416.0 - 442.0	430	Yes
O	Chest Depth without Jacket	195.0 - 211.0	200	Yes
P	Foot Length (right)	216.0 - 232.0	223	Yes
P	Foot Length (left)	216.0 - 232.0	223	Yes
Q	Hip Breadth	313.0 - 323.0	319	Yes
R	Arm Length	249.0 - 259.0	254	Yes
S	Knee Joint to seat Back	478.0 - 493.0	485	Yes
V	Shoulder Width (only one arm installed)	341.0 - 357.0	347	Yes
W	Foot Width (right)	78.0 - 94.0	85	Yes
W	Foot Width (left)	78.0 - 94.0	85	Yes
Y	Chest Circumference with Jacket	851.0 - 881.0	877	Yes
Z	Waist Circumference	761.0 - 791.0	781	Yes

Revised 9/29/2005

Report Number: 297_S2F74

Page 29 of 31



Transportation Research Center Inc.

Left Lateral Head Drop

SID II: Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	18.9 - 25.6 °C	21.2 °C	Yes
Relative Humidity	10 - 70 %	42 %	Yes
Peak Head Resultant Acceleration	115 - 137 g	119.8 g	Yes
Peak Head Longitudinal Acceleration	(-15) - 15 g	4.6 g	Yes
Is Head Resultant Acceleration Curve Unimodal within 15% of Peak?	< 15 %	0.66 %	Yes

Test meets specifications.

Condition: Used

Comments:

Head Skin S/N: 1330

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 09:41:24 234

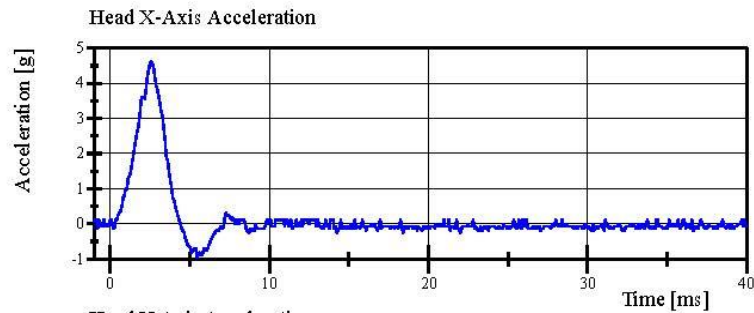


Transportation Research Center Inc.

Left Lateral Head Drop

SID IIs Serial No. 297 Certification No. 74-1

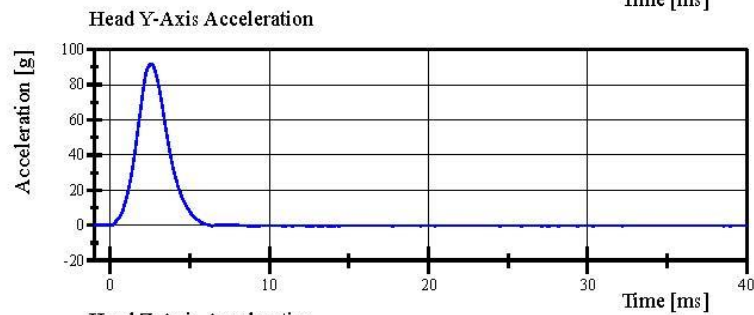
Test Date: 3/27/2025



Filter Class: CFC_1000

Max: 4.6 g at 2.6 ms

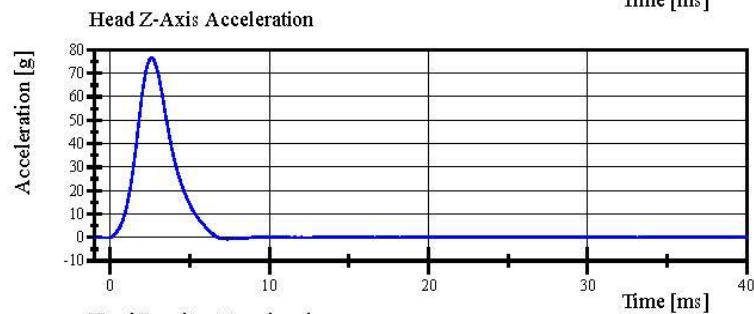
Min: -0.9 g at 5.4 ms



Filter Class: CFC_1000

Max: 91.9 g at 2.6 ms

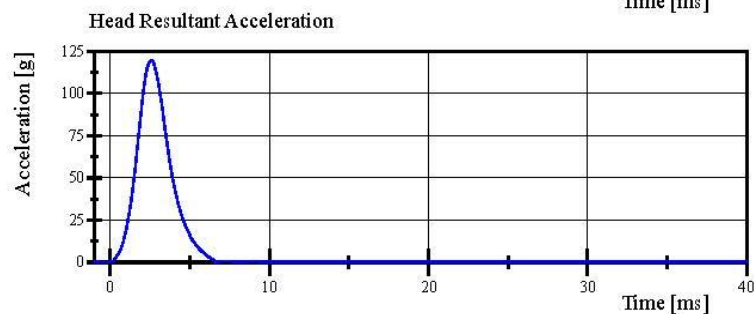
Min: -0.7 g at 9.1 ms



Filter Class: CFC_1000

Max: 76.7 g at 2.6 ms

Min: -0.7 g at 7.4 ms



Filter Class: CFC_1000

Max: 119.8 g at 2.6 ms

Min: 0.1 g at -0.2 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 09:42:39 234



Transportation Research Center Inc.

Left Lateral Neck

SID II: Serial No. 297 Certification No. 74-4

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.4 °C	Yes
Relative Humidity	10 - 70 %	41 %	Yes
Pendulum Velocity	(-5.51) - (-5.63) m/s	-5.620 m/s	Yes
Pendulum Integrated Velocity			
Change at 10 ms	2.20 - 2.80 m/s	2.483 m/s	Yes
Change at 15 ms	3.30 - 4.10 m/s	3.525 m/s	Yes
Change at 20 ms	4.40 - 5.40 m/s	4.675 m/s	Yes
Change at 25 ms	5.40 - 6.10 m/s	5.712 m/s	Yes
Change at 25 to 100 ms	5.50 - 6.20 m/s	5.855 m/s	Yes
Maximum Headform Flexion			
Peak	(-71) - (-81) deg	-81.0 deg	Yes
Time of Peak	50 - 70 ms	65.2 ms	Yes
Total Neck Occipital Condyles Moment	36 - 44 N·m	40.0 N·m	Yes
Decay to 0 N·m	102 - 126 ms	118.3 ms	Yes

Test meets specifications.

Condition: Used

Comments:

Neck S/N: 779

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 12:39:43 749

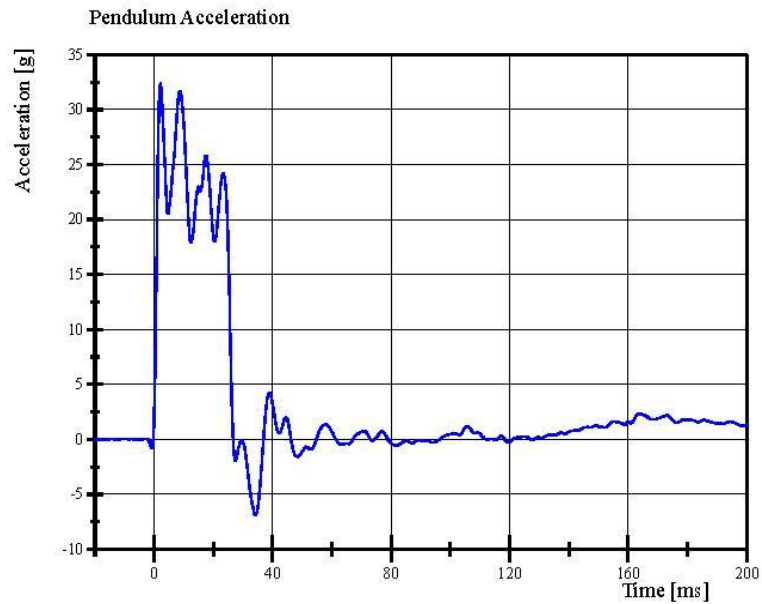


Transportation Research Center Inc.

Left Lateral Neck

SID IIa Serial No. 297 Certification No. 74-4

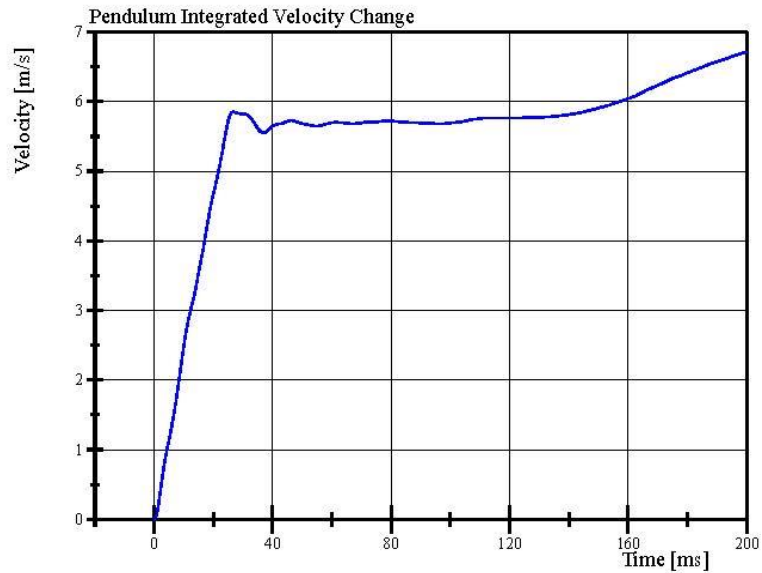
Test Date: 3/27/2025



Filter Class: CFC_180

Max: 32.3 g at 2.2 ms

Min: -6.9 g at 34.2 ms



Filter Class: CFC_180

Max: 6.7 m/s at 200.0 ms

Min: 0.0 m/s at 0.0 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 12:40:17 749

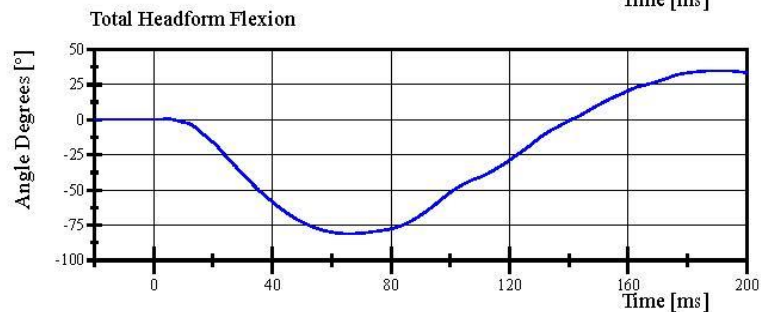
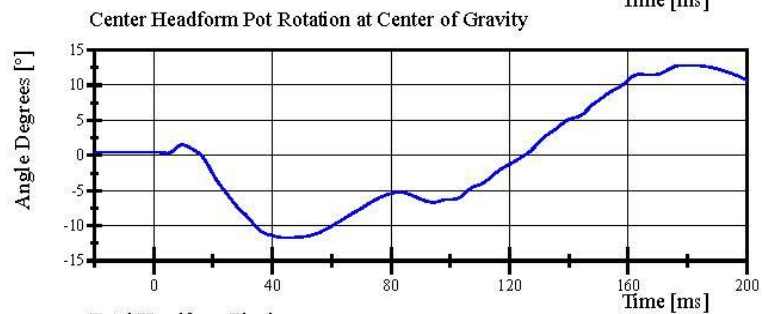
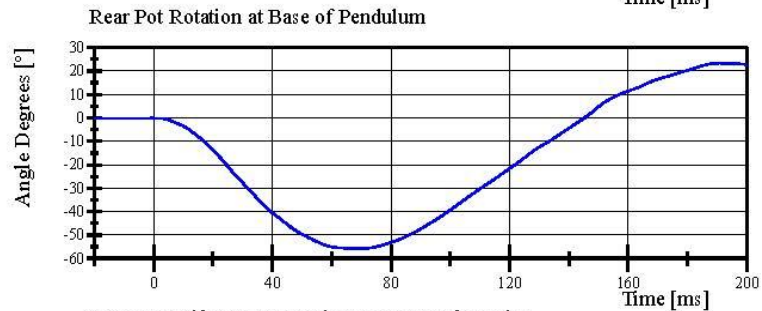
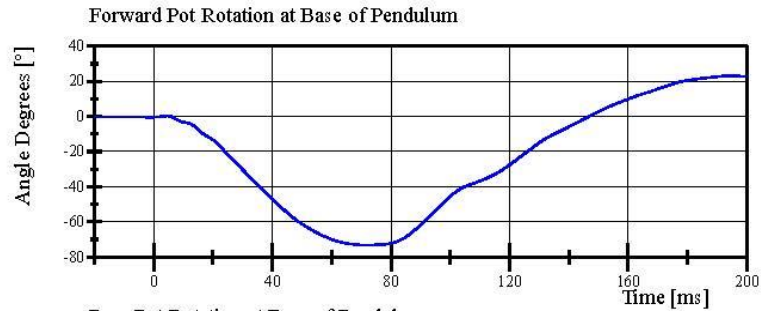


Transportation Research Center Inc.

Left Lateral Neck

SID IIS Serial No. 297 Certification No. 74-4

Test Date: 3/27/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 12:40:17 749

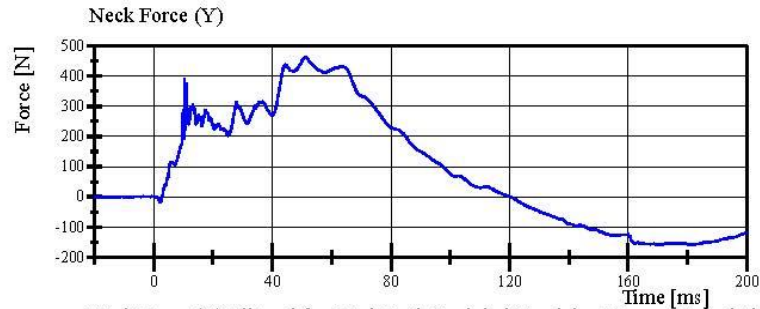


Transportation Research Center Inc.

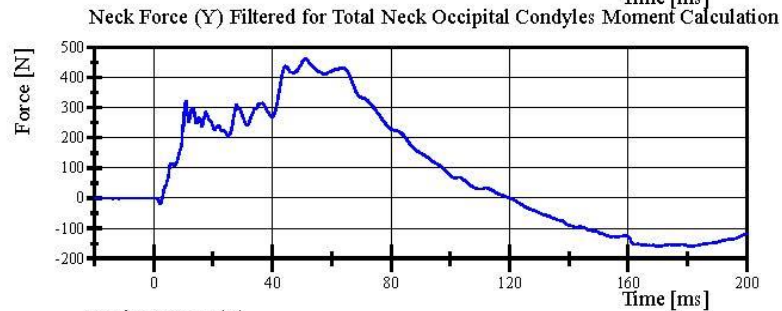
Left Lateral Neck

SID II_s Serial No. 297 Certification No. 74-4

Test Date: 3/27/2025



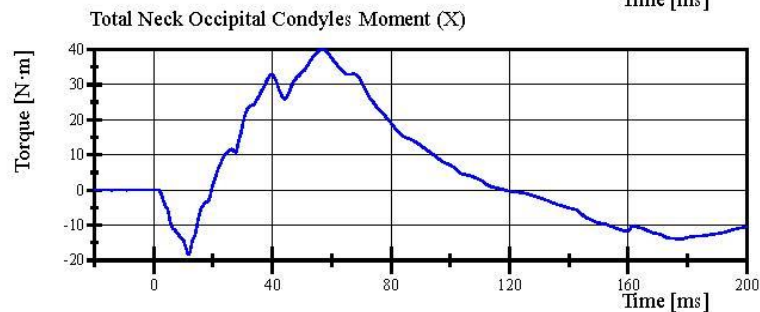
Filter Class: CFC_1000
Max: 463.0 N at 51.0 ms
Min: -160.4 N at 170.4 ms



Filter Class: CFC_600
Max: 462.9 N at 51.0 ms
Min: -159.9 N at 170.4 ms



Filter Class: CFC_600
Max: 32.6 Nm at 57.1 ms
Min: -22.9 Nm at 11.6 ms



Filter Class: Without_(Constan
Max: 40.0 N·m at 57.0 ms
Min: -18.3 N·m at 11.8 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 12:40:18 749



Transportation Research Center Inc.

Left Lateral Shoulder

SID II: Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	42 %	Yes
Impactor Velocity	4.2 - 4.4 m/s	4.33 m/s	Yes
Impactor Acceleration	(-13) - (-18) g	-15.2 g	Yes
Shoulder Displacement	28 - 37 mm	28.8 mm	Yes
Upper Spine Lateral Acceleration	17 - 22 g	20.3 g	Yes

Test meets specifications.

Condition: Used

Comments:

Arm S/N: 940L

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:06:38 878

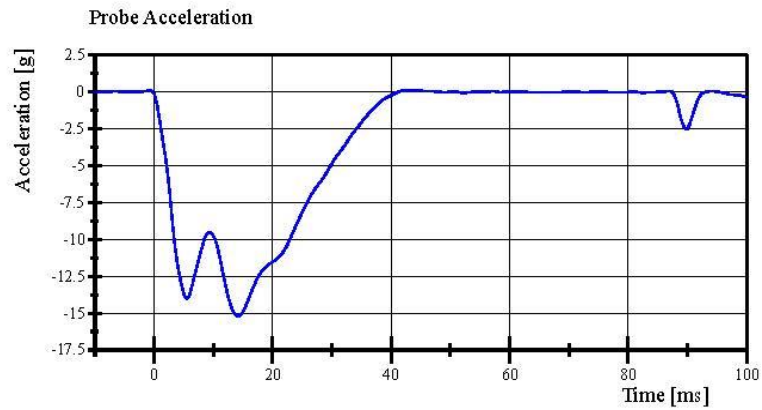


Transportation Research Center Inc.

Left Lateral Shoulder

SID IIa Serial No. 297 Certification No. 74-1

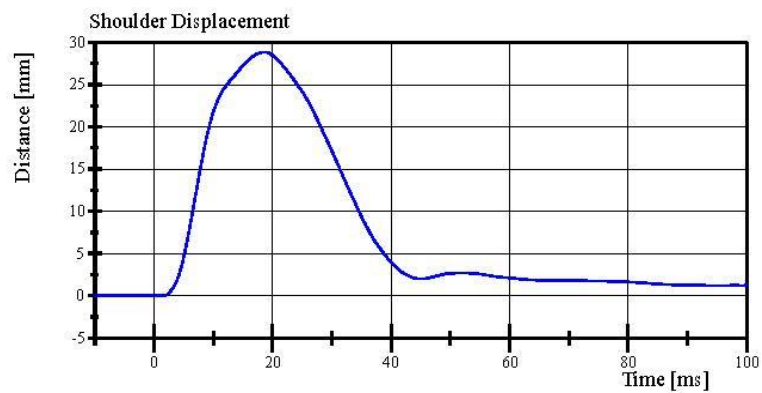
Test Date: 3/27/2025



Filter Class: CFC_180

Max: 0.1 g at -0.7 ms

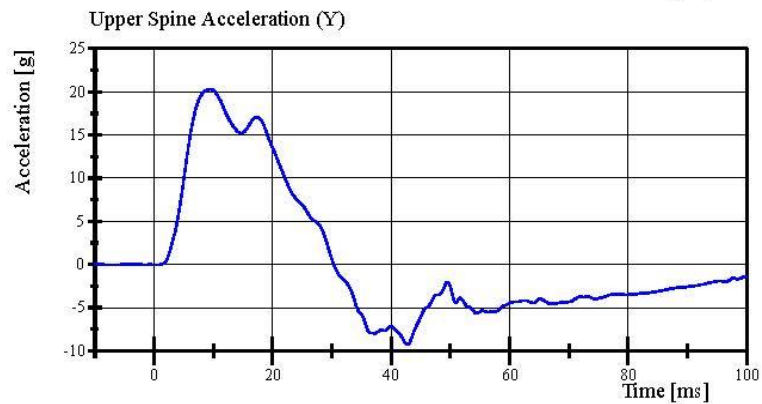
Min: -15.2 g at 14.2 ms



Filter Class: CFC_600

Max: 28.8 mm at 18.8 ms

Min: -0.0 mm at 1.6 ms



Filter Class: CFC_180

Max: 20.3 g at 9.4 ms

Min: -9.3 g at 42.8 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:07:40 878



Transportation Research Center Inc.

Left Lateral Thorax with Arm

SID II: Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	41 %	Yes
Impactor Velocity	6.60 - 6.80 m/s	6.723 m/s	Yes
Impactor Acceleration	(-30) - (-36) g	-33.7 g	Yes
Shoulder Displacement	31 - 40 mm	32.9 mm	Yes
Upper Thorax Rib Displacement	25 - 32 mm	25.8 mm	Yes
Center Thorax Rib Displacement	30 - 36 mm	30.3 mm	Yes
Lower Thorax Rib Displacement	32 - 38 mm	33.8 mm	Yes
Upper Spine Lateral Acceleration	34 - 43 g	40.0 g	Yes
Lower Spine Lateral Acceleration	29 - 37 g	34.0 g	Yes

Test meets specifications.

Condition: Used

Comments:

Left Arm S/N: 940L

Shoulder Rib S/N: DL9245

Upper Thorax Rib S/N: DM5020

Middle Thorax Rib S/N: DM5021

Lower Thorax Rib S/N: DM5022

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 15:03:58 640

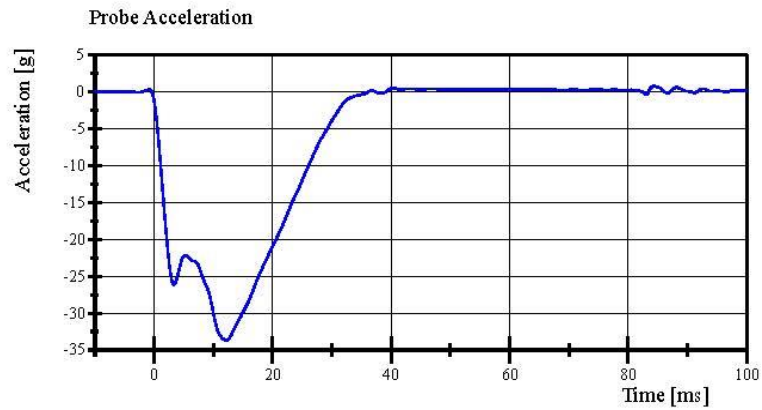


Transportation Research Center Inc.

Left Lateral Thorax with Arm

SID II_s Serial No. 297 Certification No. 74-1

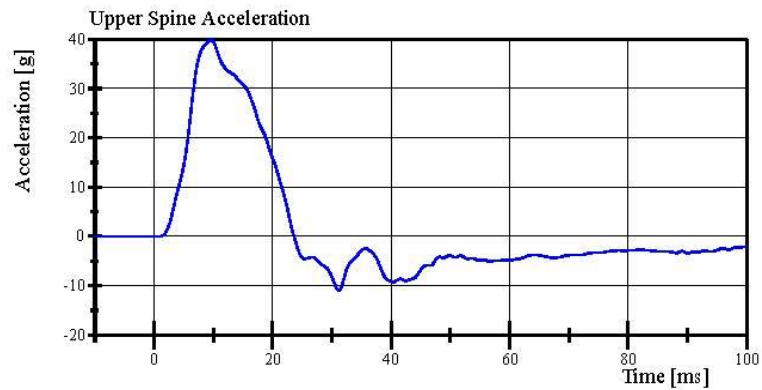
Test Date: 3/27/2025



Filter Class: CFC_180

Max: 0.8 g at 84.3 ms

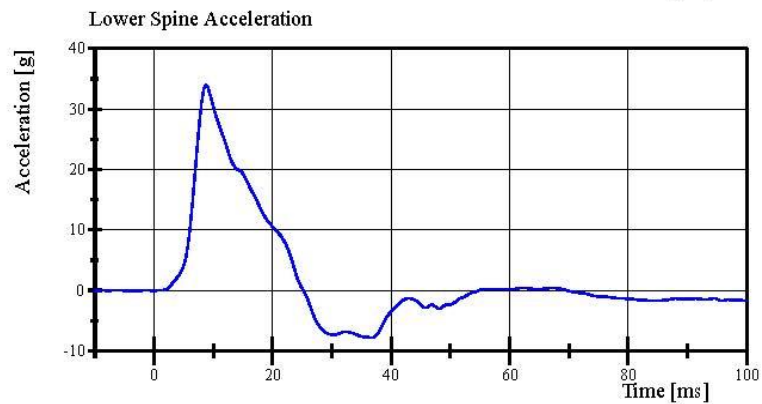
Min: -33.7 g at 12.2 ms



Filter Class: CFC_180

Max: 40.0 g at 9.6 ms

Min: -11.0 g at 31.2 ms



Filter Class: CFC_180

Max: 34.0 g at 8.8 ms

Min: -7.8 g at 36.7 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 15:05:23 640

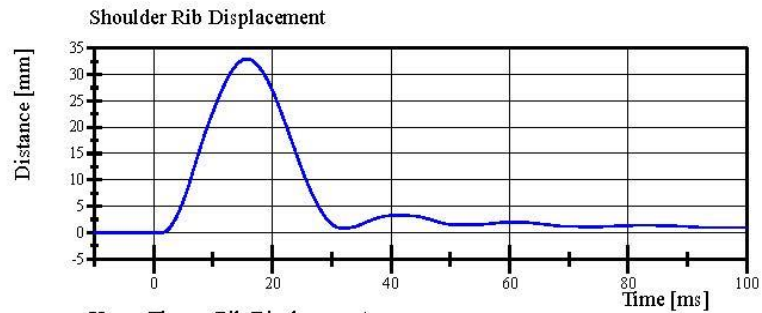


Transportation Research Center Inc.

Left Lateral Thorax with Arm

SID II_s Serial No. 297 Certification No. 74-1

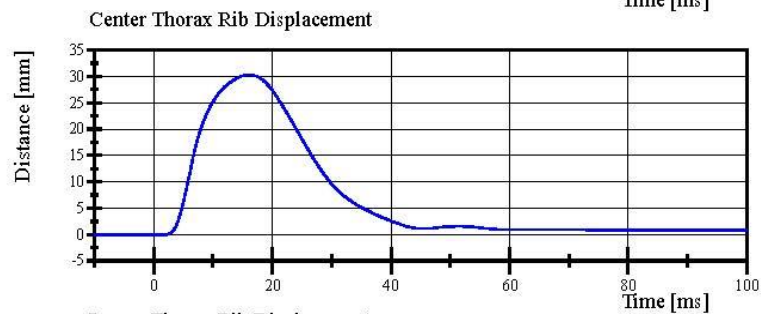
Test Date: 3/27/2025



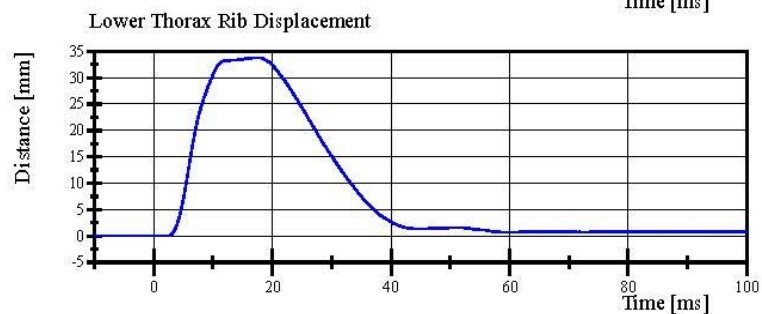
Filter Class: CFC_600
Max: 32.9 mm at 15.7 ms
Min: -0.0 mm at 1.1 ms



Filter Class: CFC_600
Max: 25.8 mm at 15.9 ms
Min: -0.0 mm at -9.5 ms



Filter Class: CFC_600
Max: 30.3 mm at 16.0 ms
Min: -0.0 mm at -2.6 ms



Filter Class: CFC_600
Max: 33.8 mm at 17.8 ms
Min: -0.0 mm at -0.3 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 15:05:24 640



Transportation Research Center Inc.

Left Lateral Thorax without Arm

SID IIa Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.3 °C	Yes
Relative Humidity	10 - 70 %	42 %	Yes
Impactor Velocity	4.20 - 4.40 m/s	4.351 m/s	Yes
Impactor Acceleration	(-14) - (-18) g	-15.7 g	Yes
Upper Thorax Rib Displacement	32 - 40 mm	37.1 mm	Yes
Center Thorax Rib Displacement	39 - 45 mm	41.2 mm	Yes
Lower Thorax Rib Displacement	35 - 43 mm	38.7 mm	Yes
Upper Spine Lateral Acceleration	13 - 17 g	14.1 g	Yes
Lower Spine Lateral Acceleration	7 - 11 g	9.8 g	Yes

Test meets specifications.

Condition: Used

Comments:

Upper Thorax Rib S/N: 180-3362 DP6492

Middle Thorax Rib S/N: 180-3362 DP6493

Lower Thorax Rib S/N: 180-3362 DP7664

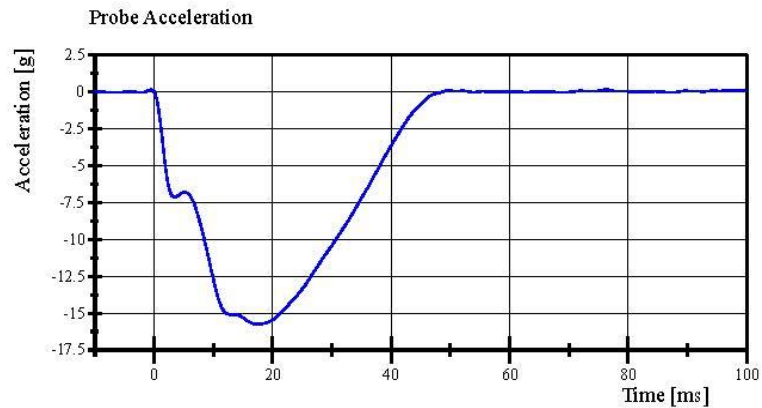
Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:38:56 862

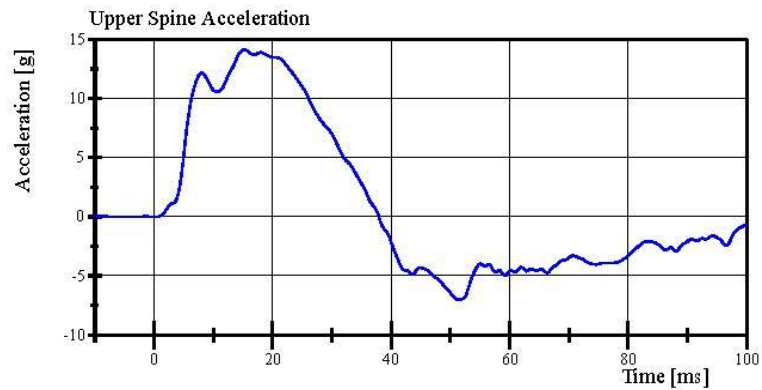


Transportation Research Center Inc.

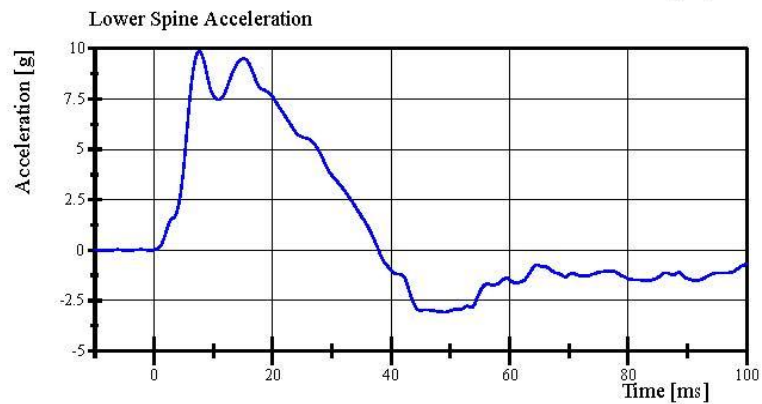
Left Lateral Thorax without Arm
SID IIa Serial No. 297 Certification No. 74-1
Test Date: 3/27/2025



Filter Class: CFC_180
Max: 0.1 g at -0.6 ms
Min: -15.7 g at 17.4 ms



Filter Class: CFC_180
Max: 14.1 g at 15.3 ms
Min: -7.0 g at 51.4 ms



Filter Class: CFC_180
Max: 9.8 g at 7.6 ms
Min: -3.1 g at 49.0 ms

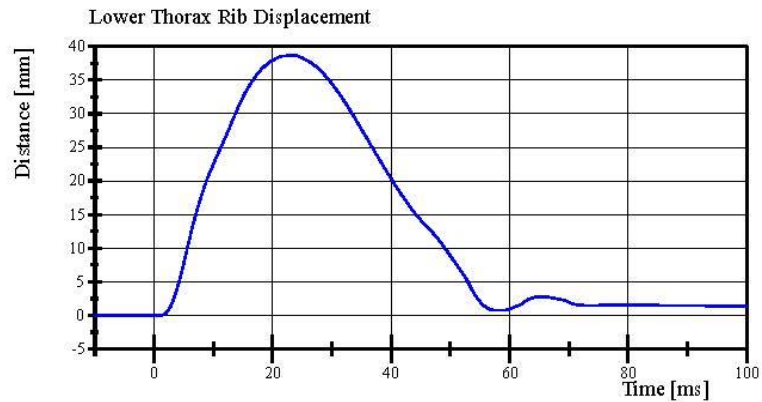
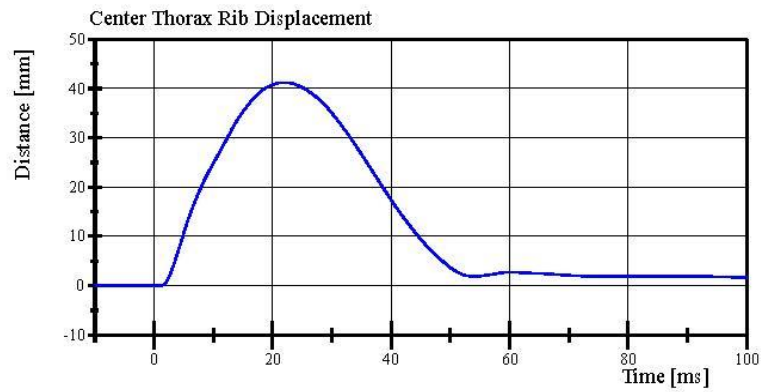
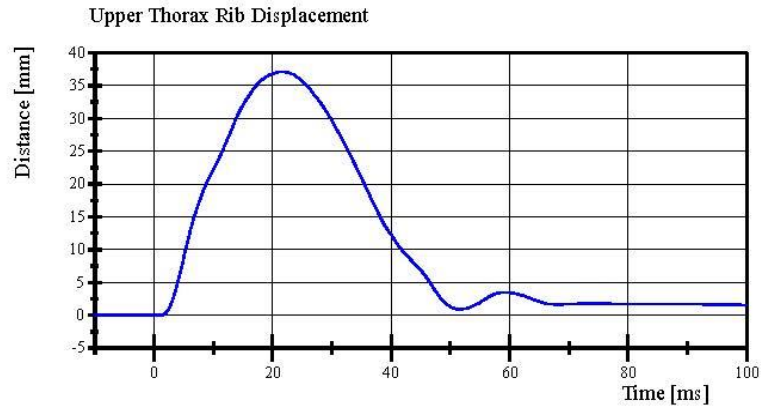
Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:39:28 862



Transportation Research Center Inc.

Left Lateral Thorax without Arm
SID IIa Serial No. 297 Certification No. 74-1
Test Date: 3/27/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:39:29 862



Transportation Research Center Inc.

Left Lateral Abdomen

SID II: Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	42 %	Yes
Impactor Velocity	4.2 - 4.4 m/s	4.38 m/s	Yes
Impactor Acceleration	(-12) - (-16) g	-15.0 g	Yes
Upper Abdominal Rib Displacement	36 - 47 mm	40.7 mm	Yes
Lower Abdominal Rib Displacement	33 - 44 mm	39.9 mm	Yes
Lower Spine Lateral Acceleration	9 - 14.0 g	11.83 g	Yes

Test meets specifications.

Condition: Used

Comments:

Upper Abdominal Rib S/N: AB8010

Lower Abdominal Rib S/N: DM7275

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:22:12 685

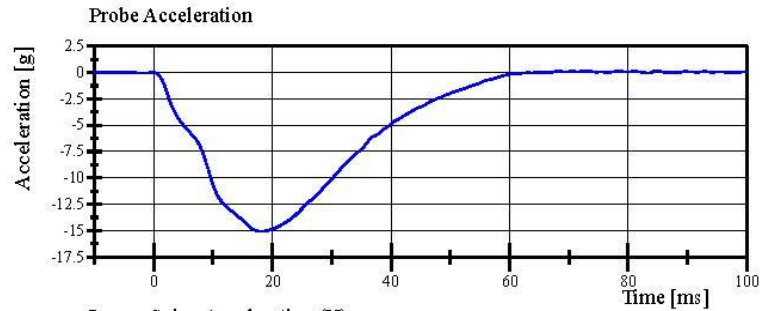


Transportation Research Center Inc.

Left Lateral Abdomen

SID II_s Serial No. 297 Certification No. 74-1

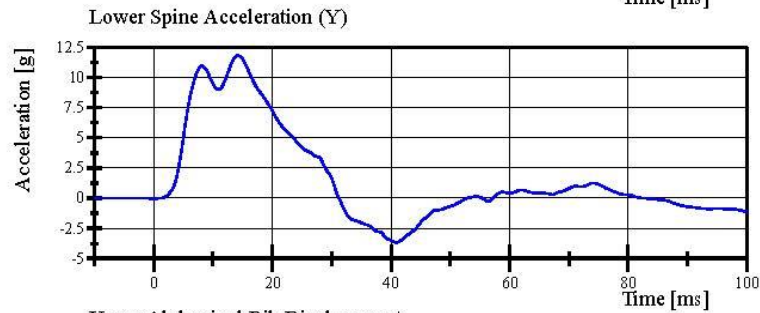
Test Date: 3/27/2025



Filter Class: CFC_180

Max: 0.2 g at 85.0 ms

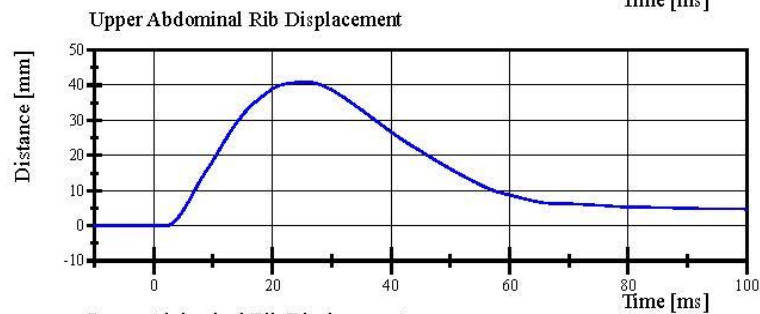
Min: -15.0 g at 18.2 ms



Filter Class: CFC_180

Max: 11.8 g at 14.2 ms

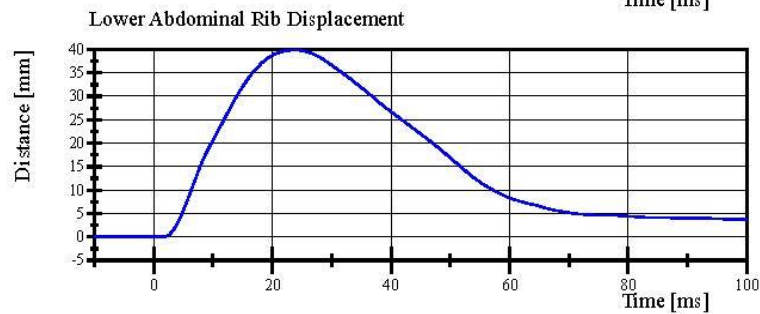
Min: -3.7 g at 40.8 ms



Filter Class: CFC_600

Max: 40.7 mm at 25.4 ms

Min: -0.0 mm at 1.9 ms



Filter Class: CFC_600

Max: 39.9 mm at 23.8 ms

Min: -0.0 mm at 1.2 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 14:22:42 685



Transportation Research Center Inc.

Left Lateral Pelvis

SID II: Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.2 °C	Yes
Relative Humidity	10 - 70 %	42 %	Yes
Pendulum Velocity	6.6 - 6.8 m/s	6.61 m/s	Yes
Impactor Acceleration	(-38.0) - (-47.0) g	-42.47 g	Yes
Peak Pelvis Lateral Acceleration after 6ms	34 - 42 g	38.4 g	Yes
Acetabulum Force	3,600 - 4,300 N	3,683.0 N	Yes

Test meets specifications.

Condition: Used

Comments:

Pelvis Skin S/N: 1171

Pelvis Plug Info:

Manufacturer: Saco

S/N: 14485

Cal Date: 20201218

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 15:15:25 465

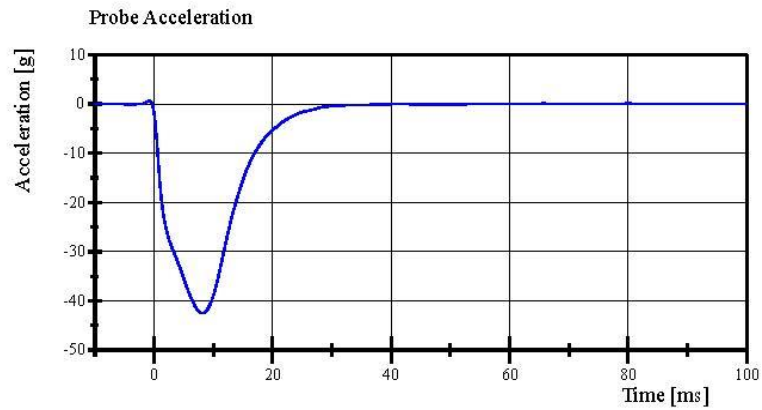


Transportation Research Center Inc.

Left Lateral Pelvis

SID II_s Serial No. 297 Certification No. 74-1

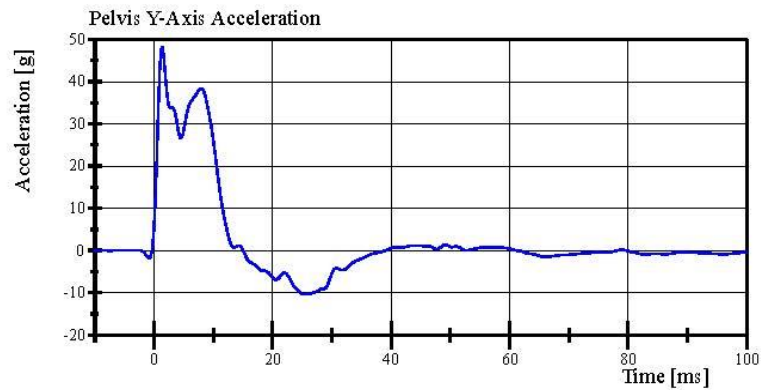
Test Date: 3/27/2025



Filter Class: CFC_180

Max: 0.6 g at -0.8 ms

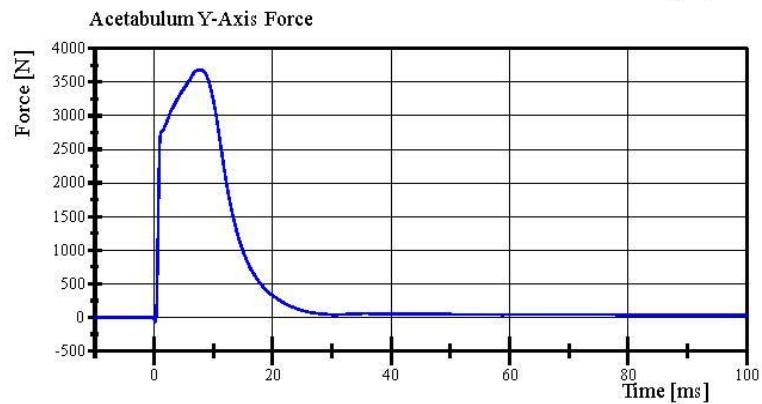
Min: -42.5 g at 8.2 ms



Filter Class: CFC_180

Max: 48.2 g at 1.4 ms

Min: -10.4 g at 25.2 ms



Filter Class: CFC_600

Max: 3,683.0 N at 7.8 ms

Min: -65.8 N at 0.2 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 15:16:40 465



Transportation Research Center Inc.

Left Lateral Iliac

SID IIs Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	39 %	Yes
Pendulum Velocity	4.2 - 4.4 m/s	4.24 m/s	Yes
Impactor Acceleration	(-36) - (-45) g	-42.9 g	Yes
Peak Pelvis Lateral Acceleration	28 - 39 g	37.0 g	Yes
Iliac Force	4,100 - 5,100 N	5,056.4 N	Yes

Test meets specifications.

Condition: Used

Comments:

Pelvis Skin S/N: 1171

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 13:53:34 708

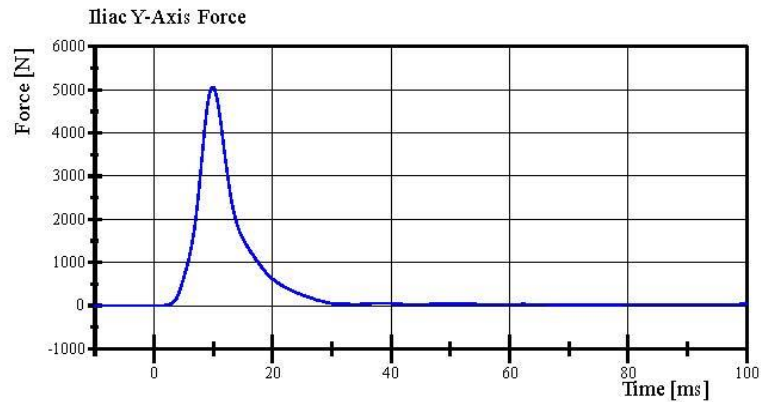
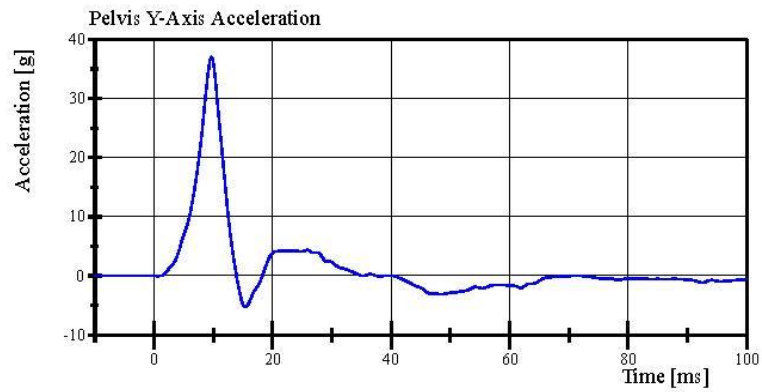
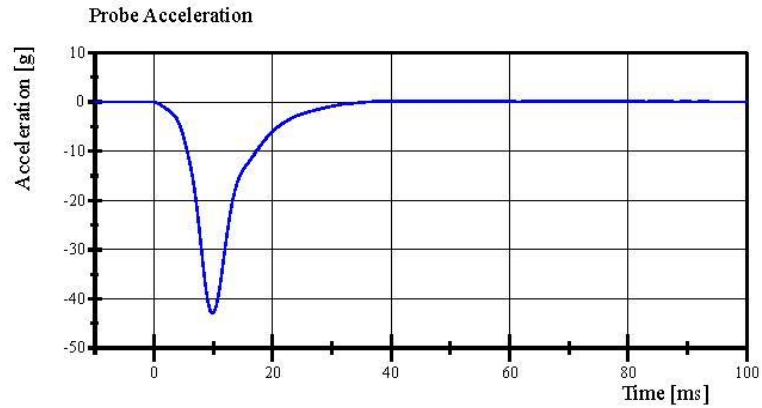


Transportation Research Center Inc.

Left Lateral Iliac

SID II_s Serial No. 297 Certification No. 74-1

Test Date: 3/27/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

03.27.2025 13:54:00 708



Post-Test Calibration Sheets
Driver S/N 297

Transportation Research Center Inc.
SIDIIs Dummy - Level D
External Dimensions
Serial No. 297 Calibration No. 75

Symbol	Description	Specification	Results	Pass
		mm	mm	
A	Sitting Height	772.0 - 788.0	780	Yes
B	Shoulder Pivot Height	437.0 - 453.0	450	Yes
C	H-Point Height	79.0 - 89.0	85	Yes
D	H-Point from Seat Back	141.0 - 151.0	147	Yes
E	Shoulder Pivot from Backline	97.0 - 107.0	102	Yes
F	Thigh Clearance	119.0 - 135.0	130	Yes
G	Head Breadth	140.0 - 148.0	147	Yes
H	Head Back from Backline	40.0 - 46.0	45	Yes
I	Head Depth	178.0 - 188.0	183	Yes
J	Head Circumference	541.0 - 551.0	544	Yes
K	Buttock to Knee Length	514.0 - 540.0	528	Yes
L	Popliteal Height	343.0 - 369.0	353	Yes
M	Knee Pivot to Floor Height	393.0 - 409.0	400	Yes
N	Buttock Popliteal Length	416.0 - 442.0	430	Yes
O	Chest Depth without Jacket	195.0 - 211.0	200	Yes
P	Foot Length (right)	216.0 - 232.0	223	Yes
P	Foot Length (left)	216.0 - 232.0	223	Yes
Q	Hip Breadth	313.0 - 323.0	319	Yes
R	Arm Length	249.0 - 259.0	254	Yes
S	Knee Joint to seat Back	478.0 - 493.0	485	Yes
V	Shoulder Width (only one arm installed)	341.0 - 357.0	347	Yes
W	Foot Width (right)	78.0 - 94.0	85	Yes
W	Foot Width (left)	78.0 - 94.0	85	Yes
Y	Chest Circumference with Jacket	851.0 - 881.0	877	Yes
Z	Waist Circumference	761.0 - 791.0	781	Yes

Revised 9/29/2005

Report Number: 297_S2F75

Page 29 of 31



Transportation Research Center Inc.

Left Lateral Head Drop

SID II: Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	18.9 - 25.6 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	44 %	Yes
Peak Head Resultant Acceleration	115 - 137 g	122.4 g	Yes
Peak Head Longitudinal Acceleration	(-15) - 15 g	-1.8 g	Yes
Is Head Resultant Acceleration Curve Unimodal within 15% of Peak?	< 15 %	0.75 %	Yes

Test meets specifications.

Condition: Used

Comments:

Head Skin S/N: 1330

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 11:20:53 233

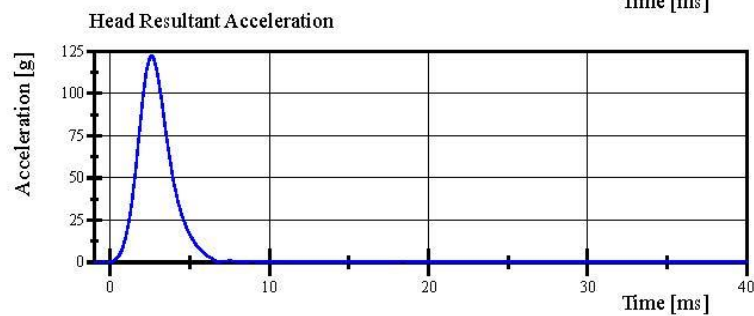
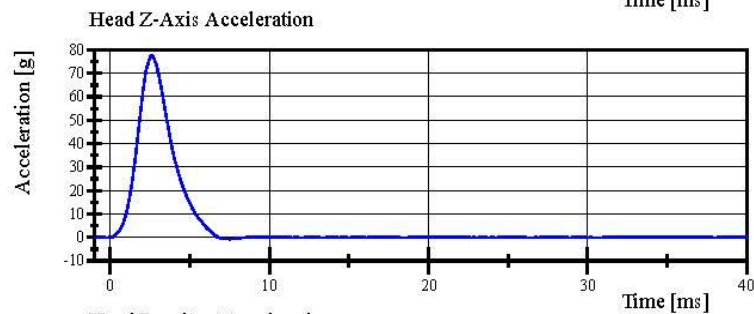
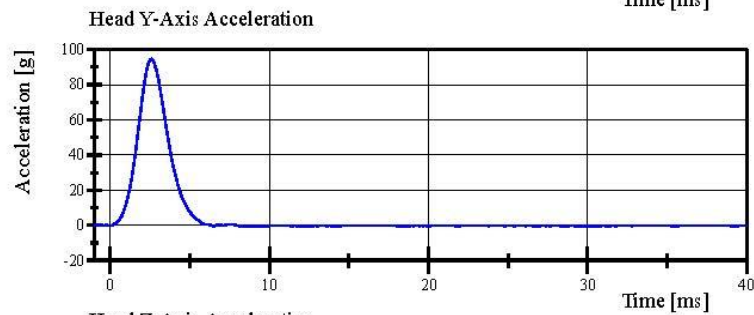
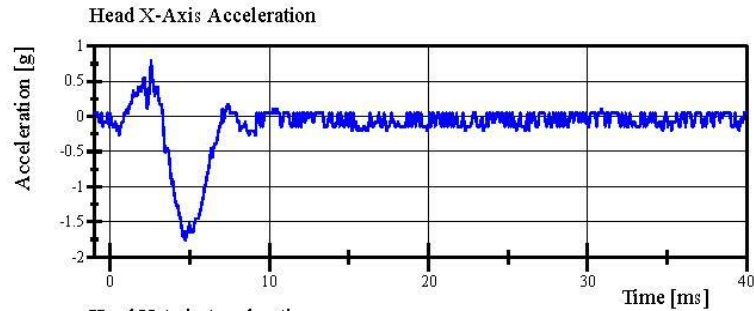


Transportation Research Center Inc.

Left Lateral Head Drop

SID IIa Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 11:21:30 233



Transportation Research Center Inc.

Left Lateral Neck

SID II: Serial No. 297 Certification No. 75-4

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.2 °C	Yes
Relative Humidity	10 - 70 %	46 %	Yes
Pendulum Velocity	(-5.51) - (-5.63) m/s	-5.611 m/s	Yes
Pendulum Integrated Velocity			
Change at 10 ms	2.20 - 2.80 m/s	2.458 m/s	Yes
Change at 15 ms	3.30 - 4.10 m/s	3.584 m/s	Yes
Change at 20 ms	4.40 - 5.40 m/s	4.812 m/s	Yes
Change at 25 ms	5.40 - 6.10 m/s	5.813 m/s	Yes
Change at 25 to 100 ms	5.50 - 6.20 m/s	5.887 m/s	Yes
Maximum Headform Flexion			
Peak	(-71) - (-81) deg	-79.6 deg	Yes
Time of Peak	50 - 70 ms	63.8 ms	Yes
Total Neck Occipital Condyles Moment	36 - 44 N·m	41.8 N·m	Yes
Decay to 0 N·m	102 - 126 ms	114.1 ms	Yes

Test meets specifications.

Condition: Used

Comments:

Neck S/N: 779

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:39:17 751

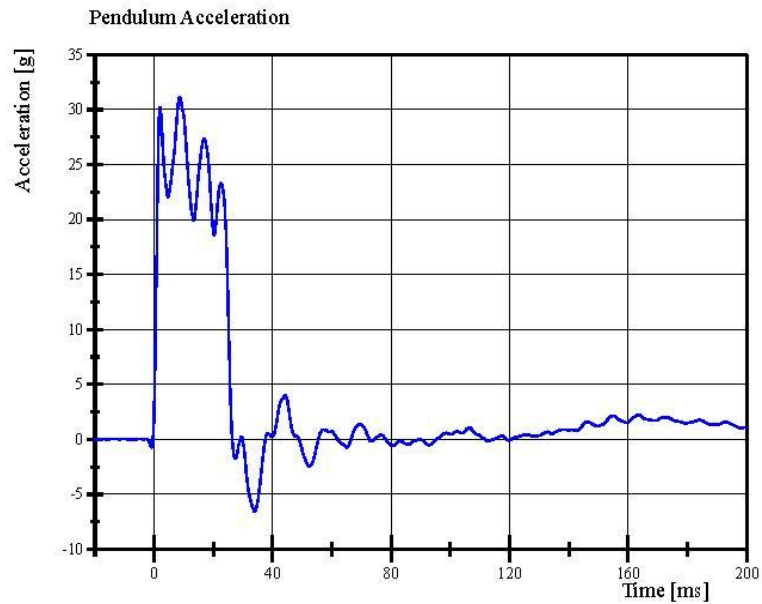


Transportation Research Center Inc.

Left Lateral Neck

SID IIa Serial No. 297 Certification No. 75-4

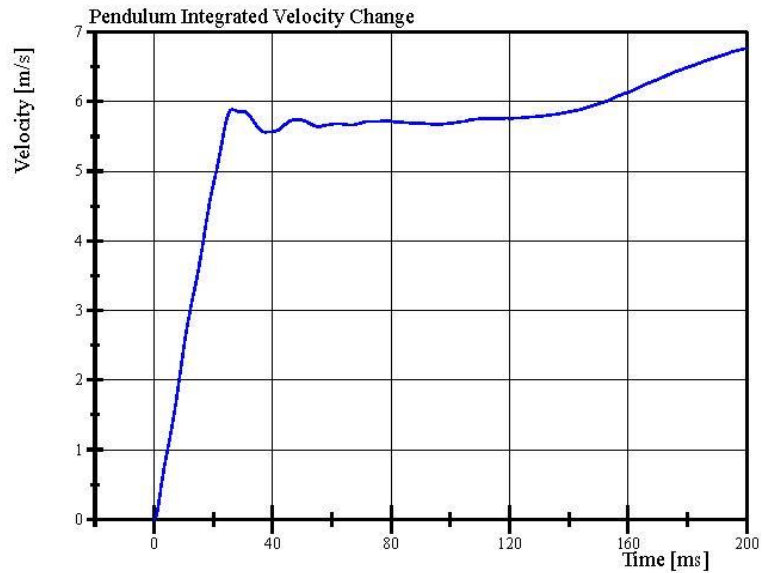
Test Date: 4/10/2025



Filter Class: CFC_180

Max: 31.1 g at 8.6 ms

Min: -6.6 g at 33.9 ms



Filter Class: CFC_180

Max: 6.8 m/s at 200.0 ms

Min: 0.0 m/s at 0.0 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:39:49 751

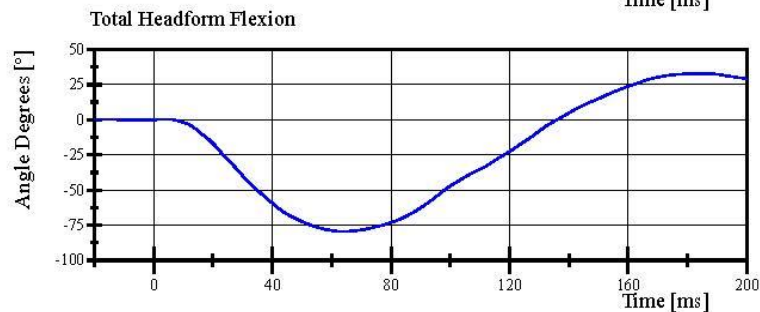
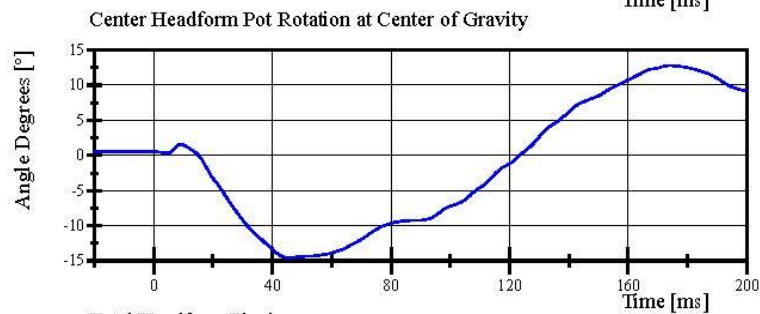
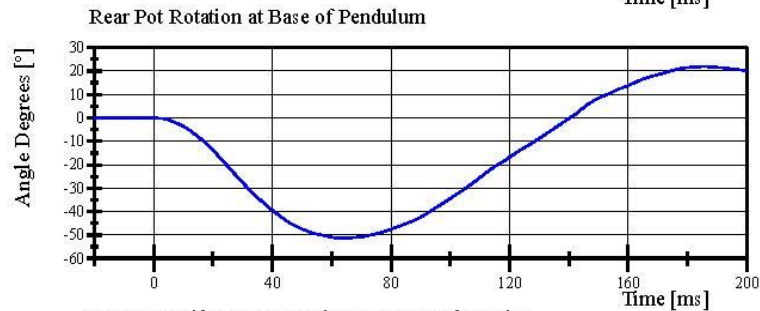
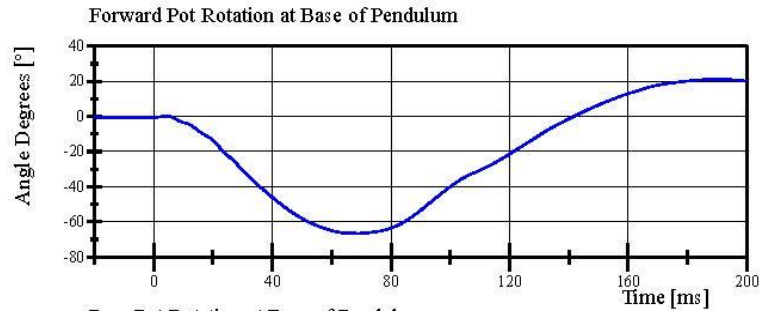


Transportation Research Center Inc.

Left Lateral Neck

SID II_s Serial No. 297 Certification No. 75-4

Test Date: 4/10/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:39:49 751



Transportation Research Center Inc.

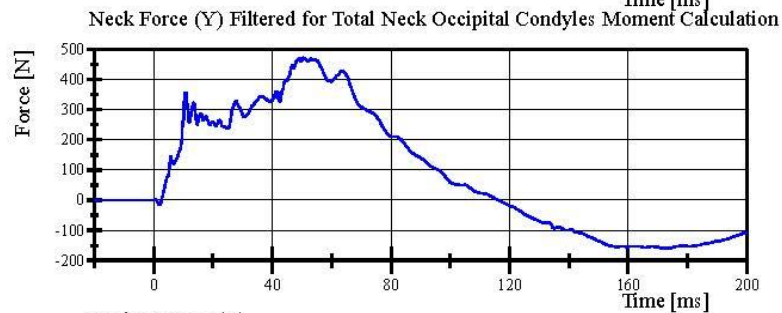
Left Lateral Neck

SID II_s Serial No. 297 Certification No. 75-4

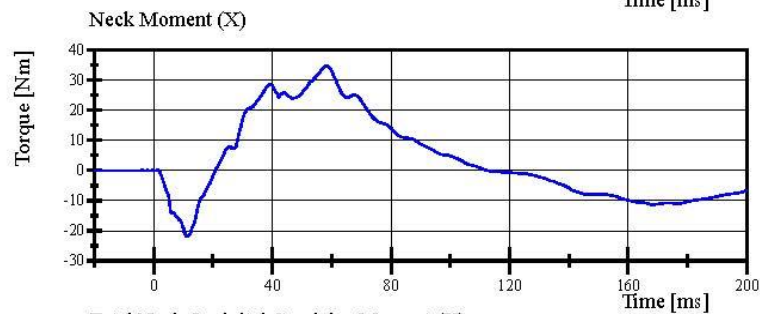
Test Date: 4/10/2025



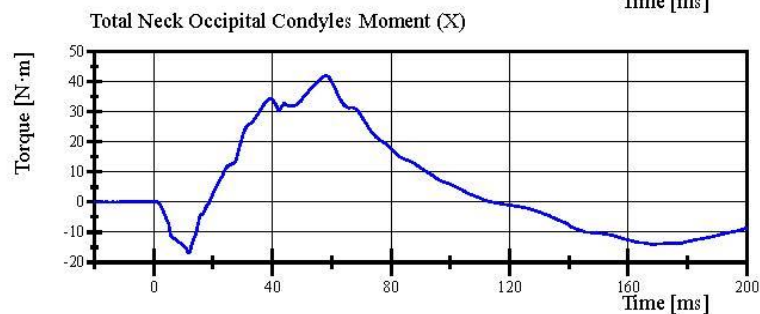
Filter Class: CFC_1000
Max: 474.4 N at 50.4 ms
Min: -160.5 N at 173.0 ms



Filter Class: CFC_600
Max: 472.9 N at 50.4 ms
Min: -160.0 N at 173.0 ms



Filter Class: CFC_600
Max: 34.7 Nm at 58.4 ms
Min: -21.9 Nm at 11.8 ms



Filter Class: Without_(Constan
Max: 41.8 N·m at 57.8 ms
Min: -16.9 N·m at 11.8 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:39:49 751



Transportation Research Center Inc.

Left Lateral Shoulder

SID II: Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	44 %	Yes
Impactor Velocity	4.2 - 4.4 m/s	4.33 m/s	Yes
Impactor Acceleration	(-13) - (-18) g	-15.5 g	Yes
Shoulder Displacement	28 - 37 mm	30.2 mm	Yes
Upper Spine Lateral Acceleration	17 - 22 g	21.0 g	Yes

Test meets specifications.

Condition: Used

Comments:

Arm S/N: 940L

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 09:01:01 844

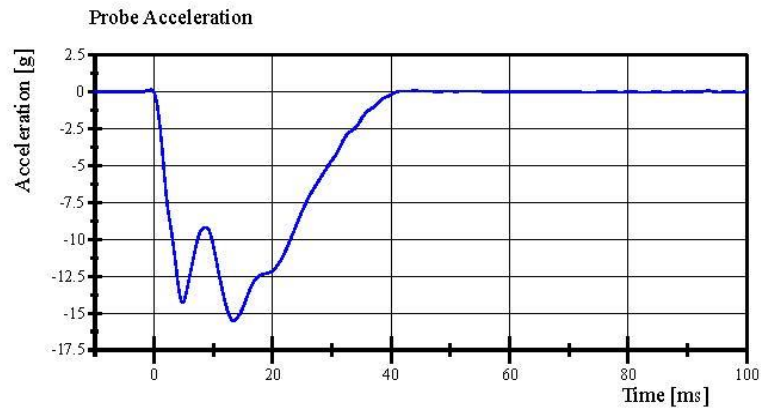


Transportation Research Center Inc.

Left Lateral Shoulder

SID IIa Serial No. 297 Certification No. 75-1

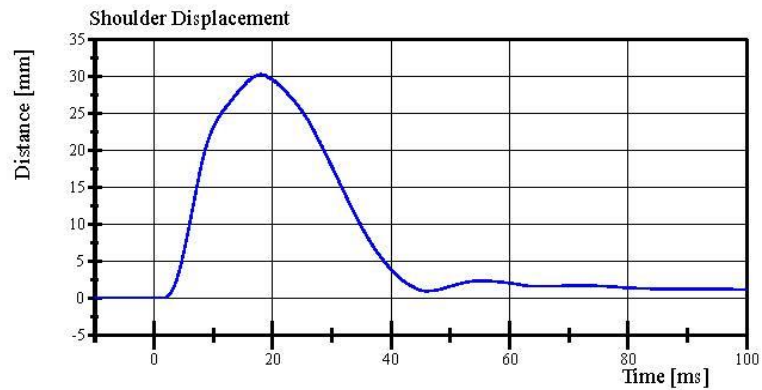
Test Date: 4/10/2025



Filter Class: CFC_180

Max: 0.1 g at -0.6 ms

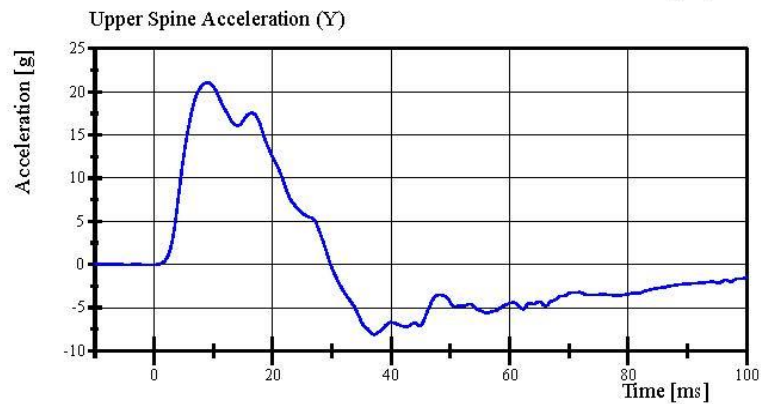
Min: -15.5 g at 13.4 ms



Filter Class: CFC_600

Max: 30.2 mm at 18.1 ms

Min: -0.0 mm at 1.4 ms



Filter Class: CFC_180

Max: 21.0 g at 9.1 ms

Min: -8.1 g at 37.1 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 09:01:28 844



Transportation Research Center Inc.

Left Lateral Thorax with Arm

SID II: Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	46 %	Yes
Impactor Velocity	6.60 - 6.80 m/s	6.730 m/s	Yes
Impactor Acceleration	(-30) - (-36) g	-34.5 g	Yes
Shoulder Displacement	31 - 40 mm	34.1 mm	Yes
Upper Thorax Rib Displacement	25 - 32 mm	25.9 mm	Yes
Center Thorax Rib Displacement	30 - 36 mm	30.3 mm	Yes
Lower Thorax Rib Displacement	32 - 38 mm	33.4 mm	Yes
Upper Spine Lateral Acceleration	34 - 43 g	41.0 g	Yes
Lower Spine Lateral Acceleration	29 - 37 g	32.9 g	Yes

Test meets specifications.

Condition: Used

Comments:

Left Arm S/N: 940L

Shoulder Rib S/N: DL9245

Upper Thorax Rib S/N: DM5020

Middle Thorax Rib S/N: DM5021

Lower Thorax Rib S/N: DM5022

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 10:47:18 634

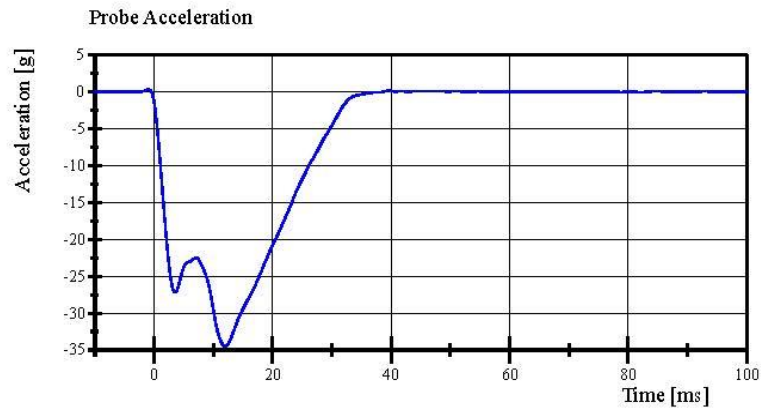


Transportation Research Center Inc.

Left Lateral Thorax with Arm

SID II_s Serial No. 297 Certification No. 75-1

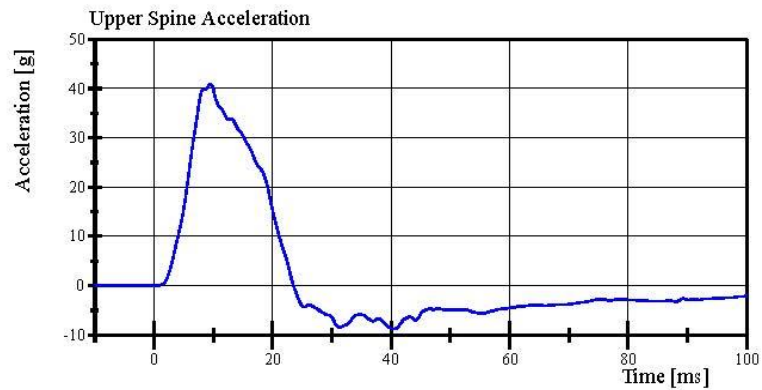
Test Date: 4/10/2025



Filter Class: CFC_180

Max: 0.3 g at -1.0 ms

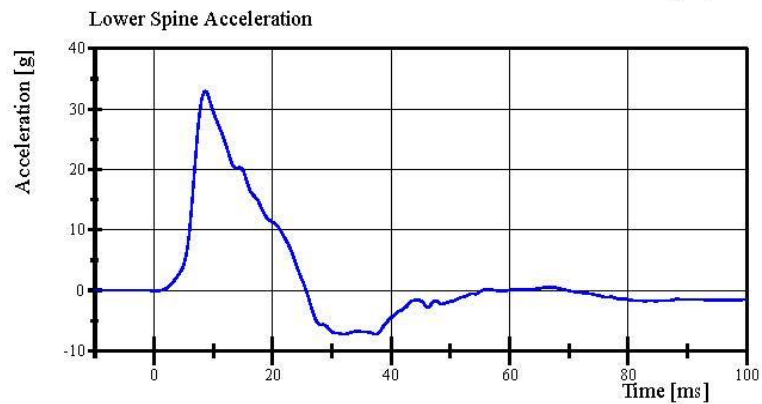
Min: -34.5 g at 12.0 ms



Filter Class: CFC_180

Max: 41.0 g at 9.5 ms

Min: -8.8 g at 40.4 ms



Filter Class: CFC_180

Max: 32.9 g at 8.6 ms

Min: -7.3 g at 37.4 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 10:48:04 634

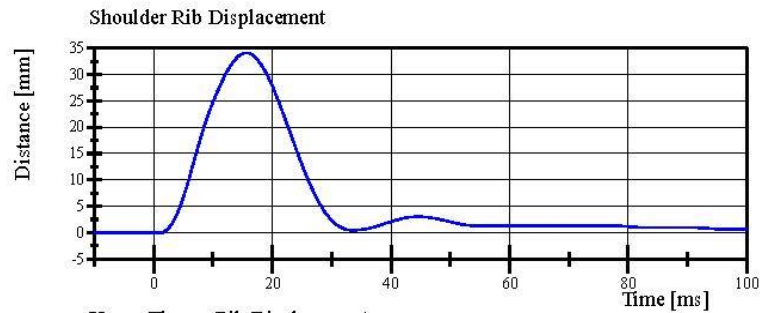


Transportation Research Center Inc.

Left Lateral Thorax with Arm

SID II_s Serial No. 297 Certification No. 75-1

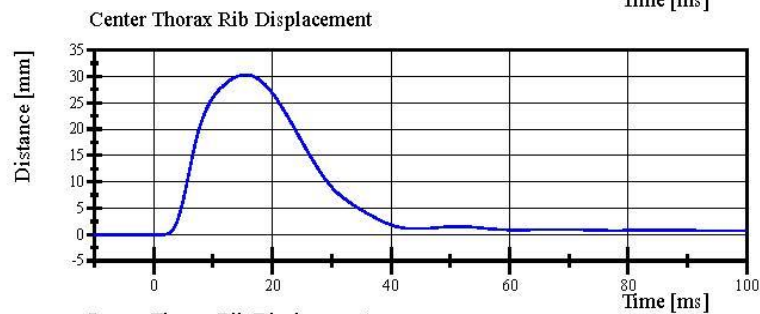
Test Date: 4/10/2025



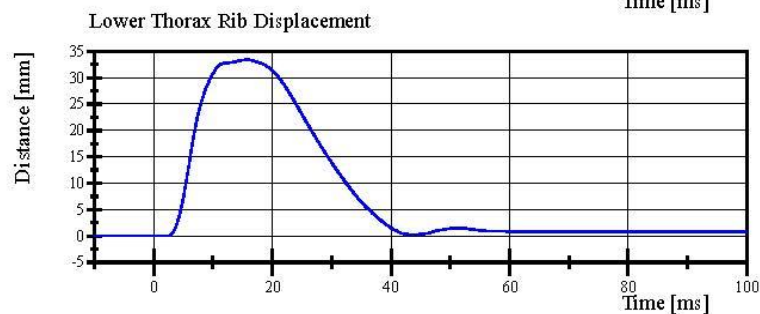
Filter Class: CFC_600
Max: 34.1 mm at 15.7 ms
Min: -0.0 mm at 1.3 ms



Filter Class: CFC_600
Max: 25.9 mm at 15.6 ms
Min: -0.0 mm at -3.3 ms



Filter Class: CFC_600
Max: 30.3 mm at 15.4 ms
Min: -0.0 mm at -8.2 ms



Filter Class: CFC_600
Max: 33.4 mm at 15.7 ms
Min: -0.0 mm at -8.6 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 10:48:04 634



Transportation Research Center Inc.

Left Lateral Thorax without Arm

SID II: Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	42 %	Yes
Impactor Velocity	4.20 - 4.40 m/s	4.359 m/s	Yes
Impactor Acceleration	(-14) - (-18) g	-15.8 g	Yes
Upper Thorax Rib Displacement	32 - 40 mm	34.6 mm	Yes
Center Thorax Rib Displacement	39 - 45 mm	40.6 mm	Yes
Lower Thorax Rib Displacement	35 - 43 mm	39.9 mm	Yes
Upper Spine Lateral Acceleration	13 - 17 g	13.9 g	Yes
Lower Spine Lateral Acceleration	7 - 11 g	9.9 g	Yes

Test meets specifications.

Condition: Used

Comments:

Upper Thorax Rib S/N: DM5020

Middle Thorax Rib S/N: DM5021

Lower Thorax Rib S/N: DM5022

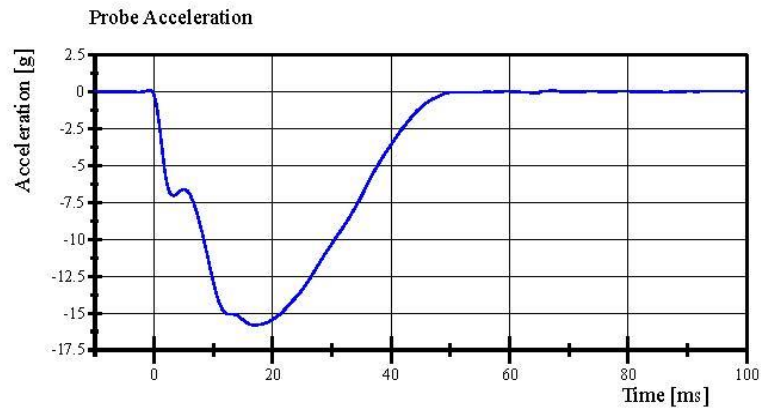
Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:49:18 872

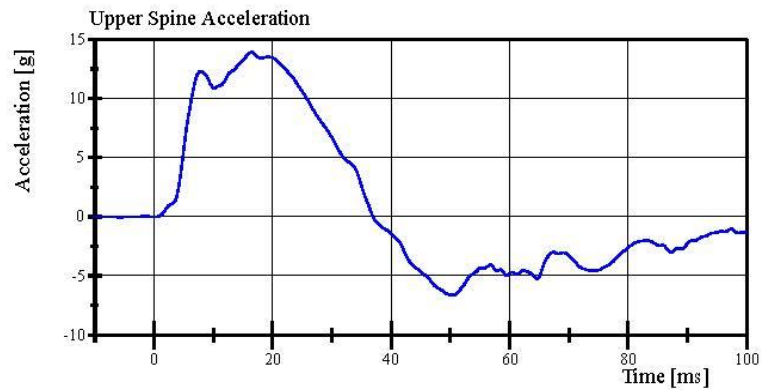


Transportation Research Center Inc.

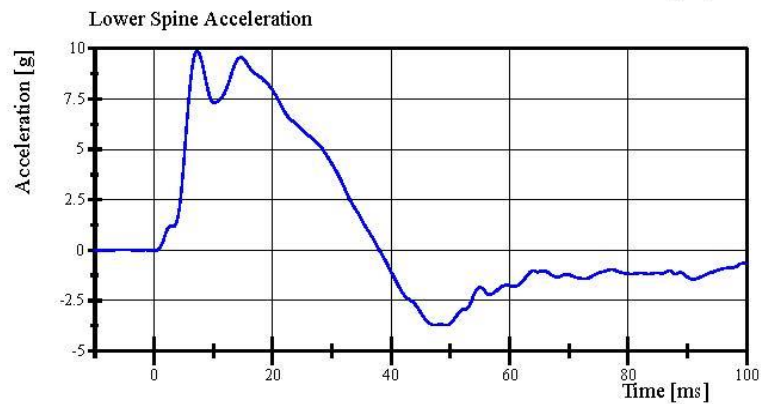
Left Lateral Thorax without Arm
SID IIa Serial No. 297 Certification No. 75-1
Test Date: 4/10/2025



Filter Class: CFC_180
Max: 0.1 g at 67.4 ms
Min: -15.8 g at 17.0 ms



Filter Class: CFC_180
Max: 13.9 g at 16.5 ms
Min: -6.6 g at 50.5 ms



Filter Class: CFC_180
Max: 9.9 g at 7.3 ms
Min: -3.7 g at 47.4 ms

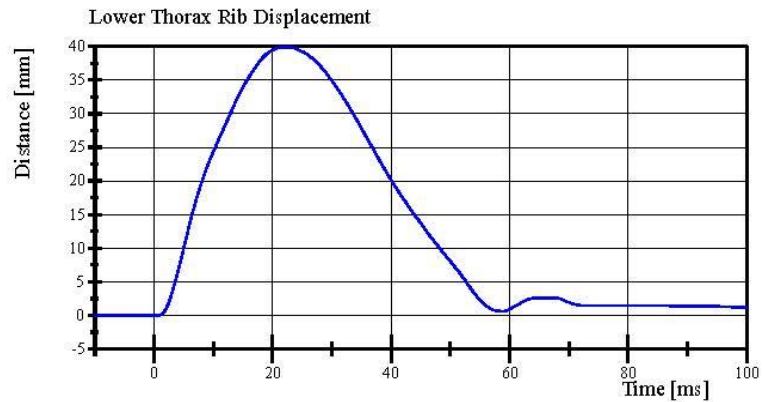
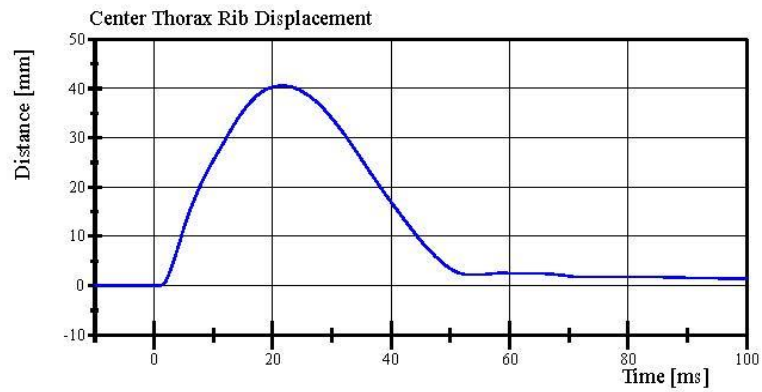
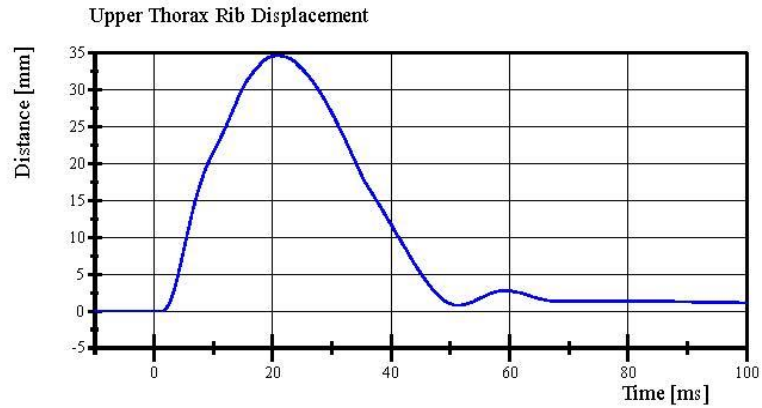
Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:49:56 872



Transportation Research Center Inc.

Left Lateral Thorax without Arm
SID IIa Serial No. 297 Certification No. 75-1
Test Date: 4/10/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 14:49:56 872



Transportation Research Center Inc.

Left Lateral Abdomen

SID II: Serial No. 297 Certification No. 75-2

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.2 °C	Yes
Relative Humidity	10 - 70 %	41 %	Yes
Impactor Velocity	4.2 - 4.4 m/s	4.33 m/s	Yes
Impactor Acceleration	(-12) - (-16) g	-14.9 g	Yes
Upper Abdominal Rib Displacement	36 - 47 mm	39.3 mm	Yes
Lower Abdominal Rib Displacement	33 - 44 mm	38.7 mm	Yes
Lower Spine Lateral Acceleration	9 - 14.0 g	12.25 g	Yes

Test meets specifications.

Condition: Used

Comments:

Upper Abdominal Rib S/N: AB8010

Lower Abdominal Rib S/N: DM7275

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 09:53:33 698

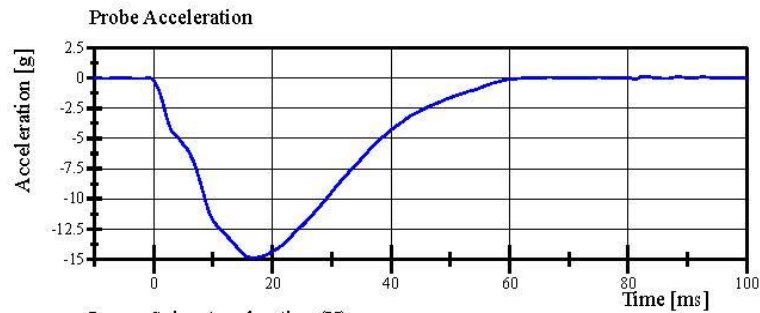


Transportation Research Center Inc.

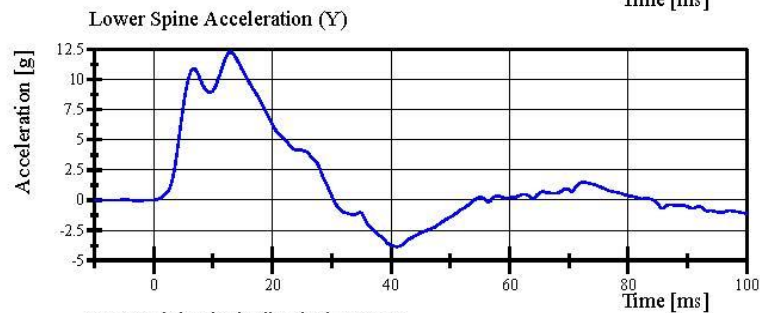
Left Lateral Abdomen

SID II_s Serial No. 297 Certification No. 75-2

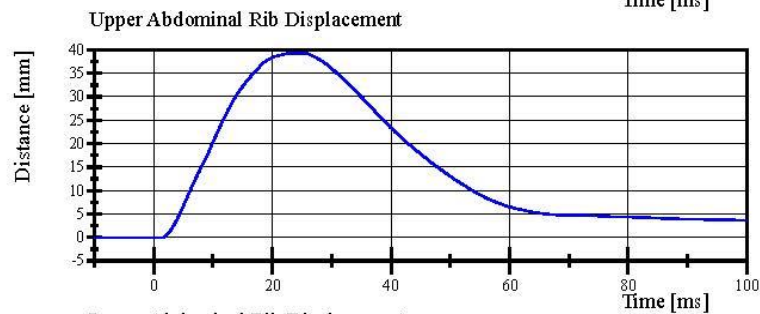
Test Date: 4/10/2025



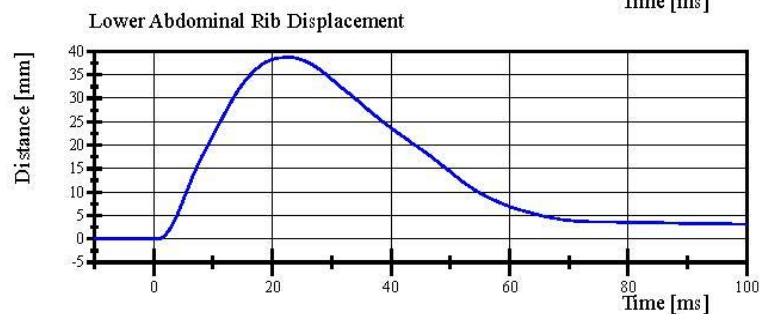
Filter Class: CFC_180
Max: 0.2 g at 82.6 ms
Min: -14.9 g at 16.9 ms



Filter Class: CFC_180
Max: 12.2 g at 12.9 ms
Min: -3.9 g at 41.0 ms



Filter Class: CFC_600
Max: 39.3 mm at 23.6 ms
Min: -0.0 mm at 1.4 ms



Filter Class: CFC_600
Max: 38.7 mm at 22.9 ms
Min: -0.0 mm at 0.4 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 09:54:03 698



Transportation Research Center Inc.

Left Lateral Pelvis

SID II: Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.2 °C	Yes
Relative Humidity	10 - 70 %	43 %	Yes
Pendulum Velocity	6.6 - 6.8 m/s	6.61 m/s	Yes
Impactor Acceleration	(-38.0) - (-47.0) g	-43.59 g	Yes
Peak Pelvis Lateral Acceleration after 6ms	34 - 42 g	38.5 g	Yes
Acetabulum Force	3,600 - 4,300 N	3,755.9 N	Yes

Test meets specifications.

Condition: Used

Comments:

Pelvis Skin S/N: 1171

Pelvis Plug Info:

Manufacturer: Saco

S/N: 14478

Cal Date: 20201218

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 08:49:18 469

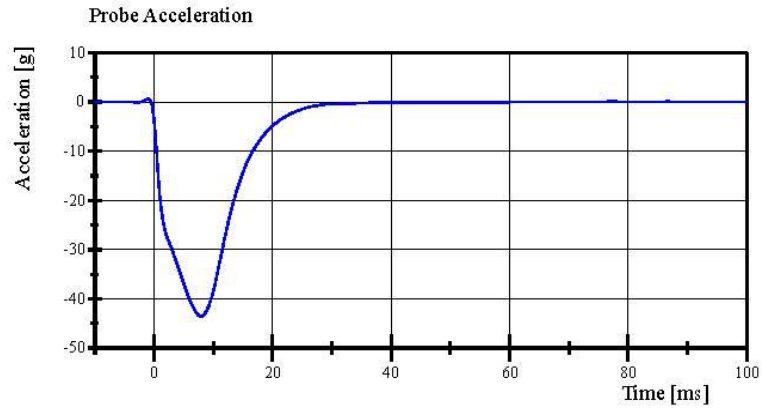


Transportation Research Center Inc.

Left Lateral Pelvis

SID II_s Serial No. 297 Certification No. 75-1

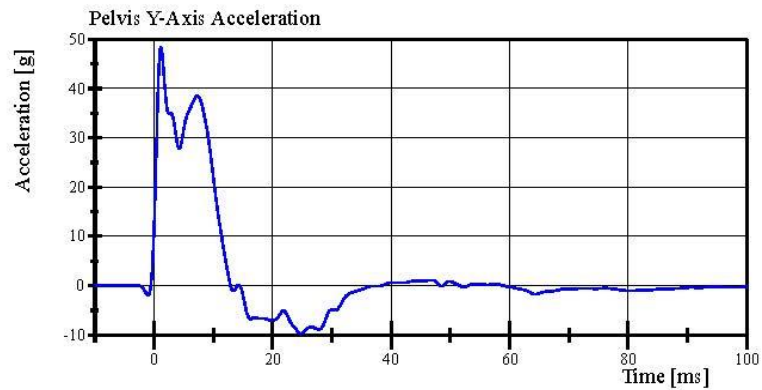
Test Date: 4/10/2025



Filter Class: CFC_180

Max: 0.6 g at -1.0 ms

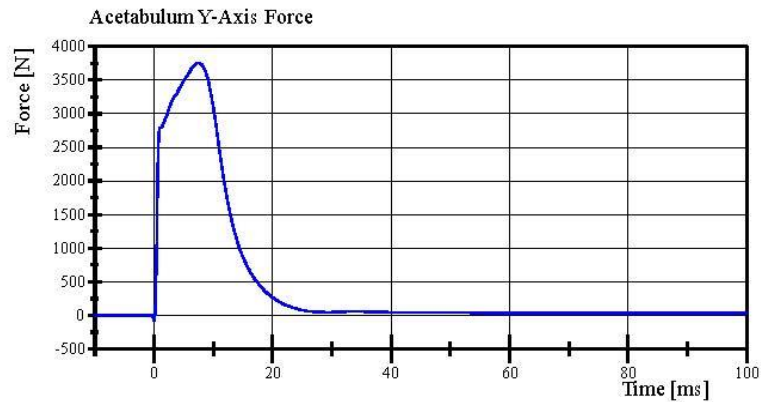
Min: -43.6 g at 7.9 ms



Filter Class: CFC_180

Max: 48.4 g at 1.1 ms

Min: -9.8 g at 24.8 ms



Filter Class: CFC_600

Max: 3,755.9 N at 7.5 ms

Min: -70.8 N at 0.0 ms

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 08:51:01 469



Transportation Research Center Inc.

Left Lateral Iliac

SID IIs Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.1 °C	Yes
Relative Humidity	10 - 70 %	45 %	Yes
Pendulum Velocity	4.2 - 4.4 m/s	4.24 m/s	Yes
Impactor Acceleration	(-36) - (-45) g	-41.8 g	Yes
Peak Pelvis Lateral Acceleration	28 - 39 g	34.9 g	Yes
Iliac Force	4,100 - 5,100 N	4,817.3 N	Yes

Test meets specifications.

Condition: Used

Comments:

Pelvis Skin S/N: 1171

Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 10:56:23 681

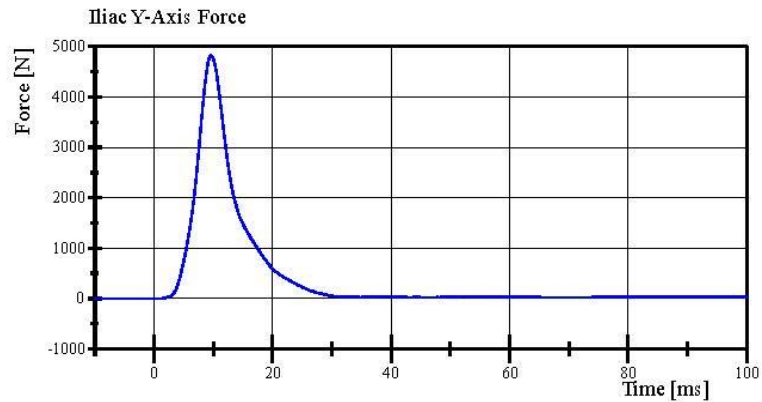
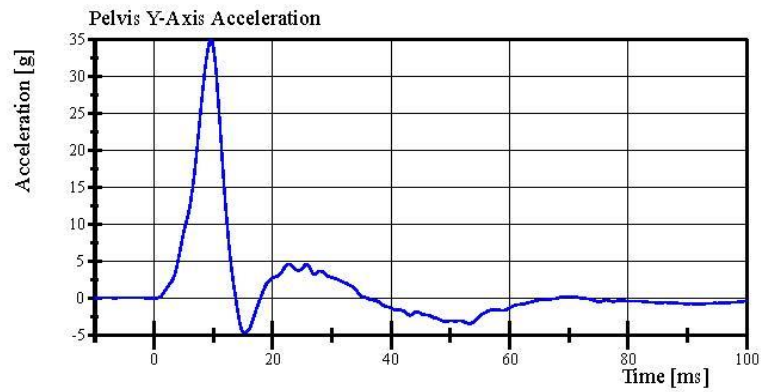
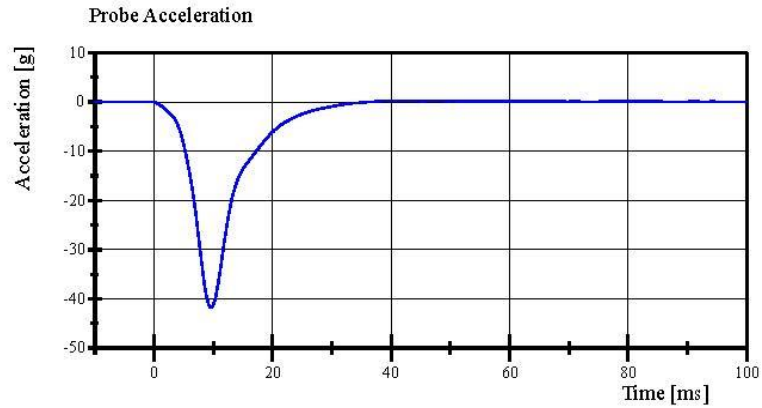


Transportation Research Center Inc.

Left Lateral Iliac

SID II_s Serial No. 297 Certification No. 75-1

Test Date: 4/10/2025



Specification Source: CFR49 Part 572 Subpart V
with Polarity in accordance with J211

04.10.2025 10:56:49 681



APPENDIX D
TEST EQUIPMENT AND INSTRUMENTATION CALIBRATION DATA

TABLE 1 – Dummy Instrumentation (SID-IIs)

				SID-IIs S/N 297			
				Serial Number	Manufacturer	Calibration Date	
Head Accelerometers				X	T17622	Endevco	17-Jan-2025
				Y	T24507	Endevco	17-Jan-2025
				Z	T17636	Endevco	17-Jan-2025
Displacement Potentiometers	Shoulder			Y	N/A	N/A	N/A
	Thoracic Rib	Upper	Y	023	Servo	26-Apr-2024	
		Middle	Y	063	Servo	26-Apr-2024	
		Lower	Y	043	Servo	26-Apr-2024	
	Abdominal Rib	Upper	Y	051	Servo	26-Apr-2024	
		Lower	Y	081	Servo	25-Jan-2025	
Lower Spine Accelerometers (T12)				X	T20232	Endevco	16-Jan-2025
				Y	T11866	Endevco	21-Jan-2025
				Z	T17633	Endevco	16-Jan-2025
Acetabulum Load Cell				Y	235-FY	FTSS	26-Apr-2024
Iliac Wing Load Cell				Y	320-FY	Denton	26-Apr-2024
Pelvis Plug (struck side)					14482	Saco	18-Dec-2020
Pelvis Plug (non-struck side)					14486	Saco	18-Dec-2020

TABLE 2 – Vehicle Instrumentation

Vehicle Instrumentation		Serial Number	Manufacturer	Calibration Date
Vehicle Center of Gravity	X	A400070	Measurement Specialties	10-Dec-2024
Vehicle Center of Gravity	Y	A378304	Measurement Specialties	10-Dec-2024
Vehicle Center of Gravity	Z	A385750	Measurement Specialties	10-Dec-2024
Left Floor Sill	Y	A379029	Measurement Specialties	27-Feb-2025
A-Pillar Sill	Y	A377544	Measurement Specialties	3-Mar-2025
A-Pillar Low	Y	A400067	Measurement Specialties	11-Dec-2024
A-Pillar Mid	Y	A385705	Measurement Specialties	10-Dec-2024
B-Pillar Sill	Y	A385740	Measurement Specialties	14-Oct-2024
B-Pillar Low	Y	A386340	Measurement Specialties	10-Dec-2024
B-Pillar Mid	Y	A377514	Measurement Specialties	10-Dec-2024
Driver Seat	Y	A379063	Measurement Specialties	3-Mar-2025
Engine Top	X	A379051	Measurement Specialties	3-Mar-2025
Engine Top	Y	A378307	Measurement Specialties	13-Feb-2025
Firewall	Y	A377524	Measurement Specialties	3-Mar-2025
Right Roof	Y	A379036	Measurement Specialties	3-Mar-2025
Right Floor Sill	Y	A377523	Measurement Specialties	3-Mar-2025
Rear Floor Pan	X	A386347	Measurement Specialties	11-Dec-2024
Rear Floor Pan	Y	A386338	Measurement Specialties	11-Dec-2024

TABLE 3 – Pole Instrumentation

Pole Instrumentation	Serial Number	Manufacturer	Calibration Date
Load Cell 1	DK7091S	Humanetics	13-Jan-2025
Load Cell 2	DK7120S	Humanetics	13-Jan-2025
Load Cell 3	DK7118S	Humanetics	13-Jan-2025
Load Cell 4	DK7124S	Humanetics	13-Jan-2025
Load Cell 5	DK7111S	Humanetics	13-Jan-2025
Load Cell 6	DK7126S	Humanetics	13-Jan-2025
Load Cell 7	DK7112S	Humanetics	13-Jan-2025
Load Cell 8	DK7074S	Humanetics	13-Jan-2025