



NIO EL7
Standard Safety Equipment

2023



Adult Occupant



93%

Child Occupant



85%

Vulnerable Road Users



80%

Safety Assist



79%

SPECIFICATION

Tested Model	NIO EL7, 20" rim 75kWh Battery, LHD
Body Type	- 5 door SUV
Year Of Publication	2023
Kerb Weight	2346kg
VIN From Which Rating Applies	- all EL7's
Class	Large SUV

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	—
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✘	✘	—
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	●	●	✘
Centre Airbag	●	✘	—

	Driver	Passenger	Rear
CHILD PROTECTION			
Isfix/i-Size	—	✘	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
Child presence detection	—	✘	●
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

OTHER SYSTEMS	
Active Bonnet	✘
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
Cyclist Dooring Prevention	●
AEB Motorcyclist	●
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●
Fatigue / Distraction Detection	●

Note: Other equipment may be available on the vehicle but was not considered in the test year.

- Fitted to the vehicle as standard
 ○ Fitted to the vehicle as part of the safety pack
○ Not fitted to the test vehicle but available as option or as part of the safety pack
 ✘ Not available
 — Not applicable

ADULT OCCUPANT

Total 37.3 Pts / 93%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Frontal Impact 13.7 / 16 Pts

Mobile Progressive Deformable Barrier Full Width Rigid Barrier

Lateral Impact 16.0 / 16 Pts

Side Mobile Barrier Side Pole Far-Side Excursion Occupant Interaction


Rear Impact 3.6 / 4 Pts

Rear Seat Front Seat


 ADULT OCCUPANT

Total 37.3 Pts / 93%

GOOD ADEQUATE MARGINAL WEAK POOR

Rescue and Extrication		4.0 / 4 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Available	
Submergence Check	Compliant	

Comments

The passenger compartment of the EL7 remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. NIO showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the EL7 would be a somewhat aggressive impact partner in a frontal collision. In the full-width rigid barrier test, good protection was provided to all critical body areas for both the driver and rear passenger, and the car scored maximum points in this part of the assessment. In both the side barrier test and the more severe side pole impact, protection of all critical body areas was good and the car scored maximum points. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was found to be adequate. The EL7 has a counter-measure to mitigate against occupant to occupant injuries in such impacts and this performed well in Euro NCAP's test. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats indicated marginal whiplash protection. The EL7 has an advanced eCall system which alerts the emergency services in the event of a crash. The car also has a system which applies the brakes after an impact, to avoid secondary collisions. NIO demonstrated that, if the car entered water, the doors and windows of the EL7 would remain functional long enough to allow the occupants to escape.

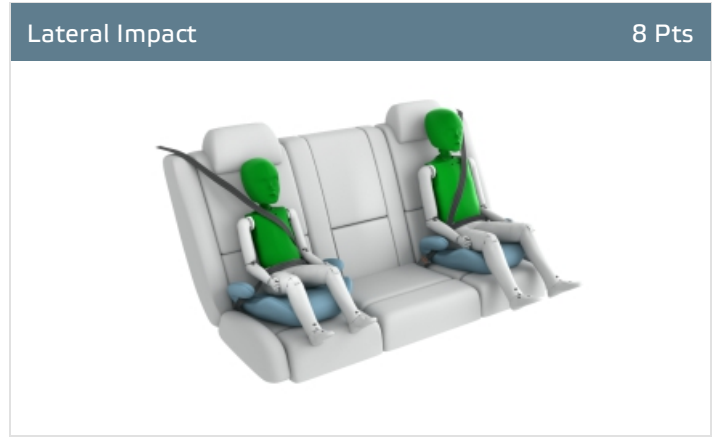
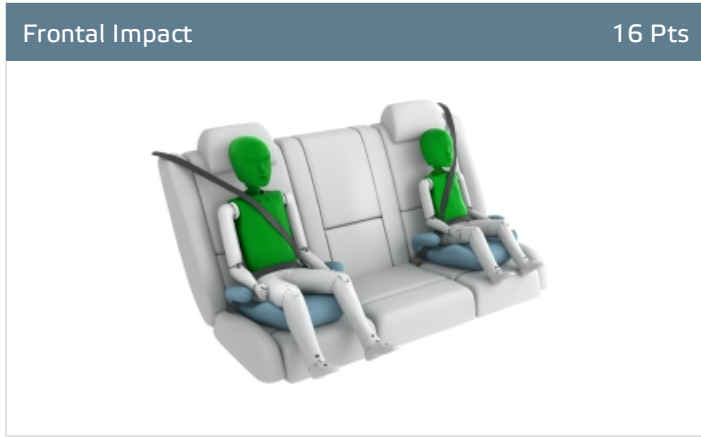
CHILD OCCUPANT

Total 42.0 Pts / 85%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

24.0 / 24 Pts



Restraint for 6 year old child: *Cybex Solution Z i-Fix*
 Restraint for 10 year old child: *Graco Booster Basic*

Safety Features

6.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	✗	●	✗
i-Size	✗	●	✗
Integrated CRS	✗	✗	✗
Top tether	✗	●	✗
Child Presence Detection	✗	●	●

● Fitted to test car as standard
 ○ Not on test car but available as option
 ✗ Not available

CRS Installation Check

12.0 / 12 Pts

i-Size	Seat Position				
	Front		2nd row		
			Left	center	Right
	✗	✗	●	✗	●

● Easy
 ● Difficult
 ● Safety critical
 ✗ Not allowed
✗ Airbag ON
 Rearward facing restraint installation not allowed
 Airbag OFF

Version 110724

CHILD OCCUPANT

Total 42.0 Pts / 85%

Isofix	Seat Position				
	Front		2nd row		
			Left	center	Right
	✗	✗	●	✗	●
	✗	✗	●	✗	●
	✗	✗	●	✗	●
	✗	✗	●	✗	●
	✗	✗	●	✗	●
	✗	✗	●	✗	●

● Easy
 ● Difficult
 ● Safety critical
 ✗ Not allowed
✗ Airbag ON
 Rearward facing restraint installation not allowed
✗ Airbag OFF

Seatbelt Attached	Seat Position				
	Front		2nd row		
			Left	center	Right
	✗	●	●	●	●
	✗	●	●	●	●
	✗	●	●	●	●
	✗	●	●	●	●
	✗	●	●	●	●
	✗	●	●	●	●

● Easy
 ● Difficult
 ● Safety critical
 ✗ Not allowed
✗ Airbag ON
 Rearward facing restraint installation not allowed
✗ Airbag OFF



CHILD OCCUPANT

Total 42.0 Pts / 85%

Comments

In both the frontal offset and side barrier tests, good protection was provided to all critical body areas for both child dummies, and the NIO EL7 scored maximum points in this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. The EL7 is equipped with a direct 'child presence detection' system, which issues a warning when it detects that a child or infant has been left in the car. However, the system did not meet Euro NCAP's requirements and was not rewarded. All of the child restraint types for which the EL7 is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 50.8 Pts / 80%



VRU Impact Protection

28.6 / 36 Pts



Pedestrian & Cyclist Head	11.2 Pts
Pelvis	3.9 Pts
Femur	4.5 Pts
Knee & Tibia	9.0 Pts

VRU Impact Mitigation

22.2 / 27 Pts

System Name	AEB
Type	Auto-Brake with Forward Collision Warning
Operational From	4 km/h
PERFORMANCE	

AEB Pedestrian

7.2 / 9 Pts

Scenario	Day time	Night time
Car reversing into adult or child		—
Adult crossing a road into which a car is turning		—
Adult crossing the road		
Child running from behind parked vehicles		
Adult along the roadside		

— Currently not tested

AEB Cyclist

7.4 / 8 Pts

Scenario	Day time
Approaching cyclist crossing from behind parked parked vehicles	
Turning across path of an oncoming cyclist	
Approaching a crossing cyclist	
Approaching a cyclist along the roadside	

 **VULNERABLE ROAD USERS**

Total 50.8 Pts / 80%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Cyclist Dooring Prevention ■ 0.3 / 1 Pts

Scenario	
Dooring a passing cyclist	sudden opening prevention"

AEB Motorcyclist ■ 4.3 / 6 Pts

Scenario	Autobrake function only	Driver reacts to warning
Approaching a stationary motorcyclist	■	■
Approaching a braking motorcyclist	■	■
Turn across the path of an oncoming motorcyclist	■	—

— Currently not tested

Lane Support Motorcyclist ■ 3.0 / 3 Pts

Scenario	Day time
Changing lane across the path of an oncoming motorcyclist	■
Changing lane across the path of an overtaking motorcyclist	■

Comments

Protection of the head of a struck pedestrian or cyclist was almost mostly good or adequate, with poor results recorded only on the stiff windscreen pillars. Protection of the pelvis, femur and tibia was good at all test locations. The autonomous emergency braking (AEB) system of the NIO can respond to vulnerable road users as well as to other vehicles. The system performed well in tests of its response to pedestrians, with marginal performance only in tests of a child running from behind parked vehicles. Performance was good in all bicyclist scenarios apart from dooring, in which the car prevents or warns against door opening if a cyclist is approaching from behind, where performance was marginal. Good or adequate performance was seen in all tests of the NIO EL7's response to motorcyclists.

SAFETY ASSIST

Total 14.2 Pts / 79%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Speed Assistance 2.3 / 3 Pts

System Name	Speed Limiter
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	Intelligent ACC (accurate to 5km/h)

Occupant Status Monitoring 2.6 / 3 Pts

> Seatbelt Reminder 1.0 / 1 Pts

Applies To	Front and rear seats		
	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●
Occupant Detection	—	●	●

● Pass
 ● Fail
 — Not available

> Driver Monitoring 1.6 / 2 Pts

System Name	Advanced Driver Monitoring System (ADMS)
Type	Direct eye monitoring
Operational From	10 km/h
Fatigue	Drowsiness, Microsleep and Sleep
Distraction	Long & Short Distraction and Phone Use
Impairment	Does not react to unresponsive driver

SAFETY ASSIST

Total 14.2 Pts / 79%

Lane Support

2.3 / 3 Pts

System Name	LSS
Type	LKA and ELK
Operational From	50 km/h
PERFORMANCE	
Emergency Lane Keeping	ADEQUATE
Lane Keep Assist	GOOD
Human Machine Interface	GOOD

AEB Car-to-Car

7.1 / 9 Pts

System Name	AEB
Type	Autonomous emergency braking and forward collision warning
Operational From	4 km/h
Sensor Used	Camera, Radar and LIDAR

Scenario	Autobrake function only	Driver reacts to warning
Approaching a car crossing a junction		
Approaching a car head-on		—
Turning across the path of an oncoming car		—
Approaching a stationary car		
Approaching a slower moving car		—
Approaching a braking car		—

— Currently not tested



SAFETY ASSIST

Total 14.2 Pts / 79%

Comments

The autonomous emergency braking (AEB) system of the NIO EL7 performed well in tests of its reaction to other vehicles. NIO was not able to verify the car's performance in Euro NCAP's 'head-on' tests and no points were awarded. A seatbelt reminder system is fitted as standard to the front and rear seats and the car is equipped with a system to detect driver fatigue, such as microsleap (very short periods where consciousness is lost) and distraction, such as phone use. The lane support system gently corrects the vehicle's path if it is drifting out of lane and also intervenes in some more critical situations. The speed assistance system identifies the local speed limit, and the driver can choose to allow the limiter to be set automatically by the system.

RATING VALIDITY

Variants of Model Range

Body Type	Engine & Transmission	Drivetrain	Rating Applies	
			LHD	RHD
5 door SUV	75 kWh electric *	4 x 4	✓	✓
5 door SUV	100 kWh electric	4 x 4	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
July 2023	Rating Published	2023 ★★★★★ ✓