



Lexus RZ
Standard Safety Equipment

2023



Adult Occupant



87%

Child Occupant



87%

Vulnerable Road Users



84%

Safety Assist



81%

SPECIFICATION

Tested Model	Lexus RZ, 71kWh electric 'Executive', LHD
Body Type	- 5 door SUV
Year Of Publication	2023
Kerb Weight	2105kg
VIN From Which Rating Applies	- all RZs
Class	Large Off-Road

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			
Isifix/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 35.1 Pts / 87%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Frontal Impact 12.9 / 16 Pts

Mobile Progressive Deformable Barrier Full Width Rigid Barrier

Lateral Impact 15.4 / 16 Pts

Side Mobile Barrier Side Pole Far-Side Excursion Occupant Interaction


Rear Impact 3.7 / 4 Pts

Rear Seat Front Seat


 ADULT OCCUPANT

Total 35.1 Pts / 87%

GOOD ADEQUATE MARGINAL WEAK POOR

Rescue and Extrication		3.0 / 4 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Available	
Submergence Check	Compliant	

Comments

The passenger compartment of the RZ remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Lexus showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Protection of all critical body areas was good for the front passenger. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the RZ would be a moderately benign impact partner in a frontal collision. In the full-width rigid barrier test, chest protection was rated as weak for the rear passenger, based on dummy readings of compression. Otherwise, protection of both dummies was good or adequate in this test. In the side barrier test, protection of all critical body areas was good and the car scored maximum points. However, in the side pole impact, dummy readings of rib compression indicated a marginal level of protection. 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 good. The RZ has a counter-measure to mitigate against occupant to occupant injuries in such impacts and this performed well in Euro NCAP's test. The centre airbag is mounted on the driver's seat but provides protection to both front seat occupants in a side impact. 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 also indicated good whiplash protection. The RZ 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. Lexus demonstrated that, if the car entered water, the doors and windows of the RZ would remain functional long enough to allow the occupants to escape.

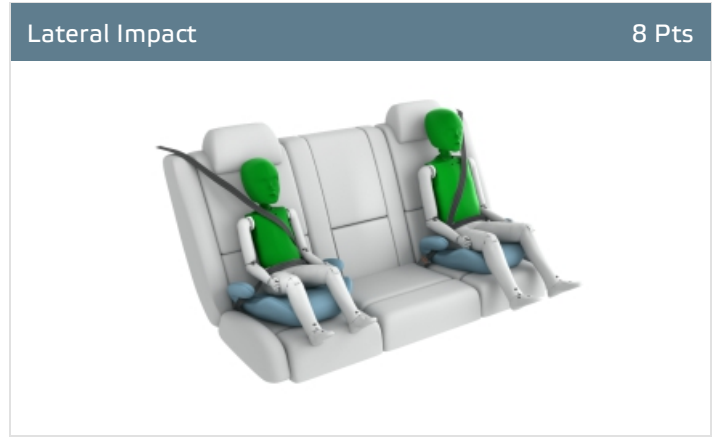
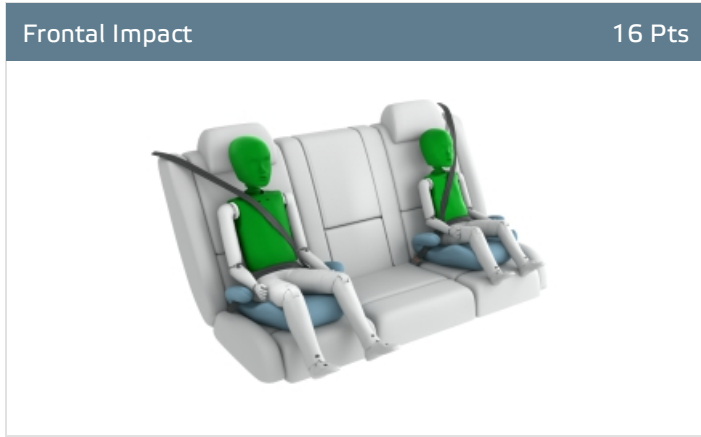
CHILD OCCUPANT

Total 43.0 Pts / 87%

■ 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: *KIDFIX i-SIZE*
 Restraint for 10 year old child: *GRACO BOOSTER BASIC*

Safety Features

7.0 / 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 131223

CHILD OCCUPANT

Total 43.0 Pts / 87%

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 43.0 Pts / 87%

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 Lexus RZ 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 vehicle is equipped with an indirect child presence detection system, which warns when a child or infant may have been left in the car. All of the child restraint types for which the RZ is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 53.4 Pts / 84%



VRU Impact Protection

26.9 / 36 Pts



Pedestrian & Cyclist Head	11.0 Pts
Pelvis	4.5 Pts
Femur	4.4 Pts
Knee & Tibia	7.0 Pts

VRU Impact Mitigation

26.5 / 27 Pts

System Name	Pre-Collision System (with Pedestrian & Bicyclist Detection).
Type	Auto-Brake with Forward Collision Warning
Operational From	5 km/h
PERFORMANCE	

AEB Pedestrian

8.5 / 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

8.0 / 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 53.4 Pts / 84%



Cyclist Dooring Prevention 1.0 / 1 Pts

Scenario	
Dooring a passing cyclist	sudden opening prevention"

AEB Motorcyclist 6.0 / 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 predominantly good or adequate, with poor results recorded only on the stiff windscreen pillars. Protection of the pelvis was good at all test locations and that of the femur was at least adequate. However, protection of the knee and tibia was poor towards the centreline of the car. The autonomous emergency braking (AEB) system of the Lexus can respond to vulnerable road users as well as to other vehicles. The system performed well in tests of its response to pedestrians and full points were scored in tests of the system's reaction to cyclists, including dooring, in which the car prevents or warns against door opening if a cyclist is approaching from behind. Similarly, the AEB system performed well in all tests of its response to motorcyclists and scored full points.

SAFETY ASSIST

Total 14.7 Pts / 81%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Speed Assistance

■ 2.1 / 3 Pts

System Name	Road Sign Assist with Speed Limiter
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	Intelligent Speed Limiter default ON (accurate to 5km/h)

Occupant Status Monitoring

■ 1.3 / 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**

■ 0.3 / 2 Pts

System Name	Driver Monitor
Type	Direct (distraction & sleep); Indirect (drowsiness)
Operational From	10 km/h
Fatigue	Drowsiness and Sleep

SAFETY ASSIST

Total 14.7 Pts / 81%

Lane Support

3.0 / 3 Pts

System Name	Lane Departure Alert & Lane Tracing Assist	
Type	LKA and ELK	
Operational From	50 km/h	
PERFORMANCE		
Emergency Lane Keeping		GOOD
Lane Keep Assist		GOOD
Human Machine Interface		GOOD

AEB Car-to-Car

8.3 / 9 Pts

System Name	Pre-Collision System	
Type	Autonomous emergency braking and forward collision warning	
Operational From	5 km/h	
Sensor Used	camera and radar	

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 14.7 Pts / 81%

Comments

The autonomous emergency braking (AEB) system of the Lexus RZ performed well in tests of its reaction to other vehicles, including the head-on scenarios. 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 drowsiness and long distraction, where the driver is not focussed on the driving task. The system does not recognise short distraction or 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	Model Name	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	71kWh battery electric	RZ 450e*	4 x 4		

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
September 2023	Rating Published	2023