Tesla Model S
Standard Safety Equipment

2022 ★★★★★

Adult Occupant — **94%**

Child Occupant — **91%**

Vulnerable Road Users — **85%**

Safety Assist — **98%**

SPECIFICATION

Tested Model	Tesla Model S, Dual Motor AWD 'Premium', LHD
Body Type	- 4 door saloon
Year Of Publication	2022
Kerb Weight	2095kg
VIN From Which Rating Applies	- all Model S
Class	Executive

Version 161122

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	🟢	❌	—

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Euro NCAP © Tesla Model S Nov 2022 2/18

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	—	✖	●
Integrated CRS	—	✖	✖
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

OTHER SYSTEMS	
Active Bonnet	●
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●

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 35.8 Pts / 94%

GOOD	ADEQUATE	MARGINAL	WEAK	POOR

Frontal Impact — 13.9 / 16 Pts

Mobile Progressive Deformable Barrier

Full Width Rigid Barrier
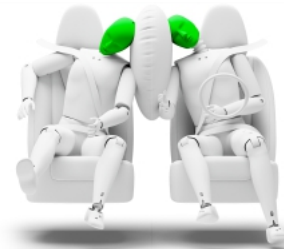
Lateral Impact — 16.0 / 16 Pts

Side Mobile Barrier

Side Pole

Far-Side Excursion

Occupant Interaction

Rear Impact — 3.9 / 4 Pts

Rear Seat

Front Seat

ADULT OCCUPANT

Total 35.8 Pts / 94%

| GOOD | ADEQUATE | MARGINAL | WEAK | POOR |

Rescue and Extrication	2.0 / 2 Pts
Rescue Sheet	Available, ISO compliant
Advanced eCall	Available
Multi Collision Brake	Available

Comments

The passenger compartment of the Model S remained stable in the frontal offset test. Dummy readings indicated good protection of the knees and femurs of both the driver and passenger. Tesla demonstrated that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Protection of the driver's chest was rated as marginal, based on dummy readings of compression. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the Model S would be a moderately benign impact partner in a frontal collision. In the full-width rigid barrier test, protection of all critical body areas was good, both for the driver and the rear passenger, and the Model S scored maximum points in this part of the assessment. Likewise, in both the side barrier and the more aggressive side pole impact, protection of all critical body areas was good. 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 Model S has a counter-measure to mitigate against occupant to occupant injuries in such impacts. The system performed well in Euro NCAP's test, with good protection of occupants' heads. 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 Model S has an advanced eCall system which alerts the emergency services in the event of a crash and a system which automatically applies the brakes to prevent secondary collisions.
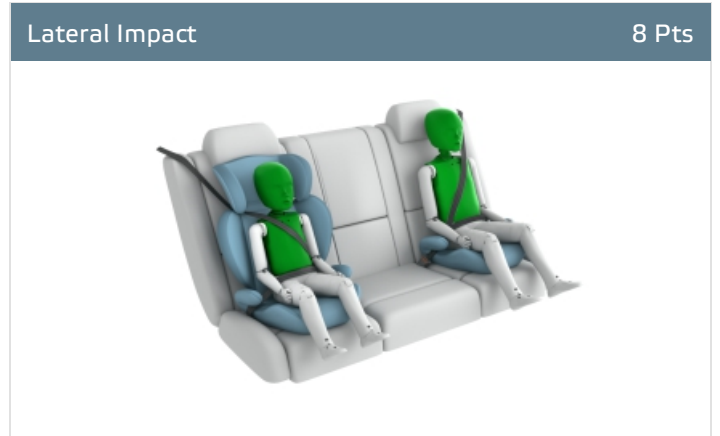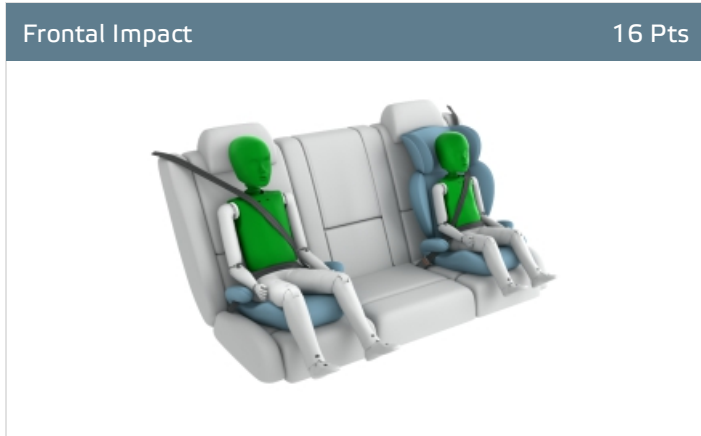
EURO NCAP
FOR SAFER CARS

👶 CHILD OCCUPANT   Total 45 Pts / 91%

🟩 GOOD	🟨 ADEQUATE	🟧 MARGINAL	🟫 WEAK	🟥 POOR

Crash Test Performance based on 6 & 10 year old children   24.0 / 24 Pts

Frontal Impact	16 Pts

Lateral Impact	8 Pts

Restraint for 6 year old child: *Britax Römer Kidfix I-Size*
Restraint for 10 year old child: *Peg Perego Viaggio*

Safety Features   9.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	✖	🟢	✖
i-Size	✖	🟢	✖
Integrated CRS	✖	✖	✖

🟢 Fitted to test car as standard   ⭕ Not on test car but available as option   ✖ Not available

EURO NCAP

CRS Installation Check

12.0 / 12 Pts

● Install without problem ● Install with care ● Safety critical problem ✖ Installation not allowed

■ i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (i-Size)	Maxi Cosi 2way Pearl & 2wayFix (i-Size)	BeSafe iZi Kid X2 i-Size (i-Size)

Britax Römer TriFix2 i-Size (i-Size)	BeSafe iZi Flex FIX i-Size (i-Size)

■ ISOFIX CRS

BeSafe iZi Combi X4 ISOfix (ISOFIX)	Cybex Solution Z i-Fix (ISOFIX)

CHILD OCCUPANT

Total 45 Pts / 91%

■ **Universal Belted CRS**

Maxi Cosi Cabriofix (Belt)

Maxi Cosi Cabriofix & EasyFix (Belt)

Britax Römer King II LS (Belt)

Cybex Solution Z i-Fix (Belt)

🪑 CHILD OCCUPANT

Total 45 Pts / 91%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	—	🟢	—	🟢
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	—	🟢	—	🟢
BeSafe iZi Kid X2 i-Size (i-Size)	—	🟢	—	🟢
Britax Römer TriFix2 i-Size (i-Size)	—	🟢	—	🟢
BeSafe iZi Flex FIX i-Size (i-Size)	—	🟢	—	🟢
BeSafe iZi Combi X4 ISOfix (ISOFIX)	—	🟢	—	🟢
Cybex Solution Z i-Fix (ISOFIX)	—	🟢	—	🟢
Maxi Cosi Cabriofix (Belt)	🟢	🟢	🟢	🟢
Maxi Cosi Cabriofix & EasyFix (Belt)	🟢	🟢	🟢	🟢
Britax Römer King II LS (Belt)	🟢	🟢	🟢	🟢
Cybex Solution Z i-Fix (Belt)	🟢	🟢	🟢	🟢

🟢 Install without problem   🟠 Install with care   🔴 Safety critical problem   ❌ Installation not allowed

— Not available

Comments

The Model S provided good protection for all critical body regions of both the 6 and 10 year dummies in the frontal offset and side barrier tests, and scored maximum points in this part of the assessment. The Model S has a system which automatically disables the front passenger airbag to allow a rearward-facing child restraint to be used in that seating position. Tests showed that the system correctly identified when to disable the airbag, and it was rewarded. All of the child restraint types for which the Model S is designed could be properly installed and accommodated.

🚶 VULNERABLE ROAD USERS

Total 45.9 Pts / 85%

GOOD	ADEQUATE	MARGINAL	WEAK	POOR

Pedestrian

28.9 / 36 Pts

Head Impact	16.9 Pts
Pelvis Impact	6.0 Pts
Leg Impact	6.0 Pts

Vulnerable Road Users

17.0 / 18 Pts

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

VULNERABLE ROAD USERS

Total 45.9 Pts / 85%

AEB Pedestrian

8.0 / 9 Pts

- **Day time**

Vehicle reversing into standing pedestrian
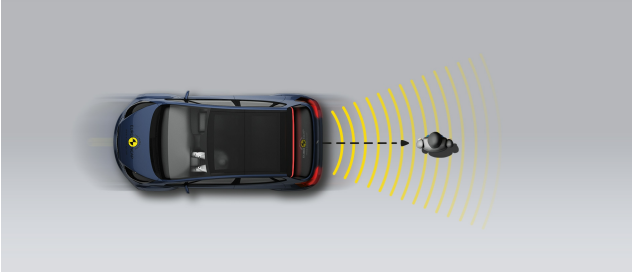
Pedestrian crossing a road into which a car is turning

Adult crossing the road
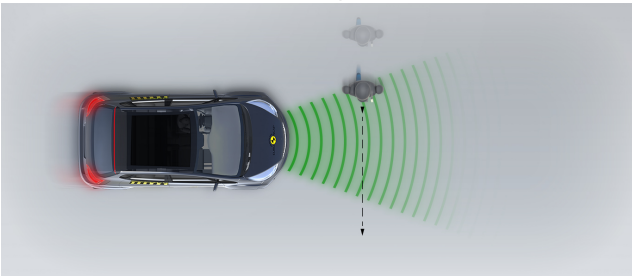
Child running from behind parked vehicles
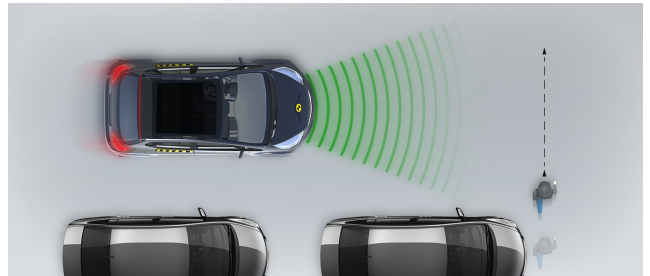
Adult along the roadside
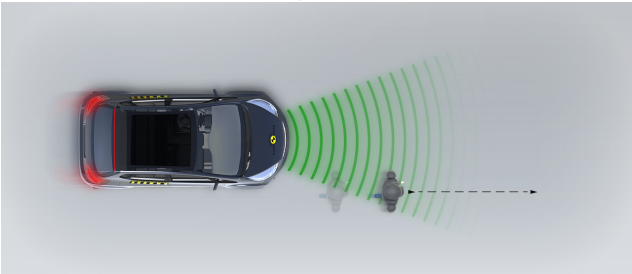
- **Night time**

Adult crossing the road
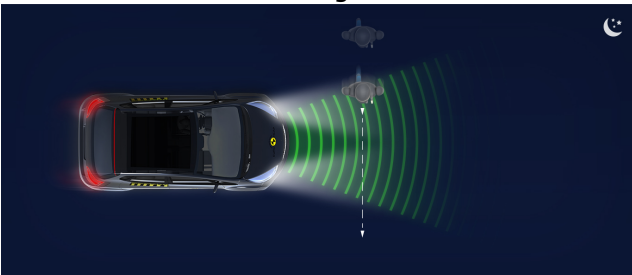
Adult along the roadside
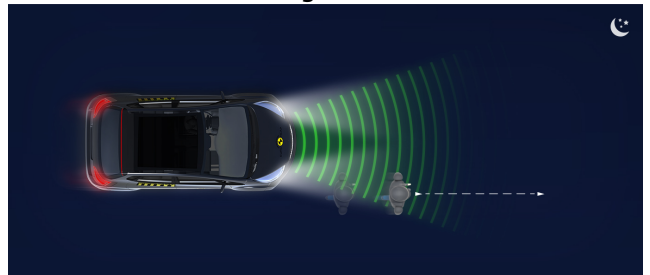
🚶 VULNERABLE ROAD USERS

Total 45.9 Pts / 85%

AEB Cyclist

9.0 / 9 Pts

Cyclist from nearside, obstructed view

Approaching a crossing cyclist
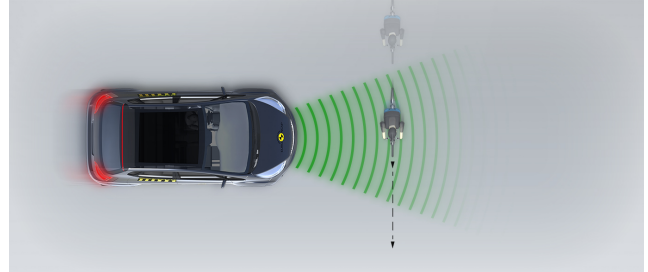
Cyclist along the roadside
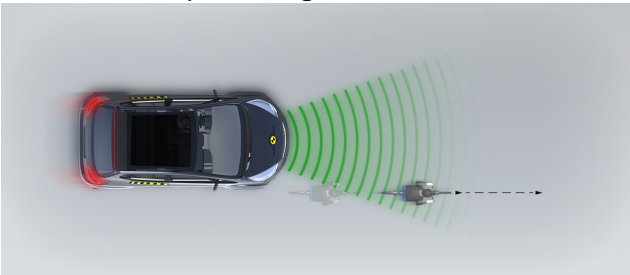
Comments

The Model S has an 'active' bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet to provide greater clearance to stiff structures underneath. Tesla showed that the system worked robustly for different pedestrian statures and over a range of speeds and, accordingly, the car was tested with the bonnet in the raised, deployed, position. The protection provided to the head of a struck pedestrian was almost completely good or adequate, with some poor results only at the base of the windscreen and on the stiff windscreen pillars. The bumper offered good protection to pedestrians' legs at all test locations and protection of the pelvis was also good across the width of the car. The autonomous emergency braking (AEB) system of the Model S can respond to vulnerable road users as well as to other vehicles. The system performed well in tests of its response to pedestrians and cyclists, with collisions avoided in almost all test scenarios.

🚘 SAFETY ASSIST

Total 15.7 Pts / 98%

	GOOD		ADEQUATE		MARGINAL		WEAK		POOR

Speed Assistance

3.0 / 3 Pts

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

Occupant Status Monitoring

3.0 / 3 Pts

> #### Seatbelt Reminder

2.0 / 2 Pts

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

● Pass   ● Fail   — Not available

> #### Driver Monitoring

1.0 / 1 Pts

System Name	Collision Avoidance Driver Monitoring
Type	Direct eye monitoring & driver control input
Operational From	4 km/h

SAFETY ASSIST

Total 15.7 Pts / 98%

Lane Support

4.0 / 4 Pts

System Name	Lane Assist
Type	LKA and ELK
Operational From	40 km/h
PERFORMANCE	
Emergency Lane Keeping	GOOD
Lane Keep Assist	GOOD
Human Machine Interface	GOOD

AEB Car-to-Car

5.7 / 6 Pts

System Name	Auto-Brake with Forward Collision Warning
Type	Autonomous emergency braking and forward collision warning
Operational From	8 km/h
Sensor Used	camera and radar

![EURO NCAP - FOR SAFER CARS]

📶 SAFETY ASSIST

- **Autobrake function only**

Car turning across the path of an oncoming car
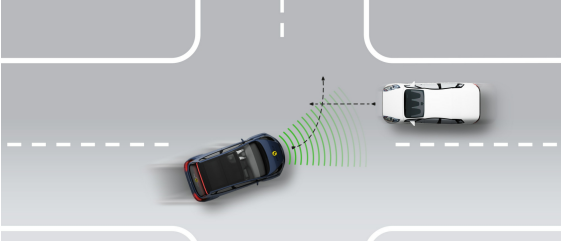
Approaching a stationary car
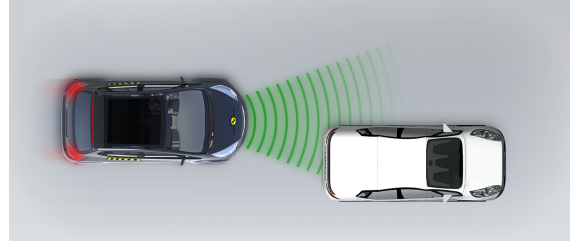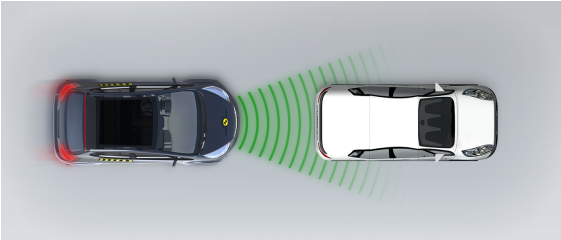
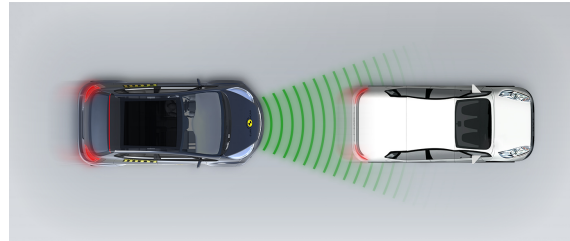Approaching a stationary car

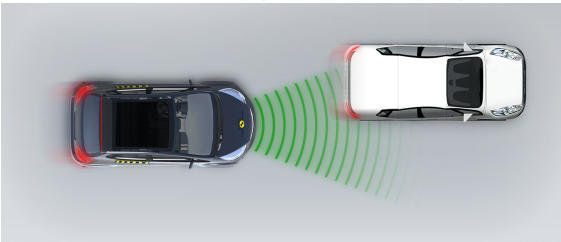Approaching a stationary car
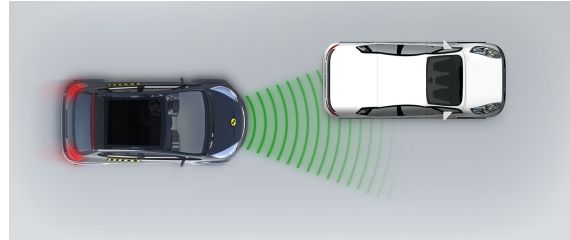
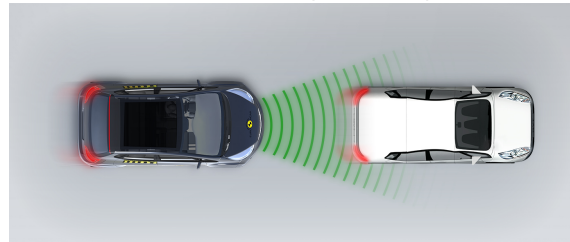Approaching a slower moving car
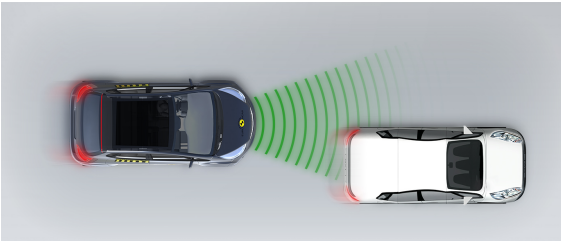
Approaching a slower moving car

Approaching a slower moving car
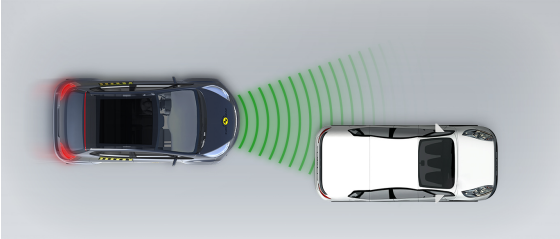

Approaching a braking car

SAFETY ASSIST
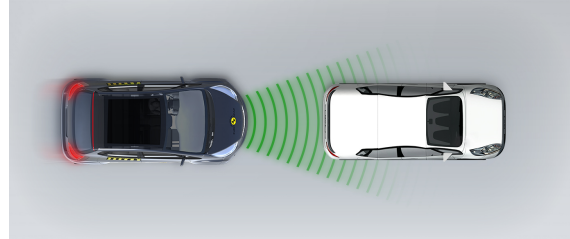
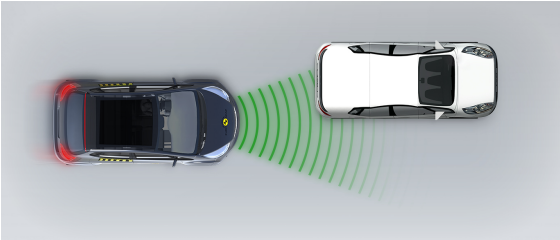Total 15.7 Pts / 98%

- **Driver reacts to warning**

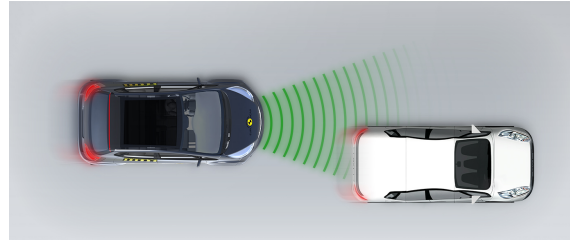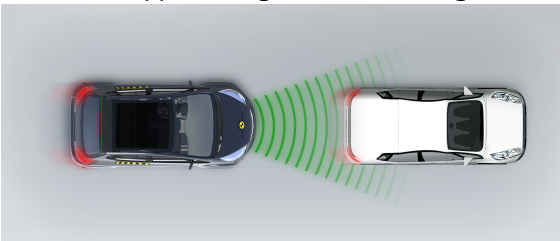### Approaching a stationary car

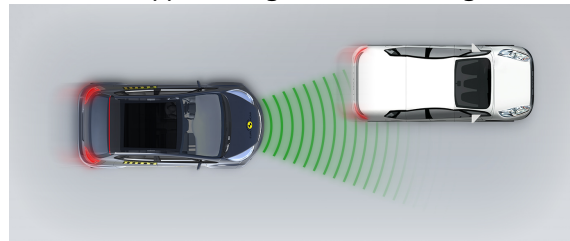### Approaching a stationary car

Approaching a stationary car
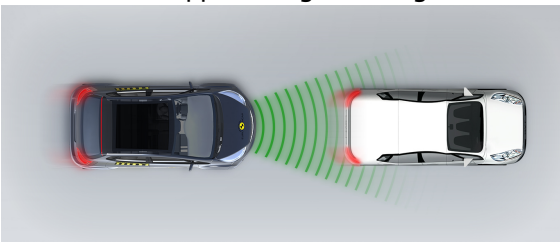

Approaching a slower moving car

Approaching a slower moving car

Approaching a slower moving car

Approaching a braking car

Version 161122

SAFETY ASSIST

Total 15.7 Pts / 98%

Comments

The autonomous emergency braking (AEB) system performed well in tests of its reaction to other vehicles. A seatbelt reminder system is fitted as standard to the front and rear seats. Its 'Collision Avoidance Driver Monitoring' system uses camera-based direct monitoring to detect a distracted driver and automatically changes the sensitivity of the Forward Collision Warning System to be more reactive. 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 car uses digital mapping and camera inputs to determine the local speed limit and the driver can opt to be notified via a visual and both visual and acoustic warning.

Version 161122

RATING VALIDITY

Variants of Model Range

Body Type	Engine	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
4 door saloon	Dual Motor AWD*		4 x 4	✔	
4 door saloon	Tri Motor AWD	Plaid	4 x 4	✔	

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome	
November 2022	Rating Published	2022 ⭐⭐⭐⭐⭐	✔