



Lexus ES
Standard Safety Equipment

2018



Adult Occupant



91%

Child Occupant



87%

Vulnerable Road Users



90%

Safety Assist



77%

SPECIFICATION

Tested Model	Lexus ES 300h 'Comfort', RHD
Body Type	- 4 door saloon
Year Of Publication	2018
Kerb Weight	1740kg
VIN From Which Rating Applies	- all ES
Class	Large Family Car

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	—
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	●	●	—
SIDE CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	●
Side pelvis airbag	●	●	●

Version 231018

SAFETY EQUIPMENT (NEXT)

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

OTHER SYSTEMS	
Active Bonnet (Hood)	●
AEB Pedestrian	●
AEB Cyclist	●
AEB City	●
AEB Inter-Urban	●
Speed Assistance System	●
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 34.7 Pts / 91%

 GOOD  ADEQUATE  MARGINAL  WEAK  POOR

Frontal Offset Deformable Barrier 7.5 / 8 Pts



Passenger



Driver

Frontal Full Width 6.6 / 8 Pts



Rear Passenger



Driver

Whiplash Rear Impact 1.6 / 2 Pts



Front seat



Rear seat

Lateral Impact 15 / 16 Pts



Car



Pole

 ADULT OCCUPANT

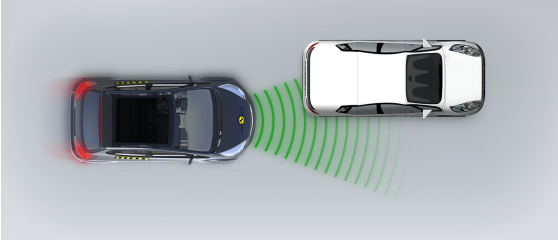
Total 34.7 Pts / 91%

 GOOD  ADEQUATE  MARGINAL  WEAK  POOR

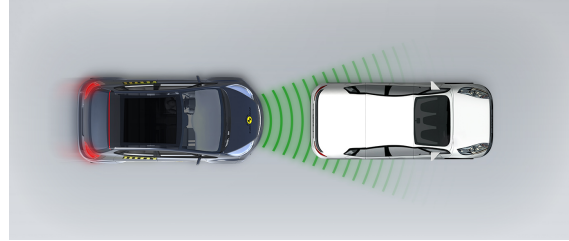
AEB City

 4 / 4 Pts

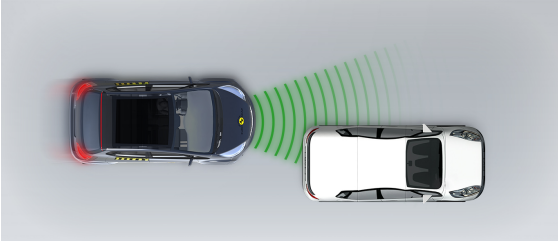
Approaching a stationary car: Left Offset



Approaching a stationary car: No Offset



Approaching a stationary car: Right Offset



 ADULT OCCUPANT

Total 34.7 Pts / 91%

Comments

The passenger compartment of the ES remained stable in the frontal offset test. Dummy readings showed good protection of all critical body areas for the passenger and good protection for 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. In the full-width rigid barrier test, protection of the driver dummy was good for all critical body areas. Protection of the rear passenger was good or adequate but the pelvis slipped beneath the lap section of the seatbelt, behaviour that was penalised, and the rating for this body area was rated as poor. Also, the side curtain airbag did not deploy properly, and a penalty was applied to the scores in the side barrier and pole impacts. In these side impact tests, dummy readings showed that protection of all critical body areas was good. However, with the penalty applied for incorrect airbag deployment (seen in the full-width frontal test), protection of the head was down-graded to adequate. Tests on the front seats and head restraints demonstrated good protection against whiplash injury in the event of a rear-end collision. A geometric assessment of the rear seats also indicated good whiplash protection. The standard-fit autonomous emergency braking (AEB) system scored near-maximum points in tests of its functionality at the low speeds, typical of city driving, at which many whiplash injuries are caused.

CHILD OCCUPANT

Total 43 Pts / 87%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

24 / 24 Pts

Frontal Impact 16 Pts



Lateral Impact 8 Pts



Restraint for 6 year old child: *Britax Römer KidFix XP SICT*

Restraint for 10 year old child: *Takata Maxi*

Safety Features

7 / 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

CRS Installation Check

12 / 12 Pts

● Install without problem
 ○ Install with care
 ● Safety critical problem
 ✗ Installation not allowed

■ i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)



Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)



BeSafe iZi Kid X2 i-Size (iSize)



CHILD OCCUPANT

Total 43 Pts / 87%

■ **ISOFIX CRS**

Maxi Cosi Cabriofix & FamilyFix (ISOFIX)



BeSafe iZi Kid X4 ISOfix (ISOFIX)



Britax Römer Duo Plus (ISOFIX)



Britax Römer KidFix XP (ISOFIX)



■ **Universal Belted CRS**

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyBase2 (Belt)



Britax Römer King II LS (Belt)



Britax Römer KidFix XP (Belt)



CHILD OCCUPANT

Total 43 Pts / 87%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)	□	●	□	●
Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)	□	●	□	●
BeSafe iZi Kid X2 i-Size (iSize)	□	●	□	●
Maxi Cosi Cabriofix & FamilyFix (ISOFIX)	□	●	□	●
BeSafe iZi Kid X4 ISOfix (ISOFIX)	□	●	□	●
Britax Römer Duo Plus (ISOFIX)	□	●	□	●
Britax Römer KidFix XP (ISOFIX)	□	●	□	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyBase2 (Belt)	●	●	✘	●
Britax Römer King II LS (Belt)	●	●	●	●
Britax Römer KidFix XP (Belt)	●	●	●	●

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

Comments

In both the frontal offset and the side barrier impacts, protection was good for all critical body areas for the 6 and 10 year children. The front passenger airbag can be deactivated 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. All of the restraint types for which the ES is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 43.7 Pts / 90%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Pedestrian Impact Protection	32.3 / 36 Pts						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Head Impact</td> <td style="text-align: right; padding: 5px;">20.3 Pts</td> </tr> <tr> <td style="padding: 5px;">Pelvis Impact</td> <td style="text-align: right; padding: 5px;">6 Pts</td> </tr> <tr> <td style="padding: 5px;">Leg Impact</td> <td style="text-align: right; padding: 5px;">6 Pts</td> </tr> </table>	Head Impact	20.3 Pts	Pelvis Impact	6 Pts	Leg Impact	6 Pts
Head Impact	20.3 Pts						
Pelvis Impact	6 Pts						
Leg Impact	6 Pts						

Vulnerable Road Users	11.3 / 12 Pts
System Name	Pre-Collision System with cyclist detection during daytime as part of the Lexus Safety System +
Type	Auto-Brake with Forward Collision Warning
Operational From	10 km/h

Comments

The ES has an active, deployable bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet to provide greater clearance to hard structures in the engine compartment. Lexus showed that the system worked robustly for different pedestrian statures and over a range of speeds, so tests were done with the bonnet in the raised position. The protection to the head of a struck pedestrian was good or adequate over almost the entire bonnet surface. The bumper provided good protection to pedestrians' legs and protection of the pelvis was also good. The AEB system performed well in tests of its reaction to pedestrians, in daylight and in low light, and in tests with cyclists.

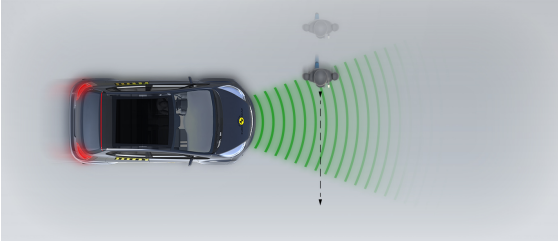
 VULNERABLE ROAD USERS

Total 43.7 Pts / 90%

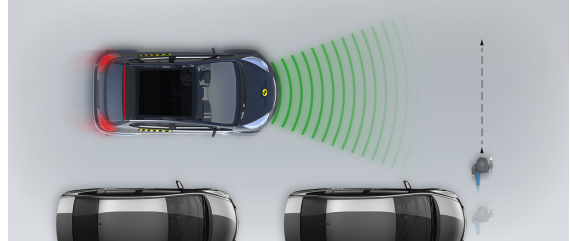
AEB Pedestrian 

■ Day time

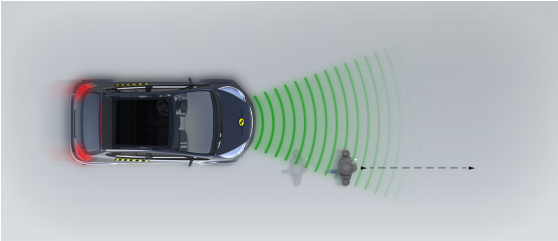
Adult crossing the road



Child running from behind parked vehicles



Adult along the roadside

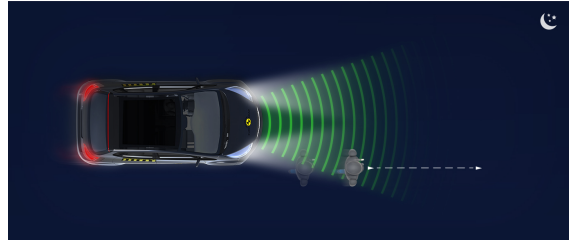


■ Night time

Adult crossing the road

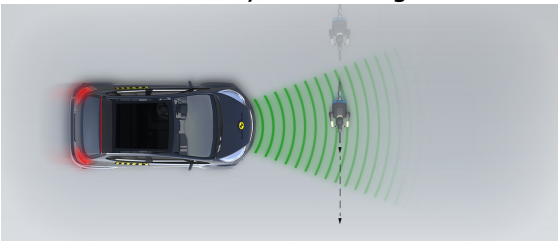


Adult along the roadside

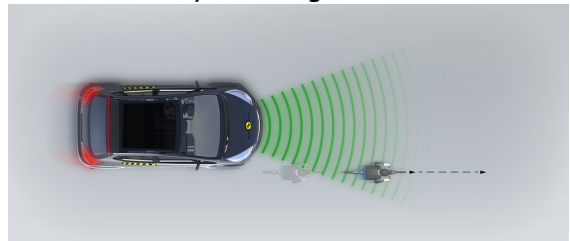


AEB Cyclist 

Cyclist crossing



Cyclist along the roadside



SAFETY ASSIST

Total 10.1 Pts / 77%

GOOD ADEQUATE MARGINAL WEAK POOR

Speed Assistance

2.4 / 3 Pts

System Name	Dynamic Radar Cruise Control with Road Sign Assist as part of the Lexus Safety System +
Speed Limit Information Function	Camera based
Speed Limitation Function	System advised (accurate to 5km/h)

Seat Belt Reminder

3 / 3 Pts

Applies To	Not available		
	Driver Seat	front passenger(s)	rear passenger(s)
Warning			
Visual			
Audible			

Pass Fail Not available

Lane Support

2.3 / 4 Pts


System Name	Lane Tracing Assist as part of the Lexus Safety System +
Type	LKA
Operational From	50 km/h

PERFORMANCE	
Emergency Lane Keeping	NOT AVAILABLE
Lane Keep Assist	GOOD
Human Machine Interface	ADEQUATE

 SAFETY ASSIST

Total 10.1 Pts / 77%

AEB Interurban

 2.4 / 3 Pts

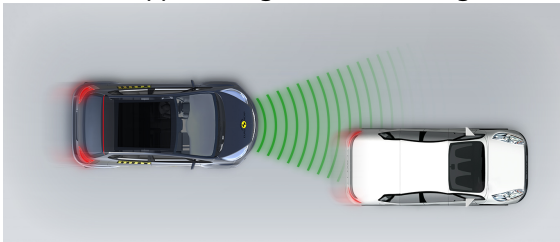
System Name	Pre-Collision System as part of the Lexus Safety System +
Type	Autonomous Emergency Braking and Forward Collision Warning
Operational From	10 km/h

Comments

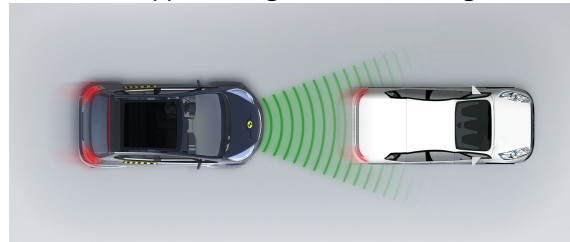
The AEB system performed well when tested at highway speeds, with collisions avoided or mitigated in most situations. The Lexus ES has a seatbelt reminder for the front and rear seats and a camera-based speed assistance system which informs the driver of the local speed limit, allowing the driver to set the limiter appropriately. A lane keeping assist system is also standard, and helps avoid inadvertent drifting out of lane, but does not intervene in more critical emergency situations.

■ Autobrake function only

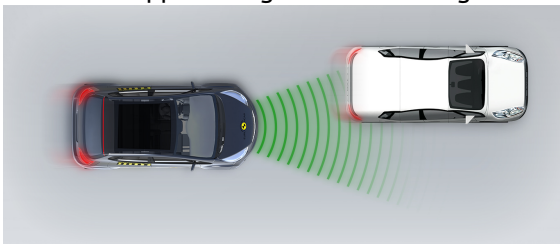
Approaching a slower moving car



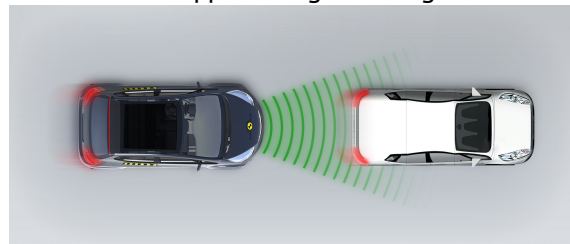
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car

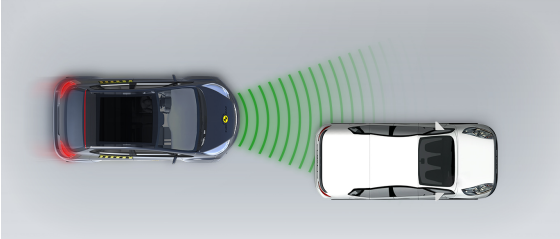


 SAFETY ASSIST

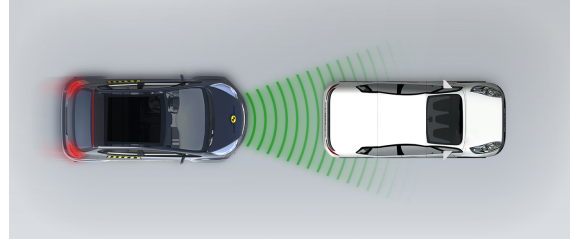
Total 10.1 Pts / 77%

■ Driver reacts to warning

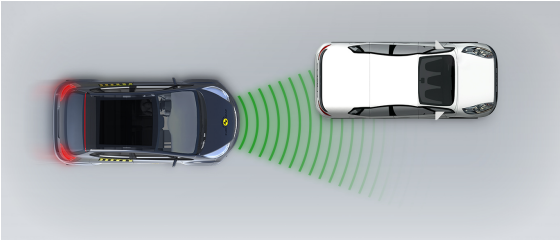
Approaching a stationary car



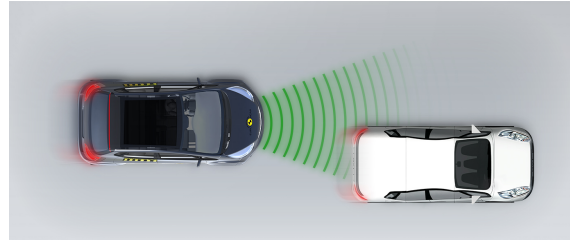
Approaching a stationary car



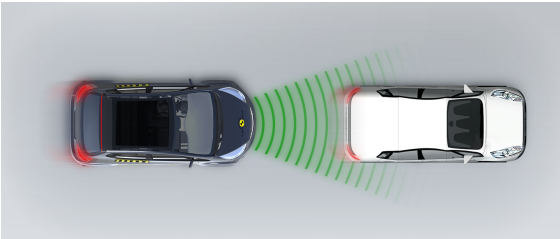
Approaching a stationary car



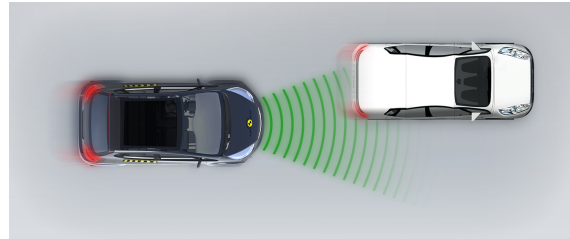
Approaching a slower moving car



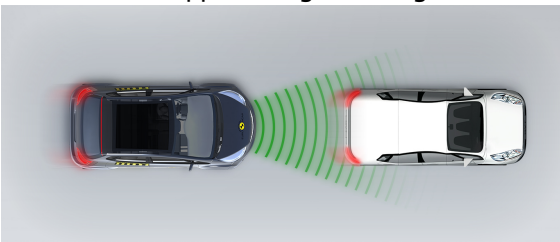
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



RATING VALIDITY

Variants of Model Range

Body Type	Engine & Transmission	Drivetrain	Rating Applies	
			LHD	RHD
4 door saloon	2.5 hybrid*	4 x 2	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
October 2018	Rating Published	2018 ★ ★ ★ ★ ★ ✓