LEXUS ES300h

SEPTEMBER 2018 - ONWARDS ALL VARIANTS









86%

CHILD OCCUPANT PROTECTION





76%

ASSI



LEXUS ES300h

OVERVIEW

The Lexus ES300h was introduced in Australia and New Zealand in September 2018. This ANCAP safety rating applies to all variants.

Dual frontal airbags, driver and passenger knee airbags, front and rear chest-protecting side airbags and head-protecting side airbags (curtains) are standard equipment.

All three grades of autonomous emergency braking (City, Interurban and Vulnerable Road User), and lane keep assist (LKA) with lane departure warning (LDW), are standard on all variants.

ANCAP SAFETY RATING RATING YEAR (DATESTAMP) VEHICLE TYPE AIRBAGS ****

2018

Medium Car

Dual frontal, side chest (front & rear), side head, knee (driver & front passenger)

RATING APPLICABILITY

VARIANT	BODY TYPE	ENGINE	DRIVETRAIN	AUS	NZ
Lexus ES300h Luxury	4 door sedan	2.5 litre hybrid	FWD	\checkmark	-
Lexus ES300h Sports Luxury	4 door sedan	2.5 litre hybrid	FWD	\checkmark	-
Lexus ES300h	4 door sedan	2.5 litre hybrid	FWD	-	\checkmark
Lexus ES300h Limited	4 door sedan	2.5 litre hybrid	FWD	-	\checkmark

✓ COVERED BY THIS RATING

× NOT COVERED BY THIS RATING

◆ TESTED VARIANT

ADULT OCCUPANT PROTECTION



The passenger compartment remained stable in the frontal offset test. Dummy readings showed ADEQUATE protection for the chest of the driver and the lower legs of both the driver and passenger. GOOD protection was offered to all other critical body regions.

In the full width frontal test, protection of the driver dummy was ADEQUATE for the chest and GOOD for all other critical body regions. Protection of the rear passenger was GOOD or ADEQUATE except for the pelvis area which was rated as POOR. The pelvis slipped beneath the lap section of the seatbelt and was not restrained properly during the crash. The side curtain airbag did not deploy correctly in the full width test and, as a result, a penalty was applied to the scores in the side impact and oblique

In the side impact test and the oblique pole test, protection of all critical body regions was GOOD. However, with the penalty applied for incorrect airbag deployment in the full-width frontal test, protection of the head was downgraded to ADEQUATE.

FRONTAL OFFSET TEST (64 KM/H)



Driver

Head / neck: 4.00 points 3.64 points Chest: Upper legs: 4.00 points Lower legs: 3.82 points Deductions: Nil



Front Passenger

Head / neck: 4.00 points Chest: 4.00 points Upper legs: 4.00 points Lower legs: 3.37 points Deductions: Nil

SIDE IMPACT TEST (50 KM/H)



Driver

Head: 3.00 points 4.00 points Chest: Abdomen: 4.00 points Pelvis: 4.00 points

Deductions: -1.00 point (incorrect airbag deployment)

WHIPLASH (REAR IMPACT) PROTECTION TEST





Rear Passenger **Driver / Front Passenger**

0.38 points Rear: Front: 1.22 points The autonomous emergency braking (AEB) system scored maximum points with GOOD performance in low-speed test scenarios typical of city driving.

FRONTAL OFFSET# FULL WIDTH FRONTAL# SIDE IMPACT# OBLIQUE POLE# WHIPLASH PROTECTION	6.61 7.50 7.50 1.60	(out of 8) (out of 8) (out of 8) (out of 8) (out of 2)
AEB - City	4.00	(out of 4)

^{*}Scaled scores. Total test scored out of 16.00 points.

FULL WIDTH FRONTAL TEST (50 KM/H) -



Driver

Head: 4.00 points Neck: 4.00 points Chest: 3.47 points 4.00 points Upper legs: Deductions: Nil



Rear Passenger

Head: 4.00 points Neck: 4.00 points Chest: 2.99 points Upper legs: 0.00 points Deductions: -4.00 points (submarining)

OBLIQUE POLE TEST (32 KM/H)



Driver

Head: 3.00 points 4.00 points Chest: Abdomen: 4.00 points Pelvis: 4.00 points

Deductions: -1.00 point (incorrect airbag deployment)

AEB - CITY (10-50 KM/H)

Score: 4.00 points

OVERLAP	-50%	-75%	100%	75%	50%
DEDECOMANCE					
PERFORMANCE			GOOD		

CHILD OCCUPANT PROTECTION



In both the frontal offset and side impact test, protection was GOOD for all critical body areas for the 6 year and 10 year child dummies.

The Lexus ES300h is fitted with lower ISOFix anchorages on the rear outboard seats and top tether anchorages on all rear seats.

Installation of typical child restraints available in Australia and New Zealand showed that most child restraints could be accommodated in most rear seating positions, though neither booster seat could be correctly installed in the centre rear position, and one of the two selected convertible seats could not be correctly installed in rearward-facing mode using the ISOfix anchorages.

DYNAMIC TEST (FRONT)		(out of 16)
DYNAMIC TEST (SIDE)	8.00	(out of 8)
RESTRAINT INSTALLATION	11.22	(out of 12)
ON-BOARD SAFETY FEATURES	7.00	(out of 13)

FRONTAL OFFSET TEST (64 KM/H)



6 year old 10 year old

SIDE IMPACT TEST (50 KM/H)



10 year old 6 year old

× NOT AVAILABLE

ON-BOARD SAFETY FEATURES

FITTED TO TEST CAR AS STANDARD

FEATURE	FRONT Passenger	2nd ROW OUTBOARD	2nd ROW CENTRE	3rd ROW OUTBOARD	3rd ROW CENTRE
ISOFix	-	•	×	-	-
Integrated child restraints	-	×	×	-	-
Top tether anchorage	-	•	•	-	-
Airbag disabling	×	-	-	-	-

NOT FITTED TO TEST CAR BUT AVAILABLE AS AN OPTION

NOTE: The child restraints fitted to vehicles tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. For more detailed information about Australian child restraints visit www.childcarseats.com.au.

- NOT APPLICABLE

CHILD OCCUPANT PROTECTION



CHILD RESTRAINT INSTALLATION*

		CHILD RESTRAINT (CRS) TYPE [^]	FRONT ROW Passenger	LEFT	2nd ROW	RIGHT	LEFT	3rd ROW	RIGHT
		Rearward facing capsule	×	•	•	•	_	-	_
	TYPE A	Rearward facing with harness - convertible (Model A)	×	•	•	•	_	_	_
		Rearward facing with harness - convertible (Model B)	×	•	•	•	_	-	_
BELTED	TVDE D	Forward facing with harness - convertible (Model A)	×	•	•	•	-	-	-
8	TYPE B	Forward facing with harness - convertible (Model B)	×	•	•	•	-	-	-
	TYPE E	Booster - 4 to 8 years	×	•	•	•	-	_	_
	TYPE F	Booster - 4 to 10 years	×	•	•	•	-	_	-
		Rearward facing capsule	×	•	-	•	-	-	-
×	TYPE A	Rearward facing with harness - convertible (Model A)	×	•	-	•	-	-	-
ISOFIX		Rearward facing with harness - convertible (Model B)	×	•	-	•	-	_	-
_	TYPE B	Forward facing with harness - convertible (Model A)	×	•	-	•	-	-	-
	111 L D	Forward facing with harness - convertible (Model B)	×		-		-	-	-

^{*} Installation of each child restraint is assessed separately in each position. Installation of multiple restraints has not been assessed and may not be possible.

INSTALL WITHOUT PROBLEM
INSTALL WITH CARE
CANNOT BE FITTED SAFELY
X INSTALLATION NOT ALLOWED
NOT APPLICABLE

NOTE: The above list of child restraints has been selected to provide a general indication of the rated vehicle's ability to accommodate various CRS types. ANCAP does not endorse or recommend any one CRS brand or model, nor does it rate the safety of child restraints.

The Child Restraint Evaluation Program (CREP) provides an independent assessment on the safety of Australasian child restraints - see www.childcarseats.com.au.

The child restraints fitted to vehicles tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. For more detailed information about Australian child restraints visit www.childcarseats.com.au.

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VULNERABLE ROAD USER PROTECTION



The Lexus ES300h has an 'active' bonnet. Sensors detect when a pedestrian is struck and actuators lift the bonnet to provide greater clearance to stiff components in the engine bay. The vehicle was tested with the bonnet in the raised position and GOOD or ADEQUATE results were recorded over most of the bonnet area, however some POOR results were recorded around the windscreen pillars. The bumper provided GOOD protection to pedestrians' legs and protection of the pelvis was also GOOD.

The autonomous emergency braking (AEB) system is capable of detecting and reacting to vulnerable road users such as pedestrians and cyclists. The AEB system showed GOOD performance in pedestrian test scenarios, in both daylight and low light, earning full points. GOOD performance was also seen in cyclist test scenarios, with collisions avoided or mitigated in most scenarios.

PEDESTRIAN	IMPACT	TEST (40	KM/H)

9	

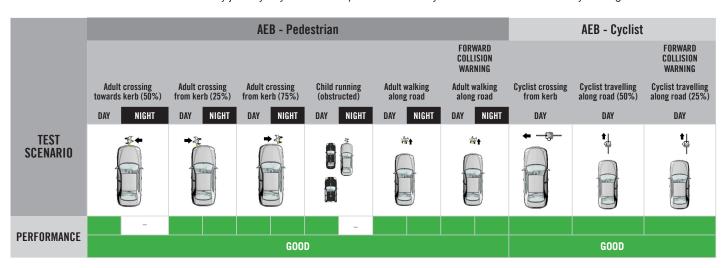
HEAD IMPACTS	20.32	(out of 24)
UPPER LEG IMPACTS	6.00	(out of 6)
LOWER LEG IMPACTS	6.00	(out of 6)
AEB - Pedestrian	6.00	(out of 6)
AEB - Cyclist	5.33	(out of 6)

AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN & CYCLIST)

SYSTEM NAME: Pre-Collision System with cyclist detection (Lexus Safety System +)
TYPE: Autonomous emergency braking with forward collision warning

OPERATIONAL FROM: 10-180 km/h

DESCRIPTION: Defaults ON for every journey. System detects pedestrians and cyclists and functions in both day and night.



SAFETY ASSIST



The Lexus ES300h is fitted with autonomous emergency braking (AEB) and a lane support system (LSS) with lane keep assist (LKA) and lane departure warning (LDW). A blind spot monitoring system (BSM) is available on some variants.

Tests of the AEB system showed GOOD performance with collisions avoided or mitigated in most test scenarios. Tests of the LSS functionality showed some GOOD performance, however the system does not intervene in more critical emergency lane keeping scenarios and overall performance was classified as ADEQUATE.

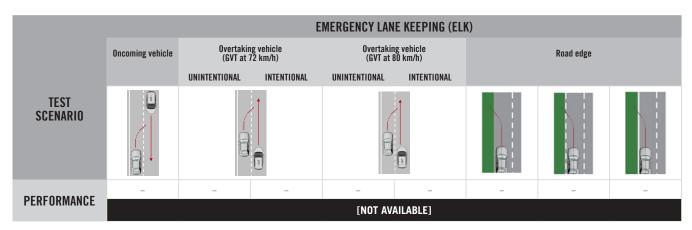
A speed assistance system (SAS) is also standard equipment. A seatbelt reminder system with occupancy detection is fitted to all seating positions.

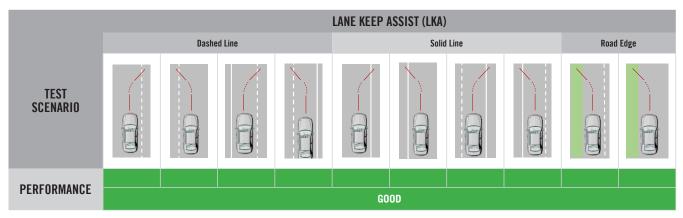
SPEED ASSISTANCE SYSTEMS SEAT BELT REMINDERS		(out of 3) (out of 3)
LANE SUPPORT SYSTEMS	2.25	(out of 4)
AEB - Interurban	2.40	(out of 3)

LANE SUPPORT SYSTEMS (LSS)

SYSTEM NAME: Lane Tracing Assist (Lexus Safety System +)

OPERATIONAL FROM: 50-200 km/h





HUMAN MACHINE INTERFACE (HMI)				
FUNCTION	Lane Departure Warning (LDW)	PASS		
FUNCTION	Blind Spot Monitoring (BSM)	[NOT STANDARD]		

SAFETY ASSIST



AUTONOMOUS EMERGENCY BRAKING (INTERURBAN)

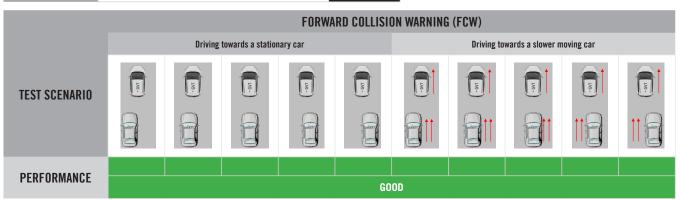
SYSTEM NAME: Pre-Collision System (Lexus Safety System +)

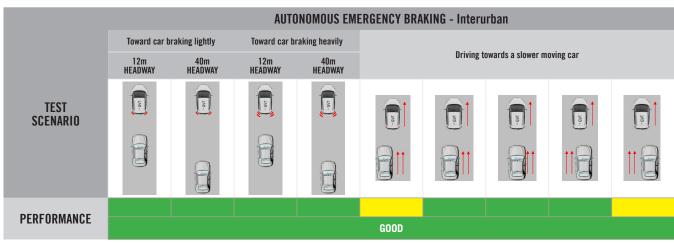
TYPE: Autonomous emergency braking with forward collision warning

OPERATIONAL FROM: 10-180 km/h

DESCRIPTION: Defaults ON for every journey.







SPEED ASSISTANCE SYSTEMS (SAS) -

SYSTEM NAME: Dynamic Radar Cruise Control with Road Sign

Assist (Lexus Safety System +)

SAS FEATURE	DESCRIPTION
Speed Limit Information Function (SLIF)	Camera based
Speed Limitation Function	System advised
Specu Elimitation i unction	Cyclem daviced

SEAT BELT REMINDERS (SBR)

WARNING TYPE	DRIVER	FRONT Passenger	REAR PASSENGERS
Occupant Detection	-	•	•
Visual	•	•	•
Audible	•	•	•
• PASS • FAIL ×	NOT AVAILAE	BLE – NOT APPI	LICABLE
GOOD ADEQUATE	MARG	INAL WEAI	POOR

SAFETY FEATURES & TECHNOLOGIES

FFATURE / TEQUNOLOGY.		AVAILABILITY	
FEATURE / TECHNOLOGY~	AUS	NZ	
Seat belts (three-point) for all forward-facing seats		•	
Seat belt pre-tensioners (front)			
Seat belt pre-tensioners (rear outboard)			
Seat belt pre-tensioners (rear centre)	×	×	
Intelligent seat belt reminder (driver)			
Intelligent seat belt reminder (front passenger)			
Intelligent seat belt reminder (2nd row seats)			
Intelligent seat belt reminder (3rd row seats)	-	_	
Airbag - frontal (driver)			
Airbag - frontal (passenger)			
Airbags - side, chest protection (front seats)			
Airbags - side, chest protection (2nd row seats)			
Airbags - side, chest protection (3rd row seats)	-	_	
Airbags - side, head protection (front seats)			
Airbags - side, head protection (2nd row seats)			
Airbags - side, head protection (3rd row seats)	-	_	
Airbag - knee (driver)			
Airbag - knee (front passenger)			
Airbag disabling switch - automatic (front passenger)	×	×	
Airbag disabling switch - manual (front passenger)	×	×	
Head restraints for all seats			
Active bonnet			
Adaptive cruise control (ACC)			
Adaptive headlights			
Anti-lock braking system (ABS)			
Autonomous emergency braking (AEB) - City			
Autonomous emergency braking (AEB) - Interurban			
Autonomous emergency braking (AEB) - VRU			
Automatic emergency call (eCall)		×	
Automatic headlights			
Automatic high beam	•		

FEATURE / TEQUNOLOGY		AVAILABILITY	
FEATURE / TECHNOLOGY~	AUS	NZ	
Blind spot monitor (BSM)	•	•	
Child presence alert	×	×	
Daytime running lights (DRL)			
Electronic brakeforce distribution (EBD)			
Electronic data recorder (EDR)			
Electronic stability control (ESC)			
Emergency brake assist (EBA)			
Emergency stop signal (ESS)			
Fatigue reminder			
Fatigue detection			
Forward collision warning (FCW)			
Hill launch assist			
Integrated child seat / restraint	×	X	
ISOFix			
Lane departure warning (LDW)			
Lane keep assist (LKA)			
Pre-crash systems			
Rear cross-traffic alert (RCTA)			
Reversing collision avoidance (camera)			
Reversing collision avoidance (auto brake)	×	×	
Roll stability system	×	×	
Secondary / multi-collision brake			
Speed assistance - auto / intelligent speed limiter			
Speed assistance - manual speed limiter			
Speed assistance - speed sign recognition & warning			
Smart (intelligent) key	×	×	
Trailer stability control	×	×	
Tyre pressure monitoring system (TPMS)			
Vehicle-to-infrastructure communication (V2I)	×	×	
Vehicle-to-vehicle communication (V2V)	×	×	

[~] Specifications & availability subject to change. Please check with the vehicle manufacturer for confirmation of vehicle specification.

STANDARD
 NOT AVAILABLE ON BASE VARIANT BUT STANDARD OR OPTIONAL ON HIGHER VARIANTS
 OPTIONAL
 NOT AVAILABLE

MODEL VARIANTS:

ANCAP safety ratings do not automatically extend to variants that have different body styles, engine configurations, driven wheels or occupant restraint systems (e.g. fewer airbags). In these cases, ANCAP considers technical evidence submitted by manufacturers before deciding on the extension of a rating to additional variants of a model.

RATING YEAR (DATESTAMP):

The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and, for vehicles rated from 2018, the Rating Year is the year in which the vehicle was tested.

ASSESSMENT DETAILS

TESTED MAKE / MODEL
TESTED VEHICLE(S) BUILT
TESTED BODY TYPE
TESTED VEHICLE ENGINE
RATING PUBLISHED
RATING UPDATED

Lexus ES300h Comfort 2.5L LHD 2018 4 door sedan 2.5 litre petrol hybrid 24 October 2018 n/a