

ANCAP Safety Rating

LEXUS IS (From April 2013)



Test Vehicle(s).

Test Variant:	IS 300h
Kerb Mass:	1670 kg
Built:	2013
Engine:	2.5L Hybrid
Category:	LUXURY CAR
Variant Applicability*:	Applies to 250, 350 and 300h variants

Note: The IS 300h was tested by Euro NCAP. ANCAP was provided with information which showed that the Euro NCAP results apply to IS 250, IS 350 and IS 300h Australasian variants.



Frontal offset test at 64 km/h (Euro NCAP)

Airbags	ESC	Frontal Offset	Side Impact	Pole	Whiplash	Pedestrian	Seat Belt Reminders	Overall Score	ANCAP Safety Rating
Frontal + Side + Head + Knee	Standard	14.00 (out of 16)	16.00 (out of 16)	2.00 (out of 2)	GOOD	GOOD	3 (out of 3)	35.00 (out of 37)	★★★★★

The tested model of Lexus IS was introduced in Australia and New Zealand in mid 2013. This ANCAP safety rating applies to IS 250, IS 350 and IS 300h variants built from April 2013.

Dual frontal side chest, side head (curtains), driver knee and front passenger knee airbags are standard. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted to all seats.

In the offset crash test driver chest, leg and foot protection was acceptable. Passenger leg protection was also acceptable. Driver protection was good in the side impact crash. Head protection in the side pole test was good.

OCCUPANT PROTECTION

Frontal Offset Test.

Each body region is scored out of 4 points

Head / neck:	4.00 points
Chest:	3.22 points
Upper legs:	4.00 points
Lower legs:	2.78 points

The passenger compartment held its shape well in the offset test. Pedal and steering wheel displacements were well controlled. Driver and passenger contact with the airbags was stable. All doors remained closed during the crash.

Side Impact Test.

Each body region is scored out of 4 points

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

Good protection was provided for the driver in the side impact test. The side airbags performed well.

Pole Test.

Scored out of 2 points

The vehicle was eligible for a side pole test because it has side curtain airbags. The vehicle scored the maximum 2 points for head protection in this test.

Whiplash Protection Test.

Whiplash protection is assessed to the RCAR Protocol

Geometric test:	Good
Dynamic test:	Good
Overall whiplash rating:	Good

Injury Outcomes.

Frontal Offset
Driver



Passenger



Side Impact & Pole
Driver



Whiplash



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PEDESTRIAN PROTECTION

Pedestrian Test.

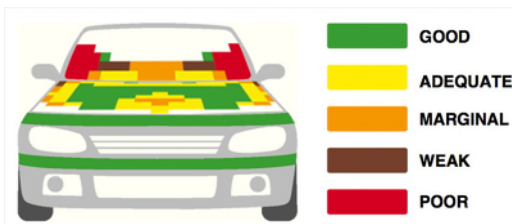
GOOD - Scored 28.93 out of 36 points

Child & adult head impacts: 16.93 points
 Upper leg impacts: 6.00 points
 Lower leg impacts: 6.00 points

The IS 300h has an 'active' bonnet which provides additional head protection for struck pedestrians. This provided good or adequate levels of protection over most of the bonnet surface. The bumper and the leading edge of the bonnet also performed well, the car scoring maximum points for the protection it offered to the legs and pelvis of a struck pedestrian. (Euro NCAP V6.0)



Lexus IS



SAFETY FEATURES (APRIL 2013)

These specifications are subject to change. Please check with manufacturer for the latest specifications. For a description of these safety features and safety rating requirements see the ANCAP Rating Road Map.

Safety Assist Technology (SAT)	Availability
Front airbag - driver	S
Front airbag - passenger	S
Side airbags (chest protection) - front seats	S
Side airbags (chest protection) - 2nd row seats	V
Side airbags (head protection) - front seats	S
Side airbags (head protection) - 2nd row seats	S
Knee airbags - driver and front passenger	S
Three-point seat belts for all forward facing seats	S
Seat belt pretensioners (front / rear outboard)	S / S
Intelligent seat belt reminder - driver	S
Intelligent seat belt reminder - front passenger	S
Intelligent seat belt reminder - 2nd row seats	S
Head restraints for all seats	S
Antilock brakes (ABS)	S
Electronic brake distribution (EBD)	S
Emergency brake assist (EBA)	S
Electronic stability control (ESC)	S
Adaptive cruise control (ACC)	V
Autonomous emergency braking (AEB)	V
Lane support system	V
Blind spot monitoring	V
Daytime running lights	S
Emergency stop signal	S
Hill launch assist	S
Reversing collision avoidance	S
Tyre pressure monitoring	S
Automatic high beam	V
Pre-crash systems	V

S = Standard on all variants.
 O = Optional on base variant. May be standard on higher variants.
 V = Not available on base variant but standard or optional on higher variants.
 X = Not available on any variant
 E = Available in Europe but not available on any Australasian variant.



INJURY MEASUREMENTS

Body Region	Frontal offset test at 64 km/h (v6.0)		Side impact test at 50 km/h (v6.0)
	Driver	Passenger	Driver
Head			
HIC	332.00	256.00	26.00
Acceleration (g for 3ms)	44.20	43.80	15.80
Neck			
Shear (kN)	0.40	0.73	-
Tension (kN)	1.49	0.57	-
Extension (Nm)	5.80	33.60	-
Chest			
Acceleration (g for 3ms)	-	-	-
Compression (mm)	27.48	18.31	6.11
Viscous criterion (m/s)	0.10	0.07	0.01
Abdomen			
Force (kN)	-	-	0.41
Pelvis			
Force (kN)	-	-	1.33
Upper legs			
Femur force left (kN)	1.76	1.15	
Femur force right (kN)	1.29	1.01	
Knee displacement left (mm)	4.19	1.51	
Knee displacement right (mm)	2.88	2.26	
Lower legs			
Force left (kN)	3.83	2.54	
Force right (kN)	2.88	2.42	
Index (upper / lower) left	0.32 / 0.64	0.18 / 0.27	
Index (upper / lower) right	0.39 / 0.44	0.19 / 0.29	

INTRUSION MEASUREMENTS

Steering Column

Forwards:	63mm
Downwards:	31mm
Sideways:	15mm

Pedals

Brake (rearwards):	66mm
Brake (upwards):	9mm

A-Pillar (rearwards):	11mm
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SCORE DEDUCTIONS

Deductions from frontal offset test scores

Blocked brake pedal: 0.11 points from foot score

Deductions from side impact test score

No deductions for side impact test.

Deductions from pole test score

No deductions for pole test.

* For information about the application of ANCAP ratings to model variants see the ANCAP Variant Policy. In brief, 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 extending a rating to additional variants of a model.

^ Refer ANCAP Rating Road Map (www.ancap.com.au/media).

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ANCAP

Crash testing for safety

AUSTRALASIAN
 NEW CAR ASSESSMENT
 PROGRAM