

Crash Tests

New Car Safety

LEXUS IS

2005 on

Front + side & head airbags

Occupant Protection



Occupant Protection Score 33.40 out of 37

Variant: IS220 sedan

Engine: 2.2 litre diesel

Kerb weight: 1590 kg

Category: LUXURY

Vehicles built: 2006

Test by Euro NCAP

Important note: The *diesel* European model was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

Model History and Safety Features

The tested model of Lexus IS was introduced in Australia during 2005. Euro NCAP tested the IS220 with a diesel engine. The Australasian IS250 has a petrol engine.

Dual front airbags, side airbags, head-protecting side curtains and knee airbags are standard equipment. ABS/EBD brakes and electronic stability control are also standard. Advanced seat belt reminders are fitted to both front seats. A rear view camera is available for the Sports variants.

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point seat belt.

OCCUPANT PROTECTION: 5 Stars

The Lexus IS scored 13.40 out of 16 in the offset crash test. The passenger compartment held its shape very well. There was a slight risk of head, chest and leg injury for the driver.

The vehicle scored 16 out of 16 in the side impact crash test. A further 2 points were scored in the optional pole test.

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 3.23 pts, chest 3.13 pts, upper legs 4 pts, lower legs 3.04 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 101 mm and downwards 44mm. The steering wheel hub moved forwards 1mm and downwards 38mm. The front ("A") pillar moved 23 mm rearwards. All doors remained closed during the crash. After the crash moderate manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. Knee airbags protected the legs of the driver and passenger. The passenger's head was cushioned by the airbag.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.



Offset crash test at 64km/h

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver
Head HIC	432	248	61
Acceleration (g for 3ms)	55.0	39.4	27.3
Neck - Shear (kN)	0.44	0.04	-
Tension (kN)	1.69	0.94	-
Extension (Nm)	44.9	38.2	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	28.08	20.26	11.27
Viscous criterion (m/s)	0.22	0.07	0.05
Abdomen - Force (kN)	-	-	0.890
Pelvis - Force (kN)	-	-	1.360
Upper legs Force (kN)	Left 1.59 Right 1.33	1.03 0.64	
Knee displ (mm)	Left 1.90 Right 0.90	1.30 2.40	
Lower legs Force (kN)	Left 3.44 Right 2.35	1.96 2.46	
Index (Upper/Low)	Left 0.34 / 0.57 Right 0.36 / 0.29	0.21 / 0.22 0.28 / 0.27	

Bonus points (maximum 5)

Pole Test: 2 pts Seat belt reminders: 2

Modifiers - offset test scores

Head No deduction
Chest No deduction
Upper leg Variable & conc. loading No deduction
Lower leg No deduction
Foot score Brake pedal rearward and blocked Score 3.58 points

Modifiers - side impact test scores

Chest No deduction

PEDESTRIAN PROTECTION RATING (v4.1)

Child head impacts	4.22	Upper leg impacts	2.84
Adult head impacts	5.82	Lower leg impacts	2.49
Total (out of 36)	15.37	★ ★ ☆ ☆	



ANCAP
Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

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Canberra ACT
Australia 2601
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