

# Crash Tests

## New Car Safety

### Lexus IS

07/2005 on 12/2012 - Frontal+Side+Head+Knee

#### Overall Evaluation



#### Overall Score

Variant: 220 Sedan

**33.4 out of 37**

Engine: 2.2 Litre Diesel  
Category: Luxury

Vehicles tested after 1 January 2008 will require Electronic Stability Control in order to achieve a 5 star rating. This vehicle was tested prior to this date and may or may not meet this new requirement.

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.

#### Overall Evaluation: 5

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 pt.

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.

#### Pedestrian rating (v4.1)



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

Offset crash test at 64km/hr



#### Injury Measurements

Refer to the information sheet 'How the tests 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	39.4	27.3
Neck			
- Shear (kN)	0.44	0.04	
- Tension (kN)	1.69	0.94	
- Extension (Nm)	44.9	38.2	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	28.08	20.26	11.27
- Viscous Criterion (m/s)	0.22	0.07	0.05
Abdomen			
- Force (kN)			0.89
Pelvis			
- Force (kN)			1.36
Upper Legs Force (kN)			
- Left	1.59	1.03	
- Right	1.33	0.64	
Knee Displacement (kN)			
- Left	1.9	1.3	
- Right	0.9	2.4	
Lower Legs Force (kN)			
- Left	3.44	1.96	
- Right	2.35	2.46	
Index (Upper   Lower)			
- Left	0.34   0.57	0.21   0.22	
- Right	0.36   0.29	0.28   0.27	

#### Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: Fitted to both front seats - 2 points

#### Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	Score 3.58 points
Brake pedal rearward and blocked	

Structure

#### Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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