



Kia Optima
Large Family Car

2015



Adult Occupant



89%

Child Occupant



86%

Pedestrian



67%

Safety Assist



71%

SPECIFICATION

Tested Model	KIA Optima 1.7 diesel 'EX', LHD
Body Type	4 door sedan
Year Of Publication	2015
Kerb Weight	1515kg
VIN From Which Rating Applies	all Optimas with safety equipment assessed
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	✗	✗	✗

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)	✗
ESC	●
AEB City	○
AEB Inter-Urban	○
Speed Assistance System	○
Lane Assist System	○

The Safety Equipment includes those items relevant for the year of assessment


- Fitted to test car as standard
 ○ Fitted to test car as option
 — Not applicable
 ✗ Not available
○ Not fitted to test car but available as option

ADULT OCCUPANT

Total 34.0 Pts / 89%

■ GOOD ■ ADEQUATE ■ MARGINAL ■ WEAK ■ POOR

Frontal Offset Deformable Barrier 8 Pts




Passenger Driver

Frontal Full Width 7.9 Pts




Rear Passenger Driver

Whiplash Rear Impact 2.1 Pts



Front seat Rear seat

Lateral Impact 16 Pts



Car Pole

AEB City 0

Performance:

 ADULT OCCUPANT

Total 34.0 Pts / 89%

Comments on Adult Occupant

The passenger compartment remained stable in the frontal offset test. The Optima scored maximum points for the protection of the front passenger in that test, with good protection of all critical body areas. Dummy readings indicated good protection of the knees and femurs of both dummies and Kia showed that a similar level of protection would be provided to occupants of different sizes and to those sat in different positions. In the full-width rigid barrier test, protection of the driver was good for all body areas, and for the rear passenger it was good for all areas except the chest, protection of which was adequate. In the side barrier impact, protection of all critical parts of the body was again good, and the Optima scored maximum points. Even in the more severe side pole test, all body areas were well protected. The front seats and head restraints demonstrated marginal protection against whiplash injury in Euro NCAP's tests. A geometric assessment of the rear seats indicated marginal whiplash protection also for the occupants of those seats. An autonomous emergency braking system is available on the Optima which would provide additional whiplash protection at the low, city speeds at which such injuries commonly occur. The system was not included in this assessment as it is not standard equipment.

CHILD OCCUPANT


Total 42.5 Pts / 86%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance

23.5 Pts


18 months old child 12 Pts



Tested restraint (Fit):
Römer BabySafe + ISOFIX Base

■ Good

36 months old child 11.5 Pts



Tested restraint (Fit):
Römer Duo Plus

■

Safety Features

7 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 Pts

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

■ **Infants up to 13 kg**

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyFix (Belt)



Maxi Cosi Cabriofix & EasyFix (ISOFIX)



CHILD OCCUPANT

Total 42.5 Pts / 86%

■ **Infants and toddlers up to 18 kg**

BeSafe iZi Kid X3 ISOFix (ISOFIX)



■ **Toddlers from 9 to 18 kg**

Römer King Plus (Belt)



Römer Duo Plus (ISOFIX)



Maxi Cosi Pearl & Familyfix (ISOFIX)



■ **Toddlers over 18 kg**

Römer KidFix (Belt)



Römer KidFix (ISOFIX)



CHILD OCCUPANT

Total 42.5 Pts / 86%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Römer King Plus (Belt)	●	●	●	●
Römer Duo Plus (ISOFIX)	✘	●	✘	●
Römer KidFix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyFix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyFix (ISOFIX)	✘	●	✘	●
BeSafe iZi Kid X3 ISOfix (ISOFIX)	✘	●	✘	●
Maxi Cosi Pearl & Familyfix (ISOFIX)	✘	●	✘	●
Römer KidFix (ISOFIX)	✘	●	✘	●

● Install without problem
 ● install with care
 ● safety critical problem
 ✘ Installation not allowed

Comments on Child Occupant


The Optima scored maximum points for its protection of the 1½ year dummy in the frontal offset test. Forward movement of the 3 year dummy, sat in a forward-facing restraint, was not excessive, although neck tensile forces were marginally elevated. In the side barrier test, both dummies were properly contained within the protective shells of their restraints, minimising the likelihood of head contact with parts of the car vehicle interior. The front passenger airbag can be disabled 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 Optima is designed could be correctly installed and accommodated in the car.

PEDESTRIAN PROTECTION

Total 24.3 Pts / 67%



Pedestrian Protection 24.3 Pts



Head Impact	15.1 Pts
Pelvis Impact	3.2 Pts
Leg Impact	6 Pts

Comments on Pedestrian

The bumper provided good or adequate protection to pedestrians' legs. Protection of the pelvis was mixed, ranging from good at some test points to poor at others. The bonnet offered mostly good or adequate protection to the head of a struck pedestrian, with weak and poor results recorded along the base of the windscreen and on the stiff windscreen pillars. The Optima's optional autonomous emergency braking system recognises pedestrians as well as other cars. Euro NCAP will start to assess the performance of such functionality in 2016 so the system cannot be rewarded here.

SAFETY ASSIST

Total 9.3 Pts / 71%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Speed Assistance

2.3 Pts

System Name	Speed Limiter
Speed Limit Information Function	Camera & Map
Warning Function	Manually set
Speed Limitation Function	Manually set

Electronic Stability Control

3 Pts

System Name	ESC	
PERFORMANCE		
Vehicle Yaw Rate @ COS + 1.00 s	14.1%	meets ECE requirements
Vehicle Yaw Rate @ COS + 1.75 s	1.37%	meets ECE requirements
Lateral Displacement @ BOS + 1.07 s	2.6 m	meets ECE requirements

Seat Belt Reminder

3 Pts

Applies To	All seats		
	Driver Seat	front passenger(s)	rear passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●

● Pass
 ● Fail
 — Not available

Lane Support

1 Pts

System Name	LDWS
Type	Lane Departure Warning
Operational From	60
Warning	Audible & Visual
PERFORMANCE	
LDW Confirmation Test	Meets NHTSA requirements

 SAFETY ASSIST

Total 9.3 Pts / 71%

Comments on Safety Assist

Electronic stability control is standard equipment, together with a seatbelt reminder for the front and rear seats. A speed assistance system is an option that is expected to be sold in sufficient numbers to qualify for assessment by Euro NCAP. Data from a digital map is combined with information from a windscreen-mounted camera to provide information to the driver about the speed limit at any point. The driver can set the speed to which the car is limited. A lane departure warning system is also an option that was included in this assessment. Autonomous emergency braking is available as an option but is not expected to be fitted widely enough to be included in this assessment.