



Renault Rafale
Standard Safety Equipment

2022



Adult Occupant



87%

Child Occupant



83%

Vulnerable Road Users



69%

Safety Assist



87%

SPECIFICATION

Tested Model	Renault Austral 1,3 Tce, LHD
Body Type	- 5 door MPV
Year Of Publication	2022
Kerb Weight	1502kg
VIN From Which Rating Applies	- all Rafale HEV and PHEV
Class	Large MPV

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	—
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✘	✘	—
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	✘	✘	✘
Centre Airbag	●	—	—
	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	—	○	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix/i-Size	—	○	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

OTHER SYSTEMS	
Active Bonnet	✘
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	○
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●

Note: Other equipment may be available on the vehicle but was not considered in the test year.

- Fitted to the vehicle as standard ○ Fitted to the vehicle as part of the safety pack
- Not fitted to the test vehicle but available as option or as part of the safety pack ✘ Not available — Not applicable

 ADULT OCCUPANT

Total 33.4 Pts / 87%


 GOOD  ADEQUATE  MARGINAL  WEAK  POOR

Frontal Impact 13.4 / 16 Pts




Mobile Progressive Deformable Barrier Full Width Rigid Barrier

Lateral Impact 15.5 / 16 Pts



Side Mobile Barrier Side Pole Far-Side Excursion Occupant Interaction

Rear Impact 3.6 / 4 Pts




Rear Seat Front Seat


ADULT OCCUPANT

Total 33.4 Pts / 87%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Rescue and Extrication		1.0 / 2 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Not available	

Comments

The passenger compartment of the Rafale remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Analysis of the driver's side dashboard after the test revealed some areas which could be more injurious to occupants of different sizes and to those sitting in different positions. Protection of the driver's chest was rated as marginal, based on dummy readings of compression. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the Austral would be a moderately benign impact partner in a frontal collision. In the full width rigid barrier test, dummy readings of chest compression revealed marginal protection of this body region for the rear passenger. All other critical body areas were rated as good or adequate, both for the driver and rear passenger. In the side barrier test, protection of all critical body regions was good. In the more severe side pole impact, chest protection was rated as marginal, based on dummy readings of rib compression. This is a poorer result than that of the Austral but does not affect the overall star rating. Limitation of occupant excursion - the extent to which the occupant is flung to the other side of the vehicle in a side impact - was rated as adequate. The Rafale has a centre airbag as a counter-measure against occupant to occupant injuries in side impacts. In Euro NCAP's test, the airbag performed well, with good protection of the heads of the front seat occupants. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric assessment of the rear seats also indicated good whiplash protection. The Rafale has an advanced eCall system to alert the emergency services in the event of a collision and a system that automatically to avoid secondary collisions, although the latter was not assessed by Euro NCAP.

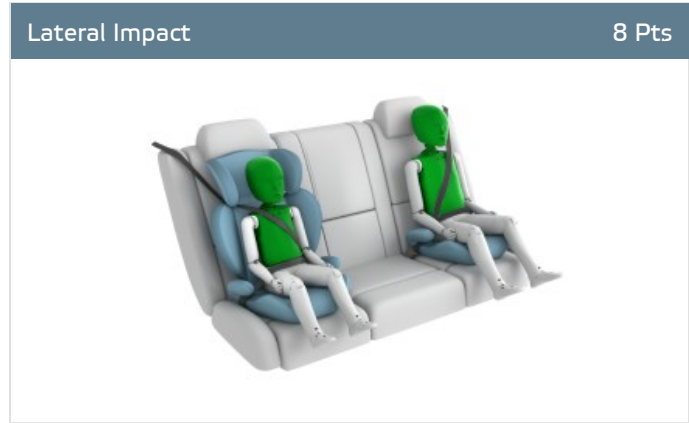
CHILD OCCUPANT

Total 40.7 Pts / 83%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

23.5 / 24 Pts



Restraint for 6 year old child: *Britax Römer KIDFIX i-Size*
 Restraint for 10 year old child: *Britax Römer KIDFIX 2R*

Safety Features

6.0 / 13 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

11.3 / 12 Pts

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

■ i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (i-Size)



Maxi Cosi 2way Pearl & 2wayFix (i-Size)



BeSafe iZi Kid X2 i-Size (i-Size)



Britax Römer TriFix2 i-Size (i-Size)



BeSafe iZi Flex FIX i-Size (i-Size)




■ ISOFIX CRS

BeSafe iZi Combi X4 ISOfix (ISOFIX)



Cybex Solution Z i-Fix (ISOFIX)



 CHILD OCCUPANT

Total 40.7 Pts / 83%

■ Universal Belted CRS

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyFix (Belt)



Britax Römer King II LS (Belt)



Cybex Solution Z i-Fix (Belt)



Comments

The Rafale provided good or adequate protection to all critical body areas of the 6 and 10 year dummies, both in the frontal offset test and the side barrier impact. 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. The user manual precludes the use of universal child restraints on the rear centre seat. Otherwise, all of the child restraints for which the Rafale is designed could be properly installed and accommodated in the car.

CHILD OCCUPANT

Total 40.7 Pts / 83%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	●	●	—	●
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	●	●	—	●
BeSafe iZi Kid X2 i-Size (i-Size)	●	●	—	●
Britax Römer TriFix2 i-Size (i-Size)	●	●	—	●
BeSafe iZi Flex FIX i-Size (i-Size)	●	●	—	●
BeSafe iZi Combi X4 ISOfix (ISOFIX)	●	●	—	●
Cybox Solution Z i-Fix (ISOFIX)	●	●	—	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyFix (Belt)	●	●	✘	●
Britax Römer King II LS (Belt)	●	●	●	●
Cybox Solution Z i-Fix (Belt)	●	●	●	●

● Easy ● Difficult ● Safety critical ✘ Not allowed — Not available

Comments

The Rafale provided good or adequate protection to all critical body areas of the 6 and 10 year dummies, both in the frontal offset test and the side barrier impact. 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. The user manual precludes the use of universal child restraints on the rear centre seat. Otherwise, all of the child restraints for which the Rafale is designed could be properly installed and accommodated in the car.

 **VULNERABLE ROAD USERS**

Total 37.7 Pts / 69%



VRU Impact Protection 22.8 / 36 Pts



Head Impact	14.1 Pts
Pelvis Impact	2.7 Pts
Leg Impact	6.0 Pts


Vulnerable Road Users 14.9 / 18 Pts

System Name	Active Emergency Braking System
Type	Auto-Brake with Forward Collision Warning
Operational From	8 km/h

 VULNERABLE ROAD USERS

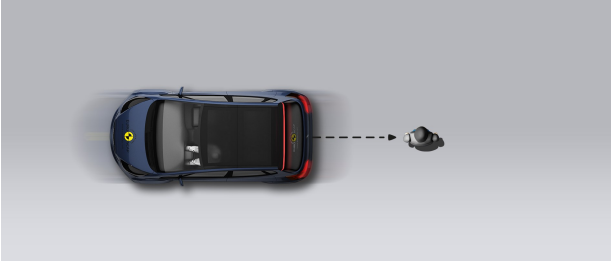
Total 37.7 Pts / 69%

AEB Pedestrian

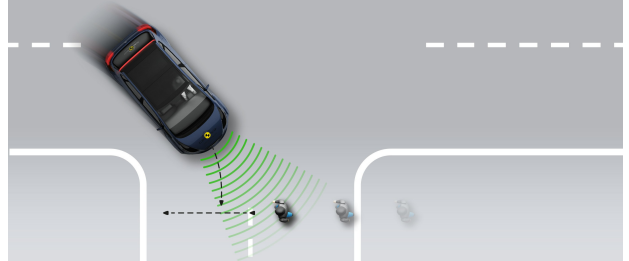
 7.0 / 9 Pts

■ Day time

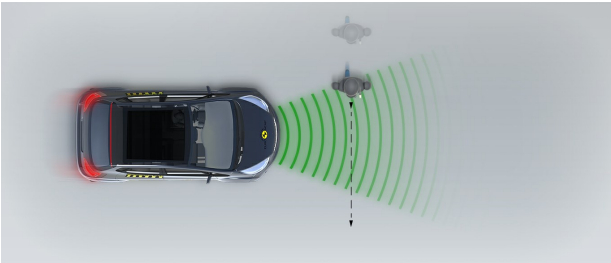
Vehicle reversing into standing pedestrian



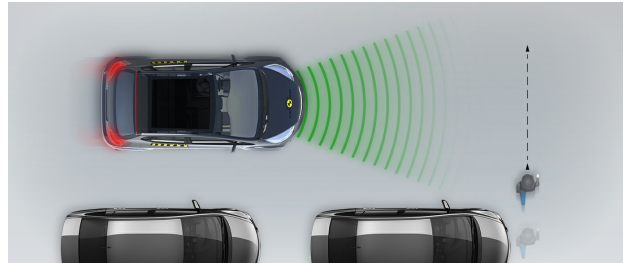
Pedestrian crossing a road into which a car is turning



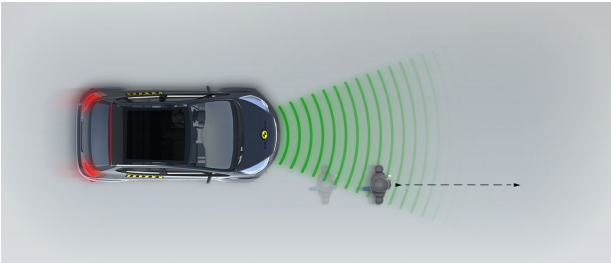
Adult crossing the road



Child running from behind parked vehicles



Adult along the roadside

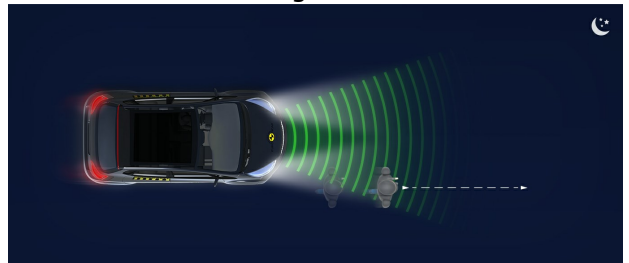


■ Night time

Adult crossing the road




Adult along the roadside

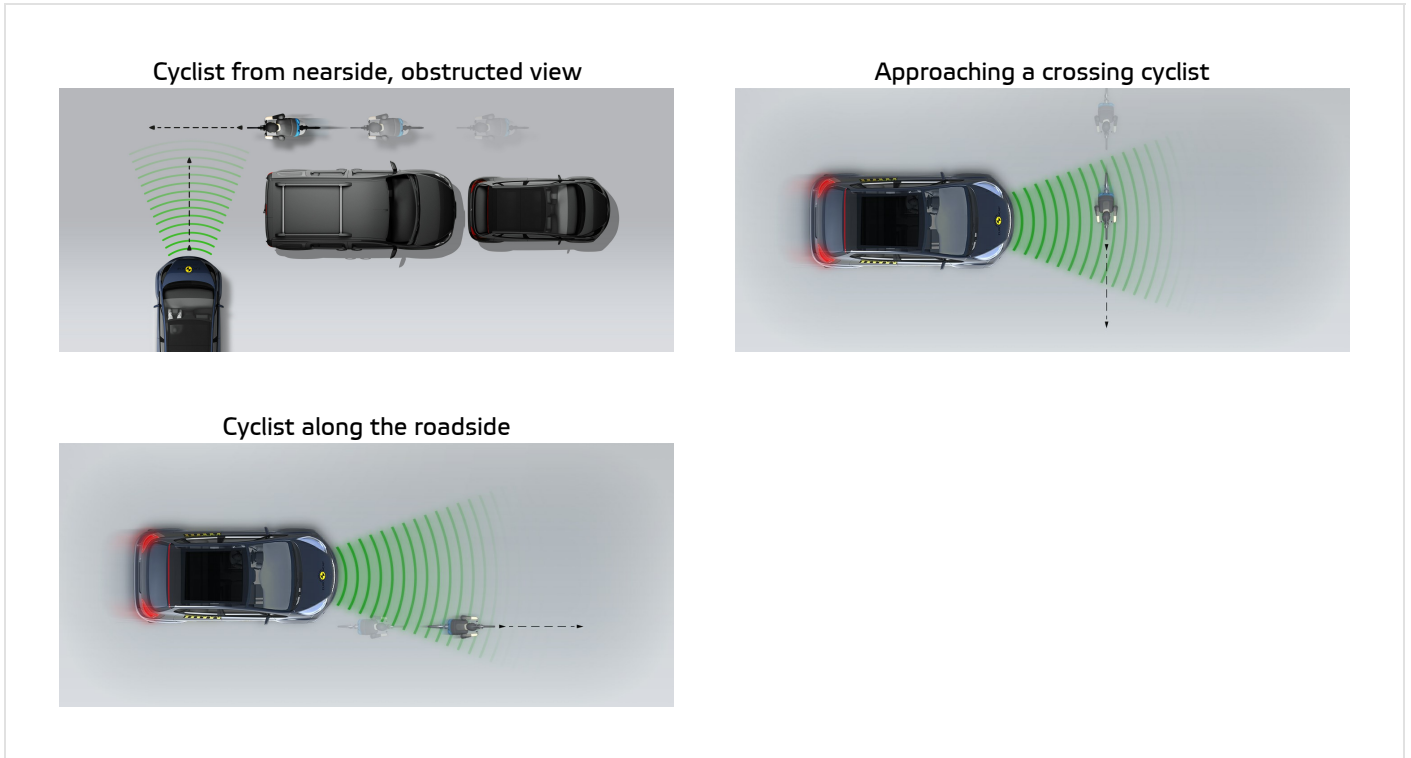


 VULNERABLE ROAD USERS

Total 37.7 Pts / 69%

AEB Cyclist

 7.9 / 9 Pts



Comments

The protection offered by the bonnet to the head of a struck pedestrian was predominantly good or adequate, with areas of weak and poor protection at the base of the windscreen and on the stiff windscreen pillars. The bumper provided good or adequate protection to pedestrians' legs at all test positions but protection of the pelvis was mixed. The Rafale's autonomous emergency braking (AEB) system detects vulnerable road users like pedestrians and cyclists, as well as other vehicles. In tests of the system's response to such road-users, performance was rated as good, with collisions avoided or mitigated in most test scenarios.

SAFETY ASSIST

Total 13.9 Pts / 87%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Speed Assistance 2.4 / 3 Pts

System Name	Speed Limiter
Speed Limit Information Function	Camera based, subsigns supported
Speed Limitation Function	System advised (accurate to 5km/h)

Occupant Status Monitoring 3.0 / 3 Pts

> Seatbelt Reminder 2.0 / 2 Pts

Applies To	Front and rear seats		
	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●
Occupant Detection	—	●	●

● Pass
 ● Fail
 — Not available

> Driver Monitoring 1.0 / 1 Pts

SAFETY ASSIST

Total 13.9 Pts / 87%

Lane Support

3.0 / 4 Pts

System Name	Lane Keep Assist	
Type	LKA and ELK	
Operational From	65 km/h	
PERFORMANCE		
Emergency Lane Keeping		ADEQUATE
Lane Keep Assist		GOOD
Human Machine Interface		GOOD

AEB Car-to-Car

5.5 / 6 Pts

System Name	Active Emergency Braking System	
Type	Autonomous emergency braking and forward collision warning	
Operational From	7 km/h	
Sensor Used	camera and radar	

 SAFETY ASSIST

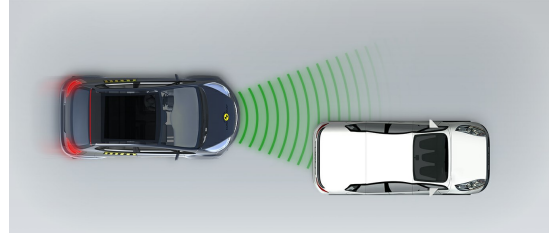
Total 13.9 Pts / 87%

■ Autobrake function only

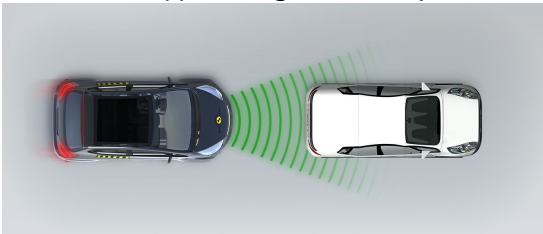
Car turning across the path of an oncoming car



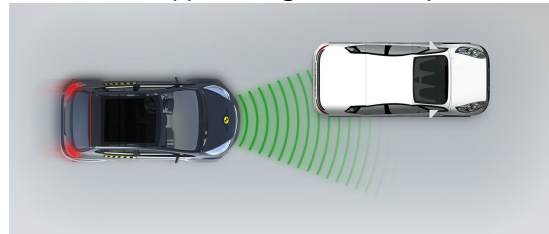
Approaching a stationary car



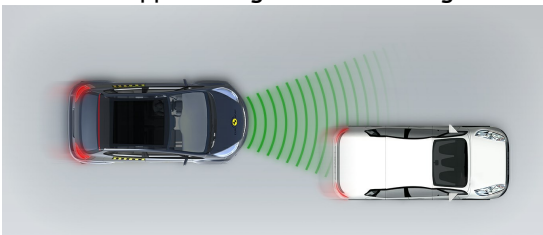
Approaching a stationary car



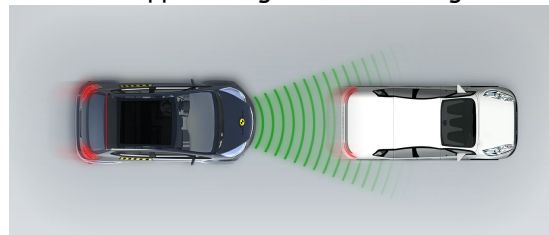
Approaching a stationary car



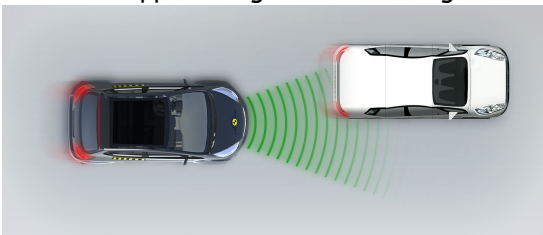
Approaching a slower moving car



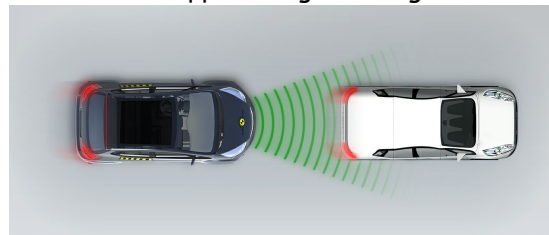
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car

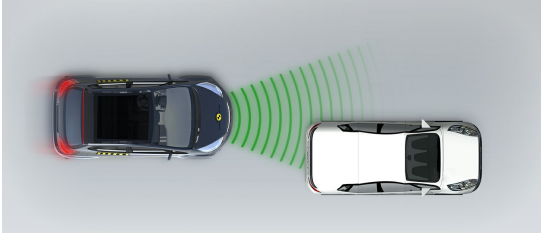


 SAFETY ASSIST

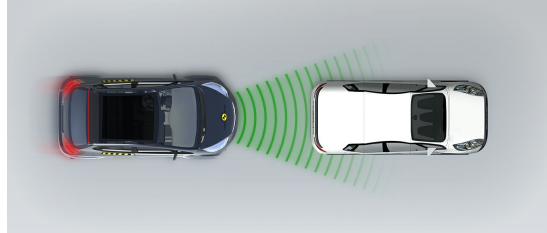
Total 13.9 Pts / 87%

■ Driver reacts to warning

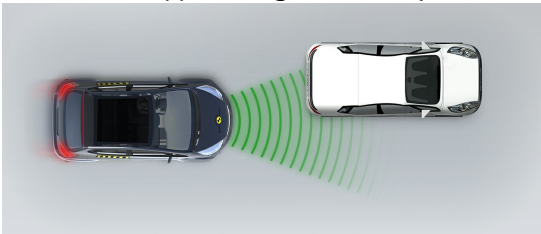
Approaching a stationary car



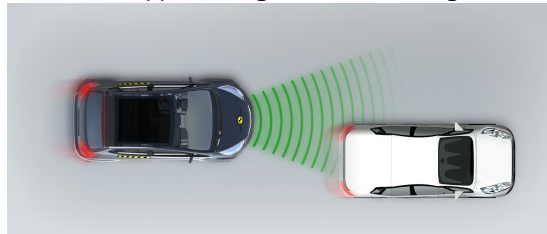
Approaching a stationary car



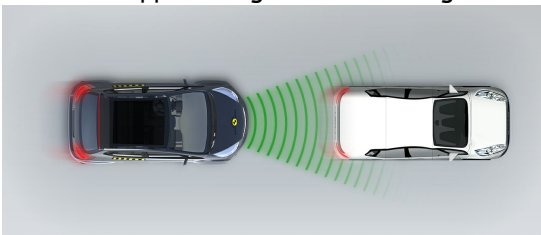
Approaching a stationary car



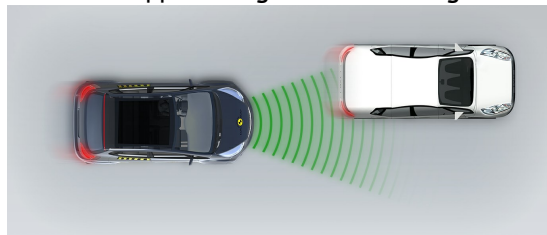
Approaching a slower moving car



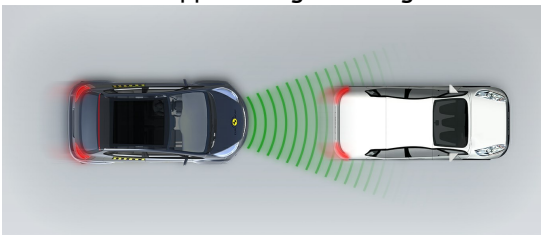
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car





SAFETY ASSIST

Total 13.9 Pts / 87%

Comments

The Rafale's autonomous emergency braking (AEB) system performed well in tests of its reaction to other vehicles, with impacts avoided in most test cases. A seatbelt reminder system, including occupant detection, is standard for all seats and the car is also equipped with a driver monitoring system, which monitors steering inputs for patterns which are characteristic of a fatigued or inattentive driver. Lane assistance corrects the car's path if it is drifting out of lane and which also intervenes in some more critical situations. A camera based speed assistance system recognises local speed limits, allowing the speed limiter to be set appropriately.

RATING VALIDITY

Variants of Model Range

Body Type	Engine	Drivetrain	Rating Applies	
			LHD	RHD
5 door MPV	1.2 Tce E-Tech 200 Hybride *	4 x 2	✓	✓
5 door MPV	1.2 Tce E-Tech 230 Plug-In Hybride **	4 x 4	✓	✓

* Tested variant and Renault Austral 1.3 Tce, LHD

** Additional tests performed

Annual Reviews and Facelifts

Date	Event	Outcome
June 2024	Rating Published	2022 ★ ★ ★ ★ ★ ✓
November 2024	Addition of PHEV Variant	2022 ★ ★ ★ ★ ★ ✓