



Hyundai BAYON  
Standard Safety Equipment

2021



Adult Occupant



76%

Child Occupant



82%

Vulnerable Road Users



76%

Safety Assist



67%

## SPECIFICATION

Tested Model	Hyundai BAYON 1.0 T-GDI GL, LHD
Body Type	- 5 door SUV
Year Of Publication	2021
Kerb Weight	1230kg
VIN From Which Rating Applies	- all BAYONs
Class	Small Off-Road

## 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	✘	✘	✘

## SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix	—	✗	●
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 29.2 Pts / 76%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

Frontal Impact 11.8 / 16 Pts

Mobile Progressive Deformable Barrier                      Full Width Rigid Barrier

Lateral Impact 11.8 / 16 Pts

Side Mobile Barrier                      Side Pole                      Far-Side Excursion                      Occupant Interaction

Rear Impact 3.7 / 4 Pts

Rear Seat                      Front Seat

## ADULT OCCUPANT

Total 29.2 Pts / 76%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

Rescue and Extrication		2.0 / 2 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Available	

## Comments

The passenger compartment of the BAYON remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Hyundai showed that, on the passenger's side, a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. However, on the driver's side, structures in the dashboard were considered a risk to occupants' legs and a penalty was applied to the score. Protection of the driver's chest was rated as marginal, based on dummy readings of chest compression. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the BAYON would be a benign impact partner in a frontal collision. In the full-width rigid barrier test, protection of the chest of the rear dummy was rated as weak, based on compression of the chest, but protection was otherwise good or adequate. In the side barrier test, protection of all critical body areas was good and the car scored maximum points in this part of the assessment. In the more severe side pole impact, protection of all critical body areas was good or adequate. The BAYON is not equipped with a counter-measure to mitigate occupant to occupant injuries in the event of a side impact. Mitigation of the extent to which a body would be thrown to the opposite side of a car in a lateral collision was rated as poor. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats also indicated good whiplash protection. The BAYON is equipped with an advanced eCall system which alerts the emergency services in the event of a crash, and with MCB, a system which applies the brakes after a collision to reduce the likelihood of secondary impacts.

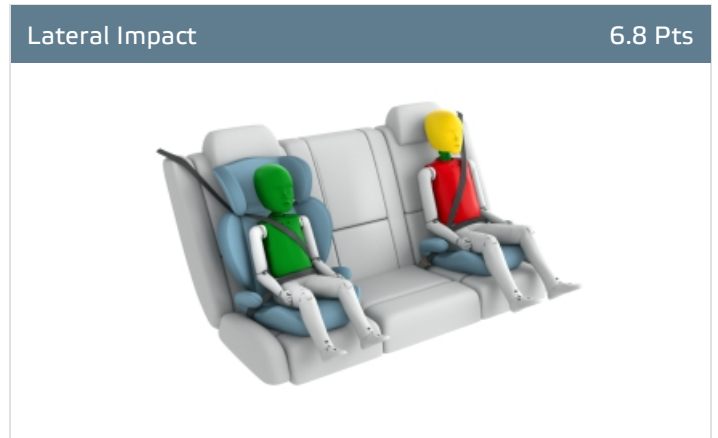
**CHILD OCCUPANT**

Total 40.4 Pts / 82%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

21.4 / 24 Pts



Restraint for 6 year old child: *Britax Römer Kidfix III*  
 Restraint for 10 year old child: *Graco Junior*

**Safety Features**

7.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center
Isifix	✘	●	✘
i-Size	✘	●	✘
Integrated CRS	✘	✘	✘

● Fitted to test car as standard   
 ○ Not on test car but available as option   
 ✘ Not available

CRS Installation Check

12.0 / 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 40.4 Pts / 82%

■ Universal Belted CRS

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyFix (Belt)



Britax Römer King II LS (Belt)



Cybex Solution Z i-Fix (Belt)





## CHILD OCCUPANT

Total 40.4 Pts / 82%

	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)	—	●	—	●
Cybex Solution Z i-Fix (ISOFIX)	—	●	—	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyFix (Belt)	●	●	●	●
Britax Römer King II LS (Belt)	●	●	●	●
Cybex Solution Z i-Fix (Belt)	●	●	●	●

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

— Not available

## Comments

In the frontal offset test, protection of both child dummies was good for all body regions except the neck of the 10 year dummy, protection of which was rated as weak, on the basis of measurements of tensile forces. In the side barrier impact, protection of the head of the 10 year dummy was adequate but that of the chest was rated as poor on the basis of accelerations measured during the test. 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 child restraint types for which the BAYON is designed could be properly installed and accommodated in the car.

**VULNERABLE ROAD USERS**

Total 41.4 Pts / 76%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

**Pedestrian**

26.9 / 36 Pts



Head Impact	14.9 Pts
Pelvis Impact	6.0 Pts
Leg Impact	6.0 Pts

**Vulnerable Road Users**


14.6 / 18 Pts

System Name	Forward Collision-Avoidance Assist
Type	Auto-Brake with Forward Collision Warning
Operational From	5 km/h

 VULNERABLE ROAD USERS

Total 41.4 Pts / 76%

AEB Pedestrian

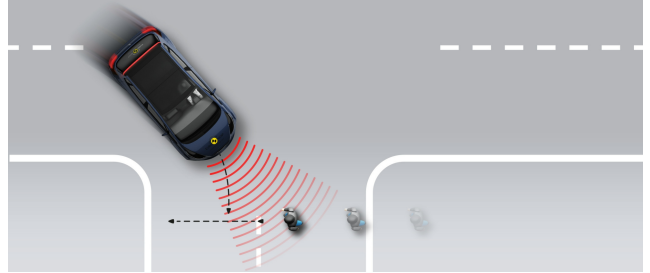
 6.0 / 9 Pts

■ 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

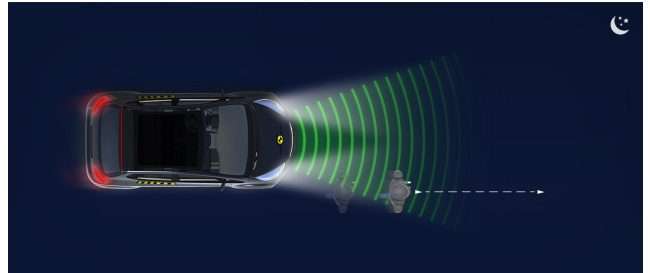


■ Night time

Adult crossing the road




Adult along the roadside

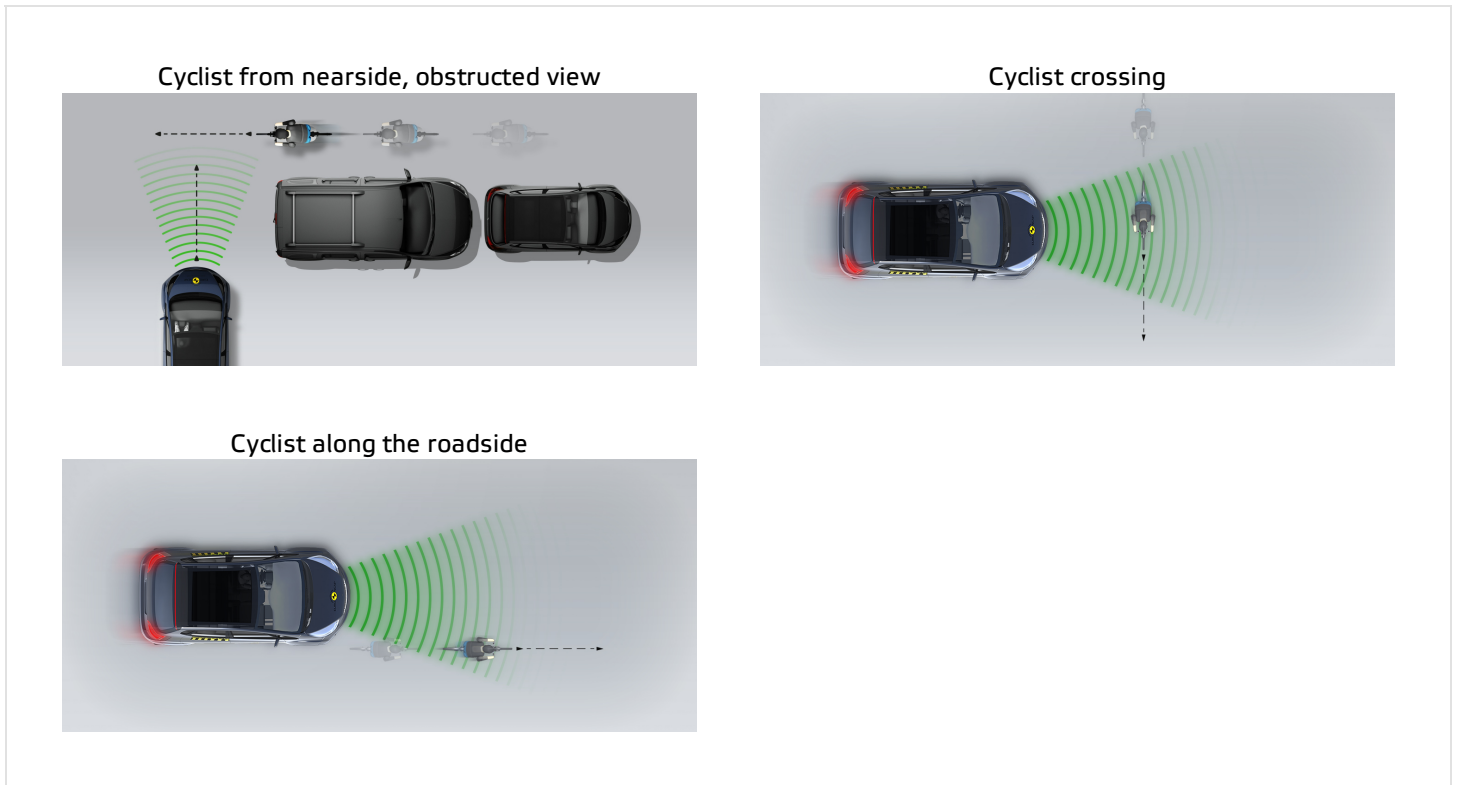


 **VULNERABLE ROAD USERS**

Total 41.4 Pts / 76%

**AEB Cyclist**

 **8.6 / 9 Pts**



**Comments**

The protection provided by the bonnet to the head of a struck pedestrian was mixed but was mostly rated as between marginal and good. Poor results were recorded at the base of the windscreen and on the stiff windscreen pillars. The bumper provided good protection to pedestrians' legs at all test locations and protection of the pelvis was also good, the BAYON scoring maximum points in these areas of assessment. The autonomous emergency braking system of the BAYON detects vulnerable road users, as well as other vehicles. The system's response to pedestrians was adequate and its response to cyclists was good, with collisions avoided or mitigated in most test scenarios.

SAFETY ASSIST

Total 10.8 Pts / 67%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

Speed Assistance

■ 1.8 / 3 Pts

System Name	Manual Speed Limit Assist (MSLA) / Intelligent Speed Limit Assist (ISLA)
Speed Limit Information Function	Camera based, subsigns supported
Speed Limitation Function	Manually set (accurate to 5km/h)

Occupant Status Monitoring

■ 2.7 / 3 Pts

> Seatbelt Reminder

■ 1.7 / 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

System Name	Driver Attention Warning (DAW)
Type	Steering input
Operational From	10 km/h

## SAFETY ASSIST

Total 10.8 Pts / 67%

## Lane Support

3.5 / 4 Pts

System Name	LKA	
Type	LKA and ELK	
Operational From	60 km/h	
<b>PERFORMANCE</b>		
Emergency Lane Keeping		GOOD
Lane Keep Assist		GOOD
Human Machine Interface		GOOD

## AEB Car-to-Car

2.8 / 6 Pts

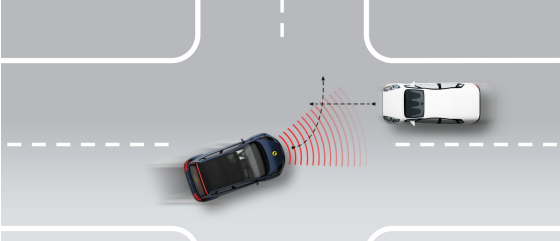
System Name	Forward Collision-Avoidance Assist	
Type	Autonomous emergency braking and forward collision warning	
Operational From	5 km/h	
Sensor Used	camera	

 SAFETY ASSIST

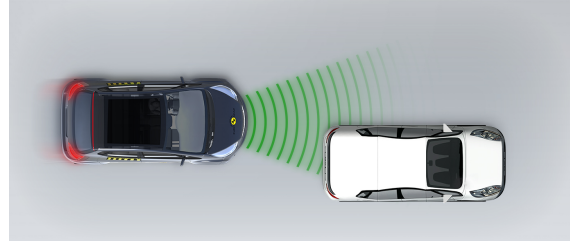
Total 10.8 Pts / 67%

■ Autobrake function only

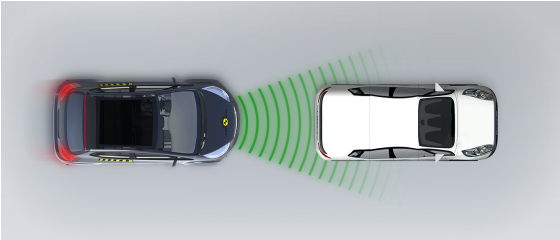
Test car turns across the path of an approaching car



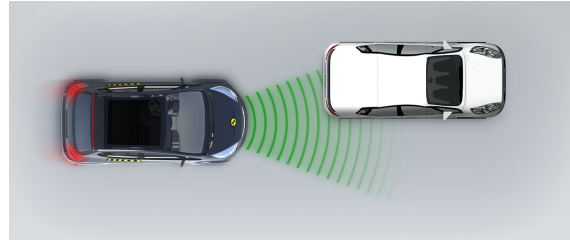
Approaching a stationary car



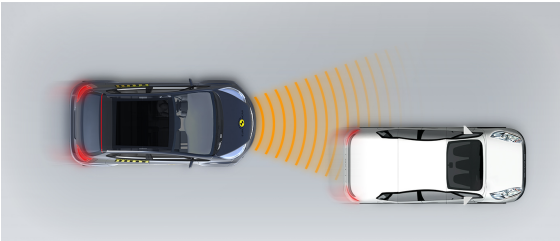
Approaching a stationary car



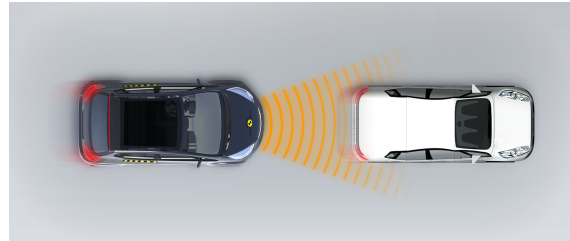
Approaching a stationary car



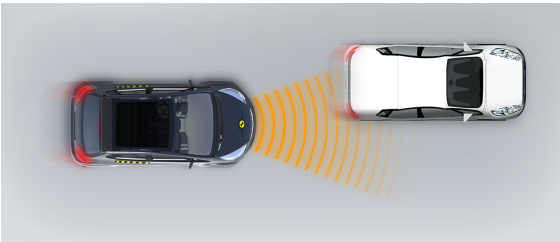
Approaching a slower moving car



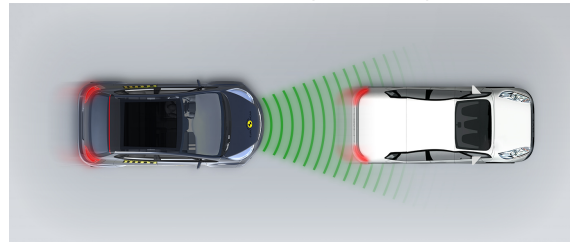
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



 SAFETY ASSIST

Total 10.8 Pts / 67%

■ Driver reacts to warning

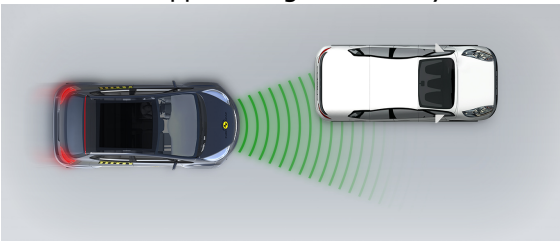
Approaching a stationary car



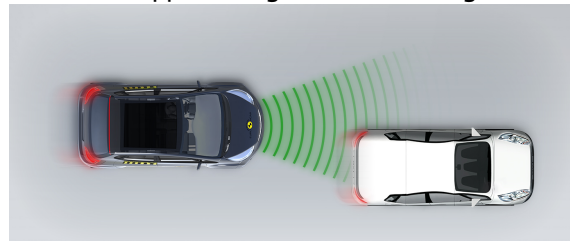
Approaching a stationary car



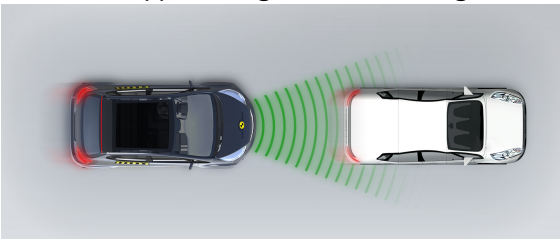
Approaching a stationary car



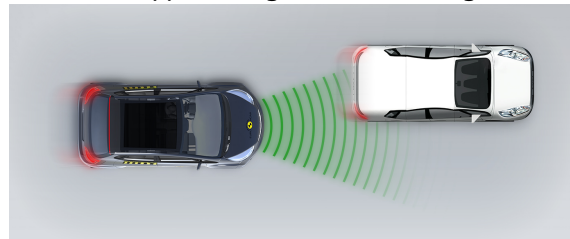
Approaching a slower moving car



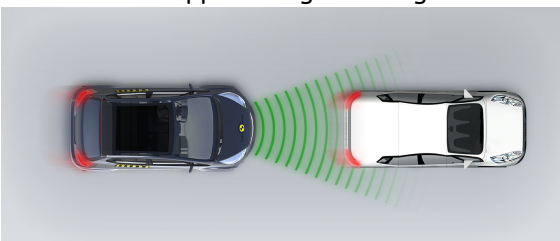
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car







## SAFETY ASSIST

Total 10.8 Pts / 67%

## Comments

A seatbelt reminder is standard for the front and rear seats and a driver monitoring system monitors steering inputs for signs of fatigued driving. The autonomous emergency braking system showed only marginal performance in tests of its reaction to other vehicles. Speed assistance is provided by a system which informs the driver of the local limit, allowing the limiter to be set appropriately. A lane support system gently corrects the course of a car which is drifting out of lane and also intervenes in more critical situations.

## RATING VALIDITY

### Variants of Model Range

Body Type	Engine	Drivetrain	Rating Applies	
			LHD	RHD
5 door SUV	1.2 MPI	4 x 2	✓	✓
5 door SUV	1.0 T-GDI*	4 x 2	✓	✓
5 door SUV	1.0 T-GDI 48V MHEV	4 x 2	✓	✓

\*Tested variant

### Annual Reviews and Facelifts

Date	Event	Outcome
October 2021	Rating Published	2021 ★★☆☆☆ ✓