



**Hyundai i20**  
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	- from NLHBR81GVNZ144410
Class	Supermini

### General comments

The Hyundai i20 is very closely related to the Hyundai BAYON tested by Euro NCAP in 2021 and shares the same safety equipment. Based on data reviewed by Euro NCAP, the two cars can be considered identical as far as safety is concerned and the rating of the BAYON can be applied also to the i20.

## 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	●	●	✗
Centre Airbag	✗	✗	✗
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 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



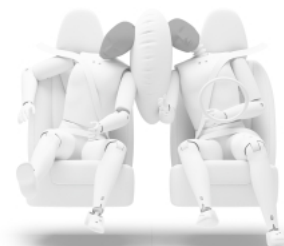
Side Mobile Barrier



Side Pole



Far-Side Excursion



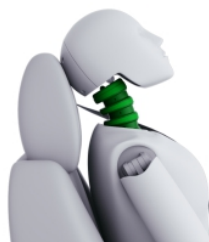
Occupant Interaction

## 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 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 car 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 car 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 car 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 &amp; 10 year old children

21.4 / 24 Pts

### Frontal Impact

14.6 Pts



### Lateral Impact

6.8 Pts

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

## Safety Features

7.0 / 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

12.0 / 12 Pts

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

## ■ i-Size CRS

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



Maxi Cosi 2way Pearl &amp; 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 car is designed could be properly installed and accommodated.





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

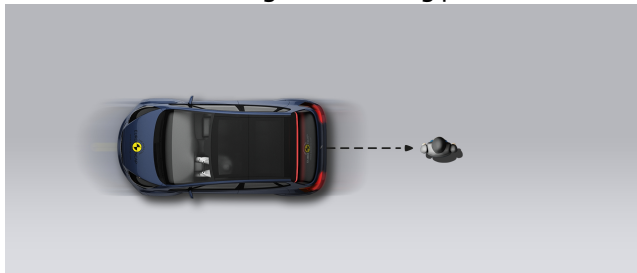
Total 41.4 Pts / 76%

## AEB Pedestrian

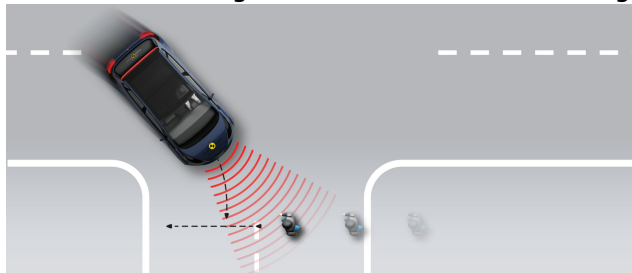
6.0 / 9 Pts

■ Day time

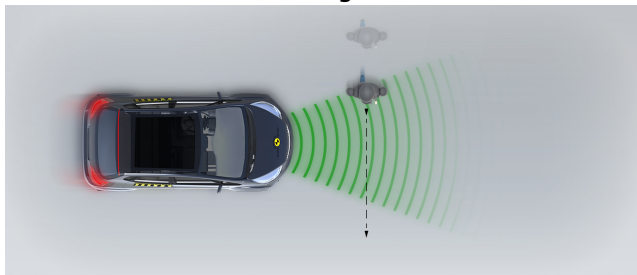
Vehicle reversing into standing pedestrian



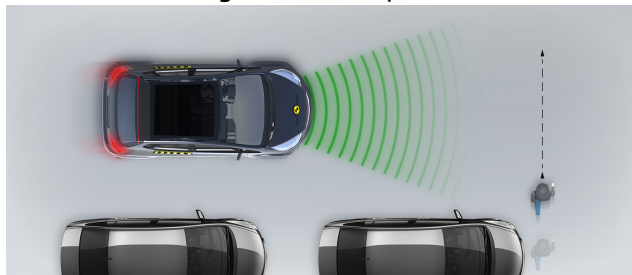
Pedestrian crossing a road into which a car is turning



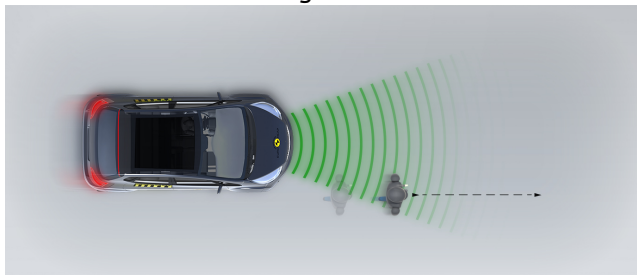
Adult crossing the road



Child running from behind parked vehicles

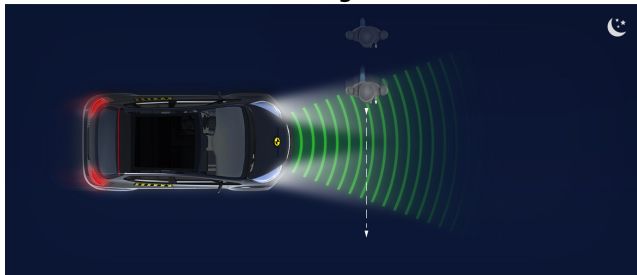


Adult along the roadside

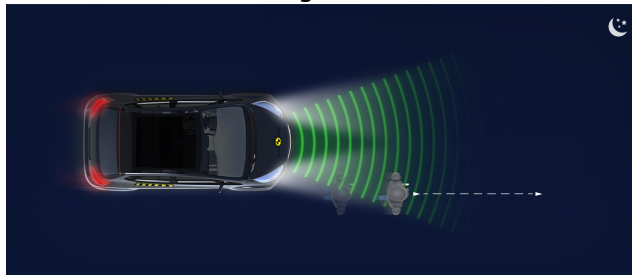


■ Night time

Adult crossing the road



Adult along the roadside





## VULNERABLE ROAD USERS

Total 41.4 Pts / 76%

## AEB Cyclist

8.6 / 9 Pts

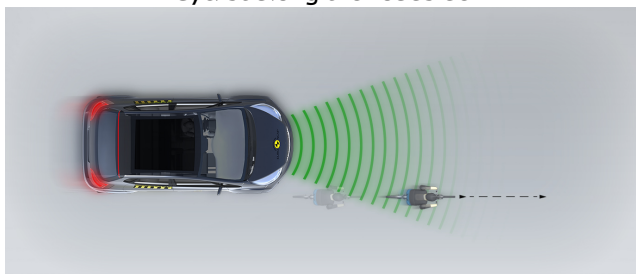
Cyclist from nearside, obstructed view



Cyclist crossing



Cyclist along the roadside



## 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 car scoring maximum points in these areas of assessment. The autonomous emergency braking system 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

## &gt; Seatbelt Reminder

1.7 / 2 Pts

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

Pass
 Fail
 Not available

## &gt; 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
PERFORMANCE	
Emergency Lane Keeping	<span></span> GOOD
Lane Keep Assist	<span></span> GOOD
Human Machine Interface	<span></span> 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

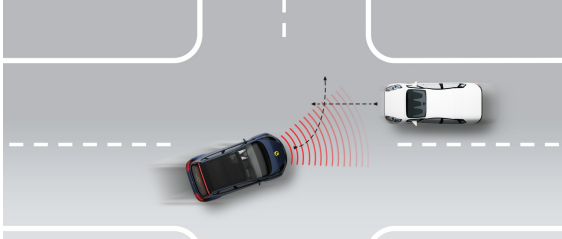


## SAFETY ASSIST

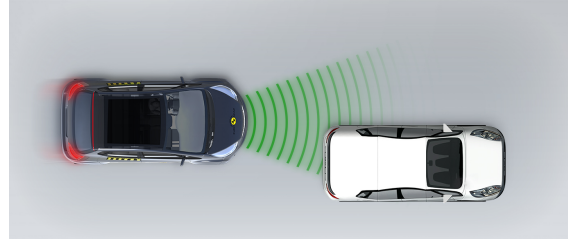
Total 10.8 Pts / 67%

### Autobrake function only

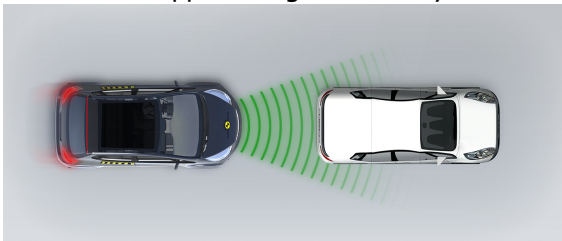
Test car turns across the path of an approaching car



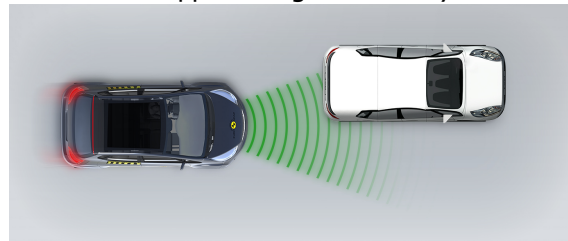
Approaching a stationary car



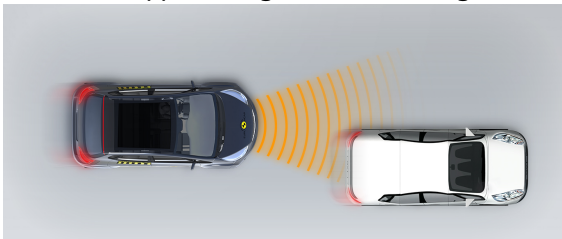
Approaching a stationary car



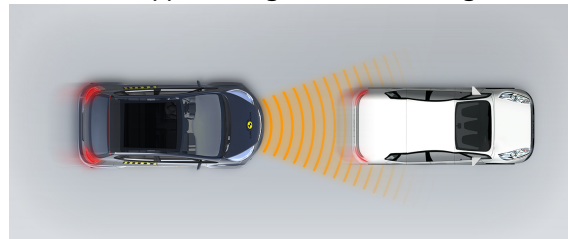
Approaching a stationary car



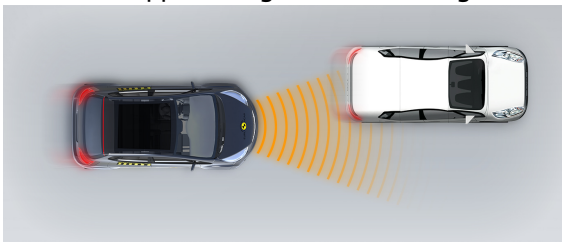
Approaching a slower moving car



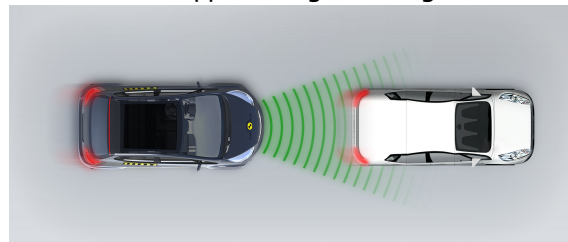
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



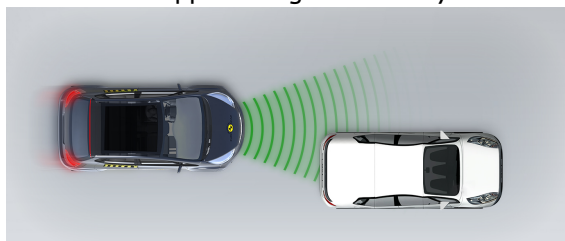


## SAFETY ASSIST

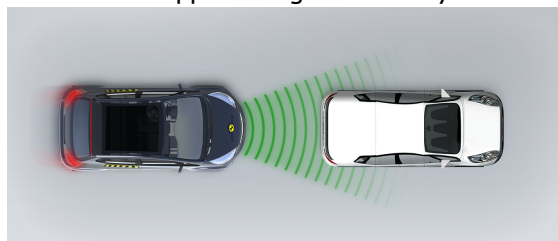
Total 10.8 Pts / 67%

### ■ Driver reacts to warning

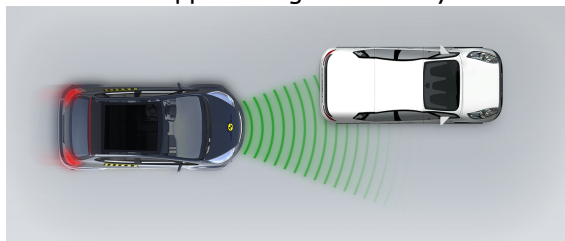
Approaching a stationary car



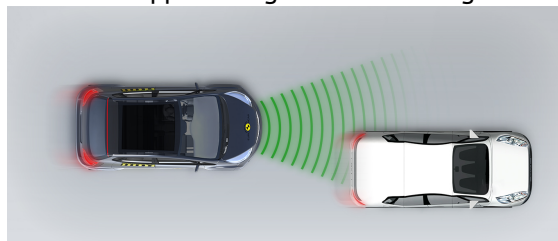
Approaching a stationary car



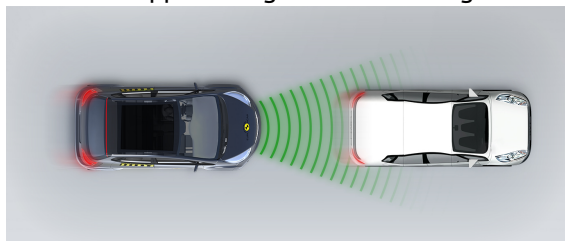
Approaching a stationary car



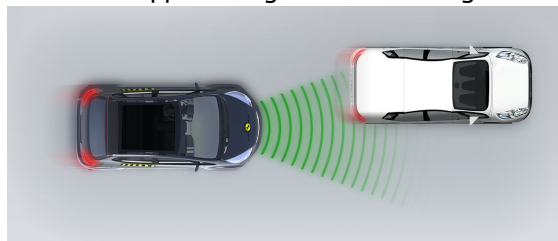
Approaching a slower moving car



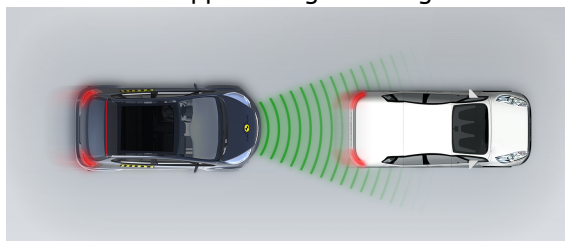
Approaching a slower moving car



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: Hyundai BAYON 1.0 T-GDI

### Annual Reviews and Facelifts

Date	Event	Outcome	
September 2022	Rating Published	2021 ★ ★ ★ ★ ☆	✓