

**Hyundai IONIQ 5**  
Highway Driving Assist II

2021

**MODERATE**



ASSISTANCE  
COMPETENCE



77%

SAFETY  
BACKUP



50%

## SPECIFICATION

SYSTEM NAME	Highway Driving Assist II
STANDARD ACTIVE SAFETY SYSTEMS	
AEB Car-to-Car	●
AEB Vulnerable Road User	●
Lane Support Systems	●
Speed Assistance Systems	●

### Comments

Hyundai's system name Highway Driving Assist II accurately portrays system functionality. The promotional material and the handbook correctly indicate the limitations of the system capabilities. Status information is clear, and the IONIQ 5 offers a head-up display showing the system status in the driver's direct line of sight. Hyundai did not equip the IONIQ 5 with an internal camera and the system relies only on steering wheel input for Driver Monitoring. The system balances driver steering input with lane guidance, promoting co-operative driving.

Hyundai combines map-based speed limit information with real time camera inputs to manage fixed, variable and temporary speed limit signs. The system can adapt speed for upcoming curves but not for other road features such as junctions or roundabouts. The IONIQ 5 responds to avoid a collision in most of the ACC test scenarios and requires AEB interventions in the more critical stopped vehicle, cut-in and cut-out tests. The driver is supported through the S-Bend, staying centred in the lane at all test speeds. The vehicle does not have an Active Blindspot system designed to prevent lane changing into adjacent vehicles. A lane-change assist function is available. In case of an unresponsive driver, the IONIQ 5 deactivates the system leaving the vehicle without control. If the camera is blocked the car provides a timely warning and prevents system activation. With the radar blocked only limited warnings are issued.

**The Hyundai IONIQ 5 provides a good level of Vehicle Assistance with a similar level of Driver Engagement but a moderate Safety Back-up resulting in a Moderate but balanced system.**

**ASSISTANCE COMPETENCE**

Total 77%

**DRIVER ENGAGEMENT**

80.0 / 100 PTS

**CONSUMER INFORMATION** 20.0 / 25 Pts

SYSTEM NAME	Highway Driving Assist II
MARKETING MATERIAL	Highway Driving Assist II   Hyundai Viewed 12 November 2021
QUICK START GUIDE	
VEHICLE HANDBOOK	Viewed 12 November 2021

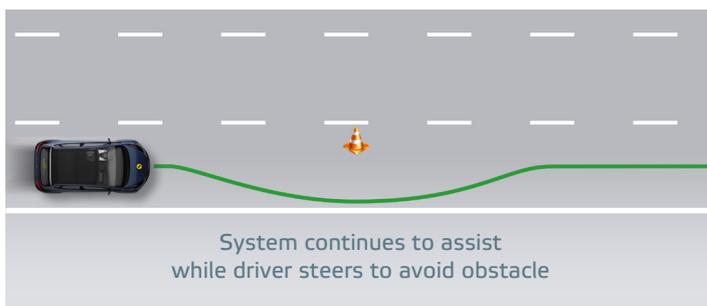
**SYSTEM STATUS** 25.0 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

**DRIVER MONITORING** 10.0 / 25 Pts

**DRIVING COLLABORATION** 25.0 / 25 Pts

Steering to avoid an obstacle



GOOD
  ADEQUATE
  MARGINAL
  WEAK
  POOR

**ASSISTANCE COMPETENCE**

Total 77%

**VEHICLE ASSISTANCE**

77.4 / 100 PTS

**SPEED ASSISTANCE** 13.0 / 25 Pts

SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	Start slowing down after sign
Vehicle response to variable Speed limits	Start slowing down after sign

ROAD FEATURES

Speed adaptation for corners



Speed adaptation for roundabouts



Speed adaptation for junctions



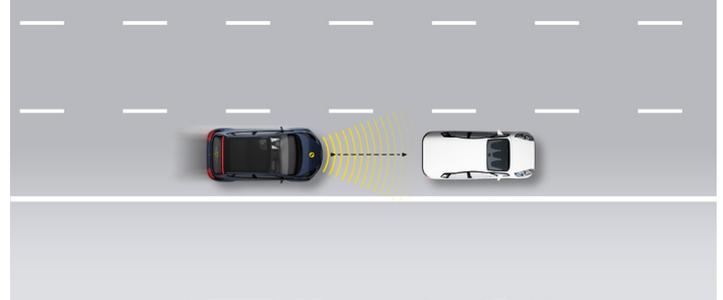
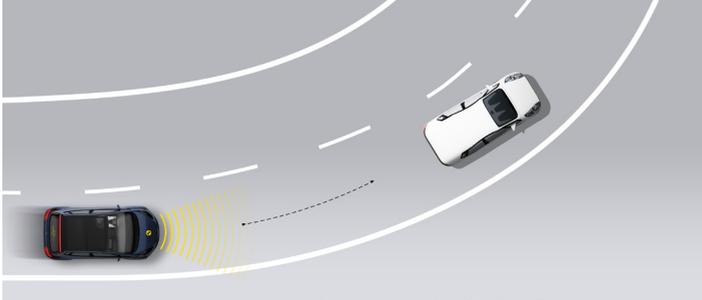
● FITTED TO THE VEHICLE    
 — NOT AVAILABLE

**ASSISTANCE COMPETENCE**

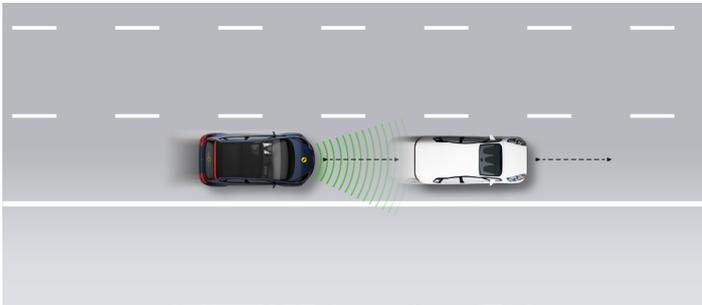
Total 77%

**ADAPTIVE CRUISE CONTROL PERFORMANCE** 29.4 / 40 Pts

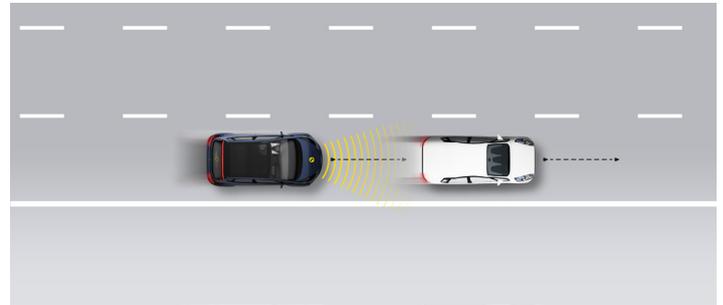
Approaching a stationary car



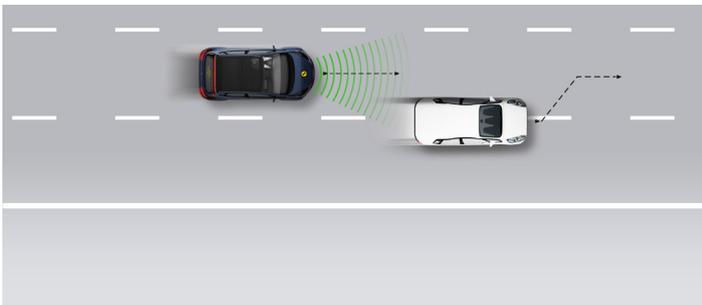
Approaching a slower moving car



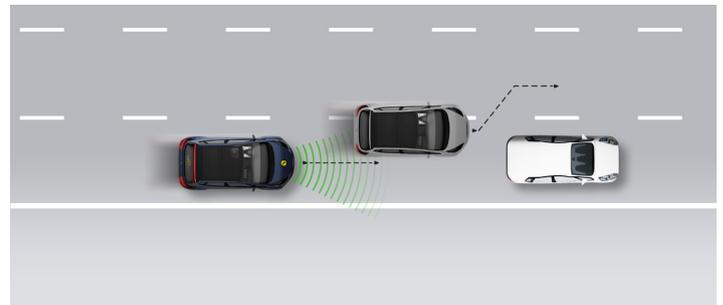
Approaching a braking car



Car cutting-in in front



Car cutting-out in front



UNDERTAKE PREVENTION	
Undertake prevention at speeds over 90 km/h	<b>✘</b>

ADAPTIVE CRUISE CONTROL AUTO-RESUME	
Assistance maintained after coming to a full stop	<b>●</b>
System assistance maintained by	Automatic resume within 5s of stop and driver input required over 5s

**ASSISTANCE COMPETENCE**

Total 77%

**STEERING ASSISTANCE** 35.0 / 35 Pts

Steering in an S-curve



80 km/h	●
100 km/h	●
120 km/h	●
Lane Change Assist	●

**SAFETY BACKUP**

Total 50%

SYSTEM FAILURE 14.0 / 25 Pts

	ENGAGEMENT	WARNING
<b>SENSOR BLOCKED AT START-UP</b>		
Camera	System can NOT be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
Radar	System can be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
<b>SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM INACTIVE</b>		
Camera	System can NOT be engaged after a 5 minute drive	Visual Warning within 5 minutes after sensor blocking
Radar	after a 5 minute drive	after sensor blocking
<b>SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM ACTIVE</b>		
Camera	within 2 minutes after blocking	after sensor blocking
Radar	after sensor blocking	after sensor blocking

UNRESPONSIVE DRIVER INTERVENTION 0.0 / 25 Pts

Hands Off Warning Timeline

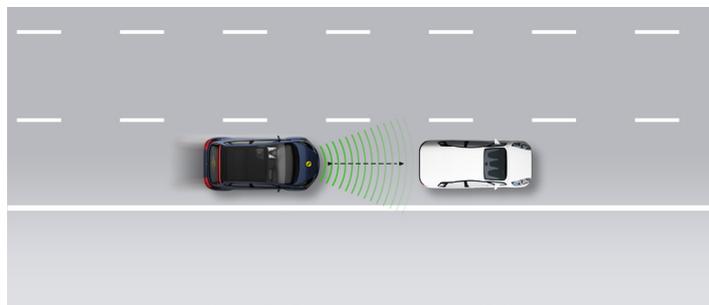
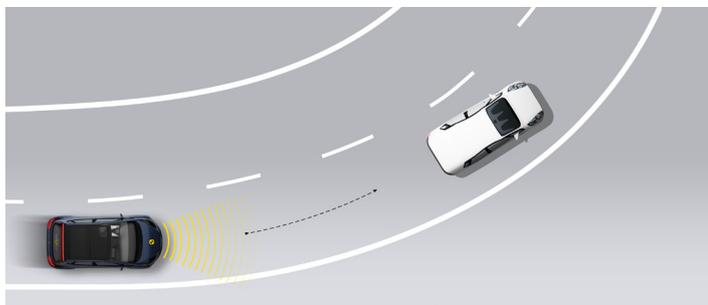


 SAFETY BACKUP

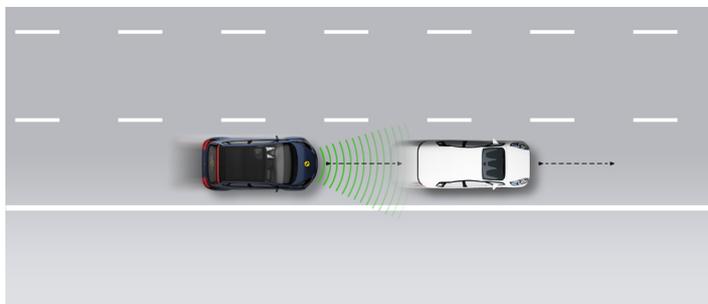
Total 50%

COLLISION AVOIDANCE  36.3 / 50 Pts

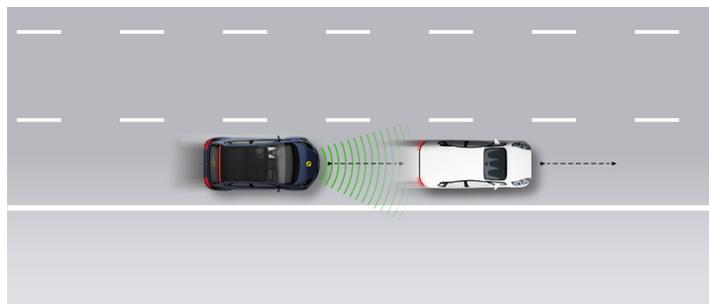
Approaching a stationary car



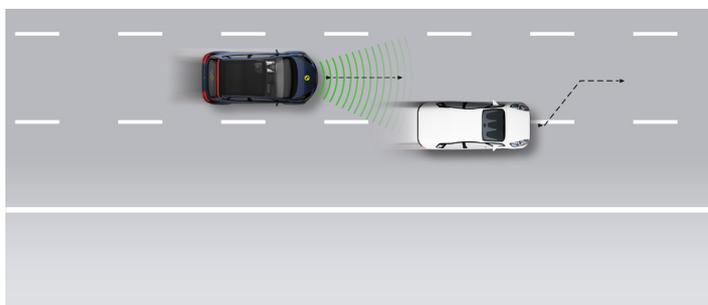
Approaching a slower moving car



Approaching a braking car



Car cutting-in in front



Car cutting-out in front

