



## Mercedes-EQ EQS

Standard Safety Equipment

2021



### Adult Occupant



96%

### Child Occupant



91%

### Vulnerable Road Users



76%

### Safety Assist



80%

## SPECIFICATION

Tested Model	Mercedes-EQ EQS 450+ 4x2 AMG Line, LHD
Body Type	- 5 door hatchback
Year Of Publication	2021
Kerb Weight	2480kg
VIN From Which Rating Applies	- all EQS
Class	Executive

## ADVANCED REWARDS

- 2010 - Mercedes-Benz PRE-SAFE®

## 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	—	✗	●
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 36.6 Pts / 96%

GOOD

ADEQUATE

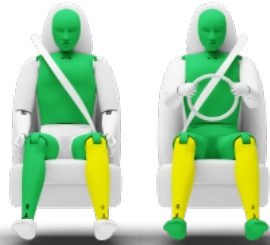
MARGINAL

WEAK

POOR

Frontal Impact

14.7 / 16 Pts



Mobile Progressive Deformable Barrier



Full Width Rigid Barrier

Lateral Impact

16.0 / 16 Pts



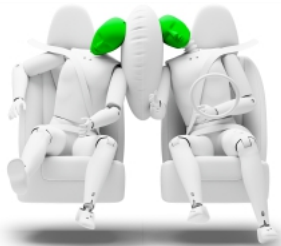
Side Mobile Barrier



Side Pole



Far-Side Excursion



Occupant Interaction

Rear Impact

3.9 / 4 Pts



Rear Seat



Front Seat



ADULT OCCUPANT

Total 36.6 Pts / 96%



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 EQS remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Daimler showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the EQS would be a moderately benign impact partner in a frontal collision. In the full-width rigid barrier test, good protection was provided to all critical body areas of the driver and rear passenger, and the EQS scored maximum points in this part of the assessment. In both the side barrier test and the more severe side pole impact, protection of all critical body areas was good and the car scored maximum points in this part of the assessment. 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 EQS is equipped with a centre airbag to protect against occupant to occupant injuries in side impacts. The airbag performed well in Euro NCAP's tests, with good protection of the dummies' heads. 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 automatically alerts the emergency services in the event of an accident. A multi-collision braking system prevents secondary impacts after the car has been involved in a collision.

## CHILD OCCUPANT

Total 45 Pts / 91%

GOOD ADEQUATE MARGINAL WEAK POOR

Crash Test Performance based on 6 &amp; 10 year old children

24.0 / 24 Pts

Frontal Impact

16 Pts



Lateral Impact

8 Pts

Restraint for 6 year old child: *Mercedes-Benz Kidfix*Restraint for 10 year old child: *Mercedes-Benz Kidfix base*

## Safety Features

9.0 / 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 45 Pts / 91%

■ 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 45 Pts / 91%

	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 both the frontal offset test and the side barrier test, protection of all critical body regions was good, for both child dummies. The front passenger airbag is automatically disabled when a rearward-facing child restraint is put in that seating position. Tests showed that the system worked robustly and the system was rewarded. All of the child restraint types for which the EQS is designed could be properly installed and accommodated in the car.





VULNERABLE ROAD USERS

Total 41.3 Pts / 76%



GOOD



ADEQUATE



MARGINAL



WEAK



POOR

Pedestrian

25.8 / 36 Pts



Head Impact	16.9 Pts
Pelvis Impact	2.9 Pts
Leg Impact	6.0 Pts

Vulnerable Road Users

15.6 / 18 Pts

System Name	Active Brake Assist
Type	Auto-Brake with Forward Collision Warning
Operational From	7 km/h



## VULNERABLE ROAD USERS

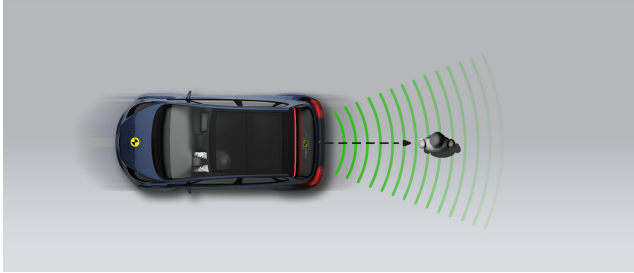
Total 41.3 Pts / 76%

## AEB Pedestrian

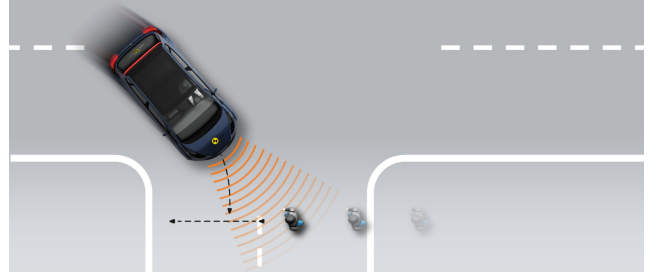
8.0 / 9 Pts

## ■ Day time

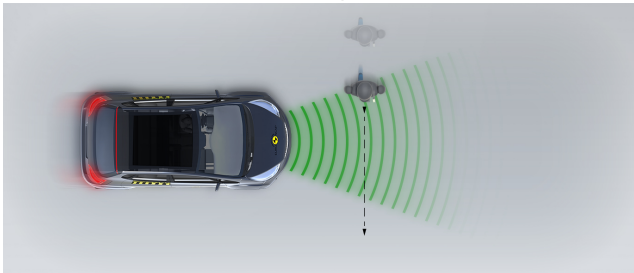
Vehicle reversing into standing pedestrian



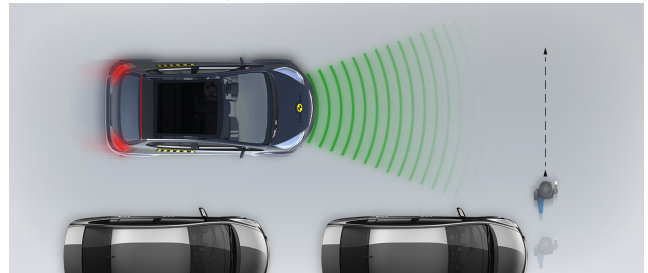
Pedestrian crossing a road into which a car is turning



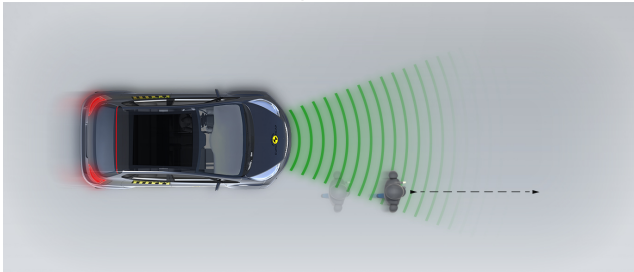
Adult crossing the road



Child running from behind parked vehicles



Adult along the roadside

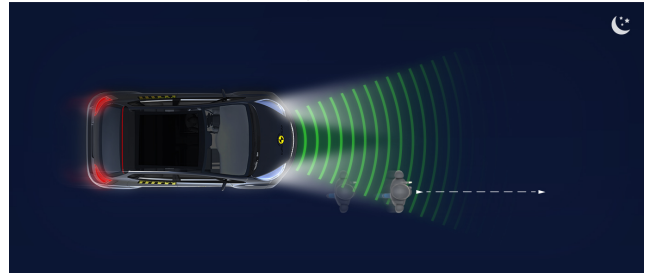


## ■ Night time

Adult crossing the road



Adult along the roadside






## VULNERABLE ROAD USERS

Total 41.3 Pts / 76%

## AEB Cyclist

 7.6 / 9 Pts

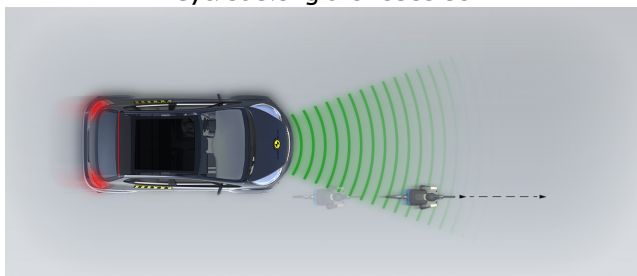
Cyclist from nearside, obstructed view



Cyclist crossing



Cyclist along the roadside



## Comments

The EQS has an 'active bonnet'. Sensors in the bumper detect when a pedestrian has been hit and actuators lift the bonnet to create more space between its surface and the hard components beneath. Daimler demonstrated that the system worked robustly for various pedestrian statures and over a wide range of speeds and, accordingly, the car was tested with the bonnet in the deployed, raised, condition. Protection of the head of a struck pedestrian was good, or at least adequate, over almost the entire area tested by Euro NCAP. Similarly, the bumper provided good protection to pedestrians' legs at all test points. However, pelvis protection was mixed, some test areas showing good protection and some poor. The autonomous emergency braking system of the EQS can detect vulnerable road users such as pedestrians and cyclists, as well as other vehicles. The system performed well in tests of its response to such road-users, with collisions avoided in most cases.



## SAFETY ASSIST

Total 12.9 Pts / 80%

 GOOD


 ADEQUATE

 MARGINAL

 WEAK


 POOR

## Speed Assistance


 2.5 / 3 Pts








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




## Occupant Status Monitoring

 2.0 / 3 Pts


## &gt; Seatbelt Reminder

 1.0 / 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	Attention Assist
Type	Steering inputs
Operational From	60 km/h



SAFETY ASSIST

Total 12.9 Pts / 80%



Lane Support 3.3 / 4 Pts

System Name	Active Lane Keeping Assist
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 5.1 / 6 Pts

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

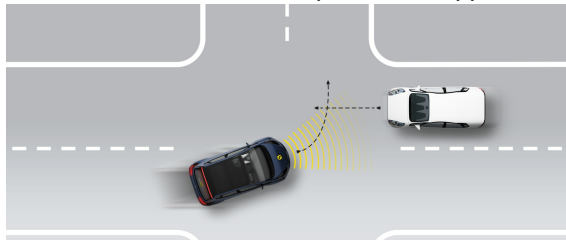


## SAFETY ASSIST

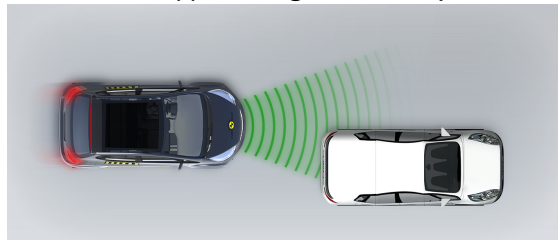
Total 12.9 Pts / 80%

### Autobrake function only

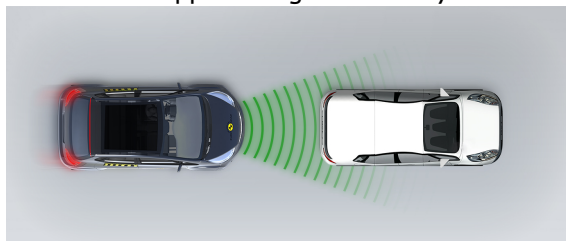
Test car turns across the path of an approaching car



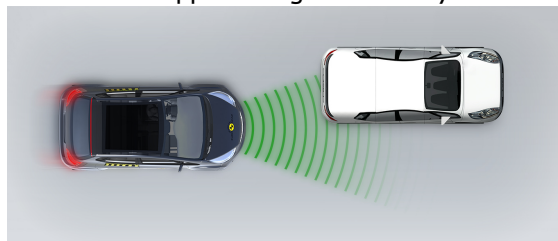
Approaching a stationary car



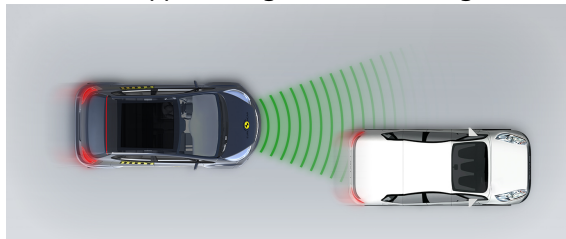
Approaching a stationary car



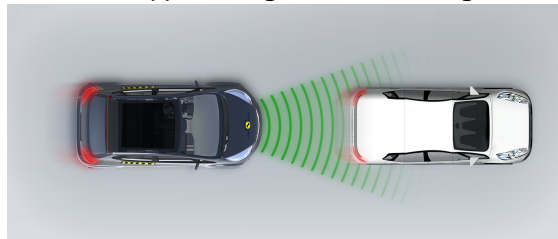
Approaching a stationary car



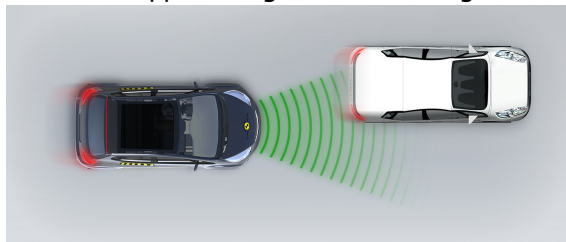
Approaching a slower moving car



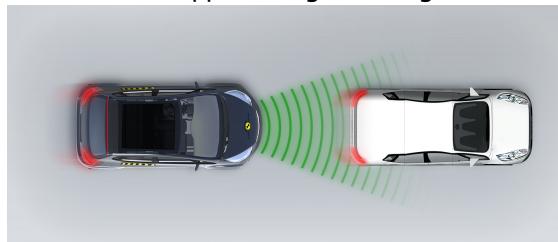
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



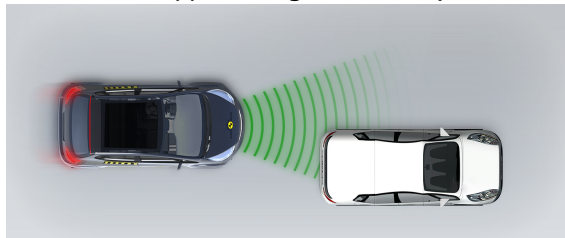


## SAFETY ASSIST

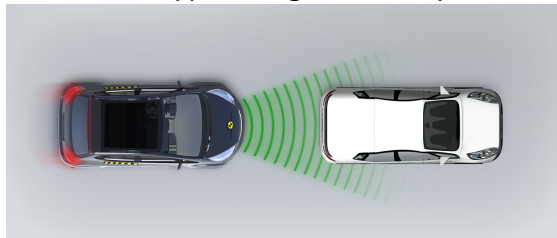
Total 12.9 Pts / 80%

## ■ Driver reacts to warning

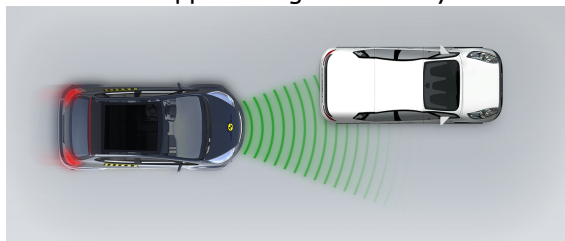
Approaching a stationary car



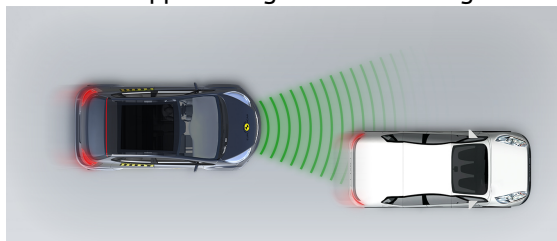
Approaching a stationary car



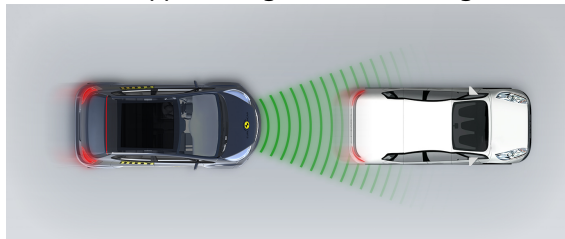
Approaching a stationary car



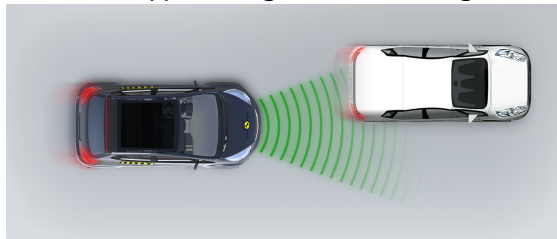
Approaching a slower moving car



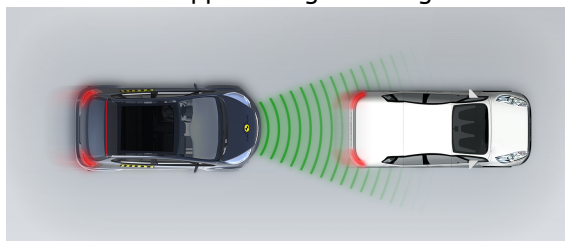
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car





## SAFETY ASSIST

Total 12.9 Pts / 80%

## Comments

The EQS has a seatbelt reminder system for the front and rear seats. 'Attention Assist' monitors steering inputs to detect behaviour characteristic of fatigued driving and advises the driver to rest when necessary. A more advanced system featuring direct eye monitoring is available as an option but was not rated here. The lane support system gently corrects the vehicle's path when it is drifting out of lane and also intervenes in some more critical situations to stop the car from leaving the road, for example. A speed assistance system uses a camera and digital mapping to determine the local speed limit and provides the information to the driver, allowing the speed limiter to be set appropriately. The AEB system performed well in tests of its reaction to other cars.



## RATING VALIDITY

### Variants of Model Range

Body Type	Engine	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door hatchback	electric motor	EQS 450+ *	4 x 2	✓	✓
5 door hatchback	electric motor	EQS 350	4 x 2	✓	✓
5 door hatchback	electric motor	EQS 580 4MATIC	4 x 4	✓	✓

\* Tested variant

### Annual Reviews and Facelifts

Date	Event	Outcome	
December 2021	Rating Published	2021 ★ ★ ★ ★ ★	✓