



Lucid Air
Standard Safety Equipment

2022



Adult Occupant



90%

Child Occupant



91%

Vulnerable Road Users



78%

Safety Assist



84%

SPECIFICATION

Tested Model	Lucid Air GT, LHD
Body Type	- 4 door saloon
Year Of Publication	2022
Kerb Weight	2371kg
VIN From Which Rating Applies	- all Lucid Air
Class	Executive

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	●	●	—

Version 011222

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isifix/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 34.2 Pts / 90%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Frontal Impact 12.8 / 16 Pts

Mobile Progressive Deformable Barrier Full Width Rigid Barrier

Lateral Impact 15.9 / 16 Pts

Side Mobile Barrier Side Pole Far-Side Excursion Occupant Interaction

Rear Impact 3.5 / 4 Pts

Rear Seat Front Seat


ADULT OCCUPANT

Total 34.2 Pts / 90%


 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 Lucid Air remained stable in the frontal offset test. Dummy readings indicated good protection of the knees and femurs of both the driver and passenger. However, Lucid did not provide evidence to demonstrate that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions, and the score for this body region was penalized. 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 an aggressive impact partner in a frontal collision, and the score was penalised accordingly. In the full-width rigid barrier test, protection of all critical body regions was good or adequate for both the driver and rear passenger. In both the side barrier impact and the more severe side pole test, protection of all critical body areas was good and the Air scored maximum points in this part of the assessment. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was found to be adequate. The Air has a counter-measure to mitigate against occupant to occupant injuries in such impacts. The system performed well in Euro NCAP's tests, with good protection of the occupants' 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 Air has an advanced eCall system which alerts the emergency services in the event of a crash and a 'Secondary Collision Mitigation System' which automatically applies the brakes to prevent secondary collisions.

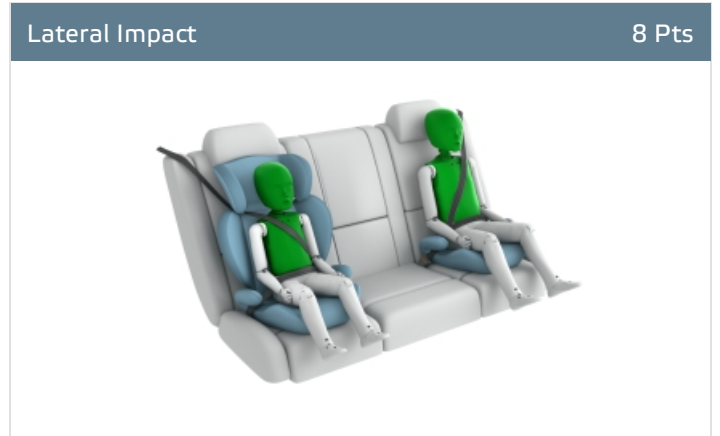
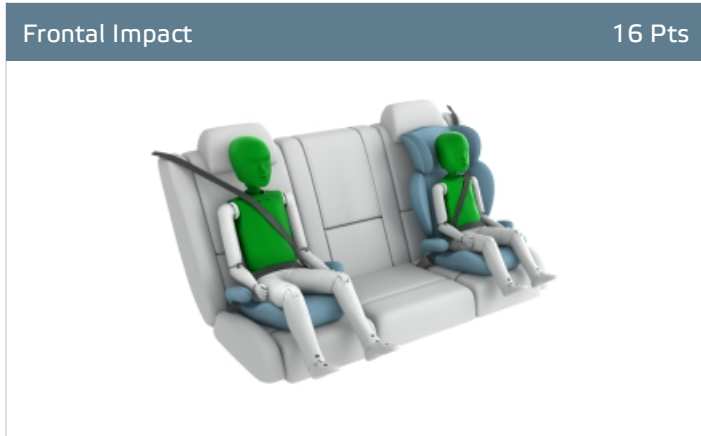
CHILD OCCUPANT

Total 45 Pts / 91%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

24.0 / 24 Pts



Restraint for 6 year old child: *Cybex Solution Z i-Fix*
 Restraint for 10 year old child: *Graco Booster*

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 & 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 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 both the frontal offset test and the side barrier impact, protection of all critical body regions was good for both child dummies, and the Air scored maximum points in this part of the assessment. The Air has a system which automatically disables the front passenger airbag to allow a rearward-facing child restraint to be used in that seating position. The system worked robustly and was rewarded. All of the child restraint types for which the Air is designed could be properly installed and accommodated in the car.

 **VULNERABLE ROAD USERS**

Total 42.2 Pts / 78%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Pedestrian

28.2 / 36 Pts



Head Impact	16.3 Pts
Pelvis Impact	6.0 Pts
Leg Impact	5.9 Pts

Vulnerable Road Users


14.0 / 18 Pts

System Name	Automatic Emergency Braking
Type	Auto-Brake with Forward Collision Warning
Operational From	7 km/h

 VULNERABLE ROAD USERS

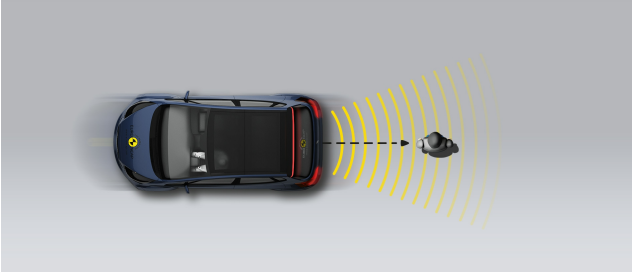
Total 42.2 Pts / 78%

AEB Pedestrian

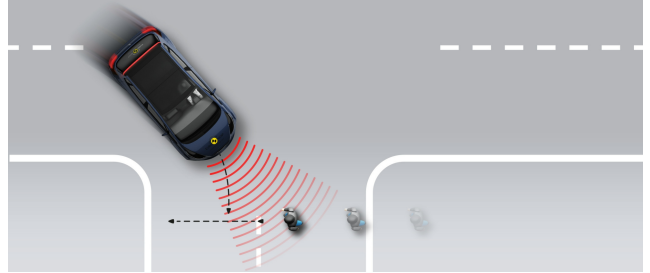
 7.9 / 9 Pts

■ 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

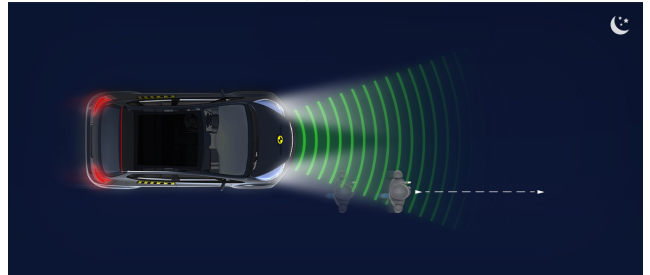


■ Night time

Adult crossing the road



Adult along the roadside



VULNERABLE ROAD USERS

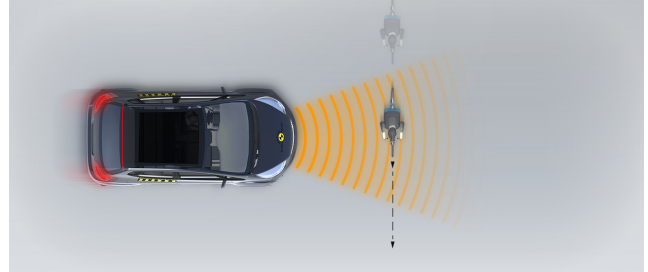
Total 42.2 Pts / 78%

AEB Cyclist
6.1 / 9 Pts

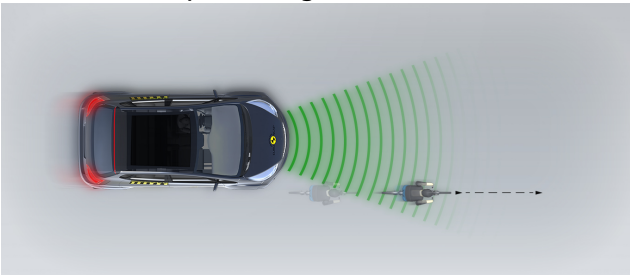
Cyclist from nearside, obstructed view



Approaching a crossing cyclist



Cyclist along the roadside

**Comments**

The Lucid Air has an 'active' bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet to provide greater clearance to hard structures underneath. Lucid demonstrated that the system worked robustly for different pedestrian statures and across a range of speeds. Accordingly, the car was tested with the bonnet in the raised, 'deployed' position. Protection of the head of a struck pedestrian was almost entirely good or adequate over the bonnet surface but poor results were recorded at the base of the windscreen and on the stiff windscreen pillars. The bumper offered good or adequate protection to pedestrians' legs and protection of the pelvis was good at all test locations. The autonomous emergency braking (AEB) system of the Lucid can respond to vulnerable road users as well as to other vehicles. The system performed well in tests of its response to pedestrians and adequately in tests of its response to cyclists.

SAFETY ASSIST

Total 13.5 Pts / 84%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Speed Assistance ■ 2.4 / 3 Pts

System Name	Traffic Sign Recognition
Speed Limit Information Function	Camera & Map, 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

System Name	Distracted Driver Alert & Drowsy Driver Alert
Type	Direct eye monitoring
Operational From	60 km/h

SAFETY ASSIST

Total 13.5 Pts / 84%

Lane Support

3.5 / 4 Pts

System Name	Lane Departure Protection	
Type	LKA and ELK	
Operational From	50 km/h	
PERFORMANCE		
Emergency Lane Keeping		GOOD
Lane Keep Assist		GOOD
Human Machine Interface		GOOD

AEB Car-to-Car

4.6 / 6 Pts

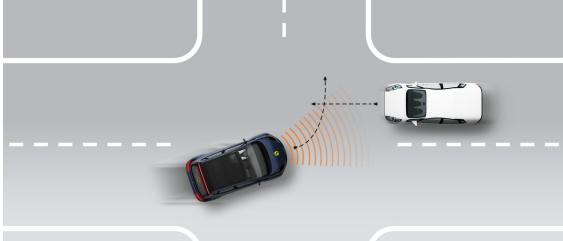
System Name	Automatic Emergency Braking	
Type	Autonomous emergency braking and forward collision warning	
Operational From	7 km/h	
Sensor Used	camera and radar	

 SAFETY ASSIST

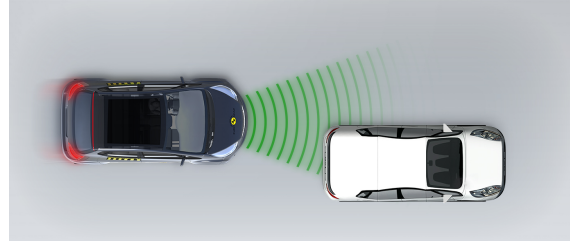
Total 13.5 Pts / 84%

■ Autobrake function only

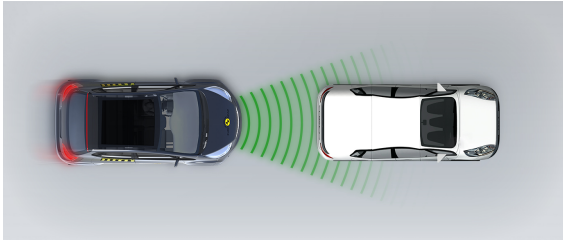
Car turning across the path of an oncoming car



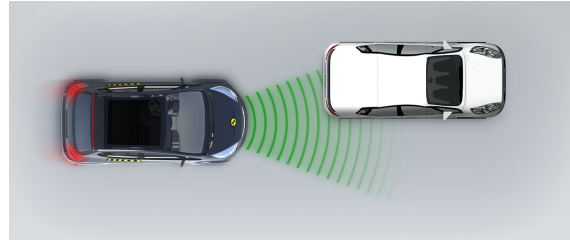
Approaching a stationary car



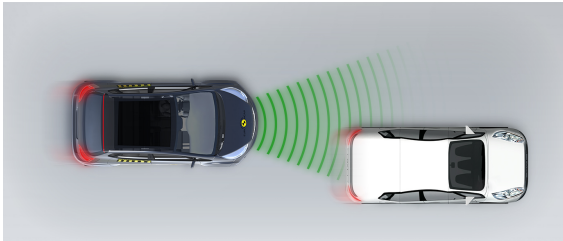
Approaching a stationary car



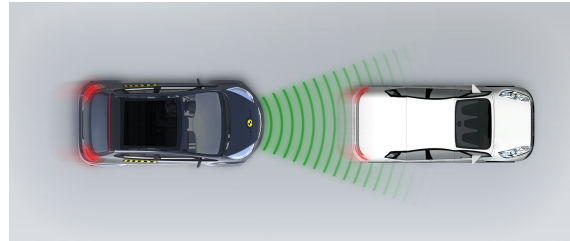
Approaching a stationary car



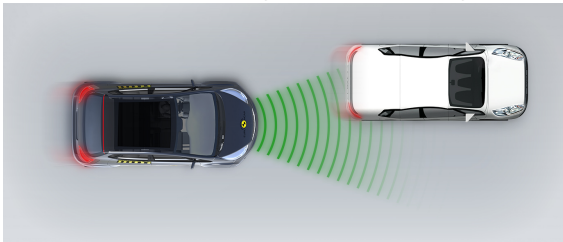
Approaching a slower moving car



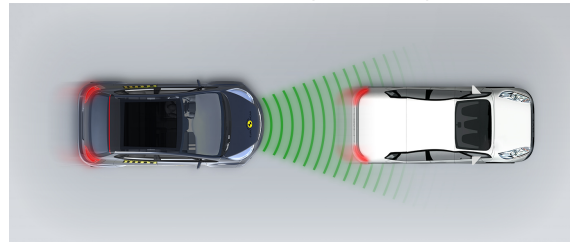
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



 SAFETY ASSIST

Total 13.5 Pts / 84%

■ Driver reacts to warning

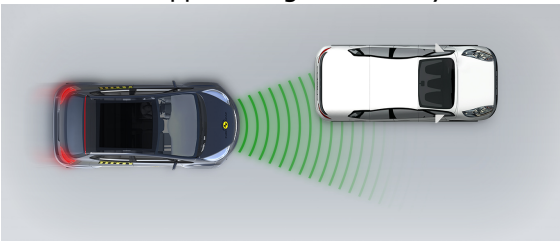
Approaching a stationary car



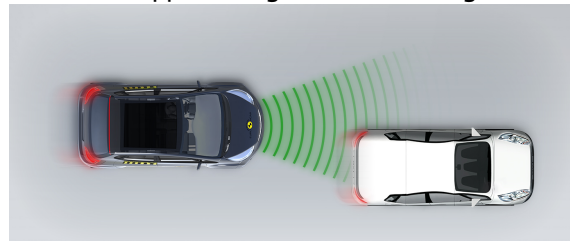
Approaching a stationary car



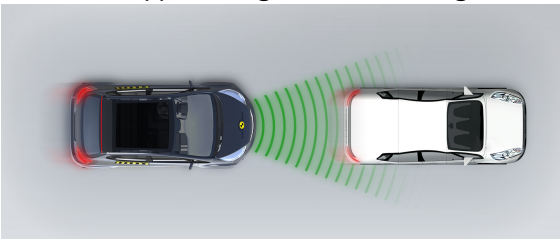
Approaching a stationary car



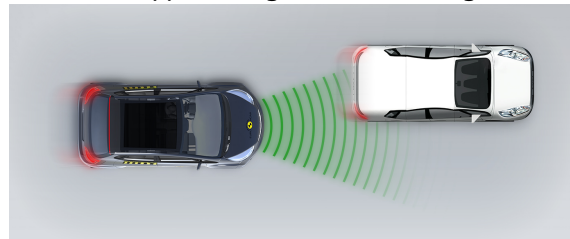
Approaching a slower moving car



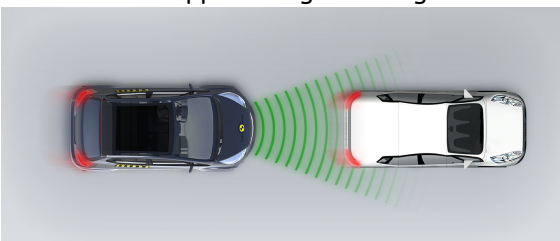
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car





SAFETY ASSIST

Total 13.5 Pts / 84%

Comments

The autonomous emergency braking (AEB) system of the Air performed well in tests of its reaction to other vehicles. A seatbelt reminder system is fitted as standard to the front and rear seats and the car is equipped with a system to detect driver fatigue. The lane support system gently corrects the vehicle's path if it is drifting out of lane, and also intervenes in some more critical situations. The speed assistance system identifies the local speed limit, and the driver can choose to let the car adjust the speed limiter accordingly.

RATING VALIDITY

Variants of Model Range

Body Type	Engine	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
4 door saloon	Electric	Lucid Air GT *	4 x 4	✓	-

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
December 2022	Rating Published	2022 ★★★★★ ✓