



# **Lucid Air** Standard Safety Equipment

2022









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	•	•	<u>—</u>



# SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
lsofix/i-Size		×	
Integrated CRS	<del>_</del>	×	×
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				

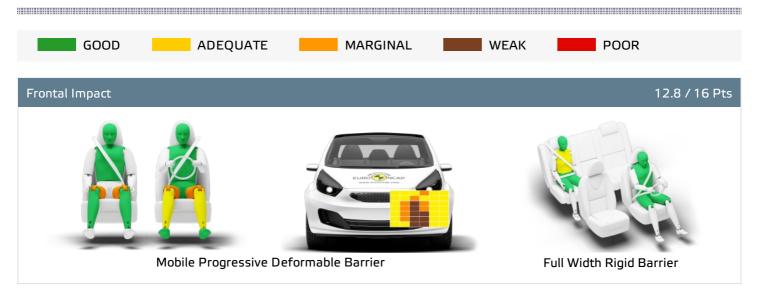
Fitted to the vehicle as standard	Fitted to the vehicle as part of the safety pack
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O Not fitted to the test vehicle but available as option or as part of the safety pack X Not available — Not applicable

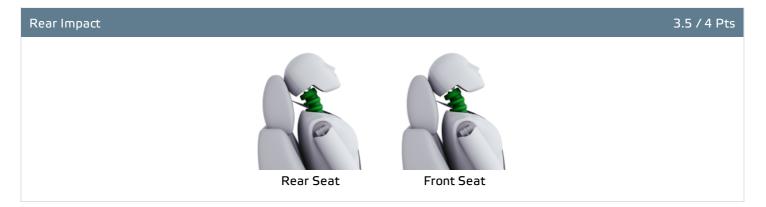




Total 34.2 Pts / 90%











Total 34.2 Pts / 90%

GOOD	ADEQUATE	MARGINAL V	VEAK F	POOR
Rescue and Extrication				2.0 / 2 Pts
	Rescue Sheet	Available, ISO compliant		POF
	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.



Total 45 Pts / 91%



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

O Not on test car but available as option

🗶 Not available



CRS Installation Check 12.0 / 12 Pts



### i-Size CRS











### ISOFIX CRS









Total 45 Pts / 91%

### Universal Belted CRS











Total 45 Pts / 91%

	Seat Position			
	Front	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 Zi-Fix (ISOFIX)	_	•		•
Maxi Cosi Cabriofix (Belt)	•	•	•	•
Maxi Cosi Cabriofix & EasyFix (Belt)	•	•	•	•
Britax Römer King II LS (Belt)	•	•	•	•
Cybex Solution Zi-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

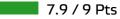
System Name	Automatic Emergency Braking
Туре	Auto-Brake with Forward Collision Warning
Operational From	7 km/h



# **VULNERABLE ROAD USERS**

Total 42.2 Pts / 78%

### **AEB Pedestrian**



### Day time

Vehicle reversing into standing pedestrian



Pedestrian crossing a road into which a car is turning

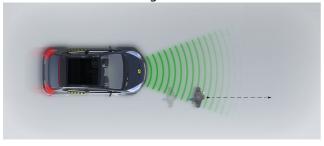
Adult crossing the road



Child running from behind parked vehicles



Adult along the roadside

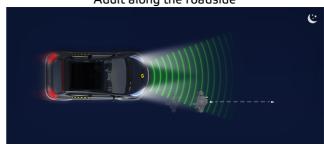


Night time

Adult crossing the road



Adult along the roadside



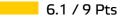




### VULNERABLE ROAD USERS

Total 42.2 Pts / 78%

### **AEB Cyclist**

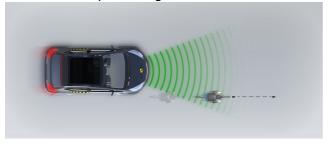


### Cyclist from nearside, obstructed view





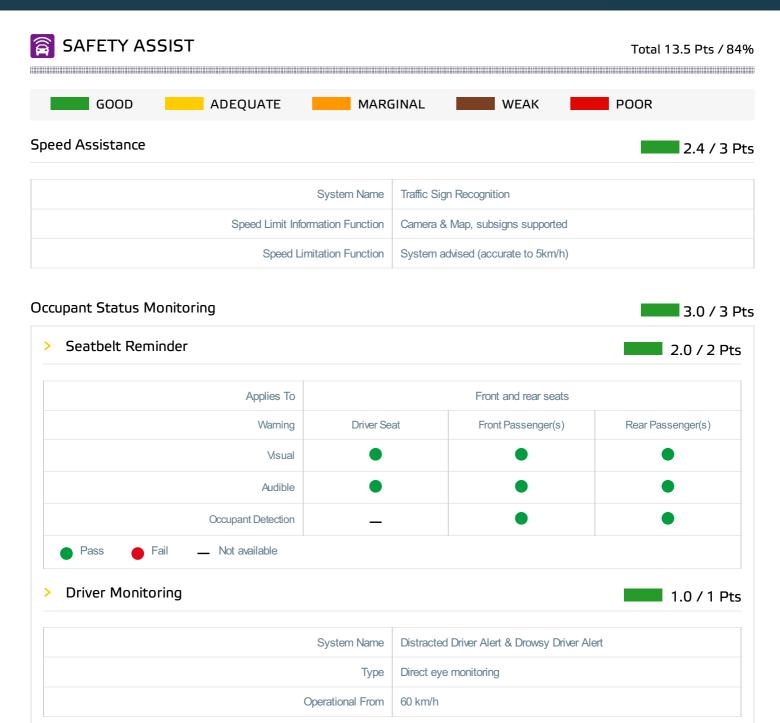
Cyclist along the roadside



### 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.









## Lane Support 3.5 / 4 Pts

System Name	Lane Departure Protection
Туре	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
Туре	Autonomous emergency braking and forward collision warning
Operational From	7 km/h
Sensor Used	camera and radar

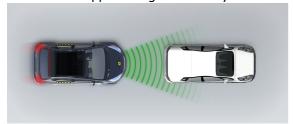


### Autobrake function only

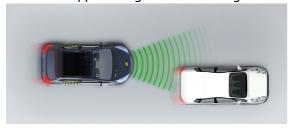
Car turning across the path of an oncoming car



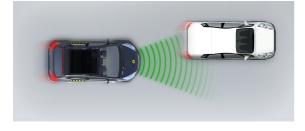
Approaching a stationary car



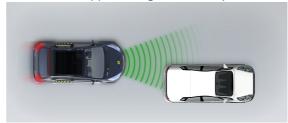
Approaching a slower moving car



Approaching a slower moving car



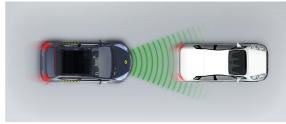
Approaching a stationary car



Approaching a stationary car



Approaching a slower moving car



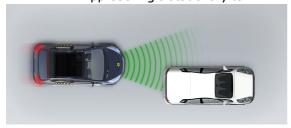
Approaching a braking car



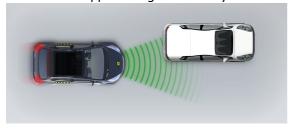


### Driver reacts to warning

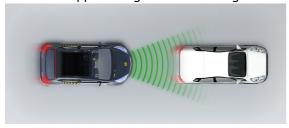
Approaching a stationary car



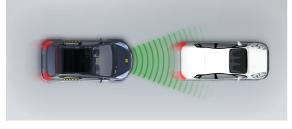
Approaching a stationary car



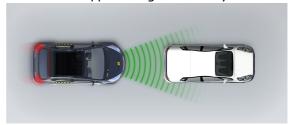
Approaching a slower moving car



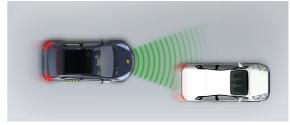
Approaching a braking car



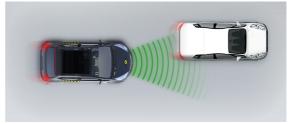
Approaching a stationary car



Approaching a slower moving car



Approaching a slower moving car







### 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	✓	-

<sup>\*</sup> Tested variant

### Annual Reviews and Facelifts

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