Toyota bZ4X

Standard Safety Equipment

2022

Adult Occupant 88%

Child Occupant 87%

Vulnerable Road Users 79%

Safety Assist 91%

SPECIFICATION

Tested Model	Toyota bZ4X, LHD
Body Type	- 5 door SUV
Year Of Publication	2022
Kerb Weight	2060kg
VIN From Which Rating Applies	- all bZ4X
Class	Small Off-Road

Version 281022

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	●	●	–

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
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 33.7 Pts / 88%

GOOD ADEQUATE MARGINAL WEAK POOR

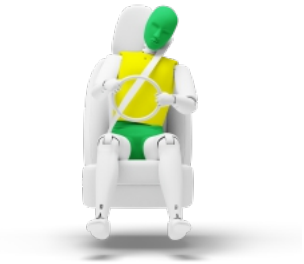
Frontal Impact 12.4 / 16 Pts

Mobile Progressive Deformable Barrier

Full Width Rigid Barrier

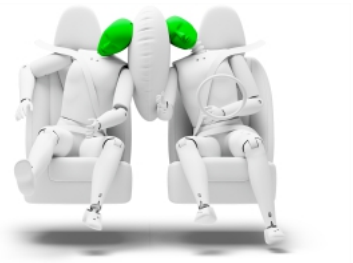
Lateral Impact 15.5 / 16 Pts

Side Mobile Barrier



Side Pole

Far-Side Excursion



Occupant Interaction

Rear Impact 3.7 / 4 Pts

Rear Seat

Front Seat

ADULT OCCUPANT

Total 33.7 Pts / 88%

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 bZ4X remained stable in the frontal offset test. Dummy readings indicated good protection of the knees and femurs of both the driver and passenger. However, Toyota did not demonstrate a similar level of protection for occupants of different sizes or those sitting in different positions. Dummy readings of compression indicated a marginal level of protection for the driver's chest. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the bZ4X would be a moderately benign impact partner in a frontal collision. In the full-width rigid barrier test, protection of the chest of both the driver and rear passenger was rated as marginal, based on measured values of compression. In the side barrier test, protection of all critical body areas was good or adequate. In the more severe side pole impact, protection of the chest was adequate, with good protection of other critical body areas. 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 good. The bZ4X has a counter-measure to mitigate against occupant to occupant injuries in such impacts. The system performed well in Euro NCAP's test, with good protection of 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 bZ4X has an advanced eCall system which alerts the emergency services in the event of a crash and a system which automatically applies the brakes to prevent secondary collisions.

CHILD OCCUPANT

Total 43 Pts / 87%

GOOD ADEQUATE MARGINAL WEAK POOR

Crash Test Performance based on 6 & 10 year old children

24.0 / 24 Pts

Frontal Impact	16 Pts

Lateral Impact	8 Pts

Restraint for 6 year old child: *Toyota KidFix i-Size*
Restraint for 10 year old child: *Toyota Maxi Plus*

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

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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 43 Pts / 87%

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 43 Pts / 87%

	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

The bZ4X provided good or adequate protection for all critical body regions of both the 6 and 10 year dummies in the frontal offset and side barrier tests, and scored maximum points in this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. All of the child restraint types for which the bZ4X is designed could be properly installed and accommodated.

VULNERABLE ROAD USERS

Total 42.8 Pts / 79%

GOOD ADEQUATE MARGINAL WEAK POOR

Pedestrian

27.0 / 36 Pts

Head Impact	16.5 Pts
Pelvis Impact	4.5 Pts
Leg Impact	6.0 Pts

Vulnerable Road Users

15.7 / 18 Pts

System Name	Pre-Collision System as part of Toyota Safety Sense
Type	Auto-Brake with Forward Collision Warning
Operational From	5 km/h

VULNERABLE ROAD USERS

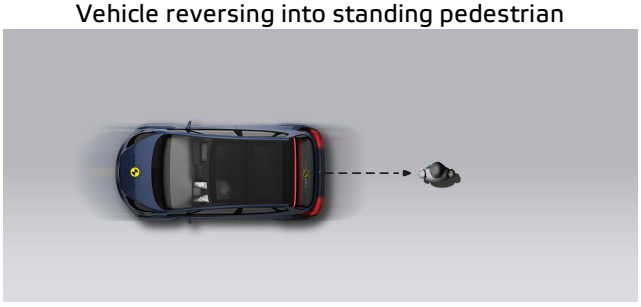
Total 42.8 Pts / 79%

AEB Pedestrian

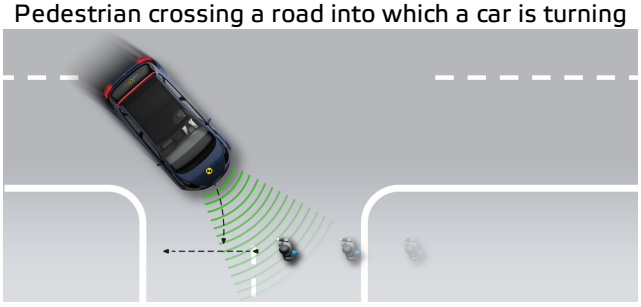
7.0 / 9 Pts

- **Day time**

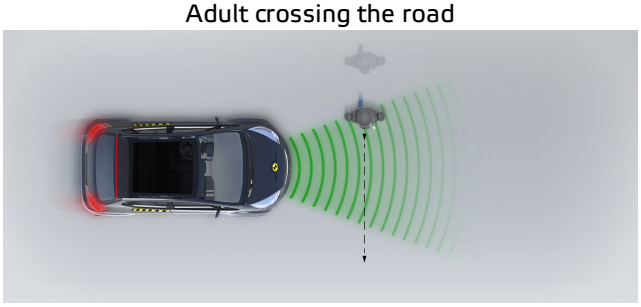
Vehicle reversing into standing pedestrian



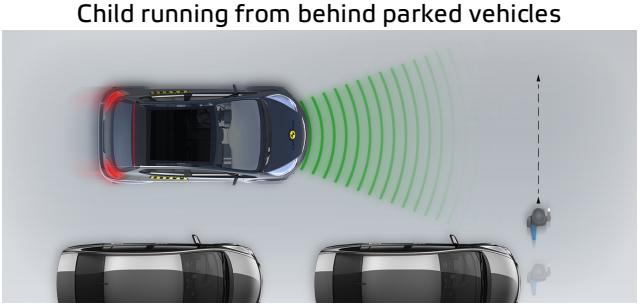
Pedestrian crossing a road into which a car is turning



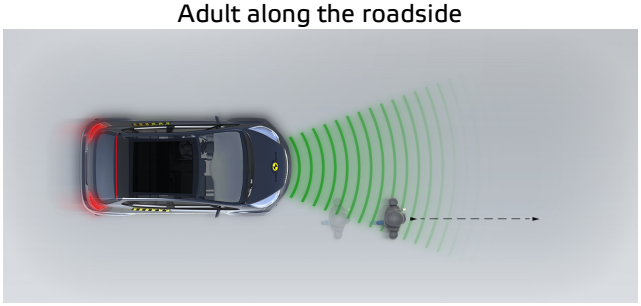
Adult crossing the road



Child running from behind parked vehicles

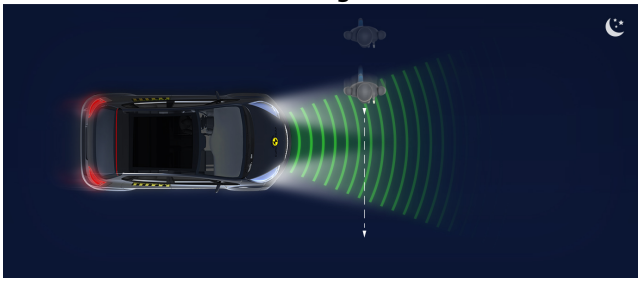


Adult along the roadside

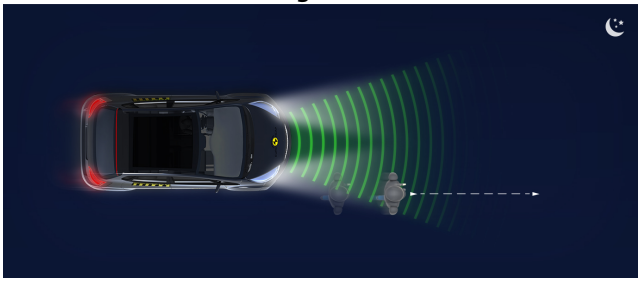


- **Night time**

Adult crossing the road



Adult along the roadside



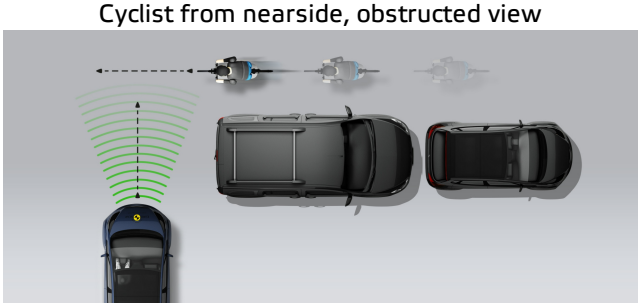
VULNERABLE ROAD USERS

Total 42.8 Pts / 79%

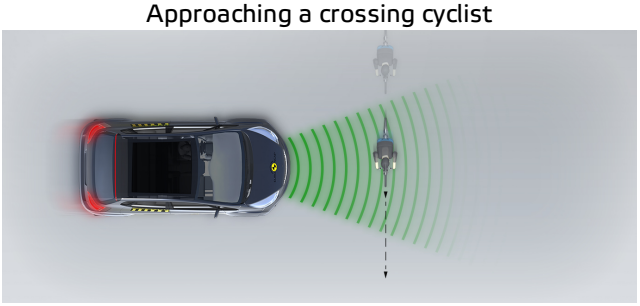
AEB Cyclist

8.7 / 9 Pts

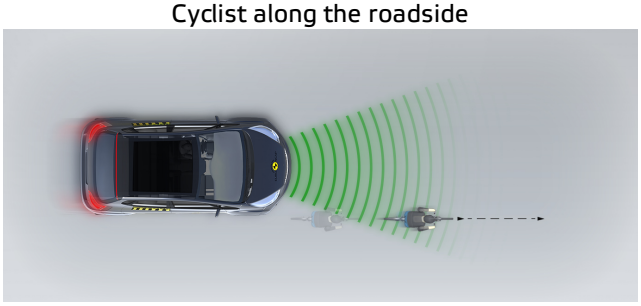
Cyclist from nearside, obstructed view



Approaching a crossing cyclist



Cyclist along the roadside



Comments

Protection of the head of struck pedestrian was predominantly good or adequate with some poor areas on the stiff windscreen pillars. The bumper offered good protection to pedestrians' legs but protection of the pelvis region was mixed. The autonomous emergency braking (AEB) system of the bZ4X can respond to vulnerable road users as well as to other vehicles. The system performed well in tests of its response to pedestrians and cyclists, with collisions avoided in most test scenarios.

SAFETY ASSIST

Total 14.7 Pts / 91%

GOOD ADEQUATE MARGINAL WEAK POOR

Speed Assistance

2.4 / 3 Pts

System Name	N/A
Speed Limit Information Function	Camera based, 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		
Warning	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Visual	●	●	●
Audible	●	●	●
Occupant Detection	—	●	●

● Pass ● Fail — Not available

Driver Monitoring

1.0 / 1 Pts

System Name	Driver Break Suggestion
Type	lane position, steering input
Operational From	50 km/h

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SAFETY ASSIST

Total 14.7 Pts / 91%

Lane Support

3.5 / 4 Pts

System Name	Lane Tracing Alert as part of Toyota Safety Sense
Operational From	50 km/h
PERFORMANCE	
Emergency Lane Keeping	GOOD
Lane Keep Assist	GOOD
Human Machine Interface	GOOD

AEB Car-to-Car

5.8 / 6 Pts

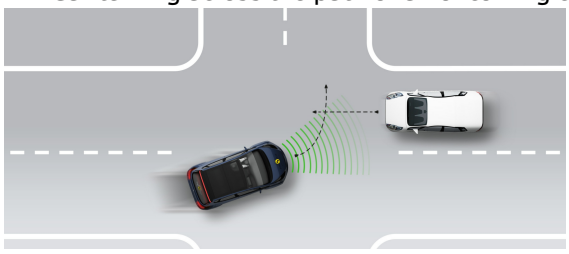
System Name	Pre-Collision System as part of Toyota Safety Sense
Operational From	5 km/h
Sensor Used	camera and radar

SAFETY ASSIST

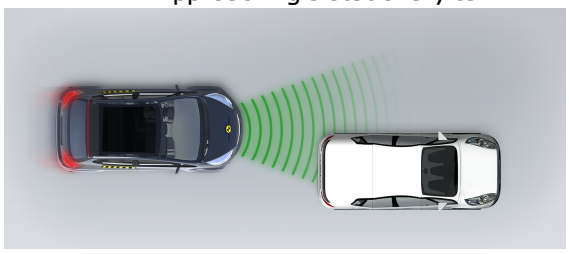
Total 14.7 Pts / 91%

- **Autobrake function only**

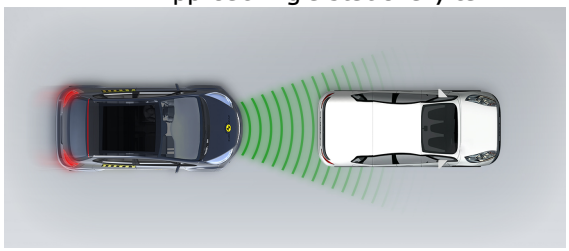
Car turning across the path of an oncoming car



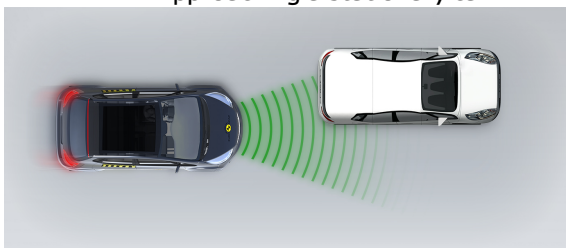
Approaching a stationary car



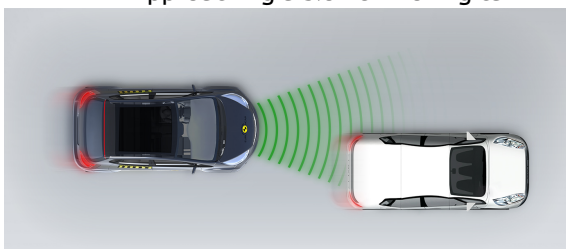
Approaching a stationary car



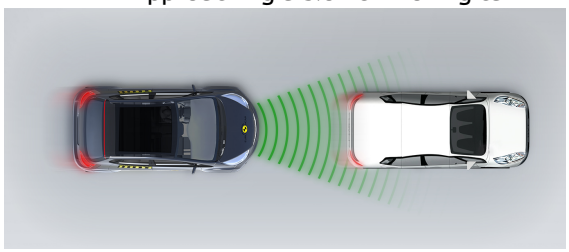
Approaching a stationary car



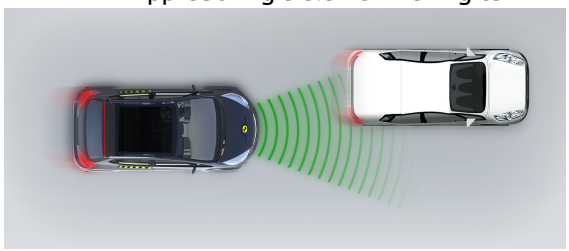
Approaching a slower moving car



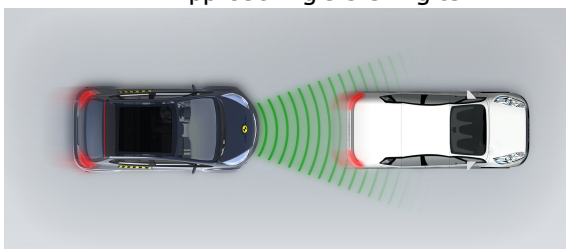
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car

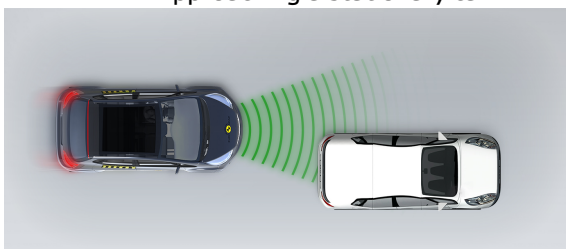


SAFETY ASSIST

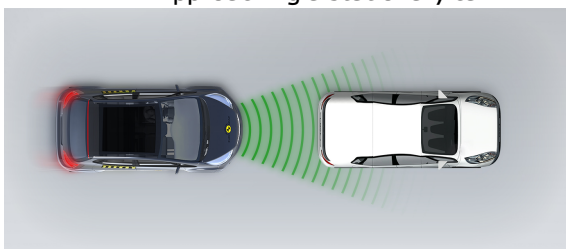
Total 14.7 Pts / 91%

- **Driver reacts to warning**

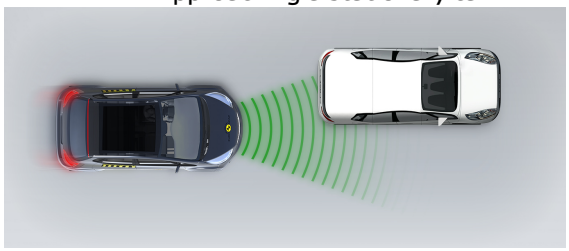
Approaching a stationary car



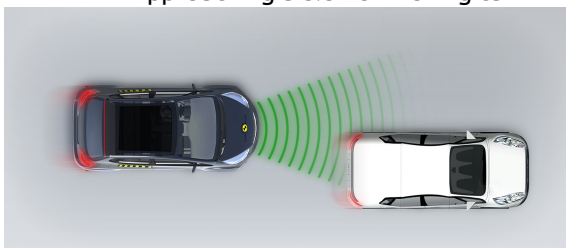
Approaching a stationary car



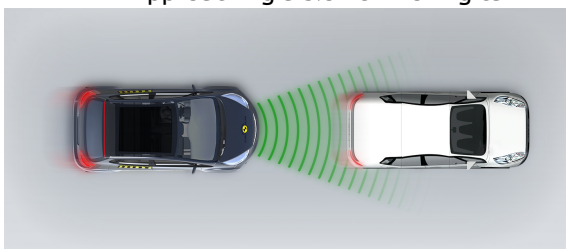
Approaching a stationary car



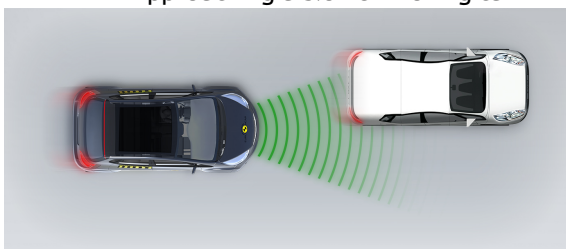
Approaching a slower moving car



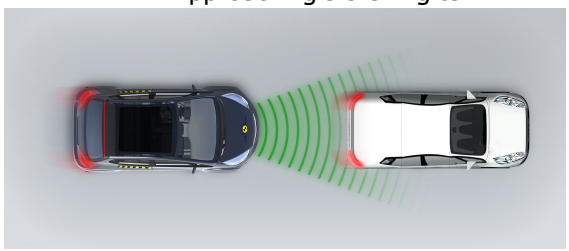
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



SAFETY ASSIST

Total 14.7 Pts / 91%

Comments

The bZ4X's autonomous emergency braking (AEB) system 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. A speed assistance system detects the local speed limit and the driver can choose to set the limiter or let the system do so automatically.

RATING VALIDITY

Variants of Model Range

Body Type	Engine	Drivetrain	Rating Applies	
			LHD	RHD
5 door SUV	electric (2 x 80 kW)	4 x 4 *	✓	✓
5 door SUV	150 kW	4 x 2	✓	✓

* Tested variant

Annual Reviews and Facelifts

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

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