



**Tesla Model 3**  
Autopilot

2020



**MODERATE**



ASSISTANCE  
COMPETENCE



36%

SAFETY  
BACKUP



95%

## SPECIFICATION

SYSTEM NAME	Autopilot
Version Tested	Software 2020.36.10 Hardware 3.0 with Full Self-Driving Capability
STANDARD ACTIVE SAFETY SYSTEMS	
AEB Car-to-Car	●
AEB Vulnerable Road User	●
Lane Support Systems	●
Speed Assistance Systems	●
ALSO AVAILABLE ON	Model S - Model X

### Comments

Tesla's system name **Autopilot** is inappropriate as it suggests full automation. The promotional material suggests automation where the handbook correctly indicates the limitations of the system capabilities, which could lead to confusion. Status information is clear, but the Model 3 does not offer a head-up display showing the system status in the driver's direct line of sight. While the Tesla is equipped with an internal camera, it is not used for Driver Monitoring relying only on steering wheel input for driver engagement. The system resists driver steering input and then disengages, limiting co-operative driving.

Tesla uses map-based speed limit information on highways to manage changes on highways but responds to variable and temporary speed limit signs only on urban roads. The system adapts speed for upcoming road features such as curves and junctions. The Model 3 responds to avoid a collision in all the ACC test scenarios and requires AEB interventions only in the most critical 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 has an Active Blindspot system designed to prevent lane changing into adjacent vehicles. A lane-change assist function is also provided. In case of an unresponsive driver, the Tesla performs a controlled stop in lane. If the radar or camera are blocked the Model 3 provides a timely warning and prevents system activation.

**The Tesla Model 3 excels in the level of Vehicle Assistance but fails to balance that high level of support with a similar level of Driver Engagement leading to possible overreliance. Euro NCAP tested the latest version of AutoPilot available at the time of testing. Tesla can improve the functionality of the system remotely by over-the-air software updates.**

**ASSISTANCE COMPETENCE**

Total 36%

**DRIVER ENGAGEMENT**

36.5 / 100 PTS

**CONSUMER INFORMATION** 10.0 / 25 Pts

SYSTEM NAME	Autopilot
MARKETING MATERIAL	Autopilot   Tesla Viewed 12 September 2020
QUICK START GUIDE	
VEHICLE HANDBOOK	Viewed 12 September 2020

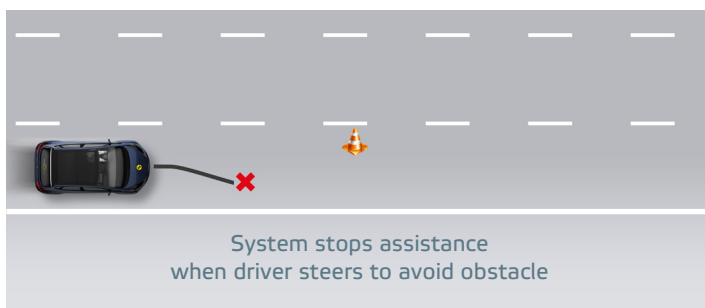
**SYSTEM STATUS** 16.5 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

**DRIVER MONITORING** 10.0 / 25 Pts

**DRIVING COLLABORATION** 0.0 / 25 Pts

Steering to avoid an obstacle



GOOD
  ADEQUATE
  MARGINAL
  WEAK
  POOR

**ASSISTANCE COMPETENCE**

Total 36%

**VEHICLE ASSISTANCE**

91.7 / 100 PTS

**SPEED ASSISTANCE** 16.7 / 25 Pts

SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	Slowing down at sign
Vehicle response to variable Speed limits	No response

ROAD FEATURES

Speed adaptation for corners



Speed adaptation for roundabouts



Speed adaptation for junctions



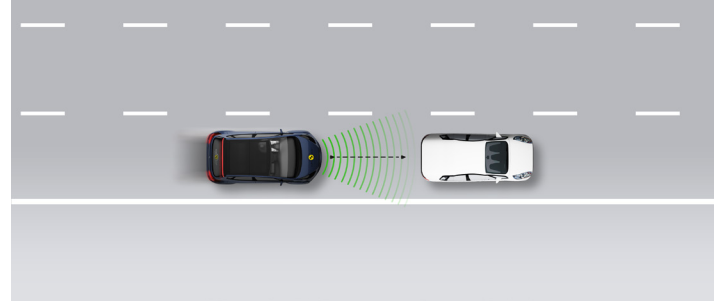
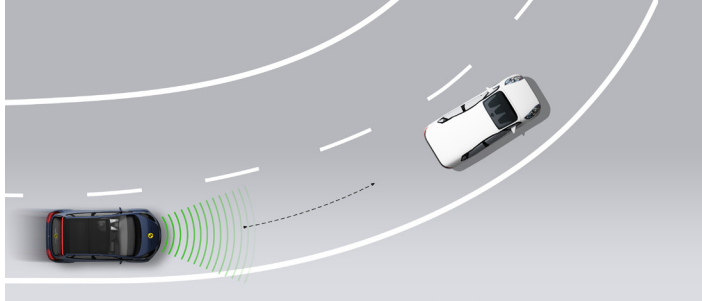
● FITTED TO THE VEHICLE    — NOT AVAILABLE

**ASSISTANCE COMPETENCE**

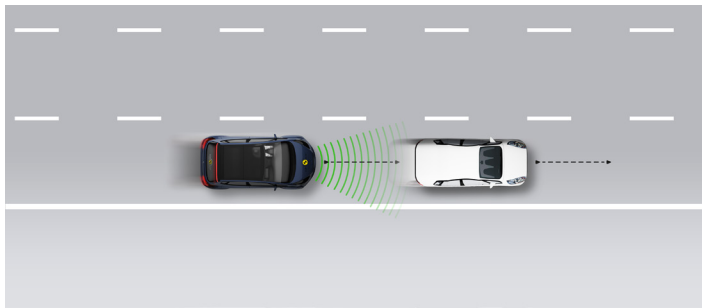
Total 36%

**ADAPTIVE CRUISE CONTROL PERFORMANCE** 40.0 / 40 Pts

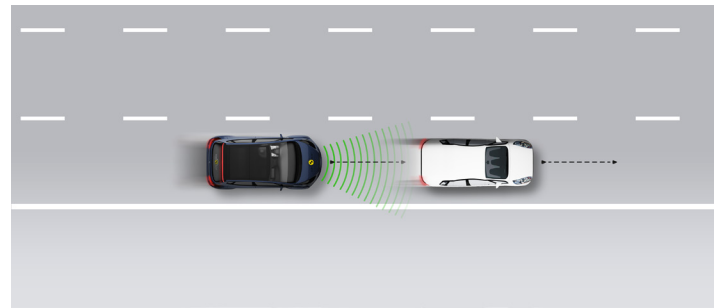
Approaching a stationary car



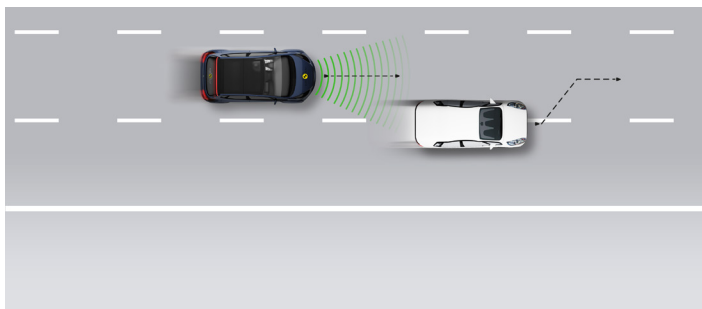
Approaching a slower moving car



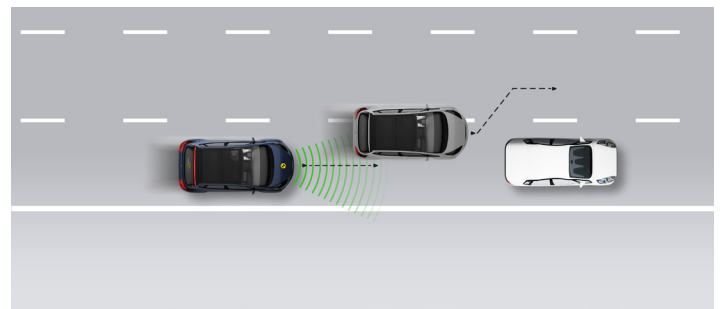
Approaching a braking car



Car cutting-in in front



Car cutting-out in front



UNDERTAKE PREVENTION	
Undertake prevention at speeds over 90 km/h	●

ADAPTIVE CRUISE CONTROL AUTO-RESUME	
Assistance maintained after coming to a full stop	●
System assistance maintained by	Automatic resume with collision prevention by external sensors

ASSISTANCE COMPETENCE

Total 36%

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 95%

SYSTEM FAILURE 25.0 / 25 Pts

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

UNRESPONSIVE DRIVER INTERVENTION 20.0 / 25 Pts

Hands Off Warning Timeline

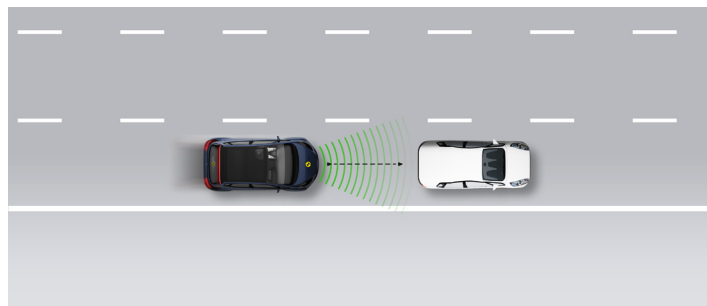
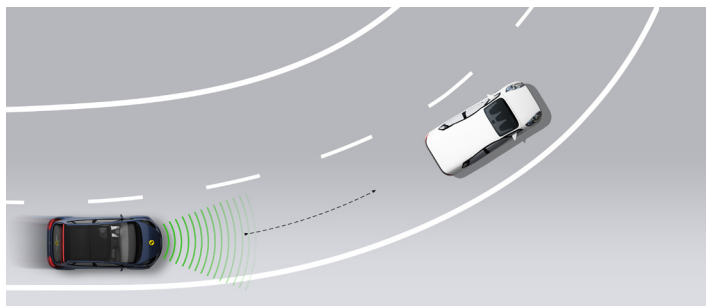


 SAFETY BACKUP

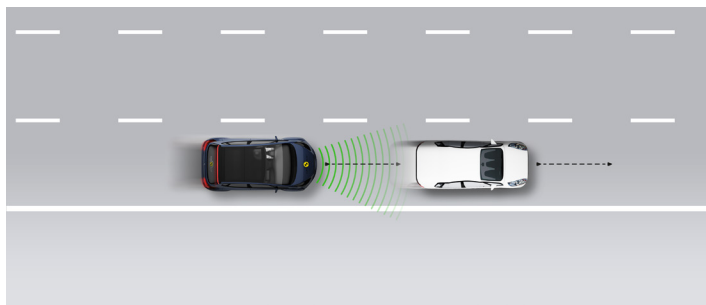
Total 95%

COLLISION AVOIDANCE  50.0 / 50 Pts

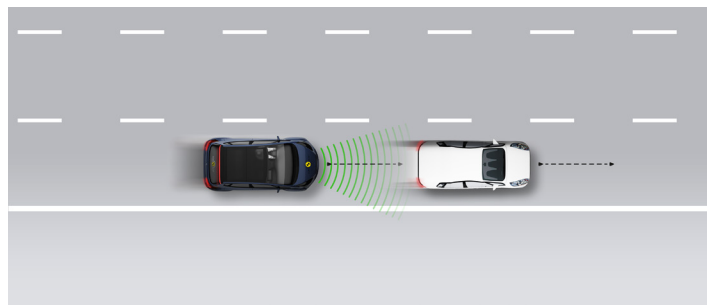
Approaching a stationary car



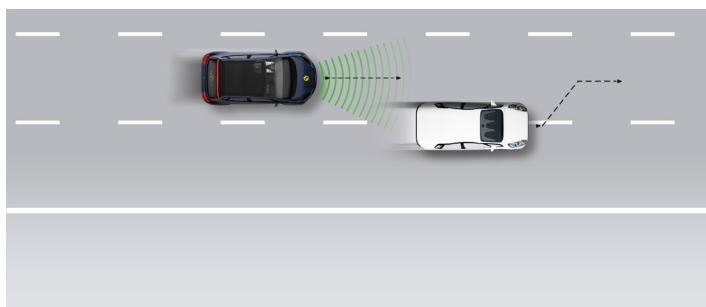
Approaching a slower moving car



Approaching a braking car



Car cutting-in in front



Car cutting-out in front

