Ford Mustang Mach-E

Co-Pilot360

2021

GOOD

ASSISTANCE COMPETENCE	69%
SAFETY BACKUP	83%

SPECIFICATION

SYSTEM NAME	Co-Pilot360
STANDARD ACTIVE SAFETY SYSTEMS	
AEB Car-to-Car	●
AEB Vulnerable Road User	●
Lane Support Systems	●
Speed Assistance Systems	●

Comments

Ford's system name Co-Pilot 360 is inappropriate and indicates more functionality than the system is capable of. The promotional material and the handbook correctly indicate the limitations of the system capabilities. Status information is clear but the Mustang Mach-E does not offer a head-up display. Ford equipped the Mach-E with an internal camera but it is not used for the functionality tested in Driver Monitoring, and relies only on steering wheel input. The system balances driver steering input with lane guidance, promoting co-operative driving.

Ford combines map-based speed limit information with real time camera inputs to manage fixed, variable and temporary speed limit signs. The system cannot adapt speed for upcoming road features such as curves and junctions. The Mustang Mach-E responds to avoid a collision in most of the ACC test scenarios and requires AEB interventions in the more critical stopped vehicle, cut-in and cut-out tests. The driver is supported through the S-Bend, but the car stays centred in the lane only at the lowest test speed. The vehicle has an Active Blindspot system designed to prevent lane changing into adjacent vehicles. A lane-change assist function is not available. In case of an unresponsive driver, the Ford slows to approximately 10 km/h and stays in lane. If the radar or camera are blocked the Mustang Mach-E provides a timely warning and prevents system activation.

The Ford Mustang Mach-E provides a good level of Vehicle Assistance with a similar level of Driver Engagement resulting in a good, balanced system.

Version 191121

ASSISTANCE COMPETENCE

Total 69%

DRIVER ENGAGEMENT

69.1 / 100 PTS

CONSUMER INFORMATION

15.0 / 25 Pts

SYSTEM NAME	Co-Pilot360
MARKETING MATERIAL	Co-Pilot 360 | Ford Viewed 12 November 2021
QUICK START GUIDE	✖
VEHICLE HANDBOOK	Viewed 12 November 2021

SYSTEM STATUS

19.1 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

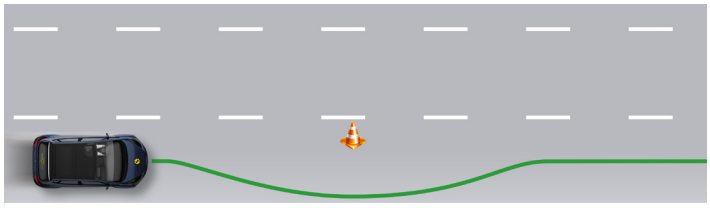
DRIVER MONITORING

10.0 / 25 Pts

DRIVING COLLABORATION

25.0 / 25 Pts

Steering to avoid an obstacle



System continues to assist
while driver steers to avoid obstacle

GOOD ADEQUATE MARGINAL WEAK POOR

Version 191121

ASSISTANCE COMPETENCE

Total 69%

VEHICLE ASSISTANCE

71.8 / 100 PTS

SPEED ASSISTANCE

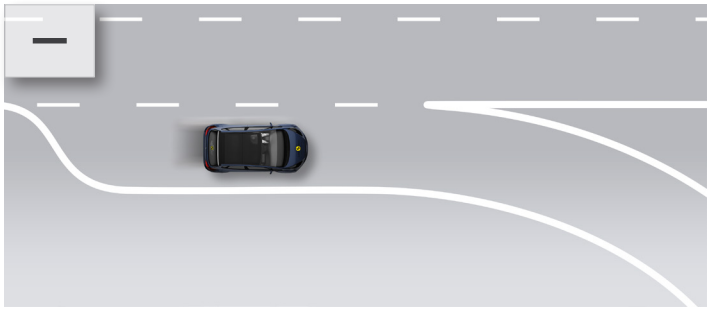
15.8 / 25 Pts

SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	Slowing down at sign
Vehicle response to variable Speed limits	Slowing down at sign

ROAD FEATURES

Speed adaptation for corners



Speed adaptation for round-abouts

Speed adaptation for junctions

● FITTED TO THE VECHILE — NOT AVAILABLE

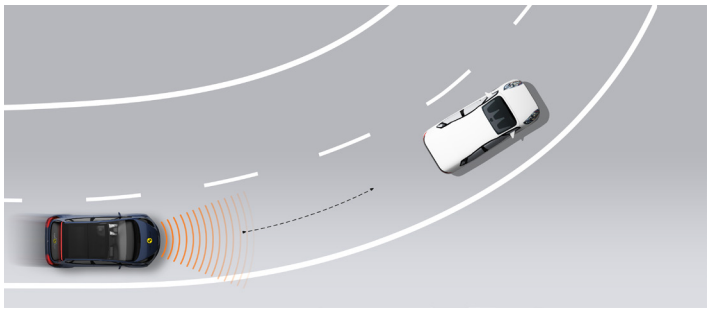
ASSISTANCE COMPETENCE

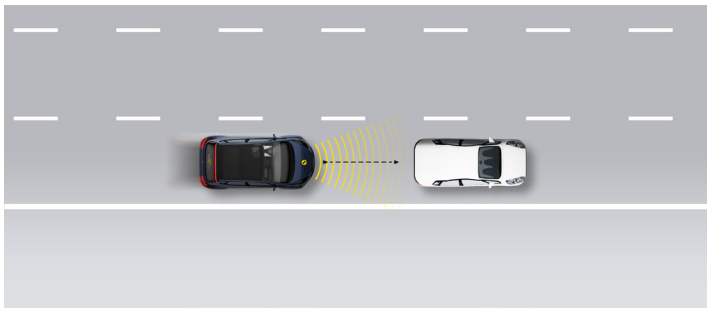
Total 69%

ADAPTIVE CRUISE CONTROL PERFORMANCE

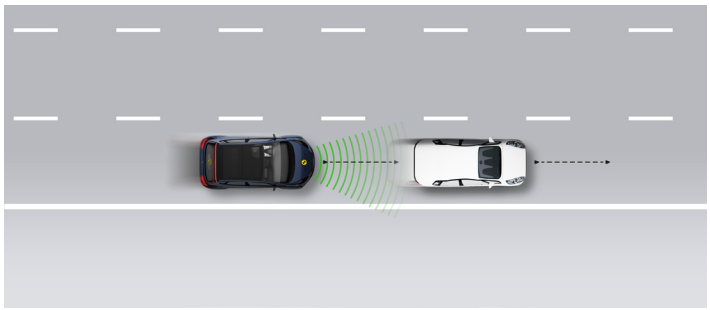
28.5 / 40 Pts

Approaching a stationary car

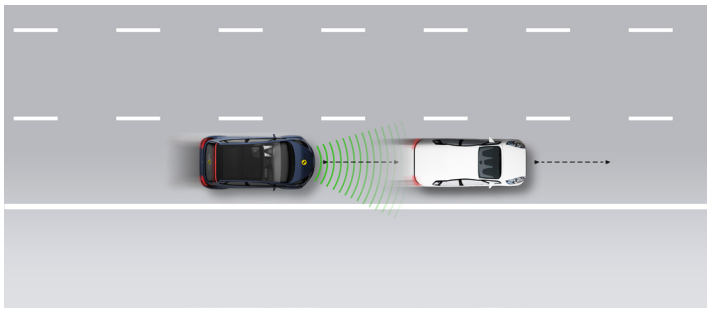




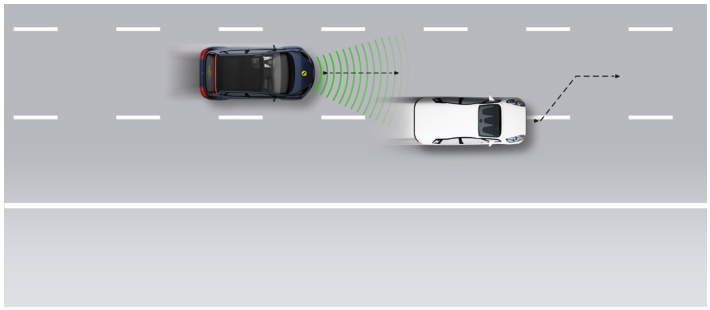
Approaching a slower moving car



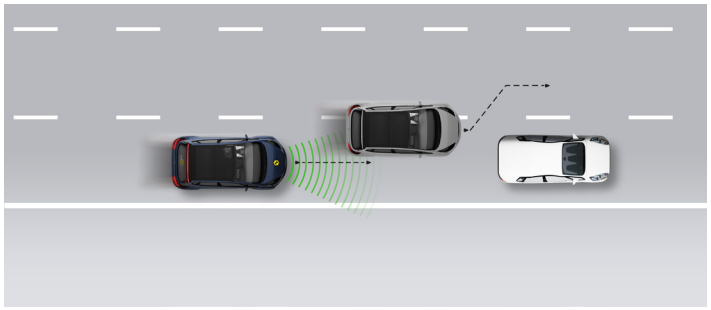
Approaching a braking car



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 within 5s of stop and driver input required over 5s

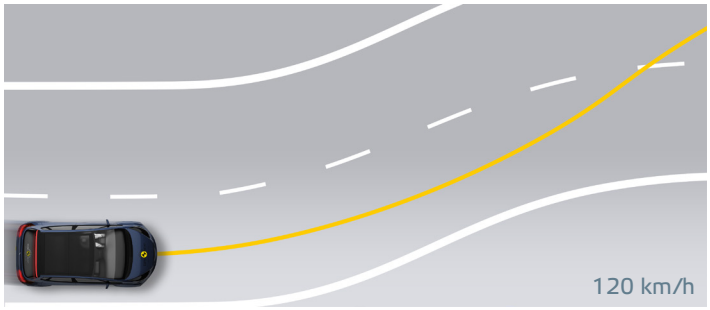
Version 191121

ASSISTANCE COMPETENCE

Total 69%

STEERING ASSISTANCE 27.5 / 35 Pts

Steering in an S-curve



80 km/h	●
100 km/h	●
120 km/h	●

Lane Change Assist	✖

SAFETY BACKUP

Total 83%

SYSTEM FAILURE 24.0 / 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	after a 5 minute drive	after sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM ACTIVE		
Camera	within 2 minutes after blocking	after sensor blocking
Radar	after sensor blocking	after sensor blocking

UNRESPONSIVE DRIVER INTERVENTION 20.0 / 25 Pts

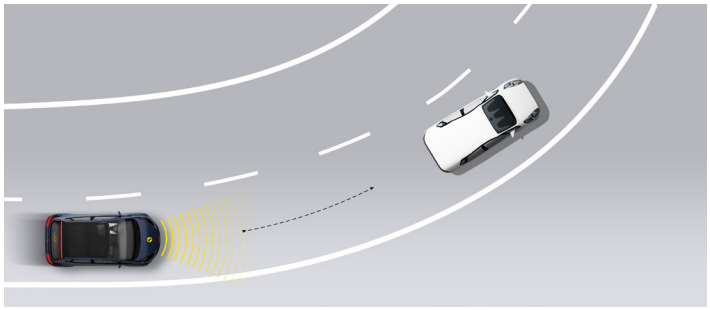
Hands Off Warning Timeline

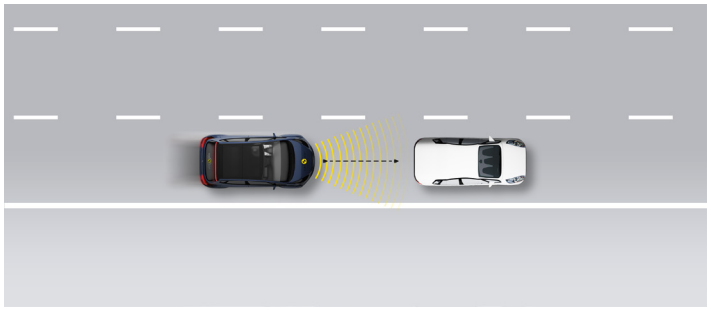
SAFETY BACKUP

Total 83%

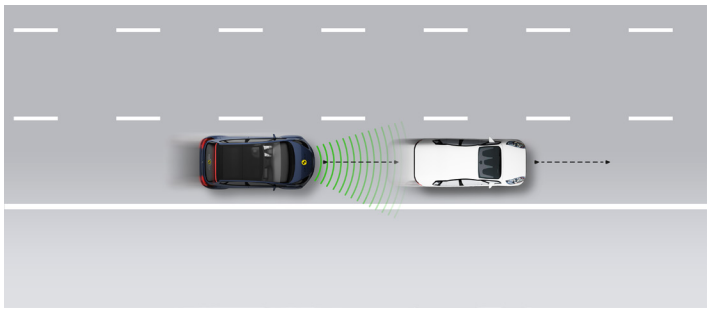
COLLISION AVOIDANCE 39.8 / 50 Pts

Approaching a stationary car

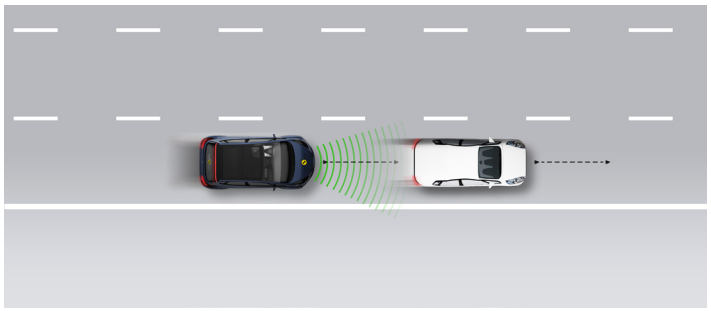




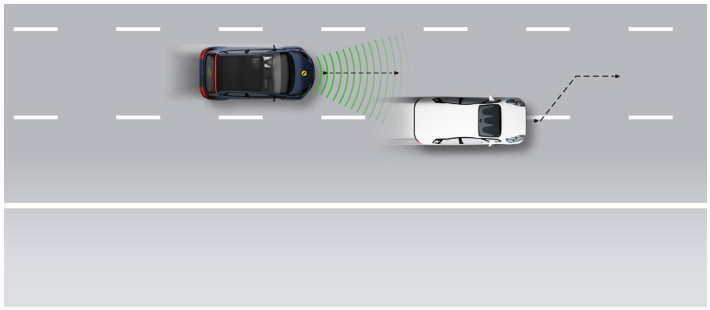
Approaching a slower moving car



Approaching a braking car



Car cutting-in in front



Car cutting-out in front