

Longitudinal Driving Test Scenarios:

Map: flat world

Reference Video: [Euro NCAP Automated Testing : Hyundai Smart Cruise Control with Lane Following Assist](#)

1. Ego car approaches a stopped static car in its lane and has to come to a safe stop
2. Ego car is driving behind a moving vehicle which changes lanes to reveal a stopped static car, the Ego has to come to a safe stop
3. Ego car is approaching a car that is travelling slower than it, and has to slow down to maintain a safe following gap to the lead car
4. Ego car is approaching a car that is decelerating to a slower speed and maintains that slower speed, and the Ego car has to maintain a safe following gap to the lead car

Lateral Driving Test Scenarios:

Map: flat world with lane (left/right lane marking)

Lane centering accuracy < 15cm error (left/right)

1. Ego car maintains lane centering on straight road
2. Ego car maintains lane centering on highway curve
3. Ego car maintains lane centering if a lane goes missing (straight/curve)

Autopilot Test Scenarios:

Map: flat world with a loop and a lane (left/right lane marking) - similar to testing tracks

Can you do both at the same time