

# Overview of Test Procedures, etc. for Advanced Emergency Braking Systems (Braking for Pedestrians)

## 1. Test Vehicle Speed

Test vehicle speed: The test vehicle speed ranges are as shown in Table 1. Each test starts at the lowest vehicle speed and keeps increasing the speed by 5 km/h or 10 km/h. The initial vehicle speed can be raised at the request of a vehicle manufacturer, etc. Similarly, the final vehicle speed can be reduced at the request of a vehicle manufacturer, etc. However, in either case, test results for those speeds at which no testing was conducted shall be treated the same as when the system was not activated.

Table 1 Test vehicle speed

	<b>AEBS Test</b>
<b>CPN Scenario</b>	<b>10–60 km/h</b>
<b>CPNO Scenario</b>	<b><u>10</u>25–<u>60</u>45 km/h</b>

## 2. Test Scenarios

After the standard evaluation tests are conducted, partial evaluation tests shall be performed separately for AEBS and FCWS under the following conditions. As regards the test in (5), it shall be performed with the test target's initial lateral position changed to 6.0 m.

(1) CPNO Scenario

Collision point of 50%, test target speed of 5 km/h, child dummy

(2) CPN Scenario

Collision point of 50%, test target speed of 5 km/h, child dummy

(3) CPN Scenario

Collision point of 25%, test target speed of 5 km/h, adult dummy

(4) CPN Scenario

Collision point of 75%, test target speed of 5 km/h, adult dummy

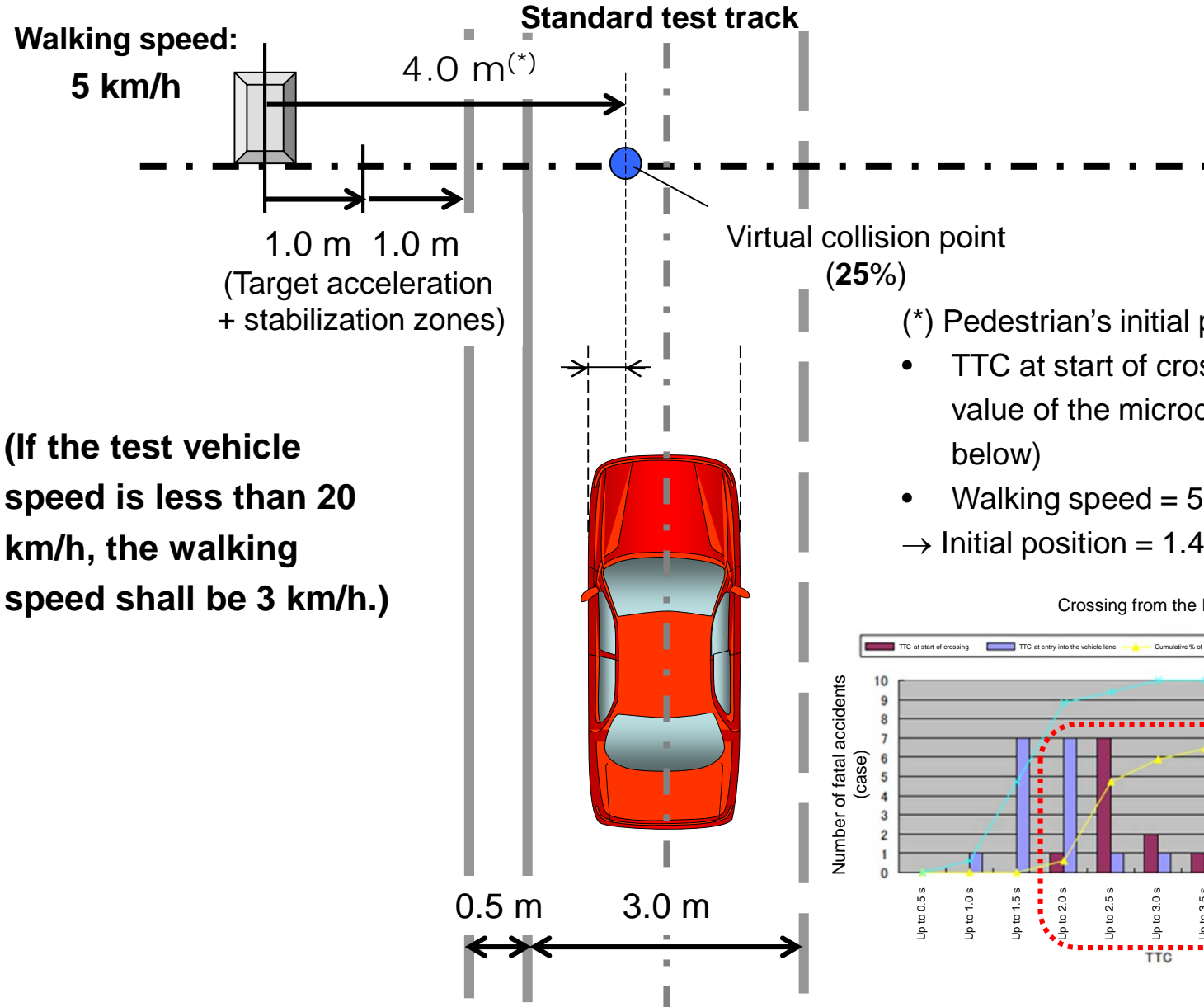
(5) CPN Scenario

Collision point of 50%, test target speed of 8 km/h, adult dummy

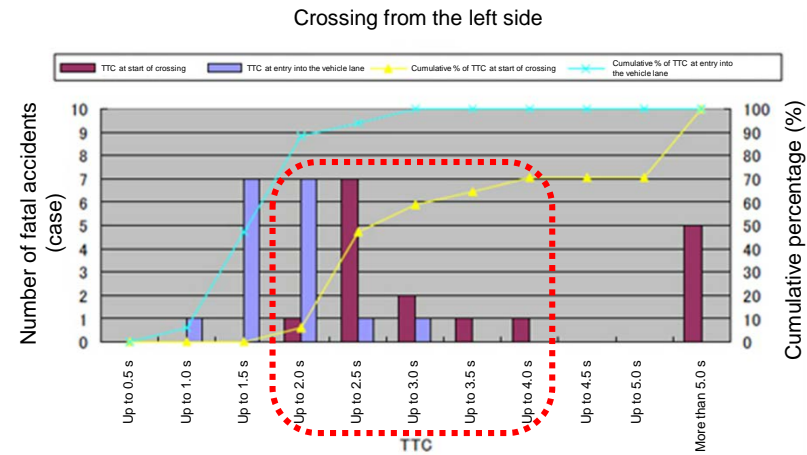
# 3. Proposed Test Conditions

(\* Assuming a general 7-m-wide road

## Nearside Test (CPN: Car to Pedestrian Nearside)



- (\* Pedestrian's initial position
- TTC at start of crossing = 2.8 s (mean value of the microdata distribution below)
- Walking speed = 5 km/h = 1.4 m/s  
→ Initial position = 1.4 x 2.8 ≈ **4.0 m**

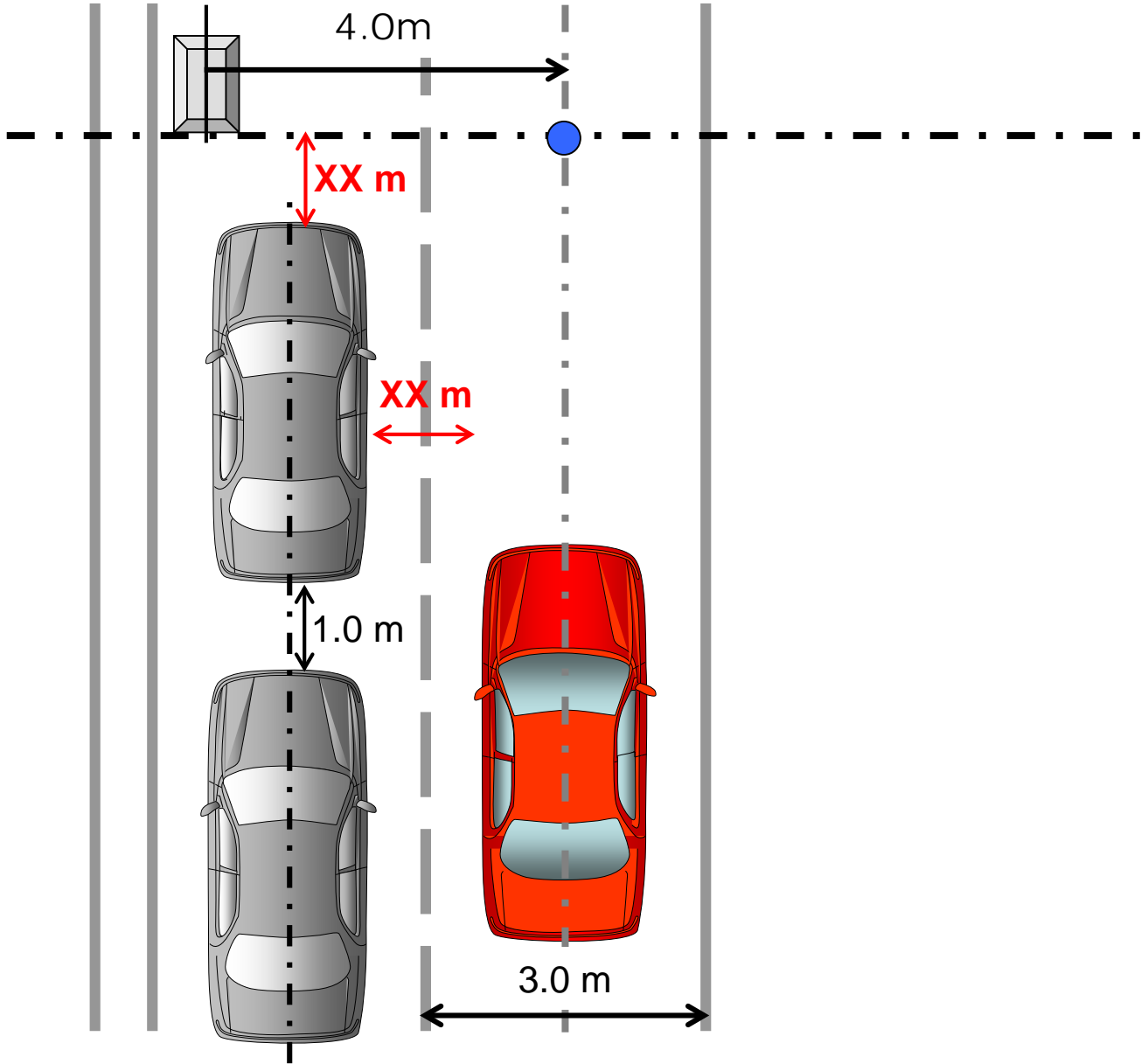


*Nearside - Obstructed Test  
(CPNO: Car to Pedestrian Nearside  
Obstruction)*

Walking speed: 5 km/h

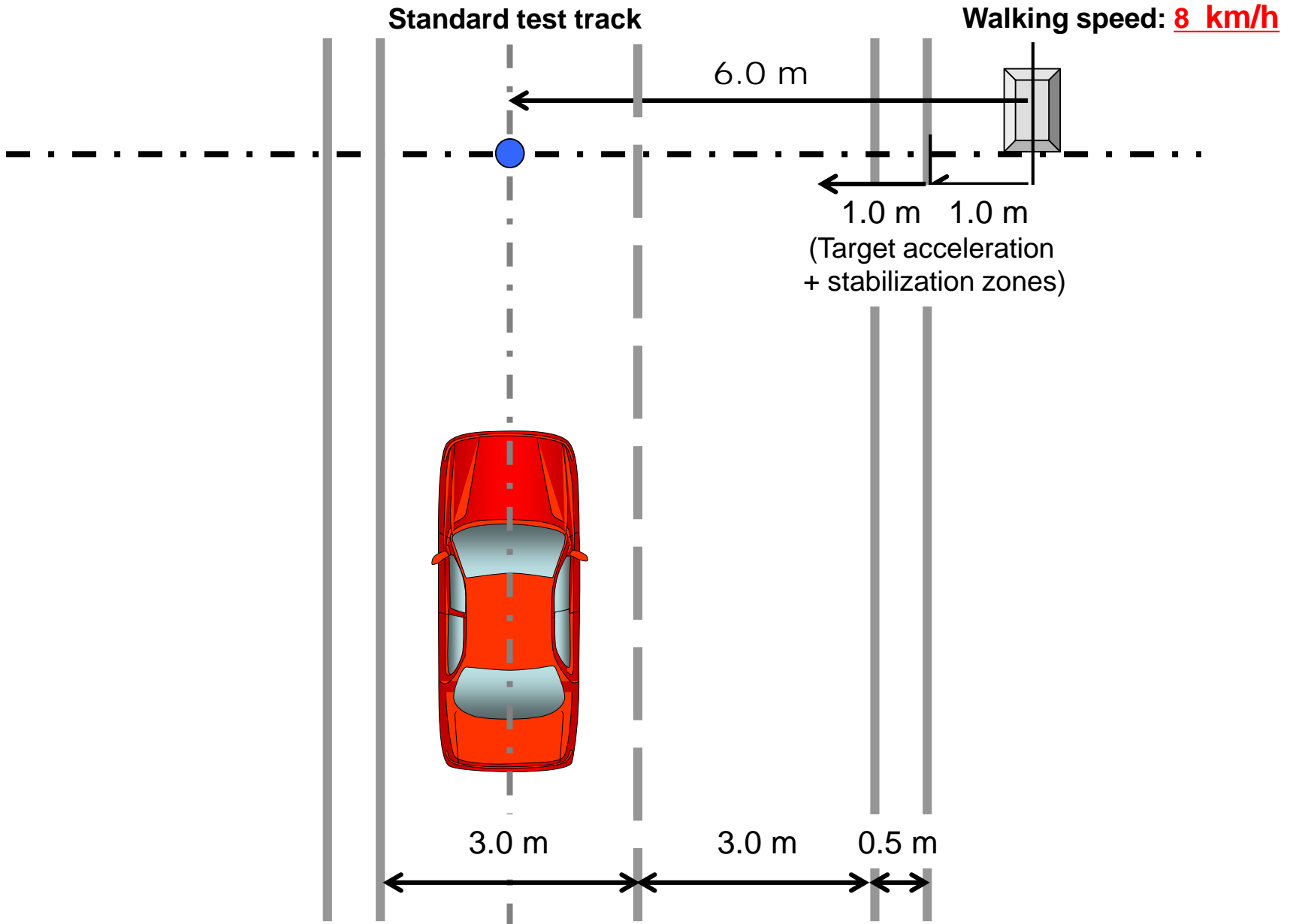
Standard test track

*Obstruction*



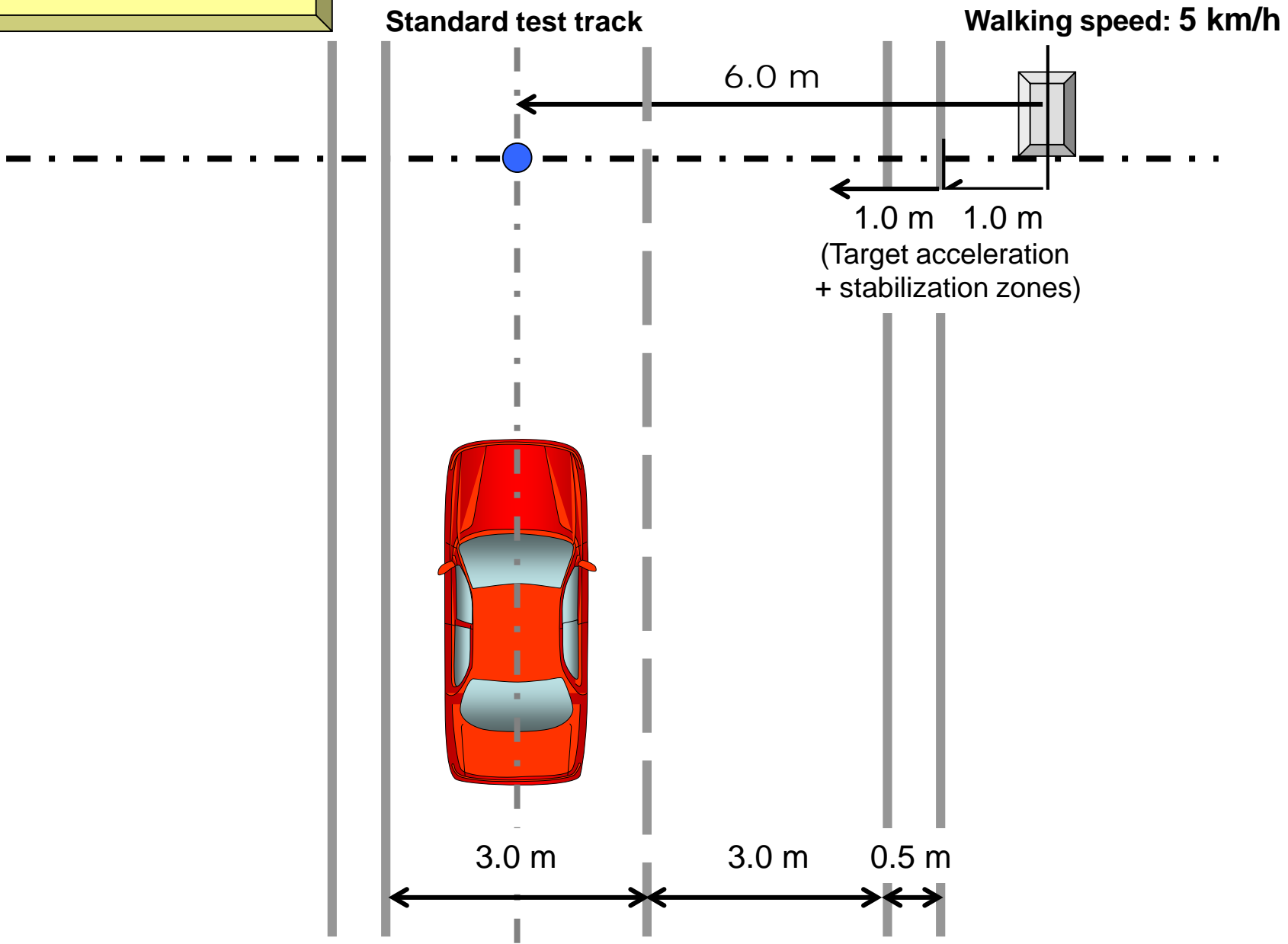
*Farside Test (Warning Verification Only)*  
*(CPF: Car to Pedestrian Farside)*

Daytime evaluation 3



Nighttime evaluation 1  
Under discussion

*Farside Test*  
*(CPF: Car to Pedestrian Farside)*



Nighttime evaluation 2  
Under discussion

# Farside - Obstructed Test (CPFO: Car to Pedestrian Farside Obstruction)

