

IFS DriverAlert

Boundary Value Testing

Date: Jan. 30, 2025

Table 1: Eyes closed detection:

Test Case ID	Condition	Closed Eyes Detected	Expected Result
1	Below boundary (boundary -1)	0.9 second	Detected as blink
2	At boundary	1 second	Closed eyes detected
3	Above boundary (boundary +1)	1.1 second	Closed eyes detected

Table 2: Yawn detection:

Test Case ID	Condition	Yawn Detected	Expected Result
1	Below boundary (boundary -1)	1.9 second	Yawn is not detected
2	At boundary	2 second	Yawn is detected
3	Above boundary (boundary +1)	2.1 second	Yawn is detected

Table 3: Looking away detection:

Test Case ID	Condition	Turn Detected	Expected Result
1	Below boundary (boundary -1)	2.9 second	Turn is not detected
2	At boundary	3 second	Turn is detected
3	Above boundary (boundary +1)	3.1 second	Turn is detected

Table 4: Multi faces detection:

Test Case ID	Condition	Face Presence	Expected Result
1	Below boundary (boundary -1)	No Faces	Detect nothing
2	At boundary	One face	Detect the face
3	Above boundary (boundary +1)	Two faces	Keep tracking and detecting the first face

Table 5: Auto detection starts at 20 km/h:

Test Case ID	Condition	Speed Detected	Expected Result
1	Below boundary (boundary -1)	19 Km/h	Detection system is off
2	At boundary	20 Km/h	Detection system is on
3	Above boundary (boundary +1)	21 Km/h	Detection system is on