

Table G: List of Selected Scenarios for Safety Testing of ADS using $D1_{overlap} - O_{d1_{overlap}}$

Sr. #	Groups	Scenario Name	Identifier	Score	Priority
G3	Following Lead Vehicle	Ego vehicle approaching slower lead vehicle	S_{17}	18	1
		Turning lead vehicle	S_{18}	16	2
		Inattentive, Rear	S_{19}	11	3
		Stutter Stop	S_{20}	11	3
G5	Crossing Path	Oncoming vehicle turns right at signalized junction	S_{25}	18	4
		Sirens	S_{29}	18	4
		Entering a roundabout with another vehicle	S_{28}	17	5
		Left Turn Clip	S_{30}	16	6
		Wrong Driveway	S_{31}	16	6
		Run Red Into Left Turner	S_{33}	16	6
		Misjudgment, Left Turn	S_{34}	16	6
		Ego vehicle turns right with oncoming vehicle at signalized junction	S_{26}	14	7
G2	Lane Change	Navigating on an empty roundabout	S_{27}	11	8
		Wave to Go	S_{32}	11	8
		Cut-in in front of the ego vehicle	S_4	18	9
		Cut-out in front of the ego vehicle	S_7	18	9
		Vehicle swerving towards ego vehicle	S_8	18	9
		Vehicle backing up into the ego vehicle	S_9	18	9
		Impassable object on intended path	S_{10}	18	9
		Object road with incoming traffic	S_{12}	18	9
		Driving straight	S_{13}	18	9
		U-Turn	S_{16}	18	9
		Ego performing lane change with the vehicle behind	S_5	15	10
		Ego merging into an occupied lane	S_6	15	10
		Passable object on intended path	S_{11}	15	10
		Avoidance, Rear	S_{14}	15	10
G3	Opposite Direction	Oncoming vehicle swerving into ego vehicle's lane	S_{64}	18	11
		Oncoming vehicle	S_{65}	18	11
G7	Pedestrian Interaction	Jaywalking	S_{36}	17	12
		Pedestrian crossing at zebra crossing	S_{37}	17	12
		Pedestrian running a red light	S_{41}	17	12
		Struck Human	S_{45}	17	12
		Pedestrian stationary at road side	S_{39}	16	13
		Pedestrian walking along the road	S_{40}	16	13
		Pedestrian at left turn at signalized junction	S_{42}	15	14
		Pedestrian in same direction obstructed at ego left turn	S_{43}	15	14
		Zebra crossing	S_{38}	14	15
		Pedestrian at right turn at signalized junction	S_{44}	13	16
G8	Cyclist Interaction	Cyclist crossing from left side at signalized junction	S_{46}	15	17
		Cyclist crossing from right side at signalized junction	S_{47}	15	17
		Ego vehicle approaching cyclist riding in same direction	S_{48}	15	17
		Ego vehicle driving alongside a cyclist	S_{49}	15	17
		Cyclist and ego vehicle driving in opposite direction	S_{50}	15	17
		Cyclist turning left and ends up in lane of ego vehicle	S_{56}	15	17
		Cyclist turning right and ends up in lane of ego vehicle	S_{57}	15	17
		Entering a roundabout with a cyclist Interaction	S_{54}	14	18
		Leaving a roundabout with a cyclist	S_{55}	14	18
		Cyclist at left turn at signalized junction	S_{51}	13	19
		Cyclist driving in same direction obstructed at ego left turn	S_{52}	13	19
		Cyclist at right turn at signalized junction	S_{53}	11	20