

Table E: List of Selected Scenarios for Safety Testing of ADS using  $D1 - O_{d1}$ 

Sr. #	Groups	Scenario Name	Identifier	Score	Priority
G3	Following Lead Vehicle	Ego vehicle approaching slower lead vehicle	$S_{17}$	28	1
		Turning lead vehicle	$S_{18}$	26	2
		Inattentive, Rear	$S_{19}$	23	3
		Stutter Stop	$S_{20}$	23	3
G5	Crossing Path	Oncoming vehicle turns right at signalized junction	$S_{25}$	28	4
		Sirens	$S_{29}$	28	4
		Entering a roundabout with another vehicle	$S_{28}$	27	5
		Left Turn Clip	$S_{30}$	26	6
		Wrong Driveway	$S_{31}$	26	6
		Run Red Into Left Turner	$S_{33}$	26	6
		Misjudgment, Left Turn	$S_{34}$	26	6
		Wave to Go	$S_{32}$	23	7
		Navigating on an empty roundabout	$S_{27}$	22	8
		Ego vehicle turns right with oncoming vehicle at signalized junction	$S_{26}$	21	9
G2	Lane Change	Cut-in in front of the ego vehicle	$S_4$	28	10
		Cut-out in front of the ego vehicle	$S_7$	28	10
		Vehicle swerving towards ego vehicle	$S_8$	28	10
		Vehicle backing up into the ego vehicle	$S_9$	28	10
		Impassable object on intended path	$S_{10}$	28	10
		Object road with incoming traffic	$S_{12}$	28	10
		Driving straight	$S_{13}$	28	10
		U-Turn	$S_{16}$	28	10
		Ego performing lane change with the vehicle behind	$S_5$	24	11
		Ego merging into an occupied lane	$S_6$	24	11
		Passable object on intended path	$S_{11}$	24	11
		Avoidance, Rear	$S_{14}$	24	11
G3	Opposite Direction	Oncoming vehicle swerving into ego vehicle's lane	$S_{64}$	28	12
		Oncoming vehicle	$S_{65}$	28	12
G7	Pedestrian Interaction	Jaywalking	$S_{36}$	27	13
		Pedestrian crossing at zebra crossing	$S_{37}$	27	13
		Pedestrian running a red light	$S_{41}$	27	13
		Struck Human	$S_{45}$	27	13
		Pedestrian stationary at road side	$S_{39}$	26	14
		Pedestrian walking along the road	$S_{40}$	26	14
		Pedestrian at left turn at signalized junction	$S_{42}$	25	15
		Pedestrian in same direction obstructed at ego left turn	$S_{43}$	25	15
		Zebra crossing	$S_{38}$	23	16
		Pedestrian at right turn at signalized junction	$S_{44}$	20	17
G8	Cyclist Interaction	Cyclist crossing from left side at signalized junction	$S_{46}$	25	18
		Cyclist crossing from right side at signalized junction	$S_{47}$	25	18
		Ego vehicle approaching cyclist riding in same direction	$S_{48}$	25	18
		Ego vehicle driving alongside a cyclist	$S_{49}$	25	18
		Cyclist and ego vehicle driving in opposite direction	$S_{50}$	25	18
		Cyclist turning left and ends up in lane of ego vehicle	$S_{56}$	25	18
		Cyclist turning right and ends up in lane of ego vehicle	$S_{57}$	25	18
		Entering a roundabout with a cyclist Interaction	$S_{54}$	24	19
		Leaving a roundabout with a cyclist	$S_{55}$	24	19
		Cyclist at left turn at signalized junction	$S_{51}$	23	20
		Cyclist driving in same direction obstructed at ego left turn	$S_{52}$	23	20
		Cyclist at right turn at signalized junction	$S_{53}$	18	21