

Table G: List of Selected Scenarios for Safety Testing of ADS using  $D2 - O_{d2}$ 

Sr. #	Groups	Scenario Name	Identifier	Score	Priority
G8	Cyclist Interaction	Ego vehicle approaching cyclist riding in same direction	$S_{48}$	19	1
		Ego vehicle driving alongside a cyclist	$S_{49}$	19	1
		Cyclist and ego vehicle driving in opposite direction	$S_{50}$	19	1
		Cyclist crossing from left side at signalized junction	$S_{46}$	18	2
		Cyclist crossing from right side at signalized junction	$S_{47}$	18	2
		Cyclist turning left and ends up in lane of ego vehicle	$S_{56}$	18	2
		Cyclist turning right and ends up in lane of ego vehicle	$S_{57}$	18	2
		Cyclist at left turn at signalized junction	$S_{51}$	17	3
		Cyclist driving in same direction obstructed at ego left turn	$S_{52}$	17	3
		Entering a roundabout with a cyclist Interaction	$S_{54}$	16	4
		Leaving a roundabout with a cyclist	$S_{55}$	16	4
		Cyclist at right turn at signalized junction	$S_{53}$	14	5
G5	Crossing Path	Oncoming vehicle turns right at signalized junction	$S_{25}$	21	6
		Sirens	$S_{29}$	21	6
		Left Turn Clip	$S_{30}$	20	7
		Wrong Driveway	$S_{31}$	20	7
		Run Red Into Left Turner	$S_{33}$	20	7
		Misjudgment, Left Turn	$S_{34}$	20	7
		Entering a roundabout with another vehicle	$S_{28}$	19	8
		Ego vehicle turns right with oncoming vehicle at signalized junction	$S_{26}$	17	9
		Navigating on an empty roundabout	$S_{27}$	14	10
		Wave to Go	$S_{32}$	14	10
G7	Pedestrian Interaction	Jaywalking	$S_{36}$	21	11
		Pedestrian crossing at zebra crossing	$S_{37}$	21	11
		Pedestrian running a red light	$S_{41}$	20	12
		Struck Human	$S_{45}$	20	12
		Pedestrian stationary at road side	$S_{39}$	19	13
		Pedestrian walking along the road	$S_{40}$	19	13
		Pedestrian at left turn at signalized junction	$S_{42}$	19	13
		Pedestrian in same direction obstructed at ego left turn	$S_{43}$	19	13
		Zebra crossing	$S_{38}$	18	14
		Pedestrian at right turn at signalized junction	$S_{44}$	16	15
G3	Opposite Direction	Oncoming vehicle swerving into ego vehicle's lane	$S_{64}$	22	16
		Oncoming vehicle	$S_{65}$	22	16
G3	Following Lead Vehicle	Ego vehicle approaching slower lead vehicle	$S_{17}$	21	17
		Turning lead vehicle	$S_{18}$	20	18
		Inattentive, Rear	$S_{19}$	14	19
		Stutter Stop	$S_{20}$	14	19
G2	Lane Change	Cut-in in front of the ego vehicle	$S_4$	22	20
		Cut-out in front of the ego vehicle	$S_7$	22	20
		Vehicle swerving towards ego vehicle	$S_8$	22	20
		Vehicle backing up into the ego vehicle	$S_9$	22	20
		Impassable object on intended path	$S_{10}$	22	20
		Object road with incoming traffic	$S_{12}$	22	20
		Driving straight	$S_{13}$	22	20
		U-Turn	$S_{16}$	22	20
		Ego performing lane change with the vehicle behind	$S_5$	19	21
		Ego merging into an occupied lane	$S_6$	19	21
		Passable object on intended path	$S_{11}$	19	21
		Avoidance, Rear	$S_{14}$	19	21
		Lane Change, Rear.	$S_{15}$	19	21
		Back Into Object	$S_{61}$	17	22
G10	Reversing	Back into Roadway	$S_{62}$	17	22
		Back Track	$S_{63}$	17	22