TABLE I. Comparison of task success rates (%) across four benchmark scenarios with varying pedestrian numbers (5-30). The task success rate represents the proportion of successfully completed following tasks under different pedestrian numbers in the benchmark scenarios. **Bold** indicates the best result, while underlined marks the second-best. Circular Crowd Parallel Perpendicular Method 20 25 25 30 10 43.75 16.25 6.25 2.50 3.75 11.25 85.00 37.50 30.00 13.75 0.00 0.00 95.00 95.00 90.00 75.00 70.00 40.00 83.75 38.75 17.50 10.00 3.75 0.00 Wang's [18] Vu's [22] 67.50 50.00 21.25 23.75 23.75 20.00 78.75 57.50 25.00 13.75 16.25 2.50 86.25 73.75 61.25 62.50 35.00 22.50 73.75 32.50 22.50 12.50 8.75 10.00 RDA-Traj [29] 77.50 57.50 35.00 35.00 22.50 12.50 82.50 82.50 57.50 55.50 35.00 95.00 95.00 82.50 82.50 72.50 77.50 82.50 72.50 47.50 42.50 32.50 25.00 Ours **83.62 64.34 49.45 33.68 47.39 37.43 93.75 72.50 61.25 42.50 32.50 12.50 100.00 98.75 98.75 90.00 92.50 85.00 90.00 78.75 65.00 56.25 31.25 17.50**