

| Methods | Object Detection (AP) | | | Orientation (AOS) | | |
|-----------------------|-----------------------|--------------|--------------|-------------------|--------------|--------------|
| | Easy | Moderate | Hard | Easy | Moderate | Hard |
| Car | | | | | | |
| RPN + | 82.91 | 77.83 | 66.25 | N/A | N/A | N/A |
| Our RPN + | 95.14 | 85.20 | 72.12 | N/A | N/A | N/A |
| Ours w/o Pose | 94.66 | 84.94 | 72.43 | N/A | N/A | N/A |
| Ours w/o Extra | 95.51 | 86.29 | 73.68 | 94.26 | 84.69 | 71.80 |
| Ours Full | 95.77 | 86.64 | 74.07 | 94.55 | 85.03 | 72.21 |
| Pedestrian | | | | | | |
| RPN + | 83.31 | 68.39 | 62.56 | N/A | N/A | N/A |
| Our RPN + | 85.96 | 68.55 | 62.55 | N/A | N/A | N/A |
| Ours w/o Pose | 83.22 | 67.61 | 62.03 | N/A | N/A | N/A |
| Ours w/o Extra | 84.86 | 68.87 | 63.09 | 74.05 | 59.06 | 54.05 |
| Ours Full | 86.43 | 69.95 | 64.03 | 73.91 | 58.91 | 53.79 |
| Cyclist | | | | | | |
| RPN + | 56.36 | 46.36 | 42.77 | N/A | N/A | N/A |
| Our RPN + | 71.00 | 55.88 | 51.72 | N/A | N/A | N/A |
| Ours w/o Pose | 71.12 | 57.52 | 53.77 | N/A | N/A | N/A |
| Ours w/o Extra | 71.23 | 55.56 | 51.61 | 61.89 | 47.30 | 43.69 |
| Ours Full | 74.92 | 59.13 | 55.03 | 65.79 | 50.46 | 46.57 |