Former. ‡ Reported by PVRCNN++. Mean L2 Pedestrain L1 Pedestrain L2 Method Frame (mAP/APH) (mAP/APH) (mAP/APH) (mAP/APH) (mAP/APH) (mAP/APH) mAPH StarNet [28] 55.1/54.6 48.7/48.3 68.3/60.9 59.3/52.8 SECOND<sup>‡</sup> [49] 50 9 /57 1 57.2

Table 1: The detection results on WOD validation set. †: Deformable Center-

DECOND [45]		12.3/11.1	05.5/05.5	00.1/00.2	00.7/01.0	00.0/00.0	00.0/01.1	01.2
Lidar R-Cnn [20]	1	73.5/73.0	64.7/64.2	71.2/58.7	63.1/51.7	68.6/66.9	66.1/64.4	60.1
Part-A2 <sup>‡</sup> [37]	1	77.1/76.5	68.5/68.0	75.2/66.9	66.2/58.6	68.6/67.4	66.1/64.9	63.8
3D-MAN [50]	16	74.5/74.0	67.6/67.1	71.7/67.7	62.6/59.0	-/-	- / -	_
DV DCMM [0*]	1	TO 1 /TO C	TO 0 /00 0	00.0/51.0	71 0 /cc o	70 F /70 4	TO T /CO C	00.0

rart-A2 [57]	1	11.1/10.5	00.0/00.0	15.2/00.9	00.2/00.0	00.0/07.4	00.1/04.9	05.0
3D-MAN [50]	16	74.5/74.0	67.6/67.1	71.7/67.7	62.6/59.0	-/-	- / -	_
PV-RCNN++ [35]	1	79.1/78.6	70.3/69.9	80.6/74.6	71.9/66.3	73.5/72.4	70.7/69.6	68.6
CenterPoint [53]	1	-/-	- /67.9	-/-	- /65.6	-/-	- /68.6	67.4

76.2/73.0

76.7/73.4

77.2/74.2

77.8/75.0

73.6/72.7

74.2/73.3

73.4/72.6

73.2/72.3

76.0/75.1

76.6/75.7

75.6/74.8

75.2/74.4

72.5

72.8

73.2

73.7

	10	14.5/14.0	01.0/01.1	11.1/01.1	02.0/39.0	_/-	-/-	
[35]	1	79.1/78.6	70.3/69.9	80.6/74.6	71.9/66.3	73.5/72.4	70.7/69.6	
3]	1	-/-	- /67.9	-/-	- /65.6	-/-	- /68.6	
31	2	-/-	- /69.7	-/-	- /70.3	-/-	- /70.9	

80.9/77.6

81.4/78.0

81.7/78.6

82.1/79.3

CenterPoint [53]	1	-/-	<b>-</b> /67.9	-/-	- /65.6	-/-	- /68.6	67.4
CenterPoint [53]	2	-/-	- /69.7	-/-	- /70.3	-/-	- /70.9	70.3
CenterFormer	1	75.0/74.4	69.9/69.4	78.0/72.4	73.1/67.7	73.8/72.7	71.3/70.2	69.1

CenterPoint [53]	2	-/-	<b>-</b> /69.7	-/-	- /70.3	-/-	- /70.9	70.3
CenterFormer	1	75.0/74.4	69.9/69.4	78.0/72.4	73.1/67.7	73.8/72.7	71.3/70.2	69.1
CenterFormer <sup>†</sup>	1	75.2/74.7	70.2/69.7	78.6/73.0	73.6/68.3	72.3/71.3	69.8/68.8	69.0

72.2/71.7

72.1/71.6

73.4/72.9

74.3/73.8

77.1/76.6

77.0/76.5

78.1/77.6

78.8/78.3

CenterFormer

CenterFormer<sup>†</sup>

CenterFormer<sup>†</sup>

CenterFormer<sup>†</sup>