Pipeline	Filtered	Precision	Recall	$AUC_{05}^F$	$AUC_{@10}^{F}$	MegaDept $AUC_{0:20}^F$	$AUC_{\angle}^{F}$	$AUC_{05}^{E}$	$AUC_{010}^{E}$	$AUC_{020}^E$	$\mathrm{AUC}_{\mathbb{Z}}^{E}$	Filtered	Precision	Recall	$AUC_{05}^{F}$	$AUC_{010}^F$	ScanNet AUC <sup>F</sup> <sub>@20</sub>	$\mathrm{AUC}_{\perp}^F$	$AUC_{05}^{E}$	$AUC_{010}^{E}$	$AUC_{0:20}^{E}$	$\mathrm{AUC}_{\mathcal{L}}^{E}$
SuperPoint+LightGlue	0.00	88.66 94.31	99.87 71.87	32.24 36.70	48.51 54.24	64.92 70.34	48.56 53.76	46.00 48.00	63.57 65.41	77.29 78.58	62.29 64.00	0.00	68.85 71.18	94.17 65.04	6.42 10.64	15.83 23.72	29.21 38.85	17.15 24.41	17.20 17.54	34.30 34.73	50.79 51.70	34.09 34.66
+MAGSAC↓ +ACNe	45.44 42.04	95.19	60.45 58.63	38.06	55.35	70.76	54.72	48.70	65.77	78.41 66.81	64.29	43.55	71.42	55.56	11.22	25.03 12.24	40.20	25.49	17.47	34.66	50.99	34.37 24.59
	59.96 66.74	93.97 94.74	43.44 36.66	22.21 21.74	35.74 35.78	51.46 51.36	36.47 36.30	34.36 36.04	52.69 54.78	69.19 70.96	52.08 53.93	61.77 66.72	71.16 71.15	38.42 33.24	5.28 5.66	14.15 14.50	27.18 27.19	15.54 15.78	10.45 10.96	24.15 24.17	39.78 39.85	24.79 25.00
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.00 34.00 45.44	88.66 94.31 95.19	99.87 71.87 60.45	32.24 36.70 38.06	48.51 54.24 55.35	64.92 70.34 70.76	48.56 53.76 54.72	46.00 48.00 48.70	63.57 65.41 65.77	77.29 78.58 78.41	62.29 64.00 64.29	0.00 33.99 43.55	68.85 71.18 71.42	94.17 65.04 55.56	6.42 10.64 11.22	15.83 23.72 25.03	29.21 38.85 40.20	17.15 24.41 25.49	17.20 17.54 17.47	34.30 34.73 34.66	50.79 51.70 50.99	34.09 34.66 34.37
+CC +MAGSAC +MAGSAC	17.92 44.67 54.33	84.60 89.24 90.03	82.75 60.19 50.48	21.89 26.45 26.40	35.63 40.50 40.73	50.53 55.50 55.29	36.02 40.82 40.81	36.50 38.98 40.25	54.58 57.17 57.93	69.18 71.60 71.70	53.42 55.92 56.63	31.26 52.45 58.81	61.26 62.32 62.54	64.27 46.56 40.34	5.44 7.21 7.21	13.52 16.84 16.82	25.36 29.01 29.15	14.77 17.69 17.73	13.19 13.59 13.02	26.19 26.78 26.85	39.67 39.96 40.68	26.35 26.77 26.85
+CLNet +MAGSAC↑ +MAGSAC⊥	19.55 45.29 54.75	89.44 93.97 94.80	81.13 59.28 49.83	13.93 18.61 18.71	25.66 31.68 32.75	41.65 47.37 48.61	27.08 32.55 33.36	31.25 35.34 36.11	50.78 55.25 56.06	68.02 71.20 71.91	50.02 53.93 54.69	45.98 60.94 65.90	71.39 69.97 70.05	51.40 39.00 33.94	3.43 3.62 3.54	8.30 9.38 9.46	16.30 19.79 19.28	9.34 10.93 10.76	8.27 7.92 8.61	19.27 19.23 19.50	33.50 33.19 33.79	20.35 20.12 20.64
+ConvMatch +MAGSAC↑ +MAGSAC⊥	64.96 74.04 78.23	89.94 92.63 93.25	35.76 27.85 23.65	10.24 12.17 12.43	20.16 23.75 23.19	34.61 38.77 37.80	21.67 24.90 24.48	19.15 19.94 21.69	34.97 36.14 38.75	53.30 54.62 56.69	35.81 36.90 39.04	64.24 73.97 77.00	71.05 69.34 69.36	34.93 26.99 23.86	3.13 3.64 3.29	8.96 10.04 9.80	20.45 21.37 21.35	10.85 11.68 11.48	8.13 8.27 8.26	19.03 19.09 19.37	32.97 32.97 32.66	20.04 20.11 20.10
+DeMatch	64.35 74.08	89.69 93.01 93.67	36.17 27.74	9.81 11.18 11.43	20.70 22.53	35.13 37.46	21.88 23.72 24.25	16.02 20.02 18.97	32.34 36.65 37.35	51.57 55.90 57.01	33.31 37.52	67.89 75.98	71.10 70.07	31.38 24.90	1.53 2.04 1.65	5.46 6.28	13.45 15.28	6.81 7.87	5.91 5.38 6.28	14.96 15.37 15.83	27.39 28.16	16.09 16.30
+FC-GNN +MAGSAC <sub>↑</sub>	78.25 21.72 23.84	96.58 <b>97.06</b>	23.57 89.27 87.42	49.70 <b>51.58</b>	23.27 64.49 <b>66.51</b>	38.05 75.86 <b>78.20</b>	63.35 <b>65.43</b>	52.05 51.22	68.58 68.24	80.64 80.44	37.78 67.09 66.63	78.69 28.65 38.19	70.20 72.29 72.76	22.07 68.86 62.07	9.50 11.51	5.97 20.28 24.54	15.23 34.84 38.87	7.62 21.54 24.97	16.21 16.56	31.67 32.43	28.71 47.89 48.35	31.93 32.45
+GMS +MAGSAC↑	25.66 24.63 49.29	97.23 84.86 87.83	85.55 75.72 54.77	28.54 33.98	44.24 49.01	78.27 59.60 62.86	44.13 48.62	51.45 39.98 39.93	69.08 56.76 56.75	81.01 69.96 70.07	55.57 55.58	41.65 51.96 63.63	72.86 67.85 67.18	58.52 48.25 37.04	5.41 6.80	24.68 13.60 16.06	39.20 24.55 27.94	25.26 14.52 16.93	16.79 10.65 10.57	33.13 22.91 23.56	48.87 37.26 38.20	32.93 23.61 24.11
+MS <sup>2</sup> DG-Net +MAGSAC↑	57.92 71.15 79.63	89.88 94.13	46.14 29.41 22.19	33.25 20.21 18.34	47.90 34.38 31.01	62.15 51.20 47.61	47.76 35.26 32.32	42.86 17.51 20.18	33.69 37.26	71.68 52.33 56.49	58.03 34.51 37.98	68.71 61.19 72.03	67.31 71.24 72.00	31.86 34.95 26.90	6.78 4.37 4.61	15.62 11.13 11.95	26.88 22.41 23.27	16.43 12.64 13.28	7.23 6.67	22.24 17.04 17.10	36.83 30.19 30.08	23.12 18.15 17.95
+MAGSAC↓ +NCC +MAGSAC↑	82.92 0.00 38.11	94.88 78.17 92.62	18.87 87.75 66.90	17.61 18.23 39.68	30.81 31.71 53.21	47.03 49.12 65.78	31.82 33.02 52.89	23.19 44.58 43.96	41.70 60.10 60.76	59.99 72.57 74.24	41.63 59.08 59.65	74.94 0.00 40.72	72.01 64.70 70.90	23.97 90.34 58.52	4.27 4.80 12.91	11.59 11.43 26.00	23.57 22.97 40.18	13.14 13.06 26.37	6.97 17.24 17.86	17.14 34.60 34.89	30.10 50.68 51.31	18.07 34.18 34.69
	44.26 16.61 43.43	93.07 89.43 93.80	60.82 84.09 61.37	38.87 15.03 19.39	52.80 27.20 32.75	65.82 42.83 49.23	52.49 28.35 33.79	43.93 31.26 35.02	60.76 51.36 54.40	74.42 68.19 70.53	59.70 50.27 53.32	47.23 42.15 58.05	71.18 70.94 69.35	52.18 54.83 41.90	13.07 2.83 4.57	26.00 7.87 11.43	40.21 16.76 21.96	26.42 9.16 12.65	18.76 8.98 9.12	34.85 20.75 20.97	51.19 35.13 35.01	34.94 21.62 21.70
+MAGSAC↓ +OANet	53.17 90.36	94.60 90.47	51.60 9.96	20.01 3.49	33.46 8.63	49.28 18.06	34.25 10.06	35.60 6.07	55.67 13.98	71.36 28.97	54.21 16.34	63.59 <b>88.26</b>	69.45 69.67	36.35 10.77	4.33 1.14	11.56 3.39	22.70 8.83	12.86 4.45	9.54 1.51	21.53 5.65	36.24 13.74	22.44 6.97
+MAGSAC <sub>↑</sub> +MAGSAC <sub>↓</sub>	92.21 93.12	91.16 91.42	8.25 7.33	3.48 3.64	8.13 8.61	18.23 18.22	9.95 10.16	6.54 5.93	15.44 14.65	29.77 30.97	17.25 17.18	91.95 92.44	61.88 61.93	7.96 7.49	0.96 0.88	3.01 2.95	8.10 8.13	4.02 3.99	2.03 2.34	6.20 6.78	14.22 14.68	7.48 7.93
$+MOP_{0.5K}+MiHo$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.26 33.99 45.50	94.31 95.20	99.70 71.85 60.38	31.97 36.64 37.95	48.35 53.95 54.81	64.95 70.10 70.21	48.42 53.56 54.32	45.89 47.95 48.25	63.32 65.25 65.94	76.83 78.41 78.76	62.01 63.87 64.31	7.54 36.70 46.20	68.51 71.09 71.31	90.89 63.98 54.47	6.72 10.59 10.76	16.53 23.43 24.36	30.26 38.71 39.64	17.83 24.24 24.92	17.00 17.47 17.46	33.78 34.17 34.70	50.17 50.75 50.61	33.65 34.13 34.25
$+MOP_{0.5K}+MiHo+NCC$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.26 25.28 29.75	85.92 96.35 96.73	99.27 84.96 80.46	22.05 49.48 49.79	36.26 64.57 65.25	52.47 76.94 77.45	36.93 63.66 64.16	53.15 52.64 52.82	70.64 70.17 70.44	82.46 82.43 82.50	68.75 68.41 68.58	7.54 39.50 45.40	65.48 70.92 71.10	88.10 61.40 55.59	5.14 14.57 15.40	12.83 28.05 28.79	25.02 42.46 43.22	14.33 28.36 29.14	18.58 19.06 19.85	36.32 35.17 <b>36.91</b>	52.31 51.27 <b>52.56</b>	35.74 35.17 36.44
+MOP <sub>1.0K</sub> +MiHo	0.24 33.98 45.48	88.72 94.30 95.22	99.72 71.89 60.42	32.31 36.83 37.90	48.63 54.15 54.88	65.24 70.29 70.19	48.73 53.76 54.33	46.14 47.59 47.92	63.53 65.08 65.61	77.04 78.25 78.50	62.23 63.64 64.04	7.51 36.68 46.14	68.46 71.02 71.23	90.88 63.89 54.39	6.67 10.42 11.09	16.25 23.65 24.59	30.19 38.89 39.57	17.70 24.32 25.09	17.27 17.52 17.53	33.88 34.57 34.66	50.12 51.22 50.52	33.76 34.43 34.24
+MOP <sub>1.0K</sub> +MiHo+NCC +MAGSAC <sub>↑</sub> +MAGSAC <sub>↓</sub>	0.24 25.27 29.70	85.93 96.37 96.76	99.30 85.00 80.54	21.95 48.77 49.75	36.44 64.02 65.20	52.51 76.47	36.97 63.09 64.12	54.39 52.92 53.40	71.50 70.54	82.89 82.45	69.59 68.64	7.51 39.52 45.42	65.40 70.86 71.03	88.02 61.35 55.57	5.06 14.47 15.35	12.58 27.78 28.84	24.60 42.33 43.28	14.08 28.19 29.15	17.81 19.09 19.86	35.14 35.74 36.87	51.42 51.87 <b>52.67</b>	34.79 35.57 <b>36.47</b>
+MOP <sub>1.5K</sub> +MiHo	0.25 34.02 45.47	88.72 94.33 95.23	99.71 71.86 60.44	31.92 36.70 38.00	48.27 54.15 55.26	65.11 70.29 70.59	48.43 53.71 54.61	46.48 47.23 48.08	63.68 64.72 65.76	77.05 77.99	62.40 63.31 64.18	7.50 36.69 46.11	68.46 71.05 71.21	90.79 63.90 54.30	6.92 10.47 11.21	16.78 23.79 24.65	30.57 38.71 39.64	18.09 24.32 25.17	17.11 17.95 17.86	33.74 35.07 34.79	50.15 51.48	33.67 34.83 34.42
+MOP <sub>1.5K</sub> +MiHo+NCC	0.25 25.28	85.93 96.34	99.28 84.96	21.65 49.47	35.98 64.86	52.16 77.28	36.60 63.87 64.31	<b>54.54</b> 51.69	<b>71.49</b> 69.74	82.97 81.91	69.67 67.78	7.50 39.50	65.39 71.03	88.03 61.68	5.38 14.02	13.08 27.99	24.86 42.70	14.44 28.24	18.72 19.00	35.68 35.18	51.55 51.55	35.31 35.24
+MOP <sub>2.0K</sub> +MiHo +MAGSAC <sub>↑</sub>	29.70 0.24 34.00	96.72 88.72 94.33	99.72 71.87	32.01 36.56	<b>65.36</b> 48.43 54.10	65.11 70.33	48.52 53.67	46.27 47.91	69.74 63.52 65.14	76.94 78.22	62.24 63.76	45.45 7.54 36.69	71.14 68.46 71.04	90.78 63.91	6.94 10.54	28.82 16.53 23.72	30.12 38.83	29.01 17.86 24.36	17.32 17.96	33.86 34.97	50.18 51.39	33.78 34.77
+MAGSAC↓ +MOP <sub>2.9K</sub> +MiHo+NCC +MAGSAC↑	45.47 0.24 25.28	95.21 85.92 96.35	99.28 84.97	37.85 21.55 49.49	55.26 35.85 64.77	70.68 52.16 77.08	54.60 36.52 63.78	48.02 <b>54.00</b> 52.18	65.65 <b>71.26</b> 69.95	78.64 82.96 82.15	64.10 <b>69.41</b> 68.09	46.15 7.54 39.52	71.29 65.39 70.95	54.38 87.94 61.48	11.08 5.19 14.50	24.49 12.77 28.28	39.54 24.37 42.65	25.04 14.11 28.48	18.12 18.55 19.30	35.21 35.62 35.95	51.05 51.75 51.72	34.80 35.31 35.66
	29.70 0.86 34.24	98.76 88.80 94.31	99.24 71.62	32.05 36.49	65.13 48.39 54.17	77.39 65.19 70.34	48.54 53.67	52.31 46.35 47.60	69.84 63.50 65.31	76.99 78.42	68.02 62.28 63.78	45.46 11.75 39.07	71.10 68.48 70.74	55.54 87.87 62.15	6.96 10.71	29.00 16.77 23.74	43.13 30.68 38.47	29.13 18.14 24.31	19.78 16.37 17.24	36.56 32.80 33.82	52.35 49.28 50.57	36.23 32.82 33.87
$+MAGSAC_{\downarrow}$ $+MOP_{0.5K}+NCC$ $+MAGSAC_{\uparrow}$	45.73 0.86 25.98	95.15 85.72 96.13	98.37 83.90	37.53 20.83 48.08	54.58 35.30 63.45	52.21 75.50	53.98 36.11 62.34	48.54 50.82 51.80	65.41 68.48 69.18	78.23 80.93 81.68	64.06 66.74 67.55	48.42 11.75 41.55	70.95 65.35 70.72	52.63 85.27 60.33	5.20 13.98	23.71 12.85 27.87	38.75 24.80 42.43	24.49 14.29 28.09	17.43 18.64 19.12	34.01 35.11 35.82	50.01 51.01 52.01	33.82 34.92 35.65
$+MOP_{1.0K}$ $+MAGSAC_{\uparrow}$	30.38 0.79 34.17	96.58 88.86 94.35	79.52 99.34 71.69	32.16 36.91	64.65 48.09 54.23	76.39 64.98 70.38	48.41 53.84	51.10 47.05 47.18	68.35 63.95 64.70	77.13 77.69	62.71 63.19	47.18 11.41 38.88	70.84 68.45 70.65	54.65 88.09 62.19	7.25 10.31	28.39 17.15 23.33	42.90 30.59 38.50	28.52 18.33 24.04	19.45 16.60 17.03	35.79 33.02 33.45	51.86 49.57 50.41	35.70 33.06 33.63
$+MOP_{1.0K}+NCC$	45.70 0.79 25.90	95.21 85.78 96.28	60.16 98.47 84.10	37.26 20.84 49.02	54.32 35.38 63.63	69.87 52.23 75.83	53.82 36.15 62.83	48.38 49.54 51.36	65.90 67.71 68.78	78.82 80.59 81.49	64.36 65.95 67.21	48.21 11.41 41.35	70.88 65.32 70.73	52.69 85.46 60.45	10.59 5.18 14.50	24.02 12.86 29.14	38.84 24.52 43.57	24.48 14.19 29.07	17.31 17.92 18.79	34.14 34.45 35.77	50.25 50.54 51.55	33.90 34.30 35.37
$+MAGSAC_{\downarrow}$ $+MOP_{1.5K}$	30.35 0.74	96.71 88.84	79.60 99.36	49.32 49.32 31.98	64.22 48.02	75.97 64.82	63.17 48.28	51.45 45.89	68.62 63.30	81.36 76.96	67.14 62.05	47.17 11.33	70.87 68.41	54.61 88.17	14.06 7.17	28.21 16.71	42.44 30.08	28.24 17.99	18.79 16.06	35.50 32.70	51.83	35.37 32.62
+MAGSAC↓ +MOP <sub>1.5K</sub> +NCC	34.15 45.64 0.74	94.35 95.23 85.75	71.71 60.24 98.48	36.69 38.00 21.48	54.00 54.80 35.69	70.22 69.95 52.50	53.64 54.25 36.56	47.71 48.32 50.14	64.63 65.74 67.92	77.49 78.96 80.50	63.27 64.34 66.18	38.82 48.14 11.33	70.75 70.90 65.29	62.45 52.83 85.66	10.35 10.59 5.05	23.36 24.10 12.51	38.13 39.11 24.10	23.95 24.60 13.89	16.61 17.05 18.02	33.03 33.38 34.63	49.87 49.32 51.18	33.17 33.25 34.61
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$ $+MOP_{2.0K}$	25.86 30.32	96.26 96.69	84.13 79.65	48.82 49.76	63.43 64.38	75.55 75.98	62.60 63.37	50.92 51.89	68.63 68.97	81.53 81.36	67.03 67.40	41.43 47.25	70.67 70.87	60.35 54.42	14.35 14.20	28.38 27.90	42.19 41.96	28.30 28.02	17.52 18.05	34.74 35.96	51.41 <b>52.42</b>	34.55 35.47
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.74 34.13 45.65	88.85 94.36 95.24	99.38 71.74 60.23	32.21 37.09 37.53	48.16 54.22 54.22	64.79 70.48 69.74	48.39 53.93 53.83	46.57 48.19 48.36	63.67 65.14 65.71	76.94 77.78 78.69	62.39 63.70 64.25	11.31 38.85 48.09	68.43 70.77 70.95	88.20 62.42 52.93	7.07 10.60 10.92	16.61 23.72 24.25	30.15 38.43 39.39	17.94 24.25 24.85	16.79 17.27 16.72	32.90 33.66 33.36	49.11 50.16 49.35	32.93 33.70 33.15
$+MOP_{2.0K}+NCC$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	0.74 25.86 30.33	85.76 96.28 96.68	98.47 84.12 79.60	21.03 48.50 49.28	35.37 63.48 63.92	52.29 75.60 75.69	36.23 62.53 62.96	49.96 51.47 51.84	67.80 68.68 69.35	80.50 81.35 81.59	66.09 67.17 67.59	11.31 41.48 47.27	65.27 70.61 70.74	85.55 60.15 54.22	4.76 14.53 14.04	12.32 28.23 28.22	24.01 42.01 42.26	13.70 28.26 28.17	18.24 18.16 18.57	34.67 34.65 35.75	51.20 50.76 52.07	34.71 34.52 35.46