Discolina	Filtered	Precision	Recall	AUC_{s}^{F} .	AUC ^F	MegaDept $AUC_{0:20}^{F}$	h AUC ^F	AUC^{E}_{-} .	AUCE	AUCE	AUC ^E	Filtered	Precision	Recall	AUC.	AUC_{010}^F	ScanNet AUC ^F AUC ^F	t AUC ^F	AUC ^E .	$AUC_{\alpha_{1\alpha}}^{E}$	AUC ^E	AUC ^E
Pipeline DeDoDe2	0.00	68.37	99.98	0.30	1.11	3.65	1.69	52.70	67.97	78.85	66.51	0.00	45.31	99.37	0.00	0.13	1.05	0.39	11.70	23.01	34.80	23.17
$+MAGSAC_{\uparrow}$	41.74	92.09	79.44	43.26	56.07	67.19	55.51	52.25	67.51	78.54	66.10	55.59	56.52	49.24	8.13	17.51	27.76	17.80	12.86	24.62	36.73	24.74
$+MAGSAC_{\downarrow}$	47.14	92.59	72.34	43.46	56.75	67.89	56.03	51.50	67.24	78.32	65.69	60.93	56.16	42.12	8.59	17.31	27.27	17.72	11.81	23.39	35.62	23.61
+ACNe	36.09	88.48	83.75	12.98	25.68	41.82	26.83	46.84	64.02	77.05	62.64	50.19	55.16	56.79	1.54	5.55	13.80	6.97	11.14	22.30	35.86	23.10
$+MAGSAC_{\uparrow}$	49.04	94.28	71.07	39.41	53.67	66.96	53.35	44.75	63.26	76.51	61.51	64.57	57.71	39.70	5.66	13.91	24.83	14.80	10.48	21.30	34.23	22.00
$+MAGSAC_{\downarrow}$	53.36	94.87	65.41	40.34	54.25	67.66	54.08	44.92	62.85	76.28	61.35	68.44	57.59	34.31	5.56	13.64	24.72	14.64	10.17	21.15	34.13	21.82
+AdaLAM	0.00	68.37	99.98	0.30	1.11	3.65	1.69	52.70	67.97	78.85	66.51	0.00	45.31	99.37	0.00	0.13	1.05	0.39	11.70	23.01	34.80	23.17
$+MAGSAC_{\uparrow}$	41.74	92.09	79.44	43.26	56.07	67.19	55.51	52.25	67.51	78.54	66.10	55.59	56.52	49.24	8.13	17.51	27.76	17.80	12.86	24.62	36.73	24.74
$+MAGSAC_{\downarrow}$	47.14	92.59	72.34	43.46	56.75	67.89	56.03	51.50	67.24	78.32	65.69	60.93	56.16	42.12	8.59	17.31	27.27	17.72	11.81	23.39	35.62	23.61
$^{+\text{CC}}_{+\text{MAGSAC}_{\uparrow}} \\ ^{+\text{MAGSAC}_{\downarrow}}$	28.17	87.91	91.55	16.86	27.75	40.74	28.45	50.67	66.37	77.99	65.01	32.01	51.25	73.56	0.30	1.18	4.13	1.87	11.07	21.55	32.95	21.86
	44.52	94.28	76.42	48.95	61.83	72.29	61.03	51.36	66.81	77.97	65.38	59.06	55.73	44.92	7.01	14.50	23.68	15.06	11.42	22.00	33.64	22.35
	49.26	94.80	70.25	50.04	62.68	72.89	61.87	50.35	66.34	77.81	64.83	63.63	55.25	38.72	7.16	15.26	25.05	15.82	11.26	22.04	33.85	22.38
+CLNet +MAGSAC \uparrow +MAGSAC \downarrow	37.82 50.62 54.78	92.49 93.04	79.15 66.85 61.63	2.54 31.58 32.57	7.16 45.25 46.31	17.69 59.17 60.39	9.13 45.33 46.42	43.33 42.73 42.96	61.17 60.31 60.06	74.07 73.72 73.11	59.52 58.92 58.71	60.31 71.51 74.79	59.54 61.53 61.49	49.81 35.54 30.97	0.48 3.53 3.80	1.62 8.29 8.95	4.92 17.00 17.73	2.34 9.60 10.16	7.90 7.11 7.64	17.76 16.81 16.47	30.33 29.17 28.20	18.66 17.70 17.43
+ConvMatch	66.65	85.66	49.33	13.92	23.82	36.48	24.74	32.26	48.13	60.85	47.08	67.05	64.16	47.32	2.27	6.95	16.66	8.63	8.98	19.56	32.86	20.46
+MAGSAC \uparrow	72.73	87.62	42.30	25.47	36.84	49.34	37.22	32.91	48.12	61.12	47.38	76.69	65.78	32.68	4.79	11.73	22.40	12.98	9.62	20.82	34.25	21.56
+MAGSAC \downarrow	75.01	88.06	38.92	25.48	37.01	49.34	37.28	32.96	47.47	60.26	46.90	79.45	65.83	28.30	4.79	11.53	22.08	12.80	8.92	19.96	33.12	20.67
+DeMatch	51.79	88.06	64.51	13.55	24.25	38.48	25.43	39.17	57.24	71.21	55.87	62.80	61.34	49.52	1.49	4.61	11.63	5.91	9.12	19.91	33.19	20.74
+MAGSAC \uparrow	60.95	92.69	54.90	28.27	42.69	57.36	42.77	37.37	56.14	70.82	54.78	73.38	63.08	34.21	3.66	9.73	20.32	11.24	8.41	18.94	31.91	19.75
+MAGSAC \downarrow	64.19	93.16	50.57	29.67	44.16	58.17	44.00	39.04	56.82	71.30	55.72	76.43	63.15	29.77	3.40	10.09	20.70	11.40	8.81	19.36	32.41	20.19
+FC-GNN $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	35.45 41.79 43.42	88.38 94.77 95.07	84.77 80.90 78.82	2.62 50.47 51.22	5.26 62.78 64.10	11.39 78.48 74.72	6.42 62.24 63.34	54.47 53.89 52.98	70.06 69.22 68.67	80.45 79.70 79.61	68.33 67.61 67.09	46.49 62.72 65.42	54.35 62.24 62.16	62.97 48.16 44.26	9.89 10.43	0.92 19.75 20.78	3.37 31.57 32.23	20.40 21.14	14.23 13.20 13.85	27.98 26.55 27.12	41.42 40.56 40.97	27.88 26.77 27.32
+GMS $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	34.72 49.52 53.82	84.36 92.10 92.60	79.85 67.14 61.76	11.36 49.02 49.29	20.26 62.02 62.22	32.50 72.05 72.09	21.37 61.03 61.20	49.93 51.57 49.48	65.07 66.69 65.09	75.85 77.13 76.07	63.62 65.13 63.55	34.53 61.43 65.88	51.60 56.39 55.83	71.56 42.84 36.71	7.11 7.04	1.00 14.87 14.97	4.01 24.58 24.75	1.73 15.52 15.59	9.29 9.84	21.77 20.08 20.67	33.68 32.25 33.00	22.09 20.54 21.17
+MS ² DG-Net +MAGSAC↑ +MAGSAC↓ +NCC	72.95 79.80 81.38	83.11 91.12 91.66	36.48 30.58 28.33	0.21 30.74 30.23	0.74 44.82 44.55	3.32 58.34 58.58	1.42 44.64 44.45	32.51 30.79 32.00	48.45 46.05 47.18	63.05 60.35 61.93	48.01 45.73 47.04	70.26 80.70 82.54	54.24 57.09 56.64	35.21 21.92 19.29	0.00 2.06 2.48	0.07 5.95 6.20	0.47 13.27 13.13	0.18 7.09 7.27	4.55 4.83 4.39	11.07 10.49 10.20	20.35 19.80 18.92	11.99 11.70 11.17
+NCC	0.00	60.62	84.79	0.34	1.15	3.66	1.71	43.37	57.56	69.25	56.72	0.00	43.88	97.78	0.00	0.12	1.04	0.39	11.24	22.30	33.90	22.48
+MAGSAC↑	52.70	85.47	59.26	32.07	43.88	55.38	43.78	42.25	56.26	67.85	55.46	56.57	55.69	47.45	6.89	14.30	24.37	15.19	11.48	22.72	34.76	22.99
+MAGSAC↓	57.34	86.11	53.90	32.90	44.83	56.42	44.72	40.66	55.83	67.75	54.75	61.01	55.36	41.71	6.91	14.66	24.98	15.52	10.16	21.72	34.26	22.04
+NCAINCE +MAGSAC _↑ +MAGSAC _↓ +OANct	36.94 49.77 54.00	93.58 94.06	81.53 69.06 63.56	2.37 34.33 34.23	6.41 47.39 48.05	16.78 61.12 61.78	8.52 47.61 48.02	43.18 44.12 44.17	61.31 61.84 61.81	74.25 74.71 74.88	59.58 60.22 60.29	60.47 71.72 75.21	61.32 63.54 63.45	51.30 36.99 32.00	1.25 4.93 4.62	3.40 10.84 10.69	8.09 19.85 20.09	4.24 11.87 11.80	9.84 9.10 9.10	20.09 19.24 19.72	32.72 32.47 33.06	20.88 20.27 20.63
$+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	71.52 76.77 78.65	87.75 92.71 93.11	38.12 32.89 30.33	3.58 22.34 23.28	9.51 35.77 36.81	19.69 50.36 50.90	10.93 36.16 36.99	34.14 31.52 32.45	50.95 49.30 49.68	65.74 64.60 65.11	50.28 48.47 49.08	79.61 83.58 84.87	49.18 50.05 49.98	19.61 14.70 12.95	0.51 1.26 1.02	1.62 4.37 4.00	4.98 10.36 9.61	2.37 5.33 4.88	3.35 2.99 3.33	8.84 8.75 8.71	16.97 16.94 17.04	9.72 9.56 9.69
$\begin{aligned} &+ \mathbf{MOP}_{0.5K} + \mathbf{MiHo} \\ &+ \mathbf{MAGSAC}_{\uparrow} \\ &+ \mathbf{MAGSAC}_{\downarrow} \end{aligned}$	10.96	74.40	98.76	0.59	1.44	5.10	2.38	53.75	69.14	79.76	67.55	8.15	47.28	95.52	0.00	0.38	1.97	0.78	12.04	23.51	35.24	23.60
	41.98	92.67	79.48	44.49	57.74	68.56	56.93	51.47	67.42	78.70	65.87	55.93	56.89	49.62	8.62	18.01	28.71	18.45	12.32	24.16	36.25	24.24
	47.30	93.42	72.69	45.54	58.71	69.55	57.93	51.64	67.38	78.60	65.87	61.18	56.45	42.37	8.21	17.38	27.64	17.74	12.64	24.15	36.98	24.59
$+ \begin{aligned} & + \mathbf{MOP_{0.5K}} + \mathbf{MiHo} + \mathbf{NCC} \\ & + \mathbf{MAGSAC_{\uparrow}} \\ & + \mathbf{MAGSAC_{\downarrow}} \end{aligned}$	10.96	71.37	94.82	0.58	1.51	5.14	2.41	51.68	67.53	78.97	66.06	8.15	46.37	95.16	0.00	0.39	1.95	0.78	11.37	23.04	35.88	23.43
	44.17	93.38	77.44	41.53	54.49	66.29	54.10	51.33	67.42	79.09	65.95	54.92	56.95	50.94	7.73	16.57	27.27	17.19	13.11	25.43	38.00	25.52
	47.60	93.94	73.02	43.32	56.90	68.46	56.23	51.13	67.27	78.57	65.66	59.08	56.75	45.33	8.18	17.32	28.04	17.84	13.49	26.06	37.99	25.85
$+MOP_{1.0K}+MiHo$	10.32	74.00	99.03	0.48	1.54	4.91	2.31	51.89	67.83	79.10	66.27	7.66	47.16	95.86	0.00	0.21	1.65	0.62	12.34	23.64	35.00	23.66
$+MAGSAC_{\uparrow}$	41.92	92.62	79.64	44.99	58.00	68.88	57.29	52.03	67.39	78.94	66.12	55.99	56.87	49.45	7.89	16.83	27.21	17.31	12.10	24.73	37.32	24.72
$+MAGSAC_{\downarrow}$	47.26	93.23	72.71	46.35	59.53	70.29	58.72	51.77	67.72	79.01	66.17	61.14	56.56	42.54	8.50	17.43	27.82	17.92	12.49	24.26	36.63	24.46
$+MOP_{1.0K}+MiHo+NCC$	10.32	71.03	95.14	0.51	1.60	4.89	2.33	52.54	68.79	80.02	67.12	7.66	46.26	95.18	0.00	0.24	1.65	0.63	12.79	24.34	36.38	24.51
$+MAGSAC\uparrow$	44.11	93.32	77.45	39.90	53.71	65.78	53.13	50.05	67.45	79.49	65.66	54.80	57.07	51.21	8.49	17.38	28.21	18.03	13.05	25.55	37.99	25.53
$+MAGSAC\downarrow$	47.58	93.95	73.06	41.57	55.02	67.51	54.70	51.09	67.46	79.25	65.93	58.94	56.86	45.54	8.44	17.36	27.57	17.79	12.79	24.54	37.29	24.88
$+MOP_{1.5K}+MiHo$	9.89	73.70	99.07	0.47	1.44	4.89	2.27	52.90	68.02	78.46	66.46	7.41	47.12	96.08	0.00	0.23	1.69	0.64	11.60	22.97	35.04	23.20
$+MAGSAC_{\uparrow}$	41.93	92.56	79.59	44.59	57.12	67.73	56.48	51.01	66.45	77.79	65.08	55.94	57.02	49.47	7.98	17.09	27.59	17.55	12.60	24.86	37.31	24.92
$+MAGSAC_{\downarrow}$	47.22	93.38	72.88	45.59	58.78	69.94	58.10	51.03	66.70	78.08	65.27	61.12	56.53	42.33	8.26	17.02	27.49	17.59	12.43	23.54	35.64	23.87
+MOP _{1.5K} +MiHo+NCC	9.89	70.76	95.13	0.49	1.44	4.76	2.23	52.00	68.90	80.14	67.02	7.41	46.24	95.74	0.00	0.24	1.71	0.65	12.10	23.67	35.63	23.80
+MAGSAC _↑	44.10	93.46	77.61	39.85	53.18	65.93	52.99	50.11	66.28	78.37	64.92	54.81	57.37	51.45	8.06	16.79	27.47	17.44	12.33	24.78	37.99	25.03
+MAGSAC _↓	47.63	94.08	73.11	41.63	54.93	68.10	54.89	49.90	66.38	78.27	64.85	58.87	57.13	45.88	7.87	17.00	28.09	17.65	12.82	24.91	37.76	25.16
$+MOP_{2,0K}+MiHo$	9.68	73.60	99.21	0.64	1.59	4.78	2.34	55.18	69.91	80.11	68.40	7.25	47.07	96.08	0.00	0.24	1.70	0.65	11.73	22.89	34.79	23.14
$+MAGSAC_{\uparrow}$	41.91	92.49	79.55	45.11	57.92	68.24	57.09	52.57	68.01	79.00	66.52	55.94	56.75	49.43	8.25	16.99	27.44	17.56	12.43	24.35	37.14	24.64
$+MAGSAC_{\downarrow}$	47.24	93.28	72.74	46.09	58.84	69.66	58.20	51.70	66.98	78.18	65.62	61.16	56.64	42.50	8.54	17.49	27.75	17.92	12.39	23.77	36.36	24.17
+MOP _{2.0K} +MiHo+NCC	9.68	70.67	95.50	0.65	1.58	4.71	2.32	52.86	68.38	79.71	66.99	7.25	46.18	95.53	0.00	0.23	1.70	0.64	12.64	24.60	36.31	24.52
+MAGSAC↑	44.04	93.38	77.82	40.82	54.25	66.47	53.84	50.73	67.18	78.93	65.62	54.83	56.80	51.08	8.23	16.85	27.29	17.46	12.91	24.64	37.16	24.91
+MAGSAC↓	47.58	93.95	73.30	41.72	55.41	67.59	54.90	50.96	67.44	79.36	65.92	58.85	56.62	45.48	8.37	17.20	28.36	17.98	12.83	25.10	37.29	25.07
$+MOP_{0.5K}$	17.75	79.29	96.92	1.11	3.11	8.18	4.13	53.21	68.71	79.66	67.19	14.43	48.90	91.50	0.13	0.33	2.25	0.90	11.78	23.21	35.23	23.41
$+MAGSAC_{\uparrow}$	42.34	93.47	79.44	46.26	59.18	70.46	58.63	53.27	69.05	80.01	67.44	56.39	57.22	49.31	8.57	17.52	27.97	18.02	12.14	23.71	36.25	24.03
$+MAGSAC_{\downarrow}$	47.53	94.11	72.72	47.21	60.42	71.67	59.77	53.39	68.67	79.80	67.28	61.63	56.82	42.33	8.46	17.36	27.74	17.85	12.50	24.08	36.51	24.37
$+MOP_{0.5K}+NCC$	17.75	75.81	92.68	1.06	3.09	8.18	4.11	51.48	67.57	79.17	66.08	14.43	47.99	90.99	0.13	0.35	2.26	0.91	12.08	24.39	37.10	24.52
$+MAGSAC_{\uparrow}$	44.61	93.64	76.59	41.44	54.76	66.91	54.37	50.27	66.51	78.41	65.06	55.12	57.69	51.68	8.28	17.15	27.22	17.55	12.88	25.37	38.32	25.52
$+MAGSAC_{\downarrow}$	48.02	94.20	72.24	43.90	57.21	69.17	56.76	51.16	67.23	78.83	65.74	59.05	57.59	46.34	8.90	17.70	28.36	18.32	13.31	26.10	38.51	25.97
$+ \begin{aligned} & + MOP_{1.0K} \\ & + MAGSAC_{\uparrow} \\ & + MAGSAC_{\downarrow} \end{aligned}$	17.04	78.80	97.21	0.97	2.22	6.98	3.39	54.61	69.95	80.20	68.25	13.72	48.81	92.62	0.20	0.57	2.75	1.17	12.10	23.23	34.96	23.43
	42.22	93.41	79.61	46.25	59.38	70.20	58.61	53.29	68.71	79.13	67.04	56.30	57.17	49.31	8.47	17.29	27.77	17.85	12.17	23.27	35.96	23.80
	47.42	94.03	72.83	47.26	60.39	71.24	59.63	54.35	68.95	79.65	67.65	61.46	56.86	42.40	8.54	17.55	27.78	17.95	12.57	23.92	36.15	24.21
$+MOP_{1.0K}+NCC$ $+MAGSAC_{\uparrow}$ $+MAGSAC_{\downarrow}$	17.04 44.50 47.91	75.42 93.86 94.37	93.01 76.96 72.57	1.03 42.74 43.03	2.46 55.41 56.11	7.01 66.96 68.07	3.50 55.04 55.74	52.06 51.07 50.83	67.84 67.18 67.21	79.51 78.91 79.20	66.47 65.72 65.75	13.72 55.05 59.06	47.89 57.92 57.75	92.28 51.91 46.50	9.08 9.17	0.57 18.29 18.15	2.75 28.83 29.22	1.18 18.73 18.85	12.97 13.34 12.64	25.11 26.27 25.45	37.56 39.81 39.02	25.21 26.47 25.70
$\begin{aligned} &+ \mathbf{MOP}_{1.5K} \\ &+ \mathbf{MAGSAC}_{\uparrow} \\ &+ \mathbf{MAGSAC}_{\downarrow} \end{aligned}$	16.65	78.47	97.39	0.81	2.25	7.23	3.43	53.36	68.63	79.69	67.23	13.56	48.73	92.73	0.13	0.44	2.27	0.95	11.67	23.25	35.06	23.33
	42.24	93.22	79.43	45.55	58.65	69.64	57.95	52.51	68.39	79.48	66.79	56.35	57.07	49.28	8.30	17.17	27.54	17.67	11.66	23.84	36.51	24.01
	47.41	93.98	72.83	47.48	60.40	71.05	59.64	51.19	67.29	78.90	65.79	61.47	56.83	42.49	8.36	17.22	27.62	17.73	13.42	24.63	36.93	25.00
$+MOP_{1.5K}+NCC$	16.65	75.13	93.22	0.89	2.32	7.03	3.41	54.26	69.53	80.21	68.00	13.56	47.81	91.91	0.14	0.45	2.27	0.95	13.13	25.32	37.47	25.31
$+MAGSAC_{\uparrow}$	44.45	93.73	77.03	42.00	55.27	67.86	55.04	49.87	66.09	78.26	64.74	54.95	57.68	51.76	8.66	18.30	29.25	18.74	13.60	26.46	39.47	26.51
$+MAGSAC_{\downarrow}$	47.91	94.22	72.53	43.87	57.19	69.23	56.76	49.24	65.83	78.56	64.55	58.96	57.34	46.22	8.89	18.02	28.85	18.59	13.46	25.70	37.74	25.63
$+MOP_{2.0K}$	16.44	78.32	97.48	0.91	2.55	7.30	3.59	53.47	69.36	80.18	67.67	13.45	48.69	92.64	0.13	0.53	2.63	1.10	11.69	22.94	34.41	23.01
$+MAGSAC_{\uparrow}$	42.17	93.18	79.54	46.15	58.66	69.72	58.17	52.38	68.02	79.36	66.59	56.42	57.21	49.28	8.25	17.05	27.45	17.58	12.88	24.84	37.01	24.91
$+MAGSAC_{\downarrow}$	47.42	93.77	72.67	48.06	60.95	71.41	60.14	52.38	67.82	78.63	66.28	61.54	56.67	42.07	8.18	17.09	27.81	17.69	12.70	24.25	36.86	24.60
$\begin{array}{l} + \text{MOP}_{2.0K} + \text{NCC} \\ + \text{MAGSAC}_{\uparrow} \\ + \text{MAGSAC}_{\downarrow} \end{array}$	16.44	75.04	93.38	0.85	2.35	7.11	3.44	52.64	68.29	79.73	66.89	13.45	47.74	91.83	0.13	0.53	2.67	1.11	12.20	23.92	36.53	24.21
	44.38	93.86	77.26	41.28	54.69	66.93	54.30	52.78	68.69	79.44	66.97	55.05	57.26	51.35	8.37	17.50	28.25	18.04	13.57	26.05	39.07	26.23
	47.80	94.49	72.97	42.33	56.47	69.23	56.01	49.68	66.37	78.66	64.90	58.99	57.25	46.05	9.10	18.33	29.03	18.82	13.33	26.14	38.65	26.04