Name	IR	sampling	Direct	Kappa	Boost	UWA	DWA	UDWA	UDWA_Enf	Random
					- IR(1-3)	_				
glass-1	1.82	no	0.8472	0.8212	0.8428	0.8556	0.8523	0.8289	0.8289	0.8212
			(17.58)	(13.98)	(16.80)	(17.60)	(13.48)	(21.06)	(21.06)	(26.18)
		rus	0.8472 (19.12)	0.8289 (16.60)	0.8486 $(17.30)$	0.8503 $(18.98)$	0.8567 $(14.76)$	0.8289 $(19.92)$	0.8289 (19.92)	0.8274 $(25.16)$
		smote	0.8535	0.8331	0.8499	0.8580	0.8605	0.8363	0.8363	0.8301
		Smore	(19.48)	(14.48)	(14.80)	(17.34)	(14.16)	(20.90)	(20.90)	(26.18)
ecoli-01	1.86	no	0.9901 $(8.78)$	0.9913 $(16.66)$	$0.9839 \ (5.92)$	0.9868 $(9.84)$	$0.9909 \ (10.20)$	$0.9845 \ (3.24)$	$0.9845 \ (3.24)$	0.9894 $(24.96)$
			0.9888	0.9903	0.9825	0.9875	0.9891	0.9827	0.9827	0.9884
		rus	(7.34)	(16.06)	(5.84)	(10.26)	(9.88)	(3.34)	(3.34)	(25.36)
		smote	$0.9906 \\ (9.18)$	0.9895 $(15.98)$	0.9826 $(4.68)$	0.9863 $(8.66)$	0.9901 $(10.08)$	0.9841 $(4.72)$	0.9841 $(4.72)$	0.9902 $(26.34)$
			0.7828	0.7736	0.7442	0.7757	0.7839	0.7010	0.6900	0.7708
yeast-1	2.46	no	(26.78)	(18.82)	(27.74)	(24.84)	(18.24)	(27.76)	(27.26)	(29.68)
		rus	0.7843	0.7749	0.7447	0.7746	0.7840	0.7017	0.6876	0.7712
			(27.36) $0.7847$	(21.36) 0.7720	(27.74) $0.7424$	(23.96) $0.7739$	(18.66) <b>0.7849</b>	(28.12) <b>0.7023</b>	(27.88) $0.6895$	(29.56) <b>0.7713</b>
		smote	(27.30)	(20.80)	(27.98)	(23.26)	(19.44)	(28.38)	(27.24)	(29.68)
				_	IR(8-12)	_				
yeast-3	8.11	no	0.9680	0.9646	0.9585	0.9654	0.9678	0.8863	0.8461	0.9656
	6.11	no	(21.96)	(24.54)	(27.32)	(26.34)	(22.86)	(24.44)	(22.98)	(29.78)
		rus	0.9675 $(22.12)$	$0.9659 \ (24.18)$	0.9568 $(26.90)$	$0.9670 \ (26.32)$	0.9672 (22.20)	0.9012 $(25.58)$	0.8557 (23.68)	$0.9668 \ (29.62)$
			0.9672	0.9651	0.9600	0.9662	0.9672	0.9034	0.8655	0.9655
		smote	(20.78)	(25.30)	(27.16)	(26.68)	(22.44)	(25.80)	(24.24)	(29.58)
ecoli-0675	10	no	0.9254	0.9262	0.9110	0.9306	0.9306	0.8847	0.8751	0.9294
			( <b>7.36</b> ) 0.9126	(16.16) <b>0.9294</b>	(13.32) 0.9030	(15.66) 0.9266	(9.54) 0.9259	(14.64) $0.9011$	(13.86) $0.8919$	( <b>24.76</b> ) 0.9257
		rus	(8.36)	(14.92)	(12.72)	(16.84)	(10.12)	(14.68)	(12.72)	(25.84)
		smote	0.9148	0.9176	0.9035	0.9304	0.9253	0.9017	0.8969	0.9292
			(7.22) $0.9258$	(16.24) <b>0.9322</b>	(11.22) 0.9134	(14.02) 0.9309	(9.54) $0.9301$	(15.70) 0.9125	(12.28) 0.9135	$   \begin{array}{r}                                     $
led7digit	10.97	no	(10.72)	(14.42)	(10.74)	(14.38)	(12.72)	(18.40)	(25.24)	(26.12)
		rus	0.9286	0.9311	0.9127	0.9232	0.9322	0.9149	0.9146	0.9314
			(10.96) 0.9285	(14.60) $0.9313$	(10.76) <b>0.9157</b>	(12.64) $0.9267$	(11.72) 0.9311	(18.88) 0.9144	( <b>24.44</b> ) 0.9112	(25.00) $0.9318$
		smote	(10.50)	(14.80)	(9.60)	(13.08)	(11.42)	(15.64)	(25.32)	(25.40)
				_	IR(30-40	) —				
yeast-21897	30.56	no	0.7698	0.7696	0.6700	0.7153	0.7610	0.6265	0.6172	0.7681
	90.00	110	(12.94)	(18.26)	(8.66)	(15.34)	(20.04)	(6.28)	(6.44)	(27.80)
		rus	0.7693 $(13.72)$	0.7711 (18.18)	$0.6798 \\ (9.14)$	0.7210 $(13.56)$	$0.7662 \\ (21.78)$	$0.6477 \ (5.96)$	$0.6406 \\ (5.48)$	0.7688 $(27.72)$
		smote	0.7655	0.7640	0.6619	0.7151	0.7613	0.6308	0.6213	0.7712
		Smote	(13.12)	(16.72)	(9.54)	(14.54)	(21.18)	(6.32)	(5.96)	(28.02)
yeast-5 yeast-6	32.78	no	0.7835 $(26.92)$	0.7737 $(20.32)$	$0.7455 \ (28.24)$	$0.7752 \ (25.18)$	0.7851 $(18.88)$	$0.7008 \ (28.34)$	0.6810 $(27.50)$	0.7705 $(29.62)$
			0.7839	0.7732	0.7436	0.7738	0.7854	0.6977	0.6906	0.7705
		rus	(26.52)	(19.62)	(27.78)	(23.94)	(19.14)	(28.70)	(28.68)	(29.56)
		smote	0.7817	0.7743	0.7418	0.7744	0.7839	(28.26)	0.6865	0.7705
			(26.98) $0.9139$	$\frac{(19.92)}{0.9228}$	$\frac{(26.90)}{0.7652}$	$\frac{(23.54)}{0.8792}$	(18.80) 0.9102	(28.26)	(27.88) 0.5860	(29.76) 0.9202
	39.15	no	(15.20)	(22.72)	(10.92)	(20.44)	(22.98)	(6.96)	(6.00)	(29.00)
		rus	0.9125	0.9223	0.7659	0.8796	0.9099	0.6376	0.6118	0.9184
			(15.04) <b>0.9163</b>	(24.42) $0.9226$	(13.44) <b>0.8046</b>	(20.30) <b>0.8829</b>	(21.90) <b>0.9118</b>	(7.82) 0.6125	( <b>7.20</b> ) 0.6026	(28.96) <b>0.9214</b>
		smote	(14.34)	(22.90)	(12.98)	(20.24)	(22.92)	(5.86)	(5.18)	(28.94)
				_	- IR(100-)	_				
abalone-19	128.87	no	0.8049	0.7818	0.7555	0.7598	0.7603	0.7555	0.7555	0.7660
	120.01	110	(9.34)	(12.50)	(1.08)	(2.02)	(15.18)	(1.42)	(1.42)	(12.96)
		rus	0.7938 $(8.74)$	0.7903 $(14.28)$	$0.7647 \\ (1.02)$	0.7727 $(1.86)$	$0.7664 \ (16.36)$	$0.7647 \\ (1.02)$	$0.7647 \ (1.02)$	0.7681 $(16.14)$
			0.7934	0.7952	0.7516	0.7544	0.7472	0.7516	0.7516	0.7697
		smote	(8.90)	(13.84)	(1.02)	(1.62)	(13.88)	(1.52)	(1.52)	(14.30)