	10% CS								
Dataset	PCCC	PCCC-N2-S	PCCC-N5-S	PCCC-N2-S-RD	COPKM	CSC	DILS	LCC	KMEANS
n500-k2	**0.1**	0.2	0.2	0.3	7.8	4.2	3,370.1	197.6	0.1
n500-k5	2.0	**0.8**	1.9	3.1	–	6.0	3,088.7	40.0	0.1
n500–k10	5.0	**0.6**	2.2	1.6	4.3	4.4	2,884.1	45.9	0.1
n500-k20	21.0	**1.1**	3.1	4.8	3.0	6.3	3,003.3	79.4	0.1
n500-k50	52.9	**1.0**	2.0	2.8	2.9	4.6	2,765.2	157.5	0.2
n500-k100	70.6	**0.7**	1.5	1.8	19.6	3.6	2,892.1	306.4	0.2
n1000-k2	**0.1**	**0.1**	**0.1**	0.3	201.5	24.6	3,649.8	2,158.6	0.2
n1000-k5	1.0	**0.6**	1.5	1.4	28.9	25.8	3,623.0	1,160.5	0.1
n1000-k10	14.6	**1.1**	4.6	3.0	–	27.6	3,629.8	299.7	0.2
n1000-k20	115.3	**1.9**	7.9	9.1	–	27.6	3,638.4	270.8	0.1
n1000-k50	281.7	**3.5**	7.5	8.2	7.7	27.5	3,645.3	381.8	0.4
n1000-k100	313.8	**1.6**	3.5	5.1	39.0	31.4	3,628.5	708.9	0.2
n2000-k2	**0.3**	**0.3**	**0.3**	0.4	3,742.6	238.8	3,701.4	35.8	0.3
n2000-k5	0.8	**0.5**	1.0	1.4	870.3	232.5	3,755.0	3,434.3	0.1
n2000-k10	14.4	**1.8**	6.2	4.3	–	218.2	3,656.9	3,792.7	0.3
n2000-k20	208.7	**3.1**	33.2	25.1	–	218.8	3,639.1	3,547.9	0.4
n2000-k50	747.1	**6.2**	19.0	24.1	35.2	222.8	3,661.9	1,238.0	0.3
n2000-k100	333.2	**6.2**	15.0	17.9	157.9	219.8	3,651.1	1,916.3	0.5
n5000-k2	**1.0**	1.1	1.1	1.2	–	2,832.7	3,763.4	–	0.4
n5000-k5	1.0	**0.9**	1.3	1.0	–	2,854.0	3,877.6	–	0.3
n5000-k10	4.7	**1.4**	2.5	3.3	–	2,682.4	3,888.9	–	0.4
n5000-k20	73.1	**3.1**	25.1	49.3	–	2,619.7	3,886.3	–	0.5
n5000-k50	813.4	**18.1**	207.9	67.0	–	2,663.6	4,056.7	4,121.8	0.5
n5000-k100	2,050.3	**12.0**	70.7	49.2	417.0	2,598.4	3,995.0	3,705.7	0.7
Sum	5,126.4	**68.0**	419.2	285.5	41,537.8*	17,795.1	85,351.6	41,999.4*	6.8

*Nan values (–) are replaced with 3,600 before computing the sum.

Table W97: Average running times (in seconds) of the versions of the PCCC algorithm and the four state-of-the-art algorithms (COPKM, CSC, DILS, LCC) for the constraint sets of size 10% CS. The lowest values are stated in bold. The column KMEANS reports the average running time of the unconstrained k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 3,600 seconds.