	15% CS								
Dataset	PCCC	PCCC-N2-S	PCCC-N5-S	PCCC-N2-S-RD	COPKM	CSC	DILS	LCC	KMEANS
n500-k2	**0.1**	**0.1**	**0.1**	0.2	27.1	2.9	3,616.4	8.7	0.1
n500-k5	1.5	**0.2**	0.6	0.5	4.3	3.1	3,623.7	256.4	0.1
n500–k10	5.9	**0.6**	2.0	1.6	–	2.8	3,557.5	95.7	0.3
n500-k20	46.2	**1.5**	4.5	10.8	9.1	3.5	3,549.5	119.9	0.1
n500-k50	98.8	**0.9**	2.3	4.7	9.3	4.1	3,530.5	220.3	0.2
n500-k100	127.6	**0.9**	1.5	3.5	10.2	3.5	3,529.4	390.7	0.2
n1000-k2	0.3	**0.1**	**0.1**	**0.1**	538.4	26.3	3,651.7	–	0.2
n1000-k5	0.4	**0.2**	0.5	0.3	125.4	23.0	3,648.1	1,564.4	0.1
n1000-k10	5.0	**0.6**	1.6	1.4	19.7	26.1	3,640.2	3,082.7	0.2
n1000-k20	93.7	**1.8**	16.1	33.9	–	27.9	3,631.4	1,068.1	0.3
n1000-k50	432.2	**3.2**	9.3	13.3	37.0	26.0	3,617.4	593.4	0.1
n1000-k100	318.7	**3.0**	5.6	10.4	40.8	27.6	3,638.6	993.7	0.2
n2000-k2	**0.5**	**0.5**	**0.5**	0.6	–	236.3	3,720.4	–	0.4
n2000-k5	0.5	**0.3**	0.5	0.5	2,432.7	234.7	3,713.4	515.0	0.3
n2000-k10	3.3	**0.6**	1.5	3.5	561.9	222.1	3,732.1	–	0.5
n2000-k20	46.2	**2.1**	7.8	20.8	116.6	232.1	3,715.0	4,564.0	0.4
n2000-k50	287.7	**5.7**	137.7	65.2	–	219.4	3,711.7	3,621.9	0.6
n2000-k100	662.8	**5.0**	27.3	28.9	161.0	222.5	3,804.0	3,621.1	0.4
n5000-k2	3.9	2.5	**2.3**	2.8	–	2,930.6	3,888.4	–	0.3
n5000-k5	4.3	2.2	2.2	**2.0**	–	2,927.7	4,376.8	–	0.3
n5000-k10	2.0	**1.9**	2.1	**1.9**	–	2,833.4	4,394.7	–	0.3
n5000-k20	19.1	**2.3**	5.4	10.3	6,542.6	2,671.3	4,293.2	–	0.3
n5000-k50	519.2	**6.5**	66.8	92.9	–	2,656.8	4,159.0	–	0.5
n5000-k100	3,180.5	**14.2**	514.6	321.8	–	2,646.7	4,268.2	4,494.3	0.7
Sum	5,860.5	**57.0**	812.9	631.9	43,036.1*	18,210.3	91,011.3	54,010.3*	7.1

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

Table W98: 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 15% 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.