

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

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

Table W88: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms 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.