

## Results for Li\_400 instances (PDPTW)

Keld Helsgaun, May 9, 2018

Instance	BKS	LKH-3	LKH-3 d	Gap (%)
LC1_4_1	7152.06	7152.040	7152.06	0.00
LC1_4_2	8007.79			
LC1_4_3	9252.95			
LC1_4_4	6451.68	6959.331	6959.34	7.87
LC1_4_5	7150.00	7149.979	7150.00	0.00
LC1_4_6	7154.02	7153.999	7154.02	0.00
LC1_4_7	7149.43	7149.418	7149.43	0.00
LC1_4_8	7111.16	7111.136	7111.16	0.00
LC1_4_9	7451.20	7451.179	7451.20	0.00
LC1_4_10	7325.01	7812.248	7812.26	6.65
LC2_4_1	4116.33	4116.317	4116.33	0.00
LC2_4_2	4144.29	4144.275	4144.29	0.00
LC2_4_3	4418.88	4414.379	<b>4414.39</b>	<b>-0.10</b>
LC2_4_4	3743.95	3743.955	3743.95	0.00
LC2_4_5	4030.63	4030.625	4030.63	0.00
LC2_4_6	3900.29	3900.274	3900.29	0.00
LC2_4_7	3962.51	3962.495	3962.51	0.00
LC2_4_8	3844.45	3844.443	3844.45	0.00
LC2_4_9	4188.93	4188.920	4188.93	0.00
LC2_4_10	3828.44	3828.427	3828.44	0.00
LR1_4_1	10639.75	10639.748	10639.75	0.00
LR1_4_2	9968.19			
LR1_4_3	9291.25			
LR1_4_4	6710.99			
LR1_4_5	11374.06			
LR1_4_6	9872.59			
LR1_4_7	8999.97			
LR1_4_8 *	5848.60 *	5848.590	5848.60	0.00
LR1_4_9	9862.65			
LR1_4_10	8364.66			
LR2_4_1	9726.88	9726.890	9726.88	0.00
LR2_4_2	9440.93	10336.758	10336.76	9.49
LR2_4_3	10658.64			
LR2_4_4	6403.06 *	6403.058	6403.06	0.00
LR2_4_5	10084.44			
LR2_4_6	9044.03			
LR2_4_7	6727.98 *	6727.972	6727.98	0.00
LR2_4_8	5303.74 *	5303.734	5303.74	0.00
LR2_4_9	7930.55	7930.549	7930.55	0.00
LR2_4_10	7807.23 *	7807.239	7807.23	0.00
LRC1_4_1	9124.52	9152.569	9152.58	0.31

LRC1_4_2	8346.06			
LRC1_4_3	7856.72			
LRC1_4_4	5806.20	5812.077	5812.08	0.10
LRC1_4_5	8867.38			
LRC1_4_6	8396.08			
LRC1_4_7	8037.87			
LRC1_4_8	8173.63			
LRC1_4_9	8181.32			
LRC1_4_10	7222.97			
LRC2_4_1	7454.14	7454.135	7454.14	0.00
LRC2_4_2	7424.72	7690.473	7690.48	3.58
LRC2_4_3	6576.48	6527.932	<b>6527.95</b>	<b>-0.74</b>
LRC2_4_4	5300.42 *	5300.419	5300.42	0.00
LRC2_4_5	7462.66	7828.649	7828.66	4.90
LRC2_4_6	6337.08	6339.460	6339.46	0.04
LRC2_4_7	6322.35 *	6322.347	6322.35	0.00
LRC2_4_8	5778.36 *	5778.349	5778.36	0.00
LRC2_4_9	6529.63 *	6529.622	6529.63	0.00
LRC2_4_10	5551.07 *	5551.073	5551.07	0.00

\* New best-known solution found by LKH-3