

Instance Name	Benchmark	Category	#var	#cons	Objective	Previous best	<i>LS-IQCQP</i>
QPLIB_2036	QPLIB	QCQP	324	324	Minimize	-30590	-30660 ¹
QPLIB_2096	QPLIB	QCQP	300	6925	Minimize	7068000	7064664 ²
chimera_mgw-c16-2031-01	MINLPLIB	QUBO	2032	0	Maximize	1993	2006 ³
chimera_mgwc16203102	MINLPLIB	QUBO	2032	0	Maximize	1996	2004 ⁴
chimera_selbyc1601	MINLPLIB	QUBO	2031	0	Maximize	739.4	741.1 ⁵
chimera_selbyc1602	MINLPLIB	QUBO	2031	0	Maximize	733.9	738.1 ⁶

Table 1 LS-IQCQP sets new records for 6 open instances. #var and #cons denote the number of variables and constraints. Minimize refers to a minimization problem, while Maximize refers to a maximization.

Endnotes

¹<https://qplib.zib.de/index.html>, <https://minlplib.org/sonet25v6.p3.html>

²<https://qplib.zib.de/index.html>, <https://minlplib.org/sonet25v5.p2.html>

³https://minlplib.org/chimera_mgw-c16-2031-01.p5.html

⁴https://minlplib.org/chimera_mgw-c16-2031-02.p4.html

⁵https://minlplib.org/chimera_selby-c16-01.p6.html

⁶https://minlplib.org/chimera_mgw-c16-2031-02.p4.html