

Table C.1: Number of iterations  $l$  until termination, 2-norm of the gradient vector at termination, and place finishes for number of iterations, tolerance =  $10^{-12}$ .

Function	Problem	Size	$l$	$\ \nabla F(x_l)\ _2$	Rank	Ratio
ARGAUS	ARGAUS	3	3	2.47E-16	1	1
ARGQDN	ARGQDN50	5	2	0.00E+00	1	1
ARTRIG	ARTRIG10	10	11	7.45E-12	2	1.11
AVRIEL	AVRIEL3	2	2	4.44E-16	1	1
BARD70	BARD70	3	12	4.98E-16	2	1.14
BEAL58	BEAL58KO	2	11	2.90E-15	2	1.12
BOOTH	BOOTH	2	2	3.55E-15	1	1
BOX66	BOX662HL	2	13	1.33E-16	2	1.38
BRKMCC	BRKMCC	2	4	4.22E-15	1	1
BROWND	BROWND	4	9	3.45E-11	2	1.14
BROY7D	BROY7D	60	28	2.22E-10	3	2.45
BRWNAL	BRWNL100	100	6	1.09E-11	1	1
BRYBND	BRYBND18	100	8	1.39E-12	1	1
CLUSTR	CLUSTR	2	14	3.00E-18	2	1.5
CRGLVY	CRGLY500	500	17	2.65E-14	1	1
DIXON	DIXON	10	2	0.00E+00	1	1
EXTRSN	EXTRA100	100	25	0.00E+00	2	1.05
FRDRTH	FRDRTHB3	50	7	1.75E-12	1	1
GOTTFR	GOTTFR	2	20	1.17E-16	2	1.62
HILBRT	HILBRT12	12	5	2.06E-23	1	1
HIMM1	HIMM1	2	1	0.00E+00	1	1
HIMM25	HIMM25	2	1	0.00E+00	1	1
MANCIN	MANCIN50	50	4	5.36E-09	1	1
NONDIA	NONDIA20	20	26	8.66E-13	3	1.26
PENAL1	PEN1LN1	50	45	2.87E-17	1	1
PENAL1	PEN1LN2	100	45	5.04E-16	1	1
QUARTC	QUARTC	25	33	9.07E-13	1	1

SCHMVT	SCHMV500	500	4	4.51E-15	1	1
TDQUAD	TDQ500	500	2	9.86E-32	1	1
TOINT	PSPTOINT	50	12	5.61E-14	1	1
TRIDIA	TRLN100	100	2	6.86E-13	1	1
WATSON	WATSON6	6	16	9.56E-12	3	1.36
WOODS	WOODS	4	50	6.60E-14	3	1.3
WOODS	WOODS80	80	47	3.18E-13	2	1.22
XTX	XTX16	16	2	1.41E-31	1	1
XTX	XTX2	2	2	4.97E-32	1	1
ZANGWL	ZANGWL1	3	2	4.19E-29	1	1