

Table 1: IGD, Mean and standard deviation

Obj.	problem	HHCOR2	HHCORandom	HHCOR2LPNORM	HHCORandomLPNORM	HHCOR2MINMAX	HHCORandomMINMAX	HHLA
5	MaF01	9.62E-4	9.95E-4	1.2E-3	1.22E-3	1.23E-3	1.26E-3	1.34E-3
	MaF02	5.01E-3	5.26E-3	6.68E-3	6.94E-3	6.87E-3	6.86E-3	1.08E-2
	MaF03	6.07E-1	4.67E-4	2.81E2	7.81E-4	6.1E-1	9.93E-4	6.3E5
	MaF04	1.36E-2	1.39E-2	1.86E-2	1.88E-2	1.92E-2	1.98E-2	1.83E-1
	MaF05	1.36E-2	1.35E-2	1.93E-2	1.92E-2	2.21E-2	1.98E-2	2.76E-2
	MaF06	1.45E-5	1.5E-5	4.25E-5	4.45E-5	3.9E-5	3.76E-5	6.08E-4
	MaF07	1.61E-3	1.72E-3	2.31E-3	2.37E-3	2.37E-3	2.49E-3	4.29E-3
	MaF08	7.14E-4	7.01E-4	1.07E-3	1.08E-3	1.24E-3	1.13E-3	2.77E-3
	MaF09	7.51E-4	7.59E-4	1.1E-3	1.14E-3	1.29E-3	1.24E-3	1.35E-3
	MaF10	8.02E-3	5.43E-3	8.43E-3	5.94E-3	9.11E-3	6.31E-3	1.71E-2
	MaF11	5.76E-3	5.38E-3	9.64E-3	8.68E-3	7.32E-3	6.67E-3	4.56E-2
	MaF12	7.08E-3	7.11E-3	1.03E-2	1.03E-2	1.08E-2	1.04E-2	1.38E-2
	MaF13	7.55E-4	6.14E-4	8.84E-4	7.79E-4	9.93E-4	8.86E-4	2.25E-3
	MaF14	4.71E-3	5.27E-3	6.4E-3	5.98E-3	5.6E-3	6.04E-3	5.9E-3
	MaF15	4.23E-3	2.36E-3	9.79E-3	5.99E-3	4.7E-3	5.53E-3	8.48E-3
10	MaF01	2.18E-3	2.24E-3	2.7E-3	2.75E-3	2.66E-3	2.82E-3	3.35E-3
	MaF02	1.57E-3	1.59E-3	1.98E-3	1.99E-3	1.96E-3	1.98E-3	4.14E-3
	MaF03	9.5E-1	8.47E-4	1.73E3	2.64E2	1.24E0	1.85E-3	2.64E6
	MaF04	5.08E-1	5.33E-1	6.78E-1	6.93E-1	6.86E-1	7.09E-1	9.06E0
	MaF05	5.81E-1	5.65E-1	9.62E-1	9.39E-1	1.45E0	1.21E0	1.45E0
	MaF06	8.56E-3	1.18E-4	1.45E-2	3.49E-3	8.65E-3	1.01E-3	1.53E-2
	MaF07	4.16E-3	4.32E-3	6.46E-3	6.47E-3	6.48E-3	6.61E-3	2.93E-2
	MaF08	9.1E-4	8.98E-4	1.3E-3	1.3E-3	1.43E-3	1.39E-3	1.1E-2
	MaF09	1.58E-3	1.19E-3	1.79E-2	1.33E-2	7.43E-3	1.46E-3	9.28E-3
	MaF10	1.72E-2	1.37E-2	1.87E-2	1.51E-2	1.94E-2	1.59E-2	3.62E-2
	MaF11	1.15E-2	1.06E-2	2.57E-2	2.41E-2	1.69E-2	1.58E-2	1.29E-1
	MaF12	3.85E-2	3.91E-2	5.09E-2	5.26E-2	5.15E-2	5.09E-2	6.14E-2
	MaF13	8.45E-4	8.33E-4	1.03E-3	1.01E-3	1.16E-3	1.16E-3	3.01E-3
	MaF14	7.88E-3	7.42E-3	1.06E-2	1.12E-2	8.36E-3	8.39E-3	1.32E-1
	MaF15	6.26E-3	5.89E-3	5.13E-2	1.64E-2	9.56E-3	1.16E-2	1.23E-1
15	MaF01	3.13E-3	3.4E-3	3.89E-3	4.02E-3	4.11E-3	4.36E-3	4.86E-3
	MaF02	2.15E-3	2.18E-3	2.54E-3	2.57E-3	2.76E-3	2.82E-3	5.18E-3
	MaF03	8.03E-2	1.26E-3	1.13E-1	2.58E-3	8.29E-2	2.48E-3	2.41E5
	MaF04	1.99E1	2.16E1	2.63E1	2.82E1	2.65E1	2.79E1	4.35E2
	MaF05	2.09E1	2.08E1	3.68E1	3.49E1	5.02E1	5.03E1	5.44E1
	MaF06	3.95E-3	2.02E-4	1.21E-2	4.1E-3	4.55E-3	5.65E-3	3.59E-1
	MaF07	1.07E-2	1.1E-2	1.29E-2	1.28E-2	1.34E-2	1.34E-2	4.95E-2
	MaF08	2.11E0	2.42E0	2.11E0	2.42E0	2.11E0	2.42E0	3.2E0
	MaF09	1.77E-3	1.78E-3	2.68E-3	2.52E-3	3.04E-3	2.8E-3	9.97E-3
	MaF10	2.18E-2	2.17E-2	2.64E-2	2.73E-2	2.68E-2	2.69E-2	5.5E-2
	MaF11	3.58E-3	2.66E-3	7.57E-2	7.29E-2	3.27E-2	3.36E-2	1.91E-1
	MaF12	8.74E-2	9.08E-2	1.16E-1	1.18E-1	1.13E-1	1.13E-1	1.27E-1
	MaF13	1.22E-3	1.21E-3	1.71E-3	1.68E-3	1.97E-3	2.13E-3	4.49E-3
	MaF14	1.23E-2	1.14E-2	1.42E-2	1.27E-2	1.37E-2	1.3E-2	1.51E-1
	MaF15	1.05E-2	8.46E-3	6.54E-2	1.96E-2	1.54E-2	1.38E-2	2.77E-1