G	algorithm	$\min \Phi(S)$	$E[\Phi(S)]$	success rate
$Celeg$20160114	LS[1]	0.1360744	0.15048384	1 / 100
	ALS[1]	0.08558559	0.13292784	1 / 100
	ARLS[1,2]	0.13139222	0.14561728	1 / 100
	AGA-1PX	0.13117964	0.15636037	1 / 100
	AGA-UX	0.1341165	0.15054743	1 / 100
	StS AMA	**0.01226994**	**0.03331431**	29 / 100
$Dmela$20160114	LS[1]	0.30524601	0.32650744	1 / 100
	ALS[1]	0.21733168	0.23160832	1 / 100
	ARLS[1,2]	0.23824626	0.25221482	2 / 100
	AGA-1PX	0.38336905	0.38964162	1 / 100
	AGA-UX	0.32978997	0.33968028	1 / 100
	StS AMA*	**0.1559633**	**0.18935739**	1 / 100
$Ecoli$20160114	LS[1]	0.44194299	0.46075783	1 / 100
	ALS[1]	0.35021218	0.38262331	1 / 100
	ARLS[1,2]	0.31840414	0.32633622	1 / 100
	AGA-1PX	0.36671548	0.40512006	1 / 100
	AGA-UX	0.34065565	0.36573979	1 / 100
	StS AMA	**0.06060606**	**0.30657497**	1 / 100
$Hpylo$20160114	LS[1]	0.16543575	0.1878742	1 / 100
	ALS[1]	0.16543575	0.18784113	1 / 100
	ARLS[1,2]	0.17282127	0.1934479	1 / 100
	AGA-1PX	0.17429838	0.2037738	1 / 100
	AGA-UX	0.17429838	0.20141001	1 / 100
	StS AMA	**0.14899926**	**0.15361405**	1 / 100
$Hsapi$20160114	LS[1]	0.08230694	0.08867847	1 / 100
	ALS[1]	0.06979472	0.08627573	1 / 100
	ARLS[1,2]	0.07009483	0.08051043	1 / 100
	AGA-1PX	0.10188901	0.12269489	1 / 100
	AGA-UX	0.08241275	0.10327176	1 / 100
	StS AMA	**0.05024438**	**0.05558534**	1 / 100
$Mmusc$20160114	LS[1]	0.03706222	0.04354185	1 / 100
	ALS[1]	0.03441296	0.04331399	1 / 100
	ARLS[1,2]	0.03726083	0.04940749	1 / 100
	AGA-1PX	0.04620573	0.06044643	1 / 100
	AGA-UX	0.04432505	0.0587076	1 / 100
	StS AMA	**0.01428571**	**0.02361266**	1 / 100
$Rnorv$20160114	LS[1]	**0.00671141**	**0.00671141**	100 / 100
	ALS[1]	**0.00671141**	**0.00671141**	100 / 100
	ARLS[1,2]	**0.00671141**	0.0120047	34 / 100
	AGA-1PX	**0.00671141**	0.01036659	38 / 100
	AGA-UX	**0.00671141**	0.01179875	22 / 100
	StS AMA	**0.00671141**	**0.00671141**	100 / 100
$Scere$20160114	LS[1]	0.45503758	0.47404224	1 / 100
	ALS[1]	0.23874941	0.24093083	1 / 100
	ARLS[1,2]	0.23873166	0.24034586	1 / 100
	AGA-1PX	0.44679302	0.46746535	1 / 100
	AGA-UX	0.34502747	0.37700811	1 / 100
	StS AMA*	**0.23821699**	**0.23907947**	1 / 100

* For these instances, a run of StS AMA took more than 1 minute due to the initial population sampling already taking more than 1 minute.