Input	Var	Cons	Length	FAT w. Length Result	FAT w. Length Time(s)	FAT w.o Length Result	FAT w.o Length Times(s)	HAMPI Result	HAMPI Time (s)
grammar01.smt2	6	7	20	sat	1.14	sat	1.24	sat	0.52
grammar02.smt2	6	7	20	unsat	1.02	unsat	1.11	unsat	0.20
grammar03.smt2	8	10	50	sat	1.01	sat	1.45	sat	9.34
grammar04.smt2	8	10	50	unsat	1.56	unsat	1.54	unsat	9.33
grammar05.smt2	10	14	70	sat	1.55	sat	2.00	-	timeout
grammar06.smt2	10	14	70	unsat	2.01	unsat	1.12	-	timeout
grammar07.smt2	14	20	50	sat	2.13	sat	3.36	-	crashed
grammar08.smt2	14	20	50	unsat	1.56	unsat	2.58	-	crashed
grammar09.smt2	20	26	70	sat	1.78	sat	2.27	-	crashed
grammar10.smt2	20	26	70	unsat	2.46	unsat	1.89	-	crashed
grammar11.smt2	8	10	25	sat	1.11	sat	1.45	sat	1.60
grammar12.smt2	8	10	30	sat	1.94	sat	1.45	sat	1.83
grammar13.smt2	8	10	35	sat	1.56	sat	1.45	sat	2.21
grammar14.smt2	8	10	40	sat	2.11	sat	1.45	sat	2.81
grammar15.smt2	8	10	45	sat	1.35	sat	1.45	sat	6.86

Table 1: Performance of FAT in comparison to HAMPI on the CFG suites. Each row corresponds to a test, test descriptions and results of both solvers. The column *Var* gives the number of variables in the test in SMT format. The column *Cons* gives the number of constraints. The column *Length* gives the bounded length of string variable to assist HAMPI. The columns *Result* give answers of solvers: "*(un)sat*" means it is (im)possible to find values of variables to satisfy the constraints. "-" denotes that a solver cannot finish the test. The columns *Time* give running time of solvers if they return results.

	0-1s	1-5s	5-10s	10-20s	timeout
CVC4	44562	76	65	113	2468
Z3-str2	32765	13157	209	118	553
S3P	31321	13260	1265	1016	422
FAT	38710	7792	634	85	63

Table 2: Running time of FAT in comparison to CVC4, Z3-str2, and S3P on the Kaluza test suite. Columns "*0-1s*", "*1-5s*", "*5-10s*", and "*10-20s*", indicate the number of benchmarks that solvers can solve within the amount of time. Column "*timeout*" indicates the number of benchmarks that solvers cannot handle within 20 seconds.