

Numerical lower and upper bounds for the Eden Model in high dimension

We consider the Eden model on edges of \mathbb{Z}^d , *i.e.* first passage percolation in \mathbb{Z}^d with exponential passage times. Let μ_d be the time constant along the axis:

$$\mu(d) = \lim_{n \rightarrow +\infty} \frac{1}{n} T(\mathbf{0}, (n, 0, \dots, 0)).$$

Let $\mu_*(d)$ the time constant along the diagonal:

$$\mu_*(d) = \lim_{n \rightarrow +\infty} \frac{1}{n} T(\mathbf{0}, (n/\sqrt{d}, \dots, n/\sqrt{d})).$$

The Eden conjecture says that the limiting shape of the Eden model is a euclidian ball. In particular, one would have $\mu(d) = \mu_*(d)$.

The aim of this note is to explain why, as we claimed in [CEG11], the Eden conjecture is false for $d \geq 35$. When $d \geq 14000$, [CEG11] shows directly that $\mu(d) < \mu_*(d)$ (choose $\ell = 4$ in the proof of Theorem 1).

For "small" d , we now give below numerical bounds for $33 \leq d \leq 400$. They are computed with the companion python computer code `NumericalConstantsEdenModel.py`; this code can also give the values for $401 \leq d \leq 14000$.

We use the results of

- [Dhar88] D.Dhar. First passage percolation in many dimensions. *Physics Letters A*, vol.130 n.4-5 (1988)
- [CEG11] O.Couronné, N.Enriquez, L.Gerin. Construction of a short path in high dimensional first passage percolation. *Electronic Communications in Probability*, vol.16 (2011) p.22-28.

More precisely, the constants below are obtained as follows:

- For all d , the lower bound for $\mu_*(d)$ is given by eq.(2) in [CEG11].
- For $d \leq 55$, the upper bound for $\mu(d)$ is obtained with eq.(17) in [Dhar88].
- For $56 \leq d \leq 14000$, the upper bound for $\mu(d)$ is obtained with eq.(9) in [Dhar88].

d	upper bound for $\mu(d)$	lower bound for $\mu_*(d)$	Conclusion
33	0.0585170048278	0.0576823720775	?
34	0.0571505427728	0.0568277711728	?
35	0.0558601119292	0.0560100627694	Eden conjecture is false
36	0.0546402488683	0.0552266666667	Eden conjecture is false
37	0.0534884373061	0.0544752484335	Eden conjecture is false
38	0.0523977051617	0.0537536901059	Eden conjecture is false
39	0.0513672277029	0.0530600650449	Eden conjecture is false
40	0.0503880028235	0.0523926162737	Eden conjecture is false

41	0.0494595495354	0.0517497377394	Eden conjecture is false
42	0.0485795471343	0.0511299580434	Eden conjecture is false
43	0.0477441910456	0.0505319262654	Eden conjecture is false
44	0.0469513153809	0.0499543995696	Eden conjecture is false
45	0.0461982416697	0.049396232335	Eden conjecture is false
46	0.0454837250975	0.0488563665915	Eden conjecture is false
47	0.0448043735881	0.0483338235827	Eden conjecture is false
48	0.0441587211278	0.0478276962997	Eden conjecture is false
49	0.0435454631453	0.0473371428571	Eden conjecture is false
50	0.0429630182135	0.0468613806028	Eden conjecture is false
51	0.0424104060169	0.0463996808644	Eden conjecture is false
52	0.0418843789735	0.0459513642553	Eden conjecture is false
53	0.041384771375	0.04551579647	Eden conjecture is false
54	0.0409100502699	0.0450923845094	Eden conjecture is false
55	0.0404589987284	0.0446805732852	Eden conjecture is false
56	0.0437772740803	0.0442798425601	Eden conjecture is false
57	0.0431472390725	0.0438897041837	Eden conjecture is false
58	0.0425369762433	0.0435096995924	Eden conjecture is false
59	0.0419453454799	0.0431393975426	Eden conjecture is false
60	0.0413713722385	0.0427783920533	Eden conjecture is false
61	0.0408142217363	0.0424263005346	Eden conjecture is false
62	0.0402733456825	0.0420827620828	Eden conjecture is false
63	0.0397479608864	0.0417474359254	Eden conjecture is false
64	0.0392374277683	0.04142	Eden conjecture is false
65	0.0387409609378	0.0411001496535	Eden conjecture is false
66	0.0382581403183	0.0407875964509	Eden conjecture is false
67	0.0377883168875	0.0404820670819	Eden conjecture is false
68	0.03733109197	0.040183302356	Eden conjecture is false
69	0.0368857179362	0.0398910562785	Eden conjecture is false
70	0.0364519094986	0.0396050951989	Eden conjecture is false
71	0.0360289980648	0.0393251970259	Eden conjecture is false
72	0.0356168852916	0.0390511505023	Eden conjecture is false
73	0.0352148210119	0.0387827545349	Eden conjecture is false
74	0.0348227105596	0.0385198175742	Eden conjecture is false
75	0.0344399637685	0.0382621570397	Eden conjecture is false
76	0.0340663247401	0.0380095987877	Eden conjecture is false
77	0.0337015258113	0.0377619766157	Eden conjecture is false
78	0.0333451613016	0.0375191318034	Eden conjecture is false
79	0.0329969345707	0.0372809126851	Eden conjecture is false
80	0.0326570257712	0.0370471742512	Eden conjecture is false
81	0.0323243213245	0.0368177777778	Eden conjecture is false
82	0.031998975548	0.0365925904802	Eden conjecture is false
83	0.0316807352242	0.0363714851902	Eden conjecture is false
84	0.031369348204	0.0361543400543	Eden conjecture is false

85	0.031064882491	0.0359410382514	Eden conjecture is false
86	0.0307686154992	0.0357314677287	Eden conjecture is false
87	0.0304765474117	0.0355255209544	Eden conjecture is false
88	0.0301905740802	0.0353230946858	Eden conjecture is false
89	0.029910486665	0.0351240897519	Eden conjecture is false
90	0.0296359349468	0.0349284108491	Eden conjecture is false
91	0.0293668695043	0.0347359663496	Eden conjecture is false
92	0.0291031188553	0.034546668121	Eden conjecture is false
93	0.0288445618514	0.0343604313566	Eden conjecture is false
94	0.0285910064127	0.034177174416	Eden conjecture is false
95	0.0283422839897	0.0339968186747	Eden conjecture is false
96	0.0280983173569	0.033819288382	Eden conjecture is false
97	0.0278589080601	0.0336445105279	Eden conjecture is false
98	0.0276239723036	0.0334724147163	Eden conjecture is false
99	0.0273934239671	0.0333029330464	Eden conjecture is false
100	0.0271670265407	0.033136	Eden conjecture is false
101	0.0269447278503	0.0329715523348	Eden conjecture is false
102	0.0267264139094	0.0328095289841	Eden conjecture is false
103	0.026512019298	0.0326498709613	Eden conjecture is false
104	0.0263013110854	0.0324925212697	Eden conjecture is false
105	0.0260943624765	0.0323374248172	Eden conjecture is false
106	0.0258909063418	0.0321845283351	Eden conjecture is false
107	0.025690951121	0.032033780301	Eden conjecture is false
108	0.0254943665556	0.0318851308664	Eden conjecture is false
109	0.0253010755846	0.0317385317871	Eden conjecture is false
110	0.0251114826733	0.0315939363572	Eden conjecture is false
111	0.024924531334	0.0314512993473	Eden conjecture is false
112	0.0247406681782	0.0313105769441	Eden conjecture is false
113	0.0245597855276	0.0311717266948	Eden conjecture is false
114	0.024381810404	0.0310347074526	Eden conjecture is false
115	0.0242066770993	0.0308994793259	Eden conjecture is false
116	0.024034298702	0.0307660036292	Eden conjecture is false
117	0.0238647391497	0.0306342428369	Eden conjecture is false
118	0.0236977102448	0.0305041605387	Eden conjecture is false
119	0.0235332396672	0.0303757213975	Eden conjecture is false
120	0.0233713144024	0.0302488911092	Eden conjecture is false
121	0.0232118338346	0.0301236363636	Eden conjecture is false
122	0.0230547516948	0.0299999248086	Eden conjecture is false
123	0.0229000162012	0.0298777250143	Eden conjecture is false
124	0.0227475785716	0.0297570064398	Eden conjecture is false
125	0.0225974662821	0.029637739401	Eden conjecture is false
126	0.0224494864023	0.02951989504	Eden conjecture is false
127	0.0223036307298	0.029403445296	Eden conjecture is false
128	0.0221600934351	0.0292883628767	Eden conjecture is false

129	0.0220183892761	0.029174621232	Eden conjecture is false
130	0.0218786915101	0.0290621945278	Eden conjecture is false
131	0.0217409622172	0.0289510576215	Eden conjecture is false
132	0.0216051546145	0.0288411860387	Eden conjecture is false
133	0.0214712423203	0.0287325559502	Eden conjecture is false
134	0.0213391762719	0.0286251441501	Eden conjecture is false
135	0.021208902319	0.0285189280355	Eden conjecture is false
136	0.0210803965074	0.0284138855864	Eden conjecture is false
137	0.0209536474824	0.0283099953461	Eden conjecture is false
138	0.0208290736481	0.0282072364032	Eden conjecture is false
139	0.0207056550566	0.0281055883739	Eden conjecture is false
140	0.020583867221	0.0280050313847	Eden conjecture is false
141	0.0204636748372	0.0279055460565	Eden conjecture is false
142	0.0203450513835	0.0278071134885	Eden conjecture is false
143	0.0202280017231	0.0277097152436	Eden conjecture is false
144	0.0201124137776	0.0276133333333	Eden conjecture is false
145	0.0199983006527	0.0275179502043	Eden conjecture is false
146	0.0198856473229	0.0274235487247	Eden conjecture is false
147	0.0197744022006	0.0273301121712	Eden conjecture is false
148	0.0196645548279	0.0272376242168	Eden conjecture is false
149	0.0195560816801	0.0271460689183	Eden conjecture is false
150	0.0194489345688	0.0270554307056	Eden conjecture is false
151	0.0193431100655	0.0269656943698	Eden conjecture is false
152	0.0192385785812	0.0268768450529	Eden conjecture is false
153	0.0191353065008	0.0267888682373	Eden conjecture is false
154	0.0190332946826	0.0267017497359	Eden conjecture is false
155	0.0189324905	0.0266154756825	Eden conjecture is false
156	0.0188328889526	0.0265300325224	Eden conjecture is false
157	0.0187344788339	0.0264454070037	Eden conjecture is false
158	0.0186372106987	0.0263615861684	Eden conjecture is false
159	0.0185410836471	0.0262785573444	Eden conjecture is false
160	0.0184460698262	0.0261963081368	Eden conjecture is false
161	0.0183521541727	0.0261148264211	Eden conjecture is false
162	0.018259315583	0.0260341003349	Eden conjecture is false
163	0.0181675336659	0.0259541182708	Eden conjecture is false
164	0.0180767923694	0.0258748688697	Eden conjecture is false
165	0.0179870790819	0.0257963410137	Eden conjecture is false
166	0.0178983667079	0.0257185238198	Eden conjecture is false
167	0.0178106430156	0.0256414066333	Eden conjecture is false
168	0.0177239020985	0.0255649790217	Eden conjecture is false
169	0.0176381122037	0.0254892307692	Eden conjecture is false
170	0.0175532602105	0.0254141518704	Eden conjecture is false
171	0.0174693628983	0.0253397325251	Eden conjecture is false
172	0.017386348062	0.0252659631327	Eden conjecture is false

173	0.0173042236811	0.0251928342872	Eden conjecture is false
174	0.0172229796552	0.025120336772	Eden conjecture is false
175	0.0171426078231	0.0250484615553	Eden conjecture is false
176	0.0170630886012	0.0249771997848	Eden conjecture is false
177	0.0169844046949	0.0249065427839	Eden conjecture is false
178	0.0169065450609	0.0248364820466	Eden conjecture is false
179	0.0168294996592	0.0247670092334	Eden conjecture is false
180	0.0167532515429	0.0246981161675	Eden conjecture is false
181	0.0166777930662	0.02462979483	Eden conjecture is false
182	0.016603107364	0.0245620373569	Eden conjecture is false
183	0.0165291864885	0.0244948360344	Eden conjecture is false
184	0.016456026878	0.0244281832957	Eden conjecture is false
185	0.0163835931093	0.0243620717177	Eden conjecture is false
186	0.0163119066763	0.0242964940167	Eden conjecture is false
187	0.0162409207379	0.0242314430459	Eden conjecture is false
188	0.0161706407194	0.0241669117914	Eden conjecture is false
189	0.0161010574351	0.0241028933695	Eden conjecture is false
190	0.0160321631815	0.0240393810236	Eden conjecture is false
191	0.0159639424285	0.023976368121	Eden conjecture is false
192	0.0158963910348	0.0239138481498	Eden conjecture is false
193	0.015829490691	0.0238518147168	Eden conjecture is false
194	0.0157632410365	0.023790261544	Eden conjecture is false
195	0.0156976305908	0.0237291824662	Eden conjecture is false
196	0.0156326408679	0.0236685714286	Eden conjecture is false
197	0.0155682671563	0.023608422484	Eden conjecture is false
198	0.0155045082948	0.0235487297905	Eden conjecture is false
199	0.0154413451361	0.0234894876092	Eden conjecture is false
200	0.0153787758769	0.0234306903014	Eden conjecture is false
201	0.0153167896586	0.0233723323271	Eden conjecture is false
202	0.0152553789034	0.0233144082422	Eden conjecture is false
203	0.0151945373542	0.0232569126966	Eden conjecture is false
204	0.0151342548413	0.0231998404322	Eden conjecture is false
205	0.0150745302166	0.0231431862806	Eden conjecture is false
206	0.0150153449755	0.0230869451616	Eden conjecture is false
207	0.014956699316	0.0230311120807	Eden conjecture is false
208	0.0148985819852	0.0229756821276	Eden conjecture is false
209	0.0148409994202	0.0229206504747	Eden conjecture is false
210	0.014783922475	0.0228660123744	Eden conjecture is false
211	0.0147273517149	0.0228117631583	Eden conjecture is false
212	0.0146712821408	0.022757898235	Eden conjecture is false
213	0.0146157128518	0.0227044130888	Eden conjecture is false
214	0.0145606280752	0.0226513032779	Eden conjecture is false
215	0.0145060263953	0.0225985644327	Eden conjecture is false
216	0.0144518993545	0.0225461922547	Eden conjecture is false

217	0.0143982529558	0.0224941825147	Eden conjecture is false
218	0.0143450591272	0.0224425310516	Eden conjecture is false
219	0.0142923258982	0.0223912337706	Eden conjecture is false
220	0.0142400403618	0.0223402866426	Eden conjecture is false
221	0.0141882000232	0.0222896857019	Eden conjecture is false
222	0.0141368006656	0.0222394270456	Eden conjecture is false
223	0.014085834956	0.0221895068321	Eden conjecture is false
224	0.0140353082288	0.02213992128	Eden conjecture is false
225	0.0139851968108	0.0220906666667	Eden conjecture is false
226	0.013935503026	0.0220417393272	Eden conjecture is false
227	0.01388622152	0.0219931356532	Eden conjecture is false
228	0.0138373519754	0.0219448520919	Eden conjecture is false
229	0.0137888798861	0.0218968851447	Eden conjecture is false
230	0.0137408088525	0.0218492313664	Eden conjecture is false
231	0.0136931271148	0.0218018873642	Eden conjecture is false
232	0.0136458347541	0.0217548497962	Eden conjecture is false
233	0.0135989252629	0.021708115371	Eden conjecture is false
234	0.0135523933553	0.0216616808465	Eden conjecture is false
235	0.0135062355325	0.0216155430287	Eden conjecture is false
236	0.0134604535501	0.0215696987713	Eden conjecture is false
237	0.0134150316541	0.0215241449744	Eden conjecture is false
238	0.0133699692641	0.0214788785836	Eden conjecture is false
239	0.0133252680968	0.0214338965896	Eden conjecture is false
240	0.013280913497	0.0213891960267	Eden conjecture is false
241	0.0132369073683	0.0213447739724	Eden conjecture is false
242	0.0131932443391	0.0213006275467	Eden conjecture is false
243	0.0131499222191	0.021256753911	Eden conjecture is false
244	0.0131069349327	0.0212131502673	Eden conjecture is false
245	0.0130642795348	0.0211698138578	Eden conjecture is false
246	0.0130219521475	0.0211267419641	Eden conjecture is false
247	0.0129799508402	0.021083931906	Eden conjecture is false
248	0.0129382689461	0.0210413810414	Eden conjecture is false
249	0.0128969038966	0.0209990867654	Eden conjecture is false
250	0.0128558523319	0.0209570465095	Eden conjecture is false
251	0.0128151115038	0.020915257741	Eden conjecture is false
252	0.0127746754151	0.0208737179627	Eden conjecture is false
253	0.0127345458101	0.0208324247117	Eden conjecture is false
254	0.0126947112367	0.0207913755591	Eden conjecture is false
255	0.0126551735386	0.0207505681094	Eden conjecture is false
256	0.0126159278749	0.02071	Eden conjecture is false
257	0.0125769718367	0.0206696689004	Eden conjecture is false
258	0.0125383033496	0.0206295725117	Eden conjecture is false
259	0.0124999178869	0.0205897085662	Eden conjecture is false
260	0.0124618106504	0.0205500748267	Eden conjecture is false

261	0.0124239807549	0.0205106690861	Eden conjecture is false
262	0.012386424659	0.0204714891667	Eden conjecture is false
263	0.0123491395025	0.0204325329199	Eden conjecture is false
264	0.0123121225579	0.0203937982255	Eden conjecture is false
265	0.0122753705317	0.0203552829914	Eden conjecture is false
266	0.0122388803887	0.0203169851532	Eden conjecture is false
267	0.0122026498476	0.0202789026733	Eden conjecture is false
268	0.0121666771782	0.020241033541	Eden conjecture is false
269	0.0121309571695	0.0202033757715	Eden conjecture is false
270	0.0120954887382	0.0201659274061	Eden conjecture is false
271	0.0120602684797	0.0201286865112	Eden conjecture is false
272	0.0120252952963	0.020091651178	Eden conjecture is false
273	0.0119905651616	0.0200548195225	Eden conjecture is false
274	0.0119560753409	0.0200181896846	Eden conjecture is false
275	0.0119218281383	0.0199817598279	Eden conjecture is false
276	0.0118878120754	0.0199455281393	Eden conjecture is false
277	0.0118540302736	0.0199094928286	Eden conjecture is false
278	0.0118204785068	0.0198736521284	Eden conjecture is false
279	0.011787155772	0.0198380042932	Eden conjecture is false
280	0.0117540589112	0.0198025475995	Eden conjecture is false
281	0.011721186982	0.0197672803451	Eden conjecture is false
282	0.0116885358677	0.0197322008492	Eden conjecture is false
283	0.0116561040965	0.0196973074517	Eden conjecture is false
284	0.0116238901203	0.019662598513	Eden conjecture is false
285	0.0115918907857	0.0196280724134	Eden conjecture is false
286	0.0115601046508	0.0195937275535	Eden conjecture is false
287	0.011528530064	0.019559562353	Eden conjecture is false
288	0.0114971631115	0.0195255752512	Eden conjecture is false
289	0.0114660032808	0.0194917647059	Eden conjecture is false
290	0.0114350476879	0.0194581291938	Eden conjecture is false
291	0.0114042949141	0.01942466721	Eden conjecture is false
292	0.0113737431841	0.0193913772675	Eden conjecture is false
293	0.0113433909782	0.019358257897	Eden conjecture is false
294	0.0113132339952	0.0193253076469	Eden conjecture is false
295	0.011283271425	0.0192925250827	Eden conjecture is false
296	0.0112535016654	0.0192599087871	Eden conjecture is false
297	0.0112239233771	0.0192274573592	Eden conjecture is false
298	0.0111945355672	0.0191951694147	Eden conjecture is false
299	0.0111653348934	0.0191630435856	Eden conjecture is false
300	0.0111363193421	0.0191310785199	Eden conjecture is false
301	0.0111074903114	0.019099272881	Eden conjecture is false
302	0.0110788412223	0.0190676253483	Eden conjecture is false
303	0.0110503715483	0.0190361346161	Eden conjecture is false
304	0.0110220798346	0.0190047993938	Eden conjecture is false

305	0.0109939657187	0.0189736184058	Eden conjecture is false
306	0.0109660272051	0.0189425903909	Eden conjecture is false
307	0.010938261742	0.0189117141025	Eden conjecture is false
308	0.0109106678681	0.0188809883078	Eden conjecture is false
309	0.0108832449183	0.0188504117885	Eden conjecture is false
310	0.0108559918971	0.0188199833396	Eden conjecture is false
311	0.010828904965	0.01878970177	Eden conjecture is false
312	0.0108019840105	0.0187595659017	Eden conjecture is false
313	0.0107752272325	0.0187295745701	Eden conjecture is false
314	0.0107486344788	0.0186997266236	Eden conjecture is false
315	0.0107222021978	0.0186700209231	Eden conjecture is false
316	0.0106959290809	0.0186404563425	Eden conjecture is false
317	0.0106698139667	0.018611031768	Eden conjecture is false
318	0.0106438562427	0.018581746098	Eden conjecture is false
319	0.0106180540379	0.018552598243	Eden conjecture is false
320	0.0105924060379	0.0185235871256	Eden conjecture is false
321	0.0105669105934	0.01849471168	Eden conjecture is false
322	0.0105415661196	0.0184659708519	Eden conjecture is false
323	0.0105163715334	0.0184373635987	Eden conjecture is false
324	0.0104913278576	0.0184088888889	Eden conjecture is false
325	0.0104664290221	0.0183805457021	Eden conjecture is false
326	0.0104416763903	0.018352333029	Eden conjecture is false
327	0.010417068579	0.018324249871	Eden conjecture is false
328	0.0103926042419	0.0182962952401	Eden conjecture is false
329	0.0103682820723	0.018268468159	Eden conjecture is false
330	0.0103441008431	0.0182407676606	Eden conjecture is false
331	0.0103200595858	0.0182131927882	Eden conjecture is false
332	0.010296157056	0.0181857425951	Eden conjecture is false
333	0.0102723914841	0.0181584161445	Eden conjecture is false
334	0.0102487629021	0.0181312125095	Eden conjecture is false
335	0.0102252685978	0.018104130773	Eden conjecture is false
336	0.0102019082249	0.0180771700271	Eden conjecture is false
337	0.0101786804131	0.0180503293738	Eden conjecture is false
338	0.0101555841729	0.0180236079242	Eden conjecture is false
339	0.0101326186832	0.0179970047983	Eden conjecture is false
340	0.0101097821942	0.0179705191257	Eden conjecture is false
341	0.0100870740791	0.0179441500445	Eden conjecture is false
342	0.0100644935108	0.017917896702	Eden conjecture is false
343	0.0100420392118	0.0178917582538	Eden conjecture is false
344	0.0100197097478	0.0178657338643	Eden conjecture is false
345	0.0099975053991	0.0178398227066	Eden conjecture is false
346	0.00997542278869	0.0178140239618	Eden conjecture is false
347	0.00995346192933	0.0177883368194	Eden conjecture is false
348	0.00993162253553	0.0177627604772	Eden conjecture is false

349	0.00990990233545	0.0177372941408	Eden conjecture is false
350	0.00988830118582	0.017711937024	Eden conjecture is false
351	0.00986681808394	0.0176866883483	Eden conjecture is false
352	0.00984545209189	0.0176615473429	Eden conjecture is false
353	0.00982420207664	0.0176365132448	Eden conjecture is false
354	0.00980306718888	0.0176115852984	Eden conjecture is false
355	0.00978204646796	0.0175867627557	Eden conjecture is false
356	0.00976113927318	0.0175620448759	Eden conjecture is false
357	0.00974034405155	0.0175374309257	Eden conjecture is false
358	0.00971966051165	0.0175129201787	Eden conjecture is false
359	0.0096990874263	0.0174885119157	Eden conjecture is false
360	0.00967862401755	0.0174642054246	Eden conjecture is false
361	0.0096582693292	0.01744	Eden conjecture is false
362	0.00963802228301	0.0174158949436	Eden conjecture is false
363	0.00961788246718	0.0173918895635	Eden conjecture is false
364	0.00959784947327	0.0173679831748	Eden conjecture is false
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367	0.00953837750631	0.0172968512042	Eden conjecture is false
368	0.00951876053541	0.0172733340605	Eden conjecture is false
369	0.00949924548007	0.0172499125798	Eden conjecture is false
370	0.0094798315753	0.0172265861153	Eden conjecture is false
371	0.00946051826629	0.0172033540264	Eden conjecture is false
372	0.00944130493484	0.0171802156783	Eden conjecture is false
373	0.00942219078442	0.0171571704423	Eden conjecture is false
374	0.00940317539146	0.0171342176957	Eden conjecture is false
375	0.0093842564127	0.0171113568213	Eden conjecture is false
376	0.00936543434261	0.017088587208	Eden conjecture is false
377	0.00934670818409	0.0170659082502	Eden conjecture is false
378	0.00932807713139	0.0170433193478	Eden conjecture is false
379	0.00930954023007	0.0170208199065	Eden conjecture is false
380	0.00929109721956	0.0169984093373	Eden conjecture is false
381	0.00927274717797	0.0169760870568	Eden conjecture is false
382	0.00925449015792	0.0169538524866	Eden conjecture is false
383	0.00923632411249	0.0169317050539	Eden conjecture is false
384	0.00921824918902	0.016909644191	Eden conjecture is false
385	0.00920026495854	0.0168876693355	Eden conjecture is false
386	0.00918236994237	0.0168657799299	Eden conjecture is false
387	0.00916456365556	0.0168439754218	Eden conjecture is false
388	0.00914684580408	0.0168222552639	Eden conjecture is false
389	0.009129215461	0.0168006189138	Eden conjecture is false
390	0.0091116722432	0.0167790658338	Eden conjecture is false
391	0.00909421537747	0.0167575954913	Eden conjecture is false
392	0.00907684405471	0.0167362073581	Eden conjecture is false

393	0.00905955772836	0.0167149009111	Eden conjecture is false
394	0.00904235595714	0.0166936756315	Eden conjecture is false
395	0.0090252380764	0.0166725310054	Eden conjecture is false
396	0.00900820310937	0.0166514665232	Eden conjecture is false
397	0.00899125077828	0.0166304816799	Eden conjecture is false
398	0.00897438054635	0.016609575975	Eden conjecture is false
399	0.00895759154815	0.0165887489123	Eden conjecture is false