Rank-65617 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

$$X_1^3 + X_2^3 + X_3^3 + X_0^2 X_3 + X_0 X_1 X_2 = 0$$

(0, 1, 1, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(16) is 303112741

General information

Number of lines	0
Number of points	257
Number of singular points	1
Number of Eckardt points	0
Number of double points	0
Number of single points	0
Number of points off lines	257
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^{257}

Singular Points

The surface has 1 singular points:

$0 : P_{275} = \mathbf{P}(1, 0, 0, 1) = \mathbf{P}(1, 0, 0, 1)$

The 0 Lines

The lines and their Pluecker coordinates are:
Rank of lines: ( )
Rank of points on Klein quadric: ( )

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 0 Double points:
The double points on the surface are:

Single Points

The surface has 0 single points:
The single points on the surface are:

The single points on the surface are:

Points on surface but on no line

The surface has 257 points not on any line:
The points on the surface but not on lines are:

$0: P_0 = (1, 0, 0, 0)$

$1: P_{35} = (0, 1, 1, 0)$

$2: P_{59} = (8, 2, 1, 0)$

$3: P_{80} = (13, 3, 1, 0)$

$4: P_{98} = (15, 4, 1, 0)$

$5: P_{106} = (7, 5, 1, 0)$

$6: P_{124} = (9, 6, 1, 0)$

$7: P_{133} = (2, 7, 1, 0)$

$8: P_{159} = (12, 8, 1, 0)$

$9: P_{166} = (3, 9, 1, 0)$

$10: P_{179} = (0, 10, 1, 0)$

$11: P_{195} = (0, 11, 1, 0)$

$12: P_{215} = (4, 12, 1, 0)$

$13: P_{241} = (14, 13, 1, 0)$

$14: P_{248} = (5, 14, 1, 0)$

$15: P_{265} = (6, 15, 1, 0)$

$16: P_{275} = (1, 0, 0, 1)$

$17: P_{290} = (0, 1, 0, 1)$

$18: P_{310} = (4, 2, 0, 1)$

$19: P_{331} = (9, 3, 0, 1)$

$20: P_{347} = (9, 4, 0, 1)$

$21: P_{368} = (14, 5, 0, 1)$

$22: P_{372} = (2, 6, 0, 1)$

$23: P_{395} = (9, 7, 0, 1)$

$24: P_{404} = (2, 8, 0, 1)$

$25: P_{432} = (14, 9, 0, 1)$

$26: P_{434} = (0, 10, 0, 1)$

$27: P_{450} = (0, 11, 0, 1)$

$28: P_{480} = (14, 12, 0, 1)$

$29: P_{486} = (4, 13, 0, 1)$

$30: P_{500} = (2, 14, 0, 1)$

$31: P_{518} = (4, 15, 0, 1)$

$32: P_{530} = (0, 0, 1, 1)$

$33: P_{555} = (10, 1, 1, 1)$

$34: P_{556} = (11, 1, 1, 1)$

$35: P_{635} = (10, 6, 1, 1)$

$36: P_{637} = (12, 6, 1, 1)$

$37: P_{651} = (10, 7, 1, 1)$

$38: P_{654} = (13, 7, 1, 1)$

$39: P_{694} = (5, 10, 1, 1)$

$40: P_{704} = (15, 10, 1, 1)$

$41: P_{708} = (3, 11, 1, 1)$

$42: P_{713} = (8, 11, 1, 1)$

$43: P_{728} = (7, 12, 1, 1)$

$44: P_{732} = (11, 12, 1, 1)$

$45: P_{743} = (6, 13, 1, 1)$

$46: P_{748} = (11, 13, 1, 1)$

$47: P_{789} = (4, 0, 2, 1)$

$48: P_{826} = (9, 2, 2, 1)$

$49: P_{830} = (13, 2, 2, 1)$

$50: P_{856} = (7, 4, 2, 1)$

$51: P_{864} = (15, 4, 2, 1)$

$52: P_{869} = (4, 5, 2, 1)$

$53: P_{879} = (14, 5, 2, 1)$

$54: P_{930} = (1, 9, 2, 1)$

$55: P_{939} = (10, 9, 2, 1)$

$56: P_{951} = (6, 10, 2, 1)$

$57: P_{956} = (11, 10, 2, 1)$

$58: P_{989} = (12, 12, 2, 1)$

$59: P_{990} = (13, 12, 2, 1)$

$60: P_{1017} = (8, 14, 2, 1)$

$61: P_{1022} = (13, 14, 2, 1)$

$62: P_{1050} = (9, 0, 3, 1)$

$63: P_{1124} = (3, 5, 3, 1)$

$64: P_{1133} = (12, 5, 3, 1)$

$65: P_{1138} = (1, 6, 3, 1)$

$66: P_{1148} = (11, 6, 3, 1)$

$67: P_{1160} = (7, 7, 3, 1)$

$68: P_{1167} = (14, 7, 3, 1)$

$69: P_{1175} = (6, 8, 3, 1)$

$70: P_{1176} = (7, 8, 3, 1)$

$71: P_{1211} = (10, 10, 3, 1)$

$72: P_{1214} = (13, 10, 3, 1)$

$73: P_{1267} = (2, 14, 3, 1)$

$74: P_{1274} = (9, 14, 3, 1)$

$75: P_{1288} = (7, 15, 3, 1)$

$76: P_{1296} = (15, 15, 3, 1)$

$77: P_{1306} = (9, 0, 4, 1)$

$78: P_{1336} = (7, 2, 4, 1)$

$79: P_{1344} = (15, 2, 4, 1)$

$80: P_{1368} = (7, 4, 4, 1)$

$81: P_{1375} = (14, 4, 4, 1)$

$82: P_{1399} = (6, 6, 4, 1)$

$83: P_{1400} = (7, 6, 4, 1)$

$84: P_{1427} = (2, 8, 4, 1)$

$85: P_{1434} = (9, 8, 4, 1)$

$86: P_{1444} = (3, 9, 4, 1)$

$87: P_{1453} = (12, 9, 4, 1)$

$88: P_{1483} = (10, 11, 4, 1)$

$89: P_{1486} = (13, 11, 4, 1)$

$90: P_{1522} = (1, 14, 4, 1)$

$91: P_{1532} = (11, 14, 4, 1)$

$92: P_{1567} = (14, 0, 5, 1)$

$93: P_{1589} = (4, 2, 5, 1)$

$94: P_{1599} = (14, 2, 5, 1)$

$95: P_{1604} = (3, 3, 5, 1)$

$96: P_{1613} = (12, 3, 5, 1)$

$97: P_{1686} = (5, 8, 5, 1)$

$98: P_{1687} = (6, 8, 5, 1)$

$99: P_{1736} = (7, 11, 5, 1)$

$100: P_{1740} = (11, 11, 5, 1)$

$101: P_{1747} = (2, 12, 5, 1)$

$102: P_{1757} = (12, 12, 5, 1)$

$103: P_{1762} = (1, 13, 5, 1)$

$104: P_{1771} = (10, 13, 5, 1)$

$105: P_{1805} = (12, 15, 5, 1)$

$106: P_{1806} = (13, 15, 5, 1)$

$107: P_{1811} = (2, 0, 6, 1)$

$108: P_{1835} = (10, 1, 6, 1)$

$109: P_{1837} = (12, 1, 6, 1)$

$110: P_{1858} = (1, 3, 6, 1)$

$111: P_{1868} = (11, 3, 6, 1)$

$112: P_{1879} = (6, 4, 6, 1)$

$113: P_{1880} = (7, 4, 6, 1)$

$114: P_{1923} = (2, 7, 6, 1)$

$115: P_{1930} = (9, 7, 6, 1)$

$116: P_{1941} = (4, 8, 6, 1)$

$117: P_{1943} = (6, 8, 6, 1)$

$118: P_{2006} = (5, 12, 6, 1)$

$119: P_{2007} = (6, 12, 6, 1)$

$120: P_{2025} = (8, 13, 6, 1)$

$121: P_{2030} = (13, 13, 6, 1)$

$122: P_{2074} = (9, 0, 7, 1)$

$123: P_{2091} = (10, 1, 7, 1)$

$124: P_{2094} = (13, 1, 7, 1)$

$125: P_{2120} = (7, 3, 7, 1)$

$126: P_{2127} = (14, 3, 7, 1)$

$127: P_{2163} = (2, 6, 7, 1)$

$128: P_{2170} = (9, 6, 7, 1)$

$129: P_{2194} = (1, 8, 7, 1)$

$130: P_{2204} = (11, 8, 7, 1)$

$131: P_{2260} = (3, 12, 7, 1)$

$132: P_{2269} = (12, 12, 7, 1)$

$133: P_{2280} = (7, 13, 7, 1)$

$134: P_{2288} = (15, 13, 7, 1)$

$135: P_{2295} = (6, 14, 7, 1)$

$136: P_{2296} = (7, 14, 7, 1)$

$137: P_{2323} = (2, 0, 8, 1)$

$138: P_{2375} = (6, 3, 8, 1)$

$139: P_{2376} = (7, 3, 8, 1)$

$140: P_{2387} = (2, 4, 8, 1)$

$141: P_{2394} = (9, 4, 8, 1)$

$142: P_{2406} = (5, 5, 8, 1)$

$143: P_{2407} = (6, 5, 8, 1)$

$144: P_{2421} = (4, 6, 8, 1)$

$145: P_{2423} = (6, 6, 8, 1)$

$146: P_{2434} = (1, 7, 8, 1)$

$147: P_{2444} = (11, 7, 8, 1)$

$148: P_{2491} = (10, 10, 8, 1)$

$149: P_{2493} = (12, 10, 8, 1)$

$150: P_{2569} = (8, 15, 8, 1)$

$151: P_{2574} = (13, 15, 8, 1)$

$152: P_{2591} = (14, 0, 9, 1)$

$153: P_{2610} = (1, 2, 9, 1)$

$154: P_{2619} = (10, 2, 9, 1)$

$155: P_{2644} = (3, 4, 9, 1)$

$156: P_{2653} = (12, 4, 9, 1)$

$157: P_{2723} = (2, 9, 9, 1)$

$158: P_{2733} = (12, 9, 9, 1)$

$159: P_{2744} = (7, 10, 9, 1)$

$160: P_{2748} = (11, 10, 9, 1)$

$161: P_{2797} = (12, 13, 9, 1)$

162 : $P_{2798} = (13, 13, 9, 1)$
163 : $P_{2806} = (5, 14, 9, 1)$
164 : $P_{2807} = (6, 14, 9, 1)$
165 : $P_{2821} = (4, 15, 9, 1)$
166 : $P_{2831} = (14, 15, 9, 1)$
167 : $P_{2833} = (0, 0, 10, 1)$
168 : $P_{2854} = (5, 1, 10, 1)$
169 : $P_{2864} = (15, 1, 10, 1)$
170 : $P_{2871} = (6, 2, 10, 1)$
171 : $P_{2876} = (11, 2, 10, 1)$
172 : $P_{2891} = (10, 3, 10, 1)$
173 : $P_{2894} = (13, 3, 10, 1)$
174 : $P_{2971} = (10, 8, 10, 1)$
175 : $P_{2973} = (12, 8, 10, 1)$
176 : $P_{2984} = (7, 9, 10, 1)$
177 : $P_{2988} = (11, 9, 10, 1)$
178 : $P_{2996} = (3, 10, 10, 1)$
179 : $P_{3001} = (8, 10, 10, 1)$
180 : $P_{3019} = (10, 11, 10, 1)$
181 : $P_{3020} = (11, 11, 10, 1)$
182 : $P_{3089} = (0, 0, 11, 1)$
183 : $P_{3108} = (3, 1, 11, 1)$
184 : $P_{3113} = (8, 1, 11, 1)$
185 : $P_{3163} = (10, 4, 11, 1)$
186 : $P_{3166} = (13, 4, 11, 1)$
187 : $P_{3176} = (7, 5, 11, 1)$
188 : $P_{3180} = (11, 5, 11, 1)$
189 : $P_{3259} = (10, 10, 11, 1)$
190 : $P_{3260} = (11, 10, 11, 1)$
191 : $P_{3270} = (5, 11, 11, 1)$
192 : $P_{3280} = (15, 11, 11, 1)$
193 : $P_{3323} = (10, 14, 11, 1)$
194 : $P_{3325} = (12, 14, 11, 1)$
195 : $P_{3335} = (6, 15, 11, 1)$
196 : $P_{3340} = (11, 15, 11, 1)$
197 : $P_{3359} = (14, 0, 12, 1)$
198 : $P_{3368} = (7, 1, 12, 1)$
199 : $P_{3372} = (11, 1, 12, 1)$
200 : $P_{3389} = (12, 2, 12, 1)$
201 : $P_{3390} = (13, 2, 12, 1)$
202 : $P_{3427} = (2, 5, 12, 1)$
203 : $P_{3437} = (12, 5, 12, 1)$
204 : $P_{3446} = (5, 6, 12, 1)$
205 : $P_{3447} = (6, 6, 12, 1)$
206 : $P_{3460} = (3, 7, 12, 1)$
207 : $P_{3469} = (12, 7, 12, 1)$
208 : $P_{3557} = (4, 13, 12, 1)$
209 : $P_{3567} = (14, 13, 12, 1)$

210 : $P_{3586} = (1, 15, 12, 1)$
211 : $P_{3595} = (10, 15, 12, 1)$
212 : $P_{3605} = (4, 0, 13, 1)$
213 : $P_{3623} = (6, 1, 13, 1)$
214 : $P_{3628} = (11, 1, 13, 1)$
215 : $P_{3682} = (1, 5, 13, 1)$
216 : $P_{3691} = (10, 5, 13, 1)$
217 : $P_{3705} = (8, 6, 13, 1)$
218 : $P_{3710} = (13, 6, 13, 1)$
219 : $P_{3720} = (7, 7, 13, 1)$
220 : $P_{3728} = (15, 7, 13, 1)$
221 : $P_{3757} = (12, 9, 13, 1)$
222 : $P_{3758} = (13, 9, 13, 1)$
223 : $P_{3797} = (4, 12, 13, 1)$
224 : $P_{3807} = (14, 12, 13, 1)$
225 : $P_{3850} = (9, 15, 13, 1)$
226 : $P_{3854} = (13, 15, 13, 1)$
227 : $P_{3859} = (2, 0, 14, 1)$
228 : $P_{3897} = (8, 2, 14, 1)$
229 : $P_{3902} = (13, 2, 14, 1)$
230 : $P_{3907} = (2, 3, 14, 1)$
231 : $P_{3914} = (9, 3, 14, 1)$
232 : $P_{3922} = (1, 4, 14, 1)$
233 : $P_{3932} = (11, 4, 14, 1)$
234 : $P_{3975} = (6, 7, 14, 1)$
235 : $P_{3976} = (7, 7, 14, 1)$
236 : $P_{4006} = (5, 9, 14, 1)$
237 : $P_{4007} = (6, 9, 14, 1)$
238 : $P_{4043} = (10, 11, 14, 1)$
239 : $P_{4045} = (12, 11, 14, 1)$
240 : $P_{4085} = (4, 14, 14, 1)$
241 : $P_{4087} = (6, 14, 14, 1)$
242 : $P_{4117} = (4, 0, 15, 1)$
243 : $P_{4168} = (7, 3, 15, 1)$
244 : $P_{4176} = (15, 3, 15, 1)$
245 : $P_{4205} = (12, 5, 15, 1)$
246 : $P_{4206} = (13, 5, 15, 1)$
247 : $P_{4249} = (8, 8, 15, 1)$
248 : $P_{4254} = (13, 8, 15, 1)$
249 : $P_{4261} = (4, 9, 15, 1)$
250 : $P_{4271} = (14, 9, 15, 1)$
251 : $P_{4295} = (6, 11, 15, 1)$
252 : $P_{4300} = (11, 11, 15, 1)$
253 : $P_{4306} = (1, 12, 15, 1)$
254 : $P_{4315} = (10, 12, 15, 1)$
255 : $P_{4330} = (9, 13, 15, 1)$
256 : $P_{4334} = (13, 13, 15, 1)$

Line Intersection Graph

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Neighbor sets in the line intersection graph:
The surface has 257 points:

The points on the surface are:

$0: P_0 = (1, 0, 0, 0)$
$1: P_{35} = (0, 1, 1, 0)$
$2: P_{59} = (8, 2, 1, 0)$
$3: P_{80} = (13, 3, 1, 0)$
$4: P_{98} = (15, 4, 1, 0)$
$5: P_{106} = (7, 5, 1, 0)$
$6: P_{124} = (9, 6, 1, 0)$
$7: P_{133} = (2, 7, 1, 0)$
$8: P_{159} = (12, 8, 1, 0)$
$9: P_{166} = (3, 9, 1, 0)$
$10: P_{179} = (0, 10, 1, 0)$
$11: P_{195} = (0, 11, 1, 0)$
$12: P_{215} = (4, 12, 1, 0)$
$13: P_{241} = (14, 13, 1, 0)$
$14: P_{248} = (5, 14, 1, 0)$
$15: P_{265} = (6, 15, 1, 0)$
$16: P_{275} = (1, 0, 0, 1)$
$17: P_{290} = (0, 1, 0, 1)$
$18: P_{310} = (4, 2, 0, 1)$
$19: P_{331} = (9, 3, 0, 1)$
$20: P_{347} = (9, 4, 0, 1)$
$21: P_{368} = (14, 5, 0, 1)$
$22: P_{372} = (2, 6, 0, 1)$
$23: P_{395} = (9, 7, 0, 1)$
$24: P_{404} = (2, 8, 0, 1)$
$25: P_{432} = (14, 9, 0, 1)$
$26: P_{434} = (0, 10, 0, 1)$
$27: P_{450} = (0, 11, 0, 1)$
$28: P_{480} = (14, 12, 0, 1)$
$29: P_{486} = (4, 13, 0, 1)$
$30: P_{500} = (2, 14, 0, 1)$
$31: P_{518} = (4, 15, 0, 1)$
$32: P_{530} = (0, 0, 1, 1)$
$33: P_{555} = (10, 1, 1, 1)$
$34: P_{556} = (11, 1, 1, 1)$
$35: P_{635} = (10, 6, 1, 1)$
$36: P_{637} = (12, 6, 1, 1)$
$37: P_{651} = (10, 7, 1, 1)$
$38: P_{654} = (13, 7, 1, 1)$
$39: P_{694} = (5, 10, 1, 1)$
$40: P_{704} = (15, 10, 1, 1)$
$41: P_{708} = (3, 11, 1, 1)$
$42: P_{713} = (8, 11, 1, 1)$
$43: P_{728} = (7, 12, 1, 1)$
$44: P_{732} = (11, 12, 1, 1)$
$45: P_{743} = (6, 13, 1, 1)$
$46: P_{748} = (11, 13, 1, 1)$
$47: P_{789} = (4, 0, 2, 1)$
$48: P_{826} = (9, 2, 2, 1)$
$49: P_{830} = (13, 2, 2, 1)$
$50: P_{856} = (7, 4, 2, 1)$

$51: P_{864} = (15, 4, 2, 1)$
$52: P_{869} = (4, 5, 2, 1)$
$53: P_{879} = (14, 5, 2, 1)$
$54: P_{930} = (1, 9, 2, 1)$
$55: P_{939} = (10, 9, 2, 1)$
$56: P_{951} = (6, 10, 2, 1)$
$57: P_{956} = (11, 10, 2, 1)$
$58: P_{989} = (12, 12, 2, 1)$
$59: P_{990} = (13, 12, 2, 1)$
$60: P_{1017} = (8, 14, 2, 1)$
$61: P_{1022} = (13, 14, 2, 1)$
$62: P_{1050} = (9, 0, 3, 1)$
$63: P_{1124} = (3, 5, 3, 1)$
$64: P_{1133} = (12, 5, 3, 1)$
$65: P_{1138} = (1, 6, 3, 1)$
$66: P_{1148} = (11, 6, 3, 1)$
$67: P_{1160} = (7, 7, 3, 1)$
$68: P_{1167} = (14, 7, 3, 1)$
$69: P_{1175} = (6, 8, 3, 1)$
$70: P_{1176} = (7, 8, 3, 1)$
$71: P_{1211} = (10, 10, 3, 1)$
$72: P_{1214} = (13, 10, 3, 1)$
$73: P_{1267} = (2, 14, 3, 1)$
$74: P_{1274} = (9, 14, 3, 1)$
$75: P_{1288} = (7, 15, 3, 1)$
$76: P_{1296} = (15, 15, 3, 1)$
$77: P_{1306} = (9, 0, 4, 1)$
$78: P_{1336} = (7, 2, 4, 1)$
$79: P_{1344} = (15, 2, 4, 1)$
$80: P_{1368} = (7, 4, 4, 1)$
$81: P_{1375} = (14, 4, 4, 1)$
$82: P_{1399} = (6, 6, 4, 1)$
$83: P_{1400} = (7, 6, 4, 1)$
$84: P_{1427} = (2, 8, 4, 1)$
$85: P_{1434} = (9, 8, 4, 1)$
$86: P_{1444} = (3, 9, 4, 1)$
$87: P_{1453} = (12, 9, 4, 1)$
$88: P_{1483} = (10, 11, 4, 1)$
$89: P_{1486} = (13, 11, 4, 1)$
$90: P_{1522} = (1, 14, 4, 1)$
$91: P_{1532} = (11, 14, 4, 1)$
$92: P_{1567} = (14, 0, 5, 1)$
$93: P_{1589} = (4, 2, 5, 1)$
$94: P_{1599} = (14, 2, 5, 1)$
$95: P_{1604} = (3, 3, 5, 1)$
$96: P_{1613} = (12, 3, 5, 1)$
$97: P_{1686} = (5, 8, 5, 1)$
$98: P_{1687} = (6, 8, 5, 1)$
$99: P_{1736} = (7, 11, 5, 1)$
$100: P_{1740} = (11, 11, 5, 1)$
$101: P_{1747} = (2, 12, 5, 1)$

$102: P_{1757} = (12, 12, 5, 1)$
$103: P_{1762} = (1, 13, 5, 1)$
$104: P_{1771} = (10, 13, 5, 1)$
$105: P_{1805} = (12, 15, 5, 1)$
$106: P_{1806} = (13, 15, 5, 1)$
$107: P_{1811} = (2, 0, 6, 1)$
$108: P_{1835} = (10, 1, 6, 1)$
$109: P_{1837} = (12, 1, 6, 1)$
$110: P_{1858} = (1, 3, 6, 1)$
$111: P_{1868} = (11, 3, 6, 1)$
$112: P_{1879} = (6, 4, 6, 1)$
$113: P_{1880} = (7, 4, 6, 1)$
$114: P_{1923} = (2, 7, 6, 1)$
$115: P_{1930} = (9, 7, 6, 1)$
$116: P_{1941} = (4, 8, 6, 1)$
$117: P_{1943} = (6, 8, 6, 1)$
$118: P_{2006} = (5, 12, 6, 1)$
$119: P_{2007} = (6, 12, 6, 1)$
$120: P_{2025} = (8, 13, 6, 1)$
$121: P_{2030} = (13, 13, 6, 1)$
$122: P_{2074} = (9, 0, 7, 1)$
$123: P_{2091} = (10, 1, 7, 1)$
$124: P_{2094} = (13, 1, 7, 1)$
$125: P_{2120} = (7, 3, 7, 1)$
$126: P_{2127} = (14, 3, 7, 1)$
$127: P_{2163} = (2, 6, 7, 1)$
$128: P_{2170} = (9, 6, 7, 1)$
$129: P_{2194} = (1, 8, 7, 1)$
$130: P_{2204} = (11, 8, 7, 1)$
$131: P_{2260} = (3, 12, 7, 1)$
$132: P_{2269} = (12, 12, 7, 1)$
$133: P_{2280} = (7, 13, 7, 1)$
$134: P_{2288} = (15, 13, 7, 1)$
$135: P_{2295} = (6, 14, 7, 1)$
$136: P_{2296} = (7, 14, 7, 1)$
$137: P_{2323} = (2, 0, 8, 1)$
$138: P_{2375} = (6, 3, 8, 1)$
$139: P_{2376} = (7, 3, 8, 1)$
$140: P_{2387} = (2, 4, 8, 1)$
$141: P_{2394} = (9, 4, 8, 1)$
$142: P_{2406} = (5, 5, 8, 1)$
$143: P_{2407} = (6, 5, 8, 1)$
$144: P_{2421} = (4, 6, 8, 1)$
$145: P_{2423} = (6, 6, 8, 1)$
$146: P_{2434} = (1, 7, 8, 1)$
$147: P_{2444} = (11, 7, 8, 1)$
$148: P_{2491} = (10, 10, 8, 1)$
$149: P_{2493} = (12, 10, 8, 1)$
$150: P_{2569} = (8, 15, 8, 1)$
$151: P_{2574} = (13, 15, 8, 1)$
$152: P_{2591} = (14, 0, 9, 1)$

$153 : P_{2610} = (1, 2, 9, 1)$

$154 : P_{2619} = (10, 2, 9, 1)$

$155 : P_{2644} = (3, 4, 9, 1)$

$156 : P_{2653} = (12, 4, 9, 1)$

$157 : P_{2723} = (2, 9, 9, 1)$

$158 : P_{2733} = (12, 9, 9, 1)$

$159 : P_{2744} = (7, 10, 9, 1)$

$160 : P_{2748} = (11, 10, 9, 1)$

$161 : P_{2797} = (12, 13, 9, 1)$

$162 : P_{2798} = (13, 13, 9, 1)$

$163 : P_{2806} = (5, 14, 9, 1)$

$164 : P_{2807} = (6, 14, 9, 1)$

$165 : P_{2821} = (4, 15, 9, 1)$

$166 : P_{2831} = (14, 15, 9, 1)$

$167 : P_{2833} = (0, 0, 10, 1)$

$168 : P_{2854} = (5, 1, 10, 1)$

$169 : P_{2864} = (15, 1, 10, 1)$

$170 : P_{2871} = (6, 2, 10, 1)$

$171 : P_{2876} = (11, 2, 10, 1)$

$172 : P_{2891} = (10, 3, 10, 1)$

$173 : P_{2894} = (13, 3, 10, 1)$

$174 : P_{2971} = (10, 8, 10, 1)$

$175 : P_{2973} = (12, 8, 10, 1)$

$176 : P_{2984} = (7, 9, 10, 1)$

$177 : P_{2988} = (11, 9, 10, 1)$

$178 : P_{2996} = (3, 10, 10, 1)$

$179 : P_{3001} = (8, 10, 10, 1)$

$180 : P_{3019} = (10, 11, 10, 1)$

$181 : P_{3020} = (11, 11, 10, 1)$

$182 : P_{3089} = (0, 0, 11, 1)$

$183 : P_{3108} = (3, 1, 11, 1)$

$184 : P_{3113} = (8, 1, 11, 1)$

$185 : P_{3163} = (10, 4, 11, 1)$

$186 : P_{3166} = (13, 4, 11, 1)$

$187 : P_{3176} = (7, 5, 11, 1)$

$188 : P_{3180} = (11, 5, 11, 1)$

$189 : P_{3259} = (10, 10, 11, 1)$

$190 : P_{3260} = (11, 10, 11, 1)$

$191 : P_{3270} = (5, 11, 11, 1)$

$192 : P_{3280} = (15, 11, 11, 1)$

$193 : P_{3323} = (10, 14, 11, 1)$

$194 : P_{3325} = (12, 14, 11, 1)$

$195 : P_{3335} = (6, 15, 11, 1)$

$196 : P_{3340} = (11, 15, 11, 1)$

$197 : P_{3359} = (14, 0, 12, 1)$

$198 : P_{3368} = (7, 1, 12, 1)$

$199 : P_{3372} = (11, 1, 12, 1)$

$200 : P_{3389} = (12, 2, 12, 1)$

$201 : P_{3390} = (13, 2, 12, 1)$

$202 : P_{3427} = (2, 5, 12, 1)$

$203 : P_{3437} = (12, 5, 12, 1)$

$204 : P_{3446} = (5, 6, 12, 1)$

$205 : P_{3447} = (6, 6, 12, 1)$

$206 : P_{3460} = (3, 7, 12, 1)$

$207 : P_{3469} = (12, 7, 12, 1)$

$208 : P_{3557} = (4, 13, 12, 1)$

$209 : P_{3567} = (14, 13, 12, 1)$

$210 : P_{3586} = (1, 15, 12, 1)$

$211 : P_{3595} = (10, 15, 12, 1)$

$212 : P_{3605} = (4, 0, 13, 1)$

$213 : P_{3623} = (6, 1, 13, 1)$

$214 : P_{3628} = (11, 1, 13, 1)$

$215 : P_{3682} = (1, 5, 13, 1)$

$216 : P_{3691} = (10, 5, 13, 1)$

$217 : P_{3705} = (8, 6, 13, 1)$

$218 : P_{3710} = (13, 6, 13, 1)$

$219 : P_{3720} = (7, 7, 13, 1)$

$220 : P_{3728} = (15, 7, 13, 1)$

$221 : P_{3757} = (12, 9, 13, 1)$

$222 : P_{3758} = (13, 9, 13, 1)$

$223 : P_{3797} = (4, 12, 13, 1)$

$224 : P_{3807} = (14, 12, 13, 1)$

$225 : P_{3850} = (9, 15, 13, 1)$

$226 : P_{3854} = (13, 15, 13, 1)$

$227 : P_{3859} = (2, 0, 14, 1)$

$228 : P_{3897} = (8, 2, 14, 1)$

$229 : P_{3902} = (13, 2, 14, 1)$

$230 : P_{3907} = (2, 3, 14, 1)$

$231 : P_{3914} = (9, 3, 14, 1)$

$232 : P_{3922} = (1, 4, 14, 1)$

$233 : P_{3932} = (11, 4, 14, 1)$

$234 : P_{3975} = (6, 7, 14, 1)$

$235 : P_{3976} = (7, 7, 14, 1)$

$236 : P_{4006} = (5, 9, 14, 1)$

$237 : P_{4007} = (6, 9, 14, 1)$

$238 : P_{4043} = (10, 11, 14, 1)$

$239 : P_{4045} = (12, 11, 14, 1)$

$240 : P_{4085} = (4, 14, 14, 1)$

$241 : P_{4087} = (6, 14, 14, 1)$

$242 : P_{4117} = (4, 0, 15, 1)$

$243 : P_{4168} = (7, 3, 15, 1)$

$244 : P_{4176} = (15, 3, 15, 1)$

$245 : P_{4205} = (12, 5, 15, 1)$

$246 : P_{4206} = (13, 5, 15, 1)$

$247 : P_{4249} = (8, 8, 15, 1)$

$248 : P_{4254} = (13, 8, 15, 1)$

$249 : P_{4261} = (4, 9, 15, 1)$

$250 : P_{4271} = (14, 9, 15, 1)$

$251 : P_{4295} = (6, 11, 15, 1)$

$252 : P_{4300} = (11, 11, 15, 1)$

$253 : P_{4306} = (1, 12, 15, 1)$

$254 : P_{4315} = (10, 12, 15, 1)$

$255 : P_{4330} = (9, 13, 15, 1)$

$256 : P_{4334} = (13, 13, 15, 1)$