

Rank-16 over GF(32)

January 15, 2021

The equation

The equation of the surface is :

$$X_0X_1X_2 = 0$$

(0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)

The point rank of the equation over GF(32) is 16

General information

Number of lines	3168
Number of points	3073
Number of singular points	97
Number of Eckardt points	0
Number of double points	0
Number of single points	0
Number of points off lines	0
Number of Hesse planes	0
Number of axes	0
Type of points on lines	33^{3168}
Type of lines on points	$96, 65^{96}, 33^{2976}$

Singular Points

The surface has 97 singular points:

$$0 : P_0 = \mathbf{P}(1, 0, 0, 0) = \mathbf{P}(1, 0, 0, 0)$$

$$1 : P_1 = \mathbf{P}(0, 1, 0, 0) = \mathbf{P}(0, 1, 0, 0)$$

$$2 : P_2 = \mathbf{P}(0, 0, 1, 0) = \mathbf{P}(0, 0, 1, 0)$$

$$3 : P_3 = \mathbf{P}(0, 0, 0, 1) = \mathbf{P}(0, 0, 0, 1)$$

$$4 : P_{1059} = \mathbf{P}(1, 0, 0, 1) = \mathbf{P}(1, 0, 0, 1)$$

$$5 : P_{1060} = \mathbf{P}(\eta, 0, 0, 1) = \mathbf{P}(2, 0, 0, 1)$$

$$6 : P_{1061} = \mathbf{P}(\eta^{18}, 0, 0, 1) = \mathbf{P}(3, 0, 0, 1)$$

$$7 : P_{1062} = \mathbf{P}(\eta^2, 0, 0, 1) = \mathbf{P}(4, 0, 0, 1)$$

$$8 : P_{1063} = \mathbf{P}(\eta^5, 0, 0, 1) = \mathbf{P}(5, 0, 0, 1)$$

$$9 : P_{1064} = \mathbf{P}(\eta^{19}, 0, 0, 1) = \mathbf{P}(6, 0, 0, 1)$$

$$10 : P_{1065} = \mathbf{P}(\eta^{11}, 0, 0, 1) = \mathbf{P}(7, 0, 0, 1)$$

$$11 : P_{1066} = \mathbf{P}(\eta^3, 0, 0, 1) = \mathbf{P}(8, 0, 0, 1)$$

$$12 : P_{1067} = \mathbf{P}(\eta^{29}, 0, 0, 1) = \mathbf{P}(9, 0, 0, 1)$$

$$13 : P_{1068} = \mathbf{P}(\eta^6, 0, 0, 1) = \mathbf{P}(10, 0, 0, 1)$$

$$14 : P_{1069} = \mathbf{P}(\eta^{27}, 0, 0, 1) = \mathbf{P}(11, 0, 0, 1)$$

$$15 : P_{1070} = \mathbf{P}(\eta^{20}, 0, 0, 1) = \mathbf{P}(12, 0, 0, 1)$$

$$16 : P_{1071} = \mathbf{P}(\eta^8, 0, 0, 1) = \mathbf{P}(13, 0, 0, 1)$$

$$17 : P_{1072} = \mathbf{P}(\eta^{12}, 0, 0, 1) = \mathbf{P}(14, 0, 0, 1)$$

$$\begin{aligned}
18 : P_{1073} &= \mathbf{P}(\eta^{23}, 0, 0, 1) = \mathbf{P}(15, 0, 0, 1) \\
19 : P_{1074} &= \mathbf{P}(\eta^4, 0, 0, 1) = \mathbf{P}(16, 0, 0, 1) \\
20 : P_{1075} &= \mathbf{P}(\eta^{10}, 0, 0, 1) = \mathbf{P}(17, 0, 0, 1) \\
21 : P_{1076} &= \mathbf{P}(\eta^{30}, 0, 0, 1) = \mathbf{P}(18, 0, 0, 1) \\
22 : P_{1077} &= \mathbf{P}(\eta^{17}, 0, 0, 1) = \mathbf{P}(19, 0, 0, 1) \\
23 : P_{1078} &= \mathbf{P}(\eta^7, 0, 0, 1) = \mathbf{P}(20, 0, 0, 1) \\
24 : P_{1079} &= \mathbf{P}(\eta^{22}, 0, 0, 1) = \mathbf{P}(21, 0, 0, 1) \\
25 : P_{1080} &= \mathbf{P}(\eta^{28}, 0, 0, 1) = \mathbf{P}(22, 0, 0, 1) \\
26 : P_{1081} &= \mathbf{P}(\eta^{26}, 0, 0, 1) = \mathbf{P}(23, 0, 0, 1) \\
27 : P_{1082} &= \mathbf{P}(\eta^{21}, 0, 0, 1) = \mathbf{P}(24, 0, 0, 1) \\
28 : P_{1083} &= \mathbf{P}(\eta^{25}, 0, 0, 1) = \mathbf{P}(25, 0, 0, 1) \\
29 : P_{1084} &= \mathbf{P}(\eta^9, 0, 0, 1) = \mathbf{P}(26, 0, 0, 1) \\
30 : P_{1085} &= \mathbf{P}(\eta^{16}, 0, 0, 1) = \mathbf{P}(27, 0, 0, 1) \\
31 : P_{1086} &= \mathbf{P}(\eta^{13}, 0, 0, 1) = \mathbf{P}(28, 0, 0, 1) \\
32 : P_{1087} &= \mathbf{P}(\eta^{14}, 0, 0, 1) = \mathbf{P}(29, 0, 0, 1) \\
33 : P_{1088} &= \mathbf{P}(\eta^{24}, 0, 0, 1) = \mathbf{P}(30, 0, 0, 1) \\
34 : P_{1089} &= \mathbf{P}(\eta^{15}, 0, 0, 1) = \mathbf{P}(31, 0, 0, 1) \\
35 : P_{1090} &= \mathbf{P}(0, 1, 0, 1) = \mathbf{P}(0, 1, 0, 1) \\
36 : P_{1122} &= \mathbf{P}(0, \eta, 0, 1) = \mathbf{P}(0, 2, 0, 1) \\
37 : P_{1154} &= \mathbf{P}(0, \eta^{18}, 0, 1) = \mathbf{P}(0, 3, 0, 1) \\
38 : P_{1186} &= \mathbf{P}(0, \eta^2, 0, 1) = \mathbf{P}(0, 4, 0, 1) \\
39 : P_{1218} &= \mathbf{P}(0, \eta^5, 0, 1) = \mathbf{P}(0, 5, 0, 1) \\
40 : P_{1250} &= \mathbf{P}(0, \eta^{19}, 0, 1) = \mathbf{P}(0, 6, 0, 1) \\
41 : P_{1282} &= \mathbf{P}(0, \eta^{11}, 0, 1) = \mathbf{P}(0, 7, 0, 1) \\
42 : P_{1314} &= \mathbf{P}(0, \eta^3, 0, 1) = \mathbf{P}(0, 8, 0, 1) \\
43 : P_{1346} &= \mathbf{P}(0, \eta^{29}, 0, 1) = \mathbf{P}(0, 9, 0, 1) \\
44 : P_{1378} &= \mathbf{P}(0, \eta^6, 0, 1) = \mathbf{P}(0, 10, 0, 1) \\
45 : P_{1410} &= \mathbf{P}(0, \eta^{27}, 0, 1) = \mathbf{P}(0, 11, 0, 1) \\
46 : P_{1442} &= \mathbf{P}(0, \eta^{20}, 0, 1) = \mathbf{P}(0, 12, 0, 1) \\
47 : P_{1474} &= \mathbf{P}(0, \eta^8, 0, 1) = \mathbf{P}(0, 13, 0, 1) \\
48 : P_{1506} &= \mathbf{P}(0, \eta^{12}, 0, 1) = \mathbf{P}(0, 14, 0, 1) \\
49 : P_{1538} &= \mathbf{P}(0, \eta^{23}, 0, 1) = \mathbf{P}(0, 15, 0, 1) \\
50 : P_{1570} &= \mathbf{P}(0, \eta^4, 0, 1) = \mathbf{P}(0, 16, 0, 1) \\
51 : P_{1602} &= \mathbf{P}(0, \eta^{10}, 0, 1) = \mathbf{P}(0, 17, 0, 1) \\
52 : P_{1634} &= \mathbf{P}(0, \eta^{30}, 0, 1) = \mathbf{P}(0, 18, 0, 1) \\
53 : P_{1666} &= \mathbf{P}(0, \eta^{17}, 0, 1) = \mathbf{P}(0, 19, 0, 1) \\
54 : P_{1698} &= \mathbf{P}(0, \eta^7, 0, 1) = \mathbf{P}(0, 20, 0, 1) \\
55 : P_{1730} &= \mathbf{P}(0, \eta^{22}, 0, 1) = \mathbf{P}(0, 21, 0, 1) \\
56 : P_{1762} &= \mathbf{P}(0, \eta^{28}, 0, 1) = \mathbf{P}(0, 22, 0, 1) \\
57 : P_{1794} &= \mathbf{P}(0, \eta^{26}, 0, 1) = \mathbf{P}(0, 23, 0, 1) \\
58 : P_{1826} &= \mathbf{P}(0, \eta^{21}, 0, 1) = \mathbf{P}(0, 24, 0, 1) \\
59 : P_{1858} &= \mathbf{P}(0, \eta^{25}, 0, 1) = \mathbf{P}(0, 25, 0, 1) \\
60 : P_{1890} &= \mathbf{P}(0, \eta^9, 0, 1) = \mathbf{P}(0, 26, 0, 1) \\
61 : P_{1922} &= \mathbf{P}(0, \eta^{16}, 0, 1) = \mathbf{P}(0, 27, 0, 1) \\
62 : P_{1954} &= \mathbf{P}(0, \eta^{13}, 0, 1) = \mathbf{P}(0, 28, 0, 1) \\
63 : P_{1986} &= \mathbf{P}(0, \eta^{14}, 0, 1) = \mathbf{P}(0, 29, 0, 1) \\
64 : P_{2018} &= \mathbf{P}(0, \eta^{24}, 0, 1) = \mathbf{P}(0, 30, 0, 1) \\
65 : P_{2050} &= \mathbf{P}(0, \eta^{15}, 0, 1) = \mathbf{P}(0, 31, 0, 1) \\
66 : P_{2082} &= \mathbf{P}(0, 0, 1, 1) = \mathbf{P}(0, 0, 1, 1) \\
67 : P_{3105} &= \mathbf{P}(0, 0, \eta, 1) = \mathbf{P}(0, 0, 2, 1) \\
68 : P_{4129} &= \mathbf{P}(0, 0, \eta^{18}, 1) = \mathbf{P}(0, 0, 3, 1) \\
69 : P_{5153} &= \mathbf{P}(0, 0, \eta^2, 1) = \mathbf{P}(0, 0, 4, 1) \\
70 : P_{6177} &= \mathbf{P}(0, 0, \eta^5, 1) = \mathbf{P}(0, 0, 5, 1) \\
71 : P_{7201} &= \mathbf{P}(0, 0, \eta^{19}, 1) = \mathbf{P}(0, 0, 6, 1) \\
72 : P_{8225} &= \mathbf{P}(0, 0, \eta^{11}, 1) = \mathbf{P}(0, 0, 7, 1) \\
73 : P_{9249} &= \mathbf{P}(0, 0, \eta^3, 1) = \mathbf{P}(0, 0, 8, 1) \\
74 : P_{10273} &= \mathbf{P}(0, 0, \eta^{29}, 1) = \mathbf{P}(0, 0, 9, 1) \\
75 : P_{11297} &= \mathbf{P}(0, 0, \eta^6, 1) = \mathbf{P}(0, 0, 10, 1) \\
76 : P_{12321} &= \mathbf{P}(0, 0, \eta^{27}, 1) = \mathbf{P}(0, 0, 11, 1) \\
77 : P_{13345} &= \mathbf{P}(0, 0, \eta^{20}, 1) = \mathbf{P}(0, 0, 12, 1) \\
78 : P_{14369} &= \mathbf{P}(0, 0, \eta^8, 1) = \mathbf{P}(0, 0, 13, 1) \\
79 : P_{15393} &= \mathbf{P}(0, 0, \eta^{12}, 1) = \mathbf{P}(0, 0, 14, 1) \\
80 : P_{16417} &= \mathbf{P}(0, 0, \eta^{23}, 1) = \mathbf{P}(0, 0, 15, 1) \\
81 : P_{17441} &= \mathbf{P}(0, 0, \eta^4, 1) = \mathbf{P}(0, 0, 16, 1) \\
82 : P_{18465} &= \mathbf{P}(0, 0, \eta^{10}, 1) = \mathbf{P}(0, 0, 17, 1) \\
83 : P_{19489} &= \mathbf{P}(0, 0, \eta^{30}, 1) = \mathbf{P}(0, 0, 18, 1) \\
84 : P_{20513} &= \mathbf{P}(0, 0, \eta^{17}, 1) = \mathbf{P}(0, 0, 19, 1) \\
85 : P_{21537} &= \mathbf{P}(0, 0, \eta^7, 1) = \mathbf{P}(0, 0, 20, 1) \\
86 : P_{22561} &= \mathbf{P}(0, 0, \eta^{22}, 1) = \mathbf{P}(0, 0, 21, 1) \\
87 : P_{23585} &= \mathbf{P}(0, 0, \eta^{28}, 1) = \mathbf{P}(0, 0, 22, 1) \\
88 : P_{24609} &= \mathbf{P}(0, 0, \eta^{26}, 1) = \mathbf{P}(0, 0, 23, 1) \\
89 : P_{25633} &= \mathbf{P}(0, 0, \eta^{21}, 1) = \mathbf{P}(0, 0, 24, 1) \\
90 : P_{26657} &= \mathbf{P}(0, 0, \eta^{25}, 1) = \mathbf{P}(0, 0, 25, 1) \\
91 : P_{27681} &= \mathbf{P}(0, 0, \eta^9, 1) = \mathbf{P}(0, 0, 26, 1) \\
92 : P_{28705} &= \mathbf{P}(0, 0, \eta^{16}, 1) = \mathbf{P}(0, 0, 27, 1) \\
93 : P_{29729} &= \mathbf{P}(0, 0, \eta^{13}, 1) = \mathbf{P}(0, 0, 28, 1) \\
94 : P_{30753} &= \mathbf{P}(0, 0, \eta^{14}, 1) = \mathbf{P}(0, 0, 29, 1) \\
95 : P_{31777} &= \mathbf{P}(0, 0, \eta^{24}, 1) = \mathbf{P}(0, 0, 30, 1) \\
96 : P_{32801} &= \mathbf{P}(0, 0, \eta^{15}, 1) = \mathbf{P}(0, 0, 31, 1)
\end{aligned}$$

The 3168 Lines

The lines and their Pluecker coordinates are:

$$\begin{aligned}
\ell_0 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \end{bmatrix}_0 = \mathbf{Pl}(1, 0, 0, 0, 0, 0)_0 \\
\ell_1 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1024} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1024} = \mathbf{Pl}(0, 0, 1, 0, 0, 0)_2 \\
\ell_2 &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082368} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082368} = \mathbf{Pl}(0, 0, 0, 0, 0, 1)_{34849} \\
\ell_3 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1056} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1056} = \mathbf{Pl}(0, 0, 0, 0, 1, 0)_{1089}
\end{aligned}$$

$$\begin{aligned}
\ell_4 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{32} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{32} = \mathbf{Pl}(1, 0, 0, 0, 1, 0)_{1090} \\
\ell_5 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{576} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{576} = \mathbf{Pl}(2, 0, 0, 0, 1, 0)_{1091} \\
\ell_6 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{896} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{896} = \mathbf{Pl}(3, 0, 0, 0, 1, 0)_{1092} \\
\ell_7 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{288} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{288} = \mathbf{Pl}(4, 0, 0, 0, 1, 0)_{1093} \\
\ell_8 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{736} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{736} = \mathbf{Pl}(5, 0, 0, 0, 1, 0)_{1094} \\
\ell_9 &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{448} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{448} = \mathbf{Pl}(6, 0, 0, 0, 1, 0)_{1095} \\
\ell_{10} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{384} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{384} = \mathbf{Pl}(7, 0, 0, 0, 1, 0)_{1096} \\
\ell_{11} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{704} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{704} = \mathbf{Pl}(8, 0, 0, 0, 1, 0)_{1097} \\
\ell_{12} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{128} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{128} = \mathbf{Pl}(9, 0, 0, 0, 1, 0)_{1098} \\
\ell_{13} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{800} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{800} = \mathbf{Pl}(10, 0, 0, 0, 1, 0)_{1099} \\
\ell_{14} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{512} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{512} = \mathbf{Pl}(11, 0, 0, 0, 1, 0)_{1100} \\
\ell_{15} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{224} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{224} = \mathbf{Pl}(12, 0, 0, 0, 1, 0)_{1101} \\
\ell_{16} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{480} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{480} = \mathbf{Pl}(13, 0, 0, 0, 1, 0)_{1102} \\
\ell_{17} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{192} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{192} = \mathbf{Pl}(14, 0, 0, 0, 1, 0)_{1103} \\
\ell_{18} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{416} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{416} = \mathbf{Pl}(15, 0, 0, 0, 1, 0)_{1104} \\
\ell_{19} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{352} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{352} = \mathbf{Pl}(16, 0, 0, 0, 1, 0)_{1105} \\
\ell_{20} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{768} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{768} = \mathbf{Pl}(17, 0, 0, 0, 1, 0)_{1106} \\
\ell_{21} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{64} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{64} = \mathbf{Pl}(18, 0, 0, 0, 1, 0)_{1107} \\
\ell_{22} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{928} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{928} = \mathbf{Pl}(19, 0, 0, 0, 1, 0)_{1108} \\
\ell_{23} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{960} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{960} = \mathbf{Pl}(20, 0, 0, 0, 1, 0)_{1109} \\
\ell_{24} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{832} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{832} = \mathbf{Pl}(21, 0, 0, 0, 1, 0)_{1110}
\end{aligned}$$

$$\begin{aligned}
\ell_{25} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{256} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{256} = \mathbf{Pl}(22, 0, 0, 0, 1, 0)_{1111} \\
\ell_{26} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{160} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{160} = \mathbf{Pl}(23, 0, 0, 0, 1, 0)_{1112} \\
\ell_{27} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{544} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{544} = \mathbf{Pl}(24, 0, 0, 0, 1, 0)_{1113} \\
\ell_{28} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{320} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{320} = \mathbf{Pl}(25, 0, 0, 0, 1, 0)_{1114} \\
\ell_{29} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{672} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{672} = \mathbf{Pl}(26, 0, 0, 0, 1, 0)_{1115} \\
\ell_{30} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{992} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{992} = \mathbf{Pl}(27, 0, 0, 0, 1, 0)_{1116} \\
\ell_{31} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{96} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{96} = \mathbf{Pl}(28, 0, 0, 0, 1, 0)_{1117} \\
\ell_{32} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{608} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{608} = \mathbf{Pl}(29, 0, 0, 0, 1, 0)_{1118} \\
\ell_{33} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{640} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{640} = \mathbf{Pl}(30, 0, 0, 0, 1, 0)_{1119} \\
\ell_{34} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{864} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{864} = \mathbf{Pl}(31, 0, 0, 0, 1, 0)_{1120} \\
\ell_{35} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1025} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1025} = \mathbf{Pl}(0, 0, 1, 0, 1, 0)_{1152} \\
\ell_{36} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1042} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1042} = \mathbf{Pl}(0, 0, 2, 0, 1, 0)_{1215} \\
\ell_{37} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1052} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1052} = \mathbf{Pl}(0, 0, 3, 0, 1, 0)_{1278} \\
\ell_{38} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1033} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1033} = \mathbf{Pl}(0, 0, 4, 0, 1, 0)_{1341} \\
\ell_{39} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1047} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1047} = \mathbf{Pl}(0, 0, 5, 0, 1, 0)_{1404} \\
\ell_{40} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1038} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1038} = \mathbf{Pl}(0, 0, 6, 0, 1, 0)_{1467} \\
\ell_{41} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1036} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1036} = \mathbf{Pl}(0, 0, 7, 0, 1, 0)_{1530} \\
\ell_{42} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1046} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1046} = \mathbf{Pl}(0, 0, 8, 0, 1, 0)_{1593} \\
\ell_{43} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1028} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1028} = \mathbf{Pl}(0, 0, 9, 0, 1, 0)_{1656} \\
\ell_{44} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1049} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1049} = \mathbf{Pl}(0, 0, 10, 0, 1, 0)_{1719} \\
\ell_{45} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1040} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1040} = \mathbf{Pl}(0, 0, 11, 0, 1, 0)_{1782}
\end{aligned}$$

$$\begin{aligned}
\ell_{46} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1031} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1031} = \mathbf{Pl}(0, 0, 12, 0, 1, 0)_{1845} \\
\ell_{47} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1039} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1039} = \mathbf{Pl}(0, 0, 13, 0, 1, 0)_{1908} \\
\ell_{48} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1030} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1030} = \mathbf{Pl}(0, 0, 14, 0, 1, 0)_{1971} \\
\ell_{49} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1037} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1037} = \mathbf{Pl}(0, 0, 15, 0, 1, 0)_{2034} \\
\ell_{50} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1035} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1035} = \mathbf{Pl}(0, 0, 16, 0, 1, 0)_{2097} \\
\ell_{51} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1048} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1048} = \mathbf{Pl}(0, 0, 17, 0, 1, 0)_{2160} \\
\ell_{52} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1026} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1026} = \mathbf{Pl}(0, 0, 18, 0, 1, 0)_{2223} \\
\ell_{53} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1053} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1053} = \mathbf{Pl}(0, 0, 19, 0, 1, 0)_{2286} \\
\ell_{54} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1054} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1054} = \mathbf{Pl}(0, 0, 20, 0, 1, 0)_{2349} \\
\ell_{55} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1050} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1050} = \mathbf{Pl}(0, 0, 21, 0, 1, 0)_{2412} \\
\ell_{56} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1032} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1032} = \mathbf{Pl}(0, 0, 22, 0, 1, 0)_{2475} \\
\ell_{57} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1029} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1029} = \mathbf{Pl}(0, 0, 23, 0, 1, 0)_{2538} \\
\ell_{58} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1041} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1041} = \mathbf{Pl}(0, 0, 24, 0, 1, 0)_{2601} \\
\ell_{59} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1034} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1034} = \mathbf{Pl}(0, 0, 25, 0, 1, 0)_{2664} \\
\ell_{60} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1045} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1045} = \mathbf{Pl}(0, 0, 26, 0, 1, 0)_{2727} \\
\ell_{61} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1055} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1055} = \mathbf{Pl}(0, 0, 27, 0, 1, 0)_{2790} \\
\ell_{62} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1027} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1027} = \mathbf{Pl}(0, 0, 28, 0, 1, 0)_{2853} \\
\ell_{63} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1043} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1043} = \mathbf{Pl}(0, 0, 29, 0, 1, 0)_{2916} \\
\ell_{64} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1044} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1044} = \mathbf{Pl}(0, 0, 30, 0, 1, 0)_{2979} \\
\ell_{65} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1051} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1051} = \mathbf{Pl}(0, 0, 31, 0, 1, 0)_{3042} \\
\ell_{66} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082400} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082400} = \mathbf{Pl}(0, 0, 0, 1, 0, 0)_{65}
\end{aligned}$$

$$\begin{aligned}
\ell_{67} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{33824} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{33824} = \mathbf{Pl}(1, 0, 0, 1, 0, 0)_{66} \\
\ell_{68} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{608832} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{608832} = \mathbf{Pl}(2, 0, 0, 1, 0, 0)_{67} \\
\ell_{69} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{947072} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{947072} = \mathbf{Pl}(3, 0, 0, 1, 0, 0)_{68} \\
\ell_{70} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{304416} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{304416} = \mathbf{Pl}(4, 0, 0, 1, 0, 0)_{69} \\
\ell_{71} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{777952} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{777952} = \mathbf{Pl}(5, 0, 0, 1, 0, 0)_{70} \\
\ell_{72} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{473536} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{473536} = \mathbf{Pl}(6, 0, 0, 1, 0, 0)_{71} \\
\ell_{73} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{405888} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{405888} = \mathbf{Pl}(7, 0, 0, 1, 0, 0)_{72} \\
\ell_{74} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{744128} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{744128} = \mathbf{Pl}(8, 0, 0, 1, 0, 0)_{73} \\
\ell_{75} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{135296} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{135296} = \mathbf{Pl}(9, 0, 0, 1, 0, 0)_{74} \\
\ell_{76} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{845600} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{845600} = \mathbf{Pl}(10, 0, 0, 1, 0, 0)_{75} \\
\ell_{77} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{541184} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{541184} = \mathbf{Pl}(11, 0, 0, 1, 0, 0)_{76} \\
\ell_{78} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{236768} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{236768} = \mathbf{Pl}(12, 0, 0, 1, 0, 0)_{77} \\
\ell_{79} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{507360} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{507360} = \mathbf{Pl}(13, 0, 0, 1, 0, 0)_{78} \\
\ell_{80} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{202944} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{202944} = \mathbf{Pl}(14, 0, 0, 1, 0, 0)_{79} \\
\ell_{81} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{439712} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{439712} = \mathbf{Pl}(15, 0, 0, 1, 0, 0)_{80} \\
\ell_{82} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{372064} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{372064} = \mathbf{Pl}(16, 0, 0, 1, 0, 0)_{81} \\
\ell_{83} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{811776} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{811776} = \mathbf{Pl}(17, 0, 0, 1, 0, 0)_{82} \\
\ell_{84} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & 0 \end{bmatrix}_{67648} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{67648} = \mathbf{Pl}(18, 0, 0, 1, 0, 0)_{83} \\
\ell_{85} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{980896} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{980896} = \mathbf{Pl}(19, 0, 0, 1, 0, 0)_{84} \\
\ell_{86} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1014720} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1014720} = \mathbf{Pl}(20, 0, 0, 1, 0, 0)_{85} \\
\ell_{87} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{879424} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{879424} = \mathbf{Pl}(21, 0, 0, 1, 0, 0)_{86}
\end{aligned}$$

$$\begin{aligned}
\ell_{88} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{270592} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{270592} = \mathbf{Pl}(22, 0, 0, 1, 0, 0)_{87} \\
\ell_{89} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{169120} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{169120} = \mathbf{Pl}(23, 0, 0, 1, 0, 0)_{88} \\
\ell_{90} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{575008} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{575008} = \mathbf{Pl}(24, 0, 0, 1, 0, 0)_{89} \\
\ell_{91} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{338240} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{338240} = \mathbf{Pl}(25, 0, 0, 1, 0, 0)_{90} \\
\ell_{92} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{710304} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{710304} = \mathbf{Pl}(26, 0, 0, 1, 0, 0)_{91} \\
\ell_{93} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1048544} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{1048544} = \mathbf{Pl}(27, 0, 0, 1, 0, 0)_{92} \\
\ell_{94} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{101472} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{101472} = \mathbf{Pl}(28, 0, 0, 1, 0, 0)_{93} \\
\ell_{95} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{642656} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{642656} = \mathbf{Pl}(29, 0, 0, 1, 0, 0)_{94} \\
\ell_{96} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{676480} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{676480} = \mathbf{Pl}(30, 0, 0, 1, 0, 0)_{95} \\
\ell_{97} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & 0 \end{bmatrix}_{913248} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 0 \end{bmatrix}_{913248} = \mathbf{Pl}(31, 0, 0, 1, 0, 0)_{96} \\
\ell_{98} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082369} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082369} = \mathbf{Pl}(0, 0, 0, 1, 0, 1)_{36865} \\
\ell_{99} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082386} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082386} = \mathbf{Pl}(0, 0, 0, 18, 0, 1)_{37936} \\
\ell_{100} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082396} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082396} = \mathbf{Pl}(0, 0, 0, 28, 0, 1)_{38566} \\
\ell_{101} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082377} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082377} = \mathbf{Pl}(0, 0, 0, 9, 0, 1)_{37369} \\
\ell_{102} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082391} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082391} = \mathbf{Pl}(0, 0, 0, 23, 0, 1)_{38251} \\
\ell_{103} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082382} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082382} = \mathbf{Pl}(0, 0, 0, 14, 0, 1)_{37684} \\
\ell_{104} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082380} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082380} = \mathbf{Pl}(0, 0, 0, 12, 0, 1)_{37558} \\
\ell_{105} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082390} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082390} = \mathbf{Pl}(0, 0, 0, 22, 0, 1)_{38188} \\
\ell_{106} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082372} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082372} = \mathbf{Pl}(0, 0, 0, 4, 0, 1)_{37054} \\
\ell_{107} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082393} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082393} = \mathbf{Pl}(0, 0, 0, 25, 0, 1)_{38377} \\
\ell_{108} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082384} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082384} = \mathbf{Pl}(0, 0, 0, 16, 0, 1)_{37810}
\end{aligned}$$

$$\begin{aligned}
\ell_{109} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082375} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082375} = \mathbf{Pl}(0, 0, 0, 7, 0, 1)_{37243} \\
\ell_{110} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082383} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082383} = \mathbf{Pl}(0, 0, 0, 15, 0, 1)_{37747} \\
\ell_{111} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082374} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082374} = \mathbf{Pl}(0, 0, 0, 6, 0, 1)_{37180} \\
\ell_{112} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082381} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082381} = \mathbf{Pl}(0, 0, 0, 13, 0, 1)_{37621} \\
\ell_{113} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082379} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082379} = \mathbf{Pl}(0, 0, 0, 11, 0, 1)_{37495} \\
\ell_{114} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082392} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082392} = \mathbf{Pl}(0, 0, 0, 24, 0, 1)_{38314} \\
\ell_{115} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082370} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082370} = \mathbf{Pl}(0, 0, 0, 2, 0, 1)_{36928} \\
\ell_{116} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082397} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082397} = \mathbf{Pl}(0, 0, 0, 29, 0, 1)_{38629} \\
\ell_{117} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082398} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082398} = \mathbf{Pl}(0, 0, 0, 30, 0, 1)_{38692} \\
\ell_{118} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082394} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082394} = \mathbf{Pl}(0, 0, 0, 26, 0, 1)_{38440} \\
\ell_{119} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082376} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082376} = \mathbf{Pl}(0, 0, 0, 8, 0, 1)_{37306} \\
\ell_{120} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082373} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082373} = \mathbf{Pl}(0, 0, 0, 5, 0, 1)_{37117} \\
\ell_{121} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082385} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082385} = \mathbf{Pl}(0, 0, 0, 17, 0, 1)_{37873} \\
\ell_{122} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082378} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082378} = \mathbf{Pl}(0, 0, 0, 10, 0, 1)_{37432} \\
\ell_{123} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082389} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082389} = \mathbf{Pl}(0, 0, 0, 21, 0, 1)_{38125} \\
\ell_{124} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082399} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082399} = \mathbf{Pl}(0, 0, 0, 31, 0, 1)_{38755} \\
\ell_{125} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082371} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082371} = \mathbf{Pl}(0, 0, 0, 3, 0, 1)_{36991} \\
\ell_{126} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082387} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082387} = \mathbf{Pl}(0, 0, 0, 19, 0, 1)_{37999} \\
\ell_{127} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082388} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082388} = \mathbf{Pl}(0, 0, 0, 20, 0, 1)_{38062} \\
\ell_{128} &= \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082395} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082395} = \mathbf{Pl}(0, 0, 0, 27, 0, 1)_{38503} \\
\ell_{129} &= \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083424} = \begin{bmatrix} 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083424} = \mathbf{Pl}(0, 1, 0, 0, 0, 0)_1
\end{aligned}$$

$$\begin{aligned}
\ell_{130} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{34848} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{34848} = \mathbf{Pl}(0, 1, 1, 0, 0, 0)_{34} \\
\ell_{131} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{609856} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{609856} = \mathbf{Pl}(0, 18, 1, 0, 0, 0)_{51} \\
\ell_{132} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{948096} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{948096} = \mathbf{Pl}(0, 28, 1, 0, 0, 0)_{61} \\
\ell_{133} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{305440} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{305440} = \mathbf{Pl}(0, 9, 1, 0, 0, 0)_{42} \\
\ell_{134} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{778976} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{778976} = \mathbf{Pl}(0, 23, 1, 0, 0, 0)_{56} \\
\ell_{135} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{474560} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{474560} = \mathbf{Pl}(0, 14, 1, 0, 0, 0)_{47} \\
\ell_{136} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{406912} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{406912} = \mathbf{Pl}(0, 12, 1, 0, 0, 0)_{45} \\
\ell_{137} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{745152} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{745152} = \mathbf{Pl}(0, 22, 1, 0, 0, 0)_{55} \\
\ell_{138} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{136320} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{136320} = \mathbf{Pl}(0, 4, 1, 0, 0, 0)_{37} \\
\ell_{139} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{846624} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{846624} = \mathbf{Pl}(0, 25, 1, 0, 0, 0)_{58} \\
\ell_{140} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{542208} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{542208} = \mathbf{Pl}(0, 16, 1, 0, 0, 0)_{49} \\
\ell_{141} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{237792} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{237792} = \mathbf{Pl}(0, 7, 1, 0, 0, 0)_{40} \\
\ell_{142} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{508384} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{508384} = \mathbf{Pl}(0, 15, 1, 0, 0, 0)_{48} \\
\ell_{143} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{203968} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{203968} = \mathbf{Pl}(0, 6, 1, 0, 0, 0)_{39} \\
\ell_{144} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{440736} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{440736} = \mathbf{Pl}(0, 13, 1, 0, 0, 0)_{46} \\
\ell_{145} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{373088} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{373088} = \mathbf{Pl}(0, 11, 1, 0, 0, 0)_{44} \\
\ell_{146} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{812800} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{812800} = \mathbf{Pl}(0, 24, 1, 0, 0, 0)_{57} \\
\ell_{147} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & 0 \end{bmatrix}_{68672} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{68672} = \mathbf{Pl}(0, 2, 1, 0, 0, 0)_{35} \\
\ell_{148} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{981920} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{981920} = \mathbf{Pl}(0, 29, 1, 0, 0, 0)_{62} \\
\ell_{149} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1015744} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1015744} = \mathbf{Pl}(0, 30, 1, 0, 0, 0)_{63} \\
\ell_{150} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{880448} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{880448} = \mathbf{Pl}(0, 26, 1, 0, 0, 0)_{59}
\end{aligned}$$

$$\begin{aligned}
\ell_{151} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{271616} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{271616} = \mathbf{Pl}(0, 8, 1, 0, 0, 0)_{41} \\
\ell_{152} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{170144} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{170144} = \mathbf{Pl}(0, 5, 1, 0, 0, 0)_{38} \\
\ell_{153} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{576032} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{576032} = \mathbf{Pl}(0, 17, 1, 0, 0, 0)_{50} \\
\ell_{154} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{339264} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{339264} = \mathbf{Pl}(0, 10, 1, 0, 0, 0)_{43} \\
\ell_{155} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{711328} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{711328} = \mathbf{Pl}(0, 21, 1, 0, 0, 0)_{54} \\
\ell_{156} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1049568} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1049568} = \mathbf{Pl}(0, 31, 1, 0, 0, 0)_{64} \\
\ell_{157} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{102496} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{102496} = \mathbf{Pl}(0, 3, 1, 0, 0, 0)_{36} \\
\ell_{158} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{643680} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{643680} = \mathbf{Pl}(0, 19, 1, 0, 0, 0)_{52} \\
\ell_{159} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{677504} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{677504} = \mathbf{Pl}(0, 20, 1, 0, 0, 0)_{53} \\
\ell_{160} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{914272} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{914272} = \mathbf{Pl}(0, 27, 1, 0, 0, 0)_{60} \\
\ell_{161} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082401} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082401} = \mathbf{Pl}(0, 1, 0, 0, 0, 1)_{34881} \\
\ell_{162} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082962} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082962} = \mathbf{Pl}(0, 18, 0, 0, 0, 1)_{34898} \\
\ell_{163} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083292} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083292} = \mathbf{Pl}(0, 28, 0, 0, 0, 1)_{34908} \\
\ell_{164} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082665} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082665} = \mathbf{Pl}(0, 9, 0, 0, 0, 1)_{34889} \\
\ell_{165} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083127} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083127} = \mathbf{Pl}(0, 23, 0, 0, 0, 1)_{34903} \\
\ell_{166} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082830} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082830} = \mathbf{Pl}(0, 14, 0, 0, 0, 1)_{34894} \\
\ell_{167} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082764} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082764} = \mathbf{Pl}(0, 12, 0, 0, 0, 1)_{34892} \\
\ell_{168} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083094} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083094} = \mathbf{Pl}(0, 22, 0, 0, 0, 1)_{34902} \\
\ell_{169} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082500} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082500} = \mathbf{Pl}(0, 4, 0, 0, 0, 1)_{34884} \\
\ell_{170} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083193} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083193} = \mathbf{Pl}(0, 25, 0, 0, 0, 1)_{34905} \\
\ell_{171} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082896} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082896} = \mathbf{Pl}(0, 16, 0, 0, 0, 1)_{34896}
\end{aligned}$$

$$\begin{aligned}
\ell_{172} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082599} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082599} = \mathbf{Pl}(0, 7, 0, 0, 0, 1)_{34887} \\
\ell_{173} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082863} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082863} = \mathbf{Pl}(0, 15, 0, 0, 0, 1)_{34895} \\
\ell_{174} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082566} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082566} = \mathbf{Pl}(0, 6, 0, 0, 0, 1)_{34886} \\
\ell_{175} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082797} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082797} = \mathbf{Pl}(0, 13, 0, 0, 0, 1)_{34893} \\
\ell_{176} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082731} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082731} = \mathbf{Pl}(0, 11, 0, 0, 0, 1)_{34891} \\
\ell_{177} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083160} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083160} = \mathbf{Pl}(0, 24, 0, 0, 0, 1)_{34904} \\
\ell_{178} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082434} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082434} = \mathbf{Pl}(0, 2, 0, 0, 0, 1)_{34882} \\
\ell_{179} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083325} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083325} = \mathbf{Pl}(0, 29, 0, 0, 0, 1)_{34909} \\
\ell_{180} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083358} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083358} = \mathbf{Pl}(0, 30, 0, 0, 0, 1)_{34910} \\
\ell_{181} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083226} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083226} = \mathbf{Pl}(0, 26, 0, 0, 0, 1)_{34906} \\
\ell_{182} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082632} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082632} = \mathbf{Pl}(0, 8, 0, 0, 0, 1)_{34888} \\
\ell_{183} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082533} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082533} = \mathbf{Pl}(0, 5, 0, 0, 0, 1)_{34885} \\
\ell_{184} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082929} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082929} = \mathbf{Pl}(0, 17, 0, 0, 0, 1)_{34897} \\
\ell_{185} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082698} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082698} = \mathbf{Pl}(0, 10, 0, 0, 0, 1)_{34890} \\
\ell_{186} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083061} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083061} = \mathbf{Pl}(0, 21, 0, 0, 0, 1)_{34901} \\
\ell_{187} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083391} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083391} = \mathbf{Pl}(0, 31, 0, 0, 0, 1)_{34911} \\
\ell_{188} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082467} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082467} = \mathbf{Pl}(0, 3, 0, 0, 0, 1)_{34883} \\
\ell_{189} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082995} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1082995} = \mathbf{Pl}(0, 19, 0, 0, 0, 1)_{34899} \\
\ell_{190} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083028} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083028} = \mathbf{Pl}(0, 20, 0, 0, 0, 1)_{34900} \\
\ell_{191} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083259} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 0 \end{bmatrix}_{1083259} = \mathbf{Pl}(0, 27, 0, 0, 0, 1)_{34907} \\
\ell_{192} &= \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2113} = \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2113} = \mathbf{Pl}(0, 0, 0, 1, 1, 0)_{3105}
\end{aligned}$$

$$\begin{aligned}
\ell_{193} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{33856} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{33856} = \mathbf{Pl}(1, 0, 0, 1, 1, 0)_{3106} \\
\ell_{194} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{609408} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{609408} = \mathbf{Pl}(2, 0, 0, 1, 1, 0)_{3107} \\
\ell_{195} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{947968} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{947968} = \mathbf{Pl}(3, 0, 0, 1, 1, 0)_{3108} \\
\ell_{196} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{304704} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{304704} = \mathbf{Pl}(4, 0, 0, 1, 1, 0)_{3109} \\
\ell_{197} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{778688} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{778688} = \mathbf{Pl}(5, 0, 0, 1, 1, 0)_{3110} \\
\ell_{198} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{473984} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{473984} = \mathbf{Pl}(6, 0, 0, 1, 1, 0)_{3111} \\
\ell_{199} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{406272} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{406272} = \mathbf{Pl}(7, 0, 0, 1, 1, 0)_{3112} \\
\ell_{200} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{744832} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{744832} = \mathbf{Pl}(8, 0, 0, 1, 1, 0)_{3113} \\
\ell_{201} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{135424} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{135424} = \mathbf{Pl}(9, 0, 0, 1, 1, 0)_{3114} \\
\ell_{202} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{846400} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{846400} = \mathbf{Pl}(10, 0, 0, 1, 1, 0)_{3115} \\
\ell_{203} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{541696} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{541696} = \mathbf{Pl}(11, 0, 0, 1, 1, 0)_{3116} \\
\ell_{204} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{236992} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{236992} = \mathbf{Pl}(12, 0, 0, 1, 1, 0)_{3117} \\
\ell_{205} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{507840} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{507840} = \mathbf{Pl}(13, 0, 0, 1, 1, 0)_{3118} \\
\ell_{206} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{203136} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{203136} = \mathbf{Pl}(14, 0, 0, 1, 1, 0)_{3119} \\
\ell_{207} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{440128} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{440128} = \mathbf{Pl}(15, 0, 0, 1, 1, 0)_{3120} \\
\ell_{208} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{372416} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{372416} = \mathbf{Pl}(16, 0, 0, 1, 1, 0)_{3121} \\
\ell_{209} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{812544} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{812544} = \mathbf{Pl}(17, 0, 0, 1, 1, 0)_{3122} \\
\ell_{210} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta \end{bmatrix}_{67712} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{67712} = \mathbf{Pl}(18, 0, 0, 1, 1, 0)_{3123} \\
\ell_{211} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{981824} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{981824} = \mathbf{Pl}(19, 0, 0, 1, 1, 0)_{3124} \\
\ell_{212} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{1015680} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{1015680} = \mathbf{Pl}(20, 0, 0, 1, 1, 0)_{3125} \\
\ell_{213} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{880256} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{880256} = \mathbf{Pl}(21, 0, 0, 1, 1, 0)_{3126}
\end{aligned}$$

$$\begin{aligned}
\ell_{214} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{270848} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{270848} = \mathbf{Pl}(22, 0, 0, 1, 1, 0)_{3127} \\
\ell_{215} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{169280} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{169280} = \mathbf{Pl}(23, 0, 0, 1, 1, 0)_{3128} \\
\ell_{216} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{575552} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{575552} = \mathbf{Pl}(24, 0, 0, 1, 1, 0)_{3129} \\
\ell_{217} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{338560} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{338560} = \mathbf{Pl}(25, 0, 0, 1, 1, 0)_{3130} \\
\ell_{218} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{710976} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{710976} = \mathbf{Pl}(26, 0, 0, 1, 1, 0)_{3131} \\
\ell_{219} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{1049536} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{1049536} = \mathbf{Pl}(27, 0, 0, 1, 1, 0)_{3132} \\
\ell_{220} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{101568} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{101568} = \mathbf{Pl}(28, 0, 0, 1, 1, 0)_{3133} \\
\ell_{221} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{643264} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{643264} = \mathbf{Pl}(29, 0, 0, 1, 1, 0)_{3134} \\
\ell_{222} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{677120} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{677120} = \mathbf{Pl}(30, 0, 0, 1, 1, 0)_{3135} \\
\ell_{223} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{914112} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{914112} = \mathbf{Pl}(31, 0, 0, 1, 1, 0)_{3136} \\
\ell_{224} &= \begin{bmatrix} 1 & \eta^{30} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{20082} = \begin{bmatrix} 1 & 18 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{20082} = \mathbf{Pl}(0, 0, 0, 18, 1, 0)_{4176} \\
\ell_{225} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{33888} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{33888} = \mathbf{Pl}(18, 0, 0, 18, 1, 0)_{4194} \\
\ell_{226} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{608864} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{608864} = \mathbf{Pl}(1, 0, 0, 18, 1, 0)_{4177} \\
\ell_{227} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{948000} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{948000} = \mathbf{Pl}(19, 0, 0, 18, 1, 0)_{4195} \\
\ell_{228} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{304992} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{304992} = \mathbf{Pl}(2, 0, 0, 18, 1, 0)_{4178} \\
\ell_{229} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{778304} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{778304} = \mathbf{Pl}(16, 0, 0, 18, 1, 0)_{4192} \\
\ell_{230} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{474432} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{474432} = \mathbf{Pl}(3, 0, 0, 18, 1, 0)_{4179} \\
\ell_{231} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{406656} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{406656} = \mathbf{Pl}(17, 0, 0, 18, 1, 0)_{4193} \\
\ell_{232} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{744416} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{744416} = \mathbf{Pl}(4, 0, 0, 18, 1, 0)_{4180} \\
\ell_{233} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{135552} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{135552} = \mathbf{Pl}(22, 0, 0, 18, 1, 0)_{4198} \\
\ell_{234} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{846336} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{846336} = \mathbf{Pl}(5, 0, 0, 18, 1, 0)_{4181}
\end{aligned}$$

$$\begin{aligned}
\ell_{235} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{541344} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{541344} = \mathbf{Pl}(23, 0, 0, 18, 1, 0)_{4199} \\
\ell_{236} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{237216} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{237216} = \mathbf{Pl}(6, 0, 0, 18, 1, 0)_{4182} \\
\ell_{237} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{508320} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{508320} = \mathbf{Pl}(20, 0, 0, 18, 1, 0)_{4196} \\
\ell_{238} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{203328} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{203328} = \mathbf{Pl}(7, 0, 0, 18, 1, 0)_{4183} \\
\ell_{239} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{440544} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{440544} = \mathbf{Pl}(21, 0, 0, 18, 1, 0)_{4197} \\
\ell_{240} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{372768} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{372768} = \mathbf{Pl}(8, 0, 0, 18, 1, 0)_{4184} \\
\ell_{241} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{812448} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{812448} = \mathbf{Pl}(26, 0, 0, 18, 1, 0)_{4202} \\
\ell_{242} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{67776} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{67776} = \mathbf{Pl}(9, 0, 0, 18, 1, 0)_{4185} \\
\ell_{243} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{981888} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{981888} = \mathbf{Pl}(27, 0, 0, 18, 1, 0)_{4203} \\
\ell_{244} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{1015520} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{1015520} = \mathbf{Pl}(10, 0, 0, 18, 1, 0)_{4186} \\
\ell_{245} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{879968} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{879968} = \mathbf{Pl}(24, 0, 0, 18, 1, 0)_{4200} \\
\ell_{246} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{271104} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{271104} = \mathbf{Pl}(11, 0, 0, 18, 1, 0)_{4187} \\
\ell_{247} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{169440} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{169440} = \mathbf{Pl}(25, 0, 0, 18, 1, 0)_{4201} \\
\ell_{248} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{575232} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{575232} = \mathbf{Pl}(12, 0, 0, 18, 1, 0)_{4188} \\
\ell_{249} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{338880} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{338880} = \mathbf{Pl}(30, 0, 0, 18, 1, 0)_{4206} \\
\ell_{250} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{710784} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{710784} = \mathbf{Pl}(13, 0, 0, 18, 1, 0)_{4189} \\
\ell_{251} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{1049408} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{1049408} = \mathbf{Pl}(31, 0, 0, 18, 1, 0)_{4207} \\
\ell_{252} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{101664} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{101664} = \mathbf{Pl}(14, 0, 0, 18, 1, 0)_{4190} \\
\ell_{253} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{642752} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{642752} = \mathbf{Pl}(28, 0, 0, 18, 1, 0)_{4204} \\
\ell_{254} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{676896} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{676896} = \mathbf{Pl}(15, 0, 0, 18, 1, 0)_{4191} \\
\ell_{255} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{913856} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{913856} = \mathbf{Pl}(29, 0, 0, 18, 1, 0)_{4205}
\end{aligned}$$

$$\begin{aligned}
\ell_{256} &= \begin{bmatrix} 1 & \eta^{13} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{30652} = \begin{bmatrix} 1 & 28 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{30652} = \mathbf{Pl}(0, 0, 0, 28, 1, 0)_{4806} \\
\ell_{257} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{33920} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{33920} = \mathbf{Pl}(28, 0, 0, 28, 1, 0)_{4834} \\
\ell_{258} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{609440} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{609440} = \mathbf{Pl}(29, 0, 0, 28, 1, 0)_{4835} \\
\ell_{259} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{947104} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{947104} = \mathbf{Pl}(1, 0, 0, 28, 1, 0)_{4807} \\
\ell_{260} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{305280} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{305280} = \mathbf{Pl}(31, 0, 0, 28, 1, 0)_{4837} \\
\ell_{261} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{778848} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{778848} = \mathbf{Pl}(3, 0, 0, 28, 1, 0)_{4809} \\
\ell_{262} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{474112} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{474112} = \mathbf{Pl}(2, 0, 0, 28, 1, 0)_{4808} \\
\ell_{263} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{406528} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{406528} = \mathbf{Pl}(30, 0, 0, 28, 1, 0)_{4836} \\
\ell_{264} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{745120} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{745120} = \mathbf{Pl}(27, 0, 0, 28, 1, 0)_{4833} \\
\ell_{265} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{135680} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{135680} = \mathbf{Pl}(7, 0, 0, 28, 1, 0)_{4813} \\
\ell_{266} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{846048} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{846048} = \mathbf{Pl}(6, 0, 0, 28, 1, 0)_{4812} \\
\ell_{267} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{541856} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{541856} = \mathbf{Pl}(26, 0, 0, 28, 1, 0)_{4832} \\
\ell_{268} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{237056} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{237056} = \mathbf{Pl}(4, 0, 0, 28, 1, 0)_{4810} \\
\ell_{269} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{507904} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{507904} = \mathbf{Pl}(24, 0, 0, 28, 1, 0)_{4830} \\
\ell_{270} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{203264} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{203264} = \mathbf{Pl}(25, 0, 0, 28, 1, 0)_{4831} \\
\ell_{271} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{440448} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{440448} = \mathbf{Pl}(5, 0, 0, 28, 1, 0)_{4811} \\
\ell_{272} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{372992} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{372992} = \mathbf{Pl}(19, 0, 0, 28, 1, 0)_{4825} \\
\ell_{273} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{812192} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{812192} = \mathbf{Pl}(15, 0, 0, 28, 1, 0)_{4821} \\
\ell_{274} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{67840} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{67840} = \mathbf{Pl}(14, 0, 0, 28, 1, 0)_{4820} \\
\ell_{275} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{980960} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{980960} = \mathbf{Pl}(18, 0, 0, 28, 1, 0)_{4824} \\
\ell_{276} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{1014944} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{1014944} = \mathbf{Pl}(12, 0, 0, 28, 1, 0)_{4818}
\end{aligned}$$

$$\begin{aligned}
\ell_{277} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{879776} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{879776} = \mathbf{Pl}(16, 0, 0, 28, 1, 0)_{4822} \\
\ell_{278} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{271360} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{271360} = \mathbf{Pl}(17, 0, 0, 28, 1, 0)_{4823} \\
\ell_{279} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{169600} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{169600} = \mathbf{Pl}(13, 0, 0, 28, 1, 0)_{4819} \\
\ell_{280} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{575712} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{575712} = \mathbf{Pl}(8, 0, 0, 28, 1, 0)_{4814} \\
\ell_{281} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{339200} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{339200} = \mathbf{Pl}(20, 0, 0, 28, 1, 0)_{4826} \\
\ell_{282} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{711136} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{711136} = \mathbf{Pl}(21, 0, 0, 28, 1, 0)_{4827} \\
\ell_{283} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{1048672} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{1048672} = \mathbf{Pl}(9, 0, 0, 28, 1, 0)_{4815} \\
\ell_{284} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{101632} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{101632} = \mathbf{Pl}(23, 0, 0, 28, 1, 0)_{4829} \\
\ell_{285} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{643168} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{643168} = \mathbf{Pl}(11, 0, 0, 28, 1, 0)_{4817} \\
\ell_{286} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{677280} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{677280} = \mathbf{Pl}(10, 0, 0, 28, 1, 0)_{4816} \\
\ell_{287} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{913504} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{913504} = \mathbf{Pl}(22, 0, 0, 28, 1, 0)_{4828} \\
\ell_{288} &= \begin{bmatrix} 1 & \eta^{29} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10569} = \begin{bmatrix} 1 & 9 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10569} = \mathbf{Pl}(0, 0, 0, 9, 1, 0)_{3609} \\
\ell_{289} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{33952} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{33952} = \mathbf{Pl}(9, 0, 0, 9, 1, 0)_{3618} \\
\ell_{290} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{608896} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{608896} = \mathbf{Pl}(18, 0, 0, 9, 1, 0)_{3627} \\
\ell_{291} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{948064} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{948064} = \mathbf{Pl}(27, 0, 0, 9, 1, 0)_{3636} \\
\ell_{292} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{304448} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{304448} = \mathbf{Pl}(1, 0, 0, 9, 1, 0)_{3610} \\
\ell_{293} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{778656} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{778656} = \mathbf{Pl}(8, 0, 0, 9, 1, 0)_{3617} \\
\ell_{294} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{474464} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{474464} = \mathbf{Pl}(19, 0, 0, 9, 1, 0)_{3628} \\
\ell_{295} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{406560} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{406560} = \mathbf{Pl}(26, 0, 0, 9, 1, 0)_{3635} \\
\ell_{296} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{744704} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{744704} = \mathbf{Pl}(2, 0, 0, 9, 1, 0)_{3611} \\
\ell_{297} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{135808} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{135808} = \mathbf{Pl}(11, 0, 0, 9, 1, 0)_{3620}
\end{aligned}$$

$$\begin{aligned}
\ell_{298} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{845952} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{845952} = \mathbf{Pl}(16, 0, 0, 9, 1, 0)_{3625} \\
\ell_{299} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{541504} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{541504} = \mathbf{Pl}(25, 0, 0, 9, 1, 0)_{3634} \\
\ell_{300} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{237664} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{237664} = \mathbf{Pl}(3, 0, 0, 9, 1, 0)_{3612} \\
\ell_{301} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{508160} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{508160} = \mathbf{Pl}(10, 0, 0, 9, 1, 0)_{3619} \\
\ell_{302} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{203712} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{203712} = \mathbf{Pl}(17, 0, 0, 9, 1, 0)_{3626} \\
\ell_{303} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{440256} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{440256} = \mathbf{Pl}(24, 0, 0, 9, 1, 0)_{3633} \\
\ell_{304} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{372352} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{372352} = \mathbf{Pl}(4, 0, 0, 9, 1, 0)_{3613} \\
\ell_{305} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{812256} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{812256} = \mathbf{Pl}(13, 0, 0, 9, 1, 0)_{3622} \\
\ell_{306} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{67904} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{67904} = \mathbf{Pl}(22, 0, 0, 9, 1, 0)_{3631} \\
\ell_{307} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{981760} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{981760} = \mathbf{Pl}(31, 0, 0, 9, 1, 0)_{3640} \\
\ell_{308} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{1015456} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{1015456} = \mathbf{Pl}(5, 0, 0, 9, 1, 0)_{3614} \\
\ell_{309} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{879648} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{879648} = \mathbf{Pl}(12, 0, 0, 9, 1, 0)_{3621} \\
\ell_{310} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{270752} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{270752} = \mathbf{Pl}(23, 0, 0, 9, 1, 0)_{3632} \\
\ell_{311} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{169760} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{169760} = \mathbf{Pl}(30, 0, 0, 9, 1, 0)_{3639} \\
\ell_{312} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{575456} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{575456} = \mathbf{Pl}(6, 0, 0, 9, 1, 0)_{3615} \\
\ell_{313} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{338656} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{338656} = \mathbf{Pl}(15, 0, 0, 9, 1, 0)_{3624} \\
\ell_{314} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{711264} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{711264} = \mathbf{Pl}(20, 0, 0, 9, 1, 0)_{3629} \\
\ell_{315} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{1049152} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{1049152} = \mathbf{Pl}(29, 0, 0, 9, 1, 0)_{3638} \\
\ell_{316} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{101856} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{101856} = \mathbf{Pl}(7, 0, 0, 9, 1, 0)_{3616} \\
\ell_{317} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{642848} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{642848} = \mathbf{Pl}(14, 0, 0, 9, 1, 0)_{3623} \\
\ell_{318} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{677312} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{677312} = \mathbf{Pl}(21, 0, 0, 9, 1, 0)_{3630}
\end{aligned}$$

$$\begin{aligned}
\ell_{319} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{913344} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{913344} = \mathbf{Pl}(28, 0, 0, 9, 1, 0)_{3637} \\
\ell_{320} &= \begin{bmatrix} 1 & \eta^{26} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{25367} = \begin{bmatrix} 1 & 23 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{25367} = \mathbf{Pl}(0, 0, 0, 23, 1, 0)_{4491} \\
\ell_{321} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{33984} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{33984} = \mathbf{Pl}(23, 0, 0, 23, 1, 0)_{4514} \\
\ell_{322} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{609344} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{609344} = \mathbf{Pl}(11, 0, 0, 23, 1, 0)_{4502} \\
\ell_{323} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{947168} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{947168} = \mathbf{Pl}(28, 0, 0, 23, 1, 0)_{4519} \\
\ell_{324} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{304672} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{304672} = \mathbf{Pl}(22, 0, 0, 23, 1, 0)_{4513} \\
\ell_{325} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{777984} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{777984} = \mathbf{Pl}(1, 0, 0, 23, 1, 0)_{4492} \\
\ell_{326} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{474144} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{474144} = \mathbf{Pl}(29, 0, 0, 23, 1, 0)_{4520} \\
\ell_{327} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{406688} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{406688} = \mathbf{Pl}(10, 0, 0, 23, 1, 0)_{4501} \\
\ell_{328} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{744256} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{744256} = \mathbf{Pl}(9, 0, 0, 23, 1, 0)_{4500} \\
\ell_{329} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{135936} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{135936} = \mathbf{Pl}(30, 0, 0, 23, 1, 0)_{4521} \\
\ell_{330} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{846176} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{846176} = \mathbf{Pl}(2, 0, 0, 23, 1, 0)_{4493} \\
\ell_{331} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{542016} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{542016} = \mathbf{Pl}(21, 0, 0, 23, 1, 0)_{4512} \\
\ell_{332} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{237632} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{237632} = \mathbf{Pl}(31, 0, 0, 23, 1, 0)_{4522} \\
\ell_{333} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{508064} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{508064} = \mathbf{Pl}(8, 0, 0, 23, 1, 0)_{4499} \\
\ell_{334} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{203904} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{203904} = \mathbf{Pl}(20, 0, 0, 23, 1, 0)_{4511} \\
\ell_{335} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{440608} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{440608} = \mathbf{Pl}(3, 0, 0, 23, 1, 0)_{4494} \\
\ell_{336} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{372128} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{372128} = \mathbf{Pl}(18, 0, 0, 23, 1, 0)_{4509} \\
\ell_{337} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{812512} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{812512} = \mathbf{Pl}(5, 0, 0, 23, 1, 0)_{4496} \\
\ell_{338} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{67968} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{67968} = \mathbf{Pl}(25, 0, 0, 23, 1, 0)_{4516} \\
\ell_{339} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{981088} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{981088} = \mathbf{Pl}(14, 0, 0, 23, 1, 0)_{4505}
\end{aligned}$$

$$\begin{aligned}
\ell_{340} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{1015008} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{1015008} = \mathbf{Pl}(4, 0, 0, 23, 1, 0)_{4495} \\
\ell_{341} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{880352} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{880352} = \mathbf{Pl}(19, 0, 0, 23, 1, 0)_{4510} \\
\ell_{342} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{271008} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{271008} = \mathbf{Pl}(15, 0, 0, 23, 1, 0)_{4506} \\
\ell_{343} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{169664} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{169664} = \mathbf{Pl}(24, 0, 0, 23, 1, 0)_{4515} \\
\ell_{344} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{576000} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{576000} = \mathbf{Pl}(27, 0, 0, 23, 1, 0)_{4518} \\
\ell_{345} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{338464} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{338464} = \mathbf{Pl}(12, 0, 0, 23, 1, 0)_{4503} \\
\ell_{346} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{710656} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{710656} = \mathbf{Pl}(16, 0, 0, 23, 1, 0)_{4507} \\
\ell_{347} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{1048928} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{1048928} = \mathbf{Pl}(7, 0, 0, 23, 1, 0)_{4498} \\
\ell_{348} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{101952} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{101952} = \mathbf{Pl}(13, 0, 0, 23, 1, 0)_{4504} \\
\ell_{349} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{643328} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{643328} = \mathbf{Pl}(26, 0, 0, 23, 1, 0)_{4517} \\
\ell_{350} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{676928} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{676928} = \mathbf{Pl}(6, 0, 0, 23, 1, 0)_{4497} \\
\ell_{351} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{914016} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{914016} = \mathbf{Pl}(17, 0, 0, 23, 1, 0)_{4508} \\
\ell_{352} &= \begin{bmatrix} 1 & \eta^{12} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15854} = \begin{bmatrix} 1 & 14 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15854} = \mathbf{Pl}(0, 0, 0, 14, 1, 0)_{3924} \\
\ell_{353} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{34016} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{34016} = \mathbf{Pl}(14, 0, 0, 14, 1, 0)_{3938} \\
\ell_{354} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{608928} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{608928} = \mathbf{Pl}(28, 0, 0, 14, 1, 0)_{3952} \\
\ell_{355} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{947136} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{947136} = \mathbf{Pl}(18, 0, 0, 14, 1, 0)_{3942} \\
\ell_{356} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{305024} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{305024} = \mathbf{Pl}(29, 0, 0, 14, 1, 0)_{3953} \\
\ell_{357} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{778880} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{778880} = \mathbf{Pl}(19, 0, 0, 14, 1, 0)_{3943} \\
\ell_{358} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{473568} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{473568} = \mathbf{Pl}(1, 0, 0, 14, 1, 0)_{3925} \\
\ell_{359} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{406304} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{406304} = \mathbf{Pl}(15, 0, 0, 14, 1, 0)_{3939} \\
\ell_{360} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{744992} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{744992} = \mathbf{Pl}(31, 0, 0, 14, 1, 0)_{3955}
\end{aligned}$$

$$\begin{aligned}
\ell_{361} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{136064} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{136064} = \mathbf{Pl}(17, 0, 0, 14, 1, 0)_{3941} \\
\ell_{362} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{846496} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{846496} = \mathbf{Pl}(3, 0, 0, 14, 1, 0)_{3927} \\
\ell_{363} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{541664} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{541664} = \mathbf{Pl}(13, 0, 0, 14, 1, 0)_{3937} \\
\ell_{364} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{237344} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{237344} = \mathbf{Pl}(2, 0, 0, 14, 1, 0)_{3926} \\
\ell_{365} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{507584} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{507584} = \mathbf{Pl}(12, 0, 0, 14, 1, 0)_{3936} \\
\ell_{366} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{203584} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{203584} = \mathbf{Pl}(30, 0, 0, 14, 1, 0)_{3954} \\
\ell_{367} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{440064} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{440064} = \mathbf{Pl}(16, 0, 0, 14, 1, 0)_{3940} \\
\ell_{368} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{373056} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{373056} = \mathbf{Pl}(27, 0, 0, 14, 1, 0)_{3951} \\
\ell_{369} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{812608} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{812608} = \mathbf{Pl}(21, 0, 0, 14, 1, 0)_{3945} \\
\ell_{370} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{68032} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{68032} = \mathbf{Pl}(7, 0, 0, 14, 1, 0)_{3931} \\
\ell_{371} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{981024} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{981024} = \mathbf{Pl}(9, 0, 0, 14, 1, 0)_{3933} \\
\ell_{372} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{1015168} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{1015168} = \mathbf{Pl}(6, 0, 0, 14, 1, 0)_{3930} \\
\ell_{373} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{880128} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{880128} = \mathbf{Pl}(8, 0, 0, 14, 1, 0)_{3932} \\
\ell_{374} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{271264} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{271264} = \mathbf{Pl}(26, 0, 0, 14, 1, 0)_{3950} \\
\ell_{375} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{170080} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{170080} = \mathbf{Pl}(20, 0, 0, 14, 1, 0)_{3944} \\
\ell_{376} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{575296} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{575296} = \mathbf{Pl}(4, 0, 0, 14, 1, 0)_{3928} \\
\ell_{377} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{339040} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{339040} = \mathbf{Pl}(10, 0, 0, 14, 1, 0)_{3934} \\
\ell_{378} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{710848} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{710848} = \mathbf{Pl}(24, 0, 0, 14, 1, 0)_{3948} \\
\ell_{379} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{1048800} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{1048800} = \mathbf{Pl}(22, 0, 0, 14, 1, 0)_{3946} \\
\ell_{380} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{101792} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{101792} = \mathbf{Pl}(25, 0, 0, 14, 1, 0)_{3949} \\
\ell_{381} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{642816} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{642816} = \mathbf{Pl}(23, 0, 0, 14, 1, 0)_{3947}
\end{aligned}$$

$$\begin{aligned}
\ell_{382} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{677216} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{677216} = \mathbf{Pl}(5, 0, 0, 14, 1, 0)_{3929} \\
\ell_{383} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{913760} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{913760} = \mathbf{Pl}(11, 0, 0, 14, 1, 0)_{3935} \\
\ell_{384} &= \begin{bmatrix} 1 & \eta^{20} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13740} = \begin{bmatrix} 1 & 12 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13740} = \mathbf{Pl}(0, 0, 0, 12, 1, 0)_{3798} \\
\ell_{385} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{34048} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{34048} = \mathbf{Pl}(12, 0, 0, 12, 1, 0)_{3810} \\
\ell_{386} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{609376} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{609376} = \mathbf{Pl}(24, 0, 0, 12, 1, 0)_{3822} \\
\ell_{387} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{948032} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{948032} = \mathbf{Pl}(20, 0, 0, 12, 1, 0)_{3818} \\
\ell_{388} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{305248} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{305248} = \mathbf{Pl}(21, 0, 0, 12, 1, 0)_{3819} \\
\ell_{389} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{778272} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{778272} = \mathbf{Pl}(25, 0, 0, 12, 1, 0)_{3823} \\
\ell_{390} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{474016} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{474016} = \mathbf{Pl}(13, 0, 0, 12, 1, 0)_{3811} \\
\ell_{391} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{405920} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{405920} = \mathbf{Pl}(1, 0, 0, 12, 1, 0)_{3799} \\
\ell_{392} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{744544} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{744544} = \mathbf{Pl}(15, 0, 0, 12, 1, 0)_{3813} \\
\ell_{393} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{136192} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{136192} = \mathbf{Pl}(3, 0, 0, 12, 1, 0)_{3801} \\
\ell_{394} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{845760} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{845760} = \mathbf{Pl}(23, 0, 0, 12, 1, 0)_{3821} \\
\ell_{395} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{542176} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{542176} = \mathbf{Pl}(27, 0, 0, 12, 1, 0)_{3825} \\
\ell_{396} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{237440} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{237440} = \mathbf{Pl}(26, 0, 0, 12, 1, 0)_{3824} \\
\ell_{397} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{507616} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{507616} = \mathbf{Pl}(22, 0, 0, 12, 1, 0)_{3820} \\
\ell_{398} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{203520} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{203520} = \mathbf{Pl}(2, 0, 0, 12, 1, 0)_{3800} \\
\ell_{399} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{439904} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{439904} = \mathbf{Pl}(14, 0, 0, 12, 1, 0)_{3812} \\
\ell_{400} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{372704} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{372704} = \mathbf{Pl}(30, 0, 0, 12, 1, 0)_{3828} \\
\ell_{401} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{811840} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{811840} = \mathbf{Pl}(18, 0, 0, 12, 1, 0)_{3816} \\
\ell_{402} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{68096} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{68096} = \mathbf{Pl}(6, 0, 0, 12, 1, 0)_{3804}
\end{aligned}$$

$$\begin{aligned}
\ell_{403} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{981696} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{981696} = \mathbf{Pl}(10, 0, 0, 12, 1, 0)_{3808} \\
\ell_{404} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{1015232} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{1015232} = \mathbf{Pl}(11, 0, 0, 12, 1, 0)_{3809} \\
\ell_{405} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{879808} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{879808} = \mathbf{Pl}(7, 0, 0, 12, 1, 0)_{3805} \\
\ell_{406} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{271520} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{271520} = \mathbf{Pl}(19, 0, 0, 12, 1, 0)_{3817} \\
\ell_{407} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{169984} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{169984} = \mathbf{Pl}(31, 0, 0, 12, 1, 0)_{3829} \\
\ell_{408} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{575776} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{575776} = \mathbf{Pl}(17, 0, 0, 12, 1, 0)_{3815} \\
\ell_{409} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{338848} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{338848} = \mathbf{Pl}(29, 0, 0, 12, 1, 0)_{3827} \\
\ell_{410} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{710432} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{710432} = \mathbf{Pl}(9, 0, 0, 12, 1, 0)_{3807} \\
\ell_{411} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{1049280} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{1049280} = \mathbf{Pl}(5, 0, 0, 12, 1, 0)_{3803} \\
\ell_{412} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{101760} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{101760} = \mathbf{Pl}(4, 0, 0, 12, 1, 0)_{3802} \\
\ell_{413} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{643360} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{643360} = \mathbf{Pl}(8, 0, 0, 12, 1, 0)_{3806} \\
\ell_{414} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{676576} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{676576} = \mathbf{Pl}(28, 0, 0, 12, 1, 0)_{3826} \\
\ell_{415} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{913600} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{913600} = \mathbf{Pl}(16, 0, 0, 12, 1, 0)_{3814} \\
\ell_{416} &= \begin{bmatrix} 1 & \eta^{28} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{24310} = \begin{bmatrix} 1 & 22 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{24310} = \mathbf{Pl}(0, 0, 0, 22, 1, 0)_{4428} \\
\ell_{417} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{34080} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{34080} = \mathbf{Pl}(22, 0, 0, 22, 1, 0)_{4450} \\
\ell_{418} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{608960} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{608960} = \mathbf{Pl}(9, 0, 0, 22, 1, 0)_{4437} \\
\ell_{419} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{947936} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{947936} = \mathbf{Pl}(31, 0, 0, 22, 1, 0)_{4459} \\
\ell_{420} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{304480} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{304480} = \mathbf{Pl}(18, 0, 0, 22, 1, 0)_{4446} \\
\ell_{421} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{778240} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{778240} = \mathbf{Pl}(4, 0, 0, 22, 1, 0)_{4432} \\
\ell_{422} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{474528} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{474528} = \mathbf{Pl}(27, 0, 0, 22, 1, 0)_{4455} \\
\ell_{423} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{406368} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{406368} = \mathbf{Pl}(13, 0, 0, 22, 1, 0)_{4441}
\end{aligned}$$

$$\begin{aligned}
\ell_{424} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{744160} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{744160} = \mathbf{Pl}(1, 0, 0, 22, 1, 0)_{4429} \\
\ell_{425} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{135456} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{135456} = \mathbf{Pl}(23, 0, 0, 22, 1, 0)_{4451} \\
\ell_{426} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{846304} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{846304} = \mathbf{Pl}(8, 0, 0, 22, 1, 0)_{4436} \\
\ell_{427} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{541824} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{541824} = \mathbf{Pl}(30, 0, 0, 22, 1, 0)_{4458} \\
\ell_{428} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{237696} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{237696} = \mathbf{Pl}(19, 0, 0, 22, 1, 0)_{4447} \\
\ell_{429} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{508096} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{508096} = \mathbf{Pl}(5, 0, 0, 22, 1, 0)_{4433} \\
\ell_{430} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{203616} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{203616} = \mathbf{Pl}(26, 0, 0, 22, 1, 0)_{4454} \\
\ell_{431} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{439936} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{439936} = \mathbf{Pl}(12, 0, 0, 22, 1, 0)_{4440} \\
\ell_{432} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{372640} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{372640} = \mathbf{Pl}(2, 0, 0, 22, 1, 0)_{4430} \\
\ell_{433} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{812736} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{812736} = \mathbf{Pl}(20, 0, 0, 22, 1, 0)_{4448} \\
\ell_{434} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{68160} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{68160} = \mathbf{Pl}(11, 0, 0, 22, 1, 0)_{4439} \\
\ell_{435} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{981504} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{981504} = \mathbf{Pl}(29, 0, 0, 22, 1, 0)_{4457} \\
\ell_{436} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{1015072} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{1015072} = \mathbf{Pl}(16, 0, 0, 22, 1, 0)_{4444} \\
\ell_{437} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{879872} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{879872} = \mathbf{Pl}(6, 0, 0, 22, 1, 0)_{4434} \\
\ell_{438} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{270912} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{270912} = \mathbf{Pl}(25, 0, 0, 22, 1, 0)_{4453} \\
\ell_{439} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{169536} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{169536} = \mathbf{Pl}(15, 0, 0, 22, 1, 0)_{4443} \\
\ell_{440} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{575904} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{575904} = \mathbf{Pl}(3, 0, 0, 22, 1, 0)_{4431} \\
\ell_{441} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{339072} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{339072} = \mathbf{Pl}(21, 0, 0, 22, 1, 0)_{4449} \\
\ell_{442} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{711104} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{711104} = \mathbf{Pl}(10, 0, 0, 22, 1, 0)_{4438} \\
\ell_{443} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{1048640} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{1048640} = \mathbf{Pl}(28, 0, 0, 22, 1, 0)_{4456} \\
\ell_{444} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{102240} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{102240} = \mathbf{Pl}(17, 0, 0, 22, 1, 0)_{4445}
\end{aligned}$$

$$\begin{aligned}
\ell_{445} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{643040} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{643040} = \mathbf{Pl}(7, 0, 0, 22, 1, 0)_{4435} \\
\ell_{446} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{677024} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{677024} = \mathbf{Pl}(24, 0, 0, 22, 1, 0)_{4452} \\
\ell_{447} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{913440} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{913440} = \mathbf{Pl}(14, 0, 0, 22, 1, 0)_{4442} \\
\ell_{448} &= \begin{bmatrix} 1 & \eta^2 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5284} = \begin{bmatrix} 1 & 4 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5284} = \mathbf{Pl}(0, 0, 0, 4, 1, 0)_{3294} \\
\ell_{449} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{34112} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{34112} = \mathbf{Pl}(4, 0, 0, 4, 1, 0)_{3298} \\
\ell_{450} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{609536} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{609536} = \mathbf{Pl}(8, 0, 0, 4, 1, 0)_{3302} \\
\ell_{451} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{947296} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{947296} = \mathbf{Pl}(12, 0, 0, 4, 1, 0)_{3306} \\
\ell_{452} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{304768} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{304768} = \mathbf{Pl}(16, 0, 0, 4, 1, 0)_{3310} \\
\ell_{453} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{778912} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{778912} = \mathbf{Pl}(20, 0, 0, 4, 1, 0)_{3314} \\
\ell_{454} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{474080} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{474080} = \mathbf{Pl}(24, 0, 0, 4, 1, 0)_{3318} \\
\ell_{455} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{405984} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{405984} = \mathbf{Pl}(28, 0, 0, 4, 1, 0)_{3322} \\
\ell_{456} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{744864} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{744864} = \mathbf{Pl}(5, 0, 0, 4, 1, 0)_{3299} \\
\ell_{457} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{135328} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{135328} = \mathbf{Pl}(1, 0, 0, 4, 1, 0)_{3295} \\
\ell_{458} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{846080} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{846080} = \mathbf{Pl}(13, 0, 0, 4, 1, 0)_{3307} \\
\ell_{459} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{541312} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{541312} = \mathbf{Pl}(9, 0, 0, 4, 1, 0)_{3303} \\
\ell_{460} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{237600} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{237600} = \mathbf{Pl}(21, 0, 0, 4, 1, 0)_{3315} \\
\ell_{461} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{508128} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{508128} = \mathbf{Pl}(17, 0, 0, 4, 1, 0)_{3311} \\
\ell_{462} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{203552} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{203552} = \mathbf{Pl}(29, 0, 0, 4, 1, 0)_{3323} \\
\ell_{463} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{440032} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{440032} = \mathbf{Pl}(25, 0, 0, 4, 1, 0)_{3319} \\
\ell_{464} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{372864} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{372864} = \mathbf{Pl}(10, 0, 0, 4, 1, 0)_{3304} \\
\ell_{465} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{811968} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{811968} = \mathbf{Pl}(14, 0, 0, 4, 1, 0)_{3308}
\end{aligned}$$

$$\begin{aligned}
\ell_{466} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{68224} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{68224} = \mathbf{Pl}(2, 0, 0, 4, 1, 0)_{3296} \\
\ell_{467} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{981344} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{981344} = \mathbf{Pl}(6, 0, 0, 4, 1, 0)_{3300} \\
\ell_{468} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{1015392} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{1015392} = \mathbf{Pl}(26, 0, 0, 4, 1, 0)_{3320} \\
\ell_{469} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{880064} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{880064} = \mathbf{Pl}(30, 0, 0, 4, 1, 0)_{3324} \\
\ell_{470} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{270656} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{270656} = \mathbf{Pl}(18, 0, 0, 4, 1, 0)_{3312} \\
\ell_{471} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{169376} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{169376} = \mathbf{Pl}(22, 0, 0, 4, 1, 0)_{3316} \\
\ell_{472} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{575424} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{575424} = \mathbf{Pl}(15, 0, 0, 4, 1, 0)_{3309} \\
\ell_{473} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{338752} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{338752} = \mathbf{Pl}(11, 0, 0, 4, 1, 0)_{3305} \\
\ell_{474} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{710688} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{710688} = \mathbf{Pl}(7, 0, 0, 4, 1, 0)_{3301} \\
\ell_{475} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{1049440} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{1049440} = \mathbf{Pl}(3, 0, 0, 4, 1, 0)_{3297} \\
\ell_{476} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{102336} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{102336} = \mathbf{Pl}(31, 0, 0, 4, 1, 0)_{3325} \\
\ell_{477} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{643648} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{643648} = \mathbf{Pl}(27, 0, 0, 4, 1, 0)_{3321} \\
\ell_{478} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{676640} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{676640} = \mathbf{Pl}(23, 0, 0, 4, 1, 0)_{3317} \\
\ell_{479} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{914176} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{914176} = \mathbf{Pl}(19, 0, 0, 4, 1, 0)_{3313} \\
\ell_{480} &= \begin{bmatrix} 1 & \eta^{25} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{27481} = \begin{bmatrix} 1 & 25 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{27481} = \mathbf{Pl}(0, 0, 0, 25, 1, 0)_{4617} \\
\ell_{481} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{34144} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{34144} = \mathbf{Pl}(25, 0, 0, 25, 1, 0)_{4642} \\
\ell_{482} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{608992} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{608992} = \mathbf{Pl}(23, 0, 0, 25, 1, 0)_{4640} \\
\ell_{483} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{947264} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{947264} = \mathbf{Pl}(14, 0, 0, 25, 1, 0)_{4631} \\
\ell_{484} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{304928} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{304928} = \mathbf{Pl}(11, 0, 0, 25, 1, 0)_{4628} \\
\ell_{485} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{778016} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{778016} = \mathbf{Pl}(18, 0, 0, 25, 1, 0)_{4635} \\
\ell_{486} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{473632} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{473632} = \mathbf{Pl}(28, 0, 0, 25, 1, 0)_{4645}
\end{aligned}$$

$$\begin{aligned}
\ell_{487} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{406624} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{406624} = \mathbf{Pl}(5, 0, 0, 25, 1, 0)_{4622} \\
\ell_{488} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{744384} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{744384} = \mathbf{Pl}(22, 0, 0, 25, 1, 0)_{4639} \\
\ell_{489} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{135712} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{135712} = \mathbf{Pl}(15, 0, 0, 25, 1, 0)_{4632} \\
\ell_{490} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{845632} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{845632} = \mathbf{Pl}(1, 0, 0, 25, 1, 0)_{4618} \\
\ell_{491} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{541728} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{541728} = \mathbf{Pl}(24, 0, 0, 25, 1, 0)_{4641} \\
\ell_{492} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{237376} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{237376} = \mathbf{Pl}(29, 0, 0, 25, 1, 0)_{4646} \\
\ell_{493} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{507648} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{507648} = \mathbf{Pl}(4, 0, 0, 25, 1, 0)_{4621} \\
\ell_{494} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{203744} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{203744} = \mathbf{Pl}(10, 0, 0, 25, 1, 0)_{4627} \\
\ell_{495} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{440640} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{440640} = \mathbf{Pl}(19, 0, 0, 25, 1, 0)_{4636} \\
\ell_{496} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{372192} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{372192} = \mathbf{Pl}(9, 0, 0, 25, 1, 0)_{4626} \\
\ell_{497} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{812128} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{812128} = \mathbf{Pl}(16, 0, 0, 25, 1, 0)_{4633} \\
\ell_{498} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{68288} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{68288} = \mathbf{Pl}(30, 0, 0, 25, 1, 0)_{4647} \\
\ell_{499} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{981280} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{981280} = \mathbf{Pl}(7, 0, 0, 25, 1, 0)_{4624} \\
\ell_{500} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{1015296} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{1015296} = \mathbf{Pl}(2, 0, 0, 25, 1, 0)_{4619} \\
\ell_{501} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{880416} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{880416} = \mathbf{Pl}(27, 0, 0, 25, 1, 0)_{4644} \\
\ell_{502} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{271424} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{271424} = \mathbf{Pl}(21, 0, 0, 25, 1, 0)_{4638} \\
\ell_{503} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{169344} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{169344} = \mathbf{Pl}(12, 0, 0, 25, 1, 0)_{4629} \\
\ell_{504} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{575872} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{575872} = \mathbf{Pl}(31, 0, 0, 25, 1, 0)_{4648} \\
\ell_{505} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{338688} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{338688} = \mathbf{Pl}(6, 0, 0, 25, 1, 0)_{4623} \\
\ell_{506} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{711008} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{711008} = \mathbf{Pl}(8, 0, 0, 25, 1, 0)_{4625} \\
\ell_{507} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{1049312} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{1049312} = \mathbf{Pl}(17, 0, 0, 25, 1, 0)_{4634}
\end{aligned}$$

$$\begin{aligned}
\ell_{508} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{102432} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{102432} = \mathbf{Pl}(20, 0, 0, 25, 1, 0)_{4637} \\
\ell_{509} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{643136} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{643136} = \mathbf{Pl}(13, 0, 0, 25, 1, 0)_{4630} \\
\ell_{510} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{677376} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{677376} = \mathbf{Pl}(3, 0, 0, 25, 1, 0)_{4620} \\
\ell_{511} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{913920} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{913920} = \mathbf{Pl}(26, 0, 0, 25, 1, 0)_{4643} \\
\ell_{512} &= \begin{bmatrix} 1 & \eta^4 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17968} = \begin{bmatrix} 1 & 16 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17968} = \mathbf{Pl}(0, 0, 0, 16, 1, 0)_{4050} \\
\ell_{513} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{34176} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{34176} = \mathbf{Pl}(16, 0, 0, 16, 1, 0)_{4066} \\
\ell_{514} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{609568} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{609568} = \mathbf{Pl}(5, 0, 0, 16, 1, 0)_{4055} \\
\ell_{515} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{947904} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{947904} = \mathbf{Pl}(21, 0, 0, 16, 1, 0)_{4071} \\
\ell_{516} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{305216} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{305216} = \mathbf{Pl}(10, 0, 0, 16, 1, 0)_{4060} \\
\ell_{517} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{778624} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{778624} = \mathbf{Pl}(26, 0, 0, 16, 1, 0)_{4076} \\
\ell_{518} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{473952} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{473952} = \mathbf{Pl}(15, 0, 0, 16, 1, 0)_{4065} \\
\ell_{519} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{406752} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{406752} = \mathbf{Pl}(31, 0, 0, 16, 1, 0)_{4081} \\
\ell_{520} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{745088} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{745088} = \mathbf{Pl}(20, 0, 0, 16, 1, 0)_{4070} \\
\ell_{521} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{135584} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{135584} = \mathbf{Pl}(4, 0, 0, 16, 1, 0)_{4054} \\
\ell_{522} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{846368} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{846368} = \mathbf{Pl}(17, 0, 0, 16, 1, 0)_{4067} \\
\ell_{523} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{541216} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{541216} = \mathbf{Pl}(1, 0, 0, 16, 1, 0)_{4051} \\
\ell_{524} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{237408} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{237408} = \mathbf{Pl}(30, 0, 0, 16, 1, 0)_{4080} \\
\ell_{525} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{507552} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{507552} = \mathbf{Pl}(14, 0, 0, 16, 1, 0)_{4064} \\
\ell_{526} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{203936} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{203936} = \mathbf{Pl}(27, 0, 0, 16, 1, 0)_{4077} \\
\ell_{527} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{440224} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{440224} = \mathbf{Pl}(11, 0, 0, 16, 1, 0)_{4061} \\
\ell_{528} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{372544} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{372544} = \mathbf{Pl}(13, 0, 0, 16, 1, 0)_{4063}
\end{aligned}$$

$$\begin{aligned}
\ell_{529} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{812384} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{812384} = \mathbf{Pl}(29, 0, 0, 16, 1, 0)_{4079} \\
\ell_{530} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{68352} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{68352} = \mathbf{Pl}(8, 0, 0, 16, 1, 0)_{4058} \\
\ell_{531} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{981440} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{981440} = \mathbf{Pl}(24, 0, 0, 16, 1, 0)_{4074} \\
\ell_{532} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{1015104} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{1015104} = \mathbf{Pl}(7, 0, 0, 16, 1, 0)_{4057} \\
\ell_{533} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{879584} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{879584} = \mathbf{Pl}(23, 0, 0, 16, 1, 0)_{4073} \\
\ell_{534} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{271168} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{271168} = \mathbf{Pl}(2, 0, 0, 16, 1, 0)_{4052} \\
\ell_{535} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{169184} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{169184} = \mathbf{Pl}(18, 0, 0, 16, 1, 0)_{4068} \\
\ell_{536} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{575328} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{575328} = \mathbf{Pl}(25, 0, 0, 16, 1, 0)_{4075} \\
\ell_{537} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{338368} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{338368} = \mathbf{Pl}(9, 0, 0, 16, 1, 0)_{4059} \\
\ell_{538} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{710400} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{710400} = \mathbf{Pl}(28, 0, 0, 16, 1, 0)_{4078} \\
\ell_{539} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{1048768} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{1048768} = \mathbf{Pl}(12, 0, 0, 16, 1, 0)_{4062} \\
\ell_{540} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{102400} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{102400} = \mathbf{Pl}(19, 0, 0, 16, 1, 0)_{4069} \\
\ell_{541} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{643552} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{643552} = \mathbf{Pl}(3, 0, 0, 16, 1, 0)_{4053} \\
\ell_{542} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{676736} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{676736} = \mathbf{Pl}(22, 0, 0, 16, 1, 0)_{4072} \\
\ell_{543} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{913696} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{913696} = \mathbf{Pl}(6, 0, 0, 16, 1, 0)_{4056} \\
\ell_{544} &= \begin{bmatrix} 1 & \eta^{11} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8455} = \begin{bmatrix} 1 & 7 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8455} = \mathbf{Pl}(0, 0, 0, 7, 1, 0)_{3483} \\
\ell_{545} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{34208} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{34208} = \mathbf{Pl}(7, 0, 0, 7, 1, 0)_{3490} \\
\ell_{546} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{609024} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{609024} = \mathbf{Pl}(14, 0, 0, 7, 1, 0)_{3497} \\
\ell_{547} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{947200} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{947200} = \mathbf{Pl}(9, 0, 0, 7, 1, 0)_{3492} \\
\ell_{548} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{304512} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{304512} = \mathbf{Pl}(28, 0, 0, 7, 1, 0)_{3511} \\
\ell_{549} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{778944} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{778944} = \mathbf{Pl}(27, 0, 0, 7, 1, 0)_{3510}
\end{aligned}$$

$$\begin{aligned}
\ell_{550} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{473600} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{473600} = \mathbf{Pl}(18, 0, 0, 7, 1, 0)_{3501} \\
\ell_{551} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{406720} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{406720} = \mathbf{Pl}(21, 0, 0, 7, 1, 0)_{3504} \\
\ell_{552} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{744736} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{744736} = \mathbf{Pl}(29, 0, 0, 7, 1, 0)_{3512} \\
\ell_{553} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{135968} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{135968} = \mathbf{Pl}(26, 0, 0, 7, 1, 0)_{3509} \\
\ell_{554} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{846528} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{846528} = \mathbf{Pl}(19, 0, 0, 7, 1, 0)_{3502} \\
\ell_{555} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{542144} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{542144} = \mathbf{Pl}(20, 0, 0, 7, 1, 0)_{3503} \\
\ell_{556} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{236800} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{236800} = \mathbf{Pl}(1, 0, 0, 7, 1, 0)_{3484} \\
\ell_{557} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{507808} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{507808} = \mathbf{Pl}(6, 0, 0, 7, 1, 0)_{3489} \\
\ell_{558} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{203360} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{203360} = \mathbf{Pl}(15, 0, 0, 7, 1, 0)_{3498} \\
\ell_{559} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{440416} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{440416} = \mathbf{Pl}(8, 0, 0, 7, 1, 0)_{3491} \\
\ell_{560} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{372928} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{372928} = \mathbf{Pl}(31, 0, 0, 7, 1, 0)_{3514} \\
\ell_{561} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{812320} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{812320} = \mathbf{Pl}(24, 0, 0, 7, 1, 0)_{3507} \\
\ell_{562} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{68416} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{68416} = \mathbf{Pl}(17, 0, 0, 7, 1, 0)_{3500} \\
\ell_{563} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{981152} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{981152} = \mathbf{Pl}(22, 0, 0, 7, 1, 0)_{3505} \\
\ell_{564} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{1015616} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{1015616} = \mathbf{Pl}(3, 0, 0, 7, 1, 0)_{3486} \\
\ell_{565} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{879712} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{879712} = \mathbf{Pl}(4, 0, 0, 7, 1, 0)_{3487} \\
\ell_{566} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{271072} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{271072} = \mathbf{Pl}(13, 0, 0, 7, 1, 0)_{3496} \\
\ell_{567} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{169920} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{169920} = \mathbf{Pl}(10, 0, 0, 7, 1, 0)_{3493} \\
\ell_{568} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{575584} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{575584} = \mathbf{Pl}(2, 0, 0, 7, 1, 0)_{3485} \\
\ell_{569} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{338976} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{338976} = \mathbf{Pl}(5, 0, 0, 7, 1, 0)_{3488} \\
\ell_{570} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{710528} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{710528} = \mathbf{Pl}(12, 0, 0, 7, 1, 0)_{3495}
\end{aligned}$$

$$\begin{aligned}
\ell_{571} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{1049056} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{1049056} = \mathbf{Pl}(11, 0, 0, 7, 1, 0)_{3494} \\
\ell_{572} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{102112} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{102112} = \mathbf{Pl}(30, 0, 0, 7, 1, 0)_{3513} \\
\ell_{573} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{642976} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{642976} = \mathbf{Pl}(25, 0, 0, 7, 1, 0)_{3508} \\
\ell_{574} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{676832} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{676832} = \mathbf{Pl}(16, 0, 0, 7, 1, 0)_{3499} \\
\ell_{575} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{913408} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{913408} = \mathbf{Pl}(23, 0, 0, 7, 1, 0)_{3506} \\
\ell_{576} &= \begin{bmatrix} 1 & \eta^{23} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16911} = \begin{bmatrix} 1 & 15 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16911} = \mathbf{Pl}(0, 0, 0, 15, 1, 0)_{3987} \\
\ell_{577} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{34240} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{34240} = \mathbf{Pl}(15, 0, 0, 15, 1, 0)_{4002} \\
\ell_{578} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{609472} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{609472} = \mathbf{Pl}(30, 0, 0, 15, 1, 0)_{4017} \\
\ell_{579} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{947840} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{947840} = \mathbf{Pl}(17, 0, 0, 15, 1, 0)_{4004} \\
\ell_{580} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{304736} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{304736} = \mathbf{Pl}(25, 0, 0, 15, 1, 0)_{4012} \\
\ell_{581} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{778208} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{778208} = \mathbf{Pl}(22, 0, 0, 15, 1, 0)_{4009} \\
\ell_{582} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{473920} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{473920} = \mathbf{Pl}(7, 0, 0, 15, 1, 0)_{3994} \\
\ell_{583} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{406592} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{406592} = \mathbf{Pl}(8, 0, 0, 15, 1, 0)_{3995} \\
\ell_{584} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{744288} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{744288} = \mathbf{Pl}(23, 0, 0, 15, 1, 0)_{4010} \\
\ell_{585} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{135840} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{135840} = \mathbf{Pl}(24, 0, 0, 15, 1, 0)_{4011} \\
\ell_{586} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{845728} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{845728} = \mathbf{Pl}(9, 0, 0, 15, 1, 0)_{3996} \\
\ell_{587} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{541632} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{541632} = \mathbf{Pl}(6, 0, 0, 15, 1, 0)_{3993} \\
\ell_{588} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{236960} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{236960} = \mathbf{Pl}(14, 0, 0, 15, 1, 0)_{4001} \\
\ell_{589} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{507392} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{507392} = \mathbf{Pl}(1, 0, 0, 15, 1, 0)_{3988} \\
\ell_{590} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{203296} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{203296} = \mathbf{Pl}(16, 0, 0, 15, 1, 0)_{4003} \\
\ell_{591} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{440576} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{440576} = \mathbf{Pl}(31, 0, 0, 15, 1, 0)_{4018}
\end{aligned}$$

$$\begin{aligned}
\ell_{592} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{372576} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{372576} = \mathbf{Pl}(11, 0, 0, 15, 1, 0)_{3998} \\
\ell_{593} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{812064} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{812064} = \mathbf{Pl}(4, 0, 0, 15, 1, 0)_{3991} \\
\ell_{594} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{68480} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{68480} = \mathbf{Pl}(21, 0, 0, 15, 1, 0)_{4008} \\
\ell_{595} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{981568} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{981568} = \mathbf{Pl}(26, 0, 0, 15, 1, 0)_{4013} \\
\ell_{596} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{1014784} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{1014784} = \mathbf{Pl}(18, 0, 0, 15, 1, 0)_{4005} \\
\ell_{597} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{880032} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{880032} = \mathbf{Pl}(29, 0, 0, 15, 1, 0)_{4016} \\
\ell_{598} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{270816} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{270816} = \mathbf{Pl}(12, 0, 0, 15, 1, 0)_{3999} \\
\ell_{599} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{170016} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{170016} = \mathbf{Pl}(3, 0, 0, 15, 1, 0)_{3990} \\
\ell_{600} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{575104} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{575104} = \mathbf{Pl}(28, 0, 0, 15, 1, 0)_{4015} \\
\ell_{601} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{339168} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{339168} = \mathbf{Pl}(19, 0, 0, 15, 1, 0)_{4006} \\
\ell_{602} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{710880} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{710880} = \mathbf{Pl}(2, 0, 0, 15, 1, 0)_{3989} \\
\ell_{603} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{1049024} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{1049024} = \mathbf{Pl}(13, 0, 0, 15, 1, 0)_{4000} \\
\ell_{604} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{102208} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{102208} = \mathbf{Pl}(5, 0, 0, 15, 1, 0)_{3992} \\
\ell_{605} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{643456} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{643456} = \mathbf{Pl}(10, 0, 0, 15, 1, 0)_{3997} \\
\ell_{606} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{677472} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{677472} = \mathbf{Pl}(27, 0, 0, 15, 1, 0)_{4014} \\
\ell_{607} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{914208} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{914208} = \mathbf{Pl}(20, 0, 0, 15, 1, 0)_{4007} \\
\ell_{608} &= \begin{bmatrix} 1 & \eta^{19} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7398} = \begin{bmatrix} 1 & 6 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7398} = \mathbf{Pl}(0, 0, 0, 6, 1, 0)_{3420} \\
\ell_{609} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{34272} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{34272} = \mathbf{Pl}(6, 0, 0, 6, 1, 0)_{3426} \\
\ell_{610} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{609056} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{609056} = \mathbf{Pl}(12, 0, 0, 6, 1, 0)_{3432} \\
\ell_{611} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{947872} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{947872} = \mathbf{Pl}(10, 0, 0, 6, 1, 0)_{3430} \\
\ell_{612} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{304960} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{304960} = \mathbf{Pl}(24, 0, 0, 6, 1, 0)_{3444}
\end{aligned}$$

$$\begin{aligned}
\ell_{613} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{778592} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{778592} = \mathbf{Pl}(30, 0, 0, 6, 1, 0)_{3450} \\
\ell_{614} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{474496} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{474496} = \mathbf{Pl}(20, 0, 0, 6, 1, 0)_{3440} \\
\ell_{615} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{405952} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{405952} = \mathbf{Pl}(18, 0, 0, 6, 1, 0)_{3438} \\
\ell_{616} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{744960} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{744960} = \mathbf{Pl}(21, 0, 0, 6, 1, 0)_{3441} \\
\ell_{617} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{136224} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{136224} = \mathbf{Pl}(19, 0, 0, 6, 1, 0)_{3439} \\
\ell_{618} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{845920} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{845920} = \mathbf{Pl}(25, 0, 0, 6, 1, 0)_{3445} \\
\ell_{619} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{542048} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{542048} = \mathbf{Pl}(31, 0, 0, 6, 1, 0)_{3451} \\
\ell_{620} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{237248} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{237248} = \mathbf{Pl}(13, 0, 0, 6, 1, 0)_{3433} \\
\ell_{621} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{507872} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{507872} = \mathbf{Pl}(11, 0, 0, 6, 1, 0)_{3431} \\
\ell_{622} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{202976} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{202976} = \mathbf{Pl}(1, 0, 0, 6, 1, 0)_{3421} \\
\ell_{623} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{440096} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{440096} = \mathbf{Pl}(7, 0, 0, 6, 1, 0)_{3427} \\
\ell_{624} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{372480} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{372480} = \mathbf{Pl}(15, 0, 0, 6, 1, 0)_{3435} \\
\ell_{625} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{811904} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{811904} = \mathbf{Pl}(9, 0, 0, 6, 1, 0)_{3429} \\
\ell_{626} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{68544} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{68544} = \mathbf{Pl}(3, 0, 0, 6, 1, 0)_{3423} \\
\ell_{627} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{981632} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{981632} = \mathbf{Pl}(5, 0, 0, 6, 1, 0)_{3425} \\
\ell_{628} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{1014880} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{1014880} = \mathbf{Pl}(23, 0, 0, 6, 1, 0)_{3443} \\
\ell_{629} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{880192} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{880192} = \mathbf{Pl}(17, 0, 0, 6, 1, 0)_{3437} \\
\ell_{630} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{271584} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{271584} = \mathbf{Pl}(27, 0, 0, 6, 1, 0)_{3447} \\
\ell_{631} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{169728} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{169728} = \mathbf{Pl}(29, 0, 0, 6, 1, 0)_{3449} \\
\ell_{632} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{575680} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{575680} = \mathbf{Pl}(26, 0, 0, 6, 1, 0)_{3446} \\
\ell_{633} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{338336} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{338336} = \mathbf{Pl}(28, 0, 0, 6, 1, 0)_{3448}
\end{aligned}$$

$$\begin{aligned}
\ell_{634} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{710560} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{710560} = \mathbf{Pl}(22, 0, 0, 6, 1, 0)_{3442} \\
\ell_{635} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{1048896} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{1048896} = \mathbf{Pl}(16, 0, 0, 6, 1, 0)_{3436} \\
\ell_{636} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{102048} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{102048} = \mathbf{Pl}(2, 0, 0, 6, 1, 0)_{3422} \\
\ell_{637} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{642944} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{642944} = \mathbf{Pl}(4, 0, 0, 6, 1, 0)_{3424} \\
\ell_{638} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{676672} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{676672} = \mathbf{Pl}(14, 0, 0, 6, 1, 0)_{3434} \\
\ell_{639} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{913952} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{913952} = \mathbf{Pl}(8, 0, 0, 6, 1, 0)_{3428} \\
\ell_{640} &= \begin{bmatrix} 1 & \eta^8 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14797} = \begin{bmatrix} 1 & 13 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14797} = \mathbf{Pl}(0, 0, 0, 13, 1, 0)_{3861} \\
\ell_{641} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{34304} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{34304} = \mathbf{Pl}(13, 0, 0, 13, 1, 0)_{3874} \\
\ell_{642} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{609504} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{609504} = \mathbf{Pl}(26, 0, 0, 13, 1, 0)_{3887} \\
\ell_{643} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{947232} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{947232} = \mathbf{Pl}(23, 0, 0, 13, 1, 0)_{3884} \\
\ell_{644} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{305184} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{305184} = \mathbf{Pl}(17, 0, 0, 13, 1, 0)_{3878} \\
\ell_{645} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{778048} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{778048} = \mathbf{Pl}(28, 0, 0, 13, 1, 0)_{3889} \\
\ell_{646} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{474048} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{474048} = \mathbf{Pl}(11, 0, 0, 13, 1, 0)_{3872} \\
\ell_{647} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{406336} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{406336} = \mathbf{Pl}(6, 0, 0, 13, 1, 0)_{3867} \\
\ell_{648} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{744512} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{744512} = \mathbf{Pl}(7, 0, 0, 13, 1, 0)_{3868} \\
\ell_{649} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{136096} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{136096} = \mathbf{Pl}(10, 0, 0, 13, 1, 0)_{3871} \\
\ell_{650} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{846208} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{846208} = \mathbf{Pl}(29, 0, 0, 13, 1, 0)_{3890} \\
\ell_{651} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{541536} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{541536} = \mathbf{Pl}(16, 0, 0, 13, 1, 0)_{3877} \\
\ell_{652} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{237024} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{237024} = \mathbf{Pl}(22, 0, 0, 13, 1, 0)_{3883} \\
\ell_{653} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{508352} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{508352} = \mathbf{Pl}(27, 0, 0, 13, 1, 0)_{3888} \\
\ell_{654} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{203168} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{203168} = \mathbf{Pl}(12, 0, 0, 13, 1, 0)_{3873}
\end{aligned}$$

$$\begin{aligned}
\ell_{655} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{439744} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{439744} = \mathbf{Pl}(1, 0, 0, 13, 1, 0)_{3862} \\
\ell_{656} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{372256} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{372256} = \mathbf{Pl}(14, 0, 0, 13, 1, 0)_{3875} \\
\ell_{657} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{812672} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{812672} = \mathbf{Pl}(3, 0, 0, 13, 1, 0)_{3864} \\
\ell_{658} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{68608} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{68608} = \mathbf{Pl}(20, 0, 0, 13, 1, 0)_{3881} \\
\ell_{659} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{981216} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{981216} = \mathbf{Pl}(25, 0, 0, 13, 1, 0)_{3886} \\
\ell_{660} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{1015584} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{1015584} = \mathbf{Pl}(31, 0, 0, 13, 1, 0)_{3892} \\
\ell_{661} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{879488} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{879488} = \mathbf{Pl}(18, 0, 0, 13, 1, 0)_{3879} \\
\ell_{662} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{271328} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{271328} = \mathbf{Pl}(5, 0, 0, 13, 1, 0)_{3866} \\
\ell_{663} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{169824} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{169824} = \mathbf{Pl}(8, 0, 0, 13, 1, 0)_{3869} \\
\ell_{664} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{575136} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{575136} = \mathbf{Pl}(9, 0, 0, 13, 1, 0)_{3870} \\
\ell_{665} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{338528} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{338528} = \mathbf{Pl}(4, 0, 0, 13, 1, 0)_{3865} \\
\ell_{666} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{711232} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{711232} = \mathbf{Pl}(19, 0, 0, 13, 1, 0)_{3880} \\
\ell_{667} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{1049184} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{1049184} = \mathbf{Pl}(30, 0, 0, 13, 1, 0)_{3891} \\
\ell_{668} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{102016} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{102016} = \mathbf{Pl}(24, 0, 0, 13, 1, 0)_{3885} \\
\ell_{669} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{643488} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{643488} = \mathbf{Pl}(21, 0, 0, 13, 1, 0)_{3882} \\
\ell_{670} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{677056} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{677056} = \mathbf{Pl}(2, 0, 0, 13, 1, 0)_{3863} \\
\ell_{671} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{913664} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{913664} = \mathbf{Pl}(15, 0, 0, 13, 1, 0)_{3876} \\
\ell_{672} &= \begin{bmatrix} 1 & \eta^{27} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12683} = \begin{bmatrix} 1 & 11 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12683} = \mathbf{Pl}(0, 0, 0, 11, 1, 0)_{3735} \\
\ell_{673} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{34336} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{34336} = \mathbf{Pl}(11, 0, 0, 11, 1, 0)_{3746} \\
\ell_{674} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{609088} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{609088} = \mathbf{Pl}(22, 0, 0, 11, 1, 0)_{3757} \\
\ell_{675} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{947680} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{947680} = \mathbf{Pl}(29, 0, 0, 11, 1, 0)_{3764}
\end{aligned}$$

$$\begin{aligned}
\ell_{676} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{304544} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{304544} = \mathbf{Pl}(9, 0, 0, 11, 1, 0)_{3744} \\
\ell_{677} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{778528} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{778528} = \mathbf{Pl}(2, 0, 0, 11, 1, 0)_{3737} \\
\ell_{678} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{474400} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{474400} = \mathbf{Pl}(31, 0, 0, 11, 1, 0)_{3766} \\
\ell_{679} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{406848} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{406848} = \mathbf{Pl}(20, 0, 0, 11, 1, 0)_{3755} \\
\ell_{680} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{744192} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{744192} = \mathbf{Pl}(18, 0, 0, 11, 1, 0)_{3753} \\
\ell_{681} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{135616} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{135616} = \mathbf{Pl}(25, 0, 0, 11, 1, 0)_{3760} \\
\ell_{682} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{845888} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{845888} = \mathbf{Pl}(4, 0, 0, 11, 1, 0)_{3739} \\
\ell_{683} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{541600} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{541600} = \mathbf{Pl}(15, 0, 0, 11, 1, 0)_{3750} \\
\ell_{684} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{237760} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{237760} = \mathbf{Pl}(27, 0, 0, 11, 1, 0)_{3762} \\
\ell_{685} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{507712} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{507712} = \mathbf{Pl}(16, 0, 0, 11, 1, 0)_{3751} \\
\ell_{686} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{203424} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{203424} = \mathbf{Pl}(13, 0, 0, 11, 1, 0)_{3748} \\
\ell_{687} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{440160} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{440160} = \mathbf{Pl}(6, 0, 0, 11, 1, 0)_{3741} \\
\ell_{688} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{372096} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{372096} = \mathbf{Pl}(1, 0, 0, 11, 1, 0)_{3736} \\
\ell_{689} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{812576} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{812576} = \mathbf{Pl}(10, 0, 0, 11, 1, 0)_{3745} \\
\ell_{690} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{67808} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{67808} = \mathbf{Pl}(23, 0, 0, 11, 1, 0)_{3758} \\
\ell_{691} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{980992} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{980992} = \mathbf{Pl}(28, 0, 0, 11, 1, 0)_{3763} \\
\ell_{692} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{1015424} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{1015424} = \mathbf{Pl}(8, 0, 0, 11, 1, 0)_{3743} \\
\ell_{693} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{880320} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{880320} = \mathbf{Pl}(3, 0, 0, 11, 1, 0)_{3738} \\
\ell_{694} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{271232} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{271232} = \mathbf{Pl}(30, 0, 0, 11, 1, 0)_{3765} \\
\ell_{695} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{169952} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{169952} = \mathbf{Pl}(21, 0, 0, 11, 1, 0)_{3756} \\
\ell_{696} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{575936} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{575936} = \mathbf{Pl}(19, 0, 0, 11, 1, 0)_{3754}
\end{aligned}$$

$$\begin{aligned}
\ell_{697} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{338784} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{338784} = \mathbf{Pl}(24, 0, 0, 11, 1, 0)_{3759} \\
\ell_{698} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{711040} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{711040} = \mathbf{Pl}(5, 0, 0, 11, 1, 0)_{3740} \\
\ell_{699} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{1048736} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{1048736} = \mathbf{Pl}(14, 0, 0, 11, 1, 0)_{3749} \\
\ell_{700} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{102144} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{102144} = \mathbf{Pl}(26, 0, 0, 11, 1, 0)_{3761} \\
\ell_{701} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{643424} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{643424} = \mathbf{Pl}(17, 0, 0, 11, 1, 0)_{3752} \\
\ell_{702} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{676704} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{676704} = \mathbf{Pl}(12, 0, 0, 11, 1, 0)_{3747} \\
\ell_{703} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{913632} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{913632} = \mathbf{Pl}(7, 0, 0, 11, 1, 0)_{3742} \\
\ell_{704} &= \begin{bmatrix} 1 & \eta^{21} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{26424} = \begin{bmatrix} 1 & 24 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{26424} = \mathbf{Pl}(0, 0, 0, 24, 1, 0)_{4554} \\
\ell_{705} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{34368} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{34368} = \mathbf{Pl}(24, 0, 0, 24, 1, 0)_{4578} \\
\ell_{706} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{609664} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{609664} = \mathbf{Pl}(21, 0, 0, 24, 1, 0)_{4575} \\
\ell_{707} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{947552} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{947552} = \mathbf{Pl}(13, 0, 0, 24, 1, 0)_{4567} \\
\ell_{708} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{304832} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{304832} = \mathbf{Pl}(15, 0, 0, 24, 1, 0)_{4569} \\
\ell_{709} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{778112} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{778112} = \mathbf{Pl}(23, 0, 0, 24, 1, 0)_{4577} \\
\ell_{710} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{474208} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{474208} = \mathbf{Pl}(26, 0, 0, 24, 1, 0)_{4580} \\
\ell_{711} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{406464} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{406464} = \mathbf{Pl}(2, 0, 0, 24, 1, 0)_{4556} \\
\ell_{712} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{744768} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{744768} = \mathbf{Pl}(30, 0, 0, 24, 1, 0)_{4584} \\
\ell_{713} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{135744} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{135744} = \mathbf{Pl}(6, 0, 0, 24, 1, 0)_{4560} \\
\ell_{714} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{846112} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{846112} = \mathbf{Pl}(11, 0, 0, 24, 1, 0)_{4565} \\
\ell_{715} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{542112} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{542112} = \mathbf{Pl}(19, 0, 0, 24, 1, 0)_{4573} \\
\ell_{716} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{237536} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{237536} = \mathbf{Pl}(17, 0, 0, 24, 1, 0)_{4571} \\
\ell_{717} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{507488} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{507488} = \mathbf{Pl}(9, 0, 0, 24, 1, 0)_{4563}
\end{aligned}$$

$$\begin{aligned}
\ell_{718} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{203232} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{203232} = \mathbf{Pl}(4, 0, 0, 24, 1, 0)_{4558} \\
\ell_{719} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{439808} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{439808} = \mathbf{Pl}(28, 0, 0, 24, 1, 0)_{4582} \\
\ell_{720} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{372384} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{372384} = \mathbf{Pl}(25, 0, 0, 24, 1, 0)_{4579} \\
\ell_{721} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{811808} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{811808} = \mathbf{Pl}(1, 0, 0, 24, 1, 0)_{4555} \\
\ell_{722} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{67872} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{67872} = \mathbf{Pl}(12, 0, 0, 24, 1, 0)_{4566} \\
\ell_{723} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{981856} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{981856} = \mathbf{Pl}(20, 0, 0, 24, 1, 0)_{4574} \\
\ell_{724} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{1014976} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{1014976} = \mathbf{Pl}(22, 0, 0, 24, 1, 0)_{4576} \\
\ell_{725} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{879616} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{879616} = \mathbf{Pl}(14, 0, 0, 24, 1, 0)_{4568} \\
\ell_{726} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{271488} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{271488} = \mathbf{Pl}(3, 0, 0, 24, 1, 0)_{4557} \\
\ell_{727} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{170112} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{170112} = \mathbf{Pl}(27, 0, 0, 24, 1, 0)_{4581} \\
\ell_{728} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{575392} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{575392} = \mathbf{Pl}(7, 0, 0, 24, 1, 0)_{4561} \\
\ell_{729} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{339104} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{339104} = \mathbf{Pl}(31, 0, 0, 24, 1, 0)_{4585} \\
\ell_{730} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{710368} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{710368} = \mathbf{Pl}(18, 0, 0, 24, 1, 0)_{4572} \\
\ell_{731} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{1049344} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{1049344} = \mathbf{Pl}(10, 0, 0, 24, 1, 0)_{4564} \\
\ell_{732} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{102176} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{102176} = \mathbf{Pl}(8, 0, 0, 24, 1, 0)_{4562} \\
\ell_{733} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{643008} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{643008} = \mathbf{Pl}(16, 0, 0, 24, 1, 0)_{4570} \\
\ell_{734} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{677088} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{677088} = \mathbf{Pl}(29, 0, 0, 24, 1, 0)_{4583} \\
\ell_{735} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{913984} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{913984} = \mathbf{Pl}(5, 0, 0, 24, 1, 0)_{4559} \\
\ell_{736} &= \begin{bmatrix} 1 & \eta & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3170} = \begin{bmatrix} 1 & 2 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3170} = \mathbf{Pl}(0, 0, 0, 2, 1, 0)_{3168} \\
\ell_{737} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{34400} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{34400} = \mathbf{Pl}(2, 0, 0, 2, 1, 0)_{3170} \\
\ell_{738} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{609120} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{609120} = \mathbf{Pl}(4, 0, 0, 2, 1, 0)_{3172}
\end{aligned}$$

$$\begin{aligned}
\ell_{739} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{947520} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{947520} = \mathbf{Pl}(6, 0, 0, 2, 1, 0)_{3174} \\
\ell_{740} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{305120} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{305120} = \mathbf{Pl}(8, 0, 0, 2, 1, 0)_{3176} \\
\ell_{741} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{778752} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{778752} = \mathbf{Pl}(10, 0, 0, 2, 1, 0)_{3178} \\
\ell_{742} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{473760} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{473760} = \mathbf{Pl}(12, 0, 0, 2, 1, 0)_{3180} \\
\ell_{743} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{406080} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{406080} = \mathbf{Pl}(14, 0, 0, 2, 1, 0)_{3182} \\
\ell_{744} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{744480} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{744480} = \mathbf{Pl}(16, 0, 0, 2, 1, 0)_{3184} \\
\ell_{745} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{135360} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{135360} = \mathbf{Pl}(18, 0, 0, 2, 1, 0)_{3186} \\
\ell_{746} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{846560} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{846560} = \mathbf{Pl}(20, 0, 0, 2, 1, 0)_{3188} \\
\ell_{747} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{541440} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{541440} = \mathbf{Pl}(22, 0, 0, 2, 1, 0)_{3190} \\
\ell_{748} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{237312} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{237312} = \mathbf{Pl}(24, 0, 0, 2, 1, 0)_{3192} \\
\ell_{749} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{508032} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{508032} = \mathbf{Pl}(26, 0, 0, 2, 1, 0)_{3194} \\
\ell_{750} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{203040} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{203040} = \mathbf{Pl}(28, 0, 0, 2, 1, 0)_{3196} \\
\ell_{751} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{440352} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{440352} = \mathbf{Pl}(30, 0, 0, 2, 1, 0)_{3198} \\
\ell_{752} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{372800} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{372800} = \mathbf{Pl}(5, 0, 0, 2, 1, 0)_{3173} \\
\ell_{753} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{812160} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{812160} = \mathbf{Pl}(7, 0, 0, 2, 1, 0)_{3175} \\
\ell_{754} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & 1 \end{bmatrix}_{67680} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{67680} = \mathbf{Pl}(1, 0, 0, 2, 1, 0)_{3169} \\
\ell_{755} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{981792} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{981792} = \mathbf{Pl}(3, 0, 0, 2, 1, 0)_{3171} \\
\ell_{756} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{1015200} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{1015200} = \mathbf{Pl}(13, 0, 0, 2, 1, 0)_{3181} \\
\ell_{757} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{879840} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{879840} = \mathbf{Pl}(15, 0, 0, 2, 1, 0)_{3183} \\
\ell_{758} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{270720} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{270720} = \mathbf{Pl}(9, 0, 0, 2, 1, 0)_{3177} \\
\ell_{759} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{169632} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{169632} = \mathbf{Pl}(11, 0, 0, 2, 1, 0)_{3179}
\end{aligned}$$

$$\begin{aligned}
\ell_{760} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{575840} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{575840} = \mathbf{Pl}(21, 0, 0, 2, 1, 0)_{3189} \\
\ell_{761} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{338400} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{338400} = \mathbf{Pl}(23, 0, 0, 2, 1, 0)_{3191} \\
\ell_{762} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{711072} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{711072} = \mathbf{Pl}(17, 0, 0, 2, 1, 0)_{3185} \\
\ell_{763} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{1049472} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{1049472} = \mathbf{Pl}(19, 0, 0, 2, 1, 0)_{3187} \\
\ell_{764} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{102080} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{102080} = \mathbf{Pl}(29, 0, 0, 2, 1, 0)_{3197} \\
\ell_{765} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{643520} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{643520} = \mathbf{Pl}(31, 0, 0, 2, 1, 0)_{3199} \\
\ell_{766} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{676800} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{676800} = \mathbf{Pl}(25, 0, 0, 2, 1, 0)_{3193} \\
\ell_{767} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{914240} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{914240} = \mathbf{Pl}(27, 0, 0, 2, 1, 0)_{3195} \\
\ell_{768} &= \begin{bmatrix} 1 & \eta^{14} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{31709} = \begin{bmatrix} 1 & 29 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{31709} = \mathbf{Pl}(0, 0, 0, 29, 1, 0)_{4869} \\
\ell_{769} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{34432} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{34432} = \mathbf{Pl}(29, 0, 0, 29, 1, 0)_{4898} \\
\ell_{770} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{609696} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{609696} = \mathbf{Pl}(31, 0, 0, 29, 1, 0)_{4900} \\
\ell_{771} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{947648} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{947648} = \mathbf{Pl}(2, 0, 0, 29, 1, 0)_{4871} \\
\ell_{772} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{305408} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{305408} = \mathbf{Pl}(27, 0, 0, 29, 1, 0)_{4896} \\
\ell_{773} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{778400} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{778400} = \mathbf{Pl}(6, 0, 0, 29, 1, 0)_{4875} \\
\ell_{774} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{473824} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{473824} = \mathbf{Pl}(4, 0, 0, 29, 1, 0)_{4873} \\
\ell_{775} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{406208} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{406208} = \mathbf{Pl}(25, 0, 0, 29, 1, 0)_{4894} \\
\ell_{776} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{745056} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{745056} = \mathbf{Pl}(19, 0, 0, 29, 1, 0)_{4888} \\
\ell_{777} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{135488} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{135488} = \mathbf{Pl}(14, 0, 0, 29, 1, 0)_{4883} \\
\ell_{778} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{845824} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{845824} = \mathbf{Pl}(12, 0, 0, 29, 1, 0)_{4881} \\
\ell_{779} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{541952} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{541952} = \mathbf{Pl}(17, 0, 0, 29, 1, 0)_{4886} \\
\ell_{780} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{237472} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{237472} = \mathbf{Pl}(8, 0, 0, 29, 1, 0)_{4877}
\end{aligned}$$

$$\begin{aligned}
\ell_{781} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{508192} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{508192} = \mathbf{Pl}(21, 0, 0, 29, 1, 0)_{4890} \\
\ell_{782} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{203104} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{203104} = \mathbf{Pl}(23, 0, 0, 29, 1, 0)_{4892} \\
\ell_{783} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{440512} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{440512} = \mathbf{Pl}(10, 0, 0, 29, 1, 0)_{4879} \\
\ell_{784} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{372960} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{372960} = \mathbf{Pl}(3, 0, 0, 29, 1, 0)_{4872} \\
\ell_{785} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{812416} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{812416} = \mathbf{Pl}(30, 0, 0, 29, 1, 0)_{4899} \\
\ell_{786} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{67744} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{67744} = \mathbf{Pl}(28, 0, 0, 29, 1, 0)_{4897} \\
\ell_{787} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{980928} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{980928} = \mathbf{Pl}(1, 0, 0, 29, 1, 0)_{4870} \\
\ell_{788} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{1015264} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{1015264} = \mathbf{Pl}(24, 0, 0, 29, 1, 0)_{4893} \\
\ell_{789} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{880160} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{880160} = \mathbf{Pl}(5, 0, 0, 29, 1, 0)_{4874} \\
\ell_{790} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{270976} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{270976} = \mathbf{Pl}(7, 0, 0, 29, 1, 0)_{4876} \\
\ell_{791} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{169792} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{169792} = \mathbf{Pl}(26, 0, 0, 29, 1, 0)_{4895} \\
\ell_{792} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{575360} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{575360} = \mathbf{Pl}(16, 0, 0, 29, 1, 0)_{4885} \\
\ell_{793} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{338720} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{338720} = \mathbf{Pl}(13, 0, 0, 29, 1, 0)_{4882} \\
\ell_{794} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{710720} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{710720} = \mathbf{Pl}(15, 0, 0, 29, 1, 0)_{4884} \\
\ell_{795} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{1048608} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{1048608} = \mathbf{Pl}(18, 0, 0, 29, 1, 0)_{4887} \\
\ell_{796} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{101984} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{101984} = \mathbf{Pl}(11, 0, 0, 29, 1, 0)_{4880} \\
\ell_{797} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{642912} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{642912} = \mathbf{Pl}(22, 0, 0, 29, 1, 0)_{4891} \\
\ell_{798} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{677440} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{677440} = \mathbf{Pl}(20, 0, 0, 29, 1, 0)_{4889} \\
\ell_{799} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{913376} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{913376} = \mathbf{Pl}(9, 0, 0, 29, 1, 0)_{4878} \\
\ell_{800} &= \begin{bmatrix} 1 & \eta^{24} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{32766} = \begin{bmatrix} 1 & 30 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{32766} = \mathbf{Pl}(0, 0, 0, 30, 1, 0)_{4932} \\
\ell_{801} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{34464} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{34464} = \mathbf{Pl}(30, 0, 0, 30, 1, 0)_{4962}
\end{aligned}$$

$$\begin{aligned}
\ell_{802} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{609152} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{609152} = \mathbf{Pl}(25, 0, 0, 30, 1, 0)_{4957} \\
\ell_{803} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{947456} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{947456} = \mathbf{Pl}(7, 0, 0, 30, 1, 0)_{4939} \\
\ell_{804} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{304576} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{304576} = \mathbf{Pl}(23, 0, 0, 30, 1, 0)_{4955} \\
\ell_{805} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{778080} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{778080} = \mathbf{Pl}(9, 0, 0, 30, 1, 0)_{4941} \\
\ell_{806} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{473728} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{473728} = \mathbf{Pl}(14, 0, 0, 30, 1, 0)_{4946} \\
\ell_{807} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{406240} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{406240} = \mathbf{Pl}(16, 0, 0, 30, 1, 0)_{4948} \\
\ell_{808} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{744640} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{744640} = \mathbf{Pl}(11, 0, 0, 30, 1, 0)_{4943} \\
\ell_{809} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{136128} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{136128} = \mathbf{Pl}(21, 0, 0, 30, 1, 0)_{4953} \\
\ell_{810} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{845664} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{845664} = \mathbf{Pl}(18, 0, 0, 30, 1, 0)_{4950} \\
\ell_{811} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{541408} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{541408} = \mathbf{Pl}(12, 0, 0, 30, 1, 0)_{4944} \\
\ell_{812} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{236864} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{236864} = \mathbf{Pl}(28, 0, 0, 30, 1, 0)_{4960} \\
\ell_{813} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{507936} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{507936} = \mathbf{Pl}(2, 0, 0, 30, 1, 0)_{4934} \\
\ell_{814} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{203680} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{203680} = \mathbf{Pl}(5, 0, 0, 30, 1, 0)_{4937} \\
\ell_{815} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{440704} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{440704} = \mathbf{Pl}(27, 0, 0, 30, 1, 0)_{4959} \\
\ell_{816} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{372320} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{372320} = \mathbf{Pl}(22, 0, 0, 30, 1, 0)_{4954} \\
\ell_{817} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{812480} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{812480} = \mathbf{Pl}(8, 0, 0, 30, 1, 0)_{4940} \\
\ell_{818} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{68064} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{68064} = \mathbf{Pl}(15, 0, 0, 30, 1, 0)_{4947} \\
\ell_{819} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{981664} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{981664} = \mathbf{Pl}(17, 0, 0, 30, 1, 0)_{4949} \\
\ell_{820} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{1014752} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{1014752} = \mathbf{Pl}(1, 0, 0, 30, 1, 0)_{4933} \\
\ell_{821} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{880288} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{880288} = \mathbf{Pl}(31, 0, 0, 30, 1, 0)_{4963} \\
\ell_{822} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{271136} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{271136} = \mathbf{Pl}(24, 0, 0, 30, 1, 0)_{4956}
\end{aligned}$$

$$\begin{aligned}
\ell_{823} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{169568} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{169568} = \mathbf{Pl}(6, 0, 0, 30, 1, 0)_{4938} \\
\ell_{824} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{575616} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{575616} = \mathbf{Pl}(29, 0, 0, 30, 1, 0)_{4961} \\
\ell_{825} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{339136} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{339136} = \mathbf{Pl}(3, 0, 0, 30, 1, 0)_{4935} \\
\ell_{826} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{710592} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{710592} = \mathbf{Pl}(4, 0, 0, 30, 1, 0)_{4936} \\
\ell_{827} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{1049216} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{1049216} = \mathbf{Pl}(26, 0, 0, 30, 1, 0)_{4958} \\
\ell_{828} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{102272} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{102272} = \mathbf{Pl}(10, 0, 0, 30, 1, 0)_{4942} \\
\ell_{829} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{643616} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{643616} = \mathbf{Pl}(20, 0, 0, 30, 1, 0)_{4952} \\
\ell_{830} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{677408} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{677408} = \mathbf{Pl}(19, 0, 0, 30, 1, 0)_{4951} \\
\ell_{831} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{913728} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{913728} = \mathbf{Pl}(13, 0, 0, 30, 1, 0)_{4945} \\
\ell_{832} &= \begin{bmatrix} 1 & \eta^9 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{28538} = \begin{bmatrix} 1 & 26 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{28538} = \mathbf{Pl}(0, 0, 0, 26, 1, 0)_{4680} \\
\ell_{833} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{34496} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{34496} = \mathbf{Pl}(26, 0, 0, 26, 1, 0)_{4706} \\
\ell_{834} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{609600} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{609600} = \mathbf{Pl}(17, 0, 0, 26, 1, 0)_{4697} \\
\ell_{835} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{947584} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{947584} = \mathbf{Pl}(11, 0, 0, 26, 1, 0)_{4691} \\
\ell_{836} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{304800} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{304800} = \mathbf{Pl}(7, 0, 0, 26, 1, 0)_{4687} \\
\ell_{837} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{778560} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{778560} = \mathbf{Pl}(29, 0, 0, 26, 1, 0)_{4709} \\
\ell_{838} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{473792} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{473792} = \mathbf{Pl}(22, 0, 0, 26, 1, 0)_{4702} \\
\ell_{839} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{406112} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{406112} = \mathbf{Pl}(12, 0, 0, 26, 1, 0)_{4692} \\
\ell_{840} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{744320} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{744320} = \mathbf{Pl}(14, 0, 0, 26, 1, 0)_{4694} \\
\ell_{841} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{136256} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{136256} = \mathbf{Pl}(20, 0, 0, 26, 1, 0)_{4700} \\
\ell_{842} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{846464} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{846464} = \mathbf{Pl}(31, 0, 0, 26, 1, 0)_{4711} \\
\ell_{843} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{541920} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{541920} = \mathbf{Pl}(5, 0, 0, 26, 1, 0)_{4685}
\end{aligned}$$

$$\begin{aligned}
\ell_{844} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{236896} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{236896} = \mathbf{Pl}(9, 0, 0, 26, 1, 0)_{4689} \\
\ell_{845} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{508288} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{508288} = \mathbf{Pl}(19, 0, 0, 26, 1, 0)_{4699} \\
\ell_{846} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{203488} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{203488} = \mathbf{Pl}(24, 0, 0, 26, 1, 0)_{4704} \\
\ell_{847} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{440288} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{440288} = \mathbf{Pl}(2, 0, 0, 26, 1, 0)_{4682} \\
\ell_{848} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{372160} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{372160} = \mathbf{Pl}(28, 0, 0, 26, 1, 0)_{4708} \\
\ell_{849} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{812224} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{812224} = \mathbf{Pl}(6, 0, 0, 26, 1, 0)_{4686} \\
\ell_{850} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{68128} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{68128} = \mathbf{Pl}(13, 0, 0, 26, 1, 0)_{4693} \\
\ell_{851} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{981056} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{981056} = \mathbf{Pl}(23, 0, 0, 26, 1, 0)_{4703} \\
\ell_{852} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{1015712} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{1015712} = \mathbf{Pl}(27, 0, 0, 26, 1, 0)_{4707} \\
\ell_{853} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{879456} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{879456} = \mathbf{Pl}(1, 0, 0, 26, 1, 0)_{4681} \\
\ell_{854} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{271392} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{271392} = \mathbf{Pl}(10, 0, 0, 26, 1, 0)_{4690} \\
\ell_{855} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{169472} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{169472} = \mathbf{Pl}(16, 0, 0, 26, 1, 0)_{4696} \\
\ell_{856} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{575072} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{575072} = \mathbf{Pl}(18, 0, 0, 26, 1, 0)_{4698} \\
\ell_{857} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{338944} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{338944} = \mathbf{Pl}(8, 0, 0, 26, 1, 0)_{4688} \\
\ell_{858} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{711200} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{711200} = \mathbf{Pl}(3, 0, 0, 26, 1, 0)_{4683} \\
\ell_{859} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{1048864} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{1048864} = \mathbf{Pl}(25, 0, 0, 26, 1, 0)_{4705} \\
\ell_{860} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{102304} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{102304} = \mathbf{Pl}(21, 0, 0, 26, 1, 0)_{4701} \\
\ell_{861} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{643072} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{643072} = \mathbf{Pl}(15, 0, 0, 26, 1, 0)_{4695} \\
\ell_{862} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{676768} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{676768} = \mathbf{Pl}(4, 0, 0, 26, 1, 0)_{4684} \\
\ell_{863} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{913888} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{913888} = \mathbf{Pl}(30, 0, 0, 26, 1, 0)_{4710} \\
\ell_{864} &= \begin{bmatrix} 1 & \eta^3 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9512} = \begin{bmatrix} 1 & 8 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9512} = \mathbf{Pl}(0, 0, 0, 8, 1, 0)_{3546}
\end{aligned}$$

$$\begin{aligned}
\ell_{865} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{34528} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{34528} = \mathbf{Pl}(8, 0, 0, 8, 1, 0)_{3554} \\
\ell_{866} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{609184} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{609184} = \mathbf{Pl}(16, 0, 0, 8, 1, 0)_{3562} \\
\ell_{867} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{947616} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{947616} = \mathbf{Pl}(24, 0, 0, 8, 1, 0)_{3570} \\
\ell_{868} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{305152} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{305152} = \mathbf{Pl}(5, 0, 0, 8, 1, 0)_{3551} \\
\ell_{869} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{778432} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{778432} = \mathbf{Pl}(13, 0, 0, 8, 1, 0)_{3559} \\
\ell_{870} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{474368} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{474368} = \mathbf{Pl}(21, 0, 0, 8, 1, 0)_{3567} \\
\ell_{871} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{406496} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{406496} = \mathbf{Pl}(29, 0, 0, 8, 1, 0)_{3575} \\
\ell_{872} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{744928} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{744928} = \mathbf{Pl}(10, 0, 0, 8, 1, 0)_{3556} \\
\ell_{873} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{135872} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{135872} = \mathbf{Pl}(2, 0, 0, 8, 1, 0)_{3548} \\
\ell_{874} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{846272} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{846272} = \mathbf{Pl}(26, 0, 0, 8, 1, 0)_{3572} \\
\ell_{875} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{541248} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{541248} = \mathbf{Pl}(18, 0, 0, 8, 1, 0)_{3564} \\
\ell_{876} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{237184} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{237184} = \mathbf{Pl}(15, 0, 0, 8, 1, 0)_{3561} \\
\ell_{877} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{507744} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{507744} = \mathbf{Pl}(7, 0, 0, 8, 1, 0)_{3553} \\
\ell_{878} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{203808} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{203808} = \mathbf{Pl}(31, 0, 0, 8, 1, 0)_{3577} \\
\ell_{879} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{439872} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{439872} = \mathbf{Pl}(23, 0, 0, 8, 1, 0)_{3569} \\
\ell_{880} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{373024} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{373024} = \mathbf{Pl}(20, 0, 0, 8, 1, 0)_{3566} \\
\ell_{881} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{811872} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{811872} = \mathbf{Pl}(28, 0, 0, 8, 1, 0)_{3574} \\
\ell_{882} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{67936} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{67936} = \mathbf{Pl}(4, 0, 0, 8, 1, 0)_{3550} \\
\ell_{883} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{981120} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{981120} = \mathbf{Pl}(12, 0, 0, 8, 1, 0)_{3558} \\
\ell_{884} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{1015488} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{1015488} = \mathbf{Pl}(17, 0, 0, 8, 1, 0)_{3563} \\
\ell_{885} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{879744} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{879744} = \mathbf{Pl}(25, 0, 0, 8, 1, 0)_{3571}
\end{aligned}$$

$$\begin{aligned}
\ell_{886} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{270624} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{270624} = \mathbf{Pl}(1, 0, 0, 8, 1, 0)_{3547} \\
\ell_{887} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{169248} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{169248} = \mathbf{Pl}(9, 0, 0, 8, 1, 0)_{3555} \\
\ell_{888} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{575648} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{575648} = \mathbf{Pl}(30, 0, 0, 8, 1, 0)_{3576} \\
\ell_{889} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{338496} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{338496} = \mathbf{Pl}(22, 0, 0, 8, 1, 0)_{3568} \\
\ell_{890} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{710496} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{710496} = \mathbf{Pl}(14, 0, 0, 8, 1, 0)_{3560} \\
\ell_{891} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{1048992} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{1048992} = \mathbf{Pl}(6, 0, 0, 8, 1, 0)_{3552} \\
\ell_{892} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{102464} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{102464} = \mathbf{Pl}(27, 0, 0, 8, 1, 0)_{3573} \\
\ell_{893} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{643584} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{643584} = \mathbf{Pl}(19, 0, 0, 8, 1, 0)_{3565} \\
\ell_{894} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{676992} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{676992} = \mathbf{Pl}(11, 0, 0, 8, 1, 0)_{3557} \\
\ell_{895} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{914144} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{914144} = \mathbf{Pl}(3, 0, 0, 8, 1, 0)_{3549} \\
\ell_{896} &= \begin{bmatrix} 1 & \eta^5 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6341} = \begin{bmatrix} 1 & 5 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6341} = \mathbf{Pl}(0, 0, 0, 5, 1, 0)_{3357} \\
\ell_{897} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{34560} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{34560} = \mathbf{Pl}(5, 0, 0, 5, 1, 0)_{3362} \\
\ell_{898} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{609632} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{609632} = \mathbf{Pl}(10, 0, 0, 5, 1, 0)_{3367} \\
\ell_{899} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{947488} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{947488} = \mathbf{Pl}(15, 0, 0, 5, 1, 0)_{3372} \\
\ell_{900} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{305376} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{305376} = \mathbf{Pl}(20, 0, 0, 5, 1, 0)_{3377} \\
\ell_{901} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{778720} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{778720} = \mathbf{Pl}(17, 0, 0, 5, 1, 0)_{3374} \\
\ell_{902} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{474176} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{474176} = \mathbf{Pl}(30, 0, 0, 5, 1, 0)_{3387} \\
\ell_{903} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{406880} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{406880} = \mathbf{Pl}(27, 0, 0, 5, 1, 0)_{3384} \\
\ell_{904} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{744608} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{744608} = \mathbf{Pl}(13, 0, 0, 5, 1, 0)_{3370} \\
\ell_{905} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{136000} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{136000} = \mathbf{Pl}(8, 0, 0, 5, 1, 0)_{3365} \\
\ell_{906} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{845984} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{845984} = \mathbf{Pl}(7, 0, 0, 5, 1, 0)_{3364}
\end{aligned}$$

$$\begin{aligned}
\ell_{907} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{541760} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{541760} = \mathbf{Pl}(2, 0, 0, 5, 1, 0)_{3359} \\
\ell_{908} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{237088} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{237088} = \mathbf{Pl}(25, 0, 0, 5, 1, 0)_{3382} \\
\ell_{909} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{507456} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{507456} = \mathbf{Pl}(28, 0, 0, 5, 1, 0)_{3385} \\
\ell_{910} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{203872} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{203872} = \mathbf{Pl}(19, 0, 0, 5, 1, 0)_{3376} \\
\ell_{911} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{439968} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{439968} = \mathbf{Pl}(22, 0, 0, 5, 1, 0)_{3379} \\
\ell_{912} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{372736} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{372736} = \mathbf{Pl}(26, 0, 0, 5, 1, 0)_{3383} \\
\ell_{913} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{812640} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{812640} = \mathbf{Pl}(31, 0, 0, 5, 1, 0)_{3388} \\
\ell_{914} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{68000} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{68000} = \mathbf{Pl}(16, 0, 0, 5, 1, 0)_{3373} \\
\ell_{915} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{981728} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{981728} = \mathbf{Pl}(21, 0, 0, 5, 1, 0)_{3378} \\
\ell_{916} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{1014912} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{1014912} = \mathbf{Pl}(14, 0, 0, 5, 1, 0)_{3371} \\
\ell_{917} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{879936} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{879936} = \mathbf{Pl}(11, 0, 0, 5, 1, 0)_{3368} \\
\ell_{918} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{270880} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{270880} = \mathbf{Pl}(4, 0, 0, 5, 1, 0)_{3361} \\
\ell_{919} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{169152} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{169152} = \mathbf{Pl}(1, 0, 0, 5, 1, 0)_{3358} \\
\ell_{920} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{575168} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{575168} = \mathbf{Pl}(23, 0, 0, 5, 1, 0)_{3380} \\
\ell_{921} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{338304} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{338304} = \mathbf{Pl}(18, 0, 0, 5, 1, 0)_{3375} \\
\ell_{922} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{710912} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{710912} = \mathbf{Pl}(29, 0, 0, 5, 1, 0)_{3386} \\
\ell_{923} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{1049088} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{1049088} = \mathbf{Pl}(24, 0, 0, 5, 1, 0)_{3381} \\
\ell_{924} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{102368} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{102368} = \mathbf{Pl}(3, 0, 0, 5, 1, 0)_{3360} \\
\ell_{925} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{643104} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{643104} = \mathbf{Pl}(6, 0, 0, 5, 1, 0)_{3363} \\
\ell_{926} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{676608} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{676608} = \mathbf{Pl}(9, 0, 0, 5, 1, 0)_{3366} \\
\ell_{927} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{913472} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{913472} = \mathbf{Pl}(12, 0, 0, 5, 1, 0)_{3369}
\end{aligned}$$

$$\begin{aligned}
\ell_{928} &= \begin{bmatrix} 1 & \eta^{10} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{19025} = \begin{bmatrix} 1 & 17 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{19025} = \mathbf{Pl}(0, 0, 0, 17, 1, 0)_{4113} \\
\ell_{929} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{34592} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{34592} = \mathbf{Pl}(17, 0, 0, 17, 1, 0)_{4130} \\
\ell_{930} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{609216} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{609216} = \mathbf{Pl}(7, 0, 0, 17, 1, 0)_{4120} \\
\ell_{931} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{947328} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{947328} = \mathbf{Pl}(22, 0, 0, 17, 1, 0)_{4135} \\
\ell_{932} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{304608} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{304608} = \mathbf{Pl}(14, 0, 0, 17, 1, 0)_{4127} \\
\ell_{933} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{778816} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{778816} = \mathbf{Pl}(31, 0, 0, 17, 1, 0)_{4144} \\
\ell_{934} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{473664} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{473664} = \mathbf{Pl}(9, 0, 0, 17, 1, 0)_{4122} \\
\ell_{935} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{406432} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{406432} = \mathbf{Pl}(24, 0, 0, 17, 1, 0)_{4137} \\
\ell_{936} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{744224} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{744224} = \mathbf{Pl}(28, 0, 0, 17, 1, 0)_{4141} \\
\ell_{937} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{135776} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{135776} = \mathbf{Pl}(13, 0, 0, 17, 1, 0)_{4126} \\
\ell_{938} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{846592} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{846592} = \mathbf{Pl}(27, 0, 0, 17, 1, 0)_{4140} \\
\ell_{939} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{541984} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{541984} = \mathbf{Pl}(10, 0, 0, 17, 1, 0)_{4123} \\
\ell_{940} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{236832} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{236832} = \mathbf{Pl}(18, 0, 0, 17, 1, 0)_{4131} \\
\ell_{941} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{508256} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{508256} = \mathbf{Pl}(3, 0, 0, 17, 1, 0)_{4116} \\
\ell_{942} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{203776} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{203776} = \mathbf{Pl}(21, 0, 0, 17, 1, 0)_{4134} \\
\ell_{943} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{440000} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{440000} = \mathbf{Pl}(4, 0, 0, 17, 1, 0)_{4117} \\
\ell_{944} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{372672} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{372672} = \mathbf{Pl}(29, 0, 0, 17, 1, 0)_{4142} \\
\ell_{945} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{812000} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{812000} = \mathbf{Pl}(12, 0, 0, 17, 1, 0)_{4125} \\
\ell_{946} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{68320} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{68320} = \mathbf{Pl}(26, 0, 0, 17, 1, 0)_{4139} \\
\ell_{947} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{981408} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{981408} = \mathbf{Pl}(11, 0, 0, 17, 1, 0)_{4124} \\
\ell_{948} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{1015648} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{1015648} = \mathbf{Pl}(19, 0, 0, 17, 1, 0)_{4132}
\end{aligned}$$

$$\begin{aligned}
\ell_{949} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{880000} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{880000} = \mathbf{Pl}(2, 0, 0, 17, 1, 0)_{4115} \\
\ell_{950} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{271552} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{271552} = \mathbf{Pl}(20, 0, 0, 17, 1, 0)_{4133} \\
\ell_{951} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{169856} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{169856} = \mathbf{Pl}(5, 0, 0, 17, 1, 0)_{4118} \\
\ell_{952} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{575040} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{575040} = \mathbf{Pl}(1, 0, 0, 17, 1, 0)_{4114} \\
\ell_{953} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{338592} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{338592} = \mathbf{Pl}(16, 0, 0, 17, 1, 0)_{4129} \\
\ell_{954} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{710752} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{710752} = \mathbf{Pl}(6, 0, 0, 17, 1, 0)_{4119} \\
\ell_{955} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{1048704} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{1048704} = \mathbf{Pl}(23, 0, 0, 17, 1, 0)_{4136} \\
\ell_{956} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{101888} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{101888} = \mathbf{Pl}(15, 0, 0, 17, 1, 0)_{4128} \\
\ell_{957} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{643296} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{643296} = \mathbf{Pl}(30, 0, 0, 17, 1, 0)_{4143} \\
\ell_{958} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{677184} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{677184} = \mathbf{Pl}(8, 0, 0, 17, 1, 0)_{4121} \\
\ell_{959} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{913568} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{913568} = \mathbf{Pl}(25, 0, 0, 17, 1, 0)_{4138} \\
\ell_{960} &= \begin{bmatrix} 1 & \eta^6 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11626} = \begin{bmatrix} 1 & 10 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11626} = \mathbf{Pl}(0, 0, 0, 10, 1, 0)_{3672} \\
\ell_{961} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{34624} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{34624} = \mathbf{Pl}(10, 0, 0, 10, 1, 0)_{3682} \\
\ell_{962} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{609792} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{609792} = \mathbf{Pl}(20, 0, 0, 10, 1, 0)_{3692} \\
\ell_{963} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{947712} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{947712} = \mathbf{Pl}(30, 0, 0, 10, 1, 0)_{3702} \\
\ell_{964} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{304896} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{304896} = \mathbf{Pl}(13, 0, 0, 10, 1, 0)_{3685} \\
\ell_{965} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{778336} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{778336} = \mathbf{Pl}(7, 0, 0, 10, 1, 0)_{3679} \\
\ell_{966} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{473856} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{473856} = \mathbf{Pl}(25, 0, 0, 10, 1, 0)_{3697} \\
\ell_{967} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{406816} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{406816} = \mathbf{Pl}(19, 0, 0, 10, 1, 0)_{3691} \\
\ell_{968} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{744800} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{744800} = \mathbf{Pl}(26, 0, 0, 10, 1, 0)_{3698} \\
\ell_{969} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{135648} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{135648} = \mathbf{Pl}(16, 0, 0, 10, 1, 0)_{3688}
\end{aligned}$$

$$\begin{aligned}
\ell_{970} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{845792} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{845792} = \mathbf{Pl}(14, 0, 0, 10, 1, 0)_{3686} \\
\ell_{971} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{541472} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{541472} = \mathbf{Pl}(4, 0, 0, 10, 1, 0)_{3676} \\
\ell_{972} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{236928} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{236928} = \mathbf{Pl}(23, 0, 0, 10, 1, 0)_{3695} \\
\ell_{973} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{507968} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{507968} = \mathbf{Pl}(29, 0, 0, 10, 1, 0)_{3701} \\
\ell_{974} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{203840} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{203840} = \mathbf{Pl}(3, 0, 0, 10, 1, 0)_{3675} \\
\ell_{975} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{439840} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{439840} = \mathbf{Pl}(9, 0, 0, 10, 1, 0)_{3681} \\
\ell_{976} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{372832} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{372832} = \mathbf{Pl}(17, 0, 0, 10, 1, 0)_{3689} \\
\ell_{977} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{812768} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{812768} = \mathbf{Pl}(27, 0, 0, 10, 1, 0)_{3699} \\
\ell_{978} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{68384} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{68384} = \mathbf{Pl}(5, 0, 0, 10, 1, 0)_{3677} \\
\ell_{979} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{981312} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{981312} = \mathbf{Pl}(15, 0, 0, 10, 1, 0)_{3687} \\
\ell_{980} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{1014816} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{1014816} = \mathbf{Pl}(28, 0, 0, 10, 1, 0)_{3700} \\
\ell_{981} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{879680} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{879680} = \mathbf{Pl}(22, 0, 0, 10, 1, 0)_{3694} \\
\ell_{982} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{271296} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{271296} = \mathbf{Pl}(8, 0, 0, 10, 1, 0)_{3680} \\
\ell_{983} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{169696} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{169696} = \mathbf{Pl}(2, 0, 0, 10, 1, 0)_{3674} \\
\ell_{984} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{575520} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{575520} = \mathbf{Pl}(11, 0, 0, 10, 1, 0)_{3683} \\
\ell_{985} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{338272} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{338272} = \mathbf{Pl}(1, 0, 0, 10, 1, 0)_{3673} \\
\ell_{986} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{711168} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{711168} = \mathbf{Pl}(31, 0, 0, 10, 1, 0)_{3703} \\
\ell_{987} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{1049376} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{1049376} = \mathbf{Pl}(21, 0, 0, 10, 1, 0)_{3693} \\
\ell_{988} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{101920} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{101920} = \mathbf{Pl}(6, 0, 0, 10, 1, 0)_{3678} \\
\ell_{989} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{642880} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{642880} = \mathbf{Pl}(12, 0, 0, 10, 1, 0)_{3684} \\
\ell_{990} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{676544} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{676544} = \mathbf{Pl}(18, 0, 0, 10, 1, 0)_{3690}
\end{aligned}$$

$$\begin{aligned}
\ell_{991} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{913792} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{913792} = \mathbf{Pl}(24, 0, 0, 10, 1, 0)_{3696} \\
\ell_{992} &= \begin{bmatrix} 1 & \eta^{22} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{23253} = \begin{bmatrix} 1 & 21 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{23253} = \mathbf{Pl}(0, 0, 0, 21, 1, 0)_{4365} \\
\ell_{993} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{34656} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{34656} = \mathbf{Pl}(21, 0, 0, 21, 1, 0)_{4386} \\
\ell_{994} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{609248} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{609248} = \mathbf{Pl}(15, 0, 0, 21, 1, 0)_{4380} \\
\ell_{995} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{947744} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{947744} = \mathbf{Pl}(26, 0, 0, 21, 1, 0)_{4391} \\
\ell_{996} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{305056} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{305056} = \mathbf{Pl}(30, 0, 0, 21, 1, 0)_{4395} \\
\ell_{997} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{778464} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{778464} = \mathbf{Pl}(11, 0, 0, 21, 1, 0)_{4376} \\
\ell_{998} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{474304} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{474304} = \mathbf{Pl}(17, 0, 0, 21, 1, 0)_{4382} \\
\ell_{999} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{406176} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{406176} = \mathbf{Pl}(4, 0, 0, 21, 1, 0)_{4369} \\
\ell_{1000} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{744448} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{744448} = \mathbf{Pl}(25, 0, 0, 21, 1, 0)_{4390} \\
\ell_{1001} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{135520} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{135520} = \mathbf{Pl}(12, 0, 0, 21, 1, 0)_{4377} \\
\ell_{1002} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{845856} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{845856} = \mathbf{Pl}(22, 0, 0, 21, 1, 0)_{4387} \\
\ell_{1003} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{542080} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{542080} = \mathbf{Pl}(3, 0, 0, 21, 1, 0)_{4368} \\
\ell_{1004} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{237152} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{237152} = \mathbf{Pl}(7, 0, 0, 21, 1, 0)_{4372} \\
\ell_{1005} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{507424} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{507424} = \mathbf{Pl}(18, 0, 0, 21, 1, 0)_{4383} \\
\ell_{1006} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{203648} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{203648} = \mathbf{Pl}(8, 0, 0, 21, 1, 0)_{4373} \\
\ell_{1007} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{440320} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{440320} = \mathbf{Pl}(29, 0, 0, 21, 1, 0)_{4394} \\
\ell_{1008} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{372224} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{372224} = \mathbf{Pl}(23, 0, 0, 21, 1, 0)_{4388} \\
\ell_{1009} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{812352} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{812352} = \mathbf{Pl}(2, 0, 0, 21, 1, 0)_{4367} \\
\ell_{1010} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{68192} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{68192} = \mathbf{Pl}(24, 0, 0, 21, 1, 0)_{4389} \\
\ell_{1011} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{981376} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{981376} = \mathbf{Pl}(13, 0, 0, 21, 1, 0)_{4378}
\end{aligned}$$

$$\begin{aligned}
\ell_{1012} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{1014848} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{1014848} = \mathbf{PI}(9, 0, 0, 21, 1, 0)_{4374} \\
\ell_{1013} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{879520} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{879520} = \mathbf{PI}(28, 0, 0, 21, 1, 0)_{4393} \\
\ell_{1014} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{271040} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{271040} = \mathbf{PI}(6, 0, 0, 21, 1, 0)_{4371} \\
\ell_{1015} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{170048} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{170048} = \mathbf{PI}(19, 0, 0, 21, 1, 0)_{4384} \\
\ell_{1016} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{575200} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{575200} = \mathbf{PI}(14, 0, 0, 21, 1, 0)_{4379} \\
\ell_{1017} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{339232} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{339232} = \mathbf{PI}(27, 0, 0, 21, 1, 0)_{4392} \\
\ell_{1018} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{710336} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{710336} = \mathbf{PI}(1, 0, 0, 21, 1, 0)_{4366} \\
\ell_{1019} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{1049504} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{1049504} = \mathbf{PI}(20, 0, 0, 21, 1, 0)_{4385} \\
\ell_{1020} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{101824} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{101824} = \mathbf{PI}(16, 0, 0, 21, 1, 0)_{4381} \\
\ell_{1021} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{643392} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{643392} = \mathbf{PI}(5, 0, 0, 21, 1, 0)_{4370} \\
\ell_{1022} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{677344} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{677344} = \mathbf{PI}(31, 0, 0, 21, 1, 0)_{4396} \\
\ell_{1023} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{914048} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{914048} = \mathbf{PI}(10, 0, 0, 21, 1, 0)_{4375} \\
\ell_{1024} &= \begin{bmatrix} 1 & \eta^{15} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{33823} = \begin{bmatrix} 1 & 31 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{33823} = \mathbf{PI}(0, 0, 0, 31, 1, 0)_{4995} \\
\ell_{1025} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{34688} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{34688} = \mathbf{PI}(31, 0, 0, 31, 1, 0)_{5026} \\
\ell_{1026} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{609824} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{609824} = \mathbf{PI}(27, 0, 0, 31, 1, 0)_{5022} \\
\ell_{1027} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{947360} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{947360} = \mathbf{PI}(4, 0, 0, 31, 1, 0)_{4999} \\
\ell_{1028} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{305344} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{305344} = \mathbf{PI}(19, 0, 0, 31, 1, 0)_{5014} \\
\ell_{1029} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{778176} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{778176} = \mathbf{PI}(12, 0, 0, 31, 1, 0)_{5007} \\
\ell_{1030} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{474240} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{474240} = \mathbf{PI}(8, 0, 0, 31, 1, 0)_{5003} \\
\ell_{1031} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{406048} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{406048} = \mathbf{PI}(23, 0, 0, 31, 1, 0)_{5018} \\
\ell_{1032} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{745024} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{745024} = \mathbf{PI}(3, 0, 0, 31, 1, 0)_{4998}
\end{aligned}$$

$$\begin{aligned}
\ell_{1033} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{135392} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{135392} = \mathbf{Pl}(28, 0, 0, 31, 1, 0)_{5023} \\
\ell_{1034} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{846144} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{846144} = \mathbf{Pl}(24, 0, 0, 31, 1, 0)_{5019} \\
\ell_{1035} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{541568} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{541568} = \mathbf{Pl}(7, 0, 0, 31, 1, 0)_{5002} \\
\ell_{1036} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{237120} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{237120} = \mathbf{Pl}(16, 0, 0, 31, 1, 0)_{5011} \\
\ell_{1037} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{507776} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{507776} = \mathbf{Pl}(15, 0, 0, 31, 1, 0)_{5010} \\
\ell_{1038} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{203456} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{203456} = \mathbf{Pl}(11, 0, 0, 31, 1, 0)_{5006} \\
\ell_{1039} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{440672} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{440672} = \mathbf{Pl}(20, 0, 0, 31, 1, 0)_{5015} \\
\ell_{1040} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{372512} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{372512} = \mathbf{Pl}(6, 0, 0, 31, 1, 0)_{5001} \\
\ell_{1041} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{812096} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{812096} = \mathbf{Pl}(25, 0, 0, 31, 1, 0)_{5020} \\
\ell_{1042} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{68256} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{68256} = \mathbf{Pl}(29, 0, 0, 31, 1, 0)_{5024} \\
\ell_{1043} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{981472} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{981472} = \mathbf{Pl}(2, 0, 0, 31, 1, 0)_{4997} \\
\ell_{1044} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{1015552} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{1015552} = \mathbf{Pl}(21, 0, 0, 31, 1, 0)_{5016} \\
\ell_{1045} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{880224} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{880224} = \mathbf{Pl}(10, 0, 0, 31, 1, 0)_{5005} \\
\ell_{1046} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{270784} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{270784} = \mathbf{Pl}(14, 0, 0, 31, 1, 0)_{5009} \\
\ell_{1047} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{169888} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{169888} = \mathbf{Pl}(17, 0, 0, 31, 1, 0)_{5012} \\
\ell_{1048} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{575744} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{575744} = \mathbf{Pl}(5, 0, 0, 31, 1, 0)_{5000} \\
\ell_{1049} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{338912} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{338912} = \mathbf{Pl}(26, 0, 0, 31, 1, 0)_{5021} \\
\ell_{1050} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{710944} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{710944} = \mathbf{Pl}(30, 0, 0, 31, 1, 0)_{5025} \\
\ell_{1051} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{1048576} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{1048576} = \mathbf{Pl}(1, 0, 0, 31, 1, 0)_{4996} \\
\ell_{1052} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{101728} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{101728} = \mathbf{Pl}(22, 0, 0, 31, 1, 0)_{5017} \\
\ell_{1053} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{642784} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{642784} = \mathbf{Pl}(9, 0, 0, 31, 1, 0)_{5004}
\end{aligned}$$

$$\begin{aligned}
\ell_{1054} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{676960} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{676960} = \mathbf{Pl}(13, 0, 0, 31, 1, 0)_{5008} \\
\ell_{1055} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{913312} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{913312} = \mathbf{Pl}(18, 0, 0, 31, 1, 0)_{5013} \\
\ell_{1056} &= \begin{bmatrix} 1 & \eta^{18} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4227} = \begin{bmatrix} 1 & 3 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4227} = \mathbf{Pl}(0, 0, 0, 3, 1, 0)_{3231} \\
\ell_{1057} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{34720} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{34720} = \mathbf{Pl}(3, 0, 0, 3, 1, 0)_{3234} \\
\ell_{1058} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{609280} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{609280} = \mathbf{Pl}(6, 0, 0, 3, 1, 0)_{3237} \\
\ell_{1059} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{947808} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{947808} = \mathbf{Pl}(5, 0, 0, 3, 1, 0)_{3236} \\
\ell_{1060} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{304640} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{304640} = \mathbf{Pl}(12, 0, 0, 3, 1, 0)_{3243} \\
\ell_{1061} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{778368} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{778368} = \mathbf{Pl}(15, 0, 0, 3, 1, 0)_{3246} \\
\ell_{1062} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{474336} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{474336} = \mathbf{Pl}(10, 0, 0, 3, 1, 0)_{3241} \\
\ell_{1063} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{406016} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{406016} = \mathbf{Pl}(9, 0, 0, 3, 1, 0)_{3240} \\
\ell_{1064} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{744672} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{744672} = \mathbf{Pl}(24, 0, 0, 3, 1, 0)_{3255} \\
\ell_{1065} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{136288} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{136288} = \mathbf{Pl}(27, 0, 0, 3, 1, 0)_{3258} \\
\ell_{1066} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{846240} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{846240} = \mathbf{Pl}(30, 0, 0, 3, 1, 0)_{3261} \\
\ell_{1067} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{541792} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{541792} = \mathbf{Pl}(29, 0, 0, 3, 1, 0)_{3260} \\
\ell_{1068} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{237728} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{237728} = \mathbf{Pl}(20, 0, 0, 3, 1, 0)_{3251} \\
\ell_{1069} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{507520} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{507520} = \mathbf{Pl}(23, 0, 0, 3, 1, 0)_{3254} \\
\ell_{1070} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{203008} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{203008} = \mathbf{Pl}(18, 0, 0, 3, 1, 0)_{3249} \\
\ell_{1071} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{440480} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{440480} = \mathbf{Pl}(17, 0, 0, 3, 1, 0)_{3248} \\
\ell_{1072} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{372896} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{372896} = \mathbf{Pl}(21, 0, 0, 3, 1, 0)_{3252} \\
\ell_{1073} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{812032} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{812032} = \mathbf{Pl}(22, 0, 0, 3, 1, 0)_{3253} \\
\ell_{1074} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{68576} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{68576} = \mathbf{Pl}(19, 0, 0, 3, 1, 0)_{3250}
\end{aligned}$$

$$\begin{aligned}
\ell_{1075} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{981248} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{981248} = \mathbf{Pl}(16, 0, 0, 3, 1, 0)_{3247} \\
\ell_{1076} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{1015040} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{1015040} = \mathbf{Pl}(25, 0, 0, 3, 1, 0)_{3256} \\
\ell_{1077} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{880096} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{880096} = \mathbf{Pl}(26, 0, 0, 3, 1, 0)_{3257} \\
\ell_{1078} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{271456} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{271456} = \mathbf{Pl}(31, 0, 0, 3, 1, 0)_{3262} \\
\ell_{1079} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{169216} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{169216} = \mathbf{Pl}(28, 0, 0, 3, 1, 0)_{3259} \\
\ell_{1080} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{575488} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{575488} = \mathbf{Pl}(13, 0, 0, 3, 1, 0)_{3244} \\
\ell_{1081} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{338432} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{338432} = \mathbf{Pl}(14, 0, 0, 3, 1, 0)_{3245} \\
\ell_{1082} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{710816} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{710816} = \mathbf{Pl}(11, 0, 0, 3, 1, 0)_{3242} \\
\ell_{1083} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{1049248} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{1049248} = \mathbf{Pl}(8, 0, 0, 3, 1, 0)_{3239} \\
\ell_{1084} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{101504} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{101504} = \mathbf{Pl}(1, 0, 0, 3, 1, 0)_{3232} \\
\ell_{1085} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{643232} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{643232} = \mathbf{Pl}(2, 0, 0, 3, 1, 0)_{3233} \\
\ell_{1086} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{676864} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{676864} = \mathbf{Pl}(7, 0, 0, 3, 1, 0)_{3238} \\
\ell_{1087} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{913536} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{913536} = \mathbf{Pl}(4, 0, 0, 3, 1, 0)_{3235} \\
\ell_{1088} &= \begin{bmatrix} 1 & \eta^{17} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{21139} = \begin{bmatrix} 1 & 19 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{21139} = \mathbf{Pl}(0, 0, 0, 19, 1, 0)_{4239} \\
\ell_{1089} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{34752} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{34752} = \mathbf{Pl}(19, 0, 0, 19, 1, 0)_{4258} \\
\ell_{1090} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{609728} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{609728} = \mathbf{Pl}(3, 0, 0, 19, 1, 0)_{4242} \\
\ell_{1091} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{947424} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{947424} = \mathbf{Pl}(16, 0, 0, 19, 1, 0)_{4255} \\
\ell_{1092} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{304864} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{304864} = \mathbf{Pl}(6, 0, 0, 19, 1, 0)_{4245} \\
\ell_{1093} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{778784} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{778784} = \mathbf{Pl}(21, 0, 0, 19, 1, 0)_{4260} \\
\ell_{1094} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{474272} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{474272} = \mathbf{Pl}(5, 0, 0, 19, 1, 0)_{4244} \\
\ell_{1095} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{406144} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{406144} = \mathbf{Pl}(22, 0, 0, 19, 1, 0)_{4261}
\end{aligned}$$

$$\begin{aligned}
\ell_{1096} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{744352} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{744352} = \mathbf{Pl}(12, 0, 0, 19, 1, 0)_{4251} \\
\ell_{1097} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{136160} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{136160} = \mathbf{Pl}(31, 0, 0, 19, 1, 0)_{4270} \\
\ell_{1098} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{846016} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{846016} = \mathbf{Pl}(15, 0, 0, 19, 1, 0)_{4254} \\
\ell_{1099} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{541280} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{541280} = \mathbf{Pl}(28, 0, 0, 19, 1, 0)_{4267} \\
\ell_{1100} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{237568} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{237568} = \mathbf{Pl}(10, 0, 0, 19, 1, 0)_{4249} \\
\ell_{1101} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{507680} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{507680} = \mathbf{Pl}(25, 0, 0, 19, 1, 0)_{4264} \\
\ell_{1102} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{203072} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{203072} = \mathbf{Pl}(9, 0, 0, 19, 1, 0)_{4248} \\
\ell_{1103} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{440384} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{440384} = \mathbf{Pl}(26, 0, 0, 19, 1, 0)_{4265} \\
\ell_{1104} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{372608} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{372608} = \mathbf{Pl}(24, 0, 0, 19, 1, 0)_{4263} \\
\ell_{1105} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{812288} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{812288} = \mathbf{Pl}(11, 0, 0, 19, 1, 0)_{4250} \\
\ell_{1106} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{68640} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{68640} = \mathbf{Pl}(27, 0, 0, 19, 1, 0)_{4266} \\
\ell_{1107} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{981600} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{981600} = \mathbf{Pl}(8, 0, 0, 19, 1, 0)_{4247} \\
\ell_{1108} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{1015360} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{1015360} = \mathbf{Pl}(30, 0, 0, 19, 1, 0)_{4269} \\
\ell_{1109} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{879904} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{879904} = \mathbf{Pl}(13, 0, 0, 19, 1, 0)_{4252} \\
\ell_{1110} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{271200} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{271200} = \mathbf{Pl}(29, 0, 0, 19, 1, 0)_{4268} \\
\ell_{1111} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{169312} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{169312} = \mathbf{Pl}(14, 0, 0, 19, 1, 0)_{4253} \\
\ell_{1112} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{575968} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{575968} = \mathbf{Pl}(20, 0, 0, 19, 1, 0)_{4259} \\
\ell_{1113} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{338624} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{338624} = \mathbf{Pl}(7, 0, 0, 19, 1, 0)_{4246} \\
\ell_{1114} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{710464} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{710464} = \mathbf{Pl}(23, 0, 0, 19, 1, 0)_{4262} \\
\ell_{1115} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{1048832} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{1048832} = \mathbf{Pl}(4, 0, 0, 19, 1, 0)_{4243} \\
\ell_{1116} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{101536} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{101536} = \mathbf{Pl}(18, 0, 0, 19, 1, 0)_{4257}
\end{aligned}$$

$$\begin{aligned}
\ell_{1117} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{642688} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{642688} = \mathbf{PI}(1, 0, 0, 19, 1, 0)_{4240} \\
\ell_{1118} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{677248} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{677248} = \mathbf{PI}(17, 0, 0, 19, 1, 0)_{4256} \\
\ell_{1119} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{913824} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{913824} = \mathbf{PI}(2, 0, 0, 19, 1, 0)_{4241} \\
\ell_{1120} &= \begin{bmatrix} 1 & \eta^7 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{22196} = \begin{bmatrix} 1 & 20 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{22196} = \mathbf{PI}(0, 0, 0, 20, 1, 0)_{4302} \\
\ell_{1121} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{34784} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{34784} = \mathbf{PI}(20, 0, 0, 20, 1, 0)_{4322} \\
\ell_{1122} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{609312} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{609312} = \mathbf{PI}(13, 0, 0, 20, 1, 0)_{4315} \\
\ell_{1123} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{947392} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{947392} = \mathbf{PI}(25, 0, 0, 20, 1, 0)_{4327} \\
\ell_{1124} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{305088} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{305088} = \mathbf{PI}(26, 0, 0, 20, 1, 0)_{4328} \\
\ell_{1125} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{778144} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{778144} = \mathbf{PI}(14, 0, 0, 20, 1, 0)_{4316} \\
\ell_{1126} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{473696} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{473696} = \mathbf{PI}(23, 0, 0, 20, 1, 0)_{4325} \\
\ell_{1127} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{406784} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{406784} = \mathbf{PI}(3, 0, 0, 20, 1, 0)_{4305} \\
\ell_{1128} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{744896} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{744896} = \mathbf{PI}(17, 0, 0, 20, 1, 0)_{4319} \\
\ell_{1129} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{136032} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{136032} = \mathbf{PI}(5, 0, 0, 20, 1, 0)_{4307} \\
\ell_{1130} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{845696} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{845696} = \mathbf{PI}(28, 0, 0, 20, 1, 0)_{4330} \\
\ell_{1131} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{541888} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{541888} = \mathbf{PI}(8, 0, 0, 20, 1, 0)_{4310} \\
\ell_{1132} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{237280} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{237280} = \mathbf{PI}(11, 0, 0, 20, 1, 0)_{4313} \\
\ell_{1133} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{508224} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{508224} = \mathbf{PI}(31, 0, 0, 20, 1, 0)_{4333} \\
\ell_{1134} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{203392} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{203392} = \mathbf{PI}(6, 0, 0, 20, 1, 0)_{4308} \\
\ell_{1135} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta \end{bmatrix}_{439776} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{439776} = \mathbf{PI}(18, 0, 0, 20, 1, 0)_{4320} \\
\ell_{1136} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{372448} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{372448} = \mathbf{PI}(7, 0, 0, 20, 1, 0)_{4309} \\
\ell_{1137} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{812704} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{812704} = \mathbf{PI}(19, 0, 0, 20, 1, 0)_{4321}
\end{aligned}$$

$$\begin{aligned}
\ell_{1138} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{68448} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{68448} = \mathbf{Pl}(10, 0, 0, 20, 1, 0)_{4312} \\
\ell_{1139} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{981536} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{981536} = \mathbf{Pl}(30, 0, 0, 20, 1, 0)_{4332} \\
\ell_{1140} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{1015328} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{1015328} = \mathbf{Pl}(29, 0, 0, 20, 1, 0)_{4331} \\
\ell_{1141} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{879552} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{879552} = \mathbf{Pl}(9, 0, 0, 20, 1, 0)_{4311} \\
\ell_{1142} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{270944} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{270944} = \mathbf{Pl}(16, 0, 0, 20, 1, 0)_{4318} \\
\ell_{1143} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{169408} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{169408} = \mathbf{Pl}(4, 0, 0, 20, 1, 0)_{4306} \\
\ell_{1144} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{575264} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{575264} = \mathbf{Pl}(22, 0, 0, 20, 1, 0)_{4324} \\
\ell_{1145} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{338816} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{338816} = \mathbf{Pl}(2, 0, 0, 20, 1, 0)_{4304} \\
\ell_{1146} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{711296} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{711296} = \mathbf{Pl}(27, 0, 0, 20, 1, 0)_{4329} \\
\ell_{1147} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{1048960} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{1048960} = \mathbf{Pl}(15, 0, 0, 20, 1, 0)_{4317} \\
\ell_{1148} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{101696} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{101696} = \mathbf{Pl}(12, 0, 0, 20, 1, 0)_{4314} \\
\ell_{1149} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{643200} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{643200} = \mathbf{Pl}(24, 0, 0, 20, 1, 0)_{4326} \\
\ell_{1150} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{676512} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{676512} = \mathbf{Pl}(1, 0, 0, 20, 1, 0)_{4303} \\
\ell_{1151} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{914080} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{914080} = \mathbf{Pl}(21, 0, 0, 20, 1, 0)_{4323} \\
\ell_{1152} &= \begin{bmatrix} 1 & \eta^{16} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{29595} = \begin{bmatrix} 1 & 27 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{29595} = \mathbf{Pl}(0, 0, 0, 27, 1, 0)_{4743} \\
\ell_{1153} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & \eta^{15} \end{bmatrix}_{34816} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 31 \end{bmatrix}_{34816} = \mathbf{Pl}(27, 0, 0, 27, 1, 0)_{4770} \\
\ell_{1154} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 1 & 0 & \eta^{14} \end{bmatrix}_{609760} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 0 & 29 \end{bmatrix}_{609760} = \mathbf{Pl}(19, 0, 0, 27, 1, 0)_{4762} \\
\ell_{1155} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 1 & 0 & \eta^{28} \end{bmatrix}_{947776} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 0 & 22 \end{bmatrix}_{947776} = \mathbf{Pl}(8, 0, 0, 27, 1, 0)_{4751} \\
\ell_{1156} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 1 & 0 & \eta^{13} \end{bmatrix}_{305312} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 0 & 28 \end{bmatrix}_{305312} = \mathbf{Pl}(3, 0, 0, 27, 1, 0)_{4746} \\
\ell_{1157} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 1 & 0 & \eta^{10} \end{bmatrix}_{778496} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 0 & 17 \end{bmatrix}_{778496} = \mathbf{Pl}(24, 0, 0, 27, 1, 0)_{4767} \\
\ell_{1158} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 1 & 0 & \eta^{27} \end{bmatrix}_{473888} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 0 & 11 \end{bmatrix}_{473888} = \mathbf{Pl}(16, 0, 0, 27, 1, 0)_{4759}
\end{aligned}$$

$$\begin{aligned}
\ell_{1159} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 1 & 0 & \eta^4 \end{bmatrix}_{406400} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 0 & 16 \end{bmatrix}_{406400} = \mathbf{Pl}(11, 0, 0, 27, 1, 0)_{4754} \\
\ell_{1160} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 1 & 0 & \eta^{12} \end{bmatrix}_{744576} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 0 & 14 \end{bmatrix}_{744576} = \mathbf{Pl}(6, 0, 0, 27, 1, 0)_{4749} \\
\ell_{1161} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 1 & 0 & \eta^{17} \end{bmatrix}_{135904} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 0 & 19 \end{bmatrix}_{135904} = \mathbf{Pl}(29, 0, 0, 27, 1, 0)_{4772} \\
\ell_{1162} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 1 & 0 & \eta^9 \end{bmatrix}_{846432} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 0 & 26 \end{bmatrix}_{846432} = \mathbf{Pl}(21, 0, 0, 27, 1, 0)_{4764} \\
\ell_{1163} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 1 & 0 & \eta^{19} \end{bmatrix}_{541376} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 0 & 6 \end{bmatrix}_{541376} = \mathbf{Pl}(14, 0, 0, 27, 1, 0)_{4757} \\
\ell_{1164} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 1 & 0 & \eta^{26} \end{bmatrix}_{237504} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 0 & 23 \end{bmatrix}_{237504} = \mathbf{Pl}(5, 0, 0, 27, 1, 0)_{4748} \\
\ell_{1165} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 1 & 0 & \eta^7 \end{bmatrix}_{508000} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 0 & 20 \end{bmatrix}_{508000} = \mathbf{Pl}(30, 0, 0, 27, 1, 0)_{4773} \\
\ell_{1166} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 1 & 0 & \eta^3 \end{bmatrix}_{203200} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 0 & 8 \end{bmatrix}_{203200} = \mathbf{Pl}(22, 0, 0, 27, 1, 0)_{4765} \\
\ell_{1167} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 1 & 0 & \eta^{23} \end{bmatrix}_{440192} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 0 & 15 \end{bmatrix}_{440192} = \mathbf{Pl}(13, 0, 0, 27, 1, 0)_{4756} \\
\ell_{1168} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 1 & 0 & \eta^{11} \end{bmatrix}_{372288} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 0 & 7 \end{bmatrix}_{372288} = \mathbf{Pl}(12, 0, 0, 27, 1, 0)_{4755} \\
\ell_{1169} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 1 & 0 & \eta^5 \end{bmatrix}_{811936} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 0 & 5 \end{bmatrix}_{811936} = \mathbf{Pl}(23, 0, 0, 27, 1, 0)_{4766} \\
\ell_{1170} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 1 & 0 & \eta^{16} \end{bmatrix}_{68512} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 0 & 27 \end{bmatrix}_{68512} = \mathbf{Pl}(31, 0, 0, 27, 1, 0)_{4774} \\
\ell_{1171} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 1 & 0 & \eta^{29} \end{bmatrix}_{981184} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 0 & 9 \end{bmatrix}_{981184} = \mathbf{Pl}(4, 0, 0, 27, 1, 0)_{4747} \\
\ell_{1172} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 1 & 0 & \eta^8 \end{bmatrix}_{1015136} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 0 & 13 \end{bmatrix}_{1015136} = \mathbf{Pl}(15, 0, 0, 27, 1, 0)_{4758} \\
\ell_{1173} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 1 & 0 & \eta^{24} \end{bmatrix}_{880384} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 0 & 30 \end{bmatrix}_{880384} = \mathbf{Pl}(20, 0, 0, 27, 1, 0)_{4763} \\
\ell_{1174} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 1 & 0 & \eta^{18} \end{bmatrix}_{270688} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 0 & 3 \end{bmatrix}_{270688} = \mathbf{Pl}(28, 0, 0, 27, 1, 0)_{4771} \\
\ell_{1175} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 1 & 0 & \eta^{20} \end{bmatrix}_{169504} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 0 & 12 \end{bmatrix}_{169504} = \mathbf{Pl}(7, 0, 0, 27, 1, 0)_{4750} \\
\ell_{1176} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 1 & 0 & \eta^{25} \end{bmatrix}_{575808} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 0 & 25 \end{bmatrix}_{575808} = \mathbf{Pl}(10, 0, 0, 27, 1, 0)_{4753} \\
\ell_{1177} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 1 & 0 & \eta^{21} \end{bmatrix}_{339008} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 0 & 24 \end{bmatrix}_{339008} = \mathbf{Pl}(17, 0, 0, 27, 1, 0)_{4760} \\
\ell_{1178} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 1 & 0 & \eta^6 \end{bmatrix}_{710624} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 0 & 10 \end{bmatrix}_{710624} = \mathbf{Pl}(25, 0, 0, 27, 1, 0)_{4768} \\
\ell_{1179} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 1 & 0 & \eta^{30} \end{bmatrix}_{1049120} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 0 & 18 \end{bmatrix}_{1049120} = \mathbf{Pl}(2, 0, 0, 27, 1, 0)_{4745}
\end{aligned}$$

$$\begin{aligned}
\ell_{1180} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 1 & 0 & \eta^2 \end{bmatrix}_{101600} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 0 & 4 \end{bmatrix}_{101600} = \mathbf{Pl}(9, 0, 0, 27, 1, 0)_{4752} \\
\ell_{1181} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 1 & 0 & \eta \end{bmatrix}_{642720} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 0 & 2 \end{bmatrix}_{642720} = \mathbf{Pl}(18, 0, 0, 27, 1, 0)_{4761} \\
\ell_{1182} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 1 & 0 & \eta^{22} \end{bmatrix}_{677152} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 0 & 21 \end{bmatrix}_{677152} = \mathbf{Pl}(26, 0, 0, 27, 1, 0)_{4769} \\
\ell_{1183} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 1 & 0 & 1 \end{bmatrix}_{913280} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 0 & 1 \end{bmatrix}_{913280} = \mathbf{Pl}(1, 0, 0, 27, 1, 0)_{4744} \\
\ell_{1184} &= \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{34880} = \begin{bmatrix} 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{34880} = \mathbf{Pl}(0, 1, 0, 0, 1, 0)_{1121} \\
\ell_{1185} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{34849} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{34849} = \mathbf{Pl}(0, 1, 1, 0, 1, 0)_{1184} \\
\ell_{1186} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{609874} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{609874} = \mathbf{Pl}(0, 1, 2, 0, 1, 0)_{1247} \\
\ell_{1187} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{948124} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{948124} = \mathbf{Pl}(0, 1, 3, 0, 1, 0)_{1310} \\
\ell_{1188} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{305449} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{305449} = \mathbf{Pl}(0, 1, 4, 0, 1, 0)_{1373} \\
\ell_{1189} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{778999} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{778999} = \mathbf{Pl}(0, 1, 5, 0, 1, 0)_{1436} \\
\ell_{1190} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{474574} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{474574} = \mathbf{Pl}(0, 1, 6, 0, 1, 0)_{1499} \\
\ell_{1191} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{406924} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{406924} = \mathbf{Pl}(0, 1, 7, 0, 1, 0)_{1562} \\
\ell_{1192} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{745174} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{745174} = \mathbf{Pl}(0, 1, 8, 0, 1, 0)_{1625} \\
\ell_{1193} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{136324} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{136324} = \mathbf{Pl}(0, 1, 9, 0, 1, 0)_{1688} \\
\ell_{1194} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{846649} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{846649} = \mathbf{Pl}(0, 1, 10, 0, 1, 0)_{1751} \\
\ell_{1195} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{542224} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{542224} = \mathbf{Pl}(0, 1, 11, 0, 1, 0)_{1814} \\
\ell_{1196} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{237799} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{237799} = \mathbf{Pl}(0, 1, 12, 0, 1, 0)_{1877} \\
\ell_{1197} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{508399} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{508399} = \mathbf{Pl}(0, 1, 13, 0, 1, 0)_{1940} \\
\ell_{1198} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{203974} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{203974} = \mathbf{Pl}(0, 1, 14, 0, 1, 0)_{2003} \\
\ell_{1199} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{440749} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{440749} = \mathbf{Pl}(0, 1, 15, 0, 1, 0)_{2066} \\
\ell_{1200} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{373099} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{373099} = \mathbf{Pl}(0, 1, 16, 0, 1, 0)_{2129}
\end{aligned}$$

$$\begin{aligned}
\ell_{1201} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{812824} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{812824} = \mathbf{Pl}(0, 1, 17, 0, 1, 0)_{2192} \\
\ell_{1202} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta \end{bmatrix}_{68674} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{68674} = \mathbf{Pl}(0, 1, 18, 0, 1, 0)_{2255} \\
\ell_{1203} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{981949} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{981949} = \mathbf{Pl}(0, 1, 19, 0, 1, 0)_{2318} \\
\ell_{1204} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1015774} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1015774} = \mathbf{Pl}(0, 1, 20, 0, 1, 0)_{2381} \\
\ell_{1205} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{880474} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{880474} = \mathbf{Pl}(0, 1, 21, 0, 1, 0)_{2444} \\
\ell_{1206} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{271624} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{271624} = \mathbf{Pl}(0, 1, 22, 0, 1, 0)_{2507} \\
\ell_{1207} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{170149} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{170149} = \mathbf{Pl}(0, 1, 23, 0, 1, 0)_{2570} \\
\ell_{1208} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{576049} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{576049} = \mathbf{Pl}(0, 1, 24, 0, 1, 0)_{2633} \\
\ell_{1209} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{339274} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{339274} = \mathbf{Pl}(0, 1, 25, 0, 1, 0)_{2696} \\
\ell_{1210} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{711349} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{711349} = \mathbf{Pl}(0, 1, 26, 0, 1, 0)_{2759} \\
\ell_{1211} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1049599} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1049599} = \mathbf{Pl}(0, 1, 27, 0, 1, 0)_{2822} \\
\ell_{1212} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{102499} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{102499} = \mathbf{Pl}(0, 1, 28, 0, 1, 0)_{2885} \\
\ell_{1213} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{643699} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{643699} = \mathbf{Pl}(0, 1, 29, 0, 1, 0)_{2948} \\
\ell_{1214} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{677524} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{677524} = \mathbf{Pl}(0, 1, 30, 0, 1, 0)_{3011} \\
\ell_{1215} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{914299} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{914299} = \mathbf{Pl}(0, 1, 31, 0, 1, 0)_{3074} \\
\ell_{1216} &= \begin{bmatrix} 1 & 0 & \eta^{30} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{609888} = \begin{bmatrix} 1 & 0 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{609888} = \mathbf{Pl}(0, 18, 0, 0, 1, 0)_{1138} \\
\ell_{1217} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{34850} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{34850} = \mathbf{Pl}(0, 18, 18, 0, 1, 0)_{2272} \\
\ell_{1218} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{609857} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{609857} = \mathbf{Pl}(0, 18, 1, 0, 1, 0)_{1201} \\
\ell_{1219} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{948125} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{948125} = \mathbf{Pl}(0, 18, 19, 0, 1, 0)_{2335} \\
\ell_{1220} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{305458} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{305458} = \mathbf{Pl}(0, 18, 2, 0, 1, 0)_{1264} \\
\ell_{1221} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{778987} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{778987} = \mathbf{Pl}(0, 18, 16, 0, 1, 0)_{2146}
\end{aligned}$$

$$\begin{aligned}
\ell_{1222} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{474588} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{474588} = \mathbf{Pl}(0, 18, 3, 0, 1, 0)_{1327} \\
\ell_{1223} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{406936} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{406936} = \mathbf{Pl}(0, 18, 17, 0, 1, 0)_{2209} \\
\ell_{1224} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{745161} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{745161} = \mathbf{Pl}(0, 18, 4, 0, 1, 0)_{1390} \\
\ell_{1225} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{136328} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{136328} = \mathbf{Pl}(0, 18, 22, 0, 1, 0)_{2524} \\
\ell_{1226} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{846647} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{846647} = \mathbf{Pl}(0, 18, 5, 0, 1, 0)_{1453} \\
\ell_{1227} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{542213} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{542213} = \mathbf{Pl}(0, 18, 23, 0, 1, 0)_{2587} \\
\ell_{1228} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{237806} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{237806} = \mathbf{Pl}(0, 18, 6, 0, 1, 0)_{1516} \\
\ell_{1229} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{508414} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{508414} = \mathbf{Pl}(0, 18, 20, 0, 1, 0)_{2398} \\
\ell_{1230} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{203980} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{203980} = \mathbf{Pl}(0, 18, 7, 0, 1, 0)_{1579} \\
\ell_{1231} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{440762} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{440762} = \mathbf{Pl}(0, 18, 21, 0, 1, 0)_{2461} \\
\ell_{1232} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{373110} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{373110} = \mathbf{Pl}(0, 18, 8, 0, 1, 0)_{1642} \\
\ell_{1233} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{812821} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{812821} = \mathbf{Pl}(0, 18, 26, 0, 1, 0)_{2776} \\
\ell_{1234} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{68676} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{68676} = \mathbf{Pl}(0, 18, 9, 0, 1, 0)_{1705} \\
\ell_{1235} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{981951} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{981951} = \mathbf{Pl}(0, 18, 27, 0, 1, 0)_{2839} \\
\ell_{1236} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1015769} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1015769} = \mathbf{Pl}(0, 18, 10, 0, 1, 0)_{1768} \\
\ell_{1237} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{880465} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{880465} = \mathbf{Pl}(0, 18, 24, 0, 1, 0)_{2650} \\
\ell_{1238} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{271632} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{271632} = \mathbf{Pl}(0, 18, 11, 0, 1, 0)_{1831} \\
\ell_{1239} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{170154} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{170154} = \mathbf{Pl}(0, 18, 25, 0, 1, 0)_{2713} \\
\ell_{1240} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{576039} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{576039} = \mathbf{Pl}(0, 18, 12, 0, 1, 0)_{1894} \\
\ell_{1241} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{339284} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{339284} = \mathbf{Pl}(0, 18, 30, 0, 1, 0)_{3028} \\
\ell_{1242} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{711343} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{711343} = \mathbf{Pl}(0, 18, 13, 0, 1, 0)_{1957}
\end{aligned}$$

$$\begin{aligned}
\ell_{1243} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1049595} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1049595} = \mathbf{Pl}(0, 18, 31, 0, 1, 0)_{3091} \\
\ell_{1244} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{102502} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{102502} = \mathbf{Pl}(0, 18, 14, 0, 1, 0)_{2020} \\
\ell_{1245} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{643683} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{643683} = \mathbf{Pl}(0, 18, 28, 0, 1, 0)_{2902} \\
\ell_{1246} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{677517} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{677517} = \mathbf{Pl}(0, 18, 15, 0, 1, 0)_{2083} \\
\ell_{1247} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{914291} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{914291} = \mathbf{Pl}(0, 18, 29, 0, 1, 0)_{2965} \\
\ell_{1248} &= \begin{bmatrix} 1 & 0 & \eta^{13} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{948128} = \begin{bmatrix} 1 & 0 & 28 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{948128} = \mathbf{Pl}(0, 28, 0, 0, 1, 0)_{1148} \\
\ell_{1249} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{34851} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{34851} = \mathbf{Pl}(0, 28, 28, 0, 1, 0)_{2912} \\
\ell_{1250} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{609875} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{609875} = \mathbf{Pl}(0, 28, 29, 0, 1, 0)_{2975} \\
\ell_{1251} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{948097} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{948097} = \mathbf{Pl}(0, 28, 1, 0, 1, 0)_{1211} \\
\ell_{1252} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{305467} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{305467} = \mathbf{Pl}(0, 28, 31, 0, 1, 0)_{3101} \\
\ell_{1253} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{779004} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{779004} = \mathbf{Pl}(0, 28, 3, 0, 1, 0)_{1337} \\
\ell_{1254} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{474578} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{474578} = \mathbf{Pl}(0, 28, 2, 0, 1, 0)_{1274} \\
\ell_{1255} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{406932} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{406932} = \mathbf{Pl}(0, 28, 30, 0, 1, 0)_{3038} \\
\ell_{1256} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{745183} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{745183} = \mathbf{Pl}(0, 28, 27, 0, 1, 0)_{2849} \\
\ell_{1257} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{136332} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{136332} = \mathbf{Pl}(0, 28, 7, 0, 1, 0)_{1589} \\
\ell_{1258} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{846638} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{846638} = \mathbf{Pl}(0, 28, 6, 0, 1, 0)_{1526} \\
\ell_{1259} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{542229} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{542229} = \mathbf{Pl}(0, 28, 26, 0, 1, 0)_{2786} \\
\ell_{1260} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{237801} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{237801} = \mathbf{Pl}(0, 28, 4, 0, 1, 0)_{1400} \\
\ell_{1261} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{508401} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{508401} = \mathbf{Pl}(0, 28, 24, 0, 1, 0)_{2660} \\
\ell_{1262} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{203978} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{203978} = \mathbf{Pl}(0, 28, 25, 0, 1, 0)_{2723} \\
\ell_{1263} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{440759} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{440759} = \mathbf{Pl}(0, 28, 5, 0, 1, 0)_{1463}
\end{aligned}$$

$$\begin{aligned}
\ell_{1264} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{373117} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{373117} = \mathbf{PI}(0, 28, 19, 0, 1, 0)_{2345} \\
\ell_{1265} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{812813} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{812813} = \mathbf{PI}(0, 28, 15, 0, 1, 0)_{2093} \\
\ell_{1266} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{68678} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{68678} = \mathbf{PI}(0, 28, 14, 0, 1, 0)_{2030} \\
\ell_{1267} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{981922} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{981922} = \mathbf{PI}(0, 28, 18, 0, 1, 0)_{2282} \\
\ell_{1268} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1015751} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1015751} = \mathbf{PI}(0, 28, 12, 0, 1, 0)_{1904} \\
\ell_{1269} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{880459} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{880459} = \mathbf{PI}(0, 28, 16, 0, 1, 0)_{2156} \\
\ell_{1270} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{271640} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{271640} = \mathbf{PI}(0, 28, 17, 0, 1, 0)_{2219} \\
\ell_{1271} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{170159} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{170159} = \mathbf{PI}(0, 28, 13, 0, 1, 0)_{1967} \\
\ell_{1272} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{576054} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{576054} = \mathbf{PI}(0, 28, 8, 0, 1, 0)_{1652} \\
\ell_{1273} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{339294} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{339294} = \mathbf{PI}(0, 28, 20, 0, 1, 0)_{2408} \\
\ell_{1274} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{711354} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{711354} = \mathbf{PI}(0, 28, 21, 0, 1, 0)_{2471} \\
\ell_{1275} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1049572} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1049572} = \mathbf{PI}(0, 28, 9, 0, 1, 0)_{1715} \\
\ell_{1276} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{102501} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{102501} = \mathbf{PI}(0, 28, 23, 0, 1, 0)_{2597} \\
\ell_{1277} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{643696} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{643696} = \mathbf{PI}(0, 28, 11, 0, 1, 0)_{1841} \\
\ell_{1278} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{677529} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{677529} = \mathbf{PI}(0, 28, 10, 0, 1, 0)_{1778} \\
\ell_{1279} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{914280} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{914280} = \mathbf{PI}(0, 28, 22, 0, 1, 0)_{2534} \\
\ell_{1280} &= \begin{bmatrix} 1 & 0 & \eta^{29} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{305472} = \begin{bmatrix} 1 & 0 & 9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{305472} = \mathbf{PI}(0, 9, 0, 0, 1, 0)_{1129} \\
\ell_{1281} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{34852} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{34852} = \mathbf{PI}(0, 9, 9, 0, 1, 0)_{1696} \\
\ell_{1282} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{609858} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{609858} = \mathbf{PI}(0, 9, 18, 0, 1, 0)_{2263} \\
\ell_{1283} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{948127} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{948127} = \mathbf{PI}(0, 9, 27, 0, 1, 0)_{2830} \\
\ell_{1284} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{305441} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{305441} = \mathbf{PI}(0, 9, 1, 0, 1, 0)_{1192}
\end{aligned}$$

$$\begin{aligned}
\ell_{1285} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{778998} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{778998} = \mathbf{Pl}(0, 9, 8, 0, 1, 0)_{1633} \\
\ell_{1286} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{474589} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{474589} = \mathbf{Pl}(0, 9, 19, 0, 1, 0)_{2326} \\
\ell_{1287} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{406933} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{406933} = \mathbf{Pl}(0, 9, 26, 0, 1, 0)_{2767} \\
\ell_{1288} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{745170} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{745170} = \mathbf{Pl}(0, 9, 2, 0, 1, 0)_{1255} \\
\ell_{1289} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{136336} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{136336} = \mathbf{Pl}(0, 9, 11, 0, 1, 0)_{1822} \\
\ell_{1290} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{846635} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{846635} = \mathbf{Pl}(0, 9, 16, 0, 1, 0)_{2137} \\
\ell_{1291} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{542218} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{542218} = \mathbf{Pl}(0, 9, 25, 0, 1, 0)_{2704} \\
\ell_{1292} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{237820} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{237820} = \mathbf{Pl}(0, 9, 3, 0, 1, 0)_{1318} \\
\ell_{1293} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{508409} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{508409} = \mathbf{Pl}(0, 9, 10, 0, 1, 0)_{1759} \\
\ell_{1294} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{203992} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{203992} = \mathbf{Pl}(0, 9, 17, 0, 1, 0)_{2200} \\
\ell_{1295} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{440753} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{440753} = \mathbf{Pl}(0, 9, 24, 0, 1, 0)_{2641} \\
\ell_{1296} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{373097} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{373097} = \mathbf{Pl}(0, 9, 4, 0, 1, 0)_{1381} \\
\ell_{1297} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{812815} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{812815} = \mathbf{Pl}(0, 9, 13, 0, 1, 0)_{1948} \\
\ell_{1298} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{68680} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{68680} = \mathbf{Pl}(0, 9, 22, 0, 1, 0)_{2515} \\
\ell_{1299} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{981947} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{981947} = \mathbf{Pl}(0, 9, 31, 0, 1, 0)_{3082} \\
\ell_{1300} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1015767} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1015767} = \mathbf{Pl}(0, 9, 5, 0, 1, 0)_{1444} \\
\ell_{1301} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{880455} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{880455} = \mathbf{Pl}(0, 9, 12, 0, 1, 0)_{1885} \\
\ell_{1302} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{271621} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{271621} = \mathbf{Pl}(0, 9, 23, 0, 1, 0)_{2578} \\
\ell_{1303} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{170164} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{170164} = \mathbf{Pl}(0, 9, 30, 0, 1, 0)_{3019} \\
\ell_{1304} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{576046} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{576046} = \mathbf{Pl}(0, 9, 6, 0, 1, 0)_{1507} \\
\ell_{1305} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{339277} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{339277} = \mathbf{Pl}(0, 9, 15, 0, 1, 0)_{2074}
\end{aligned}$$

$$\begin{aligned}
\ell_{1306} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{711358} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{711358} = \mathbf{Pl}(0, 9, 20, 0, 1, 0)_{2389} \\
\ell_{1307} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1049587} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1049587} = \mathbf{Pl}(0, 9, 29, 0, 1, 0)_{2956} \\
\ell_{1308} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{102508} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{102508} = \mathbf{Pl}(0, 9, 7, 0, 1, 0)_{1570} \\
\ell_{1309} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{643686} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{643686} = \mathbf{Pl}(0, 9, 14, 0, 1, 0)_{2011} \\
\ell_{1310} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{677530} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{677530} = \mathbf{Pl}(0, 9, 21, 0, 1, 0)_{2452} \\
\ell_{1311} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{914275} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{914275} = \mathbf{Pl}(0, 9, 28, 0, 1, 0)_{2893} \\
\ell_{1312} &= \begin{bmatrix} 1 & 0 & \eta^{26} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{779008} = \begin{bmatrix} 1 & 0 & 23 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{779008} = \mathbf{Pl}(0, 23, 0, 0, 1, 0)_{1143} \\
\ell_{1313} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{34853} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{34853} = \mathbf{Pl}(0, 23, 23, 0, 1, 0)_{2592} \\
\ell_{1314} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{609872} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{609872} = \mathbf{Pl}(0, 23, 11, 0, 1, 0)_{1836} \\
\ell_{1315} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{948099} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{948099} = \mathbf{Pl}(0, 23, 28, 0, 1, 0)_{2907} \\
\ell_{1316} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{305448} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{305448} = \mathbf{Pl}(0, 23, 22, 0, 1, 0)_{2529} \\
\ell_{1317} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{778977} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{778977} = \mathbf{Pl}(0, 23, 1, 0, 1, 0)_{1206} \\
\ell_{1318} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{474579} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{474579} = \mathbf{Pl}(0, 23, 29, 0, 1, 0)_{2970} \\
\ell_{1319} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{406937} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{406937} = \mathbf{Pl}(0, 23, 10, 0, 1, 0)_{1773} \\
\ell_{1320} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{745156} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{745156} = \mathbf{Pl}(0, 23, 9, 0, 1, 0)_{1710} \\
\ell_{1321} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{136340} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{136340} = \mathbf{Pl}(0, 23, 30, 0, 1, 0)_{3033} \\
\ell_{1322} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{846642} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{846642} = \mathbf{Pl}(0, 23, 2, 0, 1, 0)_{1269} \\
\ell_{1323} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{542234} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{542234} = \mathbf{Pl}(0, 23, 21, 0, 1, 0)_{2466} \\
\ell_{1324} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{237819} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{237819} = \mathbf{Pl}(0, 23, 31, 0, 1, 0)_{3096} \\
\ell_{1325} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{508406} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{508406} = \mathbf{Pl}(0, 23, 8, 0, 1, 0)_{1647} \\
\ell_{1326} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{203998} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{203998} = \mathbf{Pl}(0, 23, 20, 0, 1, 0)_{2403}
\end{aligned}$$

$$\begin{aligned}
\ell_{1327} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{440764} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{440764} = \mathbf{Pl}(0, 23, 3, 0, 1, 0)_{1332} \\
\ell_{1328} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{373090} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{373090} = \mathbf{Pl}(0, 23, 18, 0, 1, 0)_{2277} \\
\ell_{1329} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{812823} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{812823} = \mathbf{Pl}(0, 23, 5, 0, 1, 0)_{1458} \\
\ell_{1330} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{68682} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{68682} = \mathbf{Pl}(0, 23, 25, 0, 1, 0)_{2718} \\
\ell_{1331} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{981926} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{981926} = \mathbf{Pl}(0, 23, 14, 0, 1, 0)_{2025} \\
\ell_{1332} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1015753} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1015753} = \mathbf{Pl}(0, 23, 4, 0, 1, 0)_{1395} \\
\ell_{1333} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{880477} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{880477} = \mathbf{Pl}(0, 23, 19, 0, 1, 0)_{2340} \\
\ell_{1334} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{271629} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{271629} = \mathbf{Pl}(0, 23, 15, 0, 1, 0)_{2088} \\
\ell_{1335} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{170161} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{170161} = \mathbf{Pl}(0, 23, 24, 0, 1, 0)_{2655} \\
\ell_{1336} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{576063} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{576063} = \mathbf{Pl}(0, 23, 27, 0, 1, 0)_{2844} \\
\ell_{1337} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{339271} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{339271} = \mathbf{Pl}(0, 23, 12, 0, 1, 0)_{1899} \\
\ell_{1338} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{711339} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{711339} = \mathbf{Pl}(0, 23, 16, 0, 1, 0)_{2151} \\
\ell_{1339} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1049580} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1049580} = \mathbf{Pl}(0, 23, 7, 0, 1, 0)_{1584} \\
\ell_{1340} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{102511} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{102511} = \mathbf{Pl}(0, 23, 13, 0, 1, 0)_{1962} \\
\ell_{1341} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{643701} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{643701} = \mathbf{Pl}(0, 23, 26, 0, 1, 0)_{2781} \\
\ell_{1342} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{677518} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{677518} = \mathbf{Pl}(0, 23, 6, 0, 1, 0)_{1521} \\
\ell_{1343} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{914296} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{914296} = \mathbf{Pl}(0, 23, 17, 0, 1, 0)_{2214} \\
\ell_{1344} &= \begin{bmatrix} 1 & 0 & \eta^{12} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{474592} = \begin{bmatrix} 1 & 0 & 14 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{474592} = \mathbf{Pl}(0, 14, 0, 0, 1, 0)_{1134} \\
\ell_{1345} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{34854} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{34854} = \mathbf{Pl}(0, 14, 14, 0, 1, 0)_{2016} \\
\ell_{1346} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{609859} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{609859} = \mathbf{Pl}(0, 14, 28, 0, 1, 0)_{2898} \\
\ell_{1347} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{948098} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{948098} = \mathbf{Pl}(0, 14, 18, 0, 1, 0)_{2268}
\end{aligned}$$

$$\begin{aligned}
\ell_{1348} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{305459} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{305459} = \mathbf{Pl}(0, 14, 29, 0, 1, 0)_{2961} \\
\ell_{1349} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{779005} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{779005} = \mathbf{Pl}(0, 14, 19, 0, 1, 0)_{2331} \\
\ell_{1350} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{474561} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{474561} = \mathbf{Pl}(0, 14, 1, 0, 1, 0)_{1197} \\
\ell_{1351} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{406925} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{406925} = \mathbf{Pl}(0, 14, 15, 0, 1, 0)_{2079} \\
\ell_{1352} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{745179} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{745179} = \mathbf{Pl}(0, 14, 31, 0, 1, 0)_{3087} \\
\ell_{1353} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{136344} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{136344} = \mathbf{Pl}(0, 14, 17, 0, 1, 0)_{2205} \\
\ell_{1354} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{846652} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{846652} = \mathbf{Pl}(0, 14, 3, 0, 1, 0)_{1323} \\
\ell_{1355} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{542223} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{542223} = \mathbf{Pl}(0, 14, 13, 0, 1, 0)_{1953} \\
\ell_{1356} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{237810} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{237810} = \mathbf{Pl}(0, 14, 2, 0, 1, 0)_{1260} \\
\ell_{1357} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{508391} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{508391} = \mathbf{Pl}(0, 14, 12, 0, 1, 0)_{1890} \\
\ell_{1358} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{203988} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{203988} = \mathbf{Pl}(0, 14, 30, 0, 1, 0)_{3024} \\
\ell_{1359} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{440747} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{440747} = \mathbf{Pl}(0, 14, 16, 0, 1, 0)_{2142} \\
\ell_{1360} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{373119} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{373119} = \mathbf{Pl}(0, 14, 27, 0, 1, 0)_{2835} \\
\ell_{1361} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{812826} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{812826} = \mathbf{Pl}(0, 14, 21, 0, 1, 0)_{2457} \\
\ell_{1362} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{68684} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{68684} = \mathbf{Pl}(0, 14, 7, 0, 1, 0)_{1575} \\
\ell_{1363} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{981924} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{981924} = \mathbf{Pl}(0, 14, 9, 0, 1, 0)_{1701} \\
\ell_{1364} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1015758} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1015758} = \mathbf{Pl}(0, 14, 6, 0, 1, 0)_{1512} \\
\ell_{1365} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{880470} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{880470} = \mathbf{Pl}(0, 14, 8, 0, 1, 0)_{1638} \\
\ell_{1366} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{271637} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{271637} = \mathbf{Pl}(0, 14, 26, 0, 1, 0)_{2772} \\
\ell_{1367} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{170174} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{170174} = \mathbf{Pl}(0, 14, 20, 0, 1, 0)_{2394} \\
\ell_{1368} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{576041} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{576041} = \mathbf{Pl}(0, 14, 4, 0, 1, 0)_{1386}
\end{aligned}$$

$$\begin{aligned}
\ell_{1369} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{339289} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{339289} = \mathbf{Pl}(0, 14, 10, 0, 1, 0)_{1764} \\
\ell_{1370} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{711345} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{711345} = \mathbf{Pl}(0, 14, 24, 0, 1, 0)_{2646} \\
\ell_{1371} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1049576} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1049576} = \mathbf{Pl}(0, 14, 22, 0, 1, 0)_{2520} \\
\ell_{1372} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{102506} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{102506} = \mathbf{Pl}(0, 14, 25, 0, 1, 0)_{2709} \\
\ell_{1373} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{643685} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{643685} = \mathbf{Pl}(0, 14, 23, 0, 1, 0)_{2583} \\
\ell_{1374} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{677527} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{677527} = \mathbf{Pl}(0, 14, 5, 0, 1, 0)_{1449} \\
\ell_{1375} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{914288} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{914288} = \mathbf{Pl}(0, 14, 11, 0, 1, 0)_{1827} \\
\ell_{1376} &= \begin{bmatrix} 1 & 0 & \eta^{20} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{406944} = \begin{bmatrix} 1 & 0 & 12 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{406944} = \mathbf{Pl}(0, 12, 0, 0, 1, 0)_{1132} \\
\ell_{1377} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{34855} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{34855} = \mathbf{Pl}(0, 12, 12, 0, 1, 0)_{1888} \\
\ell_{1378} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{609873} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{609873} = \mathbf{Pl}(0, 12, 24, 0, 1, 0)_{2644} \\
\ell_{1379} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{948126} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{948126} = \mathbf{Pl}(0, 12, 20, 0, 1, 0)_{2392} \\
\ell_{1380} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{305466} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{305466} = \mathbf{Pl}(0, 12, 21, 0, 1, 0)_{2455} \\
\ell_{1381} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{778986} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{778986} = \mathbf{Pl}(0, 12, 25, 0, 1, 0)_{2707} \\
\ell_{1382} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{474575} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{474575} = \mathbf{Pl}(0, 12, 13, 0, 1, 0)_{1951} \\
\ell_{1383} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{406913} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{406913} = \mathbf{Pl}(0, 12, 1, 0, 1, 0)_{1195} \\
\ell_{1384} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{745165} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{745165} = \mathbf{Pl}(0, 12, 15, 0, 1, 0)_{2077} \\
\ell_{1385} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{136348} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{136348} = \mathbf{Pl}(0, 12, 3, 0, 1, 0)_{1321} \\
\ell_{1386} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{846629} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{846629} = \mathbf{Pl}(0, 12, 23, 0, 1, 0)_{2581} \\
\ell_{1387} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{542239} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{542239} = \mathbf{Pl}(0, 12, 27, 0, 1, 0)_{2833} \\
\ell_{1388} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{237813} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{237813} = \mathbf{Pl}(0, 12, 26, 0, 1, 0)_{2770} \\
\ell_{1389} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{508392} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{508392} = \mathbf{Pl}(0, 12, 22, 0, 1, 0)_{2518}
\end{aligned}$$

$$\begin{aligned}
\ell_{1390} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{203986} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{203986} = \mathbf{Pl}(0, 12, 2, 0, 1, 0)_{1258} \\
\ell_{1391} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{440742} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{440742} = \mathbf{Pl}(0, 12, 14, 0, 1, 0)_{2014} \\
\ell_{1392} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{373108} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{373108} = \mathbf{Pl}(0, 12, 30, 0, 1, 0)_{3022} \\
\ell_{1393} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{812802} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{812802} = \mathbf{Pl}(0, 12, 18, 0, 1, 0)_{2266} \\
\ell_{1394} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{68686} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{68686} = \mathbf{Pl}(0, 12, 6, 0, 1, 0)_{1510} \\
\ell_{1395} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{981945} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{981945} = \mathbf{Pl}(0, 12, 10, 0, 1, 0)_{1762} \\
\ell_{1396} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1015760} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1015760} = \mathbf{Pl}(0, 12, 11, 0, 1, 0)_{1825} \\
\ell_{1397} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{880460} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{880460} = \mathbf{Pl}(0, 12, 7, 0, 1, 0)_{1573} \\
\ell_{1398} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{271645} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{271645} = \mathbf{Pl}(0, 12, 19, 0, 1, 0)_{2329} \\
\ell_{1399} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{170171} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{170171} = \mathbf{Pl}(0, 12, 31, 0, 1, 0)_{3085} \\
\ell_{1400} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{576056} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{576056} = \mathbf{Pl}(0, 12, 17, 0, 1, 0)_{2203} \\
\ell_{1401} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{339283} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{339283} = \mathbf{Pl}(0, 12, 29, 0, 1, 0)_{2959} \\
\ell_{1402} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{711332} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{711332} = \mathbf{Pl}(0, 12, 9, 0, 1, 0)_{1699} \\
\ell_{1403} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1049591} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1049591} = \mathbf{Pl}(0, 12, 5, 0, 1, 0)_{1447} \\
\ell_{1404} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{102505} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{102505} = \mathbf{Pl}(0, 12, 4, 0, 1, 0)_{1384} \\
\ell_{1405} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{643702} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{643702} = \mathbf{Pl}(0, 12, 8, 0, 1, 0)_{1636} \\
\ell_{1406} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{677507} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{677507} = \mathbf{Pl}(0, 12, 28, 0, 1, 0)_{2896} \\
\ell_{1407} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{914283} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{914283} = \mathbf{Pl}(0, 12, 16, 0, 1, 0)_{2140} \\
\ell_{1408} &= \begin{bmatrix} 1 & 0 & \eta^{28} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{745184} = \begin{bmatrix} 1 & 0 & 22 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{745184} = \mathbf{Pl}(0, 22, 0, 0, 1, 0)_{1142} \\
\ell_{1409} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{34856} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{34856} = \mathbf{Pl}(0, 22, 22, 0, 1, 0)_{2528} \\
\ell_{1410} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{609860} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{609860} = \mathbf{Pl}(0, 22, 9, 0, 1, 0)_{1709}
\end{aligned}$$

$$\begin{aligned}
\ell_{1411} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{948123} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{948123} = \mathbf{Pl}(0, 22, 31, 0, 1, 0)_{3095} \\
\ell_{1412} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{305442} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{305442} = \mathbf{Pl}(0, 22, 18, 0, 1, 0)_{2276} \\
\ell_{1413} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{778985} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{778985} = \mathbf{Pl}(0, 22, 4, 0, 1, 0)_{1394} \\
\ell_{1414} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{474591} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{474591} = \mathbf{Pl}(0, 22, 27, 0, 1, 0)_{2843} \\
\ell_{1415} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{406927} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{406927} = \mathbf{Pl}(0, 22, 13, 0, 1, 0)_{1961} \\
\ell_{1416} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{745153} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{745153} = \mathbf{Pl}(0, 22, 1, 0, 1, 0)_{1205} \\
\ell_{1417} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{136325} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{136325} = \mathbf{Pl}(0, 22, 23, 0, 1, 0)_{2591} \\
\ell_{1418} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{846646} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{846646} = \mathbf{Pl}(0, 22, 8, 0, 1, 0)_{1646} \\
\ell_{1419} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{542228} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{542228} = \mathbf{Pl}(0, 22, 30, 0, 1, 0)_{3032} \\
\ell_{1420} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{237821} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{237821} = \mathbf{Pl}(0, 22, 19, 0, 1, 0)_{2339} \\
\ell_{1421} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{508407} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{508407} = \mathbf{Pl}(0, 22, 5, 0, 1, 0)_{1457} \\
\ell_{1422} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{203989} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{203989} = \mathbf{Pl}(0, 22, 26, 0, 1, 0)_{2780} \\
\ell_{1423} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{440743} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{440743} = \mathbf{Pl}(0, 22, 12, 0, 1, 0)_{1898} \\
\ell_{1424} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{373106} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{373106} = \mathbf{Pl}(0, 22, 2, 0, 1, 0)_{1268} \\
\ell_{1425} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{812830} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{812830} = \mathbf{Pl}(0, 22, 20, 0, 1, 0)_{2402} \\
\ell_{1426} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{68688} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{68688} = \mathbf{Pl}(0, 22, 11, 0, 1, 0)_{1835} \\
\ell_{1427} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{981939} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{981939} = \mathbf{Pl}(0, 22, 29, 0, 1, 0)_{2969} \\
\ell_{1428} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1015755} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1015755} = \mathbf{Pl}(0, 22, 16, 0, 1, 0)_{2150} \\
\ell_{1429} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{880462} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{880462} = \mathbf{Pl}(0, 22, 6, 0, 1, 0)_{1520} \\
\ell_{1430} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{271626} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{271626} = \mathbf{Pl}(0, 22, 25, 0, 1, 0)_{2717} \\
\ell_{1431} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{170157} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{170157} = \mathbf{Pl}(0, 22, 15, 0, 1, 0)_{2087}
\end{aligned}$$

$$\begin{aligned}
\ell_{1432} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{576060} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{576060} = \mathbf{Pl}(0, 22, 3, 0, 1, 0)_{1331} \\
\ell_{1433} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{339290} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{339290} = \mathbf{Pl}(0, 22, 21, 0, 1, 0)_{2465} \\
\ell_{1434} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{711353} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{711353} = \mathbf{Pl}(0, 22, 10, 0, 1, 0)_{1772} \\
\ell_{1435} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1049571} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1049571} = \mathbf{Pl}(0, 22, 28, 0, 1, 0)_{2906} \\
\ell_{1436} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{102520} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{102520} = \mathbf{Pl}(0, 22, 17, 0, 1, 0)_{2213} \\
\ell_{1437} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{643692} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{643692} = \mathbf{Pl}(0, 22, 7, 0, 1, 0)_{1583} \\
\ell_{1438} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{677521} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{677521} = \mathbf{Pl}(0, 22, 24, 0, 1, 0)_{2654} \\
\ell_{1439} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{914278} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{914278} = \mathbf{Pl}(0, 22, 14, 0, 1, 0)_{2024} \\
\ell_{1440} &= \begin{bmatrix} 1 & 0 & \eta^2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{136352} = \begin{bmatrix} 1 & 0 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{136352} = \mathbf{Pl}(0, 4, 0, 0, 1, 0)_{1124} \\
\ell_{1441} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{34857} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{34857} = \mathbf{Pl}(0, 4, 4, 0, 1, 0)_{1376} \\
\ell_{1442} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{609878} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{609878} = \mathbf{Pl}(0, 4, 8, 0, 1, 0)_{1628} \\
\ell_{1443} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{948103} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{948103} = \mathbf{Pl}(0, 4, 12, 0, 1, 0)_{1880} \\
\ell_{1444} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{305451} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{305451} = \mathbf{Pl}(0, 4, 16, 0, 1, 0)_{2132} \\
\ell_{1445} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{779006} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{779006} = \mathbf{Pl}(0, 4, 20, 0, 1, 0)_{2384} \\
\ell_{1446} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{474577} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{474577} = \mathbf{Pl}(0, 4, 24, 0, 1, 0)_{2636} \\
\ell_{1447} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{406915} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{406915} = \mathbf{Pl}(0, 4, 28, 0, 1, 0)_{2888} \\
\ell_{1448} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{745175} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{745175} = \mathbf{Pl}(0, 4, 5, 0, 1, 0)_{1439} \\
\ell_{1449} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{136321} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{136321} = \mathbf{Pl}(0, 4, 1, 0, 1, 0)_{1187} \\
\ell_{1450} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{846639} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{846639} = \mathbf{Pl}(0, 4, 13, 0, 1, 0)_{1943} \\
\ell_{1451} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{542212} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{542212} = \mathbf{Pl}(0, 4, 9, 0, 1, 0)_{1691} \\
\ell_{1452} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{237818} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{237818} = \mathbf{Pl}(0, 4, 21, 0, 1, 0)_{2447}
\end{aligned}$$

$$\begin{aligned}
\ell_{1453} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{508408} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{508408} = \mathbf{Pl}(0, 4, 17, 0, 1, 0)_{2195} \\
\ell_{1454} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{203987} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{203987} = \mathbf{Pl}(0, 4, 29, 0, 1, 0)_{2951} \\
\ell_{1455} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{440746} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{440746} = \mathbf{Pl}(0, 4, 25, 0, 1, 0)_{2699} \\
\ell_{1456} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{373113} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{373113} = \mathbf{Pl}(0, 4, 10, 0, 1, 0)_{1754} \\
\ell_{1457} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{812806} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{812806} = \mathbf{Pl}(0, 4, 14, 0, 1, 0)_{2006} \\
\ell_{1458} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{68690} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{68690} = \mathbf{Pl}(0, 4, 2, 0, 1, 0)_{1250} \\
\ell_{1459} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{981934} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{981934} = \mathbf{Pl}(0, 4, 6, 0, 1, 0)_{1502} \\
\ell_{1460} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1015765} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1015765} = \mathbf{Pl}(0, 4, 26, 0, 1, 0)_{2762} \\
\ell_{1461} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{880468} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{880468} = \mathbf{Pl}(0, 4, 30, 0, 1, 0)_{3014} \\
\ell_{1462} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{271618} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{271618} = \mathbf{Pl}(0, 4, 18, 0, 1, 0)_{2258} \\
\ell_{1463} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{170152} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{170152} = \mathbf{Pl}(0, 4, 22, 0, 1, 0)_{2510} \\
\ell_{1464} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{576045} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{576045} = \mathbf{Pl}(0, 4, 15, 0, 1, 0)_{2069} \\
\ell_{1465} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{339280} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{339280} = \mathbf{Pl}(0, 4, 11, 0, 1, 0)_{1817} \\
\ell_{1466} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{711340} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{711340} = \mathbf{Pl}(0, 4, 7, 0, 1, 0)_{1565} \\
\ell_{1467} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1049596} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1049596} = \mathbf{Pl}(0, 4, 3, 0, 1, 0)_{1313} \\
\ell_{1468} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{102523} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{102523} = \mathbf{Pl}(0, 4, 31, 0, 1, 0)_{3077} \\
\ell_{1469} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{643711} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{643711} = \mathbf{Pl}(0, 4, 27, 0, 1, 0)_{2825} \\
\ell_{1470} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{677509} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{677509} = \mathbf{Pl}(0, 4, 23, 0, 1, 0)_{2573} \\
\ell_{1471} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{914301} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{914301} = \mathbf{Pl}(0, 4, 19, 0, 1, 0)_{2321} \\
\ell_{1472} &= \begin{bmatrix} 1 & 0 & \eta^{25} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{846656} = \begin{bmatrix} 1 & 0 & 25 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{846656} = \mathbf{Pl}(0, 25, 0, 0, 1, 0)_{1145} \\
\ell_{1473} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{34858} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{34858} = \mathbf{Pl}(0, 25, 25, 0, 1, 0)_{2720}
\end{aligned}$$

$$\begin{aligned}
\ell_{1474} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{609861} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{609861} = \mathbf{Pl}(0, 25, 23, 0, 1, 0)_{2594} \\
\ell_{1475} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{948102} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{948102} = \mathbf{Pl}(0, 25, 14, 0, 1, 0)_{2027} \\
\ell_{1476} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{305456} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{305456} = \mathbf{Pl}(0, 25, 11, 0, 1, 0)_{1838} \\
\ell_{1477} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{778978} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{778978} = \mathbf{Pl}(0, 25, 18, 0, 1, 0)_{2279} \\
\ell_{1478} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{474563} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{474563} = \mathbf{Pl}(0, 25, 28, 0, 1, 0)_{2909} \\
\ell_{1479} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{406935} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{406935} = \mathbf{Pl}(0, 25, 5, 0, 1, 0)_{1460} \\
\ell_{1480} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{745160} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{745160} = \mathbf{Pl}(0, 25, 22, 0, 1, 0)_{2531} \\
\ell_{1481} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{136333} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{136333} = \mathbf{Pl}(0, 25, 15, 0, 1, 0)_{2090} \\
\ell_{1482} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{846625} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{846625} = \mathbf{Pl}(0, 25, 1, 0, 1, 0)_{1208} \\
\ell_{1483} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{542225} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{542225} = \mathbf{Pl}(0, 25, 24, 0, 1, 0)_{2657} \\
\ell_{1484} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{237811} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{237811} = \mathbf{Pl}(0, 25, 29, 0, 1, 0)_{2972} \\
\ell_{1485} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{508393} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{508393} = \mathbf{Pl}(0, 25, 4, 0, 1, 0)_{1397} \\
\ell_{1486} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{203993} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{203993} = \mathbf{Pl}(0, 25, 10, 0, 1, 0)_{1775} \\
\ell_{1487} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{440765} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{440765} = \mathbf{Pl}(0, 25, 19, 0, 1, 0)_{2342} \\
\ell_{1488} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{373092} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{373092} = \mathbf{Pl}(0, 25, 9, 0, 1, 0)_{1712} \\
\ell_{1489} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{812811} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{812811} = \mathbf{Pl}(0, 25, 16, 0, 1, 0)_{2153} \\
\ell_{1490} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{68692} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{68692} = \mathbf{Pl}(0, 25, 30, 0, 1, 0)_{3035} \\
\ell_{1491} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{981932} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{981932} = \mathbf{Pl}(0, 25, 7, 0, 1, 0)_{1586} \\
\ell_{1492} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1015762} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1015762} = \mathbf{Pl}(0, 25, 2, 0, 1, 0)_{1271} \\
\ell_{1493} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{880479} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{880479} = \mathbf{Pl}(0, 25, 27, 0, 1, 0)_{2846} \\
\ell_{1494} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{271642} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{271642} = \mathbf{Pl}(0, 25, 21, 0, 1, 0)_{2468}
\end{aligned}$$

$$\begin{aligned}
\ell_{1495} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{170151} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{170151} = \mathbf{Pl}(0, 25, 12, 0, 1, 0)_{1901} \\
\ell_{1496} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{576059} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{576059} = \mathbf{Pl}(0, 25, 31, 0, 1, 0)_{3098} \\
\ell_{1497} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{339278} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{339278} = \mathbf{Pl}(0, 25, 6, 0, 1, 0)_{1523} \\
\ell_{1498} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{711350} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{711350} = \mathbf{Pl}(0, 25, 8, 0, 1, 0)_{1649} \\
\ell_{1499} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1049592} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1049592} = \mathbf{Pl}(0, 25, 17, 0, 1, 0)_{2216} \\
\ell_{1500} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{102526} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{102526} = \mathbf{Pl}(0, 25, 20, 0, 1, 0)_{2405} \\
\ell_{1501} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{643695} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{643695} = \mathbf{Pl}(0, 25, 13, 0, 1, 0)_{1964} \\
\ell_{1502} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{677532} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{677532} = \mathbf{Pl}(0, 25, 3, 0, 1, 0)_{1334} \\
\ell_{1503} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{914293} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{914293} = \mathbf{Pl}(0, 25, 26, 0, 1, 0)_{2783} \\
\ell_{1504} &= \begin{bmatrix} 1 & 0 & \eta^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{542240} = \begin{bmatrix} 1 & 0 & 16 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{542240} = \mathbf{Pl}(0, 16, 0, 0, 1, 0)_{1136} \\
\ell_{1505} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{34859} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{34859} = \mathbf{Pl}(0, 16, 16, 0, 1, 0)_{2144} \\
\ell_{1506} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{609879} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{609879} = \mathbf{Pl}(0, 16, 5, 0, 1, 0)_{1451} \\
\ell_{1507} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{948122} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{948122} = \mathbf{Pl}(0, 16, 21, 0, 1, 0)_{2459} \\
\ell_{1508} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{305465} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{305465} = \mathbf{Pl}(0, 16, 10, 0, 1, 0)_{1766} \\
\ell_{1509} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{778997} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{778997} = \mathbf{Pl}(0, 16, 26, 0, 1, 0)_{2774} \\
\ell_{1510} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{474573} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{474573} = \mathbf{Pl}(0, 16, 15, 0, 1, 0)_{2081} \\
\ell_{1511} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{406939} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{406939} = \mathbf{Pl}(0, 16, 31, 0, 1, 0)_{3089} \\
\ell_{1512} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{745182} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{745182} = \mathbf{Pl}(0, 16, 20, 0, 1, 0)_{2396} \\
\ell_{1513} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{136329} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{136329} = \mathbf{Pl}(0, 16, 4, 0, 1, 0)_{1388} \\
\ell_{1514} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{846648} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{846648} = \mathbf{Pl}(0, 16, 17, 0, 1, 0)_{2207} \\
\ell_{1515} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{542209} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{542209} = \mathbf{Pl}(0, 16, 1, 0, 1, 0)_{1199}
\end{aligned}$$

$$\begin{aligned}
\ell_{1516} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{237812} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{237812} = \mathbf{Pl}(0, 16, 30, 0, 1, 0)_{3026} \\
\ell_{1517} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{508390} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{508390} = \mathbf{Pl}(0, 16, 14, 0, 1, 0)_{2018} \\
\ell_{1518} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{203999} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{203999} = \mathbf{Pl}(0, 16, 27, 0, 1, 0)_{2837} \\
\ell_{1519} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{440752} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{440752} = \mathbf{Pl}(0, 16, 11, 0, 1, 0)_{1829} \\
\ell_{1520} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{373103} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{373103} = \mathbf{Pl}(0, 16, 13, 0, 1, 0)_{1955} \\
\ell_{1521} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{812819} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{812819} = \mathbf{Pl}(0, 16, 29, 0, 1, 0)_{2963} \\
\ell_{1522} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{68694} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{68694} = \mathbf{Pl}(0, 16, 8, 0, 1, 0)_{1640} \\
\ell_{1523} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{981937} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{981937} = \mathbf{Pl}(0, 16, 24, 0, 1, 0)_{2648} \\
\ell_{1524} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1015756} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1015756} = \mathbf{Pl}(0, 16, 7, 0, 1, 0)_{1577} \\
\ell_{1525} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{880453} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{880453} = \mathbf{Pl}(0, 16, 23, 0, 1, 0)_{2585} \\
\ell_{1526} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{271634} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{271634} = \mathbf{Pl}(0, 16, 2, 0, 1, 0)_{1262} \\
\ell_{1527} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{170146} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{170146} = \mathbf{Pl}(0, 16, 18, 0, 1, 0)_{2270} \\
\ell_{1528} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{576042} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{576042} = \mathbf{Pl}(0, 16, 25, 0, 1, 0)_{2711} \\
\ell_{1529} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{339268} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{339268} = \mathbf{Pl}(0, 16, 9, 0, 1, 0)_{1703} \\
\ell_{1530} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{711331} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{711331} = \mathbf{Pl}(0, 16, 28, 0, 1, 0)_{2900} \\
\ell_{1531} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1049575} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1049575} = \mathbf{Pl}(0, 16, 12, 0, 1, 0)_{1892} \\
\ell_{1532} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{102525} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{102525} = \mathbf{Pl}(0, 16, 19, 0, 1, 0)_{2333} \\
\ell_{1533} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{643708} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{643708} = \mathbf{Pl}(0, 16, 3, 0, 1, 0)_{1325} \\
\ell_{1534} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{677512} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{677512} = \mathbf{Pl}(0, 16, 22, 0, 1, 0)_{2522} \\
\ell_{1535} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{914286} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{914286} = \mathbf{Pl}(0, 16, 6, 0, 1, 0)_{1514} \\
\ell_{1536} &= \begin{bmatrix} 1 & 0 & \eta^{11} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{237824} = \begin{bmatrix} 1 & 0 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{237824} = \mathbf{Pl}(0, 7, 0, 0, 1, 0)_{1127}
\end{aligned}$$

$$\begin{aligned}
\ell_{1537} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{34860} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{34860} = \mathbf{Pl}(0, 7, 7, 0, 1, 0)_{1568} \\
\ell_{1538} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{609862} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{609862} = \mathbf{Pl}(0, 7, 14, 0, 1, 0)_{2009} \\
\ell_{1539} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{948100} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{948100} = \mathbf{Pl}(0, 7, 9, 0, 1, 0)_{1694} \\
\ell_{1540} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{305443} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{305443} = \mathbf{Pl}(0, 7, 28, 0, 1, 0)_{2891} \\
\ell_{1541} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{779007} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{779007} = \mathbf{Pl}(0, 7, 27, 0, 1, 0)_{2828} \\
\ell_{1542} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{474562} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{474562} = \mathbf{Pl}(0, 7, 18, 0, 1, 0)_{2261} \\
\ell_{1543} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{406938} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{406938} = \mathbf{Pl}(0, 7, 21, 0, 1, 0)_{2450} \\
\ell_{1544} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{745171} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{745171} = \mathbf{Pl}(0, 7, 29, 0, 1, 0)_{2954} \\
\ell_{1545} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{136341} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{136341} = \mathbf{Pl}(0, 7, 26, 0, 1, 0)_{2765} \\
\ell_{1546} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{846653} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{846653} = \mathbf{Pl}(0, 7, 19, 0, 1, 0)_{2324} \\
\ell_{1547} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{542238} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{542238} = \mathbf{Pl}(0, 7, 20, 0, 1, 0)_{2387} \\
\ell_{1548} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{237793} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{237793} = \mathbf{Pl}(0, 7, 1, 0, 1, 0)_{1190} \\
\ell_{1549} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{508398} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{508398} = \mathbf{Pl}(0, 7, 6, 0, 1, 0)_{1505} \\
\ell_{1550} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{203981} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{203981} = \mathbf{Pl}(0, 7, 15, 0, 1, 0)_{2072} \\
\ell_{1551} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{440758} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{440758} = \mathbf{Pl}(0, 7, 8, 0, 1, 0)_{1631} \\
\ell_{1552} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{373115} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{373115} = \mathbf{Pl}(0, 7, 31, 0, 1, 0)_{3080} \\
\ell_{1553} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{812817} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{812817} = \mathbf{Pl}(0, 7, 24, 0, 1, 0)_{2639} \\
\ell_{1554} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{68696} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{68696} = \mathbf{Pl}(0, 7, 17, 0, 1, 0)_{2198} \\
\ell_{1555} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{981928} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{981928} = \mathbf{Pl}(0, 7, 22, 0, 1, 0)_{2513} \\
\ell_{1556} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1015772} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1015772} = \mathbf{Pl}(0, 7, 3, 0, 1, 0)_{1316} \\
\ell_{1557} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{880457} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{880457} = \mathbf{Pl}(0, 7, 4, 0, 1, 0)_{1379}
\end{aligned}$$

$$\begin{aligned}
\ell_{1558} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{271631} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{271631} = \mathbf{Pl}(0, 7, 13, 0, 1, 0)_{1946} \\
\ell_{1559} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{170169} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{170169} = \mathbf{Pl}(0, 7, 10, 0, 1, 0)_{1757} \\
\ell_{1560} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{576050} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{576050} = \mathbf{Pl}(0, 7, 2, 0, 1, 0)_{1253} \\
\ell_{1561} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{339287} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{339287} = \mathbf{Pl}(0, 7, 5, 0, 1, 0)_{1442} \\
\ell_{1562} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{711335} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{711335} = \mathbf{Pl}(0, 7, 12, 0, 1, 0)_{1883} \\
\ell_{1563} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1049584} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1049584} = \mathbf{Pl}(0, 7, 11, 0, 1, 0)_{1820} \\
\ell_{1564} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{102516} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{102516} = \mathbf{Pl}(0, 7, 30, 0, 1, 0)_{3017} \\
\ell_{1565} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{643690} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{643690} = \mathbf{Pl}(0, 7, 25, 0, 1, 0)_{2702} \\
\ell_{1566} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{677515} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{677515} = \mathbf{Pl}(0, 7, 16, 0, 1, 0)_{2135} \\
\ell_{1567} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{914277} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{914277} = \mathbf{Pl}(0, 7, 23, 0, 1, 0)_{2576} \\
\ell_{1568} &= \begin{bmatrix} 1 & 0 & \eta^{23} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{508416} = \begin{bmatrix} 1 & 0 & 15 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{508416} = \mathbf{Pl}(0, 15, 0, 0, 1, 0)_{1135} \\
\ell_{1569} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{34861} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{34861} = \mathbf{Pl}(0, 15, 15, 0, 1, 0)_{2080} \\
\ell_{1570} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{609876} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{609876} = \mathbf{Pl}(0, 15, 30, 0, 1, 0)_{3025} \\
\ell_{1571} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{948120} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{948120} = \mathbf{Pl}(0, 15, 17, 0, 1, 0)_{2206} \\
\ell_{1572} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{305450} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{305450} = \mathbf{Pl}(0, 15, 25, 0, 1, 0)_{2710} \\
\ell_{1573} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{778984} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{778984} = \mathbf{Pl}(0, 15, 22, 0, 1, 0)_{2521} \\
\ell_{1574} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{474572} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{474572} = \mathbf{Pl}(0, 15, 7, 0, 1, 0)_{1576} \\
\ell_{1575} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{406934} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{406934} = \mathbf{Pl}(0, 15, 8, 0, 1, 0)_{1639} \\
\ell_{1576} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{745157} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{745157} = \mathbf{Pl}(0, 15, 23, 0, 1, 0)_{2584} \\
\ell_{1577} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{136337} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{136337} = \mathbf{Pl}(0, 15, 24, 0, 1, 0)_{2647} \\
\ell_{1578} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{846628} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{846628} = \mathbf{Pl}(0, 15, 9, 0, 1, 0)_{1702}
\end{aligned}$$

$$\begin{aligned}
\ell_{1579} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{542222} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{542222} = \mathbf{Pl}(0, 15, 6, 0, 1, 0)_{1513} \\
\ell_{1580} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{237798} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{237798} = \mathbf{Pl}(0, 15, 14, 0, 1, 0)_{2017} \\
\ell_{1581} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{508385} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{508385} = \mathbf{Pl}(0, 15, 1, 0, 1, 0)_{1198} \\
\ell_{1582} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{203979} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{203979} = \mathbf{Pl}(0, 15, 16, 0, 1, 0)_{2143} \\
\ell_{1583} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{440763} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{440763} = \mathbf{Pl}(0, 15, 31, 0, 1, 0)_{3088} \\
\ell_{1584} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{373104} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{373104} = \mathbf{Pl}(0, 15, 11, 0, 1, 0)_{1828} \\
\ell_{1585} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{812809} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{812809} = \mathbf{Pl}(0, 15, 4, 0, 1, 0)_{1387} \\
\ell_{1586} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{68698} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{68698} = \mathbf{Pl}(0, 15, 21, 0, 1, 0)_{2458} \\
\ell_{1587} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{981941} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{981941} = \mathbf{Pl}(0, 15, 26, 0, 1, 0)_{2773} \\
\ell_{1588} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1015746} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1015746} = \mathbf{Pl}(0, 15, 18, 0, 1, 0)_{2269} \\
\ell_{1589} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{880467} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{880467} = \mathbf{Pl}(0, 15, 29, 0, 1, 0)_{2962} \\
\ell_{1590} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{271623} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{271623} = \mathbf{Pl}(0, 15, 12, 0, 1, 0)_{1891} \\
\ell_{1591} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{170172} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{170172} = \mathbf{Pl}(0, 15, 3, 0, 1, 0)_{1324} \\
\ell_{1592} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{576035} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{576035} = \mathbf{Pl}(0, 15, 28, 0, 1, 0)_{2899} \\
\ell_{1593} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{339293} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{339293} = \mathbf{Pl}(0, 15, 19, 0, 1, 0)_{2332} \\
\ell_{1594} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{711346} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{711346} = \mathbf{Pl}(0, 15, 2, 0, 1, 0)_{1261} \\
\ell_{1595} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1049583} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1049583} = \mathbf{Pl}(0, 15, 13, 0, 1, 0)_{1954} \\
\ell_{1596} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{102519} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{102519} = \mathbf{Pl}(0, 15, 5, 0, 1, 0)_{1450} \\
\ell_{1597} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{643705} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{643705} = \mathbf{Pl}(0, 15, 10, 0, 1, 0)_{1765} \\
\ell_{1598} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{677535} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{677535} = \mathbf{Pl}(0, 15, 27, 0, 1, 0)_{2836} \\
\ell_{1599} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{914302} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{914302} = \mathbf{Pl}(0, 15, 20, 0, 1, 0)_{2395}
\end{aligned}$$

$$\begin{aligned}
\ell_{1600} &= \begin{bmatrix} 1 & 0 & \eta^{19} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{204000} = \begin{bmatrix} 1 & 0 & 6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{204000} = \mathbf{Pl}(0, 6, 0, 0, 1, 0)_{1126} \\
\ell_{1601} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{34862} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{34862} = \mathbf{Pl}(0, 6, 6, 0, 1, 0)_{1504} \\
\ell_{1602} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{609863} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{609863} = \mathbf{Pl}(0, 6, 12, 0, 1, 0)_{1882} \\
\ell_{1603} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{948121} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{948121} = \mathbf{Pl}(0, 6, 10, 0, 1, 0)_{1756} \\
\ell_{1604} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{305457} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{305457} = \mathbf{Pl}(0, 6, 24, 0, 1, 0)_{2638} \\
\ell_{1605} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{778996} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{778996} = \mathbf{Pl}(0, 6, 30, 0, 1, 0)_{3016} \\
\ell_{1606} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{474590} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{474590} = \mathbf{Pl}(0, 6, 20, 0, 1, 0)_{2386} \\
\ell_{1607} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{406914} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{406914} = \mathbf{Pl}(0, 6, 18, 0, 1, 0)_{2260} \\
\ell_{1608} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{745178} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{745178} = \mathbf{Pl}(0, 6, 21, 0, 1, 0)_{2449} \\
\ell_{1609} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{136349} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{136349} = \mathbf{Pl}(0, 6, 19, 0, 1, 0)_{2323} \\
\ell_{1610} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{846634} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{846634} = \mathbf{Pl}(0, 6, 25, 0, 1, 0)_{2701} \\
\ell_{1611} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{542235} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{542235} = \mathbf{Pl}(0, 6, 31, 0, 1, 0)_{3079} \\
\ell_{1612} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{237807} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{237807} = \mathbf{Pl}(0, 6, 13, 0, 1, 0)_{1945} \\
\ell_{1613} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{508400} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{508400} = \mathbf{Pl}(0, 6, 11, 0, 1, 0)_{1819} \\
\ell_{1614} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{203969} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{203969} = \mathbf{Pl}(0, 6, 1, 0, 1, 0)_{1189} \\
\ell_{1615} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{440748} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{440748} = \mathbf{Pl}(0, 6, 7, 0, 1, 0)_{1567} \\
\ell_{1616} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{373101} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{373101} = \mathbf{Pl}(0, 6, 15, 0, 1, 0)_{2071} \\
\ell_{1617} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{812804} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{812804} = \mathbf{Pl}(0, 6, 9, 0, 1, 0)_{1693} \\
\ell_{1618} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{68700} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{68700} = \mathbf{Pl}(0, 6, 3, 0, 1, 0)_{1315} \\
\ell_{1619} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{981943} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{981943} = \mathbf{Pl}(0, 6, 5, 0, 1, 0)_{1441} \\
\ell_{1620} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1015749} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1015749} = \mathbf{Pl}(0, 6, 23, 0, 1, 0)_{2575}
\end{aligned}$$

$$\begin{aligned}
\ell_{1621} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{880472} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{880472} = \mathbf{Pl}(0, 6, 17, 0, 1, 0)_{2197} \\
\ell_{1622} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{271647} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{271647} = \mathbf{Pl}(0, 6, 27, 0, 1, 0)_{2827} \\
\ell_{1623} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{170163} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{170163} = \mathbf{Pl}(0, 6, 29, 0, 1, 0)_{2953} \\
\ell_{1624} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{576053} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{576053} = \mathbf{Pl}(0, 6, 26, 0, 1, 0)_{2764} \\
\ell_{1625} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{339267} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{339267} = \mathbf{Pl}(0, 6, 28, 0, 1, 0)_{2890} \\
\ell_{1626} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{711336} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{711336} = \mathbf{Pl}(0, 6, 22, 0, 1, 0)_{2512} \\
\ell_{1627} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1049579} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1049579} = \mathbf{Pl}(0, 6, 16, 0, 1, 0)_{2134} \\
\ell_{1628} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{102514} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{102514} = \mathbf{Pl}(0, 6, 2, 0, 1, 0)_{1252} \\
\ell_{1629} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{643689} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{643689} = \mathbf{Pl}(0, 6, 4, 0, 1, 0)_{1378} \\
\ell_{1630} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{677510} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{677510} = \mathbf{Pl}(0, 6, 14, 0, 1, 0)_{2008} \\
\ell_{1631} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{914294} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{914294} = \mathbf{Pl}(0, 6, 8, 0, 1, 0)_{1630} \\
\ell_{1632} &= \begin{bmatrix} 1 & 0 & \eta^8 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{440768} = \begin{bmatrix} 1 & 0 & 13 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{440768} = \mathbf{Pl}(0, 13, 0, 0, 1, 0)_{1133} \\
\ell_{1633} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{34863} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{34863} = \mathbf{Pl}(0, 13, 13, 0, 1, 0)_{1952} \\
\ell_{1634} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{609877} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{609877} = \mathbf{Pl}(0, 13, 26, 0, 1, 0)_{2771} \\
\ell_{1635} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{948101} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{948101} = \mathbf{Pl}(0, 13, 23, 0, 1, 0)_{2582} \\
\ell_{1636} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{305464} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{305464} = \mathbf{Pl}(0, 13, 17, 0, 1, 0)_{2204} \\
\ell_{1637} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{778979} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{778979} = \mathbf{Pl}(0, 13, 28, 0, 1, 0)_{2897} \\
\ell_{1638} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{474576} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{474576} = \mathbf{Pl}(0, 13, 11, 0, 1, 0)_{1826} \\
\ell_{1639} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{406926} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{406926} = \mathbf{Pl}(0, 13, 6, 0, 1, 0)_{1511} \\
\ell_{1640} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{745164} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{745164} = \mathbf{Pl}(0, 13, 7, 0, 1, 0)_{1574} \\
\ell_{1641} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{136345} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{136345} = \mathbf{Pl}(0, 13, 10, 0, 1, 0)_{1763}
\end{aligned}$$

$$\begin{aligned}
\ell_{1642} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{846643} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{846643} = \mathbf{Pl}(0, 13, 29, 0, 1, 0)_{2960} \\
\ell_{1643} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{542219} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{542219} = \mathbf{Pl}(0, 13, 16, 0, 1, 0)_{2141} \\
\ell_{1644} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{237800} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{237800} = \mathbf{Pl}(0, 13, 22, 0, 1, 0)_{2519} \\
\ell_{1645} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{508415} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{508415} = \mathbf{Pl}(0, 13, 27, 0, 1, 0)_{2834} \\
\ell_{1646} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{203975} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{203975} = \mathbf{Pl}(0, 13, 12, 0, 1, 0)_{1889} \\
\ell_{1647} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{440737} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{440737} = \mathbf{Pl}(0, 13, 1, 0, 1, 0)_{1196} \\
\ell_{1648} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{373094} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{373094} = \mathbf{Pl}(0, 13, 14, 0, 1, 0)_{2015} \\
\ell_{1649} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{812828} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{812828} = \mathbf{Pl}(0, 13, 3, 0, 1, 0)_{1322} \\
\ell_{1650} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{68702} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{68702} = \mathbf{Pl}(0, 13, 20, 0, 1, 0)_{2393} \\
\ell_{1651} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{981930} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{981930} = \mathbf{Pl}(0, 13, 25, 0, 1, 0)_{2708} \\
\ell_{1652} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1015771} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1015771} = \mathbf{Pl}(0, 13, 31, 0, 1, 0)_{3086} \\
\ell_{1653} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{880450} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{880450} = \mathbf{Pl}(0, 13, 18, 0, 1, 0)_{2267} \\
\ell_{1654} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{271639} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{271639} = \mathbf{Pl}(0, 13, 5, 0, 1, 0)_{1448} \\
\ell_{1655} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{170166} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{170166} = \mathbf{Pl}(0, 13, 8, 0, 1, 0)_{1637} \\
\ell_{1656} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{576036} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{576036} = \mathbf{Pl}(0, 13, 9, 0, 1, 0)_{1700} \\
\ell_{1657} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{339273} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{339273} = \mathbf{Pl}(0, 13, 4, 0, 1, 0)_{1385} \\
\ell_{1658} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{711357} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{711357} = \mathbf{Pl}(0, 13, 19, 0, 1, 0)_{2330} \\
\ell_{1659} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1049588} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1049588} = \mathbf{Pl}(0, 13, 30, 0, 1, 0)_{3023} \\
\ell_{1660} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{102513} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{102513} = \mathbf{Pl}(0, 13, 24, 0, 1, 0)_{2645} \\
\ell_{1661} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{643706} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{643706} = \mathbf{Pl}(0, 13, 21, 0, 1, 0)_{2456} \\
\ell_{1662} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{677522} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{677522} = \mathbf{Pl}(0, 13, 2, 0, 1, 0)_{1259}
\end{aligned}$$

$$\begin{aligned}
\ell_{1663} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{914285} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{914285} = \mathbf{Pl}(0, 13, 15, 0, 1, 0)_{2078} \\
\ell_{1664} &= \begin{bmatrix} 1 & 0 & \eta^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{373120} = \begin{bmatrix} 1 & 0 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{373120} = \mathbf{Pl}(0, 11, 0, 0, 1, 0)_{1131} \\
\ell_{1665} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{34864} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{34864} = \mathbf{Pl}(0, 11, 11, 0, 1, 0)_{1824} \\
\ell_{1666} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{609864} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{609864} = \mathbf{Pl}(0, 11, 22, 0, 1, 0)_{2517} \\
\ell_{1667} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{948115} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{948115} = \mathbf{Pl}(0, 11, 29, 0, 1, 0)_{2958} \\
\ell_{1668} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{305444} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{305444} = \mathbf{Pl}(0, 11, 9, 0, 1, 0)_{1698} \\
\ell_{1669} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{778994} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{778994} = \mathbf{Pl}(0, 11, 2, 0, 1, 0)_{1257} \\
\ell_{1670} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{474587} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{474587} = \mathbf{Pl}(0, 11, 31, 0, 1, 0)_{3084} \\
\ell_{1671} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{406942} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{406942} = \mathbf{Pl}(0, 11, 20, 0, 1, 0)_{2391} \\
\ell_{1672} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{745154} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{745154} = \mathbf{Pl}(0, 11, 18, 0, 1, 0)_{2265} \\
\ell_{1673} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{136330} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{136330} = \mathbf{Pl}(0, 11, 25, 0, 1, 0)_{2706} \\
\ell_{1674} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{846633} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{846633} = \mathbf{Pl}(0, 11, 4, 0, 1, 0)_{1383} \\
\ell_{1675} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{542221} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{542221} = \mathbf{Pl}(0, 11, 15, 0, 1, 0)_{2076} \\
\ell_{1676} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{237823} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{237823} = \mathbf{Pl}(0, 11, 27, 0, 1, 0)_{2832} \\
\ell_{1677} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{508395} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{508395} = \mathbf{Pl}(0, 11, 16, 0, 1, 0)_{2139} \\
\ell_{1678} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{203983} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{203983} = \mathbf{Pl}(0, 11, 13, 0, 1, 0)_{1950} \\
\ell_{1679} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{440750} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{440750} = \mathbf{Pl}(0, 11, 6, 0, 1, 0)_{1509} \\
\ell_{1680} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{373089} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{373089} = \mathbf{Pl}(0, 11, 1, 0, 1, 0)_{1194} \\
\ell_{1681} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{812825} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{812825} = \mathbf{Pl}(0, 11, 10, 0, 1, 0)_{1761} \\
\ell_{1682} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{68677} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{68677} = \mathbf{Pl}(0, 11, 23, 0, 1, 0)_{2580} \\
\ell_{1683} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{981923} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{981923} = \mathbf{Pl}(0, 11, 28, 0, 1, 0)_{2895}
\end{aligned}$$

$$\begin{aligned}
\ell_{1684} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1015766} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1015766} = \mathbf{Pl}(0, 11, 8, 0, 1, 0)_{1635} \\
\ell_{1685} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{880476} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{880476} = \mathbf{Pl}(0, 11, 3, 0, 1, 0)_{1320} \\
\ell_{1686} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{271636} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{271636} = \mathbf{Pl}(0, 11, 30, 0, 1, 0)_{3021} \\
\ell_{1687} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{170170} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{170170} = \mathbf{Pl}(0, 11, 21, 0, 1, 0)_{2454} \\
\ell_{1688} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{576061} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{576061} = \mathbf{Pl}(0, 11, 19, 0, 1, 0)_{2328} \\
\ell_{1689} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{339281} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{339281} = \mathbf{Pl}(0, 11, 24, 0, 1, 0)_{2643} \\
\ell_{1690} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{711351} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{711351} = \mathbf{Pl}(0, 11, 5, 0, 1, 0)_{1446} \\
\ell_{1691} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1049574} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1049574} = \mathbf{Pl}(0, 11, 14, 0, 1, 0)_{2013} \\
\ell_{1692} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{102517} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{102517} = \mathbf{Pl}(0, 11, 26, 0, 1, 0)_{2769} \\
\ell_{1693} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{643704} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{643704} = \mathbf{Pl}(0, 11, 17, 0, 1, 0)_{2202} \\
\ell_{1694} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{677511} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{677511} = \mathbf{Pl}(0, 11, 12, 0, 1, 0)_{1887} \\
\ell_{1695} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{914284} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{914284} = \mathbf{Pl}(0, 11, 7, 0, 1, 0)_{1572} \\
\ell_{1696} &= \begin{bmatrix} 1 & 0 & \eta^{21} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{812832} = \begin{bmatrix} 1 & 0 & 24 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{812832} = \mathbf{Pl}(0, 24, 0, 0, 1, 0)_{1144} \\
\ell_{1697} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{34865} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{34865} = \mathbf{Pl}(0, 24, 24, 0, 1, 0)_{2656} \\
\ell_{1698} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{609882} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{609882} = \mathbf{Pl}(0, 24, 21, 0, 1, 0)_{2467} \\
\ell_{1699} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{948111} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{948111} = \mathbf{Pl}(0, 24, 13, 0, 1, 0)_{1963} \\
\ell_{1700} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{305453} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{305453} = \mathbf{Pl}(0, 24, 15, 0, 1, 0)_{2089} \\
\ell_{1701} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{778981} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{778981} = \mathbf{Pl}(0, 24, 23, 0, 1, 0)_{2593} \\
\ell_{1702} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{474581} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{474581} = \mathbf{Pl}(0, 24, 26, 0, 1, 0)_{2782} \\
\ell_{1703} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{406930} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{406930} = \mathbf{Pl}(0, 24, 2, 0, 1, 0)_{1270} \\
\ell_{1704} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{745172} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{745172} = \mathbf{Pl}(0, 24, 30, 0, 1, 0)_{3034}
\end{aligned}$$

$$\begin{aligned}
\ell_{1705} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{136334} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{136334} = \mathbf{Pl}(0, 24, 6, 0, 1, 0)_{1522} \\
\ell_{1706} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{846640} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{846640} = \mathbf{Pl}(0, 24, 11, 0, 1, 0)_{1837} \\
\ell_{1707} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{542237} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{542237} = \mathbf{Pl}(0, 24, 19, 0, 1, 0)_{2341} \\
\ell_{1708} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{237816} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{237816} = \mathbf{Pl}(0, 24, 17, 0, 1, 0)_{2215} \\
\ell_{1709} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{508388} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{508388} = \mathbf{Pl}(0, 24, 9, 0, 1, 0)_{1711} \\
\ell_{1710} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{203977} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{203977} = \mathbf{Pl}(0, 24, 4, 0, 1, 0)_{1396} \\
\ell_{1711} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{440739} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{440739} = \mathbf{Pl}(0, 24, 28, 0, 1, 0)_{2908} \\
\ell_{1712} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{373098} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{373098} = \mathbf{Pl}(0, 24, 25, 0, 1, 0)_{2719} \\
\ell_{1713} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{812801} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{812801} = \mathbf{Pl}(0, 24, 1, 0, 1, 0)_{1207} \\
\ell_{1714} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{68679} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{68679} = \mathbf{Pl}(0, 24, 12, 0, 1, 0)_{1900} \\
\ell_{1715} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{981950} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{981950} = \mathbf{Pl}(0, 24, 20, 0, 1, 0)_{2404} \\
\ell_{1716} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1015752} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1015752} = \mathbf{Pl}(0, 24, 22, 0, 1, 0)_{2530} \\
\ell_{1717} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{880454} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{880454} = \mathbf{Pl}(0, 24, 14, 0, 1, 0)_{2026} \\
\ell_{1718} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{271644} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{271644} = \mathbf{Pl}(0, 24, 3, 0, 1, 0)_{1333} \\
\ell_{1719} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{170175} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{170175} = \mathbf{Pl}(0, 24, 27, 0, 1, 0)_{2845} \\
\ell_{1720} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{576044} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{576044} = \mathbf{Pl}(0, 24, 7, 0, 1, 0)_{1585} \\
\ell_{1721} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{339291} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{339291} = \mathbf{Pl}(0, 24, 31, 0, 1, 0)_{3097} \\
\ell_{1722} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{711330} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{711330} = \mathbf{Pl}(0, 24, 18, 0, 1, 0)_{2278} \\
\ell_{1723} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1049593} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1049593} = \mathbf{Pl}(0, 24, 10, 0, 1, 0)_{1774} \\
\ell_{1724} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{102518} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{102518} = \mathbf{Pl}(0, 24, 8, 0, 1, 0)_{1648} \\
\ell_{1725} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{643691} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{643691} = \mathbf{Pl}(0, 24, 16, 0, 1, 0)_{2152}
\end{aligned}$$

$$\begin{aligned}
\ell_{1726} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{677523} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{677523} = \mathbf{Pl}(0, 24, 29, 0, 1, 0)_{2971} \\
\ell_{1727} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{914295} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{914295} = \mathbf{Pl}(0, 24, 5, 0, 1, 0)_{1459} \\
\ell_{1728} &= \begin{bmatrix} 1 & 0 & \eta & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{68704} = \begin{bmatrix} 1 & 0 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{68704} = \mathbf{Pl}(0, 2, 0, 0, 1, 0)_{1122} \\
\ell_{1729} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{34866} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{34866} = \mathbf{Pl}(0, 2, 2, 0, 1, 0)_{1248} \\
\ell_{1730} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{609865} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{609865} = \mathbf{Pl}(0, 2, 4, 0, 1, 0)_{1374} \\
\ell_{1731} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{948110} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{948110} = \mathbf{Pl}(0, 2, 6, 0, 1, 0)_{1500} \\
\ell_{1732} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{305462} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{305462} = \mathbf{Pl}(0, 2, 8, 0, 1, 0)_{1626} \\
\ell_{1733} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{779001} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{779001} = \mathbf{Pl}(0, 2, 10, 0, 1, 0)_{1752} \\
\ell_{1734} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{474567} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{474567} = \mathbf{Pl}(0, 2, 12, 0, 1, 0)_{1878} \\
\ell_{1735} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{406918} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{406918} = \mathbf{Pl}(0, 2, 14, 0, 1, 0)_{2004} \\
\ell_{1736} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{745163} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{745163} = \mathbf{Pl}(0, 2, 16, 0, 1, 0)_{2130} \\
\ell_{1737} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{136322} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{136322} = \mathbf{Pl}(0, 2, 18, 0, 1, 0)_{2256} \\
\ell_{1738} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{846654} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{846654} = \mathbf{Pl}(0, 2, 20, 0, 1, 0)_{2382} \\
\ell_{1739} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{542216} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{542216} = \mathbf{Pl}(0, 2, 22, 0, 1, 0)_{2508} \\
\ell_{1740} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{237809} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{237809} = \mathbf{Pl}(0, 2, 24, 0, 1, 0)_{2634} \\
\ell_{1741} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{508405} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{508405} = \mathbf{Pl}(0, 2, 26, 0, 1, 0)_{2760} \\
\ell_{1742} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{203971} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{203971} = \mathbf{Pl}(0, 2, 28, 0, 1, 0)_{2886} \\
\ell_{1743} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{440756} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{440756} = \mathbf{Pl}(0, 2, 30, 0, 1, 0)_{3012} \\
\ell_{1744} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{373111} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{373111} = \mathbf{Pl}(0, 2, 5, 0, 1, 0)_{1437} \\
\ell_{1745} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{812812} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{812812} = \mathbf{Pl}(0, 2, 7, 0, 1, 0)_{1563} \\
\ell_{1746} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & 1 \end{bmatrix}_{68673} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{68673} = \mathbf{Pl}(0, 2, 1, 0, 1, 0)_{1185}
\end{aligned}$$

$$\begin{aligned}
\ell_{1747} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{981948} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{981948} = \mathbf{Pl}(0, 2, 3, 0, 1, 0)_{1311} \\
\ell_{1748} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1015759} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1015759} = \mathbf{Pl}(0, 2, 13, 0, 1, 0)_{1941} \\
\ell_{1749} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{880461} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{880461} = \mathbf{Pl}(0, 2, 15, 0, 1, 0)_{2067} \\
\ell_{1750} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{271620} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{271620} = \mathbf{Pl}(0, 2, 9, 0, 1, 0)_{1689} \\
\ell_{1751} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{170160} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{170160} = \mathbf{Pl}(0, 2, 11, 0, 1, 0)_{1815} \\
\ell_{1752} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{576058} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{576058} = \mathbf{Pl}(0, 2, 21, 0, 1, 0)_{2445} \\
\ell_{1753} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{339269} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{339269} = \mathbf{Pl}(0, 2, 23, 0, 1, 0)_{2571} \\
\ell_{1754} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{711352} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{711352} = \mathbf{Pl}(0, 2, 17, 0, 1, 0)_{2193} \\
\ell_{1755} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1049597} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1049597} = \mathbf{Pl}(0, 2, 19, 0, 1, 0)_{2319} \\
\ell_{1756} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{102515} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{102515} = \mathbf{Pl}(0, 2, 29, 0, 1, 0)_{2949} \\
\ell_{1757} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{643707} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{643707} = \mathbf{Pl}(0, 2, 31, 0, 1, 0)_{3075} \\
\ell_{1758} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{677514} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{677514} = \mathbf{Pl}(0, 2, 25, 0, 1, 0)_{2697} \\
\ell_{1759} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{914303} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{914303} = \mathbf{Pl}(0, 2, 27, 0, 1, 0)_{2823} \\
\ell_{1760} &= \begin{bmatrix} 1 & 0 & \eta^{14} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{981952} = \begin{bmatrix} 1 & 0 & 29 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{981952} = \mathbf{Pl}(0, 29, 0, 0, 1, 0)_{1149} \\
\ell_{1761} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{34867} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{34867} = \mathbf{Pl}(0, 29, 29, 0, 1, 0)_{2976} \\
\ell_{1762} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{609883} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{609883} = \mathbf{Pl}(0, 29, 31, 0, 1, 0)_{3102} \\
\ell_{1763} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{948114} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{948114} = \mathbf{Pl}(0, 29, 2, 0, 1, 0)_{1275} \\
\ell_{1764} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{305471} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{305471} = \mathbf{Pl}(0, 29, 27, 0, 1, 0)_{2850} \\
\ell_{1765} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{778990} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{778990} = \mathbf{Pl}(0, 29, 6, 0, 1, 0)_{1527} \\
\ell_{1766} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{474569} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{474569} = \mathbf{Pl}(0, 29, 4, 0, 1, 0)_{1401} \\
\ell_{1767} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{406922} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{406922} = \mathbf{Pl}(0, 29, 25, 0, 1, 0)_{2724}
\end{aligned}$$

$$\begin{aligned}
\ell_{1768} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{745181} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{745181} = \mathbf{Pl}(0, 29, 19, 0, 1, 0)_{2346} \\
\ell_{1769} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{136326} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{136326} = \mathbf{Pl}(0, 29, 14, 0, 1, 0)_{2031} \\
\ell_{1770} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{846631} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{846631} = \mathbf{Pl}(0, 29, 12, 0, 1, 0)_{1905} \\
\ell_{1771} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{542232} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{542232} = \mathbf{Pl}(0, 29, 17, 0, 1, 0)_{2220} \\
\ell_{1772} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{237814} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{237814} = \mathbf{Pl}(0, 29, 8, 0, 1, 0)_{1653} \\
\ell_{1773} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{508410} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{508410} = \mathbf{Pl}(0, 29, 21, 0, 1, 0)_{2472} \\
\ell_{1774} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{203973} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{203973} = \mathbf{Pl}(0, 29, 23, 0, 1, 0)_{2598} \\
\ell_{1775} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{440761} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{440761} = \mathbf{Pl}(0, 29, 10, 0, 1, 0)_{1779} \\
\ell_{1776} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{373116} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{373116} = \mathbf{Pl}(0, 29, 3, 0, 1, 0)_{1338} \\
\ell_{1777} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{812820} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{812820} = \mathbf{Pl}(0, 29, 30, 0, 1, 0)_{3039} \\
\ell_{1778} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{68675} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{68675} = \mathbf{Pl}(0, 29, 28, 0, 1, 0)_{2913} \\
\ell_{1779} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{981921} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{981921} = \mathbf{Pl}(0, 29, 1, 0, 1, 0)_{1212} \\
\ell_{1780} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1015761} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1015761} = \mathbf{Pl}(0, 29, 24, 0, 1, 0)_{2661} \\
\ell_{1781} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{880471} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{880471} = \mathbf{Pl}(0, 29, 5, 0, 1, 0)_{1464} \\
\ell_{1782} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{271628} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{271628} = \mathbf{Pl}(0, 29, 7, 0, 1, 0)_{1590} \\
\ell_{1783} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{170165} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{170165} = \mathbf{Pl}(0, 29, 26, 0, 1, 0)_{2787} \\
\ell_{1784} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{576043} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{576043} = \mathbf{Pl}(0, 29, 16, 0, 1, 0)_{2157} \\
\ell_{1785} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{339279} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{339279} = \mathbf{Pl}(0, 29, 13, 0, 1, 0)_{1968} \\
\ell_{1786} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{711341} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{711341} = \mathbf{Pl}(0, 29, 15, 0, 1, 0)_{2094} \\
\ell_{1787} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1049570} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1049570} = \mathbf{Pl}(0, 29, 18, 0, 1, 0)_{2283} \\
\ell_{1788} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{102512} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{102512} = \mathbf{Pl}(0, 29, 11, 0, 1, 0)_{1842}
\end{aligned}$$

$$\begin{aligned}
\ell_{1789} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{643688} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{643688} = \mathbf{Pl}(0, 29, 22, 0, 1, 0)_{2535} \\
\ell_{1790} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{677534} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{677534} = \mathbf{Pl}(0, 29, 20, 0, 1, 0)_{2409} \\
\ell_{1791} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{914276} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{914276} = \mathbf{Pl}(0, 29, 9, 0, 1, 0)_{1716} \\
\ell_{1792} &= \begin{bmatrix} 1 & 0 & \eta^{24} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1015776} = \begin{bmatrix} 1 & 0 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1015776} = \mathbf{Pl}(0, 30, 0, 0, 1, 0)_{1150} \\
\ell_{1793} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{34868} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{34868} = \mathbf{Pl}(0, 30, 30, 0, 1, 0)_{3040} \\
\ell_{1794} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{609866} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{609866} = \mathbf{Pl}(0, 30, 25, 0, 1, 0)_{2725} \\
\ell_{1795} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{948108} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{948108} = \mathbf{Pl}(0, 30, 7, 0, 1, 0)_{1591} \\
\ell_{1796} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{305445} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{305445} = \mathbf{Pl}(0, 30, 23, 0, 1, 0)_{2599} \\
\ell_{1797} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{778980} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{778980} = \mathbf{Pl}(0, 30, 9, 0, 1, 0)_{1717} \\
\ell_{1798} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{474566} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{474566} = \mathbf{Pl}(0, 30, 14, 0, 1, 0)_{2032} \\
\ell_{1799} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{406923} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{406923} = \mathbf{Pl}(0, 30, 16, 0, 1, 0)_{2158} \\
\ell_{1800} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{745168} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{745168} = \mathbf{Pl}(0, 30, 11, 0, 1, 0)_{1843} \\
\ell_{1801} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{136346} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{136346} = \mathbf{Pl}(0, 30, 21, 0, 1, 0)_{2473} \\
\ell_{1802} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{846626} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{846626} = \mathbf{Pl}(0, 30, 18, 0, 1, 0)_{2284} \\
\ell_{1803} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{542215} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{542215} = \mathbf{Pl}(0, 30, 12, 0, 1, 0)_{1906} \\
\ell_{1804} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{237795} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{237795} = \mathbf{Pl}(0, 30, 28, 0, 1, 0)_{2914} \\
\ell_{1805} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{508402} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{508402} = \mathbf{Pl}(0, 30, 2, 0, 1, 0)_{1276} \\
\ell_{1806} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{203991} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{203991} = \mathbf{Pl}(0, 30, 5, 0, 1, 0)_{1465} \\
\ell_{1807} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{440767} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{440767} = \mathbf{Pl}(0, 30, 27, 0, 1, 0)_{2851} \\
\ell_{1808} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{373096} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{373096} = \mathbf{Pl}(0, 30, 22, 0, 1, 0)_{2536} \\
\ell_{1809} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{812822} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{812822} = \mathbf{Pl}(0, 30, 8, 0, 1, 0)_{1654}
\end{aligned}$$

$$\begin{aligned}
\ell_{1810} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{68685} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{68685} = \mathbf{Pl}(0, 30, 15, 0, 1, 0)_{2095} \\
\ell_{1811} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{981944} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{981944} = \mathbf{Pl}(0, 30, 17, 0, 1, 0)_{2221} \\
\ell_{1812} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1015745} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1015745} = \mathbf{Pl}(0, 30, 1, 0, 1, 0)_{1213} \\
\ell_{1813} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{880475} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{880475} = \mathbf{Pl}(0, 30, 31, 0, 1, 0)_{3103} \\
\ell_{1814} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{271633} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{271633} = \mathbf{Pl}(0, 30, 24, 0, 1, 0)_{2662} \\
\ell_{1815} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{170158} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{170158} = \mathbf{Pl}(0, 30, 6, 0, 1, 0)_{1528} \\
\ell_{1816} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{576051} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{576051} = \mathbf{Pl}(0, 30, 29, 0, 1, 0)_{2977} \\
\ell_{1817} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{339292} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{339292} = \mathbf{Pl}(0, 30, 3, 0, 1, 0)_{1339} \\
\ell_{1818} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{711337} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{711337} = \mathbf{Pl}(0, 30, 4, 0, 1, 0)_{1402} \\
\ell_{1819} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1049589} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1049589} = \mathbf{Pl}(0, 30, 26, 0, 1, 0)_{2788} \\
\ell_{1820} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{102521} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{102521} = \mathbf{Pl}(0, 30, 10, 0, 1, 0)_{1780} \\
\ell_{1821} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{643710} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{643710} = \mathbf{Pl}(0, 30, 20, 0, 1, 0)_{2410} \\
\ell_{1822} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{677533} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{677533} = \mathbf{Pl}(0, 30, 19, 0, 1, 0)_{2347} \\
\ell_{1823} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{914287} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{914287} = \mathbf{Pl}(0, 30, 13, 0, 1, 0)_{1969} \\
\ell_{1824} &= \begin{bmatrix} 1 & 0 & \eta^9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{880480} = \begin{bmatrix} 1 & 0 & 26 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{880480} = \mathbf{Pl}(0, 26, 0, 0, 1, 0)_{1146} \\
\ell_{1825} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{34869} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{34869} = \mathbf{Pl}(0, 26, 26, 0, 1, 0)_{2784} \\
\ell_{1826} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{609880} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{609880} = \mathbf{Pl}(0, 26, 17, 0, 1, 0)_{2217} \\
\ell_{1827} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{948112} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{948112} = \mathbf{Pl}(0, 26, 11, 0, 1, 0)_{1839} \\
\ell_{1828} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{305452} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{305452} = \mathbf{Pl}(0, 26, 7, 0, 1, 0)_{1587} \\
\ell_{1829} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{778995} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{778995} = \mathbf{Pl}(0, 26, 29, 0, 1, 0)_{2973} \\
\ell_{1830} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{474568} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{474568} = \mathbf{Pl}(0, 26, 22, 0, 1, 0)_{2532}
\end{aligned}$$

$$\begin{aligned}
\ell_{1831} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{406919} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{406919} = \mathbf{Pl}(0, 26, 12, 0, 1, 0)_{1902} \\
\ell_{1832} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{745158} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{745158} = \mathbf{Pl}(0, 26, 14, 0, 1, 0)_{2028} \\
\ell_{1833} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{136350} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{136350} = \mathbf{Pl}(0, 26, 20, 0, 1, 0)_{2406} \\
\ell_{1834} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{846651} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{846651} = \mathbf{Pl}(0, 26, 31, 0, 1, 0)_{3099} \\
\ell_{1835} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{542231} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{542231} = \mathbf{Pl}(0, 26, 5, 0, 1, 0)_{1461} \\
\ell_{1836} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{237796} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{237796} = \mathbf{Pl}(0, 26, 9, 0, 1, 0)_{1713} \\
\ell_{1837} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{508413} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{508413} = \mathbf{Pl}(0, 26, 19, 0, 1, 0)_{2343} \\
\ell_{1838} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{203985} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{203985} = \mathbf{Pl}(0, 26, 24, 0, 1, 0)_{2658} \\
\ell_{1839} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{440754} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{440754} = \mathbf{Pl}(0, 26, 2, 0, 1, 0)_{1272} \\
\ell_{1840} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{373091} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{373091} = \mathbf{Pl}(0, 26, 28, 0, 1, 0)_{2910} \\
\ell_{1841} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{812814} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{812814} = \mathbf{Pl}(0, 26, 6, 0, 1, 0)_{1524} \\
\ell_{1842} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{68687} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{68687} = \mathbf{Pl}(0, 26, 13, 0, 1, 0)_{1965} \\
\ell_{1843} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{981925} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{981925} = \mathbf{Pl}(0, 26, 23, 0, 1, 0)_{2595} \\
\ell_{1844} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1015775} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1015775} = \mathbf{Pl}(0, 26, 27, 0, 1, 0)_{2847} \\
\ell_{1845} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{880449} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{880449} = \mathbf{Pl}(0, 26, 1, 0, 1, 0)_{1209} \\
\ell_{1846} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{271641} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{271641} = \mathbf{Pl}(0, 26, 10, 0, 1, 0)_{1776} \\
\ell_{1847} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{170155} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{170155} = \mathbf{Pl}(0, 26, 16, 0, 1, 0)_{2154} \\
\ell_{1848} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{576034} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{576034} = \mathbf{Pl}(0, 26, 18, 0, 1, 0)_{2280} \\
\ell_{1849} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{339286} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{339286} = \mathbf{Pl}(0, 26, 8, 0, 1, 0)_{1650} \\
\ell_{1850} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{711356} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{711356} = \mathbf{Pl}(0, 26, 3, 0, 1, 0)_{1335} \\
\ell_{1851} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1049578} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1049578} = \mathbf{Pl}(0, 26, 25, 0, 1, 0)_{2721}
\end{aligned}$$

$$\begin{aligned}
\ell_{1852} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{102522} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{102522} = \mathbf{Pl}(0, 26, 21, 0, 1, 0)_{2469} \\
\ell_{1853} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{643693} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{643693} = \mathbf{Pl}(0, 26, 15, 0, 1, 0)_{2091} \\
\ell_{1854} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{677513} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{677513} = \mathbf{Pl}(0, 26, 4, 0, 1, 0)_{1398} \\
\ell_{1855} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{914292} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{914292} = \mathbf{Pl}(0, 26, 30, 0, 1, 0)_{3036} \\
\ell_{1856} &= \begin{bmatrix} 1 & 0 & \eta^3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{271648} = \begin{bmatrix} 1 & 0 & 8 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{271648} = \mathbf{Pl}(0, 8, 0, 0, 1, 0)_{1128} \\
\ell_{1857} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{34870} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{34870} = \mathbf{Pl}(0, 8, 8, 0, 1, 0)_{1632} \\
\ell_{1858} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{609867} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{609867} = \mathbf{Pl}(0, 8, 16, 0, 1, 0)_{2136} \\
\ell_{1859} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{948113} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{948113} = \mathbf{Pl}(0, 8, 24, 0, 1, 0)_{2640} \\
\ell_{1860} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{305463} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{305463} = \mathbf{Pl}(0, 8, 5, 0, 1, 0)_{1443} \\
\ell_{1861} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{778991} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{778991} = \mathbf{Pl}(0, 8, 13, 0, 1, 0)_{1947} \\
\ell_{1862} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{474586} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{474586} = \mathbf{Pl}(0, 8, 21, 0, 1, 0)_{2451} \\
\ell_{1863} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{406931} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{406931} = \mathbf{Pl}(0, 8, 29, 0, 1, 0)_{2955} \\
\ell_{1864} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{745177} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{745177} = \mathbf{Pl}(0, 8, 10, 0, 1, 0)_{1758} \\
\ell_{1865} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{136338} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{136338} = \mathbf{Pl}(0, 8, 2, 0, 1, 0)_{1254} \\
\ell_{1866} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{846645} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{846645} = \mathbf{Pl}(0, 8, 26, 0, 1, 0)_{2766} \\
\ell_{1867} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{542210} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{542210} = \mathbf{Pl}(0, 8, 18, 0, 1, 0)_{2262} \\
\ell_{1868} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{237805} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{237805} = \mathbf{Pl}(0, 8, 15, 0, 1, 0)_{2073} \\
\ell_{1869} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{508396} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{508396} = \mathbf{Pl}(0, 8, 7, 0, 1, 0)_{1569} \\
\ell_{1870} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{203995} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{203995} = \mathbf{Pl}(0, 8, 31, 0, 1, 0)_{3081} \\
\ell_{1871} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{440741} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{440741} = \mathbf{Pl}(0, 8, 23, 0, 1, 0)_{2577} \\
\ell_{1872} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{373118} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{373118} = \mathbf{Pl}(0, 8, 20, 0, 1, 0)_{2388}
\end{aligned}$$

$$\begin{aligned}
\ell_{1873} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{812803} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{812803} = \mathbf{Pl}(0, 8, 28, 0, 1, 0)_{2892} \\
\ell_{1874} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{68681} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{68681} = \mathbf{Pl}(0, 8, 4, 0, 1, 0)_{1380} \\
\ell_{1875} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{981927} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{981927} = \mathbf{Pl}(0, 8, 12, 0, 1, 0)_{1884} \\
\ell_{1876} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1015768} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1015768} = \mathbf{Pl}(0, 8, 17, 0, 1, 0)_{2199} \\
\ell_{1877} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{880458} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{880458} = \mathbf{Pl}(0, 8, 25, 0, 1, 0)_{2703} \\
\ell_{1878} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{271617} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{271617} = \mathbf{Pl}(0, 8, 1, 0, 1, 0)_{1191} \\
\ell_{1879} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{170148} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{170148} = \mathbf{Pl}(0, 8, 9, 0, 1, 0)_{1695} \\
\ell_{1880} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{576052} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{576052} = \mathbf{Pl}(0, 8, 30, 0, 1, 0)_{3018} \\
\ell_{1881} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{339272} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{339272} = \mathbf{Pl}(0, 8, 22, 0, 1, 0)_{2514} \\
\ell_{1882} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{711334} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{711334} = \mathbf{Pl}(0, 8, 14, 0, 1, 0)_{2010} \\
\ell_{1883} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1049582} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1049582} = \mathbf{Pl}(0, 8, 6, 0, 1, 0)_{1506} \\
\ell_{1884} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{102527} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{102527} = \mathbf{Pl}(0, 8, 27, 0, 1, 0)_{2829} \\
\ell_{1885} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{643709} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{643709} = \mathbf{Pl}(0, 8, 19, 0, 1, 0)_{2325} \\
\ell_{1886} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{677520} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{677520} = \mathbf{Pl}(0, 8, 11, 0, 1, 0)_{1821} \\
\ell_{1887} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{914300} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{914300} = \mathbf{Pl}(0, 8, 3, 0, 1, 0)_{1317} \\
\ell_{1888} &= \begin{bmatrix} 1 & 0 & \eta^5 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{170176} = \begin{bmatrix} 1 & 0 & 5 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{170176} = \mathbf{Pl}(0, 5, 0, 0, 1, 0)_{1125} \\
\ell_{1889} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{34871} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{34871} = \mathbf{Pl}(0, 5, 5, 0, 1, 0)_{1440} \\
\ell_{1890} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{609881} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{609881} = \mathbf{Pl}(0, 5, 10, 0, 1, 0)_{1755} \\
\ell_{1891} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{948109} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{948109} = \mathbf{Pl}(0, 5, 15, 0, 1, 0)_{2070} \\
\ell_{1892} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{305470} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{305470} = \mathbf{Pl}(0, 5, 20, 0, 1, 0)_{2385} \\
\ell_{1893} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{779000} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{779000} = \mathbf{Pl}(0, 5, 17, 0, 1, 0)_{2196}
\end{aligned}$$

$$\begin{aligned}
\ell_{1894} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{474580} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{474580} = \mathbf{Pl}(0, 5, 30, 0, 1, 0)_{3015} \\
\ell_{1895} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{406943} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{406943} = \mathbf{Pl}(0, 5, 27, 0, 1, 0)_{2826} \\
\ell_{1896} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{745167} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{745167} = \mathbf{Pl}(0, 5, 13, 0, 1, 0)_{1944} \\
\ell_{1897} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{136342} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{136342} = \mathbf{Pl}(0, 5, 8, 0, 1, 0)_{1629} \\
\ell_{1898} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{846636} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{846636} = \mathbf{Pl}(0, 5, 7, 0, 1, 0)_{1566} \\
\ell_{1899} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{542226} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{542226} = \mathbf{Pl}(0, 5, 2, 0, 1, 0)_{1251} \\
\ell_{1900} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{237802} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{237802} = \mathbf{Pl}(0, 5, 25, 0, 1, 0)_{2700} \\
\ell_{1901} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{508387} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{508387} = \mathbf{Pl}(0, 5, 28, 0, 1, 0)_{2889} \\
\ell_{1902} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{203997} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{203997} = \mathbf{Pl}(0, 5, 19, 0, 1, 0)_{2322} \\
\ell_{1903} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{440744} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{440744} = \mathbf{Pl}(0, 5, 22, 0, 1, 0)_{2511} \\
\ell_{1904} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{373109} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{373109} = \mathbf{Pl}(0, 5, 26, 0, 1, 0)_{2763} \\
\ell_{1905} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{812827} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{812827} = \mathbf{Pl}(0, 5, 31, 0, 1, 0)_{3078} \\
\ell_{1906} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{68683} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{68683} = \mathbf{Pl}(0, 5, 16, 0, 1, 0)_{2133} \\
\ell_{1907} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{981946} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{981946} = \mathbf{Pl}(0, 5, 21, 0, 1, 0)_{2448} \\
\ell_{1908} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1015750} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1015750} = \mathbf{Pl}(0, 5, 14, 0, 1, 0)_{2007} \\
\ell_{1909} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{880464} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{880464} = \mathbf{Pl}(0, 5, 11, 0, 1, 0)_{1818} \\
\ell_{1910} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{271625} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{271625} = \mathbf{Pl}(0, 5, 4, 0, 1, 0)_{1377} \\
\ell_{1911} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{170145} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{170145} = \mathbf{Pl}(0, 5, 1, 0, 1, 0)_{1188} \\
\ell_{1912} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{576037} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{576037} = \mathbf{Pl}(0, 5, 23, 0, 1, 0)_{2574} \\
\ell_{1913} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{339266} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{339266} = \mathbf{Pl}(0, 5, 18, 0, 1, 0)_{2259} \\
\ell_{1914} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{711347} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{711347} = \mathbf{Pl}(0, 5, 29, 0, 1, 0)_{2952}
\end{aligned}$$

$$\begin{aligned}
\ell_{1915} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1049585} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1049585} = \mathbf{Pl}(0, 5, 24, 0, 1, 0)_{2637} \\
\ell_{1916} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{102524} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{102524} = \mathbf{Pl}(0, 5, 3, 0, 1, 0)_{1314} \\
\ell_{1917} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{643694} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{643694} = \mathbf{Pl}(0, 5, 6, 0, 1, 0)_{1503} \\
\ell_{1918} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{677508} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{677508} = \mathbf{Pl}(0, 5, 9, 0, 1, 0)_{1692} \\
\ell_{1919} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{914279} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{914279} = \mathbf{Pl}(0, 5, 12, 0, 1, 0)_{1881} \\
\ell_{1920} &= \begin{bmatrix} 1 & 0 & \eta^{10} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{576064} = \begin{bmatrix} 1 & 0 & 17 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{576064} = \mathbf{Pl}(0, 17, 0, 0, 1, 0)_{1137} \\
\ell_{1921} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{34872} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{34872} = \mathbf{Pl}(0, 17, 17, 0, 1, 0)_{2208} \\
\ell_{1922} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{609868} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{609868} = \mathbf{Pl}(0, 17, 7, 0, 1, 0)_{1578} \\
\ell_{1923} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{948104} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{948104} = \mathbf{Pl}(0, 17, 22, 0, 1, 0)_{2523} \\
\ell_{1924} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{305446} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{305446} = \mathbf{Pl}(0, 17, 14, 0, 1, 0)_{2019} \\
\ell_{1925} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{779003} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{779003} = \mathbf{Pl}(0, 17, 31, 0, 1, 0)_{3090} \\
\ell_{1926} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{474564} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{474564} = \mathbf{Pl}(0, 17, 9, 0, 1, 0)_{1704} \\
\ell_{1927} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{406929} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{406929} = \mathbf{Pl}(0, 17, 24, 0, 1, 0)_{2649} \\
\ell_{1928} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{745155} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{745155} = \mathbf{Pl}(0, 17, 28, 0, 1, 0)_{2901} \\
\ell_{1929} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{136335} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{136335} = \mathbf{Pl}(0, 17, 13, 0, 1, 0)_{1956} \\
\ell_{1930} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{846655} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{846655} = \mathbf{Pl}(0, 17, 27, 0, 1, 0)_{2838} \\
\ell_{1931} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{542233} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{542233} = \mathbf{Pl}(0, 17, 10, 0, 1, 0)_{1767} \\
\ell_{1932} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{237794} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{237794} = \mathbf{Pl}(0, 17, 18, 0, 1, 0)_{2271} \\
\ell_{1933} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{508412} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{508412} = \mathbf{Pl}(0, 17, 3, 0, 1, 0)_{1326} \\
\ell_{1934} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{203994} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{203994} = \mathbf{Pl}(0, 17, 21, 0, 1, 0)_{2460} \\
\ell_{1935} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{440745} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{440745} = \mathbf{Pl}(0, 17, 4, 0, 1, 0)_{1389}
\end{aligned}$$

$$\begin{aligned}
\ell_{1936} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{373107} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{373107} = \mathbf{Pl}(0, 17, 29, 0, 1, 0)_{2964} \\
\ell_{1937} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{812807} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{812807} = \mathbf{Pl}(0, 17, 12, 0, 1, 0)_{1893} \\
\ell_{1938} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{68693} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{68693} = \mathbf{Pl}(0, 17, 26, 0, 1, 0)_{2775} \\
\ell_{1939} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{981936} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{981936} = \mathbf{Pl}(0, 17, 11, 0, 1, 0)_{1830} \\
\ell_{1940} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1015773} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1015773} = \mathbf{Pl}(0, 17, 19, 0, 1, 0)_{2334} \\
\ell_{1941} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{880466} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{880466} = \mathbf{Pl}(0, 17, 2, 0, 1, 0)_{1263} \\
\ell_{1942} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{271646} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{271646} = \mathbf{Pl}(0, 17, 20, 0, 1, 0)_{2397} \\
\ell_{1943} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{170167} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{170167} = \mathbf{Pl}(0, 17, 5, 0, 1, 0)_{1452} \\
\ell_{1944} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{576033} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{576033} = \mathbf{Pl}(0, 17, 1, 0, 1, 0)_{1200} \\
\ell_{1945} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{339275} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{339275} = \mathbf{Pl}(0, 17, 16, 0, 1, 0)_{2145} \\
\ell_{1946} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{711342} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{711342} = \mathbf{Pl}(0, 17, 6, 0, 1, 0)_{1515} \\
\ell_{1947} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1049573} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1049573} = \mathbf{Pl}(0, 17, 23, 0, 1, 0)_{2586} \\
\ell_{1948} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{102509} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{102509} = \mathbf{Pl}(0, 17, 15, 0, 1, 0)_{2082} \\
\ell_{1949} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{643700} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{643700} = \mathbf{Pl}(0, 17, 30, 0, 1, 0)_{3027} \\
\ell_{1950} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{677526} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{677526} = \mathbf{Pl}(0, 17, 8, 0, 1, 0)_{1641} \\
\ell_{1951} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{914282} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{914282} = \mathbf{Pl}(0, 17, 25, 0, 1, 0)_{2712} \\
\ell_{1952} &= \begin{bmatrix} 1 & 0 & \eta^6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{339296} = \begin{bmatrix} 1 & 0 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{339296} = \mathbf{Pl}(0, 10, 0, 0, 1, 0)_{1130} \\
\ell_{1953} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{34873} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{34873} = \mathbf{Pl}(0, 10, 10, 0, 1, 0)_{1760} \\
\ell_{1954} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{609886} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{609886} = \mathbf{Pl}(0, 10, 20, 0, 1, 0)_{2390} \\
\ell_{1955} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{948116} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{948116} = \mathbf{Pl}(0, 10, 30, 0, 1, 0)_{3020} \\
\ell_{1956} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{305455} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{305455} = \mathbf{Pl}(0, 10, 13, 0, 1, 0)_{1949}
\end{aligned}$$

$$\begin{aligned}
\ell_{1957} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{778988} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{778988} = \mathbf{Pl}(0, 10, 7, 0, 1, 0)_{1571} \\
\ell_{1958} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{474570} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{474570} = \mathbf{Pl}(0, 10, 25, 0, 1, 0)_{2705} \\
\ell_{1959} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{406941} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{406941} = \mathbf{Pl}(0, 10, 19, 0, 1, 0)_{2327} \\
\ell_{1960} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{745173} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{745173} = \mathbf{Pl}(0, 10, 26, 0, 1, 0)_{2768} \\
\ell_{1961} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{136331} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{136331} = \mathbf{Pl}(0, 10, 16, 0, 1, 0)_{2138} \\
\ell_{1962} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{846630} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{846630} = \mathbf{Pl}(0, 10, 14, 0, 1, 0)_{2012} \\
\ell_{1963} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{542217} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{542217} = \mathbf{Pl}(0, 10, 4, 0, 1, 0)_{1382} \\
\ell_{1964} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{237797} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{237797} = \mathbf{Pl}(0, 10, 23, 0, 1, 0)_{2579} \\
\ell_{1965} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{508403} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{508403} = \mathbf{Pl}(0, 10, 29, 0, 1, 0)_{2957} \\
\ell_{1966} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{203996} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{203996} = \mathbf{Pl}(0, 10, 3, 0, 1, 0)_{1319} \\
\ell_{1967} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{440740} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{440740} = \mathbf{Pl}(0, 10, 9, 0, 1, 0)_{1697} \\
\ell_{1968} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{373112} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{373112} = \mathbf{Pl}(0, 10, 17, 0, 1, 0)_{2201} \\
\ell_{1969} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{812831} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{812831} = \mathbf{Pl}(0, 10, 27, 0, 1, 0)_{2831} \\
\ell_{1970} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{68695} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{68695} = \mathbf{Pl}(0, 10, 5, 0, 1, 0)_{1445} \\
\ell_{1971} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{981933} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{981933} = \mathbf{Pl}(0, 10, 15, 0, 1, 0)_{2075} \\
\ell_{1972} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1015747} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1015747} = \mathbf{Pl}(0, 10, 28, 0, 1, 0)_{2894} \\
\ell_{1973} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{880456} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{880456} = \mathbf{Pl}(0, 10, 22, 0, 1, 0)_{2516} \\
\ell_{1974} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{271638} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{271638} = \mathbf{Pl}(0, 10, 8, 0, 1, 0)_{1634} \\
\ell_{1975} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{170162} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{170162} = \mathbf{Pl}(0, 10, 2, 0, 1, 0)_{1256} \\
\ell_{1976} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{576048} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{576048} = \mathbf{Pl}(0, 10, 11, 0, 1, 0)_{1823} \\
\ell_{1977} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{339265} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{339265} = \mathbf{Pl}(0, 10, 1, 0, 1, 0)_{1193}
\end{aligned}$$

$$\begin{aligned}
\ell_{1978} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{711355} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{711355} = \mathbf{Pl}(0, 10, 31, 0, 1, 0)_{3083} \\
\ell_{1979} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1049594} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1049594} = \mathbf{Pl}(0, 10, 21, 0, 1, 0)_{2453} \\
\ell_{1980} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{102510} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{102510} = \mathbf{Pl}(0, 10, 6, 0, 1, 0)_{1508} \\
\ell_{1981} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{643687} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{643687} = \mathbf{Pl}(0, 10, 12, 0, 1, 0)_{1886} \\
\ell_{1982} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{677506} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{677506} = \mathbf{Pl}(0, 10, 18, 0, 1, 0)_{2264} \\
\ell_{1983} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{914289} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{914289} = \mathbf{Pl}(0, 10, 24, 0, 1, 0)_{2642} \\
\ell_{1984} &= \begin{bmatrix} 1 & 0 & \eta^{22} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{711360} = \begin{bmatrix} 1 & 0 & 21 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{711360} = \mathbf{Pl}(0, 21, 0, 0, 1, 0)_{1141} \\
\ell_{1985} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{34874} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{34874} = \mathbf{Pl}(0, 21, 21, 0, 1, 0)_{2464} \\
\ell_{1986} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{609869} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{609869} = \mathbf{Pl}(0, 21, 15, 0, 1, 0)_{2086} \\
\ell_{1987} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{948117} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{948117} = \mathbf{Pl}(0, 21, 26, 0, 1, 0)_{2779} \\
\ell_{1988} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{305460} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{305460} = \mathbf{Pl}(0, 21, 30, 0, 1, 0)_{3031} \\
\ell_{1989} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{778992} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{778992} = \mathbf{Pl}(0, 21, 11, 0, 1, 0)_{1834} \\
\ell_{1990} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{474584} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{474584} = \mathbf{Pl}(0, 21, 17, 0, 1, 0)_{2212} \\
\ell_{1991} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{406921} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{406921} = \mathbf{Pl}(0, 21, 4, 0, 1, 0)_{1393} \\
\ell_{1992} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{745162} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{745162} = \mathbf{Pl}(0, 21, 25, 0, 1, 0)_{2716} \\
\ell_{1993} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{136327} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{136327} = \mathbf{Pl}(0, 21, 12, 0, 1, 0)_{1897} \\
\ell_{1994} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{846632} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{846632} = \mathbf{Pl}(0, 21, 22, 0, 1, 0)_{2527} \\
\ell_{1995} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{542236} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{542236} = \mathbf{Pl}(0, 21, 3, 0, 1, 0)_{1330} \\
\ell_{1996} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{237804} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{237804} = \mathbf{Pl}(0, 21, 7, 0, 1, 0)_{1582} \\
\ell_{1997} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{508386} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{508386} = \mathbf{Pl}(0, 21, 18, 0, 1, 0)_{2275} \\
\ell_{1998} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{203990} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{203990} = \mathbf{Pl}(0, 21, 8, 0, 1, 0)_{1645}
\end{aligned}$$

$$\begin{aligned}
\ell_{1999} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{440755} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{440755} = \mathbf{Pl}(0, 21, 29, 0, 1, 0)_{2968} \\
\ell_{2000} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{373093} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{373093} = \mathbf{Pl}(0, 21, 23, 0, 1, 0)_{2590} \\
\ell_{2001} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{812818} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{812818} = \mathbf{Pl}(0, 21, 2, 0, 1, 0)_{1267} \\
\ell_{2002} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{68689} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{68689} = \mathbf{Pl}(0, 21, 24, 0, 1, 0)_{2653} \\
\ell_{2003} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{981935} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{981935} = \mathbf{Pl}(0, 21, 13, 0, 1, 0)_{1960} \\
\ell_{2004} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1015748} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1015748} = \mathbf{Pl}(0, 21, 9, 0, 1, 0)_{1708} \\
\ell_{2005} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{880451} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{880451} = \mathbf{Pl}(0, 21, 28, 0, 1, 0)_{2905} \\
\ell_{2006} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{271630} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{271630} = \mathbf{Pl}(0, 21, 6, 0, 1, 0)_{1519} \\
\ell_{2007} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{170173} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{170173} = \mathbf{Pl}(0, 21, 19, 0, 1, 0)_{2338} \\
\ell_{2008} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{576038} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{576038} = \mathbf{Pl}(0, 21, 14, 0, 1, 0)_{2023} \\
\ell_{2009} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{339295} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{339295} = \mathbf{Pl}(0, 21, 27, 0, 1, 0)_{2842} \\
\ell_{2010} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{711329} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{711329} = \mathbf{Pl}(0, 21, 1, 0, 1, 0)_{1204} \\
\ell_{2011} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1049598} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1049598} = \mathbf{Pl}(0, 21, 20, 0, 1, 0)_{2401} \\
\ell_{2012} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{102507} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{102507} = \mathbf{Pl}(0, 21, 16, 0, 1, 0)_{2149} \\
\ell_{2013} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{643703} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{643703} = \mathbf{Pl}(0, 21, 5, 0, 1, 0)_{1456} \\
\ell_{2014} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{677531} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{677531} = \mathbf{Pl}(0, 21, 31, 0, 1, 0)_{3094} \\
\ell_{2015} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{914297} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{914297} = \mathbf{Pl}(0, 21, 10, 0, 1, 0)_{1771} \\
\ell_{2016} &= \begin{bmatrix} 1 & 0 & \eta^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1049600} = \begin{bmatrix} 1 & 0 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1049600} = \mathbf{Pl}(0, 31, 0, 0, 1, 0)_{1151} \\
\ell_{2017} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{34875} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{34875} = \mathbf{Pl}(0, 31, 31, 0, 1, 0)_{3104} \\
\ell_{2018} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{609887} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{609887} = \mathbf{Pl}(0, 31, 27, 0, 1, 0)_{2852} \\
\ell_{2019} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{948105} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{948105} = \mathbf{Pl}(0, 31, 4, 0, 1, 0)_{1403}
\end{aligned}$$

$$\begin{aligned}
\ell_{2020} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{305469} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{305469} = \mathbf{Pl}(0, 31, 19, 0, 1, 0)_{2348} \\
\ell_{2021} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{778983} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{778983} = \mathbf{Pl}(0, 31, 12, 0, 1, 0)_{1907} \\
\ell_{2022} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{474582} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{474582} = \mathbf{Pl}(0, 31, 8, 0, 1, 0)_{1655} \\
\ell_{2023} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{406917} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{406917} = \mathbf{Pl}(0, 31, 23, 0, 1, 0)_{2600} \\
\ell_{2024} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{745180} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{745180} = \mathbf{Pl}(0, 31, 3, 0, 1, 0)_{1340} \\
\ell_{2025} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{136323} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{136323} = \mathbf{Pl}(0, 31, 28, 0, 1, 0)_{2915} \\
\ell_{2026} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{846641} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{846641} = \mathbf{Pl}(0, 31, 24, 0, 1, 0)_{2663} \\
\ell_{2027} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{542220} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{542220} = \mathbf{Pl}(0, 31, 7, 0, 1, 0)_{1592} \\
\ell_{2028} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{237803} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{237803} = \mathbf{Pl}(0, 31, 16, 0, 1, 0)_{2159} \\
\ell_{2029} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{508397} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{508397} = \mathbf{Pl}(0, 31, 15, 0, 1, 0)_{2096} \\
\ell_{2030} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{203984} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{203984} = \mathbf{Pl}(0, 31, 11, 0, 1, 0)_{1844} \\
\ell_{2031} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{440766} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{440766} = \mathbf{Pl}(0, 31, 20, 0, 1, 0)_{2411} \\
\ell_{2032} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{373102} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{373102} = \mathbf{Pl}(0, 31, 6, 0, 1, 0)_{1529} \\
\ell_{2033} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{812810} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{812810} = \mathbf{Pl}(0, 31, 25, 0, 1, 0)_{2726} \\
\ell_{2034} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{68691} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{68691} = \mathbf{Pl}(0, 31, 29, 0, 1, 0)_{2978} \\
\ell_{2035} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{981938} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{981938} = \mathbf{Pl}(0, 31, 2, 0, 1, 0)_{1277} \\
\ell_{2036} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1015770} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1015770} = \mathbf{Pl}(0, 31, 21, 0, 1, 0)_{2474} \\
\ell_{2037} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{880473} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{880473} = \mathbf{Pl}(0, 31, 10, 0, 1, 0)_{1781} \\
\ell_{2038} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{271622} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{271622} = \mathbf{Pl}(0, 31, 14, 0, 1, 0)_{2033} \\
\ell_{2039} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{170168} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{170168} = \mathbf{Pl}(0, 31, 17, 0, 1, 0)_{2222} \\
\ell_{2040} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{576055} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{576055} = \mathbf{Pl}(0, 31, 5, 0, 1, 0)_{1466}
\end{aligned}$$

$$\begin{aligned}
\ell_{2041} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{339285} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{339285} = \mathbf{Pl}(0, 31, 26, 0, 1, 0)_{2789} \\
\ell_{2042} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{711348} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{711348} = \mathbf{Pl}(0, 31, 30, 0, 1, 0)_{3041} \\
\ell_{2043} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1049569} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1049569} = \mathbf{Pl}(0, 31, 1, 0, 1, 0)_{1214} \\
\ell_{2044} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{102504} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{102504} = \mathbf{Pl}(0, 31, 22, 0, 1, 0)_{2537} \\
\ell_{2045} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{643684} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{643684} = \mathbf{Pl}(0, 31, 9, 0, 1, 0)_{1718} \\
\ell_{2046} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{677519} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{677519} = \mathbf{Pl}(0, 31, 13, 0, 1, 0)_{1970} \\
\ell_{2047} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{914274} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{914274} = \mathbf{Pl}(0, 31, 18, 0, 1, 0)_{2285} \\
\ell_{2048} &= \begin{bmatrix} 1 & 0 & \eta^{18} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{102528} = \begin{bmatrix} 1 & 0 & 3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{102528} = \mathbf{Pl}(0, 3, 0, 0, 1, 0)_{1123} \\
\ell_{2049} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{34876} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{34876} = \mathbf{Pl}(0, 3, 3, 0, 1, 0)_{1312} \\
\ell_{2050} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{609870} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{609870} = \mathbf{Pl}(0, 3, 6, 0, 1, 0)_{1501} \\
\ell_{2051} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{948119} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{948119} = \mathbf{Pl}(0, 3, 5, 0, 1, 0)_{1438} \\
\ell_{2052} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{305447} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{305447} = \mathbf{Pl}(0, 3, 12, 0, 1, 0)_{1879} \\
\ell_{2053} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{778989} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{778989} = \mathbf{Pl}(0, 3, 15, 0, 1, 0)_{2068} \\
\ell_{2054} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{474585} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{474585} = \mathbf{Pl}(0, 3, 10, 0, 1, 0)_{1753} \\
\ell_{2055} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{406916} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{406916} = \mathbf{Pl}(0, 3, 9, 0, 1, 0)_{1690} \\
\ell_{2056} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{745169} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{745169} = \mathbf{Pl}(0, 3, 24, 0, 1, 0)_{2635} \\
\ell_{2057} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{136351} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{136351} = \mathbf{Pl}(0, 3, 27, 0, 1, 0)_{2824} \\
\ell_{2058} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{846644} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{846644} = \mathbf{Pl}(0, 3, 30, 0, 1, 0)_{3013} \\
\ell_{2059} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{542227} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{542227} = \mathbf{Pl}(0, 3, 29, 0, 1, 0)_{2950} \\
\ell_{2060} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{237822} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{237822} = \mathbf{Pl}(0, 3, 20, 0, 1, 0)_{2383} \\
\ell_{2061} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{508389} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{508389} = \mathbf{Pl}(0, 3, 23, 0, 1, 0)_{2572}
\end{aligned}$$

$$\begin{aligned}
\ell_{2062} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{203970} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{203970} = \mathbf{Pl}(0, 3, 18, 0, 1, 0)_{2257} \\
\ell_{2063} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{440760} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{440760} = \mathbf{Pl}(0, 3, 17, 0, 1, 0)_{2194} \\
\ell_{2064} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{373114} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{373114} = \mathbf{Pl}(0, 3, 21, 0, 1, 0)_{2446} \\
\ell_{2065} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{812808} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{812808} = \mathbf{Pl}(0, 3, 22, 0, 1, 0)_{2509} \\
\ell_{2066} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{68701} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{68701} = \mathbf{Pl}(0, 3, 19, 0, 1, 0)_{2320} \\
\ell_{2067} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{981931} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{981931} = \mathbf{Pl}(0, 3, 16, 0, 1, 0)_{2131} \\
\ell_{2068} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1015754} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1015754} = \mathbf{Pl}(0, 3, 25, 0, 1, 0)_{2698} \\
\ell_{2069} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{880469} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{880469} = \mathbf{Pl}(0, 3, 26, 0, 1, 0)_{2761} \\
\ell_{2070} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{271643} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{271643} = \mathbf{Pl}(0, 3, 31, 0, 1, 0)_{3076} \\
\ell_{2071} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{170147} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{170147} = \mathbf{Pl}(0, 3, 28, 0, 1, 0)_{2887} \\
\ell_{2072} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{576047} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{576047} = \mathbf{Pl}(0, 3, 13, 0, 1, 0)_{1942} \\
\ell_{2073} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{339270} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{339270} = \mathbf{Pl}(0, 3, 14, 0, 1, 0)_{2005} \\
\ell_{2074} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{711344} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{711344} = \mathbf{Pl}(0, 3, 11, 0, 1, 0)_{1816} \\
\ell_{2075} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1049590} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1049590} = \mathbf{Pl}(0, 3, 8, 0, 1, 0)_{1627} \\
\ell_{2076} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{102497} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{102497} = \mathbf{Pl}(0, 3, 1, 0, 1, 0)_{1186} \\
\ell_{2077} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{643698} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{643698} = \mathbf{Pl}(0, 3, 2, 0, 1, 0)_{1249} \\
\ell_{2078} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{677516} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{677516} = \mathbf{Pl}(0, 3, 7, 0, 1, 0)_{1564} \\
\ell_{2079} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{914281} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{914281} = \mathbf{Pl}(0, 3, 4, 0, 1, 0)_{1375} \\
\ell_{2080} &= \begin{bmatrix} 1 & 0 & \eta^{17} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{643712} = \begin{bmatrix} 1 & 0 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{643712} = \mathbf{Pl}(0, 19, 0, 0, 1, 0)_{1139} \\
\ell_{2081} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{34877} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{34877} = \mathbf{Pl}(0, 19, 19, 0, 1, 0)_{2336} \\
\ell_{2082} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{609884} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{609884} = \mathbf{Pl}(0, 19, 3, 0, 1, 0)_{1328}
\end{aligned}$$

$$\begin{aligned}
\ell_{2083} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{948107} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{948107} = \mathbf{Pl}(0, 19, 16, 0, 1, 0)_{2147} \\
\ell_{2084} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{305454} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{305454} = \mathbf{Pl}(0, 19, 6, 0, 1, 0)_{1517} \\
\ell_{2085} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{779002} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{779002} = \mathbf{Pl}(0, 19, 21, 0, 1, 0)_{2462} \\
\ell_{2086} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{474583} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{474583} = \mathbf{Pl}(0, 19, 5, 0, 1, 0)_{1454} \\
\ell_{2087} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{406920} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{406920} = \mathbf{Pl}(0, 19, 22, 0, 1, 0)_{2525} \\
\ell_{2088} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{745159} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{745159} = \mathbf{Pl}(0, 19, 12, 0, 1, 0)_{1895} \\
\ell_{2089} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{136347} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{136347} = \mathbf{Pl}(0, 19, 31, 0, 1, 0)_{3092} \\
\ell_{2090} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{846637} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{846637} = \mathbf{Pl}(0, 19, 15, 0, 1, 0)_{2084} \\
\ell_{2091} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{542211} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{542211} = \mathbf{Pl}(0, 19, 28, 0, 1, 0)_{2903} \\
\ell_{2092} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{237817} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{237817} = \mathbf{Pl}(0, 19, 10, 0, 1, 0)_{1769} \\
\ell_{2093} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{508394} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{508394} = \mathbf{Pl}(0, 19, 25, 0, 1, 0)_{2714} \\
\ell_{2094} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{203972} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{203972} = \mathbf{Pl}(0, 19, 9, 0, 1, 0)_{1706} \\
\ell_{2095} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{440757} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{440757} = \mathbf{Pl}(0, 19, 26, 0, 1, 0)_{2777} \\
\ell_{2096} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{373105} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{373105} = \mathbf{Pl}(0, 19, 24, 0, 1, 0)_{2651} \\
\ell_{2097} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{812816} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{812816} = \mathbf{Pl}(0, 19, 11, 0, 1, 0)_{1832} \\
\ell_{2098} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{68703} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{68703} = \mathbf{Pl}(0, 19, 27, 0, 1, 0)_{2840} \\
\ell_{2099} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{981942} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{981942} = \mathbf{Pl}(0, 19, 8, 0, 1, 0)_{1643} \\
\ell_{2100} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1015764} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1015764} = \mathbf{Pl}(0, 19, 30, 0, 1, 0)_{3029} \\
\ell_{2101} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{880463} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{880463} = \mathbf{Pl}(0, 19, 13, 0, 1, 0)_{1958} \\
\ell_{2102} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{271635} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{271635} = \mathbf{Pl}(0, 19, 29, 0, 1, 0)_{2966} \\
\ell_{2103} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{170150} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{170150} = \mathbf{Pl}(0, 19, 14, 0, 1, 0)_{2021}
\end{aligned}$$

$$\begin{aligned}
\ell_{2104} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{576062} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{576062} = \mathbf{Pl}(0, 19, 20, 0, 1, 0)_{2399} \\
\ell_{2105} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{339276} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{339276} = \mathbf{Pl}(0, 19, 7, 0, 1, 0)_{1580} \\
\ell_{2106} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{711333} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{711333} = \mathbf{Pl}(0, 19, 23, 0, 1, 0)_{2588} \\
\ell_{2107} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1049577} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1049577} = \mathbf{Pl}(0, 19, 4, 0, 1, 0)_{1391} \\
\ell_{2108} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{102498} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{102498} = \mathbf{Pl}(0, 19, 18, 0, 1, 0)_{2273} \\
\ell_{2109} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{643681} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{643681} = \mathbf{Pl}(0, 19, 1, 0, 1, 0)_{1202} \\
\ell_{2110} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{677528} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{677528} = \mathbf{Pl}(0, 19, 17, 0, 1, 0)_{2210} \\
\ell_{2111} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{914290} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{914290} = \mathbf{Pl}(0, 19, 2, 0, 1, 0)_{1265} \\
\ell_{2112} &= \begin{bmatrix} 1 & 0 & \eta^7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{677536} = \begin{bmatrix} 1 & 0 & 20 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{677536} = \mathbf{Pl}(0, 20, 0, 0, 1, 0)_{1140} \\
\ell_{2113} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{34878} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{34878} = \mathbf{Pl}(0, 20, 20, 0, 1, 0)_{2400} \\
\ell_{2114} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{609871} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{609871} = \mathbf{Pl}(0, 20, 13, 0, 1, 0)_{1959} \\
\ell_{2115} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{948106} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{948106} = \mathbf{Pl}(0, 20, 25, 0, 1, 0)_{2715} \\
\ell_{2116} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{305461} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{305461} = \mathbf{Pl}(0, 20, 26, 0, 1, 0)_{2778} \\
\ell_{2117} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{778982} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{778982} = \mathbf{Pl}(0, 20, 14, 0, 1, 0)_{2022} \\
\ell_{2118} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{474565} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{474565} = \mathbf{Pl}(0, 20, 23, 0, 1, 0)_{2589} \\
\ell_{2119} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{406940} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{406940} = \mathbf{Pl}(0, 20, 3, 0, 1, 0)_{1329} \\
\ell_{2120} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{745176} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{745176} = \mathbf{Pl}(0, 20, 17, 0, 1, 0)_{2211} \\
\ell_{2121} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{136343} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{136343} = \mathbf{Pl}(0, 20, 5, 0, 1, 0)_{1455} \\
\ell_{2122} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{846627} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{846627} = \mathbf{Pl}(0, 20, 28, 0, 1, 0)_{2904} \\
\ell_{2123} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{542230} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{542230} = \mathbf{Pl}(0, 20, 8, 0, 1, 0)_{1644} \\
\ell_{2124} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{237808} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{237808} = \mathbf{Pl}(0, 20, 11, 0, 1, 0)_{1833}
\end{aligned}$$

$$\begin{aligned}
\ell_{2125} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{508411} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{508411} = \mathbf{Pl}(0, 20, 31, 0, 1, 0)_{3093} \\
\ell_{2126} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{203982} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{203982} = \mathbf{Pl}(0, 20, 6, 0, 1, 0)_{1518} \\
\ell_{2127} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{440738} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{440738} = \mathbf{Pl}(0, 20, 18, 0, 1, 0)_{2274} \\
\ell_{2128} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{373100} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{373100} = \mathbf{Pl}(0, 20, 7, 0, 1, 0)_{1581} \\
\ell_{2129} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{812829} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{812829} = \mathbf{Pl}(0, 20, 19, 0, 1, 0)_{2337} \\
\ell_{2130} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{68697} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{68697} = \mathbf{Pl}(0, 20, 10, 0, 1, 0)_{1770} \\
\ell_{2131} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{981940} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{981940} = \mathbf{Pl}(0, 20, 30, 0, 1, 0)_{3030} \\
\ell_{2132} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1015763} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1015763} = \mathbf{Pl}(0, 20, 29, 0, 1, 0)_{2967} \\
\ell_{2133} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{880452} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{880452} = \mathbf{Pl}(0, 20, 9, 0, 1, 0)_{1707} \\
\ell_{2134} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{271627} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{271627} = \mathbf{Pl}(0, 20, 16, 0, 1, 0)_{2148} \\
\ell_{2135} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{170153} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{170153} = \mathbf{Pl}(0, 20, 4, 0, 1, 0)_{1392} \\
\ell_{2136} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{576040} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{576040} = \mathbf{Pl}(0, 20, 22, 0, 1, 0)_{2526} \\
\ell_{2137} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{339282} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{339282} = \mathbf{Pl}(0, 20, 2, 0, 1, 0)_{1266} \\
\ell_{2138} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{711359} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{711359} = \mathbf{Pl}(0, 20, 27, 0, 1, 0)_{2841} \\
\ell_{2139} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1049581} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1049581} = \mathbf{Pl}(0, 20, 15, 0, 1, 0)_{2085} \\
\ell_{2140} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{102503} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{102503} = \mathbf{Pl}(0, 20, 12, 0, 1, 0)_{1896} \\
\ell_{2141} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{643697} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{643697} = \mathbf{Pl}(0, 20, 24, 0, 1, 0)_{2652} \\
\ell_{2142} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{677505} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{677505} = \mathbf{Pl}(0, 20, 1, 0, 1, 0)_{1203} \\
\ell_{2143} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{914298} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{914298} = \mathbf{Pl}(0, 20, 21, 0, 1, 0)_{2463} \\
\ell_{2144} &= \begin{bmatrix} 1 & 0 & \eta^{16} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{914304} = \begin{bmatrix} 1 & 0 & 27 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{914304} = \mathbf{Pl}(0, 27, 0, 0, 1, 0)_{1147} \\
\ell_{2145} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{34879} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{34879} = \mathbf{Pl}(0, 27, 27, 0, 1, 0)_{2848}
\end{aligned}$$

$$\begin{aligned}
\ell_{2146} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{609885} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{609885} = \mathbf{Pl}(0, 27, 19, 0, 1, 0)_{2344} \\
\ell_{2147} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{948118} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{948118} = \mathbf{Pl}(0, 27, 8, 0, 1, 0)_{1651} \\
\ell_{2148} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{305468} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{305468} = \mathbf{Pl}(0, 27, 3, 0, 1, 0)_{1336} \\
\ell_{2149} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{778993} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{778993} = \mathbf{Pl}(0, 27, 24, 0, 1, 0)_{2659} \\
\ell_{2150} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{474571} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{474571} = \mathbf{Pl}(0, 27, 16, 0, 1, 0)_{2155} \\
\ell_{2151} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{406928} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{406928} = \mathbf{Pl}(0, 27, 11, 0, 1, 0)_{1840} \\
\ell_{2152} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{745166} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{745166} = \mathbf{Pl}(0, 27, 6, 0, 1, 0)_{1525} \\
\ell_{2153} &= \begin{bmatrix} 1 & 0 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{136339} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{136339} = \mathbf{Pl}(0, 27, 29, 0, 1, 0)_{2974} \\
\ell_{2154} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{846650} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{846650} = \mathbf{Pl}(0, 27, 21, 0, 1, 0)_{2470} \\
\ell_{2155} &= \begin{bmatrix} 1 & 0 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{542214} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{542214} = \mathbf{Pl}(0, 27, 14, 0, 1, 0)_{2029} \\
\ell_{2156} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{237815} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{237815} = \mathbf{Pl}(0, 27, 5, 0, 1, 0)_{1462} \\
\ell_{2157} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{508404} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{508404} = \mathbf{Pl}(0, 27, 30, 0, 1, 0)_{3037} \\
\ell_{2158} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{203976} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{203976} = \mathbf{Pl}(0, 27, 22, 0, 1, 0)_{2533} \\
\ell_{2159} &= \begin{bmatrix} 1 & 0 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{440751} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{440751} = \mathbf{Pl}(0, 27, 13, 0, 1, 0)_{1966} \\
\ell_{2160} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{373095} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{373095} = \mathbf{Pl}(0, 27, 12, 0, 1, 0)_{1903} \\
\ell_{2161} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{812805} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{812805} = \mathbf{Pl}(0, 27, 23, 0, 1, 0)_{2596} \\
\ell_{2162} &= \begin{bmatrix} 1 & 0 & 0 & \eta \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{68699} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{68699} = \mathbf{Pl}(0, 27, 31, 0, 1, 0)_{3100} \\
\ell_{2163} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{981929} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{981929} = \mathbf{Pl}(0, 27, 4, 0, 1, 0)_{1399} \\
\ell_{2164} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1015757} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1015757} = \mathbf{Pl}(0, 27, 15, 0, 1, 0)_{2092} \\
\ell_{2165} &= \begin{bmatrix} 1 & 0 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{880478} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{880478} = \mathbf{Pl}(0, 27, 20, 0, 1, 0)_{2407} \\
\ell_{2166} &= \begin{bmatrix} 1 & 0 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{271619} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{271619} = \mathbf{Pl}(0, 27, 28, 0, 1, 0)_{2911}
\end{aligned}$$

$$\begin{aligned}
\ell_{2167} &= \begin{bmatrix} 1 & 0 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{170156} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{170156} = \mathbf{PI}(0, 27, 7, 0, 1, 0)_{1588} \\
\ell_{2168} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{576057} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{576057} = \mathbf{PI}(0, 27, 10, 0, 1, 0)_{1777} \\
\ell_{2169} &= \begin{bmatrix} 1 & 0 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{339288} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{339288} = \mathbf{PI}(0, 27, 17, 0, 1, 0)_{2218} \\
\ell_{2170} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{711338} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{711338} = \mathbf{PI}(0, 27, 25, 0, 1, 0)_{2722} \\
\ell_{2171} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1049586} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1049586} = \mathbf{PI}(0, 27, 2, 0, 1, 0)_{1273} \\
\ell_{2172} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{102500} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{102500} = \mathbf{PI}(0, 27, 9, 0, 1, 0)_{1714} \\
\ell_{2173} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{643682} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{643682} = \mathbf{PI}(0, 27, 18, 0, 1, 0)_{2281} \\
\ell_{2174} &= \begin{bmatrix} 1 & 0 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{677525} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{677525} = \mathbf{PI}(0, 27, 26, 0, 1, 0)_{2785} \\
\ell_{2175} &= \begin{bmatrix} 1 & 0 & 0 & \eta^{16} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{914273} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{914273} = \mathbf{PI}(0, 27, 1, 0, 1, 0)_{1210} \\
\ell_{2176} &= \begin{bmatrix} 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082433} = \begin{bmatrix} 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082433} = \mathbf{PI}(0, 1, 0, 1, 0, 0)_{97} \\
\ell_{2177} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082402} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082402} = \mathbf{PI}(0, 1, 0, 1, 0, 1)_{36897} \\
\ell_{2178} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082980} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082980} = \mathbf{PI}(0, 18, 0, 18, 0, 1)_{37985} \\
\ell_{2179} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083320} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083320} = \mathbf{PI}(0, 28, 0, 28, 0, 1)_{38625} \\
\ell_{2180} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082674} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082674} = \mathbf{PI}(0, 9, 0, 9, 0, 1)_{37409} \\
\ell_{2181} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083150} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083150} = \mathbf{PI}(0, 23, 0, 23, 0, 1)_{38305} \\
\ell_{2182} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082844} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082844} = \mathbf{PI}(0, 14, 0, 14, 0, 1)_{37729} \\
\ell_{2183} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082776} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082776} = \mathbf{PI}(0, 12, 0, 12, 0, 1)_{37601} \\
\ell_{2184} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083116} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083116} = \mathbf{PI}(0, 22, 0, 22, 0, 1)_{38241} \\
\ell_{2185} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082504} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082504} = \mathbf{PI}(0, 4, 0, 4, 0, 1)_{37089} \\
\ell_{2186} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083218} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083218} = \mathbf{PI}(0, 25, 0, 25, 0, 1)_{38433} \\
\ell_{2187} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082912} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082912} = \mathbf{PI}(0, 16, 0, 16, 0, 1)_{37857}
\end{aligned}$$

$$\begin{aligned}
\ell_{2188} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082606} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082606} = \mathbf{Pl}(0, 7, 0, 7, 0, 1)_{37281} \\
\ell_{2189} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082878} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082878} = \mathbf{Pl}(0, 15, 0, 15, 0, 1)_{37793} \\
\ell_{2190} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082572} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082572} = \mathbf{Pl}(0, 6, 0, 6, 0, 1)_{37217} \\
\ell_{2191} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082810} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082810} = \mathbf{Pl}(0, 13, 0, 13, 0, 1)_{37665} \\
\ell_{2192} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082742} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082742} = \mathbf{Pl}(0, 11, 0, 11, 0, 1)_{37537} \\
\ell_{2193} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083184} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083184} = \mathbf{Pl}(0, 24, 0, 24, 0, 1)_{38369} \\
\ell_{2194} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082436} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082436} = \mathbf{Pl}(0, 2, 0, 2, 0, 1)_{36961} \\
\ell_{2195} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083354} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083354} = \mathbf{Pl}(0, 29, 0, 29, 0, 1)_{38689} \\
\ell_{2196} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083388} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083388} = \mathbf{Pl}(0, 30, 0, 30, 0, 1)_{38753} \\
\ell_{2197} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083252} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083252} = \mathbf{Pl}(0, 26, 0, 26, 0, 1)_{38497} \\
\ell_{2198} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082640} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082640} = \mathbf{Pl}(0, 8, 0, 8, 0, 1)_{37345} \\
\ell_{2199} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082538} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082538} = \mathbf{Pl}(0, 5, 0, 5, 0, 1)_{37153} \\
\ell_{2200} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082946} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082946} = \mathbf{Pl}(0, 17, 0, 17, 0, 1)_{37921} \\
\ell_{2201} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082708} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082708} = \mathbf{Pl}(0, 10, 0, 10, 0, 1)_{37473} \\
\ell_{2202} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083082} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083082} = \mathbf{Pl}(0, 21, 0, 21, 0, 1)_{38177} \\
\ell_{2203} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083422} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083422} = \mathbf{Pl}(0, 31, 0, 31, 0, 1)_{38817} \\
\ell_{2204} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082470} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082470} = \mathbf{Pl}(0, 3, 0, 3, 0, 1)_{37025} \\
\ell_{2205} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083014} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083014} = \mathbf{Pl}(0, 19, 0, 19, 0, 1)_{38049} \\
\ell_{2206} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083048} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083048} = \mathbf{Pl}(0, 20, 0, 20, 0, 1)_{38113} \\
\ell_{2207} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083286} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083286} = \mathbf{Pl}(0, 27, 0, 27, 0, 1)_{38561} \\
\ell_{2208} &= \begin{bmatrix} 0 & 1 & \eta^{30} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082994} = \begin{bmatrix} 0 & 1 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082994} = \mathbf{Pl}(0, 18, 0, 1, 0, 0)_{114}
\end{aligned}$$

$$\begin{aligned}
\ell_{2209} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082403} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082403} = \mathbf{Pl}(0, 1, 0, 2, 0, 1)_{36960} \\
\ell_{2210} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082963} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082963} = \mathbf{Pl}(0, 18, 0, 1, 0, 1)_{36914} \\
\ell_{2211} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083321} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083321} = \mathbf{Pl}(0, 28, 0, 29, 0, 1)_{38688} \\
\ell_{2212} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082683} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082683} = \mathbf{Pl}(0, 9, 0, 18, 0, 1)_{37976} \\
\ell_{2213} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083138} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083138} = \mathbf{Pl}(0, 23, 0, 11, 0, 1)_{37549} \\
\ell_{2214} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082858} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082858} = \mathbf{Pl}(0, 14, 0, 28, 0, 1)_{38611} \\
\ell_{2215} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082788} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082788} = \mathbf{Pl}(0, 12, 0, 24, 0, 1)_{38357} \\
\ell_{2216} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083103} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083103} = \mathbf{Pl}(0, 22, 0, 9, 0, 1)_{37422} \\
\ell_{2217} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082508} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082508} = \mathbf{Pl}(0, 4, 0, 8, 0, 1)_{37341} \\
\ell_{2218} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083216} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083216} = \mathbf{Pl}(0, 25, 0, 23, 0, 1)_{38307} \\
\ell_{2219} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082901} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082901} = \mathbf{Pl}(0, 16, 0, 5, 0, 1)_{37164} \\
\ell_{2220} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082613} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082613} = \mathbf{Pl}(0, 7, 0, 14, 0, 1)_{37722} \\
\ell_{2221} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082893} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082893} = \mathbf{Pl}(0, 15, 0, 30, 0, 1)_{38738} \\
\ell_{2222} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082578} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082578} = \mathbf{Pl}(0, 6, 0, 12, 0, 1)_{37595} \\
\ell_{2223} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082823} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082823} = \mathbf{Pl}(0, 13, 0, 26, 0, 1)_{38484} \\
\ell_{2224} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082753} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082753} = \mathbf{Pl}(0, 11, 0, 22, 0, 1)_{38230} \\
\ell_{2225} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083181} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083181} = \mathbf{Pl}(0, 24, 0, 21, 0, 1)_{38180} \\
\ell_{2226} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082438} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082438} = \mathbf{Pl}(0, 2, 0, 4, 0, 1)_{37087} \\
\ell_{2227} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083356} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083356} = \mathbf{Pl}(0, 29, 0, 31, 0, 1)_{38815} \\
\ell_{2228} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083383} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083383} = \mathbf{Pl}(0, 30, 0, 25, 0, 1)_{38438} \\
\ell_{2229} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083243} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083243} = \mathbf{Pl}(0, 26, 0, 17, 0, 1)_{37930}
\end{aligned}$$

$$\begin{aligned}
\ell_{2230} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082648} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082648} = \mathbf{Pl}(0, 8, 0, 16, 0, 1)_{37849} \\
\ell_{2231} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082543} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082543} = \mathbf{Pl}(0, 5, 0, 10, 0, 1)_{37468} \\
\ell_{2232} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082936} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082936} = \mathbf{Pl}(0, 17, 0, 7, 0, 1)_{37291} \\
\ell_{2233} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082718} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082718} = \mathbf{Pl}(0, 10, 0, 20, 0, 1)_{38103} \\
\ell_{2234} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083076} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083076} = \mathbf{Pl}(0, 21, 0, 15, 0, 1)_{37799} \\
\ell_{2235} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083418} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083418} = \mathbf{Pl}(0, 31, 0, 27, 0, 1)_{38565} \\
\ell_{2236} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082473} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082473} = \mathbf{Pl}(0, 3, 0, 6, 0, 1)_{37214} \\
\ell_{2237} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082998} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082998} = \mathbf{Pl}(0, 19, 0, 3, 0, 1)_{37041} \\
\ell_{2238} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083041} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083041} = \mathbf{Pl}(0, 20, 0, 13, 0, 1)_{37672} \\
\ell_{2239} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083278} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083278} = \mathbf{Pl}(0, 27, 0, 19, 0, 1)_{38057} \\
\ell_{2240} &= \begin{bmatrix} 0 & 1 & \eta^{13} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083324} = \begin{bmatrix} 0 & 1 & 28 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083324} = \mathbf{Pl}(0, 28, 0, 1, 0, 0)_{124} \\
\ell_{2241} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082404} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082404} = \mathbf{Pl}(0, 1, 0, 3, 0, 1)_{37023} \\
\ell_{2242} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082981} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082981} = \mathbf{Pl}(0, 18, 0, 19, 0, 1)_{38048} \\
\ell_{2243} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083293} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083293} = \mathbf{Pl}(0, 28, 0, 1, 0, 1)_{36924} \\
\ell_{2244} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082692} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082692} = \mathbf{Pl}(0, 9, 0, 27, 0, 1)_{38543} \\
\ell_{2245} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083155} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083155} = \mathbf{Pl}(0, 23, 0, 28, 0, 1)_{38620} \\
\ell_{2246} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082848} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082848} = \mathbf{Pl}(0, 14, 0, 18, 0, 1)_{37981} \\
\ell_{2247} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082784} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082784} = \mathbf{Pl}(0, 12, 0, 20, 0, 1)_{38105} \\
\ell_{2248} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083125} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083125} = \mathbf{Pl}(0, 22, 0, 31, 0, 1)_{38808} \\
\ell_{2249} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082512} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082512} = \mathbf{Pl}(0, 4, 0, 12, 0, 1)_{37593} \\
\ell_{2250} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083207} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083207} = \mathbf{Pl}(0, 25, 0, 14, 0, 1)_{37740}
\end{aligned}$$

$$\begin{aligned}
\ell_{2251} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082917} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082917} = \mathbf{Pl}(0, 16, 0, 21, 0, 1)_{38172} \\
\ell_{2252} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082608} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082608} = \mathbf{Pl}(0, 7, 0, 9, 0, 1)_{37407} \\
\ell_{2253} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082880} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082880} = \mathbf{Pl}(0, 15, 0, 17, 0, 1)_{37919} \\
\ell_{2254} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082576} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082576} = \mathbf{Pl}(0, 6, 0, 10, 0, 1)_{37469} \\
\ell_{2255} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082820} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082820} = \mathbf{Pl}(0, 13, 0, 23, 0, 1)_{38295} \\
\ell_{2256} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082760} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082760} = \mathbf{Pl}(0, 11, 0, 29, 0, 1)_{38671} \\
\ell_{2257} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083173} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083173} = \mathbf{Pl}(0, 24, 0, 13, 0, 1)_{37676} \\
\ell_{2258} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082440} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082440} = \mathbf{Pl}(0, 2, 0, 6, 0, 1)_{37213} \\
\ell_{2259} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083327} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083327} = \mathbf{Pl}(0, 29, 0, 2, 0, 1)_{36988} \\
\ell_{2260} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083365} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083365} = \mathbf{Pl}(0, 30, 0, 7, 0, 1)_{37304} \\
\ell_{2261} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083237} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083237} = \mathbf{Pl}(0, 26, 0, 11, 0, 1)_{37552} \\
\ell_{2262} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082656} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082656} = \mathbf{Pl}(0, 8, 0, 24, 0, 1)_{38353} \\
\ell_{2263} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082548} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082548} = \mathbf{Pl}(0, 5, 0, 15, 0, 1)_{37783} \\
\ell_{2264} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082951} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082951} = \mathbf{Pl}(0, 17, 0, 22, 0, 1)_{38236} \\
\ell_{2265} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082728} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082728} = \mathbf{Pl}(0, 10, 0, 30, 0, 1)_{38733} \\
\ell_{2266} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083087} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083087} = \mathbf{Pl}(0, 21, 0, 26, 0, 1)_{38492} \\
\ell_{2267} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083395} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083395} = \mathbf{Pl}(0, 31, 0, 4, 0, 1)_{37116} \\
\ell_{2268} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082472} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082472} = \mathbf{Pl}(0, 3, 0, 5, 0, 1)_{37151} \\
\ell_{2269} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083011} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083011} = \mathbf{Pl}(0, 19, 0, 16, 0, 1)_{37860} \\
\ell_{2270} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083053} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083053} = \mathbf{Pl}(0, 20, 0, 25, 0, 1)_{38428} \\
\ell_{2271} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083267} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083267} = \mathbf{Pl}(0, 27, 0, 8, 0, 1)_{37364}
\end{aligned}$$

$$\begin{aligned}
\ell_{2272} &= \begin{bmatrix} 0 & 1 & \eta^{29} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082697} = \begin{bmatrix} 0 & 1 & 9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082697} = \mathbf{Pl}(0, 9, 0, 1, 0, 0)_{105} \\
\ell_{2273} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082405} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082405} = \mathbf{Pl}(0, 1, 0, 4, 0, 1)_{37086} \\
\ell_{2274} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082964} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082964} = \mathbf{Pl}(0, 18, 0, 2, 0, 1)_{36977} \\
\ell_{2275} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083323} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083323} = \mathbf{Pl}(0, 28, 0, 31, 0, 1)_{38814} \\
\ell_{2276} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082666} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082666} = \mathbf{Pl}(0, 9, 0, 1, 0, 1)_{36905} \\
\ell_{2277} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083149} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083149} = \mathbf{Pl}(0, 23, 0, 22, 0, 1)_{38242} \\
\ell_{2278} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082859} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082859} = \mathbf{Pl}(0, 14, 0, 29, 0, 1)_{38674} \\
\ell_{2279} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082785} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082785} = \mathbf{Pl}(0, 12, 0, 21, 0, 1)_{38168} \\
\ell_{2280} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083112} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083112} = \mathbf{Pl}(0, 22, 0, 18, 0, 1)_{37989} \\
\ell_{2281} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082516} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082516} = \mathbf{Pl}(0, 4, 0, 16, 0, 1)_{37845} \\
\ell_{2282} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083204} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083204} = \mathbf{Pl}(0, 25, 0, 11, 0, 1)_{37551} \\
\ell_{2283} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082906} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082906} = \mathbf{Pl}(0, 16, 0, 10, 0, 1)_{37479} \\
\ell_{2284} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082627} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082627} = \mathbf{Pl}(0, 7, 0, 28, 0, 1)_{38604} \\
\ell_{2285} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082888} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082888} = \mathbf{Pl}(0, 15, 0, 25, 0, 1)_{38423} \\
\ell_{2286} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082590} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082590} = \mathbf{Pl}(0, 6, 0, 24, 0, 1)_{38351} \\
\ell_{2287} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082814} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082814} = \mathbf{Pl}(0, 13, 0, 17, 0, 1)_{37917} \\
\ell_{2288} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082740} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082740} = \mathbf{Pl}(0, 11, 0, 9, 0, 1)_{37411} \\
\ell_{2289} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083175} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083175} = \mathbf{Pl}(0, 24, 0, 15, 0, 1)_{37802} \\
\ell_{2290} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082442} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082442} = \mathbf{Pl}(0, 2, 0, 8, 0, 1)_{37339} \\
\ell_{2291} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083352} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083352} = \mathbf{Pl}(0, 29, 0, 27, 0, 1)_{38563} \\
\ell_{2292} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083381} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083381} = \mathbf{Pl}(0, 30, 0, 23, 0, 1)_{38312}
\end{aligned}$$

$$\begin{aligned}
\ell_{2293} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083233} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083233} = \mathbf{Pl}(0, 26, 0, 7, 0, 1)_{37300} \\
\ell_{2294} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082637} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082637} = \mathbf{Pl}(0, 8, 0, 5, 0, 1)_{37156} \\
\ell_{2295} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082553} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082553} = \mathbf{Pl}(0, 5, 0, 20, 0, 1)_{38098} \\
\ell_{2296} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082943} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082943} = \mathbf{Pl}(0, 17, 0, 14, 0, 1)_{37732} \\
\ell_{2297} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082711} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082711} = \mathbf{Pl}(0, 10, 0, 13, 0, 1)_{37662} \\
\ell_{2298} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083091} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083091} = \mathbf{Pl}(0, 21, 0, 30, 0, 1)_{38744} \\
\ell_{2299} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083410} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083410} = \mathbf{Pl}(0, 31, 0, 19, 0, 1)_{38061} \\
\ell_{2300} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082479} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082479} = \mathbf{Pl}(0, 3, 0, 12, 0, 1)_{37592} \\
\ell_{2301} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083001} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083001} = \mathbf{Pl}(0, 19, 0, 6, 0, 1)_{37230} \\
\ell_{2302} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083054} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083054} = \mathbf{Pl}(0, 20, 0, 26, 0, 1)_{38491} \\
\ell_{2303} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083262} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083262} = \mathbf{Pl}(0, 27, 0, 3, 0, 1)_{37049} \\
\ell_{2304} &= \begin{bmatrix} 0 & 1 & \eta^{26} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083159} = \begin{bmatrix} 0 & 1 & 23 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083159} = \mathbf{Pl}(0, 23, 0, 1, 0, 0)_{119} \\
\ell_{2305} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082406} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082406} = \mathbf{Pl}(0, 1, 0, 5, 0, 1)_{37149} \\
\ell_{2306} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082978} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082978} = \mathbf{Pl}(0, 18, 0, 16, 0, 1)_{37859} \\
\ell_{2307} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083295} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083295} = \mathbf{Pl}(0, 28, 0, 3, 0, 1)_{37050} \\
\ell_{2308} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082673} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082673} = \mathbf{Pl}(0, 9, 0, 8, 0, 1)_{37346} \\
\ell_{2309} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083128} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083128} = \mathbf{Pl}(0, 23, 0, 1, 0, 1)_{36919} \\
\ell_{2310} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082849} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082849} = \mathbf{Pl}(0, 14, 0, 19, 0, 1)_{38044} \\
\ell_{2311} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082789} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082789} = \mathbf{Pl}(0, 12, 0, 25, 0, 1)_{38420} \\
\ell_{2312} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083098} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083098} = \mathbf{Pl}(0, 22, 0, 4, 0, 1)_{37107} \\
\ell_{2313} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082520} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082520} = \mathbf{Pl}(0, 4, 0, 20, 0, 1)_{38097}
\end{aligned}$$

$$\begin{aligned}
\ell_{2314} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083211} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083211} = \mathbf{Pl}(0, 25, 0, 18, 0, 1)_{37992} \\
\ell_{2315} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082922} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082922} = \mathbf{Pl}(0, 16, 0, 26, 0, 1)_{38487} \\
\ell_{2316} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082626} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082626} = \mathbf{Pl}(0, 7, 0, 27, 0, 1)_{38541} \\
\ell_{2317} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082885} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082885} = \mathbf{Pl}(0, 15, 0, 22, 0, 1)_{38234} \\
\ell_{2318} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082596} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082596} = \mathbf{Pl}(0, 6, 0, 30, 0, 1)_{38729} \\
\ell_{2319} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082825} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082825} = \mathbf{Pl}(0, 13, 0, 28, 0, 1)_{38610} \\
\ell_{2320} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082733} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082733} = \mathbf{Pl}(0, 11, 0, 2, 0, 1)_{36970} \\
\ell_{2321} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083183} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083183} = \mathbf{Pl}(0, 24, 0, 23, 0, 1)_{38306} \\
\ell_{2322} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082444} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082444} = \mathbf{Pl}(0, 2, 0, 10, 0, 1)_{37465} \\
\ell_{2323} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083331} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083331} = \mathbf{Pl}(0, 29, 0, 6, 0, 1)_{37240} \\
\ell_{2324} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083367} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083367} = \mathbf{Pl}(0, 30, 0, 9, 0, 1)_{37430} \\
\ell_{2325} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083255} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083255} = \mathbf{Pl}(0, 26, 0, 29, 0, 1)_{38686} \\
\ell_{2326} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082645} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082645} = \mathbf{Pl}(0, 8, 0, 13, 0, 1)_{37660} \\
\ell_{2327} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082550} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082550} = \mathbf{Pl}(0, 5, 0, 17, 0, 1)_{37909} \\
\ell_{2328} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082960} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082960} = \mathbf{Pl}(0, 17, 0, 31, 0, 1)_{38803} \\
\ell_{2329} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082705} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082705} = \mathbf{Pl}(0, 10, 0, 7, 0, 1)_{37284} \\
\ell_{2330} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083072} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083072} = \mathbf{Pl}(0, 21, 0, 11, 0, 1)_{37547} \\
\ell_{2331} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083403} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083403} = \mathbf{Pl}(0, 31, 0, 12, 0, 1)_{37620} \\
\ell_{2332} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082482} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082482} = \mathbf{Pl}(0, 3, 0, 15, 0, 1)_{37781} \\
\ell_{2333} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083016} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083016} = \mathbf{Pl}(0, 19, 0, 21, 0, 1)_{38175} \\
\ell_{2334} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083042} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083042} = \mathbf{Pl}(0, 20, 0, 14, 0, 1)_{37735}
\end{aligned}$$

$$\begin{aligned}
\ell_{2335} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083283} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083283} = \mathbf{Pl}(0, 27, 0, 24, 0, 1)_{38372} \\
\ell_{2336} &= \begin{bmatrix} 0 & 1 & \eta^{12} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082862} = \begin{bmatrix} 0 & 1 & 14 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082862} = \mathbf{Pl}(0, 14, 0, 1, 0, 0)_{110} \\
\ell_{2337} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082407} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082407} = \mathbf{Pl}(0, 1, 0, 6, 0, 1)_{37212} \\
\ell_{2338} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082965} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082965} = \mathbf{Pl}(0, 18, 0, 3, 0, 1)_{37040} \\
\ell_{2339} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083294} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083294} = \mathbf{Pl}(0, 28, 0, 2, 0, 1)_{36987} \\
\ell_{2340} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082684} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082684} = \mathbf{Pl}(0, 9, 0, 19, 0, 1)_{38039} \\
\ell_{2341} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083156} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083156} = \mathbf{Pl}(0, 23, 0, 29, 0, 1)_{38683} \\
\ell_{2342} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082831} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082831} = \mathbf{Pl}(0, 14, 0, 1, 0, 1)_{36910} \\
\ell_{2343} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082777} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082777} = \mathbf{Pl}(0, 12, 0, 13, 0, 1)_{37664} \\
\ell_{2344} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083121} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083121} = \mathbf{Pl}(0, 22, 0, 27, 0, 1)_{38556} \\
\ell_{2345} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082524} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082524} = \mathbf{Pl}(0, 4, 0, 24, 0, 1)_{38349} \\
\ell_{2346} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083221} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083221} = \mathbf{Pl}(0, 25, 0, 28, 0, 1)_{38622} \\
\ell_{2347} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082911} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082911} = \mathbf{Pl}(0, 16, 0, 15, 0, 1)_{37794} \\
\ell_{2348} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082617} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082617} = \mathbf{Pl}(0, 7, 0, 18, 0, 1)_{37974} \\
\ell_{2349} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082870} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082870} = \mathbf{Pl}(0, 15, 0, 7, 0, 1)_{37289} \\
\ell_{2350} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082586} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082586} = \mathbf{Pl}(0, 6, 0, 20, 0, 1)_{38099} \\
\ell_{2351} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082808} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082808} = \mathbf{Pl}(0, 13, 0, 11, 0, 1)_{37539} \\
\ell_{2352} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082762} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082762} = \mathbf{Pl}(0, 11, 0, 31, 0, 1)_{38797} \\
\ell_{2353} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083186} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083186} = \mathbf{Pl}(0, 24, 0, 26, 0, 1)_{38495} \\
\ell_{2354} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082446} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082446} = \mathbf{Pl}(0, 2, 0, 12, 0, 1)_{37591} \\
\ell_{2355} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083329} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083329} = \mathbf{Pl}(0, 29, 0, 4, 0, 1)_{37114}
\end{aligned}$$

$$\begin{aligned}
\ell_{2356} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083372} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083372} = \mathbf{Pl}(0, 30, 0, 14, 0, 1)_{37745} \\
\ell_{2357} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083248} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083248} = \mathbf{Pl}(0, 26, 0, 22, 0, 1)_{38245} \\
\ell_{2358} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082653} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082653} = \mathbf{Pl}(0, 8, 0, 21, 0, 1)_{38164} \\
\ell_{2359} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082563} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082563} = \mathbf{Pl}(0, 5, 0, 30, 0, 1)_{38728} \\
\ell_{2360} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082938} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082938} = \mathbf{Pl}(0, 17, 0, 9, 0, 1)_{37417} \\
\ell_{2361} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082723} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082723} = \mathbf{Pl}(0, 10, 0, 25, 0, 1)_{38418} \\
\ell_{2362} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083078} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083078} = \mathbf{Pl}(0, 21, 0, 17, 0, 1)_{37925} \\
\ell_{2363} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083399} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083399} = \mathbf{Pl}(0, 31, 0, 8, 0, 1)_{37368} \\
\ell_{2364} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082477} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082477} = \mathbf{Pl}(0, 3, 0, 10, 0, 1)_{37466} \\
\ell_{2365} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083000} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083000} = \mathbf{Pl}(0, 19, 0, 5, 0, 1)_{37167} \\
\ell_{2366} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083051} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083051} = \mathbf{Pl}(0, 20, 0, 23, 0, 1)_{38302} \\
\ell_{2367} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083275} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083275} = \mathbf{Pl}(0, 27, 0, 16, 0, 1)_{37868} \\
\ell_{2368} &= \begin{bmatrix} 0 & 1 & \eta^{20} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082796} = \begin{bmatrix} 0 & 1 & 12 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082796} = \mathbf{Pl}(0, 12, 0, 1, 0, 0)_{108} \\
\ell_{2369} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082408} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082408} = \mathbf{Pl}(0, 1, 0, 7, 0, 1)_{37275} \\
\ell_{2370} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082979} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082979} = \mathbf{Pl}(0, 18, 0, 17, 0, 1)_{37922} \\
\ell_{2371} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083322} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083322} = \mathbf{Pl}(0, 28, 0, 30, 0, 1)_{38751} \\
\ell_{2372} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082691} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082691} = \mathbf{Pl}(0, 9, 0, 26, 0, 1)_{38480} \\
\ell_{2373} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083137} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083137} = \mathbf{Pl}(0, 23, 0, 10, 0, 1)_{37486} \\
\ell_{2374} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082845} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082845} = \mathbf{Pl}(0, 14, 0, 15, 0, 1)_{37792} \\
\ell_{2375} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082765} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082765} = \mathbf{Pl}(0, 12, 0, 1, 0, 1)_{36908} \\
\ell_{2376} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083107} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083107} = \mathbf{Pl}(0, 22, 0, 13, 0, 1)_{37674}
\end{aligned}$$

$$\begin{aligned}
\ell_{2377} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082528} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082528} = \mathbf{Pl}(0, 4, 0, 28, 0, 1)_{38601} \\
\ell_{2378} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083198} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083198} = \mathbf{Pl}(0, 25, 0, 5, 0, 1)_{37173} \\
\ell_{2379} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082927} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082927} = \mathbf{Pl}(0, 16, 0, 31, 0, 1)_{38802} \\
\ell_{2380} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082620} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082620} = \mathbf{Pl}(0, 7, 0, 21, 0, 1)_{38163} \\
\ell_{2381} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082871} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082871} = \mathbf{Pl}(0, 15, 0, 8, 0, 1)_{37352} \\
\ell_{2382} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082584} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082584} = \mathbf{Pl}(0, 6, 0, 18, 0, 1)_{37973} \\
\ell_{2383} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082803} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082803} = \mathbf{Pl}(0, 13, 0, 6, 0, 1)_{37224} \\
\ell_{2384} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082751} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082751} = \mathbf{Pl}(0, 11, 0, 20, 0, 1)_{38104} \\
\ell_{2385} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083162} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083162} = \mathbf{Pl}(0, 24, 0, 2, 0, 1)_{36983} \\
\ell_{2386} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082448} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082448} = \mathbf{Pl}(0, 2, 0, 14, 0, 1)_{37717} \\
\ell_{2387} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083350} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083350} = \mathbf{Pl}(0, 29, 0, 25, 0, 1)_{38437} \\
\ell_{2388} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083374} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083374} = \mathbf{Pl}(0, 30, 0, 16, 0, 1)_{37871} \\
\ell_{2389} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083238} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083238} = \mathbf{Pl}(0, 26, 0, 12, 0, 1)_{37615} \\
\ell_{2390} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082661} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082661} = \mathbf{Pl}(0, 8, 0, 29, 0, 1)_{38668} \\
\ell_{2391} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082560} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082560} = \mathbf{Pl}(0, 5, 0, 27, 0, 1)_{38539} \\
\ell_{2392} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082953} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082953} = \mathbf{Pl}(0, 17, 0, 24, 0, 1)_{38362} \\
\ell_{2393} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082717} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082717} = \mathbf{Pl}(0, 10, 0, 19, 0, 1)_{38040} \\
\ell_{2394} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083065} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083065} = \mathbf{Pl}(0, 21, 0, 4, 0, 1)_{37106} \\
\ell_{2395} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083414} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083414} = \mathbf{Pl}(0, 31, 0, 23, 0, 1)_{38313} \\
\ell_{2396} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082476} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082476} = \mathbf{Pl}(0, 3, 0, 9, 0, 1)_{37403} \\
\ell_{2397} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083017} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083017} = \mathbf{Pl}(0, 19, 0, 22, 0, 1)_{38238}
\end{aligned}$$

$$\begin{aligned}
\ell_{2398} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083031} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083031} = \mathbf{Pl}(0, 20, 0, 3, 0, 1)_{37042} \\
\ell_{2399} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083270} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083270} = \mathbf{Pl}(0, 27, 0, 11, 0, 1)_{37553} \\
\ell_{2400} &= \begin{bmatrix} 0 & 1 & \eta^{28} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083126} = \begin{bmatrix} 0 & 1 & 22 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083126} = \mathbf{Pl}(0, 22, 0, 1, 0, 0)_{118} \\
\ell_{2401} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082409} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082409} = \mathbf{Pl}(0, 1, 0, 8, 0, 1)_{37338} \\
\ell_{2402} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082966} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082966} = \mathbf{Pl}(0, 18, 0, 4, 0, 1)_{37103} \\
\ell_{2403} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083319} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083319} = \mathbf{Pl}(0, 28, 0, 27, 0, 1)_{38562} \\
\ell_{2404} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082667} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082667} = \mathbf{Pl}(0, 9, 0, 2, 0, 1)_{36968} \\
\ell_{2405} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083136} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083136} = \mathbf{Pl}(0, 23, 0, 9, 0, 1)_{37423} \\
\ell_{2406} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082861} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082861} = \mathbf{Pl}(0, 14, 0, 31, 0, 1)_{38800} \\
\ell_{2407} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082779} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082779} = \mathbf{Pl}(0, 12, 0, 15, 0, 1)_{37790} \\
\ell_{2408} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083095} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083095} = \mathbf{Pl}(0, 22, 0, 1, 0, 1)_{36918} \\
\ell_{2409} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082505} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082505} = \mathbf{Pl}(0, 4, 0, 5, 0, 1)_{37152} \\
\ell_{2410} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083215} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083215} = \mathbf{Pl}(0, 25, 0, 22, 0, 1)_{38244} \\
\ell_{2411} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082916} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082916} = \mathbf{Pl}(0, 16, 0, 20, 0, 1)_{38109} \\
\ell_{2412} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082628} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082628} = \mathbf{Pl}(0, 7, 0, 29, 0, 1)_{38667} \\
\ell_{2413} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082886} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082886} = \mathbf{Pl}(0, 15, 0, 23, 0, 1)_{38297} \\
\ell_{2414} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082587} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082587} = \mathbf{Pl}(0, 6, 0, 21, 0, 1)_{38162} \\
\ell_{2415} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082804} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082804} = \mathbf{Pl}(0, 13, 0, 7, 0, 1)_{37287} \\
\ell_{2416} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082749} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082749} = \mathbf{Pl}(0, 11, 0, 18, 0, 1)_{37978} \\
\ell_{2417} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083190} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083190} = \mathbf{Pl}(0, 24, 0, 30, 0, 1)_{38747} \\
\ell_{2418} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082450} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082450} = \mathbf{Pl}(0, 2, 0, 16, 0, 1)_{37843}
\end{aligned}$$

$$\begin{aligned}
\ell_{2419} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083344} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083344} = \mathbf{Pl}(0, 29, 0, 19, 0, 1)_{38059} \\
\ell_{2420} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083369} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083369} = \mathbf{Pl}(0, 30, 0, 11, 0, 1)_{37556} \\
\ell_{2421} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083240} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083240} = \mathbf{Pl}(0, 26, 0, 14, 0, 1)_{37741} \\
\ell_{2422} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082642} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082642} = \mathbf{Pl}(0, 8, 0, 10, 0, 1)_{37471} \\
\ell_{2423} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082546} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082546} = \mathbf{Pl}(0, 5, 0, 13, 0, 1)_{37657} \\
\ell_{2424} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082957} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082957} = \mathbf{Pl}(0, 17, 0, 28, 0, 1)_{38614} \\
\ell_{2425} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082724} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082724} = \mathbf{Pl}(0, 10, 0, 26, 0, 1)_{38481} \\
\ell_{2426} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083086} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083086} = \mathbf{Pl}(0, 21, 0, 25, 0, 1)_{38429} \\
\ell_{2427} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083394} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083394} = \mathbf{Pl}(0, 31, 0, 3, 0, 1)_{37053} \\
\ell_{2428} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082491} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082491} = \mathbf{Pl}(0, 3, 0, 24, 0, 1)_{38348} \\
\ell_{2429} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083007} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083007} = \mathbf{Pl}(0, 19, 0, 12, 0, 1)_{37608} \\
\ell_{2430} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083045} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083045} = \mathbf{Pl}(0, 20, 0, 17, 0, 1)_{37924} \\
\ell_{2431} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083265} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083265} = \mathbf{Pl}(0, 27, 0, 6, 0, 1)_{37238} \\
\ell_{2432} &= \begin{bmatrix} 0 & 1 & \eta^2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082532} = \begin{bmatrix} 0 & 1 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082532} = \mathbf{Pl}(0, 4, 0, 1, 0, 0)_{100} \\
\ell_{2433} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082410} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082410} = \mathbf{Pl}(0, 1, 0, 9, 0, 1)_{37401} \\
\ell_{2434} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082984} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082984} = \mathbf{Pl}(0, 18, 0, 22, 0, 1)_{38237} \\
\ell_{2435} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083299} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083299} = \mathbf{Pl}(0, 28, 0, 7, 0, 1)_{37302} \\
\ell_{2436} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082676} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082676} = \mathbf{Pl}(0, 9, 0, 11, 0, 1)_{37535} \\
\ell_{2437} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083157} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083157} = \mathbf{Pl}(0, 23, 0, 30, 0, 1)_{38746} \\
\ell_{2438} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082847} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082847} = \mathbf{Pl}(0, 14, 0, 17, 0, 1)_{37918} \\
\ell_{2439} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082767} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082767} = \mathbf{Pl}(0, 12, 0, 3, 0, 1)_{37034}
\end{aligned}$$

$$\begin{aligned}
\ell_{2440} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083117} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083117} = \mathbf{Pl}(0, 22, 0, 23, 0, 1)_{38304} \\
\ell_{2441} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082501} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082501} = \mathbf{Pl}(0, 4, 0, 1, 0, 1)_{36900} \\
\ell_{2442} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083208} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083208} = \mathbf{Pl}(0, 25, 0, 15, 0, 1)_{37803} \\
\ell_{2443} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082900} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082900} = \mathbf{Pl}(0, 16, 0, 4, 0, 1)_{37101} \\
\ell_{2444} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082625} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082625} = \mathbf{Pl}(0, 7, 0, 26, 0, 1)_{38478} \\
\ell_{2445} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082887} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082887} = \mathbf{Pl}(0, 15, 0, 24, 0, 1)_{38360} \\
\ell_{2446} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082585} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082585} = \mathbf{Pl}(0, 6, 0, 19, 0, 1)_{38036} \\
\ell_{2447} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082807} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082807} = \mathbf{Pl}(0, 13, 0, 10, 0, 1)_{37476} \\
\ell_{2448} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082756} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082756} = \mathbf{Pl}(0, 11, 0, 25, 0, 1)_{38419} \\
\ell_{2449} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083166} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083166} = \mathbf{Pl}(0, 24, 0, 6, 0, 1)_{37235} \\
\ell_{2450} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082452} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082452} = \mathbf{Pl}(0, 2, 0, 18, 0, 1)_{37969} \\
\ell_{2451} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083339} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083339} = \mathbf{Pl}(0, 29, 0, 14, 0, 1)_{37744} \\
\ell_{2452} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083379} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083379} = \mathbf{Pl}(0, 30, 0, 21, 0, 1)_{38186} \\
\ell_{2453} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083246} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083246} = \mathbf{Pl}(0, 26, 0, 20, 0, 1)_{38119} \\
\ell_{2454} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082634} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082634} = \mathbf{Pl}(0, 8, 0, 2, 0, 1)_{36967} \\
\ell_{2455} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082541} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082541} = \mathbf{Pl}(0, 5, 0, 8, 0, 1)_{37342} \\
\ell_{2456} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082942} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082942} = \mathbf{Pl}(0, 17, 0, 13, 0, 1)_{37669} \\
\ell_{2457} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082714} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082714} = \mathbf{Pl}(0, 10, 0, 16, 0, 1)_{37851} \\
\ell_{2458} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083073} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083073} = \mathbf{Pl}(0, 21, 0, 12, 0, 1)_{37610} \\
\ell_{2459} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083419} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083419} = \mathbf{Pl}(0, 31, 0, 28, 0, 1)_{38628} \\
\ell_{2460} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082494} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082494} = \mathbf{Pl}(0, 3, 0, 27, 0, 1)_{38537}
\end{aligned}$$

$$\begin{aligned}
\ell_{2461} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083026} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083026} = \mathbf{Pl}(0, 19, 0, 31, 0, 1)_{38805} \\
\ell_{2462} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083033} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083033} = \mathbf{Pl}(0, 20, 0, 5, 0, 1)_{37168} \\
\ell_{2463} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083288} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083288} = \mathbf{Pl}(0, 27, 0, 29, 0, 1)_{38687} \\
\ell_{2464} &= \begin{bmatrix} 0 & 1 & \eta^{25} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083225} = \begin{bmatrix} 0 & 1 & 25 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083225} = \mathbf{Pl}(0, 25, 0, 1, 0, 0)_{121} \\
\ell_{2465} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082411} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082411} = \mathbf{Pl}(0, 1, 0, 10, 0, 1)_{37464} \\
\ell_{2466} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082967} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082967} = \mathbf{Pl}(0, 18, 0, 5, 0, 1)_{37166} \\
\ell_{2467} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083298} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083298} = \mathbf{Pl}(0, 28, 0, 6, 0, 1)_{37239} \\
\ell_{2468} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082681} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082681} = \mathbf{Pl}(0, 9, 0, 16, 0, 1)_{37850} \\
\ell_{2469} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083129} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083129} = \mathbf{Pl}(0, 23, 0, 2, 0, 1)_{36982} \\
\ell_{2470} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082833} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082833} = \mathbf{Pl}(0, 14, 0, 3, 0, 1)_{37036} \\
\ell_{2471} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082787} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082787} = \mathbf{Pl}(0, 12, 0, 23, 0, 1)_{38294} \\
\ell_{2472} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083102} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083102} = \mathbf{Pl}(0, 22, 0, 8, 0, 1)_{37359} \\
\ell_{2473} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082513} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082513} = \mathbf{Pl}(0, 4, 0, 13, 0, 1)_{37656} \\
\ell_{2474} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083194} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083194} = \mathbf{Pl}(0, 25, 0, 1, 0, 1)_{36921} \\
\ell_{2475} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082913} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082913} = \mathbf{Pl}(0, 16, 0, 17, 0, 1)_{37920} \\
\ell_{2476} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082618} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082618} = \mathbf{Pl}(0, 7, 0, 19, 0, 1)_{38037} \\
\ell_{2477} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082872} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082872} = \mathbf{Pl}(0, 15, 0, 9, 0, 1)_{37415} \\
\ell_{2478} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082591} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082591} = \mathbf{Pl}(0, 6, 0, 25, 0, 1)_{38414} \\
\ell_{2479} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082826} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082826} = \mathbf{Pl}(0, 13, 0, 29, 0, 1)_{38673} \\
\ell_{2480} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082735} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082735} = \mathbf{Pl}(0, 11, 0, 4, 0, 1)_{37096} \\
\ell_{2481} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083171} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083171} = \mathbf{Pl}(0, 24, 0, 11, 0, 1)_{37550}
\end{aligned}$$

$$\begin{aligned}
\ell_{2482} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082454} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082454} = \mathbf{Pl}(0, 2, 0, 20, 0, 1)_{38095} \\
\ell_{2483} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083337} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083337} = \mathbf{Pl}(0, 29, 0, 12, 0, 1)_{37618} \\
\ell_{2484} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083376} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083376} = \mathbf{Pl}(0, 30, 0, 18, 0, 1)_{37997} \\
\ell_{2485} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083257} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083257} = \mathbf{Pl}(0, 26, 0, 31, 0, 1)_{38812} \\
\ell_{2486} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082658} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082658} = \mathbf{Pl}(0, 8, 0, 26, 0, 1)_{38479} \\
\ell_{2487} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082540} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082540} = \mathbf{Pl}(0, 5, 0, 7, 0, 1)_{37279} \\
\ell_{2488} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082956} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082956} = \mathbf{Pl}(0, 17, 0, 27, 0, 1)_{38551} \\
\ell_{2489} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082712} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082712} = \mathbf{Pl}(0, 10, 0, 14, 0, 1)_{37725} \\
\ell_{2490} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083083} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083083} = \mathbf{Pl}(0, 21, 0, 22, 0, 1)_{38240} \\
\ell_{2491} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083415} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083415} = \mathbf{Pl}(0, 31, 0, 24, 0, 1)_{38376} \\
\ell_{2492} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082497} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082497} = \mathbf{Pl}(0, 3, 0, 30, 0, 1)_{38726} \\
\ell_{2493} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083010} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083010} = \mathbf{Pl}(0, 19, 0, 15, 0, 1)_{37797} \\
\ell_{2494} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083056} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083056} = \mathbf{Pl}(0, 20, 0, 28, 0, 1)_{38617} \\
\ell_{2495} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083280} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083280} = \mathbf{Pl}(0, 27, 0, 21, 0, 1)_{38183} \\
\ell_{2496} &= \begin{bmatrix} 0 & 1 & \eta^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082928} = \begin{bmatrix} 0 & 1 & 16 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082928} = \mathbf{Pl}(0, 16, 0, 1, 0, 0)_{112} \\
\ell_{2497} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082412} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082412} = \mathbf{Pl}(0, 1, 0, 11, 0, 1)_{37527} \\
\ell_{2498} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082985} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082985} = \mathbf{Pl}(0, 18, 0, 23, 0, 1)_{38300} \\
\ell_{2499} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083318} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083318} = \mathbf{Pl}(0, 28, 0, 26, 0, 1)_{38499} \\
\ell_{2500} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082690} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082690} = \mathbf{Pl}(0, 9, 0, 25, 0, 1)_{38417} \\
\ell_{2501} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083148} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083148} = \mathbf{Pl}(0, 23, 0, 21, 0, 1)_{38179} \\
\ell_{2502} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082843} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082843} = \mathbf{Pl}(0, 14, 0, 13, 0, 1)_{37666}
\end{aligned}$$

$$\begin{aligned}
\ell_{2503} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082791} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082791} = \mathbf{Pl}(0, 12, 0, 27, 0, 1)_{38546} \\
\ell_{2504} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083124} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083124} = \mathbf{Pl}(0, 22, 0, 30, 0, 1)_{38745} \\
\ell_{2505} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082509} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082509} = \mathbf{Pl}(0, 4, 0, 9, 0, 1)_{37404} \\
\ell_{2506} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083217} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083217} = \mathbf{Pl}(0, 25, 0, 24, 0, 1)_{38370} \\
\ell_{2507} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082897} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082897} = \mathbf{Pl}(0, 16, 0, 1, 0, 1)_{36912} \\
\ell_{2508} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082619} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082619} = \mathbf{Pl}(0, 7, 0, 20, 0, 1)_{38100} \\
\ell_{2509} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082869} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082869} = \mathbf{Pl}(0, 15, 0, 6, 0, 1)_{37226} \\
\ell_{2510} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082597} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082597} = \mathbf{Pl}(0, 6, 0, 31, 0, 1)_{38792} \\
\ell_{2511} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082813} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082813} = \mathbf{Pl}(0, 13, 0, 16, 0, 1)_{37854} \\
\ell_{2512} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082746} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082746} = \mathbf{Pl}(0, 11, 0, 15, 0, 1)_{37789} \\
\ell_{2513} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083179} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083179} = \mathbf{Pl}(0, 24, 0, 19, 0, 1)_{38054} \\
\ell_{2514} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082456} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082456} = \mathbf{Pl}(0, 2, 0, 22, 0, 1)_{38221} \\
\ell_{2515} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083342} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083342} = \mathbf{Pl}(0, 29, 0, 17, 0, 1)_{37933} \\
\ell_{2516} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083370} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083370} = \mathbf{Pl}(0, 30, 0, 12, 0, 1)_{37619} \\
\ell_{2517} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083231} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083231} = \mathbf{Pl}(0, 26, 0, 5, 0, 1)_{37174} \\
\ell_{2518} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082650} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082650} = \mathbf{Pl}(0, 8, 0, 18, 0, 1)_{37975} \\
\ell_{2519} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082535} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082535} = \mathbf{Pl}(0, 5, 0, 2, 0, 1)_{36964} \\
\ell_{2520} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082939} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082939} = \mathbf{Pl}(0, 17, 0, 10, 0, 1)_{37480} \\
\ell_{2521} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082702} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082702} = \mathbf{Pl}(0, 10, 0, 4, 0, 1)_{37095} \\
\ell_{2522} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083064} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083064} = \mathbf{Pl}(0, 21, 0, 3, 0, 1)_{37043} \\
\ell_{2523} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083398} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083398} = \mathbf{Pl}(0, 31, 0, 7, 0, 1)_{37305}
\end{aligned}$$

$$\begin{aligned}
\ell_{2524} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082496} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082496} = \mathbf{Pl}(0, 3, 0, 29, 0, 1)_{38663} \\
\ell_{2525} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083023} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083023} = \mathbf{Pl}(0, 19, 0, 28, 0, 1)_{38616} \\
\ell_{2526} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083036} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083036} = \mathbf{Pl}(0, 20, 0, 8, 0, 1)_{37357} \\
\ell_{2527} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083273} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083273} = \mathbf{Pl}(0, 27, 0, 14, 0, 1)_{37742} \\
\ell_{2528} &= \begin{bmatrix} 0 & 1 & \eta^{11} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082631} = \begin{bmatrix} 0 & 1 & 7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082631} = \mathbf{Pl}(0, 7, 0, 1, 0, 0)_{103} \\
\ell_{2529} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082413} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082413} = \mathbf{Pl}(0, 1, 0, 12, 0, 1)_{37590} \\
\ell_{2530} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082968} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082968} = \mathbf{Pl}(0, 18, 0, 6, 0, 1)_{37229} \\
\ell_{2531} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083296} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083296} = \mathbf{Pl}(0, 28, 0, 4, 0, 1)_{37113} \\
\ell_{2532} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082668} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082668} = \mathbf{Pl}(0, 9, 0, 3, 0, 1)_{37031} \\
\ell_{2533} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083158} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083158} = \mathbf{Pl}(0, 23, 0, 31, 0, 1)_{38809} \\
\ell_{2534} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082832} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082832} = \mathbf{Pl}(0, 14, 0, 2, 0, 1)_{36973} \\
\ell_{2535} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082790} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082790} = \mathbf{Pl}(0, 12, 0, 26, 0, 1)_{38483} \\
\ell_{2536} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083113} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083113} = \mathbf{Pl}(0, 22, 0, 19, 0, 1)_{38052} \\
\ell_{2537} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082521} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082521} = \mathbf{Pl}(0, 4, 0, 21, 0, 1)_{38160} \\
\ell_{2538} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083222} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083222} = \mathbf{Pl}(0, 25, 0, 29, 0, 1)_{38685} \\
\ell_{2539} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082926} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082926} = \mathbf{Pl}(0, 16, 0, 30, 0, 1)_{38739} \\
\ell_{2540} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082600} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082600} = \mathbf{Pl}(0, 7, 0, 1, 0, 1)_{36903} \\
\ell_{2541} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082877} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082877} = \mathbf{Pl}(0, 15, 0, 14, 0, 1)_{37730} \\
\ell_{2542} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082579} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082579} = \mathbf{Pl}(0, 6, 0, 13, 0, 1)_{37658} \\
\ell_{2543} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082819} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082819} = \mathbf{Pl}(0, 13, 0, 22, 0, 1)_{38232} \\
\ell_{2544} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082758} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082758} = \mathbf{Pl}(0, 11, 0, 27, 0, 1)_{38545}
\end{aligned}$$

$$\begin{aligned}
\ell_{2545} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083177} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083177} = \mathbf{Pl}(0, 24, 0, 17, 0, 1)_{37928} \\
\ell_{2546} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082458} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082458} = \mathbf{Pl}(0, 2, 0, 24, 0, 1)_{38347} \\
\ell_{2547} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083333} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083333} = \mathbf{Pl}(0, 29, 0, 8, 0, 1)_{37366} \\
\ell_{2548} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083386} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083386} = \mathbf{Pl}(0, 30, 0, 28, 0, 1)_{38627} \\
\ell_{2549} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083235} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083235} = \mathbf{Pl}(0, 26, 0, 9, 0, 1)_{37426} \\
\ell_{2550} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082647} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082647} = \mathbf{Pl}(0, 8, 0, 15, 0, 1)_{37786} \\
\ell_{2551} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082558} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082558} = \mathbf{Pl}(0, 5, 0, 25, 0, 1)_{38413} \\
\ell_{2552} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082947} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082947} = \mathbf{Pl}(0, 17, 0, 18, 0, 1)_{37984} \\
\ell_{2553} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082721} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082721} = \mathbf{Pl}(0, 10, 0, 23, 0, 1)_{38292} \\
\ell_{2554} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083068} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083068} = \mathbf{Pl}(0, 21, 0, 7, 0, 1)_{37295} \\
\ell_{2555} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083407} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083407} = \mathbf{Pl}(0, 31, 0, 16, 0, 1)_{37872} \\
\ell_{2556} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082487} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082487} = \mathbf{Pl}(0, 3, 0, 20, 0, 1)_{38096} \\
\ell_{2557} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083005} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083005} = \mathbf{Pl}(0, 19, 0, 10, 0, 1)_{37482} \\
\ell_{2558} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083039} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083039} = \mathbf{Pl}(0, 20, 0, 11, 0, 1)_{37546} \\
\ell_{2559} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083264} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083264} = \mathbf{Pl}(0, 27, 0, 5, 0, 1)_{37175} \\
\ell_{2560} &= \begin{bmatrix} 0 & 1 & \eta^{23} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082895} = \begin{bmatrix} 0 & 1 & 15 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082895} = \mathbf{Pl}(0, 15, 0, 1, 0, 0)_{111} \\
\ell_{2561} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082414} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082414} = \mathbf{Pl}(0, 1, 0, 13, 0, 1)_{37653} \\
\ell_{2562} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082982} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082982} = \mathbf{Pl}(0, 18, 0, 20, 0, 1)_{38111} \\
\ell_{2563} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083316} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083316} = \mathbf{Pl}(0, 28, 0, 24, 0, 1)_{38373} \\
\ell_{2564} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082675} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082675} = \mathbf{Pl}(0, 9, 0, 10, 0, 1)_{37472} \\
\ell_{2565} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083135} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083135} = \mathbf{Pl}(0, 23, 0, 8, 0, 1)_{37360}
\end{aligned}$$

$$\begin{aligned}
\ell_{2566} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082842} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082842} = \mathbf{Pl}(0, 14, 0, 12, 0, 1)_{37603} \\
\ell_{2567} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082786} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082786} = \mathbf{Pl}(0, 12, 0, 22, 0, 1)_{38231} \\
\ell_{2568} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083099} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083099} = \mathbf{Pl}(0, 22, 0, 5, 0, 1)_{37170} \\
\ell_{2569} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082517} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082517} = \mathbf{Pl}(0, 4, 0, 17, 0, 1)_{37908} \\
\ell_{2570} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083197} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083197} = \mathbf{Pl}(0, 25, 0, 4, 0, 1)_{37110} \\
\ell_{2571} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082910} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082910} = \mathbf{Pl}(0, 16, 0, 14, 0, 1)_{37731} \\
\ell_{2572} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082605} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082605} = \mathbf{Pl}(0, 7, 0, 6, 0, 1)_{37218} \\
\ell_{2573} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082864} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082864} = \mathbf{Pl}(0, 15, 0, 1, 0, 1)_{36911} \\
\ell_{2574} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082577} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082577} = \mathbf{Pl}(0, 6, 0, 11, 0, 1)_{37532} \\
\ell_{2575} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082824} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082824} = \mathbf{Pl}(0, 13, 0, 27, 0, 1)_{38547} \\
\ell_{2576} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082747} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082747} = \mathbf{Pl}(0, 11, 0, 16, 0, 1)_{37852} \\
\ell_{2577} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083169} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083169} = \mathbf{Pl}(0, 24, 0, 9, 0, 1)_{37424} \\
\ell_{2578} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082460} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082460} = \mathbf{Pl}(0, 2, 0, 26, 0, 1)_{38473} \\
\ell_{2579} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083346} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083346} = \mathbf{Pl}(0, 29, 0, 21, 0, 1)_{38185} \\
\ell_{2580} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083360} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083360} = \mathbf{Pl}(0, 30, 0, 2, 0, 1)_{36989} \\
\ell_{2581} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083245} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083245} = \mathbf{Pl}(0, 26, 0, 19, 0, 1)_{38056} \\
\ell_{2582} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082639} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082639} = \mathbf{Pl}(0, 8, 0, 7, 0, 1)_{37282} \\
\ell_{2583} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082561} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082561} = \mathbf{Pl}(0, 5, 0, 28, 0, 1)_{38602} \\
\ell_{2584} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082932} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082932} = \mathbf{Pl}(0, 17, 0, 3, 0, 1)_{37039} \\
\ell_{2585} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082727} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082727} = \mathbf{Pl}(0, 10, 0, 29, 0, 1)_{38670} \\
\ell_{2586} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083079} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083079} = \mathbf{Pl}(0, 21, 0, 18, 0, 1)_{37988}
\end{aligned}$$

$$\begin{aligned}
\ell_{2587} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083406} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083406} = \mathbf{Pl}(0, 31, 0, 15, 0, 1)_{37809} \\
\ell_{2588} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082490} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082490} = \mathbf{Pl}(0, 3, 0, 23, 0, 1)_{38285} \\
\ell_{2589} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083020} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083020} = \mathbf{Pl}(0, 19, 0, 25, 0, 1)_{38427} \\
\ell_{2590} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083059} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083059} = \mathbf{Pl}(0, 20, 0, 31, 0, 1)_{38806} \\
\ell_{2591} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083289} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083289} = \mathbf{Pl}(0, 27, 0, 30, 0, 1)_{38750} \\
\ell_{2592} &= \begin{bmatrix} 0 & 1 & \eta^{19} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082598} = \begin{bmatrix} 0 & 1 & 6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082598} = \mathbf{Pl}(0, 6, 0, 1, 0, 0)_{102} \\
\ell_{2593} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082415} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082415} = \mathbf{Pl}(0, 1, 0, 14, 0, 1)_{37716} \\
\ell_{2594} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082969} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082969} = \mathbf{Pl}(0, 18, 0, 7, 0, 1)_{37292} \\
\ell_{2595} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083317} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083317} = \mathbf{Pl}(0, 28, 0, 25, 0, 1)_{38436} \\
\ell_{2596} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082682} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082682} = \mathbf{Pl}(0, 9, 0, 17, 0, 1)_{37913} \\
\ell_{2597} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083147} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083147} = \mathbf{Pl}(0, 23, 0, 20, 0, 1)_{38116} \\
\ell_{2598} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082860} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082860} = \mathbf{Pl}(0, 14, 0, 30, 0, 1)_{38737} \\
\ell_{2599} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082766} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082766} = \mathbf{Pl}(0, 12, 0, 2, 0, 1)_{36971} \\
\ell_{2600} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083120} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083120} = \mathbf{Pl}(0, 22, 0, 26, 0, 1)_{38493} \\
\ell_{2601} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082529} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082529} = \mathbf{Pl}(0, 4, 0, 29, 0, 1)_{38664} \\
\ell_{2602} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083203} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083203} = \mathbf{Pl}(0, 25, 0, 10, 0, 1)_{37488} \\
\ell_{2603} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082923} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082923} = \mathbf{Pl}(0, 16, 0, 27, 0, 1)_{38550} \\
\ell_{2604} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082614} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082614} = \mathbf{Pl}(0, 7, 0, 15, 0, 1)_{37785} \\
\ell_{2605} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082879} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082879} = \mathbf{Pl}(0, 15, 0, 16, 0, 1)_{37856} \\
\ell_{2606} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082567} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082567} = \mathbf{Pl}(0, 6, 0, 1, 0, 1)_{36902} \\
\ell_{2607} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082809} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082809} = \mathbf{Pl}(0, 13, 0, 12, 0, 1)_{37602}
\end{aligned}$$

$$\begin{aligned}
\ell_{2608} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082744} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082744} = \mathbf{Pl}(0, 11, 0, 13, 0, 1)_{37663} \\
\ell_{2609} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083164} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083164} = \mathbf{Pl}(0, 24, 0, 4, 0, 1)_{37109} \\
\ell_{2610} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082462} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082462} = \mathbf{Pl}(0, 2, 0, 28, 0, 1)_{38599} \\
\ell_{2611} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083348} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083348} = \mathbf{Pl}(0, 29, 0, 23, 0, 1)_{38311} \\
\ell_{2612} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083363} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083363} = \mathbf{Pl}(0, 30, 0, 5, 0, 1)_{37178} \\
\ell_{2613} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083250} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083250} = \mathbf{Pl}(0, 26, 0, 24, 0, 1)_{38371} \\
\ell_{2614} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082663} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082663} = \mathbf{Pl}(0, 8, 0, 31, 0, 1)_{38794} \\
\ell_{2615} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082552} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082552} = \mathbf{Pl}(0, 5, 0, 19, 0, 1)_{38035} \\
\ell_{2616} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082950} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082950} = \mathbf{Pl}(0, 17, 0, 21, 0, 1)_{38173} \\
\ell_{2617} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082701} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082701} = \mathbf{Pl}(0, 10, 0, 3, 0, 1)_{37032} \\
\ell_{2618} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083069} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083069} = \mathbf{Pl}(0, 21, 0, 8, 0, 1)_{37358} \\
\ell_{2619} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083402} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083402} = \mathbf{Pl}(0, 31, 0, 11, 0, 1)_{37557} \\
\ell_{2620} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082485} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082485} = \mathbf{Pl}(0, 3, 0, 18, 0, 1)_{37970} \\
\ell_{2621} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083004} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083004} = \mathbf{Pl}(0, 19, 0, 9, 0, 1)_{37419} \\
\ell_{2622} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083034} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083034} = \mathbf{Pl}(0, 20, 0, 6, 0, 1)_{37231} \\
\ell_{2623} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083281} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083281} = \mathbf{Pl}(0, 27, 0, 22, 0, 1)_{38246} \\
\ell_{2624} &= \begin{bmatrix} 0 & 1 & \eta^8 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082829} = \begin{bmatrix} 0 & 1 & 13 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082829} = \mathbf{Pl}(0, 13, 0, 1, 0, 0)_{109} \\
\ell_{2625} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082416} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082416} = \mathbf{Pl}(0, 1, 0, 15, 0, 1)_{37779} \\
\ell_{2626} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082983} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082983} = \mathbf{Pl}(0, 18, 0, 21, 0, 1)_{38174} \\
\ell_{2627} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083297} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083297} = \mathbf{Pl}(0, 28, 0, 5, 0, 1)_{37176} \\
\ell_{2628} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082689} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082689} = \mathbf{Pl}(0, 9, 0, 24, 0, 1)_{38354}
\end{aligned}$$

$$\begin{aligned}
\ell_{2629} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083130} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083130} = \mathbf{Pl}(0, 23, 0, 3, 0, 1)_{37045} \\
\ell_{2630} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082846} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082846} = \mathbf{Pl}(0, 14, 0, 16, 0, 1)_{37855} \\
\ell_{2631} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082778} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082778} = \mathbf{Pl}(0, 12, 0, 14, 0, 1)_{37727} \\
\ell_{2632} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083106} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083106} = \mathbf{Pl}(0, 22, 0, 12, 0, 1)_{37611} \\
\ell_{2633} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082525} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082525} = \mathbf{Pl}(0, 4, 0, 25, 0, 1)_{38412} \\
\ell_{2634} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083212} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083212} = \mathbf{Pl}(0, 25, 0, 19, 0, 1)_{38055} \\
\ell_{2635} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082907} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082907} = \mathbf{Pl}(0, 16, 0, 11, 0, 1)_{37542} \\
\ell_{2636} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082607} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082607} = \mathbf{Pl}(0, 7, 0, 8, 0, 1)_{37344} \\
\ell_{2637} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082894} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082894} = \mathbf{Pl}(0, 15, 0, 31, 0, 1)_{38801} \\
\ell_{2638} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082573} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082573} = \mathbf{Pl}(0, 6, 0, 7, 0, 1)_{37280} \\
\ell_{2639} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082798} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082798} = \mathbf{Pl}(0, 13, 0, 1, 0, 1)_{36909} \\
\ell_{2640} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082737} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082737} = \mathbf{Pl}(0, 11, 0, 6, 0, 1)_{37222} \\
\ell_{2641} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083188} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083188} = \mathbf{Pl}(0, 24, 0, 28, 0, 1)_{38621} \\
\ell_{2642} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082464} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082464} = \mathbf{Pl}(0, 2, 0, 30, 0, 1)_{38725} \\
\ell_{2643} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083335} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083335} = \mathbf{Pl}(0, 29, 0, 10, 0, 1)_{37492} \\
\ell_{2644} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083385} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083385} = \mathbf{Pl}(0, 30, 0, 27, 0, 1)_{38564} \\
\ell_{2645} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083228} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083228} = \mathbf{Pl}(0, 26, 0, 2, 0, 1)_{36985} \\
\ell_{2646} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082655} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082655} = \mathbf{Pl}(0, 8, 0, 23, 0, 1)_{38290} \\
\ell_{2647} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082555} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082555} = \mathbf{Pl}(0, 5, 0, 22, 0, 1)_{38224} \\
\ell_{2648} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082933} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082933} = \mathbf{Pl}(0, 17, 0, 4, 0, 1)_{37102} \\
\ell_{2649} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082707} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082707} = \mathbf{Pl}(0, 10, 0, 9, 0, 1)_{37410}
\end{aligned}$$

$$\begin{aligned}
\ell_{2650} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083090} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083090} = \mathbf{Pl}(0, 21, 0, 29, 0, 1)_{38681} \\
\ell_{2651} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083411} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083411} = \mathbf{Pl}(0, 31, 0, 20, 0, 1)_{38124} \\
\ell_{2652} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082484} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082484} = \mathbf{Pl}(0, 3, 0, 17, 0, 1)_{37907} \\
\ell_{2653} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083021} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083021} = \mathbf{Pl}(0, 19, 0, 26, 0, 1)_{38490} \\
\ell_{2654} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083046} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083046} = \mathbf{Pl}(0, 20, 0, 18, 0, 1)_{37987} \\
\ell_{2655} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083272} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083272} = \mathbf{Pl}(0, 27, 0, 13, 0, 1)_{37679} \\
\ell_{2656} &= \begin{bmatrix} 0 & 1 & \eta^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082763} = \begin{bmatrix} 0 & 1 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082763} = \mathbf{Pl}(0, 11, 0, 1, 0, 0)_{107} \\
\ell_{2657} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082417} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082417} = \mathbf{Pl}(0, 1, 0, 16, 0, 1)_{37842} \\
\ell_{2658} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082970} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082970} = \mathbf{Pl}(0, 18, 0, 8, 0, 1)_{37355} \\
\ell_{2659} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083311} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083311} = \mathbf{Pl}(0, 28, 0, 19, 0, 1)_{38058} \\
\ell_{2660} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082669} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082669} = \mathbf{Pl}(0, 9, 0, 4, 0, 1)_{37094} \\
\ell_{2661} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083145} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083145} = \mathbf{Pl}(0, 23, 0, 18, 0, 1)_{37990} \\
\ell_{2662} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082857} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082857} = \mathbf{Pl}(0, 14, 0, 27, 0, 1)_{38548} \\
\ell_{2663} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082794} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082794} = \mathbf{Pl}(0, 12, 0, 30, 0, 1)_{38735} \\
\ell_{2664} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083096} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083096} = \mathbf{Pl}(0, 22, 0, 2, 0, 1)_{36981} \\
\ell_{2665} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082510} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082510} = \mathbf{Pl}(0, 4, 0, 10, 0, 1)_{37467} \\
\ell_{2666} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083202} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083202} = \mathbf{Pl}(0, 25, 0, 9, 0, 1)_{37425} \\
\ell_{2667} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082909} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082909} = \mathbf{Pl}(0, 16, 0, 13, 0, 1)_{37668} \\
\ell_{2668} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082630} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082630} = \mathbf{Pl}(0, 7, 0, 31, 0, 1)_{38793} \\
\ell_{2669} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082874} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082874} = \mathbf{Pl}(0, 15, 0, 11, 0, 1)_{37541} \\
\ell_{2670} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082581} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082581} = \mathbf{Pl}(0, 6, 0, 15, 0, 1)_{37784}
\end{aligned}$$

$$\begin{aligned}
\ell_{2671} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082811} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082811} = \mathbf{Pl}(0, 13, 0, 14, 0, 1)_{37728} \\
\ell_{2672} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082732} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082732} = \mathbf{Pl}(0, 11, 0, 1, 0, 1)_{36907} \\
\ell_{2673} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083185} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083185} = \mathbf{Pl}(0, 24, 0, 25, 0, 1)_{38432} \\
\ell_{2674} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082439} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082439} = \mathbf{Pl}(0, 2, 0, 5, 0, 1)_{37150} \\
\ell_{2675} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083328} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083328} = \mathbf{Pl}(0, 29, 0, 3, 0, 1)_{37051} \\
\ell_{2676} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083380} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083380} = \mathbf{Pl}(0, 30, 0, 22, 0, 1)_{38249} \\
\ell_{2677} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083254} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083254} = \mathbf{Pl}(0, 26, 0, 28, 0, 1)_{38623} \\
\ell_{2678} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082652} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082652} = \mathbf{Pl}(0, 8, 0, 20, 0, 1)_{38101} \\
\ell_{2679} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082559} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082559} = \mathbf{Pl}(0, 5, 0, 26, 0, 1)_{38476} \\
\ell_{2680} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082958} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082958} = \mathbf{Pl}(0, 17, 0, 29, 0, 1)_{38677} \\
\ell_{2681} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082715} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082715} = \mathbf{Pl}(0, 10, 0, 17, 0, 1)_{37914} \\
\ell_{2682} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083084} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083084} = \mathbf{Pl}(0, 21, 0, 23, 0, 1)_{38303} \\
\ell_{2683} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083397} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083397} = \mathbf{Pl}(0, 31, 0, 6, 0, 1)_{37242} \\
\ell_{2684} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082488} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082488} = \mathbf{Pl}(0, 3, 0, 21, 0, 1)_{38159} \\
\ell_{2685} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083019} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083019} = \mathbf{Pl}(0, 19, 0, 24, 0, 1)_{38364} \\
\ell_{2686} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083035} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083035} = \mathbf{Pl}(0, 20, 0, 7, 0, 1)_{37294} \\
\ell_{2687} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083271} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083271} = \mathbf{Pl}(0, 27, 0, 12, 0, 1)_{37616} \\
\ell_{2688} &= \begin{bmatrix} 0 & 1 & \eta^{21} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083192} = \begin{bmatrix} 0 & 1 & 24 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083192} = \mathbf{Pl}(0, 24, 0, 1, 0, 0)_{120} \\
\ell_{2689} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082418} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082418} = \mathbf{Pl}(0, 1, 0, 17, 0, 1)_{37905} \\
\ell_{2690} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082988} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082988} = \mathbf{Pl}(0, 18, 0, 26, 0, 1)_{38489} \\
\ell_{2691} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083307} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083307} = \mathbf{Pl}(0, 28, 0, 15, 0, 1)_{37806}
\end{aligned}$$

$$\begin{aligned}
\ell_{2692} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082678} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082678} = \mathbf{Pl}(0, 9, 0, 13, 0, 1)_{37661} \\
\ell_{2693} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083132} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083132} = \mathbf{Pl}(0, 23, 0, 5, 0, 1)_{37171} \\
\ell_{2694} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082851} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082851} = \mathbf{Pl}(0, 14, 0, 21, 0, 1)_{38170} \\
\ell_{2695} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082782} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082782} = \mathbf{Pl}(0, 12, 0, 18, 0, 1)_{37979} \\
\ell_{2696} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083114} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083114} = \mathbf{Pl}(0, 22, 0, 20, 0, 1)_{38115} \\
\ell_{2697} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082514} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082514} = \mathbf{Pl}(0, 4, 0, 14, 0, 1)_{37719} \\
\ell_{2698} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083209} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083209} = \mathbf{Pl}(0, 25, 0, 16, 0, 1)_{37866} \\
\ell_{2699} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082925} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082925} = \mathbf{Pl}(0, 16, 0, 29, 0, 1)_{38676} \\
\ell_{2700} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082623} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082623} = \mathbf{Pl}(0, 7, 0, 24, 0, 1)_{38352} \\
\ell_{2701} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082867} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082867} = \mathbf{Pl}(0, 15, 0, 4, 0, 1)_{37100} \\
\ell_{2702} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082575} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082575} = \mathbf{Pl}(0, 6, 0, 9, 0, 1)_{37406} \\
\ell_{2703} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082800} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082800} = \mathbf{Pl}(0, 13, 0, 3, 0, 1)_{37035} \\
\ell_{2704} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082741} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082741} = \mathbf{Pl}(0, 11, 0, 10, 0, 1)_{37474} \\
\ell_{2705} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083161} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083161} = \mathbf{Pl}(0, 24, 0, 1, 0, 1)_{36920} \\
\ell_{2706} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082441} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082441} = \mathbf{Pl}(0, 2, 0, 7, 0, 1)_{37276} \\
\ell_{2707} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083355} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083355} = \mathbf{Pl}(0, 29, 0, 30, 0, 1)_{38752} \\
\ell_{2708} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083366} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083366} = \mathbf{Pl}(0, 30, 0, 8, 0, 1)_{37367} \\
\ell_{2709} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083232} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083232} = \mathbf{Pl}(0, 26, 0, 6, 0, 1)_{37237} \\
\ell_{2710} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082660} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082660} = \mathbf{Pl}(0, 8, 0, 28, 0, 1)_{38605} \\
\ell_{2711} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082564} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082564} = \mathbf{Pl}(0, 5, 0, 31, 0, 1)_{38791} \\
\ell_{2712} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082941} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082941} = \mathbf{Pl}(0, 17, 0, 12, 0, 1)_{37606}
\end{aligned}$$

$$\begin{aligned}
\ell_{2713} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082725} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082725} = \mathbf{Pl}(0, 10, 0, 27, 0, 1)_{38544} \\
\ell_{2714} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083063} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083063} = \mathbf{Pl}(0, 21, 0, 2, 0, 1)_{36980} \\
\ell_{2715} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083416} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083416} = \mathbf{Pl}(0, 31, 0, 25, 0, 1)_{38439} \\
\ell_{2716} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082489} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082489} = \mathbf{Pl}(0, 3, 0, 22, 0, 1)_{38222} \\
\ell_{2717} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083006} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083006} = \mathbf{Pl}(0, 19, 0, 11, 0, 1)_{37545} \\
\ell_{2718} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083047} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083047} = \mathbf{Pl}(0, 20, 0, 19, 0, 1)_{38050} \\
\ell_{2719} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083282} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083282} = \mathbf{Pl}(0, 27, 0, 23, 0, 1)_{38309} \\
\ell_{2720} &= \begin{bmatrix} 0 & 1 & \eta & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082466} = \begin{bmatrix} 0 & 1 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082466} = \mathbf{Pl}(0, 2, 0, 1, 0, 0)_{98} \\
\ell_{2721} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082419} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082419} = \mathbf{Pl}(0, 1, 0, 18, 0, 1)_{37968} \\
\ell_{2722} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082971} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082971} = \mathbf{Pl}(0, 18, 0, 9, 0, 1)_{37418} \\
\ell_{2723} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083306} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083306} = \mathbf{Pl}(0, 28, 0, 14, 0, 1)_{37743} \\
\ell_{2724} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082687} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082687} = \mathbf{Pl}(0, 9, 0, 22, 0, 1)_{38228} \\
\ell_{2725} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083152} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083152} = \mathbf{Pl}(0, 23, 0, 25, 0, 1)_{38431} \\
\ell_{2726} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082837} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082837} = \mathbf{Pl}(0, 14, 0, 7, 0, 1)_{37288} \\
\ell_{2727} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082770} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082770} = \mathbf{Pl}(0, 12, 0, 6, 0, 1)_{37223} \\
\ell_{2728} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083105} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083105} = \mathbf{Pl}(0, 22, 0, 11, 0, 1)_{37548} \\
\ell_{2729} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082502} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082502} = \mathbf{Pl}(0, 4, 0, 2, 0, 1)_{36963} \\
\ell_{2730} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083223} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083223} = \mathbf{Pl}(0, 25, 0, 30, 0, 1)_{38748} \\
\ell_{2731} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082904} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082904} = \mathbf{Pl}(0, 16, 0, 8, 0, 1)_{37353} \\
\ell_{2732} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082616} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082616} = \mathbf{Pl}(0, 7, 0, 17, 0, 1)_{37911} \\
\ell_{2733} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082884} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082884} = \mathbf{Pl}(0, 15, 0, 21, 0, 1)_{38171}
\end{aligned}$$

$$\begin{aligned}
\ell_{2734} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082569} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082569} = \mathbf{Pl}(0, 6, 0, 3, 0, 1)_{37028} \\
\ell_{2735} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082817} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082817} = \mathbf{Pl}(0, 13, 0, 20, 0, 1)_{38106} \\
\ell_{2736} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082754} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082754} = \mathbf{Pl}(0, 11, 0, 23, 0, 1)_{38293} \\
\ell_{2737} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083172} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083172} = \mathbf{Pl}(0, 24, 0, 12, 0, 1)_{37613} \\
\ell_{2738} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082435} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082435} = \mathbf{Pl}(0, 2, 0, 1, 0, 1)_{36898} \\
\ell_{2739} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083353} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083353} = \mathbf{Pl}(0, 29, 0, 28, 0, 1)_{38626} \\
\ell_{2740} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083373} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083373} = \mathbf{Pl}(0, 30, 0, 15, 0, 1)_{37808} \\
\ell_{2741} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083239} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083239} = \mathbf{Pl}(0, 26, 0, 13, 0, 1)_{37678} \\
\ell_{2742} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082636} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082636} = \mathbf{Pl}(0, 8, 0, 4, 0, 1)_{37093} \\
\ell_{2743} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082549} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082549} = \mathbf{Pl}(0, 5, 0, 16, 0, 1)_{37846} \\
\ell_{2744} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082955} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082955} = \mathbf{Pl}(0, 17, 0, 26, 0, 1)_{38488} \\
\ell_{2745} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082703} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082703} = \mathbf{Pl}(0, 10, 0, 5, 0, 1)_{37158} \\
\ell_{2746} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083085} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083085} = \mathbf{Pl}(0, 21, 0, 24, 0, 1)_{38366} \\
\ell_{2747} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083420} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083420} = \mathbf{Pl}(0, 31, 0, 29, 0, 1)_{38691} \\
\ell_{2748} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082486} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082486} = \mathbf{Pl}(0, 3, 0, 19, 0, 1)_{38033} \\
\ell_{2749} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083022} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083022} = \mathbf{Pl}(0, 19, 0, 27, 0, 1)_{38553} \\
\ell_{2750} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083038} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083038} = \mathbf{Pl}(0, 20, 0, 10, 0, 1)_{37483} \\
\ell_{2751} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083290} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083290} = \mathbf{Pl}(0, 27, 0, 31, 0, 1)_{38813} \\
\ell_{2752} &= \begin{bmatrix} 0 & 1 & \eta^{14} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083357} = \begin{bmatrix} 0 & 1 & 29 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083357} = \mathbf{Pl}(0, 29, 0, 1, 0, 0)_{125} \\
\ell_{2753} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082420} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082420} = \mathbf{Pl}(0, 1, 0, 19, 0, 1)_{38031} \\
\ell_{2754} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082989} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082989} = \mathbf{Pl}(0, 18, 0, 27, 0, 1)_{38552}
\end{aligned}$$

$$\begin{aligned}
\ell_{2755} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083310} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083310} = \mathbf{Pl}(0, 28, 0, 18, 0, 1)_{37995} \\
\ell_{2756} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082696} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082696} = \mathbf{Pl}(0, 9, 0, 31, 0, 1)_{38795} \\
\ell_{2757} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083141} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083141} = \mathbf{Pl}(0, 23, 0, 14, 0, 1)_{37738} \\
\ell_{2758} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082839} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082839} = \mathbf{Pl}(0, 14, 0, 9, 0, 1)_{37414} \\
\ell_{2759} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082774} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082774} = \mathbf{Pl}(0, 12, 0, 10, 0, 1)_{37475} \\
\ell_{2760} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083123} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083123} = \mathbf{Pl}(0, 22, 0, 29, 0, 1)_{38682} \\
\ell_{2761} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082506} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082506} = \mathbf{Pl}(0, 4, 0, 6, 0, 1)_{37215} \\
\ell_{2762} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083200} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083200} = \mathbf{Pl}(0, 25, 0, 7, 0, 1)_{37299} \\
\ell_{2763} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082920} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082920} = \mathbf{Pl}(0, 16, 0, 24, 0, 1)_{38361} \\
\ell_{2764} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082621} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082621} = \mathbf{Pl}(0, 7, 0, 22, 0, 1)_{38226} \\
\ell_{2765} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082889} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082889} = \mathbf{Pl}(0, 15, 0, 26, 0, 1)_{38486} \\
\ell_{2766} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082571} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082571} = \mathbf{Pl}(0, 6, 0, 5, 0, 1)_{37154} \\
\ell_{2767} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082822} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082822} = \mathbf{Pl}(0, 13, 0, 25, 0, 1)_{38421} \\
\ell_{2768} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082759} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082759} = \mathbf{Pl}(0, 11, 0, 28, 0, 1)_{38608} \\
\ell_{2769} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083180} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083180} = \mathbf{Pl}(0, 24, 0, 20, 0, 1)_{38117} \\
\ell_{2770} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082437} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082437} = \mathbf{Pl}(0, 2, 0, 3, 0, 1)_{37024} \\
\ell_{2771} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083326} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083326} = \mathbf{Pl}(0, 29, 0, 1, 0, 1)_{36925} \\
\ell_{2772} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083375} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083375} = \mathbf{Pl}(0, 30, 0, 17, 0, 1)_{37934} \\
\ell_{2773} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083249} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083249} = \mathbf{Pl}(0, 26, 0, 23, 0, 1)_{38308} \\
\ell_{2774} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082644} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082644} = \mathbf{Pl}(0, 8, 0, 12, 0, 1)_{37597} \\
\ell_{2775} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082554} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082554} = \mathbf{Pl}(0, 5, 0, 21, 0, 1)_{38161}
\end{aligned}$$

$$\begin{aligned}
\ell_{2776} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082940} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082940} = \mathbf{Pl}(0, 17, 0, 11, 0, 1)_{37543} \\
\ell_{2777} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082713} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082713} = \mathbf{Pl}(0, 10, 0, 15, 0, 1)_{37788} \\
\ell_{2778} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083074} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083074} = \mathbf{Pl}(0, 21, 0, 13, 0, 1)_{37673} \\
\ell_{2779} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083393} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083393} = \mathbf{Pl}(0, 31, 0, 2, 0, 1)_{36990} \\
\ell_{2780} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082483} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082483} = \mathbf{Pl}(0, 3, 0, 16, 0, 1)_{37844} \\
\ell_{2781} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083003} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083003} = \mathbf{Pl}(0, 19, 0, 8, 0, 1)_{37356} \\
\ell_{2782} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083058} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083058} = \mathbf{Pl}(0, 20, 0, 30, 0, 1)_{38743} \\
\ell_{2783} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083263} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083263} = \mathbf{Pl}(0, 27, 0, 4, 0, 1)_{37112} \\
\ell_{2784} &= \begin{bmatrix} 0 & 1 & \eta^{24} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083390} = \begin{bmatrix} 0 & 1 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083390} = \mathbf{Pl}(0, 30, 0, 1, 0, 0)_{126} \\
\ell_{2785} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082421} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082421} = \mathbf{Pl}(0, 1, 0, 20, 0, 1)_{38094} \\
\ell_{2786} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082972} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082972} = \mathbf{Pl}(0, 18, 0, 10, 0, 1)_{37481} \\
\ell_{2787} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083304} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083304} = \mathbf{Pl}(0, 28, 0, 12, 0, 1)_{37617} \\
\ell_{2788} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082670} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082670} = \mathbf{Pl}(0, 9, 0, 5, 0, 1)_{37157} \\
\ell_{2789} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083131} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083131} = \mathbf{Pl}(0, 23, 0, 4, 0, 1)_{37108} \\
\ell_{2790} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082836} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082836} = \mathbf{Pl}(0, 14, 0, 6, 0, 1)_{37225} \\
\ell_{2791} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082775} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082775} = \mathbf{Pl}(0, 12, 0, 11, 0, 1)_{37538} \\
\ell_{2792} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083110} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083110} = \mathbf{Pl}(0, 22, 0, 16, 0, 1)_{37863} \\
\ell_{2793} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082526} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082526} = \mathbf{Pl}(0, 4, 0, 26, 0, 1)_{38475} \\
\ell_{2794} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083195} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083195} = \mathbf{Pl}(0, 25, 0, 2, 0, 1)_{36984} \\
\ell_{2795} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082903} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082903} = \mathbf{Pl}(0, 16, 0, 7, 0, 1)_{37290} \\
\ell_{2796} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082602} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082602} = \mathbf{Pl}(0, 7, 0, 3, 0, 1)_{37029}
\end{aligned}$$

$$\begin{aligned}
\ell_{2797} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082881} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082881} = \mathbf{Pl}(0, 15, 0, 18, 0, 1)_{37982} \\
\ell_{2798} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082589} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082589} = \mathbf{Pl}(0, 6, 0, 23, 0, 1)_{38288} \\
\ell_{2799} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082828} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082828} = \mathbf{Pl}(0, 13, 0, 31, 0, 1)_{38799} \\
\ell_{2800} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082739} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082739} = \mathbf{Pl}(0, 11, 0, 8, 0, 1)_{37348} \\
\ell_{2801} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083182} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083182} = \mathbf{Pl}(0, 24, 0, 22, 0, 1)_{38243} \\
\ell_{2802} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082447} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082447} = \mathbf{Pl}(0, 2, 0, 13, 0, 1)_{37654} \\
\ell_{2803} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083349} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083349} = \mathbf{Pl}(0, 29, 0, 24, 0, 1)_{38374} \\
\ell_{2804} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083359} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083359} = \mathbf{Pl}(0, 30, 0, 1, 0, 1)_{36926} \\
\ell_{2805} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083253} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083253} = \mathbf{Pl}(0, 26, 0, 27, 0, 1)_{38560} \\
\ell_{2806} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082649} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082649} = \mathbf{Pl}(0, 8, 0, 17, 0, 1)_{37912} \\
\ell_{2807} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082547} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082547} = \mathbf{Pl}(0, 5, 0, 14, 0, 1)_{37720} \\
\ell_{2808} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082948} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082948} = \mathbf{Pl}(0, 17, 0, 19, 0, 1)_{38047} \\
\ell_{2809} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082726} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082726} = \mathbf{Pl}(0, 10, 0, 28, 0, 1)_{38607} \\
\ell_{2810} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083070} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083070} = \mathbf{Pl}(0, 21, 0, 9, 0, 1)_{37421} \\
\ell_{2811} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083412} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083412} = \mathbf{Pl}(0, 31, 0, 21, 0, 1)_{38187} \\
\ell_{2812} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082492} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082492} = \mathbf{Pl}(0, 3, 0, 25, 0, 1)_{38411} \\
\ell_{2813} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083025} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083025} = \mathbf{Pl}(0, 19, 0, 30, 0, 1)_{38742} \\
\ell_{2814} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083057} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083057} = \mathbf{Pl}(0, 20, 0, 29, 0, 1)_{38680} \\
\ell_{2815} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083274} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083274} = \mathbf{Pl}(0, 27, 0, 15, 0, 1)_{37805} \\
\ell_{2816} &= \begin{bmatrix} 0 & 1 & \eta^9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083258} = \begin{bmatrix} 0 & 1 & 26 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083258} = \mathbf{Pl}(0, 26, 0, 1, 0, 0)_{122} \\
\ell_{2817} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082422} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082422} = \mathbf{Pl}(0, 1, 0, 21, 0, 1)_{38157}
\end{aligned}$$

$$\begin{aligned}
\ell_{2818} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082986} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082986} = \mathbf{Pl}(0, 18, 0, 24, 0, 1)_{38363} \\
\ell_{2819} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083308} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083308} = \mathbf{Pl}(0, 28, 0, 16, 0, 1)_{37869} \\
\ell_{2820} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082677} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082677} = \mathbf{Pl}(0, 9, 0, 12, 0, 1)_{37598} \\
\ell_{2821} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083146} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083146} = \mathbf{Pl}(0, 23, 0, 19, 0, 1)_{38053} \\
\ell_{2822} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082838} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082838} = \mathbf{Pl}(0, 14, 0, 8, 0, 1)_{37351} \\
\ell_{2823} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082771} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082771} = \mathbf{Pl}(0, 12, 0, 7, 0, 1)_{37286} \\
\ell_{2824} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083100} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083100} = \mathbf{Pl}(0, 22, 0, 6, 0, 1)_{37233} \\
\ell_{2825} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082530} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082530} = \mathbf{Pl}(0, 4, 0, 30, 0, 1)_{38727} \\
\ell_{2826} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083220} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083220} = \mathbf{Pl}(0, 25, 0, 27, 0, 1)_{38559} \\
\ell_{2827} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082919} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082919} = \mathbf{Pl}(0, 16, 0, 23, 0, 1)_{38298} \\
\ell_{2828} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082603} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082603} = \mathbf{Pl}(0, 7, 0, 4, 0, 1)_{37092} \\
\ell_{2829} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082892} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082892} = \mathbf{Pl}(0, 15, 0, 29, 0, 1)_{38675} \\
\ell_{2830} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082583} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082583} = \mathbf{Pl}(0, 6, 0, 17, 0, 1)_{37910} \\
\ell_{2831} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082815} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082815} = \mathbf{Pl}(0, 13, 0, 18, 0, 1)_{37980} \\
\ell_{2832} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082734} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082734} = \mathbf{Pl}(0, 11, 0, 3, 0, 1)_{37033} \\
\ell_{2833} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083174} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083174} = \mathbf{Pl}(0, 24, 0, 14, 0, 1)_{37739} \\
\ell_{2834} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082449} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082449} = \mathbf{Pl}(0, 2, 0, 15, 0, 1)_{37780} \\
\ell_{2835} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083330} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083330} = \mathbf{Pl}(0, 29, 0, 5, 0, 1)_{37177} \\
\ell_{2836} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083389} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083389} = \mathbf{Pl}(0, 30, 0, 31, 0, 1)_{38816} \\
\ell_{2837} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083227} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083227} = \mathbf{Pl}(0, 26, 0, 1, 0, 1)_{36922} \\
\ell_{2838} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082657} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082657} = \mathbf{Pl}(0, 8, 0, 25, 0, 1)_{38416}
\end{aligned}$$

$$\begin{aligned}
\ell_{2839} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082544} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082544} = \mathbf{Pl}(0, 5, 0, 11, 0, 1)_{37531} \\
\ell_{2840} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082931} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082931} = \mathbf{Pl}(0, 17, 0, 2, 0, 1)_{36976} \\
\ell_{2841} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082720} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082720} = \mathbf{Pl}(0, 10, 0, 22, 0, 1)_{38229} \\
\ell_{2842} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083089} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083089} = \mathbf{Pl}(0, 21, 0, 28, 0, 1)_{38618} \\
\ell_{2843} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083401} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083401} = \mathbf{Pl}(0, 31, 0, 10, 0, 1)_{37494} \\
\ell_{2844} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082493} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082493} = \mathbf{Pl}(0, 3, 0, 26, 0, 1)_{38474} \\
\ell_{2845} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083008} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083008} = \mathbf{Pl}(0, 19, 0, 13, 0, 1)_{37671} \\
\ell_{2846} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083037} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083037} = \mathbf{Pl}(0, 20, 0, 9, 0, 1)_{37420} \\
\ell_{2847} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083279} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083279} = \mathbf{Pl}(0, 27, 0, 20, 0, 1)_{38120} \\
\ell_{2848} &= \begin{bmatrix} 0 & 1 & \eta^3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082664} = \begin{bmatrix} 0 & 1 & 8 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082664} = \mathbf{Pl}(0, 8, 0, 1, 0, 0)_{104} \\
\ell_{2849} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082423} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082423} = \mathbf{Pl}(0, 1, 0, 22, 0, 1)_{38220} \\
\ell_{2850} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082973} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082973} = \mathbf{Pl}(0, 18, 0, 11, 0, 1)_{37544} \\
\ell_{2851} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083309} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083309} = \mathbf{Pl}(0, 28, 0, 17, 0, 1)_{37932} \\
\ell_{2852} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082688} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082688} = \mathbf{Pl}(0, 9, 0, 23, 0, 1)_{38291} \\
\ell_{2853} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083142} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083142} = \mathbf{Pl}(0, 23, 0, 15, 0, 1)_{37801} \\
\ell_{2854} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082856} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082856} = \mathbf{Pl}(0, 14, 0, 26, 0, 1)_{38485} \\
\ell_{2855} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082783} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082783} = \mathbf{Pl}(0, 12, 0, 19, 0, 1)_{38042} \\
\ell_{2856} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083119} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083119} = \mathbf{Pl}(0, 22, 0, 25, 0, 1)_{38430} \\
\ell_{2857} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082518} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082518} = \mathbf{Pl}(0, 4, 0, 18, 0, 1)_{37971} \\
\ell_{2858} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083214} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083214} = \mathbf{Pl}(0, 25, 0, 21, 0, 1)_{38181} \\
\ell_{2859} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082898} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082898} = \mathbf{Pl}(0, 16, 0, 2, 0, 1)_{36975}
\end{aligned}$$

$$\begin{aligned}
\ell_{2860} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082612} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082612} = \mathbf{Pl}(0, 7, 0, 13, 0, 1)_{37659} \\
\ell_{2861} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082875} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082875} = \mathbf{Pl}(0, 15, 0, 12, 0, 1)_{37604} \\
\ell_{2862} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082593} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082593} = \mathbf{Pl}(0, 6, 0, 27, 0, 1)_{38540} \\
\ell_{2863} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082802} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082802} = \mathbf{Pl}(0, 13, 0, 5, 0, 1)_{37161} \\
\ell_{2864} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082761} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082761} = \mathbf{Pl}(0, 11, 0, 30, 0, 1)_{38734} \\
\ell_{2865} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083163} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083163} = \mathbf{Pl}(0, 24, 0, 3, 0, 1)_{37046} \\
\ell_{2866} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082443} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082443} = \mathbf{Pl}(0, 2, 0, 9, 0, 1)_{37402} \\
\ell_{2867} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083332} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083332} = \mathbf{Pl}(0, 29, 0, 7, 0, 1)_{37303} \\
\ell_{2868} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083382} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083382} = \mathbf{Pl}(0, 30, 0, 24, 0, 1)_{38375} \\
\ell_{2869} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083236} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083236} = \mathbf{Pl}(0, 26, 0, 10, 0, 1)_{37489} \\
\ell_{2870} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082633} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082633} = \mathbf{Pl}(0, 8, 0, 1, 0, 1)_{36904} \\
\ell_{2871} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082537} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082537} = \mathbf{Pl}(0, 5, 0, 4, 0, 1)_{37090} \\
\ell_{2872} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082949} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082949} = \mathbf{Pl}(0, 17, 0, 20, 0, 1)_{38110} \\
\ell_{2873} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082706} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082706} = \mathbf{Pl}(0, 10, 0, 8, 0, 1)_{37347} \\
\ell_{2874} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083067} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083067} = \mathbf{Pl}(0, 21, 0, 6, 0, 1)_{37232} \\
\ell_{2875} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083405} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083405} = \mathbf{Pl}(0, 31, 0, 14, 0, 1)_{37746} \\
\ell_{2876} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082498} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082498} = \mathbf{Pl}(0, 3, 0, 31, 0, 1)_{38789} \\
\ell_{2877} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083024} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083024} = \mathbf{Pl}(0, 19, 0, 29, 0, 1)_{38679} \\
\ell_{2878} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083044} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083044} = \mathbf{Pl}(0, 20, 0, 16, 0, 1)_{37861} \\
\ell_{2879} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083287} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083287} = \mathbf{Pl}(0, 27, 0, 28, 0, 1)_{38624} \\
\ell_{2880} &= \begin{bmatrix} 0 & 1 & \eta^5 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082565} = \begin{bmatrix} 0 & 1 & 5 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082565} = \mathbf{Pl}(0, 5, 0, 1, 0, 0)_{101}
\end{aligned}$$

$$\begin{aligned}
\ell_{2881} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082424} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082424} = \mathbf{Pl}(0, 1, 0, 23, 0, 1)_{38283} \\
\ell_{2882} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082987} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082987} = \mathbf{Pl}(0, 18, 0, 25, 0, 1)_{38426} \\
\ell_{2883} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083305} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083305} = \mathbf{Pl}(0, 28, 0, 13, 0, 1)_{37680} \\
\ell_{2884} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082695} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082695} = \mathbf{Pl}(0, 9, 0, 30, 0, 1)_{38732} \\
\ell_{2885} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083151} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083151} = \mathbf{Pl}(0, 23, 0, 24, 0, 1)_{38368} \\
\ell_{2886} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082850} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082850} = \mathbf{Pl}(0, 14, 0, 20, 0, 1)_{38107} \\
\ell_{2887} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082795} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082795} = \mathbf{Pl}(0, 12, 0, 31, 0, 1)_{38798} \\
\ell_{2888} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083109} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083109} = \mathbf{Pl}(0, 22, 0, 15, 0, 1)_{37800} \\
\ell_{2889} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082522} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082522} = \mathbf{Pl}(0, 4, 0, 22, 0, 1)_{38223} \\
\ell_{2890} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083205} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083205} = \mathbf{Pl}(0, 25, 0, 12, 0, 1)_{37614} \\
\ell_{2891} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082914} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082914} = \mathbf{Pl}(0, 16, 0, 18, 0, 1)_{37983} \\
\ell_{2892} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082609} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082609} = \mathbf{Pl}(0, 7, 0, 10, 0, 1)_{37470} \\
\ell_{2893} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082866} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082866} = \mathbf{Pl}(0, 15, 0, 3, 0, 1)_{37037} \\
\ell_{2894} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082595} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082595} = \mathbf{Pl}(0, 6, 0, 29, 0, 1)_{38666} \\
\ell_{2895} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082805} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082805} = \mathbf{Pl}(0, 13, 0, 8, 0, 1)_{37350} \\
\ell_{2896} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082752} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082752} = \mathbf{Pl}(0, 11, 0, 21, 0, 1)_{38167} \\
\ell_{2897} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083187} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083187} = \mathbf{Pl}(0, 24, 0, 27, 0, 1)_{38558} \\
\ell_{2898} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082445} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082445} = \mathbf{Pl}(0, 2, 0, 11, 0, 1)_{37528} \\
\ell_{2899} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083351} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083351} = \mathbf{Pl}(0, 29, 0, 26, 0, 1)_{38500} \\
\ell_{2900} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083364} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083364} = \mathbf{Pl}(0, 30, 0, 6, 0, 1)_{37241} \\
\ell_{2901} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083242} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083242} = \mathbf{Pl}(0, 26, 0, 16, 0, 1)_{37867}
\end{aligned}$$

$$\begin{aligned}
\ell_{2902} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082641} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082641} = \mathbf{Pl}(0, 8, 0, 9, 0, 1)_{37408} \\
\ell_{2903} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082534} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082534} = \mathbf{Pl}(0, 5, 0, 1, 0, 1)_{36901} \\
\ell_{2904} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082934} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082934} = \mathbf{Pl}(0, 17, 0, 5, 0, 1)_{37165} \\
\ell_{2905} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082700} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082700} = \mathbf{Pl}(0, 10, 0, 2, 0, 1)_{36969} \\
\ell_{2906} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083080} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083080} = \mathbf{Pl}(0, 21, 0, 19, 0, 1)_{38051} \\
\ell_{2907} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083408} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083408} = \mathbf{Pl}(0, 31, 0, 17, 0, 1)_{37935} \\
\ell_{2908} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082495} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082495} = \mathbf{Pl}(0, 3, 0, 28, 0, 1)_{38600} \\
\ell_{2909} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083009} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083009} = \mathbf{Pl}(0, 19, 0, 14, 0, 1)_{37734} \\
\ell_{2910} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083032} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083032} = \mathbf{Pl}(0, 20, 0, 4, 0, 1)_{37105} \\
\ell_{2911} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083266} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083266} = \mathbf{Pl}(0, 27, 0, 7, 0, 1)_{37301} \\
\ell_{2912} &= \begin{bmatrix} 0 & 1 & \eta^{10} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082961} = \begin{bmatrix} 0 & 1 & 17 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082961} = \mathbf{Pl}(0, 17, 0, 1, 0, 0)_{113} \\
\ell_{2913} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082425} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082425} = \mathbf{Pl}(0, 1, 0, 24, 0, 1)_{38346} \\
\ell_{2914} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082974} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082974} = \mathbf{Pl}(0, 18, 0, 12, 0, 1)_{37607} \\
\ell_{2915} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083300} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083300} = \mathbf{Pl}(0, 28, 0, 8, 0, 1)_{37365} \\
\ell_{2916} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082671} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082671} = \mathbf{Pl}(0, 9, 0, 6, 0, 1)_{37220} \\
\ell_{2917} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083154} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083154} = \mathbf{Pl}(0, 23, 0, 27, 0, 1)_{38557} \\
\ell_{2918} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082834} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082834} = \mathbf{Pl}(0, 14, 0, 4, 0, 1)_{37099} \\
\ell_{2919} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082781} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082781} = \mathbf{Pl}(0, 12, 0, 17, 0, 1)_{37916} \\
\ell_{2920} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083097} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083097} = \mathbf{Pl}(0, 22, 0, 3, 0, 1)_{37044} \\
\ell_{2921} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082515} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082515} = \mathbf{Pl}(0, 4, 0, 15, 0, 1)_{37782} \\
\ell_{2922} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083224} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083224} = \mathbf{Pl}(0, 25, 0, 31, 0, 1)_{38811}
\end{aligned}$$

$$\begin{aligned}
\ell_{2923} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082921} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082921} = \mathbf{Pl}(0, 16, 0, 25, 0, 1)_{38424} \\
\ell_{2924} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082601} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082601} = \mathbf{Pl}(0, 7, 0, 2, 0, 1)_{36966} \\
\ell_{2925} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082891} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082891} = \mathbf{Pl}(0, 15, 0, 28, 0, 1)_{38612} \\
\ell_{2926} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082592} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082592} = \mathbf{Pl}(0, 6, 0, 26, 0, 1)_{38477} \\
\ell_{2927} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082806} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082806} = \mathbf{Pl}(0, 13, 0, 9, 0, 1)_{37413} \\
\ell_{2928} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082750} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082750} = \mathbf{Pl}(0, 11, 0, 19, 0, 1)_{38041} \\
\ell_{2929} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083167} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083167} = \mathbf{Pl}(0, 24, 0, 7, 0, 1)_{37298} \\
\ell_{2930} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082455} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082455} = \mathbf{Pl}(0, 2, 0, 21, 0, 1)_{38158} \\
\ell_{2931} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083341} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083341} = \mathbf{Pl}(0, 29, 0, 16, 0, 1)_{37870} \\
\ell_{2932} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083387} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083387} = \mathbf{Pl}(0, 30, 0, 29, 0, 1)_{38690} \\
\ell_{2933} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083244} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083244} = \mathbf{Pl}(0, 26, 0, 18, 0, 1)_{37993} \\
\ell_{2934} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082662} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082662} = \mathbf{Pl}(0, 8, 0, 30, 0, 1)_{38731} \\
\ell_{2935} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082556} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082556} = \mathbf{Pl}(0, 5, 0, 23, 0, 1)_{38287} \\
\ell_{2936} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082930} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082930} = \mathbf{Pl}(0, 17, 0, 1, 0, 1)_{36913} \\
\ell_{2937} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082709} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082709} = \mathbf{Pl}(0, 10, 0, 11, 0, 1)_{37536} \\
\ell_{2938} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083075} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083075} = \mathbf{Pl}(0, 21, 0, 14, 0, 1)_{37736} \\
\ell_{2939} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083396} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083396} = \mathbf{Pl}(0, 31, 0, 5, 0, 1)_{37179} \\
\ell_{2940} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082480} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082480} = \mathbf{Pl}(0, 3, 0, 13, 0, 1)_{37655} \\
\ell_{2941} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083015} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083015} = \mathbf{Pl}(0, 19, 0, 20, 0, 1)_{38112} \\
\ell_{2942} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083050} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083050} = \mathbf{Pl}(0, 20, 0, 22, 0, 1)_{38239} \\
\ell_{2943} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083269} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083269} = \mathbf{Pl}(0, 27, 0, 10, 0, 1)_{37490}
\end{aligned}$$

$$\begin{aligned}
\ell_{2944} &= \begin{bmatrix} 0 & 1 & \eta^6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082730} = \begin{bmatrix} 0 & 1 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082730} = \mathbf{Pl}(0, 10, 0, 1, 0, 0)_{106} \\
\ell_{2945} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082426} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082426} = \mathbf{Pl}(0, 1, 0, 25, 0, 1)_{38409} \\
\ell_{2946} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082992} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082992} = \mathbf{Pl}(0, 18, 0, 30, 0, 1)_{38741} \\
\ell_{2947} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083312} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083312} = \mathbf{Pl}(0, 28, 0, 20, 0, 1)_{38121} \\
\ell_{2948} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082680} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082680} = \mathbf{Pl}(0, 9, 0, 15, 0, 1)_{37787} \\
\ell_{2949} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083139} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083139} = \mathbf{Pl}(0, 23, 0, 12, 0, 1)_{37612} \\
\ell_{2950} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082840} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082840} = \mathbf{Pl}(0, 14, 0, 10, 0, 1)_{37477} \\
\ell_{2951} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082793} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082793} = \mathbf{Pl}(0, 12, 0, 29, 0, 1)_{38672} \\
\ell_{2952} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083115} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083115} = \mathbf{Pl}(0, 22, 0, 21, 0, 1)_{38178} \\
\ell_{2953} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082511} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082511} = \mathbf{Pl}(0, 4, 0, 11, 0, 1)_{37530} \\
\ell_{2954} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083199} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083199} = \mathbf{Pl}(0, 25, 0, 6, 0, 1)_{37236} \\
\ell_{2955} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082905} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082905} = \mathbf{Pl}(0, 16, 0, 9, 0, 1)_{37416} \\
\ell_{2956} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082604} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082604} = \mathbf{Pl}(0, 7, 0, 5, 0, 1)_{37155} \\
\ell_{2957} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082882} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082882} = \mathbf{Pl}(0, 15, 0, 19, 0, 1)_{38045} \\
\ell_{2958} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082594} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082594} = \mathbf{Pl}(0, 6, 0, 28, 0, 1)_{38603} \\
\ell_{2959} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082801} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082801} = \mathbf{Pl}(0, 13, 0, 4, 0, 1)_{37098} \\
\ell_{2960} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082755} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082755} = \mathbf{Pl}(0, 11, 0, 24, 0, 1)_{38356} \\
\ell_{2961} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083191} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083191} = \mathbf{Pl}(0, 24, 0, 31, 0, 1)_{38810} \\
\ell_{2962} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082457} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082457} = \mathbf{Pl}(0, 2, 0, 23, 0, 1)_{38284} \\
\ell_{2963} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083338} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083338} = \mathbf{Pl}(0, 29, 0, 13, 0, 1)_{37681} \\
\ell_{2964} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083361} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083361} = \mathbf{Pl}(0, 30, 0, 3, 0, 1)_{37052}
\end{aligned}$$

$$\begin{aligned}
\ell_{2965} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083234} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083234} = \mathbf{Pl}(0, 26, 0, 8, 0, 1)_{37363} \\
\ell_{2966} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082654} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082654} = \mathbf{Pl}(0, 8, 0, 22, 0, 1)_{38227} \\
\ell_{2967} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082551} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082551} = \mathbf{Pl}(0, 5, 0, 18, 0, 1)_{37972} \\
\ell_{2968} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082945} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082945} = \mathbf{Pl}(0, 17, 0, 16, 0, 1)_{37858} \\
\ell_{2969} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082699} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082699} = \mathbf{Pl}(0, 10, 0, 1, 0, 1)_{36906} \\
\ell_{2970} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083088} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083088} = \mathbf{Pl}(0, 21, 0, 27, 0, 1)_{38555} \\
\ell_{2971} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083417} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083417} = \mathbf{Pl}(0, 31, 0, 26, 0, 1)_{38502} \\
\ell_{2972} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082481} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082481} = \mathbf{Pl}(0, 3, 0, 14, 0, 1)_{37718} \\
\ell_{2973} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083002} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083002} = \mathbf{Pl}(0, 19, 0, 7, 0, 1)_{37293} \\
\ell_{2974} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083030} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083030} = \mathbf{Pl}(0, 20, 0, 2, 0, 1)_{36979} \\
\ell_{2975} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083276} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083276} = \mathbf{Pl}(0, 27, 0, 17, 0, 1)_{37931} \\
\ell_{2976} &= \begin{bmatrix} 0 & 1 & \eta^{22} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083093} = \begin{bmatrix} 0 & 1 & 21 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083093} = \mathbf{Pl}(0, 21, 0, 1, 0, 0)_{117} \\
\ell_{2977} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082427} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082427} = \mathbf{Pl}(0, 1, 0, 26, 0, 1)_{38472} \\
\ell_{2978} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082975} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082975} = \mathbf{Pl}(0, 18, 0, 13, 0, 1)_{37670} \\
\ell_{2979} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083313} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083313} = \mathbf{Pl}(0, 28, 0, 21, 0, 1)_{38184} \\
\ell_{2980} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082685} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082685} = \mathbf{Pl}(0, 9, 0, 20, 0, 1)_{38102} \\
\ell_{2981} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083143} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083143} = \mathbf{Pl}(0, 23, 0, 16, 0, 1)_{37864} \\
\ell_{2982} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082854} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082854} = \mathbf{Pl}(0, 14, 0, 24, 0, 1)_{38359} \\
\ell_{2983} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082773} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082773} = \mathbf{Pl}(0, 12, 0, 9, 0, 1)_{37412} \\
\ell_{2984} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083104} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083104} = \mathbf{Pl}(0, 22, 0, 10, 0, 1)_{37485} \\
\ell_{2985} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082507} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082507} = \mathbf{Pl}(0, 4, 0, 7, 0, 1)_{37278}
\end{aligned}$$

$$\begin{aligned}
\ell_{2986} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083201} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083201} = \mathbf{Pl}(0, 25, 0, 8, 0, 1)_{37362} \\
\ell_{2987} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082924} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082924} = \mathbf{Pl}(0, 16, 0, 28, 0, 1)_{38613} \\
\ell_{2988} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082611} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082611} = \mathbf{Pl}(0, 7, 0, 12, 0, 1)_{37596} \\
\ell_{2989} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082865} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082865} = \mathbf{Pl}(0, 15, 0, 2, 0, 1)_{36974} \\
\ell_{2990} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082588} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082588} = \mathbf{Pl}(0, 6, 0, 22, 0, 1)_{38225} \\
\ell_{2991} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082816} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082816} = \mathbf{Pl}(0, 13, 0, 19, 0, 1)_{38043} \\
\ell_{2992} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082736} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082736} = \mathbf{Pl}(0, 11, 0, 5, 0, 1)_{37159} \\
\ell_{2993} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083178} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083178} = \mathbf{Pl}(0, 24, 0, 18, 0, 1)_{37991} \\
\ell_{2994} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082451} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082451} = \mathbf{Pl}(0, 2, 0, 17, 0, 1)_{37906} \\
\ell_{2995} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083340} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083340} = \mathbf{Pl}(0, 29, 0, 15, 0, 1)_{37807} \\
\ell_{2996} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083362} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083362} = \mathbf{Pl}(0, 30, 0, 4, 0, 1)_{37115} \\
\ell_{2997} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083229} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083229} = \mathbf{Pl}(0, 26, 0, 3, 0, 1)_{37048} \\
\ell_{2998} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082646} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082646} = \mathbf{Pl}(0, 8, 0, 14, 0, 1)_{37723} \\
\ell_{2999} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082562} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082562} = \mathbf{Pl}(0, 5, 0, 29, 0, 1)_{38665} \\
\ell_{3000} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082935} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082935} = \mathbf{Pl}(0, 17, 0, 6, 0, 1)_{37228} \\
\ell_{3001} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082729} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082729} = \mathbf{Pl}(0, 10, 0, 31, 0, 1)_{38796} \\
\ell_{3002} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083062} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083062} = \mathbf{Pl}(0, 21, 0, 1, 0, 1)_{36917} \\
\ell_{3003} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083421} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083421} = \mathbf{Pl}(0, 31, 0, 30, 0, 1)_{38754} \\
\ell_{3004} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082478} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082478} = \mathbf{Pl}(0, 3, 0, 11, 0, 1)_{37529} \\
\ell_{3005} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083018} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083018} = \mathbf{Pl}(0, 19, 0, 23, 0, 1)_{38301} \\
\ell_{3006} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1083055} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1083055} = \mathbf{Pl}(0, 20, 0, 27, 0, 1)_{38554}
\end{aligned}$$

$$\begin{aligned}
\ell_{3007} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083284} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083284} = \mathbf{Pl}(0, 27, 0, 25, 0, 1)_{38435} \\
\ell_{3008} &= \begin{bmatrix} 0 & 1 & \eta^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083423} = \begin{bmatrix} 0 & 1 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083423} = \mathbf{Pl}(0, 31, 0, 1, 0, 0)_{127} \\
\ell_{3009} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082428} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082428} = \mathbf{Pl}(0, 1, 0, 27, 0, 1)_{38535} \\
\ell_{3010} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082993} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082993} = \mathbf{Pl}(0, 18, 0, 31, 0, 1)_{38804} \\
\ell_{3011} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083301} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083301} = \mathbf{Pl}(0, 28, 0, 9, 0, 1)_{37428} \\
\ell_{3012} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082694} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082694} = \mathbf{Pl}(0, 9, 0, 29, 0, 1)_{38669} \\
\ell_{3013} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083134} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083134} = \mathbf{Pl}(0, 23, 0, 7, 0, 1)_{37297} \\
\ell_{3014} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082852} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082852} = \mathbf{Pl}(0, 14, 0, 22, 0, 1)_{38233} \\
\ell_{3015} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082769} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082769} = \mathbf{Pl}(0, 12, 0, 5, 0, 1)_{37160} \\
\ell_{3016} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1083122} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1083122} = \mathbf{Pl}(0, 22, 0, 28, 0, 1)_{38619} \\
\ell_{3017} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082503} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082503} = \mathbf{Pl}(0, 4, 0, 3, 0, 1)_{37026} \\
\ell_{3018} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083210} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083210} = \mathbf{Pl}(0, 25, 0, 17, 0, 1)_{37929} \\
\ell_{3019} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082908} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082908} = \mathbf{Pl}(0, 16, 0, 12, 0, 1)_{37605} \\
\ell_{3020} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082610} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082610} = \mathbf{Pl}(0, 7, 0, 11, 0, 1)_{37533} \\
\ell_{3021} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1082876} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1082876} = \mathbf{Pl}(0, 15, 0, 13, 0, 1)_{37667} \\
\ell_{3022} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082582} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082582} = \mathbf{Pl}(0, 6, 0, 16, 0, 1)_{37847} \\
\ell_{3023} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082827} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082827} = \mathbf{Pl}(0, 13, 0, 30, 0, 1)_{38736} \\
\ell_{3024} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082745} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082745} = \mathbf{Pl}(0, 11, 0, 14, 0, 1)_{37726} \\
\ell_{3025} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083170} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083170} = \mathbf{Pl}(0, 24, 0, 10, 0, 1)_{37487} \\
\ell_{3026} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082453} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082453} = \mathbf{Pl}(0, 2, 0, 19, 0, 1)_{38032} \\
\ell_{3027} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083343} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083343} = \mathbf{Pl}(0, 29, 0, 18, 0, 1)_{37996}
\end{aligned}$$

$$\begin{aligned}
\ell_{3028} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083384} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083384} = \mathbf{Pl}(0, 30, 0, 26, 0, 1)_{38501} \\
\ell_{3029} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1083251} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1083251} = \mathbf{Pl}(0, 26, 0, 25, 0, 1)_{38434} \\
\ell_{3030} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082638} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082638} = \mathbf{Pl}(0, 8, 0, 6, 0, 1)_{37219} \\
\ell_{3031} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082557} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082557} = \mathbf{Pl}(0, 5, 0, 24, 0, 1)_{38350} \\
\ell_{3032} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082952} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082952} = \mathbf{Pl}(0, 17, 0, 23, 0, 1)_{38299} \\
\ell_{3033} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082719} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082719} = \mathbf{Pl}(0, 10, 0, 21, 0, 1)_{38166} \\
\ell_{3034} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083081} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083081} = \mathbf{Pl}(0, 21, 0, 20, 0, 1)_{38114} \\
\ell_{3035} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083392} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083392} = \mathbf{Pl}(0, 31, 0, 1, 0, 1)_{36927} \\
\ell_{3036} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082475} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082475} = \mathbf{Pl}(0, 3, 0, 8, 0, 1)_{37340} \\
\ell_{3037} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082999} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082999} = \mathbf{Pl}(0, 19, 0, 4, 0, 1)_{37104} \\
\ell_{3038} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083043} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083043} = \mathbf{Pl}(0, 20, 0, 15, 0, 1)_{37798} \\
\ell_{3039} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1083261} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1083261} = \mathbf{Pl}(0, 27, 0, 2, 0, 1)_{36986} \\
\ell_{3040} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} & 0 \\ 0 & 0 & 0 & 0 & 1 \end{bmatrix}_{1082499} = \begin{bmatrix} 0 & 1 & 3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1082499} = \mathbf{Pl}(0, 3, 0, 1, 0, 0)_{99} \\
\ell_{3041} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082429} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082429} = \mathbf{Pl}(0, 1, 0, 28, 0, 1)_{38598} \\
\ell_{3042} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082976} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082976} = \mathbf{Pl}(0, 18, 0, 14, 0, 1)_{37733} \\
\ell_{3043} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1083315} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1083315} = \mathbf{Pl}(0, 28, 0, 23, 0, 1)_{38310} \\
\ell_{3044} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082672} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082672} = \mathbf{Pl}(0, 9, 0, 7, 0, 1)_{37283} \\
\ell_{3045} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083140} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083140} = \mathbf{Pl}(0, 23, 0, 13, 0, 1)_{37675} \\
\ell_{3046} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082855} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082855} = \mathbf{Pl}(0, 14, 0, 25, 0, 1)_{38422} \\
\ell_{3047} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082768} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082768} = \mathbf{Pl}(0, 12, 0, 4, 0, 1)_{37097} \\
\ell_{3048} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083111} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083111} = \mathbf{Pl}(0, 22, 0, 17, 0, 1)_{37926}
\end{aligned}$$

$$\begin{aligned}
\ell_{3049} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082531} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082531} = \mathbf{Pl}(0, 4, 0, 31, 0, 1)_{38790} \\
\ell_{3050} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083213} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083213} = \mathbf{Pl}(0, 25, 0, 20, 0, 1)_{38118} \\
\ell_{3051} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082915} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082915} = \mathbf{Pl}(0, 16, 0, 19, 0, 1)_{38046} \\
\ell_{3052} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082629} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082629} = \mathbf{Pl}(0, 7, 0, 30, 0, 1)_{38730} \\
\ell_{3053} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082868} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082868} = \mathbf{Pl}(0, 15, 0, 5, 0, 1)_{37163} \\
\ell_{3054} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082568} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082568} = \mathbf{Pl}(0, 6, 0, 2, 0, 1)_{36965} \\
\ell_{3055} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082821} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082821} = \mathbf{Pl}(0, 13, 0, 24, 0, 1)_{38358} \\
\ell_{3056} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1082757} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1082757} = \mathbf{Pl}(0, 11, 0, 26, 0, 1)_{38482} \\
\ell_{3057} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1083168} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1083168} = \mathbf{Pl}(0, 24, 0, 8, 0, 1)_{37361} \\
\ell_{3058} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082463} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082463} = \mathbf{Pl}(0, 2, 0, 29, 0, 1)_{38662} \\
\ell_{3059} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083336} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083336} = \mathbf{Pl}(0, 29, 0, 11, 0, 1)_{37555} \\
\ell_{3060} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083368} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083368} = \mathbf{Pl}(0, 30, 0, 10, 0, 1)_{37493} \\
\ell_{3061} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083247} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083247} = \mathbf{Pl}(0, 26, 0, 21, 0, 1)_{38182} \\
\ell_{3062} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082659} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082659} = \mathbf{Pl}(0, 8, 0, 27, 0, 1)_{38542} \\
\ell_{3063} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082536} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082536} = \mathbf{Pl}(0, 5, 0, 3, 0, 1)_{37027} \\
\ell_{3064} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082944} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082944} = \mathbf{Pl}(0, 17, 0, 15, 0, 1)_{37795} \\
\ell_{3065} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082704} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082704} = \mathbf{Pl}(0, 10, 0, 6, 0, 1)_{37221} \\
\ell_{3066} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083077} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083077} = \mathbf{Pl}(0, 21, 0, 16, 0, 1)_{37862} \\
\ell_{3067} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083413} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083413} = \mathbf{Pl}(0, 31, 0, 22, 0, 1)_{38250} \\
\ell_{3068} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082468} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082468} = \mathbf{Pl}(0, 3, 0, 1, 0, 1)_{36899} \\
\ell_{3069} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083013} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083013} = \mathbf{Pl}(0, 19, 0, 18, 0, 1)_{37986}
\end{aligned}$$

$$\begin{aligned}
\ell_{3070} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1083040} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1083040} = \mathbf{Pl}(0, 20, 0, 12, 0, 1)_{37609} \\
\ell_{3071} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083268} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083268} = \mathbf{Pl}(0, 27, 0, 9, 0, 1)_{37427} \\
\ell_{3072} &= \begin{bmatrix} 0 & 1 & \eta^{17} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083027} = \begin{bmatrix} 0 & 1 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083027} = \mathbf{Pl}(0, 19, 0, 1, 0, 0)_{115} \\
\ell_{3073} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082430} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082430} = \mathbf{Pl}(0, 1, 0, 29, 0, 1)_{38661} \\
\ell_{3074} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082990} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082990} = \mathbf{Pl}(0, 18, 0, 28, 0, 1)_{38615} \\
\ell_{3075} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1083303} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1083303} = \mathbf{Pl}(0, 28, 0, 11, 0, 1)_{37554} \\
\ell_{3076} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082679} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082679} = \mathbf{Pl}(0, 9, 0, 14, 0, 1)_{37724} \\
\ell_{3077} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083153} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083153} = \mathbf{Pl}(0, 23, 0, 26, 0, 1)_{38494} \\
\ell_{3078} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082853} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082853} = \mathbf{Pl}(0, 14, 0, 23, 0, 1)_{38296} \\
\ell_{3079} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082772} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082772} = \mathbf{Pl}(0, 12, 0, 8, 0, 1)_{37349} \\
\ell_{3080} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1083101} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1083101} = \mathbf{Pl}(0, 22, 0, 7, 0, 1)_{37296} \\
\ell_{3081} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082527} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082527} = \mathbf{Pl}(0, 4, 0, 27, 0, 1)_{38538} \\
\ell_{3082} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083206} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083206} = \mathbf{Pl}(0, 25, 0, 13, 0, 1)_{37677} \\
\ell_{3083} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082899} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082899} = \mathbf{Pl}(0, 16, 0, 3, 0, 1)_{37038} \\
\ell_{3084} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082624} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082624} = \mathbf{Pl}(0, 7, 0, 25, 0, 1)_{38415} \\
\ell_{3085} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1082873} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1082873} = \mathbf{Pl}(0, 15, 0, 10, 0, 1)_{37478} \\
\ell_{3086} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082570} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082570} = \mathbf{Pl}(0, 6, 0, 4, 0, 1)_{37091} \\
\ell_{3087} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082818} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082818} = \mathbf{Pl}(0, 13, 0, 21, 0, 1)_{38169} \\
\ell_{3088} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1082748} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1082748} = \mathbf{Pl}(0, 11, 0, 17, 0, 1)_{37915} \\
\ell_{3089} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1083176} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1083176} = \mathbf{Pl}(0, 24, 0, 16, 0, 1)_{37865} \\
\ell_{3090} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082465} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082465} = \mathbf{Pl}(0, 2, 0, 31, 0, 1)_{38788}
\end{aligned}$$

$$\begin{aligned}
\ell_{3091} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083347} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083347} = \mathbf{Pl}(0, 29, 0, 22, 0, 1)_{38248} \\
\ell_{3092} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083378} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083378} = \mathbf{Pl}(0, 30, 0, 20, 0, 1)_{38123} \\
\ell_{3093} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1083241} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1083241} = \mathbf{Pl}(0, 26, 0, 15, 0, 1)_{37804} \\
\ell_{3094} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082651} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082651} = \mathbf{Pl}(0, 8, 0, 19, 0, 1)_{38038} \\
\ell_{3095} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082539} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082539} = \mathbf{Pl}(0, 5, 0, 6, 0, 1)_{37216} \\
\ell_{3096} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082959} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082959} = \mathbf{Pl}(0, 17, 0, 30, 0, 1)_{38740} \\
\ell_{3097} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082710} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082710} = \mathbf{Pl}(0, 10, 0, 12, 0, 1)_{37599} \\
\ell_{3098} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083066} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083066} = \mathbf{Pl}(0, 21, 0, 5, 0, 1)_{37169} \\
\ell_{3099} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083400} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083400} = \mathbf{Pl}(0, 31, 0, 9, 0, 1)_{37431} \\
\ell_{3100} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082469} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082469} = \mathbf{Pl}(0, 3, 0, 2, 0, 1)_{36962} \\
\ell_{3101} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082996} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1082996} = \mathbf{Pl}(0, 19, 0, 1, 0, 1)_{36915} \\
\ell_{3102} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083052} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083052} = \mathbf{Pl}(0, 20, 0, 24, 0, 1)_{38365} \\
\ell_{3103} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083277} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083277} = \mathbf{Pl}(0, 27, 0, 18, 0, 1)_{37994} \\
\ell_{3104} &= \begin{bmatrix} 0 & 1 & \eta^7 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083060} = \begin{bmatrix} 0 & 1 & 20 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083060} = \mathbf{Pl}(0, 20, 0, 1, 0, 0)_{116} \\
\ell_{3105} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1082431} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1082431} = \mathbf{Pl}(0, 1, 0, 30, 0, 1)_{38724} \\
\ell_{3106} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082977} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082977} = \mathbf{Pl}(0, 18, 0, 15, 0, 1)_{37796} \\
\ell_{3107} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083302} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083302} = \mathbf{Pl}(0, 28, 0, 10, 0, 1)_{37491} \\
\ell_{3108} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1082686} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1082686} = \mathbf{Pl}(0, 9, 0, 21, 0, 1)_{38165} \\
\ell_{3109} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1083133} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1083133} = \mathbf{Pl}(0, 23, 0, 6, 0, 1)_{37234} \\
\ell_{3110} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1082835} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1082835} = \mathbf{Pl}(0, 14, 0, 5, 0, 1)_{37162} \\
\ell_{3111} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082792} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082792} = \mathbf{Pl}(0, 12, 0, 28, 0, 1)_{38609}
\end{aligned}$$

$$\begin{aligned}
\ell_{3112} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1083118} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1083118} = \mathbf{Pl}(0, 22, 0, 24, 0, 1)_{38367} \\
\ell_{3113} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082523} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082523} = \mathbf{Pl}(0, 4, 0, 23, 0, 1)_{38286} \\
\ell_{3114} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1083196} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1083196} = \mathbf{Pl}(0, 25, 0, 3, 0, 1)_{37047} \\
\ell_{3115} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1082918} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1082918} = \mathbf{Pl}(0, 16, 0, 22, 0, 1)_{38235} \\
\ell_{3116} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082615} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082615} = \mathbf{Pl}(0, 7, 0, 16, 0, 1)_{37848} \\
\ell_{3117} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082890} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082890} = \mathbf{Pl}(0, 15, 0, 27, 0, 1)_{38549} \\
\ell_{3118} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1082580} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1082580} = \mathbf{Pl}(0, 6, 0, 14, 0, 1)_{37721} \\
\ell_{3119} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082799} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082799} = \mathbf{Pl}(0, 13, 0, 2, 0, 1)_{36972} \\
\ell_{3120} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082743} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082743} = \mathbf{Pl}(0, 11, 0, 12, 0, 1)_{37600} \\
\ell_{3121} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1083189} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1083189} = \mathbf{Pl}(0, 24, 0, 29, 0, 1)_{38684} \\
\ell_{3122} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082459} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082459} = \mathbf{Pl}(0, 2, 0, 25, 0, 1)_{38410} \\
\ell_{3123} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1083345} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1083345} = \mathbf{Pl}(0, 29, 0, 20, 0, 1)_{38122} \\
\ell_{3124} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1083377} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1083377} = \mathbf{Pl}(0, 30, 0, 19, 0, 1)_{38060} \\
\ell_{3125} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1083230} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1083230} = \mathbf{Pl}(0, 26, 0, 4, 0, 1)_{37111} \\
\ell_{3126} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082643} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082643} = \mathbf{Pl}(0, 8, 0, 11, 0, 1)_{37534} \\
\ell_{3127} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1082542} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1082542} = \mathbf{Pl}(0, 5, 0, 9, 0, 1)_{37405} \\
\ell_{3128} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082937} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082937} = \mathbf{Pl}(0, 17, 0, 8, 0, 1)_{37354} \\
\ell_{3129} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1082716} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1082716} = \mathbf{Pl}(0, 10, 0, 18, 0, 1)_{37977} \\
\ell_{3130} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1083092} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1083092} = \mathbf{Pl}(0, 21, 0, 31, 0, 1)_{38807} \\
\ell_{3131} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083404} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083404} = \mathbf{Pl}(0, 31, 0, 13, 0, 1)_{37683} \\
\ell_{3132} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082474} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082474} = \mathbf{Pl}(0, 3, 0, 7, 0, 1)_{37277}
\end{aligned}$$

$$\begin{aligned}
\ell_{3133} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083012} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083012} = \mathbf{Pl}(0, 19, 0, 17, 0, 1)_{37923} \\
\ell_{3134} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083029} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083029} = \mathbf{Pl}(0, 20, 0, 1, 0, 1)_{36916} \\
\ell_{3135} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083285} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083285} = \mathbf{Pl}(0, 27, 0, 26, 0, 1)_{38498} \\
\ell_{3136} &= \begin{bmatrix} 0 & 1 & \eta^{16} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083291} = \begin{bmatrix} 0 & 1 & 27 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1083291} = \mathbf{Pl}(0, 27, 0, 1, 0, 0)_{123} \\
\ell_{3137} &= \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & \eta^{15} \end{bmatrix}_{1082432} = \begin{bmatrix} 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 31 \end{bmatrix}_{1082432} = \mathbf{Pl}(0, 1, 0, 31, 0, 1)_{38787} \\
\ell_{3138} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{30} \\ 0 & 0 & 1 & \eta^{14} \end{bmatrix}_{1082991} = \begin{bmatrix} 0 & 1 & 0 & 18 \\ 0 & 0 & 1 & 29 \end{bmatrix}_{1082991} = \mathbf{Pl}(0, 18, 0, 29, 0, 1)_{38678} \\
\ell_{3139} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{13} \\ 0 & 0 & 1 & \eta^{28} \end{bmatrix}_{1083314} = \begin{bmatrix} 0 & 1 & 0 & 28 \\ 0 & 0 & 1 & 22 \end{bmatrix}_{1083314} = \mathbf{Pl}(0, 28, 0, 22, 0, 1)_{38247} \\
\ell_{3140} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{29} \\ 0 & 0 & 1 & \eta^{13} \end{bmatrix}_{1082693} = \begin{bmatrix} 0 & 1 & 0 & 9 \\ 0 & 0 & 1 & 28 \end{bmatrix}_{1082693} = \mathbf{Pl}(0, 9, 0, 28, 0, 1)_{38606} \\
\ell_{3141} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{26} \\ 0 & 0 & 1 & \eta^{10} \end{bmatrix}_{1083144} = \begin{bmatrix} 0 & 1 & 0 & 23 \\ 0 & 0 & 1 & 17 \end{bmatrix}_{1083144} = \mathbf{Pl}(0, 23, 0, 17, 0, 1)_{37927} \\
\ell_{3142} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{12} \\ 0 & 0 & 1 & \eta^{27} \end{bmatrix}_{1082841} = \begin{bmatrix} 0 & 1 & 0 & 14 \\ 0 & 0 & 1 & 11 \end{bmatrix}_{1082841} = \mathbf{Pl}(0, 14, 0, 11, 0, 1)_{37540} \\
\ell_{3143} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{20} \\ 0 & 0 & 1 & \eta^4 \end{bmatrix}_{1082780} = \begin{bmatrix} 0 & 1 & 0 & 12 \\ 0 & 0 & 1 & 16 \end{bmatrix}_{1082780} = \mathbf{Pl}(0, 12, 0, 16, 0, 1)_{37853} \\
\ell_{3144} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{28} \\ 0 & 0 & 1 & \eta^{12} \end{bmatrix}_{1083108} = \begin{bmatrix} 0 & 1 & 0 & 22 \\ 0 & 0 & 1 & 14 \end{bmatrix}_{1083108} = \mathbf{Pl}(0, 22, 0, 14, 0, 1)_{37737} \\
\ell_{3145} &= \begin{bmatrix} 0 & 1 & 0 & \eta^2 \\ 0 & 0 & 1 & \eta^{17} \end{bmatrix}_{1082519} = \begin{bmatrix} 0 & 1 & 0 & 4 \\ 0 & 0 & 1 & 19 \end{bmatrix}_{1082519} = \mathbf{Pl}(0, 4, 0, 19, 0, 1)_{38034} \\
\ell_{3146} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{25} \\ 0 & 0 & 1 & \eta^9 \end{bmatrix}_{1083219} = \begin{bmatrix} 0 & 1 & 0 & 25 \\ 0 & 0 & 1 & 26 \end{bmatrix}_{1083219} = \mathbf{Pl}(0, 25, 0, 26, 0, 1)_{38496} \\
\ell_{3147} &= \begin{bmatrix} 0 & 1 & 0 & \eta^4 \\ 0 & 0 & 1 & \eta^{19} \end{bmatrix}_{1082902} = \begin{bmatrix} 0 & 1 & 0 & 16 \\ 0 & 0 & 1 & 6 \end{bmatrix}_{1082902} = \mathbf{Pl}(0, 16, 0, 6, 0, 1)_{37227} \\
\ell_{3148} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{11} \\ 0 & 0 & 1 & \eta^{26} \end{bmatrix}_{1082622} = \begin{bmatrix} 0 & 1 & 0 & 7 \\ 0 & 0 & 1 & 23 \end{bmatrix}_{1082622} = \mathbf{Pl}(0, 7, 0, 23, 0, 1)_{38289} \\
\ell_{3149} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{23} \\ 0 & 0 & 1 & \eta^7 \end{bmatrix}_{1082883} = \begin{bmatrix} 0 & 1 & 0 & 15 \\ 0 & 0 & 1 & 20 \end{bmatrix}_{1082883} = \mathbf{Pl}(0, 15, 0, 20, 0, 1)_{38108} \\
\ell_{3150} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{19} \\ 0 & 0 & 1 & \eta^3 \end{bmatrix}_{1082574} = \begin{bmatrix} 0 & 1 & 0 & 6 \\ 0 & 0 & 1 & 8 \end{bmatrix}_{1082574} = \mathbf{Pl}(0, 6, 0, 8, 0, 1)_{37343} \\
\ell_{3151} &= \begin{bmatrix} 0 & 1 & 0 & \eta^8 \\ 0 & 0 & 1 & \eta^{23} \end{bmatrix}_{1082812} = \begin{bmatrix} 0 & 1 & 0 & 13 \\ 0 & 0 & 1 & 15 \end{bmatrix}_{1082812} = \mathbf{Pl}(0, 13, 0, 15, 0, 1)_{37791} \\
\ell_{3152} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{27} \\ 0 & 0 & 1 & \eta^{11} \end{bmatrix}_{1082738} = \begin{bmatrix} 0 & 1 & 0 & 11 \\ 0 & 0 & 1 & 7 \end{bmatrix}_{1082738} = \mathbf{Pl}(0, 11, 0, 7, 0, 1)_{37285} \\
\ell_{3153} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{21} \\ 0 & 0 & 1 & \eta^5 \end{bmatrix}_{1083165} = \begin{bmatrix} 0 & 1 & 0 & 24 \\ 0 & 0 & 1 & 5 \end{bmatrix}_{1083165} = \mathbf{Pl}(0, 24, 0, 5, 0, 1)_{37172}
\end{aligned}$$

$$\begin{aligned}
\ell_{3154} &= \begin{bmatrix} 0 & 1 & 0 & \eta \\ 0 & 0 & 1 & \eta^{16} \end{bmatrix}_{1082461} = \begin{bmatrix} 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 27 \end{bmatrix}_{1082461} = \mathbf{Pl}(0, 2, 0, 27, 0, 1)_{38536} \\
\ell_{3155} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{14} \\ 0 & 0 & 1 & \eta^{29} \end{bmatrix}_{1083334} = \begin{bmatrix} 0 & 1 & 0 & 29 \\ 0 & 0 & 1 & 9 \end{bmatrix}_{1083334} = \mathbf{Pl}(0, 29, 0, 9, 0, 1)_{37429} \\
\ell_{3156} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{24} \\ 0 & 0 & 1 & \eta^8 \end{bmatrix}_{1083371} = \begin{bmatrix} 0 & 1 & 0 & 30 \\ 0 & 0 & 1 & 13 \end{bmatrix}_{1083371} = \mathbf{Pl}(0, 30, 0, 13, 0, 1)_{37682} \\
\ell_{3157} &= \begin{bmatrix} 0 & 1 & 0 & \eta^9 \\ 0 & 0 & 1 & \eta^{24} \end{bmatrix}_{1083256} = \begin{bmatrix} 0 & 1 & 0 & 26 \\ 0 & 0 & 1 & 30 \end{bmatrix}_{1083256} = \mathbf{Pl}(0, 26, 0, 30, 0, 1)_{38749} \\
\ell_{3158} &= \begin{bmatrix} 0 & 1 & 0 & \eta^3 \\ 0 & 0 & 1 & \eta^{18} \end{bmatrix}_{1082635} = \begin{bmatrix} 0 & 1 & 0 & 8 \\ 0 & 0 & 1 & 3 \end{bmatrix}_{1082635} = \mathbf{Pl}(0, 8, 0, 3, 0, 1)_{37030} \\
\ell_{3159} &= \begin{bmatrix} 0 & 1 & 0 & \eta^5 \\ 0 & 0 & 1 & \eta^{20} \end{bmatrix}_{1082545} = \begin{bmatrix} 0 & 1 & 0 & 5 \\ 0 & 0 & 1 & 12 \end{bmatrix}_{1082545} = \mathbf{Pl}(0, 5, 0, 12, 0, 1)_{37594} \\
\ell_{3160} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{10} \\ 0 & 0 & 1 & \eta^{25} \end{bmatrix}_{1082954} = \begin{bmatrix} 0 & 1 & 0 & 17 \\ 0 & 0 & 1 & 25 \end{bmatrix}_{1082954} = \mathbf{Pl}(0, 17, 0, 25, 0, 1)_{38425} \\
\ell_{3161} &= \begin{bmatrix} 0 & 1 & 0 & \eta^6 \\ 0 & 0 & 1 & \eta^{21} \end{bmatrix}_{1082722} = \begin{bmatrix} 0 & 1 & 0 & 10 \\ 0 & 0 & 1 & 24 \end{bmatrix}_{1082722} = \mathbf{Pl}(0, 10, 0, 24, 0, 1)_{38355} \\
\ell_{3162} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{22} \\ 0 & 0 & 1 & \eta^6 \end{bmatrix}_{1083071} = \begin{bmatrix} 0 & 1 & 0 & 21 \\ 0 & 0 & 1 & 10 \end{bmatrix}_{1083071} = \mathbf{Pl}(0, 21, 0, 10, 0, 1)_{37484} \\
\ell_{3163} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{15} \\ 0 & 0 & 1 & \eta^{30} \end{bmatrix}_{1083409} = \begin{bmatrix} 0 & 1 & 0 & 31 \\ 0 & 0 & 1 & 18 \end{bmatrix}_{1083409} = \mathbf{Pl}(0, 31, 0, 18, 0, 1)_{37998} \\
\ell_{3164} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{18} \\ 0 & 0 & 1 & \eta^2 \end{bmatrix}_{1082471} = \begin{bmatrix} 0 & 1 & 0 & 3 \\ 0 & 0 & 1 & 4 \end{bmatrix}_{1082471} = \mathbf{Pl}(0, 3, 0, 4, 0, 1)_{37088} \\
\ell_{3165} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{17} \\ 0 & 0 & 1 & \eta \end{bmatrix}_{1082997} = \begin{bmatrix} 0 & 1 & 0 & 19 \\ 0 & 0 & 1 & 2 \end{bmatrix}_{1082997} = \mathbf{Pl}(0, 19, 0, 2, 0, 1)_{36978} \\
\ell_{3166} &= \begin{bmatrix} 0 & 1 & 0 & \eta^7 \\ 0 & 0 & 1 & \eta^{22} \end{bmatrix}_{1083049} = \begin{bmatrix} 0 & 1 & 0 & 20 \\ 0 & 0 & 1 & 21 \end{bmatrix}_{1083049} = \mathbf{Pl}(0, 20, 0, 21, 0, 1)_{38176} \\
\ell_{3167} &= \begin{bmatrix} 0 & 1 & 0 & \eta^{16} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083260} = \begin{bmatrix} 0 & 1 & 0 & 27 \\ 0 & 0 & 1 & 1 \end{bmatrix}_{1083260} = \mathbf{Pl}(0, 27, 0, 1, 0, 1)_{36923}
\end{aligned}$$

Rank of lines: (0, 1024, 1082368, 1056, 32, 576, 896, 288, 736, 448, 384, 704, 128, 800, 512, 224, 480, 192, 416, 352, 768, 64, 928, 960, 832, 256, 160, 544, 320, 672, 992, 96, 608, 640, 864, 1025, 1042, 1052, 1033, 1047, 1038, 1036, 1046, 1028, 1049, 1040, 1031, 1039, 1030, 1037, ...1082997, 1083049, 1083260)

Rank of points on Klein quadric: (0, 2, 34849, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1152, 1215, 1278, 1341, 1404, 1467, 1530, 1593, 1656, 1719, 1782, 1845, 1908, 1971, 2034, ...36978, 38176, 36923)

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 0 points not on any line:

The points on the surface but not on lines are:

Line Intersection Graph

Too many lines to print.

Neighbor sets in the line intersection graph:

Too many lines to print.

The surface has 3073 points:

Too many to print.