

$$U_3(9).4 \pmod{3}$$

	blocks	defect	matrix
$G:$	1	6	46×32
	2	0	$729_1 = \chi_{33,0}, \varphi_{81,0}$
	3	0	$729_2 = \chi_{33,1}, \varphi_{81,1}$
	4	0	$729_3 = \chi_{33,2}, \varphi_{81,2}$
	$5 = \overline{3}$	0	$729_4 = \chi_{33,3}, \varphi_{81,3}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{1,2}$	$\varphi_{1,3}$	φ_{2+}	φ_{6+}	$\varphi_{10,0+}$	$\varphi_{10,1+}$	φ_{12+}	φ_{16+}	φ_{20+}
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.	.
$1_3 = \chi_{1,2}$	.	.	1	.	.	.	.	.	.	.	.
$1_4 = \chi_{1,3}$	.	.	.	1	.	.	.	.	.	.	.
$72_1 = \chi_{2,0}$	.	.	.	.	.	.	.	.	.	.	1
$72_2 = \chi_{2,1}$	.	.	.	.	.	.	.	.	.	.	1
$72_3 = \chi_{2,2}$	.	.	.	.	.	.	.	.	.	.	1
$72_4 = \chi_{2,3}$	.	.	.	.	.	.	.	.	.	.	1
$73_1 = \chi_{3,0}$	.	.	.	.	.	1	.	.	.	.	.
$73_2 = \chi_{3,1}$	.	.	.	.	.	1	.	.	.	.	.
$73_3 = \chi_{3,2}$	.	.	.	.	.	1	.	.	.	.	.
$73_4 = \chi_{3,3}$	.	.	.	.	.	1	.	.	.	.	.
$292_1 = \chi_{4+}$	.	.	.	.	2	.	1	1	.	.	.
$292_2 = \chi_{8+}$	1	1	1	1	.	1	.	.	1	.	.
$1168_1 = \chi_{12,0+}$	1	.	1	.	.	.	.	1	1	2	2
$1168_2 = \chi_{12,1+}$	.	1	.	1	.	.	1	.	1	2	2
$1168_3 = \chi_{14,0+}$	2	.	2	.	1	2	.	2	1	1	.
$1168_4 = \chi_{14,1+}$	.	2	.	2	1	2	2	.	1	1	.
$2336_1 = \chi_{16+}$	1	1	1	1	3	1	1	1	.	.	.
$2336_2 = \chi_{20+}$	1	1	1	1	4	2	3	3	2	3	1
$657_1 = \chi_{24,0}$	3	.	1	.	2	1	.	2	.	.	.
$657_2 = \chi_{24,1}$	.	3	.	1	2	1	2	.	.	.	.
$657_3 = \chi_{24,2}$	1	.	3	.	2	1	.	2	.	.	.
$657_4 = \chi_{24,3}$	.	1	.	3	2	1	2	.	.	.	.
$2628_1 = \chi_{25+}$	2	2	2	2	1	2	1	1	2	.	.
$2628_2 = \chi_{29+}$	.	.	.	.	2	.	.	.	1	.	.
$730_1 = \chi_{34,0}$	1	.	.	.	.	1	.	1	1	1	1
$730_2 = \chi_{34,1}$	.	1	.	.	.	1	1	.	1	1	1
$730_3 = \chi_{34,2}$	.	.	1	.	.	1	.	1	1	1	1
$730_4 = \chi_{34,3}$	.	.	.	1	.	1	1	.	1	1	1
$1460_1 = \chi_{35,0+}$	2	.	2	.	1	.	.	2	1	2	.
$1460_2 = \chi_{35,1+}$	.	2	.	2	1	.	2	.	1	2	.
$2920_1 = \chi_{37+}$	3	3	3	3	4	3	3	3	2	2	.
$2920_2 = \chi_{41+}$	2	2	2	2	5	1	2	2	.	.	.
$2920_3 = \chi_{45+}$	1	1	1	1	2	3	2	2	2	3	1
$2920_4 = \chi_{49+}$	1	1	1	1	.	2	.	.	1	.	.
$2920_5 = \chi_{53+}$	.	.	.	.	4	.	1	1	.	.	.
$2920_6 = \chi_{57+}$	.	.	.	.	1	.	1	1	3	4	4
$2920_7 = \chi_{61+}$	2	2	2	2	4	2	4	4	2	4	2
$2920_8 = \chi_{65+}$	1	1	1	1	4	2	2	2	1	2	.

(Block 1:)	φ_{24+}	φ_{28+}	$\varphi_{32,0+}$	$\varphi_{32,1+}$	φ_{34+}	φ_{38+}	φ_{42+}	φ_{46+}	$\varphi_{50,0}$	$\varphi_{50,1}$
$1_1 = \chi_{1,0}$	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	.	.	.	.	.	.	.	.	.
$1_3 = \chi_{1,2}$	.	.	.	.	.	.	.	.	.	.
$1_4 = \chi_{1,3}$	.	.	.	.	.	.	.	.	.	.
$72_1 = \chi_{2,0}$	.	.	.	.	.	.	.	.	.	.
$72_2 = \chi_{2,1}$	.	.	.	.	.	.	.	.	.	.
$72_3 = \chi_{2,2}$	.	.	.	.	.	.	.	.	.	.
$72_4 = \chi_{2,3}$	.	.	.	.	.	.	.	.	.	.
$73_1 = \chi_{3,0}$	.	.	.	.	.	.	.	.	1	.
$73_2 = \chi_{3,1}$	.	.	.	.	.	.	.	.	.	1
$73_3 = \chi_{3,2}$	.	.	.	.	.	.	.	.	.	.
$73_4 = \chi_{3,3}$	.	.	.	.	.	.	.	.	.	.
$292_1 = \chi_{4+}$	1	.	.	.	.	1	.	.	.	.
$292_2 = \chi_{8+}$	.	1	.	.	1	.	.	.	.	.
$1168_1 = \chi_{12,0+}$	.	.	1	.	.	.	.	.	.	.
$1168_2 = \chi_{12,1+}$	.	.	.	1	.	.	.	.	.	.
$1168_3 = \chi_{14,0+}$	.	1	1	.	1	.	.	1	1	.
$1168_4 = \chi_{14,1+}$	.	1	.	1	1	.	.	1	.	1
$2336_1 = \chi_{16+}$	2	2	.	.	.	1	1	.	.	.
$2336_2 = \chi_{20+}$	1	1	.	.	.	2	1	1	1	1
$657_1 = \chi_{24,0}$	.	2	.	.	.	.	.	.	.	.
$657_2 = \chi_{24,1}$	.	2	.	.	.	.	.	.	.	.
$657_3 = \chi_{24,2}$	.	2	.	.	.	.	.	.	1	.
$657_4 = \chi_{24,3}$	.	2	.	.	.	.	.	.	.	1
$2628_1 = \chi_{25+}$	1	2	.	.	1	1	2	.	.	.
$2628_2 = \chi_{29+}$	.	1	.	.	1	.	.	2	.	.
$730_1 = \chi_{34,0}$	.	.	1	.	.	.	.	.	.	.
$730_2 = \chi_{34,1}$	.	.	.	1	.	.	.	.	.	.
$730_3 = \chi_{34,2}$	.	.	1	.	.	.	.	.	1	.
$730_4 = \chi_{34,3}$	.	.	.	1	.	.	.	.	.	1
$1460_1 = \chi_{35,0+}$	.	1	1	.	1	.	.	1	.	.
$1460_2 = \chi_{35,1+}$	.	1	.	1	1	.	.	1	.	.
$2920_1 = \chi_{37+}$	1	3	.	.	1	1	1	1	1	1
$2920_2 = \chi_{41+}$	2	4	.	.	.	1	1	.	.	.
$2920_3 = \chi_{45+}$	.	1	1	1	1	1	1	2	1	1
$2920_4 = \chi_{49+}$	1	2	.	.	.	.	2	.	.	.
$2920_5 = \chi_{53+}$	1	1	.	.	.	1	1	2	.	.
$2920_6 = \chi_{57+}$	.	.	1	1	.	.	.	1	.	.
$2920_7 = \chi_{61+}$	1	1	.	.	.	2	1	1	1	1
$2920_8 = \chi_{65+}$	2	2	.	.	.	2	1	.	1	1

(Block 1:)	$\varphi_{50,2}$	$\varphi_{50,3}$	φ_{51+}	φ_{55+}	φ_{59+}	φ_{63+}	φ_{67+}	$\varphi_{71,0+}$	$\varphi_{71,1+}$	φ_{73+}
$1_1 = \chi_{1,0}$	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	.	.	.	.	.	.	.	.	.
$1_3 = \chi_{1,2}$	.	.	.	.	.	.	.	.	.	.
$1_4 = \chi_{1,3}$	.	.	.	.	.	.	.	.	.	.
$72_1 = \chi_{2,0}$	.	.	.	.	.	.	.	.	.	.
$72_2 = \chi_{2,1}$	.	.	.	.	.	.	.	.	.	.
$72_3 = \chi_{2,2}$	.	.	.	.	.	.	.	.	.	.
$72_4 = \chi_{2,3}$	.	.	.	.	.	.	.	.	.	.
$73_1 = \chi_{3,0}$	.	.	.	.	.	.	.	.	.	.
$73_2 = \chi_{3,1}$	.	.	.	.	.	.	.	.	.	.
$73_3 = \chi_{3,2}$	1	.	.	.	.	.	.	.	.	.
$73_4 = \chi_{3,3}$	.	1	.	.	.	.	.	.	.	.
$292_1 = \chi_{4+}$	.	.	.	.	.	.	.	.	.	.
$292_2 = \chi_{8+}$	.	.	.	.	.	.	.	.	.	.
$1168_1 = \chi_{12,0+}$	.	.	.	.	.	1	.	.	1	.
$1168_2 = \chi_{12,1+}$	.	.	.	.	.	1	.	1	.	.
$1168_3 = \chi_{14,0+}$	1	.	.	.	.	1	.	.	.	.
$1168_4 = \chi_{14,1+}$	.	1	.	.	.	1	.	.	.	.
$2336_1 = \chi_{16+}$	.	.	1	.	1	.	.	.	.	1
$2336_2 = \chi_{20+}$	1	1	.	1	.	1	.	.	.	.
$657_1 = \chi_{24,0}$	1	.	.	.	1	.	.	.	.	.
$657_2 = \chi_{24,1}$	.	1	.	.	1	.	.	.	.	.
$657_3 = \chi_{24,2}$	.	.	.	.	1	.	.	.	.	.
$657_4 = \chi_{24,3}$	.	.	.	.	1	.	.	.	.	.
$2628_1 = \chi_{25+}$	.	.	.	.	.	.	1	.	.	1
$2628_2 = \chi_{29+}$	.	.	.	1	.	.	.	.	.	.
$730_1 = \chi_{34,0}$	1	.	.	.	.	1	.	.	.	.
$730_2 = \chi_{34,1}$	.	1	.	.	.	1	.	.	.	.
$730_3 = \chi_{34,2}$	.	.	.	.	.	1	.	.	.	.
$730_4 = \chi_{34,3}$	.	.	.	.	.	1	.	.	.	.
$1460_1 = \chi_{35,0+}$	.	.	.	.	.	1	.	.	1	.
$1460_2 = \chi_{35,1+}$	.	.	.	.	.	1	.	1	.	.
$2920_1 = \chi_{37+}$	1	1	.	.	.	1	.	.	.	1
$2920_2 = \chi_{41+}$	.	.	1	.	2	.	.	.	.	1
$2920_3 = \chi_{45+}$	1	1	.	1	.	2	.	.	.	.
$2920_4 = \chi_{49+}$	.	.	1	.	1	.	1	.	.	1
$2920_5 = \chi_{53+}$	.	.	.	1	.	.	.	.	.	.
$2920_6 = \chi_{57+}$	.	.	.	1	.	2	.	1	1	.
$2920_7 = \chi_{61+}$	1	1	.	1	.	2	.	.	.	.
$2920_8 = \chi_{65+}$	1	1	1	.	1	.	.	.	.	1

(Block 1:)	φ_{77+}
$1_1 = \chi_{1,0}$	.
$1_2 = \chi_{1,1}$	.
$1_3 = \chi_{1,2}$	.
$1_4 = \chi_{1,3}$	.
$72_1 = \chi_{2,0}$	.
$72_2 = \chi_{2,1}$	.
$72_3 = \chi_{2,2}$	.
$72_4 = \chi_{2,3}$	.
$73_1 = \chi_{3,0}$	.
$73_2 = \chi_{3,1}$	.
$73_3 = \chi_{3,2}$	.
$73_4 = \chi_{3,3}$	.
$292_1 = \chi_{4+}$	.
$292_2 = \chi_{8+}$	.
$1168_1 = \chi_{12,0+}$	.
$1168_2 = \chi_{12,1+}$	.
$1168_3 = \chi_{14,0+}$	.
$1168_4 = \chi_{14,1+}$	.
$2336_1 = \chi_{16+}$	.
$2336_2 = \chi_{20+}$	.
$657_1 = \chi_{24,0}$	.
$657_2 = \chi_{24,1}$	.
$657_3 = \chi_{24,2}$	.
$657_4 = \chi_{24,3}$	.
$2628_1 = \chi_{25+}$	.
$2628_2 = \chi_{29+}$	1
$730_1 = \chi_{34,0}$	.
$730_2 = \chi_{34,1}$	.
$730_3 = \chi_{34,2}$	.
$730_4 = \chi_{34,3}$	.
$1460_1 = \chi_{35,0+}$	.
$1460_2 = \chi_{35,1+}$	.
$2920_1 = \chi_{37+}$	.
$2920_2 = \chi_{41+}$	.
$2920_3 = \chi_{45+}$	.
$2920_4 = \chi_{49+}$	.
$2920_5 = \chi_{53+}$	1
$2920_6 = \chi_{57+}$	.
$2920_7 = \chi_{61+}$	.
$2920_8 = \chi_{65+}$	.

(Block 1:)	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{1,2}$	$\varphi_{1,3}$	φ_{2+}	φ_{6+}	$\varphi_{10,0+}$	$\varphi_{10,1+}$	φ_{12+}	φ_{16+}	φ_{20+}
$3200_1 = \chi_{69+}$	1	1	1	1	3	1	1	1	1	.	.
$3200_2 = \chi_{73+}$	2	2	2	2	4	4	2	2	1	1	.
$3200_3 = \chi_{77+}$	1	1	1	1	3	1	1	1	1	.	.
$3200_4 = \chi_{81+}$	1	1	1	1	2	.	1	1	3	4	2
$3200_5 = \chi_{85+}$	3	3	3	3	5	2	4	4	1	3	.
$3200_6 = \chi_{89+}$	1	1	1	1	2	3	3	3	3	4	3

(Block 1:)	φ_{24+}	φ_{28+}	$\varphi_{32,0+}$	$\varphi_{32,1+}$	φ_{34+}	φ_{38+}	φ_{42+}	φ_{46+}	$\varphi_{50,0}$	$\varphi_{50,1}$
$3200_1 = \chi_{69+}$	1	2	.	.	1	1	1	2	.	.
$3200_2 = \chi_{73+}$	1	4	.	.	.	1	1	.	1	1
$3200_3 = \chi_{77+}$	2	2	.	.	.	1	2	.	.	.
$3200_4 = \chi_{81+}$	.	1	1	1	1	.	.	2	.	.
$3200_5 = \chi_{85+}$	2	3	.	.	1	2	1	1	1	1
$3200_6 = \chi_{89+}$	.	.	1	1	.	1	1	1	1	1

(Block 1:)	$\varphi_{50,2}$	$\varphi_{50,3}$	φ_{51+}	φ_{55+}	φ_{59+}	φ_{63+}	φ_{67+}	$\varphi_{71,0+}$	$\varphi_{71,1+}$	φ_{73+}
$3200_1 = \chi_{69+}$	.	.	.	1	.	.	.	.	.	.
$3200_2 = \chi_{73+}$	1	1	1	.	2	.	.	.	.	1
$3200_3 = \chi_{77+}$	.	.	1	.	1	.	1	.	.	1
$3200_4 = \chi_{81+}$	.	.	.	1	.	2	.	1	1	.
$3200_5 = \chi_{85+}$	1	1	.	.	.	1	.	.	.	1
$3200_6 = \chi_{89+}$	1	1	.	1	.	3	.	.	.	.

(Block 1:)	φ_{77+}
$3200_1 = \chi_{69+}$	1
$3200_2 = \chi_{73+}$	.
$3200_3 = \chi_{77+}$	.
$3200_4 = \chi_{81+}$	.
$3200_5 = \chi_{85+}$	.
$3200_6 = \chi_{89+}$	.

$\varphi_{1,0}$	$=$	1_1
$\varphi_{1,1}$	$=$	1_2
$\varphi_{1,2}$	$=$	1_3
$\varphi_{1,3}$	$=$	1_4
φ_{2+}	$=$	12_1
φ_{6+}	$=$	24_1
$\varphi_{10,0+}$	$=$	14_1
$\varphi_{10,1+}$	$=$	14_2
φ_{12+}	$=$	36_1
φ_{16+}	$=$	60_1
φ_{20+}	$=$	72_1
φ_{24+}	$=$	72_2
φ_{28+}	$=$	84_1
$\varphi_{32,0+}$	$=$	54_1
$\varphi_{32,1+}$	$=$	54_2
φ_{34+}	$=$	144_1
φ_{38+}	$=$	168_1
φ_{42+}	$=$	180_1
φ_{46+}	$=$	180_2
$\varphi_{50,0}$	$=$	49_1
$\varphi_{50,1}$	$=$	49_2
$\varphi_{50,2}$	$=$	49_3
$\varphi_{50,3}$	$=$	49_4
φ_{51+}	$=$	324_1
φ_{55+}	$=$	360_1
φ_{59+}	$=$	360_2
φ_{63+}	$=$	420_1
φ_{67+}	$=$	648_1
$\varphi_{71,0+}$	$=$	378_1
$\varphi_{71,1+}$	$=$	378_2
φ_{73+}	$=$	900_1
φ_{77+}	$=$	1620_1