

$U_3(11).3 \pmod{2}$

	blocks	defect	matrix
$G :$	1	5	12×3
	2	5	12×3
	$3 = \overline{2}$	5	12×3
	4	4	16×1
	5	3	8×1
	6	3	8×1
	$7 = \overline{6}$	3	8×1
	8	3	8×1
	9	3	8×1
	$10 = \overline{9}$	3	8×1
	11	0	$1440_1 = \chi_{37,0}, \varphi_{9,0}$
	12	0	$1440_2 = \chi_{37,1}, \varphi_{9,1}$
	13	0	$1440_3 = \chi_{37,2}, \varphi_{9,2}$
	$14 = \overline{11}$	0	$1440_4 = \chi_{38,0}, \varphi_{10,0}$
	$15 = \overline{13}$	0	$1440_5 = \chi_{38,1}, \varphi_{10,1}$
	$16 = \overline{12}$	0	$1440_6 = \chi_{38,2}, \varphi_{10,2}$
	17	0	$1440_7 = \chi_{39,0}, \varphi_{11,0}$
	18	0	$1440_8 = \chi_{39,1}, \varphi_{11,1}$
	19	0	$1440_9 = \chi_{39,2}, \varphi_{11,2}$
	$20 = \overline{17}$	0	$1440_{10} = \chi_{40,0}, \varphi_{12,0}$
	$21 = \overline{19}$	0	$1440_{11} = \chi_{40,1}, \varphi_{12,1}$
	$22 = \overline{18}$	0	$1440_{12} = \chi_{40,2}, \varphi_{12,2}$
	23	0	$1440_{13} = \chi_{41,0}, \varphi_{13,0}$
	24	0	$1440_{14} = \chi_{41,1}, \varphi_{13,1}$
	25	0	$1440_{15} = \chi_{41,2}, \varphi_{13,2}$
	$26 = \overline{23}$	0	$1440_{16} = \chi_{42,0}, \varphi_{14,0}$
	$27 = \overline{25}$	0	$1440_{17} = \chi_{42,1}, \varphi_{14,1}$
	$28 = \overline{24}$	0	$1440_{18} = \chi_{42,2}, \varphi_{14,2}$
	29	0	$1440_{19} = \chi_{43,0}, \varphi_{15,0}$
	30	0	$1440_{20} = \chi_{43,1}, \varphi_{15,1}$
	31	0	$1440_{21} = \chi_{43,2}, \varphi_{15,2}$
	$32 = \overline{29}$	0	$1440_{22} = \chi_{44,0}, \varphi_{16,0}$
	$33 = \overline{31}$	0	$1440_{23} = \chi_{44,1}, \varphi_{16,1}$
	$34 = \overline{30}$	0	$1440_{24} = \chi_{44,2}, \varphi_{16,2}$
	35	0	$1440_{25} = \chi_{45,0}, \varphi_{17,0}$
	36	0	$1440_{26} = \chi_{45,1}, \varphi_{17,1}$
	37	0	$1440_{27} = \chi_{45,2}, \varphi_{17,2}$
	$38 = \overline{35}$	0	$1440_{28} = \chi_{46,0}, \varphi_{18,0}$
	$39 = \overline{37}$	0	$1440_{29} = \chi_{46,1}, \varphi_{18,1}$
	$40 = \overline{36}$	0	$1440_{30} = \chi_{46,2}, \varphi_{18,2}$

	blocks	defect	matrix
	41	0	$1440_{31} = \chi_{47,0}, \varphi_{19,0}$
	42	0	$1440_{32} = \chi_{47,1}, \varphi_{19,1}$
	43	0	$1440_{33} = \chi_{47,2}, \varphi_{19,2}$
	$44 = \overline{41}$	0	$1440_{34} = \chi_{48,0}, \varphi_{20,0}$
	$45 = \overline{43}$	0	$1440_{35} = \chi_{48,1}, \varphi_{20,1}$
	$46 = \overline{42}$	0	$1440_{36} = \chi_{48,2}, \varphi_{20,2}$
3.G :	47	5	16×2
	48	5	16×2
	49	5	16×2
	$50 = 47^*$		
	$51 = 49^*$		
	$52 = 48^*$		
	53	0	$1440_{37} = \chi_{53+}, \varphi_{22+}$
	$54 = 53^*$		
	55	3	8×1
	56	3	8×1
	57	3	8×1
	$58 = 55^*$		
	$59 = 57^*$		
	$60 = 56^*$		
	61	3	8×1
	62	3	8×1
	63	3	8×1
	$64 = 61^*$		
	$65 = 63^*$		
	$66 = 62^*$		
	67	0	$1440_{39} = \chi_{84,0}, \varphi_{28,0}$
	68	0	$1440_{40} = \chi_{84,1}, \varphi_{28,1}$
	69	0	$1440_{41} = \chi_{84,2}, \varphi_{28,2}$
	$70 = 67^*$		
	$71 = 69^*$		
	$72 = 68^*$		
	$73 = \overline{70}$	0	$1440_{45} = \chi_{85,0}, \varphi_{29,0}$
	$74 = \overline{72}$	0	$1440_{46} = \chi_{85,1}, \varphi_{29,1}$
	$75 = \overline{71}$	0	$1440_{47} = \chi_{85,2}, \varphi_{29,2}$
	$76 = 73^*$		
	$77 = 75^*$		
	$78 = 74^*$		
	79	0	$1440_{51} = \chi_{86,0}, \varphi_{30,0}$
	80	0	$1440_{52} = \chi_{86,1}, \varphi_{30,1}$

	blocks	defect	matrix
	81	0	$1440_{53} = \chi_{86,2}, \varphi_{30,2}$
	82 = 79*		
	83 = 81*		
	84 = 80*		
	85 = $\overline{82}$	0	$1440_{57} = \chi_{87,0}, \varphi_{31,0}$
	86 = $\overline{84}$	0	$1440_{58} = \chi_{87,1}, \varphi_{31,1}$
	87 = $\overline{83}$	0	$1440_{59} = \chi_{87,2}, \varphi_{31,2}$
	88 = 85*		
	89 = 87*		
	90 = 86*		
	91	0	$1440_{63} = \chi_{88,0}, \varphi_{32,0}$
	92	0	$1440_{64} = \chi_{88,1}, \varphi_{32,1}$
	93	0	$1440_{65} = \chi_{88,2}, \varphi_{32,2}$
	94 = 91*		
	95 = 93*		
	96 = 92*		
	97 = $\overline{94}$	0	$1440_{69} = \chi_{89,0}, \varphi_{33,0}$
	98 = $\overline{96}$	0	$1440_{70} = \chi_{89,1}, \varphi_{33,1}$
	99 = $\overline{95}$	0	$1440_{71} = \chi_{89,2}, \varphi_{33,2}$
	100 = 97*		
	101 = 99*		
	102 = 98*		
	103	0	$1440_{75} = \chi_{90,0}, \varphi_{34,0}$
	104	0	$1440_{76} = \chi_{90,1}, \varphi_{34,1}$
	105	0	$1440_{77} = \chi_{90,2}, \varphi_{34,2}$
	106 = 103*		
	107 = 105*		
	108 = 104*		
	109 = $\overline{106}$	0	$1440_{81} = \chi_{91,0}, \varphi_{35,0}$
	110 = $\overline{108}$	0	$1440_{82} = \chi_{91,1}, \varphi_{35,1}$
	111 = $\overline{107}$	0	$1440_{83} = \chi_{91,2}, \varphi_{35,2}$
	112 = 109*		
	113 = 111*		
	114 = 110*		
	115	0	$1440_{87} = \chi_{92,0}, \varphi_{36,0}$
	116	0	$1440_{88} = \chi_{92,1}, \varphi_{36,1}$
	117	0	$1440_{89} = \chi_{92,2}, \varphi_{36,2}$
	118 = 115*		
	119 = 117*		
	120 = 116*		

	blocks	defect	matrix
	121 = $\overline{118}$	0	1440 ₉₃ = $\chi_{93,0}, \varphi_{37,0}$
	122 = $\overline{120}$	0	1440 ₉₄ = $\chi_{93,1}, \varphi_{37,1}$
	123 = $\overline{119}$	0	1440 ₉₅ = $\chi_{93,2}, \varphi_{37,2}$
	124 = 121*		
	125 = 123*		
	126 = 122*		
	127	0	1440 ₉₉ = $\chi_{94,0}, \varphi_{38,0}$
	128	0	1440 ₁₀₀ = $\chi_{94,1}, \varphi_{38,1}$
	129	0	1440 ₁₀₁ = $\chi_{94,2}, \varphi_{38,2}$
	130 = 127*		
	131 = 129*		
	132 = 128*		
	133 = $\overline{130}$	0	1440 ₁₀₅ = $\chi_{95,0}, \varphi_{39,0}$
	134 = $\overline{132}$	0	1440 ₁₀₆ = $\chi_{95,1}, \varphi_{39,1}$
	135 = $\overline{131}$	0	1440 ₁₀₇ = $\chi_{95,2}, \varphi_{39,2}$
	136 = 133*		
	137 = 135*		
	138 = 134*		

Block 1:	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{6,0}$	
$1_1 = \chi_{1,0}$	1	.	.	
$110_1 = \chi_{2,0}$	.	1	.	
$111_1 = \chi_{3,0}$	1	1	.	
$111_4 = \chi_{4,0}$	1	1	.	
$111_7 = \chi_{5,0}$	1	1	.	$\varphi_{1,0} = 1_1$
$1110_5 = \chi_{10,0}$	.	.	1	$\varphi_{2,0} = 110_1$
$1221_1 = \chi_{15,0}$	1	1	1	$\varphi_{6,0} = 1110_2$
$1221_4 = \chi_{16,0}$	1	1	1	
$1221_7 = \chi_{17,0}$	1	1	1	
$1331_1 = \chi_{18,0}$	1	2	1	
$1332_1 = \chi_{19,0}$	2	2	1	
$1332_4 = \chi_{20,0}$	2	2	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{2,1}$	$\varphi_{6,1}$
$1_2 = \chi_{1,1}$	1	.	.
$110_2 = \chi_{2,1}$	.	1	.
$111_2 = \chi_{3,1}$	1	1	.
$111_5 = \chi_{4,1}$	1	1	.
$111_8 = \chi_{5,1}$	1	1	.
$1110_6 = \chi_{10,1}$	.	.	1
$1221_2 = \chi_{15,1}$	1	1	1
$1221_5 = \chi_{16,1}$	1	1	1
$1221_8 = \chi_{17,1}$	1	1	1
$1331_2 = \chi_{18,1}$	1	2	1
$1332_2 = \chi_{19,1}$	2	2	1
$1332_5 = \chi_{20,1}$	2	2	1

$$\begin{aligned} \varphi_{1,1} &= 1_2 \\ \varphi_{2,1} &= 110_2 \\ \varphi_{6,1} &= 1110_3 \end{aligned}$$

Block 3:	$\varphi_{1,2}$	$\varphi_{2,2}$	$\varphi_{6,2}$
$1_3 = \chi_{1,2}$	1	.	.
$110_3 = \chi_{2,2}$	.	1	.
$111_3 = \chi_{3,2}$	1	1	.
$111_6 = \chi_{4,2}$	1	1	.
$111_9 = \chi_{5,2}$	1	1	.
$1110_7 = \chi_{10,2}$	.	.	1
$1221_3 = \chi_{15,2}$	1	1	1
$1221_6 = \chi_{16,2}$	1	1	1
$1221_9 = \chi_{17,2}$	1	1	1
$1331_3 = \chi_{18,2}$	1	2	1
$1332_3 = \chi_{19,2}$	2	2	1
$1332_6 = \chi_{20,2}$	2	2	1

$$\begin{aligned} \varphi_{1,2} &= 1_3 \\ \varphi_{2,2} &= 110_3 \\ \varphi_{6,2} &= 1110_4 \end{aligned}$$

Block 4:	φ_{3+}
$1110_1 = \chi_{6+}$	1
$1110_2 = \chi_{9,0}$	1
$1110_3 = \chi_{9,1}$	1
$1110_4 = \chi_{9,2}$	1
$1110_8 = \chi_{11,0}$	1
$1110_9 = \chi_{11,1}$	1
$1110_{10} = \chi_{11,2}$	1
$1110_{11} = \chi_{12,0}$	1
$1110_{12} = \chi_{12,1}$	1
$1110_{13} = \chi_{12,2}$	1
$1110_{14} = \chi_{13,0}$	1
$1110_{15} = \chi_{13,1}$	1
$1110_{16} = \chi_{13,2}$	1
$1110_{17} = \chi_{14,0}$	1
$1110_{18} = \chi_{14,1}$	1
$1110_{19} = \chi_{14,2}$	1

$$\varphi_{3+} = 1110_1$$

Block 5:	$\varphi_{7,0}$
$1332_7 = \chi_{21,0}$	1
$1332_{13} = \chi_{23,0}$	1
$1332_{19} = \chi_{25,0}$	1
$1332_{22} = \chi_{26,0}$	1
$1332_{31} = \chi_{29,0}$	1
$1332_{34} = \chi_{30,0}$	1
$1332_{43} = \chi_{33,0}$	1
$1332_{46} = \chi_{34,0}$	1

$$\varphi_{7,0} = 1332_1$$

Block 6:	$\varphi_{7,1}$
$1332_8 = \chi_{21,1}$	1
$1332_{14} = \chi_{23,1}$	1
$1332_{20} = \chi_{25,1}$	1
$1332_{23} = \chi_{26,1}$	1
$1332_{32} = \chi_{29,1}$	1
$1332_{35} = \chi_{30,1}$	1
$1332_{44} = \chi_{33,1}$	1
$1332_{47} = \chi_{34,1}$	1

$$\varphi_{7,1} = 1332_2$$

Block 7:	$\varphi_{7,2}$
$1332_9 = \chi_{21,2}$	1
$1332_{15} = \chi_{23,2}$	1
$1332_{21} = \chi_{25,2}$	1
$1332_{24} = \chi_{26,2}$	1
$1332_{33} = \chi_{29,2}$	1
$1332_{36} = \chi_{30,2}$	1
$1332_{45} = \chi_{33,2}$	1
$1332_{48} = \chi_{34,2}$	1

$$\varphi_{7,2} = 1332_3$$

Block 8:	$\varphi_{8,0}$
$1332_{10} = \chi_{22,0}$	1
$1332_{16} = \chi_{24,0}$	1
$1332_{25} = \chi_{27,0}$	1
$1332_{28} = \chi_{28,0}$	1
$1332_{37} = \chi_{31,0}$	1
$1332_{40} = \chi_{32,0}$	1
$1332_{49} = \chi_{35,0}$	1
$1332_{52} = \chi_{36,0}$	1

$$\varphi_{8,0} = 1332_4$$

Block 9:	$\varphi_{8,1}$
$1332_{11} = \chi_{22,1}$	1
$1332_{17} = \chi_{24,1}$	1
$1332_{26} = \chi_{27,1}$	1
$1332_{29} = \chi_{28,1}$	1
$1332_{38} = \chi_{31,1}$	1
$1332_{41} = \chi_{32,1}$	1
$1332_{50} = \chi_{35,1}$	1
$1332_{53} = \chi_{36,1}$	1

$$\varphi_{8,1} = 1332_5$$

Block 10:	$\varphi_{8,2}$
$1332_{12} = \chi_{22,2}$	1
$1332_{18} = \chi_{24,2}$	1
$1332_{27} = \chi_{27,2}$	1
$1332_{30} = \chi_{28,2}$	1
$1332_{39} = \chi_{31,2}$	1
$1332_{42} = \chi_{32,2}$	1
$1332_{51} = \chi_{35,2}$	1
$1332_{54} = \chi_{36,2}$	1

$$\varphi_{8,2} = 1332_6$$

Blocks 47, 50:	$\varphi_{21,0}$	$\varphi_{25,0}$
$111_{10} = \chi_{49,0}$	1	.
$111_{16} = \chi_{50,0}$	1	.
$111_{22} = \chi_{51,0}$	1	.
$111_{28} = \chi_{52,0}$	1	.
$1110_{20} = \chi_{56,0}$	.	1
$1110_{26} = \chi_{57,0}$	.	1
$1110_{32} = \chi_{58,0}$	.	1
$1110_{38} = \chi_{59,0}$	.	1
$1110_{44} = \chi_{60,0}$	.	1
$1110_{50} = \chi_{61,0}$	.	1
$1221_{10} = \chi_{62,0}$	1	1
$1221_{16} = \chi_{63,0}$	1	1
$1221_{22} = \chi_{64,0}$	1	1
$1221_{28} = \chi_{65,0}$	1	1
$1332_{55} = \chi_{66,0}$	2	1
$1332_{61} = \chi_{67,0}$	2	1

$$\begin{aligned} \varphi_{21,0} &= 111_1 \\ \varphi_{25,0} &= 1110_5 \end{aligned}$$

Blocks 48, 52:	$\varphi_{21,1}$	$\varphi_{25,1}$
$111_{11} = \chi_{49,1}$	1	.
$111_{17} = \chi_{50,1}$	1	.
$111_{23} = \chi_{51,1}$	1	.
$111_{29} = \chi_{52,1}$	1	.
$1110_{21} = \chi_{56,1}$	.	1
$1110_{27} = \chi_{57,1}$	.	1
$1110_{33} = \chi_{58,1}$	.	1
$1110_{39} = \chi_{59,1}$	.	1
$1110_{45} = \chi_{60,1}$	.	1
$1110_{51} = \chi_{61,1}$	.	1
$1221_{11} = \chi_{62,1}$	1	1
$1221_{17} = \chi_{63,1}$	1	1
$1221_{23} = \chi_{64,1}$	1	1
$1221_{29} = \chi_{65,1}$	1	1
$1332_{56} = \chi_{66,1}$	2	1
$1332_{62} = \chi_{67,1}$	2	1

$$\begin{aligned}\varphi_{21,1} &= 111_2 \\ \varphi_{25,1} &= 1110_6\end{aligned}$$

Blocks 49, 51:	$\varphi_{21,2}$	$\varphi_{25,2}$
$111_{12} = \chi_{49,2}$	1	.
$111_{18} = \chi_{50,2}$	1	.
$111_{24} = \chi_{51,2}$	1	.
$111_{30} = \chi_{52,2}$	1	.
$1110_{22} = \chi_{56,2}$	.	1
$1110_{28} = \chi_{57,2}$	.	1
$1110_{34} = \chi_{58,2}$	.	1
$1110_{40} = \chi_{59,2}$	.	1
$1110_{46} = \chi_{60,2}$	.	1
$1110_{52} = \chi_{61,2}$	.	1
$1221_{12} = \chi_{62,2}$	1	1
$1221_{18} = \chi_{63,2}$	1	1
$1221_{24} = \chi_{64,2}$	1	1
$1221_{30} = \chi_{65,2}$	1	1
$1332_{57} = \chi_{66,2}$	2	1
$1332_{63} = \chi_{67,2}$	2	1

$$\begin{aligned}\varphi_{21,2} &= 111_3 \\ \varphi_{25,2} &= 1110_7\end{aligned}$$

Blocks 55, 58:	$\varphi_{26,0}$
$1332_{67} = \chi_{68,0}$	1
$1332_{79} = \chi_{70,0}$	1
$1332_{91} = \chi_{72,0}$	1
$1332_{97} = \chi_{73,0}$	1
$1332_{115} = \chi_{76,0}$	1
$1332_{121} = \chi_{77,0}$	1
$1332_{139} = \chi_{80,0}$	1
$1332_{145} = \chi_{81,0}$	1

$$\varphi_{26,0} = 1332_7$$

Blocks 56, 60:	$\varphi_{26,1}$
$1332_{68} = \chi_{68,1}$	1
$1332_{80} = \chi_{70,1}$	1
$1332_{92} = \chi_{72,1}$	1
$1332_{98} = \chi_{73,1}$	1
$1332_{116} = \chi_{76,1}$	1
$1332_{122} = \chi_{77,1}$	1
$1332_{140} = \chi_{80,1}$	1
$1332_{146} = \chi_{81,1}$	1

$$\varphi_{26,1} = 1332_8$$

Blocks 57, 59:	$\varphi_{26,2}$
$1332_{69} = \chi_{68,2}$	1
$1332_{81} = \chi_{70,2}$	1
$1332_{93} = \chi_{72,2}$	1
$1332_{99} = \chi_{73,2}$	1
$1332_{117} = \chi_{76,2}$	1
$1332_{123} = \chi_{77,2}$	1
$1332_{141} = \chi_{80,2}$	1
$1332_{147} = \chi_{81,2}$	1

$$\varphi_{26,2} = 1332_9$$

Blocks 61, 64:	$\varphi_{27,0}$
$1332_{73} = \chi_{69,0}$	1
$1332_{85} = \chi_{71,0}$	1
$1332_{103} = \chi_{74,0}$	1
$1332_{109} = \chi_{75,0}$	1
$1332_{127} = \chi_{78,0}$	1
$1332_{133} = \chi_{79,0}$	1
$1332_{151} = \chi_{82,0}$	1
$1332_{157} = \chi_{83,0}$	1

$$\varphi_{27,0} = 1332_{13}$$

Blocks 62, 66:	$\varphi_{27,1}$
$1332_{74} = \chi_{69,1}$	1
$1332_{86} = \chi_{71,1}$	1
$1332_{104} = \chi_{74,1}$	1
$1332_{110} = \chi_{75,1}$	1
$1332_{128} = \chi_{78,1}$	1
$1332_{134} = \chi_{79,1}$	1
$1332_{152} = \chi_{82,1}$	1
$1332_{158} = \chi_{83,1}$	1

$$\varphi_{27,1} = 1332_{14}$$

Blocks 63, 65:	$\varphi_{27,2}$
$1332_{75} = \chi_{69,2}$	1
$1332_{87} = \chi_{71,2}$	1
$1332_{105} = \chi_{74,2}$	1
$1332_{111} = \chi_{75,2}$	1
$1332_{129} = \chi_{78,2}$	1
$1332_{135} = \chi_{79,2}$	1
$1332_{153} = \chi_{82,2}$	1
$1332_{159} = \chi_{83,2}$	1

$$\varphi_{27,2} = 1332_{15}$$