

$U_3(8).3_2 \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	5×2
	2	1	5×2
	$3 = \bar{2}$	1	5×2
	4	0	$56_1 = \chi_{2,0}, \varphi_{2,0}$
	5	0	$56_2 = \chi_{2,1}, \varphi_{2,1}$
	$6 = \bar{5}$	0	$56_3 = \chi_{2,2}, \varphi_{2,2}$
	7	1	5×2
	8	1	5×2
	9	1	5×2
	$10 = \bar{7}$	1	5×2
	$11 = \bar{9}$	1	5×2
	$12 = \bar{8}$	1	5×2
	13	0	$399_1 = \chi_{5+}, \varphi_{5+}$
	14	0	$399_2 = \chi_{8,0}, \varphi_{8,0}$
	15	0	$399_3 = \chi_{8,1}, \varphi_{8,1}$
	$16 = \bar{15}$	0	$399_4 = \chi_{8,2}, \varphi_{8,2}$
	17	0	$399_5 = \chi_{9,0}, \varphi_{9,0}$
	18	0	$399_6 = \chi_{9,1}, \varphi_{9,1}$
	$19 = \bar{18}$	0	$399_7 = \chi_{9,2}, \varphi_{9,2}$
	20	0	$399_8 = \chi_{10,0}, \varphi_{10,0}$
	21	0	$399_9 = \chi_{10,1}, \varphi_{10,1}$
	$22 = \bar{21}$	0	$399_{10} = \chi_{10,2}, \varphi_{10,2}$
	23	0	$567_1 = \chi_{23,0}, \varphi_{14,0}$
	24	0	$567_2 = \chi_{23,1}, \varphi_{14,1}$
	25	0	$567_3 = \chi_{23,2}, \varphi_{14,2}$
	$26 = \bar{23}$	0	$567_4 = \chi_{24,0}, \varphi_{15,0}$
	$27 = \bar{25}$	0	$567_5 = \chi_{24,1}, \varphi_{15,1}$
	$28 = \bar{24}$	0	$567_6 = \chi_{24,2}, \varphi_{15,2}$
	29	0	$567_7 = \chi_{25,0}, \varphi_{16,0}$
	30	0	$567_8 = \chi_{25,1}, \varphi_{16,1}$
	31	0	$567_9 = \chi_{25,2}, \varphi_{16,2}$
	$32 = \bar{29}$	0	$567_{10} = \chi_{26,0}, \varphi_{17,0}$
	$33 = \bar{31}$	0	$567_{11} = \chi_{26,1}, \varphi_{17,1}$
	$34 = \bar{30}$	0	$567_{12} = \chi_{26,2}, \varphi_{17,2}$
	35	0	$567_{13} = \chi_{27,0}, \varphi_{18,0}$
	36	0	$567_{14} = \chi_{27,1}, \varphi_{18,1}$
	37	0	$567_{15} = \chi_{27,2}, \varphi_{18,2}$
	$38 = \bar{35}$	0	$567_{16} = \chi_{28,0}, \varphi_{19,0}$
	$39 = \bar{37}$	0	$567_{17} = \chi_{28,1}, \varphi_{19,1}$
	$40 = \bar{36}$	0	$567_{18} = \chi_{28,2}, \varphi_{19,2}$

	blocks	defect	matrix
$3.G :$	41	1	5×2
	42	1	5×2
	43	1	5×2
	$44 = 41^*$		
	$45 = 43^*$		
	$46 = 42^*$		
	47	1	5×2
	48	1	5×2
	49	1	5×2
	$50 = 47^*$		
	$51 = 49^*$		
	$52 = 48^*$		
	53	1	5×2
	54	1	5×2
	55	1	5×2
	$56 = 53^*$		
	$57 = 55^*$		
	$58 = 54^*$		
	59	0	$567_{19} = \chi_{32+}, \varphi_{23+}$
	$60 = 59^*$		
	61	0	$399_{11} = \chi_{35,0}, \varphi_{26,0}$
	62	0	$399_{12} = \chi_{35,1}, \varphi_{26,1}$
	63	0	$399_{13} = \chi_{35,2}, \varphi_{26,2}$
	$64 = 61^*$		
	$65 = 63^*$		
	$66 = 62^*$		
	67	0	$399_{17} = \chi_{36,0}, \varphi_{27,0}$
	68	0	$399_{18} = \chi_{36,1}, \varphi_{27,1}$
	69	0	$399_{19} = \chi_{36,2}, \varphi_{27,2}$
	$70 = 67^*$		
	$71 = 69^*$		
	$72 = 68^*$		
	73	0	$399_{23} = \chi_{37,0}, \varphi_{28,0}$
	74	0	$399_{24} = \chi_{37,1}, \varphi_{28,1}$
	75	0	$399_{25} = \chi_{37,2}, \varphi_{28,2}$
	$76 = 73^*$		
	$77 = 75^*$		
	$78 = 74^*$		
	79	0	$567_{21} = \chi_{50,0}, \varphi_{32,0}$
	80	0	$567_{22} = \chi_{50,1}, \varphi_{32,1}$

	blocks	defect	matrix
	81	0	$567_{23} = \chi_{50,2}, \varphi_{32,2}$
	82 = 79*		
	83 = 81*		
	84 = 80*		
	85 = $\overline{82}$	0	$567_{27} = \chi_{51,0}, \varphi_{33,0}$
	86 = $\overline{84}$	0	$567_{28} = \chi_{51,1}, \varphi_{33,1}$
	87 = $\overline{83}$	0	$567_{29} = \chi_{51,2}, \varphi_{33,2}$
	88 = 85*		
	89 = 87*		
	90 = 86*		
	91	0	$567_{33} = \chi_{52,0}, \varphi_{34,0}$
	92	0	$567_{34} = \chi_{52,1}, \varphi_{34,1}$
	93	0	$567_{35} = \chi_{52,2}, \varphi_{34,2}$
	94 = 91*		
	95 = 93*		
	96 = 92*		
	97 = $\overline{94}$	0	$567_{39} = \chi_{53,0}, \varphi_{35,0}$
	98 = $\overline{96}$	0	$567_{40} = \chi_{53,1}, \varphi_{35,1}$
	99 = $\overline{95}$	0	$567_{41} = \chi_{53,2}, \varphi_{35,2}$
	100 = 97*		
	101 = 99*		
	102 = 98*		
	103	0	$567_{45} = \chi_{54,0}, \varphi_{36,0}$
	104	0	$567_{46} = \chi_{54,1}, \varphi_{36,1}$
	105	0	$567_{47} = \chi_{54,2}, \varphi_{36,2}$
	106 = 103*		
	107 = 105*		
	108 = 104*		
	109 = $\overline{106}$	0	$567_{51} = \chi_{55,0}, \varphi_{37,0}$
	110 = $\overline{108}$	0	$567_{52} = \chi_{55,1}, \varphi_{37,1}$
	111 = $\overline{107}$	0	$567_{53} = \chi_{55,2}, \varphi_{37,2}$
	112 = 109*		
	113 = 111*		
	114 = 110*		

Block 1:	$\varphi_{1,0}$	$\varphi_{13,0}$
$1_1 = \chi_{1,0}$	1	.
$512_1 = \chi_{13,0}$	.	1
$513_1 = \chi_{14,0}$	1	1
$513_4 = \chi_{15,0}$	1	1
$513_7 = \chi_{16,0}$	1	1

$$\begin{aligned}\varphi_{1,0} &= 1_1 \\ \varphi_{13,0} &= 512_1\end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{13,1}$
$1_2 = \chi_{1,1}$	1	.
$512_2 = \chi_{13,1}$	.	1
$513_2 = \chi_{14,1}$	1	1
$513_5 = \chi_{15,1}$	1	1
$513_8 = \chi_{16,1}$	1	1

$$\begin{aligned}\varphi_{1,1} &= 1_2 \\ \varphi_{13,1} &= 512_2\end{aligned}$$

Block 3:	$\varphi_{1,2}$	$\varphi_{13,2}$
$1_3 = \chi_{1,2}$	1	.
$512_3 = \chi_{13,2}$	.	1
$513_3 = \chi_{14,2}$	1	1
$513_6 = \chi_{15,2}$	1	1
$513_9 = \chi_{16,2}$	1	1

$$\begin{aligned}\varphi_{1,2} &= 1_3 \\ \varphi_{13,2} &= 512_3\end{aligned}$$

Block 7:	$\varphi_{3,0}$	$\varphi_{11,2}$
$57_1 = \chi_{3,0}$	1	.
$456_3 = \chi_{11,2}$	.	1
$513_{12} = \chi_{17,2}$	1	1
$513_{18} = \chi_{19,2}$	1	1
$513_{24} = \chi_{21,2}$	1	1

$$\begin{aligned}\varphi_{3,0} &= 57_1 \\ \varphi_{11,2} &= 456_3\end{aligned}$$

Block 8:	$\varphi_{3,1}$	$\varphi_{11,0}$
$57_2 = \chi_{3,1}$	1	.
$456_1 = \chi_{11,0}$	.	1
$513_{10} = \chi_{17,0}$	1	1
$513_{16} = \chi_{19,0}$	1	1
$513_{22} = \chi_{21,0}$	1	1

$$\begin{aligned}\varphi_{3,1} &= 57_2 \\ \varphi_{11,0} &= 456_1\end{aligned}$$

Block 9:	$\varphi_{3,2}$	$\varphi_{11,1}$	
$57_3 = \chi_{3,2}$	1	.	$\varphi_{3,2} = 57_3$ $\varphi_{11,1} = 456_2$
$456_2 = \chi_{11,1}$	.	1	
$513_{11} = \chi_{17,1}$	1	1	
$513_{17} = \chi_{19,1}$	1	1	
$513_{23} = \chi_{21,1}$	1	1	

Block 10:	$\varphi_{4,0}$	$\varphi_{12,1}$	
$57_4 = \chi_{4,0}$	1	.	$\varphi_{4,0} = 57_4$ $\varphi_{12,1} = 456_5$
$456_5 = \chi_{12,1}$	.	1	
$513_{14} = \chi_{18,1}$	1	1	
$513_{20} = \chi_{20,1}$	1	1	
$513_{26} = \chi_{22,1}$	1	1	

Block 11:	$\varphi_{4,1}$	$\varphi_{12,2}$	
$57_5 = \chi_{4,1}$	1	.	$\varphi_{4,1} = 57_5$ $\varphi_{12,2} = 456_6$
$456_6 = \chi_{12,2}$	.	1	
$513_{15} = \chi_{18,2}$	1	1	
$513_{21} = \chi_{20,2}$	1	1	
$513_{27} = \chi_{22,2}$	1	1	

Block 12:	$\varphi_{4,2}$	$\varphi_{12,0}$	
$57_6 = \chi_{4,2}$	1	.	$\varphi_{4,2} = 57_6$ $\varphi_{12,0} = 456_4$
$456_4 = \chi_{12,0}$	.	1	
$513_{13} = \chi_{18,0}$	1	1	
$513_{19} = \chi_{20,0}$	1	1	
$513_{25} = \chi_{22,0}$	1	1	

Blocks 41, 44:	$\varphi_{20,0}$	$\varphi_{29,0}$	
$57_7 = \chi_{29,0}$	1	.	$\varphi_{20,0} = 57_7$ $\varphi_{29,0} = 456_7$
$456_7 = \chi_{38,0}$	.	1	
$513_{28} = \chi_{41,0}$	1	1	
$513_{46} = \chi_{44,0}$	1	1	
$513_{64} = \chi_{47,0}$	1	1	

Blocks 42, 46:	$\varphi_{20,1}$	$\varphi_{29,1}$	
$57_8 = \chi_{29,1}$	1	.	$\varphi_{20,1} = 57_8$ $\varphi_{29,1} = 456_8$
$456_8 = \chi_{38,1}$	.	1	
$513_{29} = \chi_{41,1}$	1	1	
$513_{47} = \chi_{44,1}$	1	1	
$513_{65} = \chi_{47,1}$	1	1	

Blocks 43, 45:	$\varphi_{20,2}$	$\varphi_{29,2}$	
$57_9 = \chi_{29,2}$	1	.	$\varphi_{20,2} = 57_9$ $\varphi_{29,2} = 456_9$
$456_9 = \chi_{38,2}$	.	1	
$513_{30} = \chi_{41,2}$	1	1	
$513_{48} = \chi_{44,2}$	1	1	
$513_{66} = \chi_{47,2}$	1	1	

Blocks 47, 50:	$\varphi_{21,0}$	$\varphi_{30,0}$	
$57_{13} = \chi_{30,0}$	1	.	$\varphi_{21,0} = 57_{13}$ $\varphi_{30,0} = 456_{13}$
$456_{13} = \chi_{39,0}$	.	1	
$513_{34} = \chi_{42,0}$	1	1	
$513_{52} = \chi_{45,0}$	1	1	
$513_{70} = \chi_{48,0}$	1	1	

Blocks 48, 52:	$\varphi_{21,1}$	$\varphi_{30,1}$	
$57_{14} = \chi_{30,1}$	1	.	$\varphi_{21,1} = 57_{14}$ $\varphi_{30,1} = 456_{14}$
$456_{14} = \chi_{39,1}$	.	1	
$513_{35} = \chi_{42,1}$	1	1	
$513_{53} = \chi_{45,1}$	1	1	
$513_{71} = \chi_{48,1}$	1	1	

Blocks 49, 51:	$\varphi_{21,2}$	$\varphi_{30,2}$	
$57_{15} = \chi_{30,2}$	1	.	$\varphi_{21,2} = 57_{15}$ $\varphi_{30,2} = 456_{15}$
$456_{15} = \chi_{39,2}$	.	1	
$513_{36} = \chi_{42,2}$	1	1	
$513_{54} = \chi_{45,2}$	1	1	
$513_{72} = \chi_{48,2}$	1	1	

Blocks 53, 56:	$\varphi_{22,0}$	$\varphi_{31,0}$		
$57_{19} = \chi_{31,0}$	1	.	$\varphi_{22,0} =$	57_{19}
$456_{19} = \chi_{40,0}$	.	1	$\varphi_{31,0} =$	456_{19}
$513_{42} = \chi_{43,2}$	1	1		
$513_{60} = \chi_{46,2}$	1	1		
$513_{78} = \chi_{49,2}$	1	1		

Blocks 54, 58:	$\varphi_{22,1}$	$\varphi_{31,1}$		
$57_{20} = \chi_{31,1}$	1	.	$\varphi_{22,1} =$	57_{20}
$456_{20} = \chi_{40,1}$	.	1	$\varphi_{31,1} =$	456_{20}
$513_{40} = \chi_{43,0}$	1	1		
$513_{58} = \chi_{46,0}$	1	1		
$513_{76} = \chi_{49,0}$	1	1		

Blocks 55, 57:	$\varphi_{22,2}$	$\varphi_{31,2}$		
$57_{21} = \chi_{31,2}$	1	.	$\varphi_{22,2} =$	57_{21}
$456_{21} = \chi_{40,2}$	.	1	$\varphi_{31,2} =$	456_{21}
$513_{41} = \chi_{43,1}$	1	1		
$513_{59} = \chi_{46,1}$	1	1		
$513_{77} = \chi_{49,1}$	1	1		