

$U_4(3).2_1 \pmod{2}$ 

	blocks	defect	matrix
$4.G :$	1 2 $3 = \bar{2}$ 4	10 3 3 3	$94 \times 7$ $8 \times 1$ $8 \times 1$ $8 \times 1$
$12_1.G :$	5 6	9 2	$51 \times 7$ $4 \times 1$
$12_2.G :$	7	9	$43 \times 5$

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{4,0}$	$\varphi_{5+}$	$\varphi_{7+}$	$\varphi_{9,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.
$21_1 = \chi_{2,0}$	1	1	.	.	.	.	.
$21_2 = \chi_{2,1}$	1	1	.	.	.	.	.
$35_1 = \chi_{3,0}$	1	.	1	.	.	.	.
$35_2 = \chi_{3,1}$	1	.	1	.	.	.	.
$35_3 = \chi_{4,0}$	1	.	.	1	.	.	.
$35_4 = \chi_{4,1}$	1	.	.	1	.	.	.
$90_1 = \chi_{5,0}$	2	1	1	1	.	.	.
$90_2 = \chi_{5,1}$	2	1	1	1	.	.	.
$140_1 = \chi_{6,0}$	.	1	.	.	.	.	1
$140_2 = \chi_{6,1}$	.	1	.	.	.	.	1
$189_1 = \chi_{7,0}$	1	.	1	1	.	.	1
$189_2 = \chi_{7,1}$	1	.	1	1	.	.	1
$210_1 = \chi_{8,0}$	2	1	1	1	.	.	1
$210_2 = \chi_{8,1}$	2	1	1	1	.	.	1
$560_1 = \chi_{9+}$	4	2	2	2	1	.	2
$560_2 = \chi_{11+}$	4	2	2	2	.	1	2
$315_1 = \chi_{13,0}$	1	1	1	.	1	.	1
$315_2 = \chi_{13,1}$	1	1	1	.	1	.	1
$315_3 = \chi_{14,0}$	1	1	.	1	.	1	1
$315_4 = \chi_{14,1}$	1	1	.	1	.	1	1
$420_1 = \chi_{15,0}$	.	1	.	.	1	1	1
$420_2 = \chi_{15,1}$	.	1	.	.	1	1	1
$560_3 = \chi_{16,0}$	.	2	.	.	1	1	2
$560_4 = \chi_{16,1}$	.	2	.	.	1	1	2
$729_1 = \chi_{19,0}$	1	1	1	1	1	1	3
$729_2 = \chi_{19,1}$	1	1	1	1	1	1	3
$20_1 = \chi_{21,0}$	.	1	.	.	.	.	.
$20_2 = \chi_{21,1}$	.	1	.	.	.	.	.
$56_1 = \chi_{22,0}$	2	1	1	.	.	.	.
$56_2 = \chi_{22,1}$	2	1	1	.	.	.	.
$56_3 = \chi_{23,0}$	2	1	.	1	.	.	.
$56_4 = \chi_{23,1}$	2	1	.	1	.	.	.
$70_1 = \chi_{24,0}$	2	.	1	1	.	.	.
$70_2 = \chi_{24,1}$	2	.	1	1	.	.	.
$140_3 = \chi_{25+}$	.	.	.	.	1	.	.
$140_4 = \chi_{27+}$	.	.	.	.	.	1	.
$120_1 = \chi_{29,0}$	.	.	.	.	.	.	1
$120_2 = \chi_{29,1}$	.	.	.	.	.	.	1

(Block 1:)	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{4,0}$	$\varphi_{5+}$	$\varphi_{7+}$	$\varphi_{9,0}$
$210_3 = \chi_{30,0}$	2	1	1	1	.	.	1
$210_4 = \chi_{30,1}$	2	1	1	1	.	.	1
$210_5 = \chi_{31,0}$	2	1	1	1	.	.	1
$210_6 = \chi_{31,1}$	2	1	1	1	.	.	1
$504_1 = \chi_{32,0}$	2	1	2	1	1	.	2
$504_2 = \chi_{32,1}$	2	1	2	1	1	.	2
$504_3 = \chi_{33,0}$	2	1	1	2	.	1	2
$504_4 = \chi_{33,1}$	2	1	1	2	.	1	2
$540_1 = \chi_{34,0}$	.	1	.	.	1	1	2
$540_2 = \chi_{34,1}$	.	1	.	.	1	1	2
$560_5 = \chi_{35,0}$	.	2	.	.	1	1	2
$560_6 = \chi_{35,1}$	.	2	.	.	1	1	2
$630_1 = \chi_{36,0}$	2	2	1	1	1	1	2
$630_2 = \chi_{36,1}$	2	2	1	1	1	1	2
$20_3 = \chi_{40,0}$	.	1	.	.	.	.	.
$20_4 = \chi_{40,1}$	.	1	.	.	.	.	.
$20_5 = \chi_{40,0}^{*3}$	.	1	.	.	.	.	.
$20_6 = \chi_{40,1}^{*3}$	.	1	.	.	.	.	.
$120_3 = \chi_{41,0}$	.	.	.	.	.	.	1
$120_4 = \chi_{41,1}$	.	.	.	.	.	.	1
$120_5 = \chi_{41,0}^{*3}$	.	.	.	.	.	.	1
$120_6 = \chi_{41,1}^{*3}$	.	.	.	.	.	.	1
$140_5 = \chi_{42,0}$	.	1	.	.	.	.	1
$140_6 = \chi_{42,1}$	.	1	.	.	.	.	1
$140_7 = \chi_{42,0}^{*3}$	.	1	.	.	.	.	1
$140_8 = \chi_{42,1}^{*3}$	.	1	.	.	.	.	1
$448_1 = \chi_{43+}$	.	.	2	.	1	.	2
$448_2 = \chi_{43*7+}$	.	.	2	.	1	.	2
$448_3 = \chi_{45+}$	.	.	.	2	.	1	2
$448_4 = \chi_{45*7+}$	.	.	.	2	.	1	2
$280_1 = \chi_{47,0}$	4	1	2	2	.	.	1
$280_2 = \chi_{47,1}$	4	1	2	2	.	.	1
$280_3 = \chi_{47,0}^{*3}$	4	1	2	2	.	.	1
$280_4 = \chi_{47,1}^{*3}$	4	1	2	2	.	.	1
$280_5 = \chi_{48,0}$	.	1	.	.	1	.	1
$280_6 = \chi_{48,1}$	.	1	.	.	1	.	1
$280_7 = \chi_{48,0}^{*3}$	.	1	.	.	1	.	1
$280_8 = \chi_{48,1}^{*3}$	.	1	.	.	1	.	1
$280_9 = \chi_{49,0}$	.	1	.	.	.	1	1
$280_{10} = \chi_{49,1}$	.	1	.	.	.	1	1

<b>(Block 1:)</b>	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{4,0}$	$\varphi_{5+}$	$\varphi_{7+}$	$\varphi_{9,0}$	
$280_{11} = \chi_{49,0}^{*3}$	.	1	.	.	.	1	1	
$280_{12} = \chi_{49,1}^{*3}$	.	1	.	.	.	1	1	
$420_3 = \chi_{50,0}$	.	1	.	.	1	1	1	
$420_4 = \chi_{50,1}$	.	1	.	.	1	1	1	$\varphi_{1,0} = 1_1$
$420_5 = \chi_{50,0}^{*3}$	.	1	.	.	1	1	1	$\varphi_{2,0} = 20_1$
$420_6 = \chi_{50,1}^{*3}$	.	1	.	.	1	1	1	$\varphi_{3,0} = 34_1$
$540_3 = \chi_{51,0}$	.	1	.	.	1	1	2	$\varphi_{4,0} = 34_2$
$540_4 = \chi_{51,1}$	.	1	.	.	1	1	2	$\varphi_{5+} = 140_1$
$540_5 = \chi_{51,0}^{*3}$	.	1	.	.	1	1	2	$\varphi_{7+} = 140_2$
$540_6 = \chi_{51,1}^{*3}$	.	1	.	.	1	1	2	$\varphi_{9,0} = 120_1$
$840_1 = \chi_{54,0}$	4	3	2	2	1	1	3	
$840_2 = \chi_{54,1}$	4	3	2	2	1	1	3	
$840_3 = \chi_{54,0}^{*3}$	4	3	2	2	1	1	3	
$840_4 = \chi_{54,1}^{*3}$	4	3	2	2	1	1	3	

<b>Block 2:</b>	$\varphi_{10,0}$
$640_1 = \chi_{17,0}$	1
$640_2 = \chi_{17,1}$	1
$640_5 = \chi_{37,0}$	1
$640_6 = \chi_{37,1}$	1
$640_9 = \chi_{52,0}$	1
$640_{10} = \chi_{52,1}$	1
$640_{11} = \chi_{52,0}^{*15}$	1
$640_{12} = \chi_{52,1}^{*15}$	1

$$\varphi_{10,0} = 640_1$$

<b>Block 3:</b>	$\varphi_{11,0}$
$640_3 = \chi_{18,0}$	1
$640_4 = \chi_{18,1}$	1
$640_7 = \chi_{38,0}$	1
$640_8 = \chi_{38,1}$	1
$640_{13} = \chi_{53,0}$	1
$640_{14} = \chi_{53,1}$	1
$640_{15} = \chi_{53,0}^{*15}$	1
$640_{16} = \chi_{53,1}^{*15}$	1

$$\varphi_{11,0} = 640_2$$

<b>Block 4:</b>	$\varphi_{12,0}$
$896_1 = \chi_{20,0}$	1
$896_2 = \chi_{20,1}$	1
$896_3 = \chi_{39,0}$	1
$896_4 = \chi_{39,1}$	1
$896_5 = \chi_{55,0}$	1
$896_6 = \chi_{55,1}$	1
$896_7 = \chi_{55,0}^{*3}$	1
$896_8 = \chi_{55,1}^{*3}$	1

$$\varphi_{12,0} = 896_1$$

<b>Block 5:</b>	$\varphi_{13+}$	$\varphi_{14+}$	$\varphi_{15+}$	$\varphi_{16+}$	$\varphi_{17+}$	$\varphi_{18+}$	$\varphi_{19+}$
$30_1 = \chi_{56+}$	.	1	.	.	.	.	.
$42_1 = \chi_{57+}$	1	1	.	.	.	.	.
$210_7 = \chi_{58+}$	.	1	.	1	.	.	.
$210_8 = \chi_{59+}$	.	1	.	1	.	.	.
$210_9 = \chi_{60+}$	1	1	1	.	.	.	.
$420_7 = \chi_{61+}$	1	2	1	1	.	.	.
$630_3 = \chi_{62+}$	2	1	1	.	.	.	1
$672_1 = \chi_{63+}$	2	2	.	1	.	.	1
$720_1 = \chi_{64+}$	1	.	.	.	1	.	1
$720_2 = \chi_{65+}$	1	.	.	.	.	1	1
$840_5 = \chi_{67+}$	.	2	.	1	1	1	.
$1260_1 = \chi_{68+}$	1	2	.	1	1	1	1
$1458_1 = \chi_{69+}$	1	3	1	1	1	1	1
$1512_1 = \chi_{70+}$	2	4	.	2	1	1	1
$1890_1 = \chi_{71+}$	3	3	1	1	1	1	2
$12_1 = \chi_{72+}$	1	.	.	.	.	.	.
$168_1 = \chi_{73+}$	.	.	1	.	.	.	.
$240_1 = \chi_{74+}$	1	2	1	.	.	.	.
$252_1 = \chi_{75+}$	1	2	.	1	.	.	.
$420_8 = \chi_{76+}$	1	.	.	.	.	.	1
$540_7 = \chi_{77+}$	.	2	.	1	.	1	.
$540_8 = \chi_{78+}$	.	2	.	1	1	.	.
$672_2 = \chi_{79+}$	2	2	.	1	.	.	1
$840_6 = \chi_{81+}$	2	2	1	1	.	.	1
$1260_2 = \chi_{82+}$	1	2	.	1	1	1	1
$1260_3 = \chi_{83+}$	1	2	.	1	1	1	1
$1260_4 = \chi_{84+}$	1	2	.	1	1	1	1
$1680_1 = \chi_{85+}$	2	4	1	2	1	1	1
$1680_2 = \chi_{86+}$	3	2	1	.	1	1	2
$168_2 = \chi_{87+}$	.	.	1	.	.	.	.
$168_3 = \chi_{87*7+}$	.	.	1	.	.	.	.
$240_2 = \chi_{88+}$	.	2	.	1	.	.	.
$240_3 = \chi_{88*7+}$	.	2	.	1	.	.	.
$432_1 = \chi_{89+}$	2	.	.	.	.	.	1
$432_2 = \chi_{89*7+}$	2	.	.	.	.	.	1
$840_7 = \chi_{91+}$	2	2	1	1	.	.	1
$840_8 = \chi_{91*7+}$	2	2	1	1	.	.	1
$840_9 = \chi_{92+}$	.	2	.	1	1	1	.
$840_{10} = \chi_{92*7+}$	.	2	.	1	1	1	.
$960_1 = \chi_{93+}$	2	2	1	.	.	1	1

<b>(Block 5:)</b>	$\varphi_{13+}$	$\varphi_{14+}$	$\varphi_{15+}$	$\varphi_{16+}$	$\varphi_{17+}$	$\varphi_{18+}$	$\varphi_{19+}$
$960_2 = \chi_{93*43+}$	2	2	1	.	.	1	1
$960_3 = \chi_{94+}$	2	2	1	.	1	.	1
$960_4 = \chi_{94*43+}$	2	2	1	.	1	.	1
$1008_1 = \chi_{95+}$	.	.	.	.	1	1	1
$1008_2 = \chi_{95*7+}$	.	.	.	.	1	1	1
$1512_2 = \chi_{96+}$	2	4	.	2	1	1	1
$1512_3 = \chi_{96*7+}$	2	4	.	2	1	1	1
$1680_3 = \chi_{97+}$	2	2	.	1	1	1	2
$1680_4 = \chi_{97*7+}$	2	2	.	1	1	1	2
$1680_5 = \chi_{98+}$	2	4	1	2	1	1	1
$1680_6 = \chi_{98*7+}$	2	4	1	2	1	1	1

$$\begin{aligned}
\varphi_{13+} &= 12_1 \\
\varphi_{14+} &= 30_1 \\
\varphi_{15+} &= 168_1 \\
\varphi_{16+} &= 180_1 \\
\varphi_{17+} &= 300_1 \\
\varphi_{18+} &= 300_2 \\
\varphi_{19+} &= 408_1
\end{aligned}$$

<b>Block 6:</b>	$\varphi_{20+}$
$768_1 = \chi_{66+}$	1
$768_2 = \chi_{80+}$	1
$768_3 = \chi_{90+}$	1
$768_4 = \chi_{90*7+}$	1

$$\varphi_{20+} = 768_1$$

<b>Block 7:</b>	$\varphi_{21+}$	$\varphi_{22+}$	$\varphi_{23+}$	$\varphi_{24+}$	$\varphi_{25+}$
$72_1 = \chi_{99+}$	1	.	.	.	.
$90_3 = \chi_{100+}$	.	1	.	.	.
$90_4 = \chi_{101+}$	.	.	1	.	.
$252_1 = \chi_{102+}$	1	1	1	.	.
$378_1 = \chi_{103+}$	.	.	.	1	.
$630_3 = \chi_{104+}$	1	1	1	1	.
$630_4 = \chi_{105+}$	1	1	1	1	.
$630_5 = \chi_{106+}$	1	1	1	1	.
$1260_1 = \chi_{107+}$	1	2	2	.	1
$1440_1 = \chi_{108+}$	2	3	3	2	.
$1458_1 = \chi_{109+}$	1	1	1	1	1
$1512_1 = \chi_{110+}$	3	3	3	2	.
$1890_1 = \chi_{111+}$	2	3	3	1	1
$180_1 = \chi_{112+}$	.	1	1	.	.
$252_2 = \chi_{113+}$	1	1	1	.	.
$252_3 = \chi_{114+}$	1	1	1	.	.
$252_4 = \chi_{115+}$	1	1	1	.	.
$252_5 = \chi_{116+}$	1	1	1	.	.
$540_7 = \chi_{117+}$	1	.	1	1	.
$540_8 = \chi_{118+}$	1	1	.	1	.
$1008_1 = \chi_{119+}$	.	1	1	.	1
$1080_1 = \chi_{120+}$	1	1	1	.	1
$1260_2 = \chi_{121+}$	2	2	2	2	.
$1440_2 = \chi_{122+}$	2	3	3	2	.
$2520_1 = \chi_{123+}$	3	4	4	2	1
$72_2 = \chi_{124+}$	1	.	.	.	.
$72_3 = \chi_{124*7+}$	1	.	.	.	.
$432_1 = \chi_{125+}$	1	2	2	.	.
$432_2 = \chi_{125*7+}$	1	2	2	.	.
$720_1 = \chi_{126+}$	1	2	1	1	.
$720_2 = \chi_{126*43+}$	1	2	1	1	.
$720_3 = \chi_{127+}$	1	1	2	1	.
$720_4 = \chi_{127*43+}$	1	1	2	1	.
$1008_2 = \chi_{128+}$	.	1	1	.	1
$1008_3 = \chi_{128*7+}$	.	1	1	.	1
$1008_4 = \chi_{129+}$	1	1	1	2	.
$1008_5 = \chi_{129*7+}$	1	1	1	2	.
$1080_2 = \chi_{130+}$	1	1	1	.	1
$1080_3 = \chi_{130*7+}$	1	1	1	.	1
$1512_2 = \chi_{131+}$	3	3	3	2	.



<b>(Block 7:)</b>	$\varphi_{21+}$	$\varphi_{22+}$	$\varphi_{23+}$	$\varphi_{24+}$	$\varphi_{25+}$	
$1512_3 = \chi_{131*7+}$	3	3	3	2	.	$\varphi_{21+} = 72_1$
$2520_2 = \chi_{132+}$	3	4	4	2	1	$\varphi_{22+} = 90_1$
$2520_3 = \chi_{132*7+}$	3	4	4	2	1	$\varphi_{23+} = 90_2$
						$\varphi_{24+} = 378_1$
						$\varphi_{25+} = 828_1$