

$$U_4(3).2_2 \pmod{2}$$

	blocks	defect	matrix
4.G :	1	10	$70 \times 8$
	2	2	$4 \times 1$
	3	3	$5 \times 1$
12.G :	4	10	$60 \times 6$
	$5 = 4 * 5$		
	6	3	$5 \times 1$
	$7 = 6 * 5$		

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{4,0}$	$\varphi_{5,0}$	$\varphi_{6,0}$	$\varphi_{7+}$	$\varphi_{9,0}$
$1_1 = \chi_{1,0}$	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
$280_1 = \chi_{9,0}$	2	1	1	1	1	.	.	1
$280_2 = \chi_{9,1}$	2	1	1	1	1	.	.	1
$280_3 = \chi_{10,0}$	2	1	1	1	.	1	.	1
$280_4 = \chi_{10,1}$	2	1	1	1	.	1	.	1
$560_1 = \chi_{11+}$	4	2	2	2	.	.	1	2
$315_1 = \chi_{13,0}$	1	1	1	.	1	1	.	1
$315_2 = \chi_{13,1}$	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	1
$420_2 = \chi_{15,1}$	.	1	.	.	1	1	1	1
$560_2 = \chi_{16,0}$	.	2	.	.	1	1	1	2
$560_3 = \chi_{16,1}$	.	2	.	.	1	1	1	2
$729_1 = \chi_{19,0}$	1	1	1	1	1	1	1	3
$729_2 = \chi_{19,1}$	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	.	.	.	.
$70_3 = \chi_{25,0}$	.	.	.	.	1	.	.	.

(Block 1:)	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{4,0}$	$\varphi_{5,0}$	$\varphi_{6,0}$	$\varphi_{7+}$	$\varphi_{9,0}$
$70_4 = \chi_{25,1}$	.	.	.	.	1	.	.	.
$70_5 = \chi_{26,0}$	.	.	.	.	.	1	.	.
$70_6 = \chi_{26,1}$	.	.	.	.	.	1	.	.
$140_3 = \chi_{27+}$	.	.	.	.	.	.	1	.
$120_1 = \chi_{29,0}$	.	.	.	.	.	.	.	1
$120_2 = \chi_{29,1}$	.	.	.	.	.	.	.	1
$420_3 = \chi_{30+}$	4	2	2	2	.	.	.	2
$504_1 = \chi_{32,0}$	2	1	2	1	1	1	.	2
$504_2 = \chi_{32,1}$	2	1	2	1	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	1	2
$540_2 = \chi_{34,1}$	.	1	.	.	1	1	1	2
$560_4 = \chi_{35,0}$	.	2	.	.	1	1	1	2
$560_5 = \chi_{35,1}$	.	2	.	.	1	1	1	2
$630_1 = \chi_{36,0}$	2	2	1	1	1	1	1	2
$630_2 = \chi_{36,1}$	2	2	1	1	1	1	1	2
$40_1 = \chi_{40+}$	.	2	.	.	.	.	.	.
$240_1 = \chi_{41+}$	.	.	.	.	.	.	.	2
$280_5 = \chi_{42+}$	.	2	.	.	.	.	.	2
$448_1 = \chi_{43+}$	.	.	2	.	.	2	.	2
$448_2 = \chi_{44+}$	.	.	2	.	2	.	.	2
$448_3 = \chi_{45+}$	.	.	.	2	.	.	1	2
$448_4 = \chi_{46+}$	.	.	.	2	.	.	1	2
$560_6 = \chi_{47+}$	8	2	4	4	.	.	.	2
$560_7 = \chi_{48+}$	.	2	.	.	2	2	.	2
$560_8 = \chi_{49+}$	.	2	.	.	.	.	2	2
$840_1 = \chi_{50+}$	.	2	.	.	2	2	2	2
$1080_1 = \chi_{51+}$	.	2	.	.	2	2	2	4
$1680_1 = \chi_{54+}$	8	6	4	4	2	2	2	6

$$\begin{aligned}
\varphi_{1,0} &= 1_1 \\
\varphi_{2,0} &= 20_1 \\
\varphi_{3,0} &= 34_1 \\
\varphi_{4,0} &= 34_2 \\
\varphi_{5,0} &= 70_1 \\
\varphi_{6,0} &= 70_2 \\
\varphi_{7+} &= 140_1 \\
\varphi_{9,0} &= 120_1
\end{aligned}$$

Block 2:	$\varphi_{10+}$
$1280_1 = \chi_{17+}$	1
$1280_2 = \chi_{37+}$	1
$1280_3 = \chi_{52+}$	1
$1280_4 = \chi_{53+}$	1

$$\varphi_{10+} = 1280_1$$

<b>Block 3:</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
$1792_1 = \chi_{55+}$	2

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

<b>Block 4:</b>	$\varphi_{13,0}$	$\varphi_{14,0}$	$\varphi_{15,0}$	$\varphi_{16,0}$	$\varphi_{17+}$	$\varphi_{19,0}$
$15_1 = \chi_{56,0}$	.	1	.	.	.	.
$15_2 = \chi_{56,1}$	.	1	.	.	.	.
$21_3 = \chi_{57,0}$	1	1	.	.	.	.
$21_4 = \chi_{57,1}$	1	1	.	.	.	.
$105_1 = \chi_{58,0}$	.	1	.	1	.	.
$105_2 = \chi_{58,1}$	.	1	.	1	.	.
$105_5 = \chi_{59,0}$	.	1	.	1	.	.
$105_6 = \chi_{59,1}$	.	1	.	1	.	.
$105_9 = \chi_{60,0}$	1	1	1	.	.	.
$105_{10} = \chi_{60,1}$	1	1	1	.	.	.
$210_3 = \chi_{61,0}$	1	2	1	1	.	.
$210_4 = \chi_{61,1}$	1	2	1	1	.	.
$315_5 = \chi_{62,0}$	2	1	1	.	.	1
$315_6 = \chi_{62,1}$	2	1	1	.	.	1
$336_1 = \chi_{63,0}$	2	2	.	1	.	1
$336_2 = \chi_{63,1}$	2	2	.	1	.	1
$720_1 = \chi_{64+}$	2	.	.	.	1	2
$420_4 = \chi_{67,0}$	.	2	.	1	1	.
$420_5 = \chi_{67,1}$	.	2	.	1	1	.
$630_3 = \chi_{68,0}$	1	2	.	1	1	1
$630_4 = \chi_{68,1}$	1	2	.	1	1	1
$729_3 = \chi_{69,0}$	1	3	1	1	1	1
$729_4 = \chi_{69,1}$	1	3	1	1	1	1
$756_1 = \chi_{70,0}$	2	4	.	2	1	1
$756_2 = \chi_{70,1}$	2	4	.	2	1	1
$945_1 = \chi_{71,0}$	3	3	1	1	1	2
$945_2 = \chi_{71,1}$	3	3	1	1	1	2
$6_1 = \chi_{72,0}$	1	.	.	.	.	.
$6_2 = \chi_{72,1}$	1	.	.	.	.	.
$84_1 = \chi_{73,0}$	.	.	1	.	.	.
$84_2 = \chi_{73,1}$	.	.	1	.	.	.
$120_3 = \chi_{74,0}$	1	2	1	.	.	.
$120_4 = \chi_{74,1}$	1	2	1	.	.	.
$126_1 = \chi_{75,0}$	1	2	.	1	.	.
$126_2 = \chi_{75,1}$	1	2	.	1	.	.
$210_7 = \chi_{76,0}$	1	.	.	.	.	1
$210_8 = \chi_{76,1}$	1	.	.	.	.	1
$540_3 = \chi_{77+}$	.	4	.	2	1	.
$336_5 = \chi_{79,0}$	2	2	.	1	.	1
$336_6 = \chi_{79,1}$	2	2	.	1	.	1

( <b>Block 4:</b> )	$\varphi_{13,0}$	$\varphi_{14,0}$	$\varphi_{15,0}$	$\varphi_{16,0}$	$\varphi_{17+}$	$\varphi_{19,0}$	
$420_8 = \chi_{81,0}$	2	2	1	1	.	1	
$420_9 = \chi_{81,1}$	2	2	1	1	.	1	
$630_7 = \chi_{82,0}$	1	2	.	1	1	1	
$630_8 = \chi_{82,1}$	1	2	.	1	1	1	
$1260_1 = \chi_{83+}$	2	4	.	2	2	2	
$840_2 = \chi_{85,0}$	2	4	1	2	1	1	
$840_3 = \chi_{85,1}$	2	4	1	2	1	1	
$840_6 = \chi_{86,0}$	3	2	1	.	1	2	$\varphi_{13,0} = 6_1$
$840_7 = \chi_{86,1}$	3	2	1	.	1	2	$\varphi_{14,0} = 15_1$
							$\varphi_{15,0} = 84_1$
$168_1 = \chi_{87+}$	.	.	2	.	.	.	$\varphi_{16,0} = 90_1$
$240_2 = \chi_{88+}$	.	4	.	2	.	.	$\varphi_{17+} = 300_1$
$432_1 = \chi_{89+}$	4	.	.	.	.	2	$\varphi_{19,0} = 204_1$
$840_{10} = \chi_{91+}$	4	4	2	2	.	2	
$840_{12} = \chi_{92+}$	.	4	.	2	2	.	
$960_1 = \chi_{93+}$	4	4	2	.	1	2	
$960_3 = \chi_{94+}$	4	4	2	.	1	2	
$1008_1 = \chi_{95+}$	.	.	.	.	2	2	
$1512_1 = \chi_{96+}$	4	8	.	4	2	2	
$1680_2 = \chi_{97+}$	4	4	.	2	2	4	
$1680_4 = \chi_{98+}$	4	8	2	4	2	2	

<b>Block 6:</b>	$\varphi_{20,0}$	
$384_1 = \chi_{66,0}$	1	
$384_2 = \chi_{66,1}$	1	
$384_5 = \chi_{80,0}$	1	
$384_6 = \chi_{80,1}$	1	
$768_1 = \chi_{90+}$	2	

$\varphi_{20,0} = 384_1$