

$U_6(2) \pmod{2}$

	blocks	defect	matrix
$2.G :$	1 2	16 1	$75 \times 11$ $2 \times 1$
$6.G :$	3 $4 = 3^*$	16	$71 \times 10$

<b>Block 1:</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.
$22_1 = \chi_2$	2	1	.	.	.	.	.	.	.	.	.
$231_1 = \chi_3$	3	2	1	.	.	1	.	.	.	.	.
$252_1 = \chi_4$	4	3	1	.	.	1	.	.	.	.	.
$385_1 = \chi_5$	3	1	2	1	1	1	.	.	.	.	.
$440_1 = \chi_6$	4	2	3	1	1	1	.	.	.	.	.
$560_1 = \chi_7$	4	2	2	1	1	2	.	.	.	.	.
$616_1 = \chi_8$	2	3	.	.	.	1	1	.	.	.	.
$770_1 = \chi_9$	2	2	1	1	1	1	1	.	.	.	.
$770_2 = \chi_{10}$	2	2	1	1	1	1	1	.	.	.	.
$1155_1 = \chi_{11}$	5	3	3	2	2	2	1	.	.	.	.
$1155_2 = \chi_{12}$	5	3	3	2	2	2	1	.	.	.	.
$1155_3 = \chi_{13}$	5	3	3	2	2	2	1	.	.	.	.
$1386_1 = \chi_{14}$	8	5	4	2	2	3	1	.	.	.	.
$1540_1 = \chi_{15}$	8	4	5	3	3	3	1	.	.	.	.
$3080_1 = \chi_{16}$	8	4	6	5	4	3	2	1	.	.	.
$3080_2 = \chi_{17}$	8	4	6	4	5	3	2	.	1	.	.
$3520_1 = \chi_{18}$	8	6	4	2	2	4	1	.	.	1	.
$4620_1 = \chi_{19}$	8	5	3	2	2	4	1	.	.	.	1
$4928_1 = \chi_{20}$	8	4	4	3	3	5	1	.	.	.	1
$5544_1 = \chi_{21}$	10	6	5	4	4	5	2	.	.	.	1
$6160_1 = \chi_{22}$	12	8	7	5	6	6	3	.	1	1	.
$6160_2 = \chi_{23}$	12	8	7	6	5	6	3	1	.	1	.
$6930_1 = \chi_{24}$	10	6	7	6	6	5	3	1	1	1	.
$8064_1 = \chi_{25}$	10	8	4	4	4	6	3	.	.	1	1
$9240_1 = \chi_{26}$	8	5	4	4	4	5	2	1	1	1	1
$9240_2 = \chi_{27}$	8	5	4	4	4	5	2	1	1	1	1
$9240_3 = \chi_{28}$	8	5	4	4	4	5	2	1	1	1	1
$10395_1 = \chi_{29}$	13	8	7	6	6	7	3	1	1	1	1
$10395_2 = \chi_{30}$	13	8	7	6	6	7	3	1	1	1	1
$10395_3 = \chi_{31}$	13	8	7	6	6	7	3	1	1	1	1
$10395_4 = \chi_{32}$	13	8	7	6	6	7	3	1	1	1	1
$10395_5 = \chi_{33}$	13	8	7	6	6	7	3	1	1	1	1
$11264_1 = \chi_{34}$	22	12	14	12	12	10	6	1	1	.	1
$13860_1 = \chi_{35}$	8	5	5	6	6	6	3	2	2	2	1
$14784_1 = \chi_{36}$	30	18	18	14	14	14	7	1	1	1	1
$18711_1 = \chi_{37}$	31	19	18	14	14	15	7	2	2	2	1
$18711_2 = \chi_{38}$	31	19	18	14	14	15	7	2	2	2	1
$20790_1 = \chi_{39}$	26	16	14	12	12	14	6	2	2	2	2
$20790_2 = \chi_{40}$	26	16	14	12	12	14	6	2	2	2	2

(Block 1:)	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$
24640 <sub>1</sub> = $\chi_{41}$	24	17	14	14	14	15	8	3	3	4	1
25515 <sub>1</sub> = $\chi_{42}$	31	20	17	15	15	17	8	2	3	3	2
25515 <sub>2</sub> = $\chi_{43}$	31	20	17	15	15	17	8	3	2	3	2
37422 <sub>1</sub> = $\chi_{45}$	38	26	19	18	18	22	10	4	4	5	3
40095 <sub>1</sub> = $\chi_{46}$	49	32	27	23	23	27	12	4	4	5	3
56 <sub>1</sub> = $\chi_{47}$	2	1	1	.	.	.	.	.	.	.	.
176 <sub>1</sub> = $\chi_{48}$	2	1	.	.	.	1	.	.	.	.	.
616 <sub>2</sub> = $\chi_{49}$	6	3	3	1	1	2	.	.	.	.	.
792 <sub>1</sub> = $\chi_{50}$	4	3	1	1	1	1	1	.	.	.	.
1232 <sub>1</sub> = $\chi_{51}$	8	5	4	2	2	2	1	.	.	.	.
2464 <sub>1</sub> = $\chi_{52}$	10	5	7	5	5	4	2	.	.	.	.
3080 <sub>3</sub> = $\chi_{53}$	4	4	1	1	1	3	1	.	.	1	.
3360 <sub>1</sub> = $\chi_{54}$	10	5	7	5	5	4	2	1	.	.	.
3360 <sub>2</sub> = $\chi_{55}$	10	5	7	5	5	4	2	.	1	.	.
5544 <sub>2</sub> = $\chi_{56}$	10	6	5	4	4	5	2	.	.	.	1
6160 <sub>3</sub> = $\chi_{57}$	16	9	8	5	5	7	2	.	.	.	1
6160 <sub>4</sub> = $\chi_{58}$	12	8	7	5	6	6	3	.	1	1	.
6160 <sub>5</sub> = $\chi_{59}$	12	8	7	6	5	6	3	1	.	1	.
7776 <sub>1</sub> = $\chi_{60}$	18	11	11	7	7	8	3	1	1	1	.
9856 <sub>1</sub> = $\chi_{61}$	10	8	4	4	4	6	3	1	1	1	1
11264 <sub>2</sub> = $\chi_{62}$	22	12	14	12	12	10	6	1	1	.	1
12320 <sub>1</sub> = $\chi_{63}$	20	13	11	9	9	10	5	1	1	1	1
12320 <sub>2</sub> = $\chi_{64}$	20	13	11	9	9	10	5	1	1	1	1
12320 <sub>3</sub> = $\chi_{65}$	20	13	11	9	9	10	5	1	1	1	1
13608 <sub>1</sub> = $\chi_{66}$	24	14	15	12	12	12	6	1	1	1	1
15840 <sub>1</sub> = $\chi_{67}$	28	19	15	11	11	14	6	1	1	2	1
18480 <sub>1</sub> = $\chi_{68}$	16	10	8	8	8	10	4	2	2	2	2
21384 <sub>1</sub> = $\chi_{69}$	18	13	9	9	9	12	5	2	2	3	2
22176 <sub>1</sub> = $\chi_{70}$	26	16	16	14	14	14	7	3	3	3	1
24640 <sub>2</sub> = $\chi_{71}$	32	19	16	13	13	17	6	2	2	2	3
24640 <sub>3</sub> = $\chi_{72}$	28	18	15	14	13	16	7	3	2	3	2
24640 <sub>4</sub> = $\chi_{73}$	28	18	15	13	14	16	7	2	3	3	2
27720 <sub>1</sub> = $\chi_{74}$	36	22	21	18	18	19	9	3	3	3	2
30240 <sub>1</sub> = $\chi_{75}$	36	24	20	18	18	20	10	3	3	4	2
44352 <sub>1</sub> = $\chi_{77}$	48	32	26	24	24	27	13	5	5	6	3

$$\begin{aligned}
\varphi_1 &= 1_1 \\
\varphi_2 &= 20_1 \\
\varphi_3 &= 34_1 \\
\varphi_4 &= 70_1 \\
\varphi_5 &= 70_2 \\
\varphi_6 &= 154_1 \\
\varphi_7 &= 400_1 \\
\varphi_8 &= 896_1 \\
\varphi_9 &= 896_2 \\
\varphi_{10} &= 1960_1 \\
\varphi_{11} &= 3114_1
\end{aligned}$$

Block 2:	$\varphi_{12}$
32768 <sub>1</sub> = $\chi_{44}$	1
32768 <sub>2</sub> = $\chi_{76}$	1

$$\varphi_{12} = 32768_1$$

<b>Blocks 3, 4:</b>	$\varphi_{13}$	$\varphi_{14}$	$\varphi_{15}$	$\varphi_{16}$	$\varphi_{17}$	$\varphi_{18}$	$\varphi_{19}$	$\varphi_{20}$	$\varphi_{21}$	$\varphi_{22}$
$21_1 = \chi_{78}$	1	1	.	.	.	.	.	.	.	.
$210_1 = \chi_{79}$	1	2	1	1	.	.	.	.	.	.
$231_2 = \chi_{80}$	2	3	1	1	.	.	.	.	.	.
$462_1 = \chi_{81}$	4	4	1	1	1	.	.	.	.	.
$924_1 = \chi_{82}$	3	4	2	1	1	1	.	.	.	.
$1155_4 = \chi_{83}$	2	5	2	2	.	.	1	.	.	.
$1386_2 = \chi_{84}$	3	4	.	2	1	.	.	1	.	.
$1485_1 = \chi_{85}$	3	5	1	2	1	.	.	1	.	.
$1485_3 = \chi_{86}$	3	5	1	2	1	.	.	1	.	.
$1485_5 = \chi_{87}$	3	5	1	2	1	.	.	1	.	.
$2310_1 = \chi_{88}$	6	8	2	3	2	1	.	1	.	.
$2310_3 = \chi_{89}$	7	12	5	4	1	1	1	.	.	.
$2520_1 = \chi_{90}$	7	10	3	4	2	1	.	1	.	.
$2772_1 = \chi_{91}$	7	10	2	4	2	.	1	1	.	.
$3465_1 = \chi_{92}$	8	13	4	5	2	1	1	1	.	.
$3465_3 = \chi_{93}$	8	13	4	5	2	1	1	1	.	.
$3465_5 = \chi_{94}$	8	13	4	5	2	1	1	1	.	.
$3465_7 = \chi_{95}$	8	13	4	5	2	1	1	1	.	.
$3696_1 = \chi_{96}$	6	10	1	5	2	.	1	2	.	.
$4620_2 = \chi_{97}$	9	14	3	6	3	1	1	2	.	.
$4620_4 = \chi_{98}$	9	14	3	6	3	1	1	2	.	.
$5544_3 = \chi_{99}$	13	22	8	8	3	2	2	1	.	.
$6720_1 = \chi_{100}$	12	22	6	9	3	1	3	2	.	.
$6930_2 = \chi_{101}$	16	26	8	10	4	2	2	2	.	.
$9240_4 = \chi_{102}$	10	14	3	7	4	.	2	2	1	.
$9240_6 = \chi_{103}$	13	16	4	7	5	1	1	2	1	.
$10395_6 = \chi_{104}$	15	21	6	9	5	1	2	2	1	.
$11088_1 = \chi_{105}$	16	24	8	10	5	2	2	2	1	.
$11880_1 = \chi_{106}$	18	26	7	11	6	1	2	3	1	.
$11880_3 = \chi_{107}$	18	26	7	11	6	1	2	3	1	.
$11880_5 = \chi_{108}$	18	26	7	11	6	1	2	3	1	.
$14784_2 = \chi_{109}$	12	22	6	9	3	1	3	2	.	1
$18480_2 = \chi_{110}$	32	48	13	20	10	3	4	5	1	.
$18711_3 = \chi_{111}$	34	51	14	21	10	3	4	5	1	.
$18711_5 = \chi_{112}$	34	51	14	21	10	3	4	5	1	.
$20790_3 = \chi_{113}$	30	42	12	18	10	2	4	4	2	.
$21504_1 = \chi_{114}$	24	44	12	18	6	2	6	4	.	1
$25515_3 = \chi_{115}$	39	55	14	24	13	3	4	7	2	.
$25515_5 = \chi_{116}$	29	45	12	19	9	2	5	4	1	1
$27720_2 = \chi_{117}$	31	48	11	21	10	2	5	6	1	1

(Blocks 3, 4:)	$\varphi_{13}$	$\varphi_{14}$	$\varphi_{15}$	$\varphi_{16}$	$\varphi_{17}$	$\varphi_{18}$	$\varphi_{19}$	$\varphi_{20}$	$\varphi_{21}$	$\varphi_{22}$
$29568_1 = \chi_{118}$	28	40	10	18	10	2	4	5	2	1
$37422_2 = \chi_{119}$	45	66	15	29	15	2	7	8	2	1
$40095_2 = \chi_{120}$	51	77	20	33	16	4	8	8	2	1
$120_1 = \chi_{121}$	1	2	1	.	.	.	.	.	.	.
$672_1 = \chi_{122}$	5	6	2	2	1	.	.	.	.	.
$1056_1 = \chi_{123}$	5	6	2	2	1	1	.	.	.	.
$1848_1 = \chi_{124}$	3	8	4	3	.	1	1	.	.	.
$2640_1 = \chi_{125}$	8	12	4	4	2	1	.	1	.	.
$3696_3 = \chi_{126}$	6	10	1	5	2	.	1	2	.	.
$5544_5 = \chi_{127}$	13	22	8	8	3	2	2	1	.	.
$6336_1 = \chi_{128}$	14	22	5	9	4	1	1	3	.	.
$7392_1 = \chi_{129}$	16	24	5	10	5	1	2	3	.	.
$7392_3 = \chi_{130}$	17	28	8	11	4	1	3	2	.	.
$7776_2 = \chi_{131}$	17	28	8	11	4	2	3	2	.	.
$9240_8 = \chi_{132}$	19	32	9	13	5	2	3	3	.	.
$9240_{10} = \chi_{133}$	13	16	4	7	5	1	1	2	1	.
$13608_2 = \chi_{134}$	23	34	11	14	7	3	2	3	1	.
$14784_4 = \chi_{135}$	26	38	12	15	8	3	3	3	1	.
$15120_1 = \chi_{136}$	24	34	8	15	8	2	2	5	1	.
$15120_3 = \chi_{137}$	14	24	6	10	4	1	3	2	.	1
$18480_4 = \chi_{138}$	32	48	13	20	10	3	4	5	1	.
$18480_6 = \chi_{139}$	32	48	13	20	10	3	4	5	1	.
$21120_1 = \chi_{140}$	28	40	10	18	10	1	4	5	2	.
$21384_2 = \chi_{141}$	17	26	6	12	6	1	4	3	1	1
$21504_3 = \chi_{142}$	24	44	12	18	6	2	6	4	.	1
$22176_2 = \chi_{143}$	33	46	12	20	11	2	4	5	2	.
$22176_4 = \chi_{144}$	33	46	12	20	11	2	4	5	2	.
$27720_4 = \chi_{145}$	31	48	11	21	10	2	5	6	1	1
$36960_1 = \chi_{146}$	45	68	18	29	14	3	7	7	2	1
$36960_3 = \chi_{147}$	44	64	15	28	15	3	6	8	2	1
$36960_5 = \chi_{148}$	45	68	18	29	14	3	7	7	2	1

$$\begin{aligned}
\varphi_{13} &= 6_1 \\
\varphi_{14} &= 15_1 \\
\varphi_{15} &= 84_1 \\
\varphi_{16} &= 90_1 \\
\varphi_{17} &= 204_1 \\
\varphi_{18} &= 384_1 \\
\varphi_{19} &= 720_1 \\
\varphi_{20} &= 924_1 \\
\varphi_{21} &= 3984_1 \\
\varphi_{22} &= 8064_1
\end{aligned}$$