

$U_4(3).2_2 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	5×4
	2	1	5×4
	3	0	$35_1 = \chi_{3,0}, \varphi_{3,0}$
	4	0	$35_2 = \chi_{3,1}, \varphi_{3,1}$
	5	0	$35_3 = \chi_{4,0}, \varphi_{4,0}$
	6	0	$35_4 = \chi_{4,1}, \varphi_{4,1}$
	7	0	$90_1 = \chi_{5,0}, \varphi_{5,0}$
	8	0	$90_2 = \chi_{5,1}, \varphi_{5,1}$
	9	0	$140_1 = \chi_{6,0}, \varphi_{6,0}$
	10	0	$140_2 = \chi_{6,1}, \varphi_{6,1}$
	11	0	$210_1 = \chi_{8,0}, \varphi_{8,0}$
	12	0	$210_2 = \chi_{8,1}, \varphi_{8,1}$
	13	0	$280_1 = \chi_{9,0}, \varphi_{9,0}$
	14	0	$280_2 = \chi_{9,1}, \varphi_{9,1}$
	$15 = \overline{13}$	0	$280_3 = \chi_{10,0}, \varphi_{10,0}$
	$16 = \overline{14}$	0	$280_4 = \chi_{10,1}, \varphi_{10,1}$
	17	0	$560_1 = \chi_{11+}, \varphi_{11+}$
	18	0	$315_1 = \chi_{13,0}, \varphi_{13,0}$
	19	0	$315_2 = \chi_{13,1}, \varphi_{13,1}$
	20	0	$315_3 = \chi_{14,0}, \varphi_{14,0}$
	21	0	$315_4 = \chi_{14,1}, \varphi_{14,1}$
	22	0	$420_1 = \chi_{15,0}, \varphi_{15,0}$
	23	0	$420_2 = \chi_{15,1}, \varphi_{15,1}$
	24	0	$560_2 = \chi_{16,0}, \varphi_{16,0}$
	$25 = \overline{24}$	0	$560_3 = \chi_{16,1}, \varphi_{16,1}$
	26	0	$1280_1 = \chi_{17+}, \varphi_{17+}$
$2.G :$	27	0	$20_1 = \chi_{21,0}, \varphi_{20,0}$
	$28 = \overline{27}$	0	$20_2 = \chi_{21,1}, \varphi_{20,1}$
	29	1	5×4
	30	1	5×4
	31	0	$70_1 = \chi_{24,0}, \varphi_{23,0}$
	32	0	$70_2 = \chi_{24,1}, \varphi_{23,1}$
	33	0	$70_3 = \chi_{25,0}, \varphi_{24,0}$
	34	0	$70_4 = \chi_{25,1}, \varphi_{24,1}$
	$35 = \overline{33}$	0	$70_5 = \chi_{26,0}, \varphi_{25,0}$
	$36 = \overline{34}$	0	$70_6 = \chi_{26,1}, \varphi_{25,1}$
	37	0	$140_3 = \chi_{27+}, \varphi_{26+}$
	38	0	$120_1 = \chi_{29,0}, \varphi_{28,0}$
	39	0	$120_2 = \chi_{29,1}, \varphi_{28,1}$
	40	0	$420_3 = \chi_{30+}, \varphi_{29+}$

	blocks	defect	matrix
	41	0	$540_1 = \chi_{34,0}, \varphi_{33,0}$
	$42 = \overline{41}$	0	$540_2 = \chi_{34,1}, \varphi_{33,1}$
	43	0	$560_4 = \chi_{35,0}, \varphi_{34,0}$
	44	0	$560_5 = \chi_{35,1}, \varphi_{34,1}$
	45	0	$630_1 = \chi_{36,0}, \varphi_{35,0}$
	46	0	$630_2 = \chi_{36,1}, \varphi_{35,1}$
	47	0	$1280_2 = \chi_{37+}, \varphi_{36+}$
4.G :	48	0	$40_1 = \chi_{40+}, \varphi_{38+}$
	49	0	$240_1 = \chi_{41+}, \varphi_{39+}$
	50	0	$280_5 = \chi_{42+}, \varphi_{40+}$
	51	1	5×4
	52	0	$560_6 = \chi_{47+}, \varphi_{45+}$
	53	0	$560_7 = \chi_{48+}, \varphi_{46+}$
	54	0	$560_8 = \chi_{49+}, \varphi_{47+}$
	55	0	$840_1 = \chi_{50+}, \varphi_{48+}$
	56	0	$1080_1 = \chi_{51+}, \varphi_{49+}$
	57	0	$1280_3 = \chi_{52+}, \varphi_{50+}$
	58	0	$1280_4 = \chi_{53+}, \varphi_{51+}$
	59	0	$1680_1 = \chi_{54+}, \varphi_{52+}$
3.G :	60	0	$15_1 = \chi_{56,0}, \varphi_{53,0}$
	61	0	$15_2 = \chi_{56,1}, \varphi_{53,1}$
	$62 = 60^*$		
	$63 = 61^*$		
	64	1	5×4
	65	1	5×4
	$66 = 64^*$		
	$67 = 65^*$		
	68	0	$105_1 = \chi_{58,0}, \varphi_{55,0}$
	69	0	$105_2 = \chi_{58,1}, \varphi_{55,1}$
	$70 = 68^*$		
	$71 = 69^*$		
	72	0	$105_5 = \chi_{59,0}, \varphi_{56,0}$
	73	0	$105_6 = \chi_{59,1}, \varphi_{56,1}$
	$74 = 72^*$		
	$75 = 73^*$		
	76	0	$105_9 = \chi_{60,0}, \varphi_{57,0}$
	77	0	$105_{10} = \chi_{60,1}, \varphi_{57,1}$
	$78 = 76^*$		
	$79 = 77^*$		
	80	0	$210_3 = \chi_{61,0}, \varphi_{58,0}$

	blocks	defect	matrix
	81 82 = 80* 83 = 81*	0	$210_4 = \chi_{61,1}, \varphi_{58,1}$
	84 85	0	$315_5 = \chi_{62,0}, \varphi_{59,0}$
	86 = 84* 87 = 85*	0	$315_6 = \chi_{62,1}, \varphi_{59,1}$
	88 89 = 88*	0	$720_1 = \chi_{64+}, \varphi_{61+}$
	90 91	0	$420_4 = \chi_{67,0}, \varphi_{65,0}$
	92 = 90* 93 = 91*	0	$420_5 = \chi_{67,1}, \varphi_{65,1}$
	94 95	0	$630_3 = \chi_{68,0}, \varphi_{66,0}$
	96 = 94* 97 = 95*	0	$630_4 = \chi_{68,1}, \varphi_{66,1}$
	98 99	0	$945_1 = \chi_{71,0}, \varphi_{67,0}$
	100 = 98* 101 = 99*	0	$945_2 = \chi_{71,1}, \varphi_{67,1}$
6.G :	102 103 104 = 102* 105 = 103*	1 1	5×4 5×4
	106 107 108 = 106* 109 = 107*	0 0	$120_3 = \chi_{74,0}, \varphi_{70,0}$ $120_4 = \chi_{74,1}, \varphi_{70,1}$
	110 111 112 = 110* 113 = 111*	0 0	$210_7 = \chi_{76,0}, \varphi_{72,0}$ $210_8 = \chi_{76,1}, \varphi_{72,1}$
	114 115 = 114*	0	$540_3 = \chi_{77+}, \varphi_{74+}$
	116 117 118 = 116* 119 = 117*	0 0	$420_8 = \chi_{81,0}, \varphi_{76,0}$ $420_9 = \chi_{81,1}, \varphi_{76,1}$
	120	0	$630_7 = \chi_{82,0}, \varphi_{77,0}$

	blocks	defect	matrix
	121 122 = 120* 123 = 121*	0	$630_8 = \chi_{82,1}, \varphi_{77,1}$
	124 125 = 124*	0	$1260_1 = \chi_{83+}, \varphi_{78+}$
	126 127	0 0	$840_2 = \chi_{85,0}, \varphi_{80,0}$ $840_3 = \chi_{85,1}, \varphi_{80,1}$
	128 = 126* 129 = 127*		
	130 131	0 0	$840_6 = \chi_{86,0}, \varphi_{81,0}$ $840_7 = \chi_{86,1}, \varphi_{81,1}$
	132 = 130* 133 = 131*		
12.G :	134 135 = 134 * 5 136 137 = 136 * 5 138 139 = 138 * 5 140 141 = 140 * 5 142 143 = 142 * 5 144 = 142 * 7 145 = 142 * 11 146 147 = 146 * 5 148 149 = 148 * 5	1 0 0 0 0 0 0 0	5×4 $240_2 = \chi_{88+}, \varphi_{83+}$ $840_{10} = \chi_{91+}, \varphi_{87+}$ $840_{12} = \chi_{92+}, \varphi_{88+}$ $960_1 = \chi_{93+}, \varphi_{89+}$ $1680_2 = \chi_{97+}, \varphi_{91+}$ $1680_4 = \chi_{98+}, \varphi_{92+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{2,1}$	$\varphi_{7,0}$	$\varphi_{19,1}$	
$1_1 = \chi_{1,0}$	1	.	.	.	$\varphi_{1,0} = 1_1$
$21_2 = \chi_{2,1}$	.	1	.	.	$\varphi_{2,1} = 21_2$
$189_1 = \chi_{7,0}$	1	.	1	.	$\varphi_{7,0} = 188_1$
$729_2 = \chi_{19,1}$	.	1	.	1	$\varphi_{19,1} = 708_2$
$896_2 = \chi_{20,1}$	.	.	1	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{7,1}$	$\varphi_{19,0}$
$1_2 = \chi_{1,1}$	1	.	.	.
$21_1 = \chi_{2,0}$	.	1	.	.
$189_2 = \chi_{7,1}$	1	.	1	.
$729_1 = \chi_{19,0}$	.	1	.	1
$896_1 = \chi_{20,0}$	.	.	1	1

$$\begin{aligned}\varphi_{1,1} &= 1_2 \\ \varphi_{2,0} &= 21_1 \\ \varphi_{7,1} &= 188_2 \\ \varphi_{19,0} &= 708_1\end{aligned}$$

Block 29:	$\varphi_{21,0}$	$\varphi_{22,1}$	$\varphi_{31,0}$	$\varphi_{32,1}$
$56_1 = \chi_{22,0}$	1	.	.	.
$56_4 = \chi_{23,1}$	.	1	.	.
$504_1 = \chi_{32,0}$	1	.	1	.
$504_4 = \chi_{33,1}$	.	1	.	1
$896_3 = \chi_{39,0}$	.	.	1	1

$$\begin{aligned}\varphi_{21,0} &= 56_1 \\ \varphi_{22,1} &= 56_4 \\ \varphi_{31,0} &= 448_1 \\ \varphi_{32,1} &= 448_4\end{aligned}$$

Block 30:	$\varphi_{21,1}$	$\varphi_{22,0}$	$\varphi_{31,1}$	$\varphi_{32,0}$
$56_2 = \chi_{22,1}$	1	.	.	.
$56_3 = \chi_{23,0}$	.	1	.	.
$504_2 = \chi_{32,1}$	1	.	1	.
$504_3 = \chi_{33,0}$	.	1	.	1
$896_4 = \chi_{39,1}$	.	.	1	1

$$\begin{aligned}\varphi_{21,1} &= 56_2 \\ \varphi_{22,0} &= 56_3 \\ \varphi_{31,1} &= 448_2 \\ \varphi_{32,0} &= 448_3\end{aligned}$$

Block 51:	φ_{41+}	φ_{42+}	φ_{43+}	φ_{44+}
$448_1 = \chi_{43+}$	1	.	.	.
$448_2 = \chi_{44+}$	.	1	.	.
$448_3 = \chi_{45+}$	.	.	1	.
$448_4 = \chi_{46+}$	.	.	.	1
$1792_1 = \chi_{55+}$	1	1	1	1

$$\begin{aligned}\varphi_{41+} &= 448_5 \\ \varphi_{42+} &= 448_6 \\ \varphi_{43+} &= 448_7 \\ \varphi_{44+} &= 448_8\end{aligned}$$

Blocks 64, 66:	$\varphi_{54,0}$	$\varphi_{60,1}$	$\varphi_{63,0}$	$\varphi_{64,1}$
$21_3 = \chi_{57,0}$	1	.	.	.
$336_2 = \chi_{63,1}$	.	1	.	.
$384_1 = \chi_{66,0}$	1	.	1	.
$729_4 = \chi_{69,1}$	.	1	.	1
$756_1 = \chi_{70,0}$	.	.	1	1

$$\begin{aligned}\varphi_{54,0} &= 21_3 \\ \varphi_{60,1} &= 336_2 \\ \varphi_{63,0} &= 363_1 \\ \varphi_{64,1} &= 393_2\end{aligned}$$

Blocks 65, 67:	$\varphi_{54,1}$	$\varphi_{60,0}$	$\varphi_{63,1}$	$\varphi_{64,0}$
$21_4 = \chi_{57,1}$	1	.	.	.
$336_1 = \chi_{63,0}$	.	1	.	.
$384_2 = \chi_{66,1}$	1	.	1	.
$729_3 = \chi_{69,0}$	.	1	.	1
$756_2 = \chi_{70,1}$	.	.	1	1

$$\begin{aligned} \varphi_{54,1} &= 21_4 \\ \varphi_{60,0} &= 336_1 \\ \varphi_{63,1} &= 363_2 \\ \varphi_{64,0} &= 393_1 \end{aligned}$$

Blocks 102, 104:	$\varphi_{68,0}$	$\varphi_{69,0}$	$\varphi_{71,1}$	$\varphi_{73,1}$
$6_1 = \chi_{72,0}$	1	.	.	.
$84_1 = \chi_{73,0}$	1	1	.	.
$126_2 = \chi_{75,1}$	.	.	1	.
$336_6 = \chi_{79,1}$	.	1	.	1
$384_6 = \chi_{80,1}$	.	.	1	1

$$\begin{aligned} \varphi_{68,0} &= 6_1 \\ \varphi_{69,0} &= 78_1 \\ \varphi_{71,1} &= 126_2 \\ \varphi_{73,1} &= 258_2 \end{aligned}$$

Blocks 103, 105:	$\varphi_{68,1}$	$\varphi_{69,1}$	$\varphi_{71,0}$	$\varphi_{73,0}$
$6_2 = \chi_{72,1}$	1	.	.	.
$84_2 = \chi_{73,1}$	1	1	.	.
$126_1 = \chi_{75,0}$	.	.	1	.
$336_5 = \chi_{79,0}$	.	1	.	1
$384_5 = \chi_{80,0}$	.	.	1	1

$$\begin{aligned} \varphi_{68,1} &= 6_2 \\ \varphi_{69,1} &= 78_2 \\ \varphi_{71,0} &= 126_1 \\ \varphi_{73,0} &= 258_1 \end{aligned}$$

Block 134:	φ_{82+}	φ_{84+}	φ_{85+}	φ_{86+}
$168_1 = \chi_{87+}$	1	.	.	.
$432_1 = \chi_{89+}$	1	1	.	.
$768_1 = \chi_{90+}$	.	.	.	1
$1008_1 = \chi_{95+}$	.	1	1	.
$1512_1 = \chi_{96+}$	.	.	1	1

$$\begin{aligned} \varphi_{82+} &= 168_1 \\ \varphi_{84+} &= 264_1 \\ \varphi_{85+} &= 744_1 \\ \varphi_{86+} &= 768_1 \end{aligned}$$