

$U_4(3).2_2 \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	0	$21_1 = \chi_{2,0}, \varphi_{2,0}$
	3	0	$21_2 = \chi_{2,1}, \varphi_{2,1}$
	4	0	$35_1 = \chi_{3,0}, \varphi_{3,0}$
	5	0	$35_2 = \chi_{3,1}, \varphi_{3,1}$
	6	0	$35_3 = \chi_{4,0}, \varphi_{4,0}$
	7	0	$35_4 = \chi_{4,1}, \varphi_{4,1}$
	8	0	$140_1 = \chi_{6,0}, \varphi_{6,0}$
	9	0	$140_2 = \chi_{6,1}, \varphi_{6,1}$
	10	0	$189_1 = \chi_{7,0}, \varphi_{7,0}$
	11	0	$189_2 = \chi_{7,1}, \varphi_{7,1}$
	12	0	$210_1 = \chi_{8,0}, \varphi_{8,0}$
	13	0	$210_2 = \chi_{8,1}, \varphi_{8,1}$
	14	0	$280_1 = \chi_{9,0}, \varphi_{9,0}$
	15	0	$280_2 = \chi_{9,1}, \varphi_{9,1}$
	$16 = \overline{14}$	0	$280_3 = \chi_{10,0}, \varphi_{10,0}$
	$17 = \overline{15}$	0	$280_4 = \chi_{10,1}, \varphi_{10,1}$
	18	0	$560_1 = \chi_{11+}, \varphi_{11+}$
	19	0	$315_1 = \chi_{13,0}, \varphi_{13,0}$
	20	0	$315_2 = \chi_{13,1}, \varphi_{13,1}$
	21	0	$315_3 = \chi_{14,0}, \varphi_{14,0}$
	22	0	$315_4 = \chi_{14,1}, \varphi_{14,1}$
	23	0	$420_1 = \chi_{15,0}, \varphi_{15,0}$
	24	0	$420_2 = \chi_{15,1}, \varphi_{15,1}$
	25	0	$560_2 = \chi_{16,0}, \varphi_{16,0}$
	$26 = \overline{25}$	0	$560_3 = \chi_{16,1}, \varphi_{16,1}$
	27	0	$896_1 = \chi_{20,0}, \varphi_{18,0}$
	28	0	$896_2 = \chi_{20,1}, \varphi_{18,1}$
$2.G :$	29	1	7×6
	30	0	$56_1 = \chi_{22,0}, \varphi_{20,0}$
	31	0	$56_2 = \chi_{22,1}, \varphi_{20,1}$
	32	0	$56_3 = \chi_{23,0}, \varphi_{21,0}$
	33	0	$56_4 = \chi_{23,1}, \varphi_{21,1}$
	34	0	$70_1 = \chi_{24,0}, \varphi_{22,0}$
	35	0	$70_2 = \chi_{24,1}, \varphi_{22,1}$
	36	0	$70_3 = \chi_{25,0}, \varphi_{23,0}$
	37	0	$70_4 = \chi_{25,1}, \varphi_{23,1}$
	$38 = \overline{36}$	0	$70_5 = \chi_{26,0}, \varphi_{24,0}$
	$39 = \overline{37}$	0	$70_6 = \chi_{26,1}, \varphi_{24,1}$
	40	0	$140_3 = \chi_{27+}, \varphi_{25+}$

	blocks	defect	matrix
	41	0	$420_3 = \chi_{30+}, \varphi_{28+}$
	42	0	$504_1 = \chi_{32,0}, \varphi_{30,0}$
	43	0	$504_2 = \chi_{32,1}, \varphi_{30,1}$
	44	0	$504_3 = \chi_{33,0}, \varphi_{31,0}$
	45	0	$504_4 = \chi_{33,1}, \varphi_{31,1}$
	46	0	$560_4 = \chi_{35,0}, \varphi_{33,0}$
	47	0	$560_5 = \chi_{35,1}, \varphi_{33,1}$
	48	0	$630_1 = \chi_{36,0}, \varphi_{34,0}$
	49	0	$630_2 = \chi_{36,1}, \varphi_{34,1}$
	50	0	$896_3 = \chi_{39,0}, \varphi_{35,0}$
	51	0	$896_4 = \chi_{39,1}, \varphi_{35,1}$
4.G :	52	1	5×3
	53	0	$280_5 = \chi_{42+}, \varphi_{38+}$
	54	0	$448_1 = \chi_{43+}, \varphi_{39+}$
	$55 = \overline{54}$	0	$448_2 = \chi_{44+}, \varphi_{40+}$
	56	0	$448_3 = \chi_{45+}, \varphi_{41+}$
	57	0	$448_4 = \chi_{46+}, \varphi_{42+}$
	58	0	$560_6 = \chi_{47+}, \varphi_{43+}$
	59	0	$560_7 = \chi_{48+}, \varphi_{44+}$
	60	0	$560_8 = \chi_{49+}, \varphi_{45+}$
	61	0	$840_1 = \chi_{50+}, \varphi_{46+}$
	62	0	$1680_1 = \chi_{54+}, \varphi_{48+}$
	63	0	$1792_1 = \chi_{55+}, \varphi_{49+}$
3.G :	64	1	7×6
	$65 = 64^*$		
	66	0	$21_3 = \chi_{57,0}, \varphi_{51,0}$
	67	0	$21_4 = \chi_{57,1}, \varphi_{51,1}$
	$68 = 66^*$		
	$69 = 67^*$		
	70	0	$105_1 = \chi_{58,0}, \varphi_{52,0}$
	71	0	$105_2 = \chi_{58,1}, \varphi_{52,1}$
	$72 = 70^*$		
	$73 = 71^*$		
	74	0	$105_5 = \chi_{59,0}, \varphi_{53,0}$
	75	0	$105_6 = \chi_{59,1}, \varphi_{53,1}$
	$76 = 74^*$		
	$77 = 75^*$		
	78	0	$105_9 = \chi_{60,0}, \varphi_{54,0}$
	79	0	$105_{10} = \chi_{60,1}, \varphi_{54,1}$
	$80 = 78^*$		

	blocks	defect	matrix
	81 = 79*		
	82	0	$210_3 = \chi_{61,0}, \varphi_{55,0}$
	83	0	$210_4 = \chi_{61,1}, \varphi_{55,1}$
	84 = 82*		
	85 = 83*		
	86	0	$315_5 = \chi_{62,0}, \varphi_{56,0}$
	87	0	$315_6 = \chi_{62,1}, \varphi_{56,1}$
	88 = 86*		
	89 = 87*		
	90	0	$336_1 = \chi_{63,0}, \varphi_{57,0}$
	91	0	$336_2 = \chi_{63,1}, \varphi_{57,1}$
	92 = 90*		
	93 = 91*		
	94	0	$420_4 = \chi_{67,0}, \varphi_{60,0}$
	95	0	$420_5 = \chi_{67,1}, \varphi_{60,1}$
	96 = 94*		
	97 = 95*		
	98	0	$630_3 = \chi_{68,0}, \varphi_{61,0}$
	99	0	$630_4 = \chi_{68,1}, \varphi_{61,1}$
	100 = 98*		
	101 = 99*		
	102	0	$756_1 = \chi_{70,0}, \varphi_{62,0}$
	103	0	$756_2 = \chi_{70,1}, \varphi_{62,1}$
	104 = 102*		
	105 = 103*		
	106	0	$945_1 = \chi_{71,0}, \varphi_{63,0}$
	107	0	$945_2 = \chi_{71,1}, \varphi_{63,1}$
	108 = 106*		
	109 = 107*		
6.G :	110	1	7×6
	111 = 110*		
	112	0	$84_1 = \chi_{73,0}, \varphi_{65,0}$
	113	0	$84_2 = \chi_{73,1}, \varphi_{65,1}$
	114 = 112*		
	115 = 113*		
	116	0	$126_1 = \chi_{75,0}, \varphi_{67,0}$
	117	0	$126_2 = \chi_{75,1}, \varphi_{67,1}$
	118 = 116*		
	119 = 117*		
	120	0	$210_7 = \chi_{76,0}, \varphi_{68,0}$

	blocks	defect	matrix
	121	0	$210_8 = \chi_{76,1}, \varphi_{68,1}$
	122 = 120*		
	123 = 121*		
	124	0	$336_5 = \chi_{79,0}, \varphi_{70,0}$
	125	0	$336_6 = \chi_{79,1}, \varphi_{70,1}$
	126 = 124*		
	127 = 125*		
	128	0	$420_8 = \chi_{81,0}, \varphi_{71,0}$
	129	0	$420_9 = \chi_{81,1}, \varphi_{71,1}$
	130 = 128*		
	131 = 129*		
	132	0	$630_7 = \chi_{82,0}, \varphi_{72,0}$
	133	0	$630_8 = \chi_{82,1}, \varphi_{72,1}$
	134 = 132*		
	135 = 133*		
	136	0	$1260_1 = \chi_{83+}, \varphi_{73+}$
	137 = 136*		
	138	0	$840_2 = \chi_{85,0}, \varphi_{75,0}$
	139	0	$840_3 = \chi_{85,1}, \varphi_{75,1}$
	140 = 138*		
	141 = 139*		
	142	0	$840_6 = \chi_{86,0}, \varphi_{76,0}$
	143	0	$840_7 = \chi_{86,1}, \varphi_{76,1}$
	144 = 142*		
	145 = 143*		
12.G :	146	0	$168_1 = \chi_{87+}, \varphi_{77+}$
	147 = 146 * 5		
	148	1	5×3
	149 = 148 * 5		
	150	0	$840_{10} = \chi_{91+}, \varphi_{81+}$
	151 = 150 * 5		
	152	0	$840_{12} = \chi_{92+}, \varphi_{82+}$
	153 = 152 * 5		
	154	0	$1008_1 = \chi_{95+}, \varphi_{83+}$
	155 = 154 * 5		
	156	0	$1512_1 = \chi_{96+}, \varphi_{84+}$
	157 = 156 * 5		
	158	0	$1680_2 = \chi_{97+}, \varphi_{85+}$
	159 = 158 * 5		
	160	0	$1680_4 = \chi_{98+}, \varphi_{86+}$

	blocks	defect	matrix
	161 = 160 * 5		

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{17,0}$	$\varphi_{17,1}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	$\varphi_{1,0} = 1_1$
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	$\varphi_{1,1} = 1_2$
$90_1 = \chi_{5,0}$	1	.	1	.	.	.	$\varphi_{5,0} = 89_1$
$90_2 = \chi_{5,1}$	.	1	.	1	.	.	$\varphi_{5,1} = 89_2$
$1280_1 = \chi_{17+}$	.	.	.	.	1	1	$\varphi_{17,0} = 640_1$
$729_1 = \chi_{19,0}$	.	.	1	.	1	.	$\varphi_{17,1} = 640_2$
$729_2 = \chi_{19,1}$	.	.	.	1	.	1	

Block 29:	$\varphi_{19,0}$	$\varphi_{19,1}$	$\varphi_{27,0}$	$\varphi_{27,1}$	$\varphi_{32,0}$	$\varphi_{32,1}$	
$20_1 = \chi_{21,0}$	1	.	.	.	.	.	$\varphi_{19,0} = 20_1$
$20_2 = \chi_{21,1}$	.	1	.	.	.	.	$\varphi_{19,1} = 20_2$
$120_1 = \chi_{29,0}$	.	.	1	.	.	.	$\varphi_{27,0} = 120_1$
$120_2 = \chi_{29,1}$	.	.	.	1	.	.	$\varphi_{27,1} = 120_2$
$540_1 = \chi_{34,0}$	1	.	.	.	1	.	$\varphi_{32,0} = 520_1$
$540_2 = \chi_{34,1}$	.	1	.	.	.	1	$\varphi_{32,1} = 520_2$
$1280_2 = \chi_{37+}$	.	.	1	1	1	1	

Block 52:	φ_{36+}	φ_{37+}	φ_{47+}	
$40_1 = \chi_{40+}$	1	.	.	$\varphi_{36+} = 40_1$
$240_1 = \chi_{41+}$	.	1	.	$\varphi_{37+} = 240_1$
$1080_1 = \chi_{51+}$	1	.	1	$\varphi_{47+} = 1040_1$
$1280_3 = \chi_{52+}$	.	1	1	
$1280_4 = \chi_{53+}$	.	1	1	

Blocks 64, 65:	$\varphi_{50,0}$	$\varphi_{50,1}$	$\varphi_{58,0}$	$\varphi_{58,1}$	$\varphi_{59,0}$	$\varphi_{59,1}$	
$15_1 = \chi_{56,0}$	1	.	.	.	.	.	$\varphi_{50,0} = 15_1$
$15_2 = \chi_{56,1}$	.	1	.	.	.	.	$\varphi_{50,1} = 15_2$
$720_1 = \chi_{64+}$	.	.	1	1	.	.	$\varphi_{58,0} = 360_1$
$384_1 = \chi_{66,0}$	1	.	.	.	1	.	$\varphi_{58,1} = 360_2$
$384_2 = \chi_{66,1}$	.	1	.	.	.	1	$\varphi_{59,0} = 369_1$
$729_3 = \chi_{69,0}$	.	.	1	.	1	.	$\varphi_{59,1} = 369_2$
$729_4 = \chi_{69,1}$	.	.	.	1	.	1	

Blocks 110, 111:	$\varphi_{64,0}$	$\varphi_{64,1}$	$\varphi_{66,0}$	$\varphi_{66,1}$	$\varphi_{69,0}$	$\varphi_{69,1}$	
$6_1 = \chi_{72,0}$	1	.	.	.	.	.	$\varphi_{64,0} = 6_1$
$6_2 = \chi_{72,1}$	.	1	.	.	.	.	$\varphi_{64,1} = 6_2$
$120_3 = \chi_{74,0}$	1	.	1	.	.	.	$\varphi_{66,0} = 114_1$
$120_4 = \chi_{74,1}$	.	1	.	1	.	.	$\varphi_{66,1} = 114_2$
$540_3 = \chi_{77+}$	.	.	.	.	1	1	$\varphi_{69,0} = 270_1$
$384_5 = \chi_{80,0}$	.	.	1	.	1	.	$\varphi_{69,1} = 270_2$
$384_6 = \chi_{80,1}$	.	.	.	1	.	1	

Block 148:	φ_{78+}	φ_{79+}	φ_{80+}	
$240_2 = \chi_{88+}$	1	.	.	$\varphi_{78+} = 240_2$
$432_1 = \chi_{89+}$	.	1	.	$\varphi_{79+} = 432_1$
$768_1 = \chi_{90+}$	1	.	1	$\varphi_{80+} = 528_1$
$960_1 = \chi_{93+}$	.	1	1	
$960_3 = \chi_{94+}$	.	1	1	