

$$U_6(2) \pmod{11}$$

	blocks	defect	matrix
$G :$	1	1	7×5
	2	0	$22_1 = \chi_2, \varphi_2$
	3	0	$231_1 = \chi_3, \varphi_3$
	4	0	$385_1 = \chi_5, \varphi_5$
	5	0	$440_1 = \chi_6, \varphi_6$
	6	0	$616_1 = \chi_8, \varphi_8$
	7	0	$770_1 = \chi_9, \varphi_9$
	$8 = \overline{7}$	0	$770_2 = \chi_{10}, \varphi_{10}$
	9	0	$1155_1 = \chi_{11}, \varphi_{11}$
	10	0	$1155_2 = \chi_{12}, \varphi_{12}$
	11	0	$1155_3 = \chi_{13}, \varphi_{13}$
	12	0	$1386_1 = \chi_{14}, \varphi_{14}$
	13	0	$1540_1 = \chi_{15}, \varphi_{15}$
	14	0	$3080_1 = \chi_{16}, \varphi_{16}$
	$15 = \overline{14}$	0	$3080_2 = \chi_{17}, \varphi_{17}$
	16	0	$3520_1 = \chi_{18}, \varphi_{18}$
	17	0	$4620_1 = \chi_{19}, \varphi_{19}$
	18	0	$4928_1 = \chi_{20}, \varphi_{20}$
	19	0	$5544_1 = \chi_{21}, \varphi_{21}$
	20	0	$6160_1 = \chi_{22}, \varphi_{22}$
	$21 = \overline{20}$	0	$6160_2 = \chi_{23}, \varphi_{23}$
	22	0	$6930_1 = \chi_{24}, \varphi_{24}$
	23	0	$9240_1 = \chi_{26}, \varphi_{26}$
	24	0	$9240_2 = \chi_{27}, \varphi_{27}$
	25	0	$9240_3 = \chi_{28}, \varphi_{28}$
	26	0	$10395_1 = \chi_{29}, \varphi_{29}$
	$27 = \overline{26}$	0	$10395_2 = \chi_{30}, \varphi_{30}$
	28	0	$10395_3 = \chi_{31}, \varphi_{31}$
	29	0	$10395_4 = \chi_{32}, \varphi_{32}$
	30	0	$10395_5 = \chi_{33}, \varphi_{33}$
	31	0	$11264_1 = \chi_{34}, \varphi_{34}$
	32	0	$13860_1 = \chi_{35}, \varphi_{35}$
	33	0	$14784_1 = \chi_{36}, \varphi_{36}$
	34	0	$18711_1 = \chi_{37}, \varphi_{37}$
	35	0	$18711_2 = \chi_{38}, \varphi_{38}$
	36	0	$20790_1 = \chi_{39}, \varphi_{39}$
	$37 = \overline{36}$	0	$20790_2 = \chi_{40}, \varphi_{40}$
	38	0	$24640_1 = \chi_{41}, \varphi_{41}$
	39	0	$37422_1 = \chi_{45}, \varphi_{43}$
	40	0	$40095_1 = \chi_{46}, \varphi_{44}$

	blocks	defect	matrix
$2.G :$	41	1	7×5
	42	0	$176_1 = \chi_{48}, \varphi_{46}$
	43	0	$616_2 = \chi_{49}, \varphi_{47}$
	44	0	$792_1 = \chi_{50}, \varphi_{48}$
	45	0	$1232_1 = \chi_{51}, \varphi_{49}$
	46	0	$2464_1 = \chi_{52}, \varphi_{50}$
	47	0	$3080_3 = \chi_{53}, \varphi_{51}$
	48	0	$5544_2 = \chi_{56}, \varphi_{53}$
	49	0	$6160_3 = \chi_{57}, \varphi_{54}$
	50	0	$6160_4 = \chi_{58}, \varphi_{55}$
	$51 = \overline{50}$	0	$6160_5 = \chi_{59}, \varphi_{56}$
	52	0	$9856_1 = \chi_{61}, \varphi_{58}$
	53	0	$11264_2 = \chi_{62}, \varphi_{60}$
	54	0	$12320_1 = \chi_{63}, \varphi_{61}$
	55	0	$12320_2 = \chi_{64}, \varphi_{62}$
	$56 = \overline{55}$	0	$12320_3 = \chi_{65}, \varphi_{63}$
	57	0	$15840_1 = \chi_{67}, \varphi_{64}$
	58	0	$18480_1 = \chi_{68}, \varphi_{65}$
	59	0	$21384_1 = \chi_{69}, \varphi_{66}$
	60	0	$22176_1 = \chi_{70}, \varphi_{67}$
	61	0	$24640_2 = \chi_{71}, \varphi_{69}$
	62	0	$24640_3 = \chi_{72}, \varphi_{70}$
	$63 = \overline{62}$	0	$24640_4 = \chi_{73}, \varphi_{71}$
	64	0	$27720_1 = \chi_{74}, \varphi_{72}$
	65	0	$44352_1 = \chi_{77}, \varphi_{73}$
$3.G :$	66	1	7×5
	$67 = 66^*$		
	68	0	$231_2 = \chi_{80}, \varphi_{76}$
	$69 = 68^*$		
	70	0	$462_1 = \chi_{81}, \varphi_{77}$
	$71 = 70^*$		
	72	0	$924_1 = \chi_{82}, \varphi_{78}$
	$73 = 72^*$		
	74	0	$1155_4 = \chi_{83}, \varphi_{79}$
	$75 = 74^*$		
	76	0	$1386_2 = \chi_{84}, \varphi_{80}$
	$77 = 76^*$		
	78	0	$1485_1 = \chi_{85}, \varphi_{81}$
	$79 = 78^*$		
	80	0	$1485_3 = \chi_{86}, \varphi_{82}$

	blocks	defect	matrix
	81 = 80*		
	82	0	$1485_5 = \chi_{87}, \varphi_{83}$
	83 = 82*		
	84	0	$2310_1 = \chi_{88}, \varphi_{84}$
	85 = 84*		
	86	0	$2310_3 = \chi_{89}, \varphi_{85}$
	87 = 86*		
	88	0	$2772_1 = \chi_{91}, \varphi_{87}$
	89 = 88*		
	90	0	$3465_1 = \chi_{92}, \varphi_{88}$
	91 = 90*		
	92	0	$3465_3 = \chi_{93}, \varphi_{89}$
	93 = 92*		
	94	0	$3465_5 = \chi_{94}, \varphi_{90}$
	95 = 94*		
	96	0	$3465_7 = \chi_{95}, \varphi_{91}$
	97 = 96*		
	98	0	$3696_1 = \chi_{96}, \varphi_{92}$
	99 = 98*		
	100	0	$4620_2 = \chi_{97}, \varphi_{93}$
	101 = 100*		
	102	0	$4620_4 = \chi_{98}, \varphi_{94}$
	103 = 102*		
	104	0	$5544_3 = \chi_{99}, \varphi_{95}$
	105 = 104*		
	106	0	$6930_2 = \chi_{101}, \varphi_{97}$
	107 = 106*		
	108	0	$9240_4 = \chi_{102}, \varphi_{98}$
	109 = 108*		
	110	0	$9240_6 = \chi_{103}, \varphi_{99}$
	111 = 110*		
	112	0	$10395_6 = \chi_{104}, \varphi_{100}$
	113 = 112*		
	114	0	$11088_1 = \chi_{105}, \varphi_{101}$
	115 = 114*		
	116	0	$11880_1 = \chi_{106}, \varphi_{102}$
	117 = 116*		
	118	0	$11880_3 = \chi_{107}, \varphi_{103}$
	119 = 118*		
	120	0	$11880_5 = \chi_{108}, \varphi_{104}$

	blocks	defect	matrix
	121 = 120*		
	122	0	$14784_2 = \chi_{109}, \varphi_{105}$
	123 = 122*		
	124	0	$18480_2 = \chi_{110}, \varphi_{106}$
	125 = 124*		
	126	0	$18711_3 = \chi_{111}, \varphi_{107}$
	127 = 126*		
	128	0	$18711_5 = \chi_{112}, \varphi_{108}$
	129 = 128*		
	130	0	$20790_3 = \chi_{113}, \varphi_{110}$
	131 = 130*		
	132	0	$27720_2 = \chi_{117}, \varphi_{111}$
	133 = 132*		
	134	0	$29568_1 = \chi_{118}, \varphi_{112}$
	135 = 134*		
	136	0	$37422_2 = \chi_{119}, \varphi_{113}$
	137 = 136*		
	138	0	$40095_2 = \chi_{120}, \varphi_{114}$
	139 = 138*		
6.G :	140	1	7×5
	141 = 140*		
	142	0	$1056_1 = \chi_{123}, \varphi_{117}$
	143 = 142*		
	144	0	$1848_1 = \chi_{124}, \varphi_{118}$
	145 = 144*		
	146	0	$2640_1 = \chi_{125}, \varphi_{119}$
	147 = 146*		
	148	0	$3696_3 = \chi_{126}, \varphi_{120}$
	149 = 148*		
	150	0	$5544_5 = \chi_{127}, \varphi_{121}$
	151 = 150*		
	152	0	$6336_1 = \chi_{128}, \varphi_{122}$
	153 = 152*		
	154	0	$7392_1 = \chi_{129}, \varphi_{124}$
	155 = 154*		
	156	0	$7392_3 = \chi_{130}, \varphi_{125}$
	157 = 156*		
	158	0	$9240_8 = \chi_{132}, \varphi_{127}$
	159 = 158*		
	160	0	$9240_{10} = \chi_{133}, \varphi_{128}$

	blocks	defect	matrix
	161 = 160*		
	162	0	$14784_4 = \chi_{135}, \varphi_{130}$
	163 = 162*		
	164	0	$18480_4 = \chi_{138}, \varphi_{131}$
	165 = 164*		
	166	0	$18480_6 = \chi_{139}, \varphi_{132}$
	167 = 166*		
	168	0	$21120_1 = \chi_{140}, \varphi_{133}$
	169 = 168*		
	170	0	$21384_2 = \chi_{141}, \varphi_{134}$
	171 = 170*		
	172	0	$22176_2 = \chi_{143}, \varphi_{135}$
	173 = 172*		
	174	0	$22176_4 = \chi_{144}, \varphi_{136}$
	175 = 174*		
	176	0	$27720_4 = \chi_{145}, \varphi_{137}$
	177 = 176*		
	178	0	$36960_1 = \chi_{146}, \varphi_{138}$
	179 = 178*		
	180	0	$36960_3 = \chi_{147}, \varphi_{139}$
	181 = 180*		
	182	0	$36960_5 = \chi_{148}, \varphi_{140}$
	183 = 182*		

Block 1:	φ_1	φ_4	φ_7	φ_{25}	φ_{42}	
$1_1 = \chi_1$	1	.	.	.	.	$\varphi_1 = 1_1$
$252_1 = \chi_4$	1	1	.	.	.	$\varphi_4 = 251_1$
$560_1 = \chi_7$	.	.	1	.	.	$\varphi_7 = 560_1$
$8064_1 = \chi_{25}$	.	1	.	1	.	$\varphi_{25} = 7813_1$
$25515_1 = \chi_{42}$	.	.	1	.	1	$\varphi_{42} = 24955_1$
$25515_2 = \chi_{43}$	.	.	1	.	1	
$32768_1 = \chi_{44}$	.	.	.	1	1	

Block 41:	φ_{45}	φ_{52}	φ_{57}	φ_{59}	φ_{68}
$56_1 = \chi_{47}$	1	.	.	.	.
$3360_1 = \chi_{54}$	.	1	.	.	.
$3360_2 = \chi_{55}$	.	1	.	.	.
$7776_1 = \chi_{60}$	1	.	1	.	.
$13608_1 = \chi_{66}$	.	1	.	1	.
$30240_1 = \chi_{75}$	.	.	1	.	1
$32768_2 = \chi_{76}$	.	.	.	1	1

$$\begin{aligned}
\varphi_{45} &= 56_1 \\
\varphi_{52} &= 3360_1 \\
\varphi_{57} &= 7720_1 \\
\varphi_{59} &= 10248_1 \\
\varphi_{68} &= 22520_1
\end{aligned}$$

Blocks 66, 67:	φ_{74}	φ_{75}	φ_{86}	φ_{96}	φ_{109}
$21_1 = \chi_{78}$	1	.	.	.	.
$210_1 = \chi_{79}$	.	1	.	.	.
$2520_1 = \chi_{90}$	1	.	1	.	.
$6720_1 = \chi_{100}$	.	1	.	1	.
$21504_1 = \chi_{114}$	.	.	1	.	1
$25515_3 = \chi_{115}$	.	.	.	1	1
$25515_5 = \chi_{116}$	.	.	.	1	1

$$\begin{aligned}
\varphi_{74} &= 21_1 \\
\varphi_{75} &= 210_1 \\
\varphi_{86} &= 2499_1 \\
\varphi_{96} &= 6510_1 \\
\varphi_{109} &= 19005_1
\end{aligned}$$

Blocks 140, 141:	φ_{115}	φ_{116}	φ_{123}	φ_{126}	φ_{129}
$120_1 = \chi_{121}$	1	.	.	.	.
$672_1 = \chi_{122}$	.	1	.	.	.
$7776_2 = \chi_{131}$	.	1	1	.	.
$13608_2 = \chi_{134}$	1	.	.	.	1
$15120_1 = \chi_{136}$	.	.	1	1	.
$15120_3 = \chi_{137}$	.	.	1	1	.
$21504_3 = \chi_{142}$	.	.	.	1	1

$$\begin{aligned}
\varphi_{115} &= 120_1 \\
\varphi_{116} &= 672_1 \\
\varphi_{123} &= 7104_1 \\
\varphi_{126} &= 8016_1 \\
\varphi_{129} &= 13488_1
\end{aligned}$$