

$Fi_{22}.2 \pmod{11}$

	blocks	defect	matrix
$G :$	1	1	11×10
	2	1	11×10
	3	0	$429_1 = \chi_{3,0}, \varphi_{3,0}$
	4	0	$429_2 = \chi_{3,1}, \varphi_{3,1}$
	5	0	$1001_1 = \chi_{4,0}, \varphi_{4,0}$
	6	0	$1001_2 = \chi_{4,1}, \varphi_{4,1}$
	7	0	$1430_1 = \chi_{5,0}, \varphi_{5,0}$
	8	0	$1430_2 = \chi_{5,1}, \varphi_{5,1}$
	9	0	$3003_1 = \chi_{6,0}, \varphi_{6,0}$
	10	0	$3003_2 = \chi_{6,1}, \varphi_{6,1}$
	11	0	$3080_1 = \chi_{7,0}, \varphi_{7,0}$
	12	0	$3080_2 = \chi_{7,1}, \varphi_{7,1}$
	13	0	$10725_1 = \chi_{8,0}, \varphi_{8,0}$
	14	0	$10725_2 = \chi_{8,1}, \varphi_{8,1}$
	15	0	$30030_1 = \chi_{10,0}, \varphi_{10,0}$
	16	0	$30030_2 = \chi_{10,1}, \varphi_{10,1}$
	17	0	$32032_1 = \chi_{11,0}, \varphi_{11,0}$
	18	0	$32032_2 = \chi_{11,1}, \varphi_{11,1}$
	19	0	$45045_1 = \chi_{13,0}, \varphi_{13,0}$
	20	0	$45045_2 = \chi_{13,1}, \varphi_{13,1}$
	21	0	$48048_1 = \chi_{14,0}, \varphi_{14,0}$
	22	0	$48048_2 = \chi_{14,1}, \varphi_{14,1}$
	23	0	$50050_1 = \chi_{15,0}, \varphi_{15,0}$
	24	0	$50050_2 = \chi_{15,1}, \varphi_{15,1}$
	25	0	$50050_3 = \chi_{16,0}, \varphi_{16,0}$
	26	0	$50050_4 = \chi_{16,1}, \varphi_{16,1}$
	27	0	$75075_1 = \chi_{17,0}, \varphi_{17,0}$
	28	0	$75075_2 = \chi_{17,1}, \varphi_{17,1}$
	29	0	$75075_3 = \chi_{18,0}, \varphi_{18,0}$
	30	0	$75075_4 = \chi_{18,1}, \varphi_{18,1}$
	31	0	$75075_5 = \chi_{19,0}, \varphi_{19,0}$
	32	0	$75075_6 = \chi_{19,1}, \varphi_{19,1}$
	33	0	$81081_1 = \chi_{20,0}, \varphi_{20,0}$
	34	0	$81081_2 = \chi_{20,1}, \varphi_{20,1}$
	35	0	$114400_1 = \chi_{21,0}, \varphi_{21,0}$
	36	0	$114400_2 = \chi_{21,1}, \varphi_{21,1}$
	37	0	$277200_1 = \chi_{22+}, \varphi_{22+}$
	38	0	$150150_1 = \chi_{24,0}, \varphi_{24,0}$
	39	0	$150150_2 = \chi_{24,1}, \varphi_{24,1}$
	40	0	$205920_1 = \chi_{25,0}, \varphi_{25,0}$

	blocks	defect	matrix
	41	0	$205920_2 = \chi_{25,1}, \varphi_{25,1}$
	42	0	$289575_1 = \chi_{26,0}, \varphi_{26,0}$
	43	0	$289575_2 = \chi_{26,1}, \varphi_{26,1}$
	44	0	$300300_1 = \chi_{27,0}, \varphi_{27,0}$
	45	0	$300300_2 = \chi_{27,1}, \varphi_{27,1}$
	46	0	$320320_1 = \chi_{28,0}, \varphi_{28,0}$
	47	0	$320320_2 = \chi_{28,1}, \varphi_{28,1}$
	48	0	$360855_1 = \chi_{29,0}, \varphi_{29,0}$
	49	0	$360855_2 = \chi_{29,1}, \varphi_{29,1}$
	50	0	$370656_1 = \chi_{30,0}, \varphi_{30,0}$
	51	0	$370656_2 = \chi_{30,1}, \varphi_{30,1}$
	52	0	$800800_1 = \chi_{31+}, \varphi_{31+}$
	53	0	$800800_2 = \chi_{33+}, \varphi_{33+}$
	54	0	$450450_1 = \chi_{35,0}, \varphi_{35,0}$
	55	0	$450450_2 = \chi_{35,1}, \varphi_{35,1}$
	56	0	$450450_3 = \chi_{36,0}, \varphi_{36,0}$
	57	0	$450450_4 = \chi_{36,1}, \varphi_{36,1}$
	58	0	$576576_1 = \chi_{37,0}, \varphi_{37,0}$
	59	0	$576576_2 = \chi_{37,1}, \varphi_{37,1}$
	60	0	$577368_1 = \chi_{38,0}, \varphi_{38,0}$
	61	0	$577368_2 = \chi_{38,1}, \varphi_{38,1}$
	62	0	$579150_1 = \chi_{39,0}, \varphi_{39,0}$
	63	0	$579150_2 = \chi_{39,1}, \varphi_{39,1}$
	64	0	$600600_1 = \chi_{42,0}, \varphi_{41,0}$
	65	0	$600600_2 = \chi_{42,1}, \varphi_{41,1}$
	66	0	$1201200_1 = \chi_{43+}, \varphi_{42+}$
	67	0	$675675_1 = \chi_{45,0}, \varphi_{44,0}$
	68	0	$675675_2 = \chi_{45,1}, \varphi_{44,1}$
	69	0	$720720_1 = \chi_{46,0}, \varphi_{45,0}$
	70	0	$720720_2 = \chi_{46,1}, \varphi_{45,1}$
	71	0	$800800_3 = \chi_{47,0}, \varphi_{46,0}$
	72	0	$800800_4 = \chi_{47,1}, \varphi_{46,1}$
	73	0	$938223_1 = \chi_{49,0}, \varphi_{48,0}$
	74	0	$938223_2 = \chi_{49,1}, \varphi_{48,1}$
	75	0	$972972_1 = \chi_{50,0}, \varphi_{49,0}$
	76	0	$972972_2 = \chi_{50,1}, \varphi_{49,1}$
	77	0	$1201200_2 = \chi_{53,0}, \varphi_{51,0}$
	78	0	$1201200_3 = \chi_{53,1}, \varphi_{51,1}$
	79	0	$1372800_1 = \chi_{55,0}, \varphi_{54,0}$
	80	0	$1372800_2 = \chi_{55,1}, \varphi_{54,1}$

	blocks	defect	matrix
	81	0	$1441792_1 = \chi_{56,0}, \varphi_{55,0}$
	82	0	$1441792_2 = \chi_{56,1}, \varphi_{55,1}$
	83	0	$1876446_1 = \chi_{58,0}, \varphi_{57,0}$
	84	0	$1876446_2 = \chi_{58,1}, \varphi_{57,1}$
	85	0	$2027025_1 = \chi_{59,0}, \varphi_{58,0}$
	86	0	$2027025_2 = \chi_{59,1}, \varphi_{58,1}$
	87	0	$2050048_1 = \chi_{60,0}, \varphi_{59,0}$
	88	0	$2050048_2 = \chi_{60,1}, \varphi_{59,1}$
	89	0	$2316600_1 = \chi_{61,0}, \varphi_{60,0}$
	90	0	$2316600_2 = \chi_{61,1}, \varphi_{60,1}$
	91	0	$2402400_1 = \chi_{62,0}, \varphi_{61,0}$
	92	0	$2402400_2 = \chi_{62,1}, \varphi_{61,1}$
2.G :	93	0	$352_1 = \chi_{66,0}, \varphi_{62,0}$
	$94 = \overline{93}$	0	$352_2 = \chi_{66,1}, \varphi_{62,1}$
	95	1	7×5
	96	0	$27456_1 = \chi_{73+}, \varphi_{67+}$
	97	0	$27456_2 = \chi_{75,0}, \varphi_{69,0}$
	$98 = \overline{97}$	0	$27456_3 = \chi_{75,1}, \varphi_{69,1}$
	99	0	$96096_1 = \chi_{76+}, \varphi_{70+}$
	100	0	$105600_1 = \chi_{78,0}, \varphi_{72,0}$
	101	0	$105600_2 = \chi_{78,1}, \varphi_{72,1}$
	$102 = \overline{101}$	0	$105600_3 = \chi_{79,0}, \varphi_{73,0}$
	$103 = \overline{100}$	0	$105600_4 = \chi_{79,1}, \varphi_{73,1}$
	104	0	$123200_1 = \chi_{80,0}, \varphi_{74,0}$
	$105 = \overline{104}$	0	$123200_2 = \chi_{80,1}, \varphi_{74,1}$
	106	0	$133056_1 = \chi_{81,0}, \varphi_{75,0}$
	107	0	$133056_2 = \chi_{81,1}, \varphi_{75,1}$
	108	0	$292864_1 = \chi_{82+}, \varphi_{76+}$
	109	0	$228800_1 = \chi_{84,0}, \varphi_{78,0}$
	$110 = \overline{109}$	0	$228800_2 = \chi_{84,1}, \varphi_{78,1}$
	111	0	$640640_1 = \chi_{87+}, \varphi_{81+}$
	112	0	$800800_5 = \chi_{89+}, \varphi_{83+}$
	113	0	$960960_1 = \chi_{93+}, \varphi_{87+}$
	114	0	$1372800_3 = \chi_{95+}, \varphi_{89+}$
	115	0	$1830400_1 = \chi_{97+}, \varphi_{91+}$
	116	0	$1029600_1 = \chi_{99,0}, \varphi_{93,0}$
	$117 = \overline{116}$	0	$1029600_2 = \chi_{99,1}, \varphi_{93,1}$
	118	0	$2402400_3 = \chi_{100+}, \varphi_{94+}$
	119	0	$2594592_1 = \chi_{102+}, \varphi_{96+}$
	120	0	$1441792_3 = \chi_{104,0}, \varphi_{98,0}$

	blocks	defect	matrix
	121 = $\overline{120}$	0	1441792 ₄ = $\chi_{104,1}, \varphi_{98,1}$
	122	0	3326400 ₁ = $\chi_{105+}, \varphi_{99+}$
	123	0	4392960 ₁ = $\chi_{107+}, \varphi_{103+}$
	124	0	4804800 ₁ = $\chi_{111+}, \varphi_{105+}$
3.G :	125	1	7 × 5
	126	0	15444 ₁ = $\chi_{116+}, \varphi_{108+}$
	127	0	24948 ₁ = $\chi_{117+}, \varphi_{109+}$
	128 = $\overline{127}$	0	24948 ₂ = $\chi_{118+}, \varphi_{110+}$
	129	0	38610 ₁ = $\chi_{119+}, \varphi_{111+}$
	130	1	7 × 5
	131	0	54054 ₁ = $\chi_{121+}, \varphi_{113+}$
	132	0	103950 ₁ = $\chi_{123+}, \varphi_{115+}$
	133	0	108108 ₁ = $\chi_{124+}, \varphi_{116+}$
	134	0	193050 ₁ = $\chi_{126+}, \varphi_{118+}$
	135	0	247104 ₁ = $\chi_{127+}, \varphi_{119+}$
	136	0	475200 ₁ = $\chi_{129+}, \varphi_{121+}$
	137	0	579150 ₃ = $\chi_{130+}, \varphi_{122+}$
	138	0	721710 ₁ = $\chi_{131+}, \varphi_{124+}$
	139	0	772200 ₁ = $\chi_{134+}, \varphi_{125+}$
	140	0	810810 ₁ = $\chi_{135+}, \varphi_{126+}$
	141	0	810810 ₂ = $\chi_{136+}, \varphi_{127+}$
	142	0	864864 ₁ = $\chi_{137+}, \varphi_{128+}$
	143	0	988416 ₁ = $\chi_{138+}, \varphi_{129+}$
	144	0	1154736 ₁ = $\chi_{139+}, \varphi_{130+}$
	145	0	1216512 ₁ = $\chi_{140+}, \varphi_{131+}$
	146	0	1351350 ₁ = $\chi_{141+}, \varphi_{132+}$
	147	0	1351350 ₂ = $\chi_{142+}, \varphi_{133+}$
	148	0	1544400 ₁ = $\chi_{143+}, \varphi_{134+}$
	149	0	1876446 ₃ = $\chi_{145+}, \varphi_{136+}$
	150	0	1995840 ₁ = $\chi_{146+}, \varphi_{137+}$
	151	0	2471040 ₁ = $\chi_{147+}, \varphi_{138+}$
	152	0	2594592 ₂ = $\chi_{148+}, \varphi_{139+}$
	153	0	2594592 ₃ = $\chi_{149+}, \varphi_{140+}$
	154	0	2702700 ₁ = $\chi_{150+}, \varphi_{141+}$
	155	0	2702700 ₂ = $\chi_{151+}, \varphi_{142+}$
	156	0	2702700 ₃ = $\chi_{152+}, \varphi_{143+}$
	157	0	2702700 ₄ = $\chi_{153+}, \varphi_{144+}$
	158	0	3243240 ₁ = $\chi_{154+}, \varphi_{145+}$
	159	0	3459456 ₁ = $\chi_{157+}, \varphi_{149+}$
	160	0	3706560 ₁ = $\chi_{159+}, \varphi_{150+}$

	blocks	defect	matrix
	161	0	$3752892_1 = \chi_{160+}, \varphi_{151+}$
	162	0	$6177600_1 = \chi_{164+}, \varphi_{152+}$
6.G :	163	1	7×5
	$164 = \overline{163}$	1	7×5
	165	0	$123552_1 = \chi_{167+}, \varphi_{155+}$
	$166 = \overline{165}$	0	$123552_2 = \chi_{168+}, \varphi_{156+}$
	167	0	$142560_1 = \chi_{169+}, \varphi_{157+}$
	$168 = \overline{167}$	0	$142560_2 = \chi_{170+}, \varphi_{158+}$
	169	0	$247104_2 = \chi_{173+}, \varphi_{161+}$
	170	0	$617760_1 = \chi_{174+}, \varphi_{164+}$
	$171 = \overline{170}$	0	$617760_2 = \chi_{175+}, \varphi_{165+}$
	172	0	$864864_2 = \chi_{182+}, \varphi_{168+}$
	$173 = \overline{172}$	0	$864864_3 = \chi_{183+}, \varphi_{169+}$
	174	0	$2471040_2 = \chi_{188+}, \varphi_{172+}$
	$175 = \overline{174}$	0	$2471040_3 = \chi_{189+}, \varphi_{173+}$
	176	0	$3459456_2 = \chi_{190+}, \varphi_{174+}$
	$177 = \overline{176}$	0	$3459456_3 = \chi_{191+}, \varphi_{175+}$
	178	0	$3592512_1 = \chi_{192+}, \varphi_{176+}$
	$179 = \overline{178}$	0	$3592512_2 = \chi_{193+}, \varphi_{177+}$
	180	0	$5189184_1 = \chi_{194+}, \varphi_{178+}$
	181	0	$5930496_1 = \chi_{195+}, \varphi_{179+}$
	$182 = \overline{181}$	0	$5930496_2 = \chi_{196+}, \varphi_{180+}$
	183	0	$6177600_2 = \chi_{197+}, \varphi_{181+}$
	$184 = \overline{183}$	0	$6177600_3 = \chi_{198+}, \varphi_{182+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{40,0}$	$\varphi_{40,1}$	$\varphi_{52,0}$	$\varphi_{52,1}$	$\varphi_{53,0}$	$\varphi_{53,1}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$.	1	.	.	.	.	.	.	.	.
$13650_1 = \chi_{9,0}$	1	.	1	.	.	.	.	.	.	.
$13650_2 = \chi_{9,1}$.	1	.	1	.	.	.	.	.	.
$1164800_1 = \chi_{40+}$	1	1	.	.	.	.
$1360800_1 = \chi_{54,0}$.	.	1	.	.	.	.	.	.	1
$1360800_2 = \chi_{54,1}$.	.	.	1	.	.	.	.	1	.
$1791153_1 = \chi_{57,0}$	1	.	1	.	.	.
$1791153_2 = \chi_{57,1}$	1	.	1	.	.
$2555904_1 = \chi_{63,0}$	1	.	1	.
$2555904_2 = \chi_{63,1}$	1	.	1

$$\begin{array}{ll}
\varphi_{1,0} = 1_1 & \varphi_{40,1} = 582400_2 \\
\varphi_{1,1} = 1_2 & \varphi_{52,0} = 1208753_1 \\
\varphi_{9,0} = 13649_1 & \varphi_{52,1} = 1208753_2 \\
\varphi_{9,1} = 13649_2 & \varphi_{53,0} = 1347151_1 \\
\varphi_{40,0} = 582400_1 & \varphi_{53,1} = 1347151_2
\end{array}$$

Block 2:	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{47,0}$	$\varphi_{47,1}$	$\varphi_{50,0}$	$\varphi_{50,1}$	$\varphi_{56,0}$	$\varphi_{56,1}$
$78_1 = \chi_{2,0}$	1	.	.	.	.	.	.	.	.	.
$78_2 = \chi_{2,1}$.	1	.	.	.	.	.	.	.	.
$43680_1 = \chi_{12,0}$	1	.	1	.	.	.	.	.	.	.
$43680_2 = \chi_{12,1}$.	1	.	1	.	.	.	.	.	.
$852930_1 = \chi_{48,0}$.	.	1	.	1	.	.	.	.	.
$852930_2 = \chi_{48,1}$.	.	.	1	.	1	.	.	.	.
$1965600_1 = \chi_{51+}$	1	1	.	.
$2555904_3 = \chi_{64,0}$	1	.	.	1	.
$2555904_4 = \chi_{64,1}$	1	.	.	.	.	1
$2729376_1 = \chi_{65,0}$	1	.	1	.
$2729376_2 = \chi_{65,1}$	1	.	1

$$\begin{array}{ll}
\varphi_{2,0} = 78_1 & \varphi_{47,1} = 809328_2 \\
\varphi_{2,1} = 78_2 & \varphi_{50,0} = 982800_1 \\
\varphi_{12,0} = 43602_1 & \varphi_{50,1} = 982800_2 \\
\varphi_{12,1} = 43602_2 & \varphi_{56,0} = 1746576_1 \\
\varphi_{47,0} = 809328_1 & \varphi_{56,1} = 1746576_2
\end{array}$$

Block 95:	φ_{63+}	φ_{65+}	φ_{79+}	φ_{85+}	φ_{101+}	
$4160_1 = \chi_{67+}$	1	.	.	.	.	$\varphi_{63+} = 4160_1$
$11648_1 = \chi_{69+}$	.	1	.	.	.	$\varphi_{65+} = 11648_1$
$11648_2 = \chi_{71+}$	.	1	.	.	.	$\varphi_{79+} = 467584_1$
$471744_1 = \chi_{85+}$	1	.	1	.	.	$\varphi_{85+} = 861952_1$
$873600_1 = \chi_{91+}$	.	1	.	1	.	$\varphi_{101+} = 4249856_1$
$4717440_1 = \chi_{109+}$	.	.	1	.	1	
$5111808_1 = \chi_{113+}$	.	.	.	1	1	

Block 125:	φ_{107+}	φ_{114+}	φ_{135+}	φ_{146+}	φ_{147+}	
$702_1 = \chi_{115+}$	1	.	.	.	.	$\varphi_{107+} = 702_1$
$84240_1 = \chi_{122+}$	1	1	.	.	.	$\varphi_{114+} = 83538_1$
$1705860_1 = \chi_{144+}$	.	.	1	.	.	$\varphi_{135+} = 1705860_1$
$3316950_1 = \chi_{155+}$	.	1	.	.	1	$\varphi_{146+} = 2225340_1$
$3316950_2 = \chi_{156+}$	.	1	.	.	1	$\varphi_{147+} = 3233412_1$
$3931200_1 = \chi_{161+}$	.	.	1	1	.	
$5458752_1 = \chi_{163+}$	.	.	.	1	1	

Block 130:	φ_{112+}	φ_{117+}	φ_{120+}	φ_{123+}	φ_{148+}	
$39312_1 = \chi_{120+}$	1	.	.	.	.	$\varphi_{112+} = 39312_1$
$122850_1 = \chi_{125+}$	.	1	.	.	.	$\varphi_{117+} = 122850_1$
$471744_2 = \chi_{128+}$	.	1	1	.	.	$\varphi_{120+} = 348894_1$
$737100_1 = \chi_{132+}$	1	.	.	1	.	$\varphi_{123+} = 697788_1$
$737100_2 = \chi_{133+}$	1	.	.	1	.	$\varphi_{148+} = 3233412_2$
$3582306_1 = \chi_{158+}$	.	.	1	.	1	
$3931200_2 = \chi_{162+}$	.	.	.	1	1	

Blocks 163, 164:	φ_{153+}	φ_{159+}	φ_{163+}	φ_{167+}	φ_{171+}	
$3456_1 = \chi_{165+}$	1	.	.	.	.	$\varphi_{153+} = 3456_1$
$224640_1 = \chi_{171+}$	1	1	.	.	.	$\varphi_{159+} = 221184_1$
$628992_1 = \chi_{176+}$	.	1	1	.	.	$\varphi_{163+} = 407808_2$
$628992_4 = \chi_{179+}$	.	1	1	.	.	$\varphi_{167+} = 718848_2$
$718848_2 = \chi_{181+}$	.	.	.	1	.	$\varphi_{171+} = 1527552_2$
$1935360_2 = \chi_{185+}$	.	.	1	.	1	
$2246400_2 = \chi_{187+}$	.	.	.	1	1	

Block 164:	φ_{154+}	φ_{160+}	φ_{162+}	φ_{166+}	φ_{170+}	
$3456_2 = \chi_{166+}$	1	.	.	.	.	$\varphi_{154+} = 3456_2$
$224640_2 = \chi_{172+}$	1	1	.	.	.	$\varphi_{160+} = 221184_2$
$628992_2 = \chi_{177+}$	.	1	1	.	.	$\varphi_{162+} = 407808_1$
$628992_3 = \chi_{178+}$	.	1	1	.	.	$\varphi_{166+} = 718848_1$
$718848_1 = \chi_{180+}$	.	.	.	1	.	$\varphi_{170+} = 1527552_1$
$1935360_1 = \chi_{184+}$	.	.	1	.	1	
$2246400_1 = \chi_{186+}$	.	.	.	1	1	