

$A_{15}.2 \pmod{11}$

	blocks	defect	matrix		blocks	defect	matrix
$G :$	1	1	11×10		41	0	$24948_2 = \chi_{37,1}, \varphi_{37,1}$
	2	1	11×10		42	0	$25025_1 = \chi_{38,0}, \varphi_{38,0}$
	3	1	11×10		43	0	$25025_2 = \chi_{38,1}, \varphi_{38,1}$
	4	1	11×10		44	0	$25025_3 = \chi_{39,0}, \varphi_{39,0}$
	5	1	11×10		45	0	$25025_4 = \chi_{39,1}, \varphi_{39,1}$
	6	0	$715_1 = \chi_{7,0}, \varphi_{7,0}$		46	0	$25025_5 = \chi_{40,0}, \varphi_{40,0}$
	7	0	$715_2 = \chi_{7,1}, \varphi_{7,1}$		47	0	$25025_6 = \chi_{40,1}, \varphi_{40,1}$
	8	0	$1001_1 = \chi_{9,0}, \varphi_{9,0}$		48	0	$26950_1 = \chi_{41,0}, \varphi_{42,0}$
	9	0	$1001_2 = \chi_{9,1}, \varphi_{9,1}$		49	0	$26950_2 = \chi_{41,1}, \varphi_{42,1}$
	10	0	$1430_1 = \chi_{10,0}, \varphi_{10,0}$		50	0	$27027_1 = \chi_{42,0}, \varphi_{43,0}$
	11	0	$1430_2 = \chi_{10,1}, \varphi_{10,1}$		51	0	$27027_2 = \chi_{42,1}, \varphi_{43,1}$
	12	0	$1925_1 = \chi_{14,0}, \varphi_{14,0}$		52	0	$28028_1 = \chi_{43,0}, \varphi_{45,0}$
	13	0	$1925_2 = \chi_{14,1}, \varphi_{14,1}$		53	0	$28028_2 = \chi_{43,1}, \varphi_{45,1}$
	14	0	$2002_1 = \chi_{15,0}, \varphi_{15,0}$		54	0	$30030_1 = \chi_{44,0}, \varphi_{46,0}$
	15	0	$2002_2 = \chi_{15,1}, \varphi_{15,1}$		55	0	$30030_2 = \chi_{44,1}, \varphi_{46,1}$
	16	0	$2002_3 = \chi_{16,0}, \varphi_{16,0}$		56	0	$32032_1 = \chi_{45,0}, \varphi_{47,0}$
	17	0	$2002_4 = \chi_{16,1}, \varphi_{16,1}$		57	0	$32032_2 = \chi_{45,1}, \varphi_{47,1}$
	18	0	$3003_1 = \chi_{19,0}, \varphi_{19,0}$		58	0	$35035_1 = \chi_{47,0}, \varphi_{48,0}$
	19	0	$3003_2 = \chi_{19,1}, \varphi_{19,1}$		59	0	$35035_2 = \chi_{47,1}, \varphi_{48,1}$
	20	0	$3432_1 = \chi_{12+}, \varphi_{12+}$		60	0	$42042_1 = \chi_{49,0}, \varphi_{50,0}$
	21	0	$5005_1 = \chi_{20,0}, \varphi_{20,0}$		61	0	$42042_2 = \chi_{49,1}, \varphi_{50,1}$
	22	0	$5005_2 = \chi_{20,1}, \varphi_{20,1}$		62	0	$42042_3 = \chi_{50,0}, \varphi_{51,0}$
	23	0	$6006_1 = \chi_{21,0}, \varphi_{21,0}$		63	0	$42042_4 = \chi_{50,1}, \varphi_{51,1}$
	24	0	$6006_2 = \chi_{21,1}, \varphi_{21,1}$		64	0	$43120_1 = \chi_{51,0}, \varphi_{52,0}$
	25	0	$7007_1 = \chi_{22,0}, \varphi_{25,0}$		65	0	$43120_2 = \chi_{51,1}, \varphi_{52,1}$
	26	0	$7007_2 = \chi_{22,1}, \varphi_{25,1}$		66	0	$44550_1 = \chi_{52,0}, \varphi_{53,0}$
	27	0	$7722_1 = \chi_{23,0}, \varphi_{26,0}$		67	0	$44550_2 = \chi_{52,1}, \varphi_{53,1}$
	28	0	$7722_2 = \chi_{23,1}, \varphi_{26,1}$		68	0	$45045_1 = \chi_{53,0}, \varphi_{55,0}$
	29	0	$11088_1 = \chi_{26,0}, \varphi_{28,0}$		69	0	$45045_2 = \chi_{53,1}, \varphi_{55,1}$
	30	0	$11088_2 = \chi_{26,1}, \varphi_{28,1}$		70	0	$50050_1 = \chi_{54,0}, \varphi_{56,0}$
	31	0	$11583_1 = \chi_{28,0}, \varphi_{29,0}$		71	0	$50050_2 = \chi_{54,1}, \varphi_{56,1}$
	32	0	$11583_2 = \chi_{28,1}, \varphi_{29,1}$		72	0	$50050_3 = \chi_{55,0}, \varphi_{57,0}$
	33	0	$14300_1 = \chi_{33,0}, \varphi_{33,0}$		73	0	$50050_4 = \chi_{55,1}, \varphi_{57,1}$
	34	0	$14300_2 = \chi_{33,1}, \varphi_{33,1}$		74	0	$51975_1 = \chi_{56,0}, \varphi_{58,0}$
	35	0	$19305_1 = \chi_{34,0}, \varphi_{34,0}$		75	0	$51975_2 = \chi_{56,1}, \varphi_{58,1}$
	36	0	$19305_2 = \chi_{34,1}, \varphi_{34,1}$		76	0	$53625_1 = \chi_{57,0}, \varphi_{60,0}$
	37	0	$21450_1 = \chi_{35,0}, \varphi_{36,0}$		77	0	$53625_2 = \chi_{57,1}, \varphi_{60,1}$
	38	0	$21450_2 = \chi_{35,1}, \varphi_{36,1}$		78	0	$54054_1 = \chi_{58,0}, \varphi_{61,0}$
	39	0	$24024_1 = \chi_{29+}, \varphi_{30+}$		79	0	$54054_2 = \chi_{58,1}, \varphi_{61,1}$
	40	0	$24948_1 = \chi_{37,0}, \varphi_{37,0}$		80	0	$70070_1 = \chi_{63,0}, \varphi_{63,0}$

	blocks	defect	matrix
	81	0	$70070_2 = \chi_{63,1}, \varphi_{63,1}$
	82	0	$75075_1 = \chi_{64,0}, \varphi_{64,0}$
	83	0	$75075_2 = \chi_{64,1}, \varphi_{64,1}$
	84	0	$75075_3 = \chi_{65,0}, \varphi_{65,0}$
	85	0	$75075_4 = \chi_{65,1}, \varphi_{65,1}$
	86	0	$80080_1 = \chi_{68,0}, \varphi_{67,0}$
	87	0	$80080_2 = \chi_{68,1}, \varphi_{67,1}$
	88	0	$81081_1 = \chi_{69,0}, \varphi_{68,0}$
	89	0	$81081_2 = \chi_{69,1}, \varphi_{68,1}$
	90	0	$90090_1 = \chi_{70,0}, \varphi_{69,0}$
	91	0	$90090_2 = \chi_{70,1}, \varphi_{69,1}$
	92	0	$96525_1 = \chi_{72,0}, \varphi_{70,0}$
	93	0	$96525_2 = \chi_{72,1}, \varphi_{70,1}$
	94	0	$100100_1 = \chi_{73,0}, \varphi_{71,0}$
	95	0	$100100_2 = \chi_{73,1}, \varphi_{71,1}$
	96	0	$100100_3 = \chi_{74,0}, \varphi_{72,0}$
	97	0	$100100_4 = \chi_{74,1}, \varphi_{72,1}$
	98	0	$100100_5 = \chi_{75,0}, \varphi_{73,0}$
	99	0	$100100_6 = \chi_{75,1}, \varphi_{73,1}$
	100	0	$108108_1 = \chi_{76,0}, \varphi_{75,0}$
	101	0	$108108_2 = \chi_{76,1}, \varphi_{75,1}$
	102	0	$112112_1 = \chi_{77,0}, \varphi_{76,0}$
	103	0	$112112_2 = \chi_{77,1}, \varphi_{76,1}$
	104	0	$112112_3 = \chi_{78,0}, \varphi_{77,1}$
	105	0	$112112_4 = \chi_{78,1}, \varphi_{77,0}$
	106	0	$125125_1 = \chi_{80,0}, \varphi_{79,0}$
	107	0	$125125_2 = \chi_{80,1}, \varphi_{79,1}$
	108	0	$126126_1 = \chi_{81,0}, \varphi_{80,0}$
	109	0	$126126_2 = \chi_{81,1}, \varphi_{80,1}$
	110	0	$128700_1 = \chi_{82,0}, \varphi_{81,0}$
	111	0	$128700_2 = \chi_{82,1}, \varphi_{81,1}$
	112	0	$135135_1 = \chi_{83,0}, \varphi_{82,0}$
	113	0	$135135_2 = \chi_{83,1}, \varphi_{82,1}$
	114	0	$150150_1 = \chi_{86,0}, \varphi_{85,0}$
	115	0	$150150_2 = \chi_{86,1}, \varphi_{85,1}$
	116	0	$162162_1 = \chi_{88,0}, \varphi_{86,0}$
	117	0	$162162_2 = \chi_{88,1}, \varphi_{86,1}$
	118	0	$175175_1 = \chi_{89,0}, \varphi_{87,0}$
	119	0	$175175_2 = \chi_{89,1}, \varphi_{87,1}$
	120	0	$210210_1 = \chi_{91,0}, \varphi_{88,0}$

$$\begin{array}{ll}
\varphi_{1,1} = 1_2 & \varphi_{24,0} = 6889_1 \\
\varphi_{6,0} = 364_1 & \varphi_{27,1} = 9738_2 \\
\varphi_{11,1} = 1637_2 & \varphi_{41,1} = 25362_2 \\
\varphi_{17,0} = 2561_1 & \varphi_{44,0} = 27637_1 \\
\varphi_{23,0} = 6761_1 & \varphi_{49,1} = 36063_2
\end{array}$$

Block 3:	$\varphi_{2,0}$	$\varphi_{4,1}$	$\varphi_{8,0}$	$\varphi_{18,1}$	$\varphi_{22,1}$	$\varphi_{35,0}$	$\varphi_{59,1}$	$\varphi_{62,0}$	$\varphi_{74,1}$	$\varphi_{78,0}$
$14_1 = \chi_{2,0}$	1	.	.	.	.	.	.	.	.	.
$91_2 = \chi_{4,1}$	.	1	.	.	.	.	.	.	.	.
$910_1 = \chi_{8,0}$	1	.	1	.	.	.	.	.	.	.
$2835_2 = \chi_{17,1}$	.	1	.	1	.	.	.	.	.	.
$9100_2 = \chi_{24,1}$	.	.	.	1	1	.	.	.	.	.
$22113_1 = \chi_{36,0}$	.	.	1	.	.	1	.	.	.	.
$58968_2 = \chi_{60,1}$	.	.	.	.	1	.	1	.	.	.
$91000_1 = \chi_{71,0}$	.	.	.	.	.	1	.	1	.	.
$159250_2 = \chi_{87,1}$	.	.	.	.	.	.	1	.	1	.
$184275_1 = \chi_{90,0}$	.	.	.	.	.	.	.	1	.	1
$221130_1 = \chi_{92,0}$	.	.	.	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_{2,0} = 14_1 & \varphi_{35,0} = 21217_1 \\
\varphi_{4,1} = 91_2 & \varphi_{59,1} = 52612_2 \\
\varphi_{8,0} = 896_1 & \varphi_{62,0} = 69783_1 \\
\varphi_{18,1} = 2744_2 & \varphi_{74,1} = 106638_2 \\
\varphi_{22,1} = 6356_2 & \varphi_{78,0} = 114492_1
\end{array}$$

Block 4:	$\varphi_{2,1}$	$\varphi_{4,0}$	$\varphi_{8,1}$	$\varphi_{18,0}$	$\varphi_{22,0}$	$\varphi_{35,1}$	$\varphi_{59,0}$	$\varphi_{62,1}$	$\varphi_{74,0}$	$\varphi_{78,1}$
$14_2 = \chi_{2,1}$	1	.	.	.	.	.	.	.	.	.
$91_1 = \chi_{4,0}$	.	1	.	.	.	.	.	.	.	.
$910_2 = \chi_{8,1}$	1	.	1	.	.	.	.	.	.	.
$2835_1 = \chi_{17,0}$	.	1	.	1	.	.	.	.	.	.
$9100_1 = \chi_{24,0}$	.	.	.	1	1	.	.	.	.	.
$22113_2 = \chi_{36,1}$	.	.	1	.	.	1	.	.	.	.
$58968_1 = \chi_{60,0}$	.	.	.	.	1	.	1	.	.	.
$91000_2 = \chi_{71,1}$	.	.	.	.	.	1	.	1	.	.
$159250_1 = \chi_{87,0}$	.	.	.	.	.	.	1	.	1	.
$184275_2 = \chi_{90,1}$	.	.	.	.	.	.	.	1	.	1
$221130_2 = \chi_{92,1}$	.	.	.	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_{2,1} = 14_2 & \varphi_{35,1} = 21217_2 \\
\varphi_{4,0} = 91_1 & \varphi_{59,0} = 52612_1 \\
\varphi_{8,1} = 896_2 & \varphi_{62,1} = 69783_2 \\
\varphi_{18,0} = 2744_1 & \varphi_{74,0} = 106638_1 \\
\varphi_{22,0} = 6356_1 & \varphi_{78,1} = 114492_2
\end{array}$$

Block 5:	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{32,0}$	$\varphi_{32,1}$	$\varphi_{54,0}$	$\varphi_{54,1}$	$\varphi_{66,0}$	$\varphi_{66,1}$
$90_1 = \chi_{3,0}$	1	.	.	.	.	.	.	.	.	.
$90_2 = \chi_{3,1}$	.	1	.	.	.	.	.	.	.	.
$350_1 = \chi_{5,0}$	1	.	1	.	.	.	.	.	.	.
$350_2 = \chi_{5,1}$	.	1	.	1	.	.	.	.	.	.
$12740_1 = \chi_{31,0}$	.	.	1	.	1	.	.	.	.	.
$12740_2 = \chi_{31,1}$	.	.	.	1	.	1	.	.	.	.
$57330_1 = \chi_{59,0}$	.	.	.	.	1	.	1	.	.	.
$57330_2 = \chi_{59,1}$	.	.	.	.	.	1	.	1	.	.
$122850_1 = \chi_{79,0}$	.	.	.	.	.	.	1	.	1	.
$122850_2 = \chi_{79,1}$	.	.	.	.	.	.	.	1	.	1
$156000_1 = \chi_{66+}$	.	.	.	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_{3,0} &= 90_1 \\
\varphi_{3,1} &= 90_2 \\
\varphi_{5,0} &= 260_1 \\
\varphi_{5,1} &= 260_2 \\
\varphi_{32,0} &= 12480_1
\end{array}
\qquad
\begin{array}{ll}
\varphi_{32,1} &= 12480_2 \\
\varphi_{54,0} &= 44850_1 \\
\varphi_{54,1} &= 44850_2 \\
\varphi_{66,0} &= 78000_1 \\
\varphi_{66,1} &= 78000_2
\end{array}$$