

$L_4(3).2_1 \pmod{3}$

	blocks	defect	matrix
$G :$	1	6	41×28
	2	0	$729_1 = \chi_{27,0}, \varphi_{15,0}$
	3	0	$729_2 = \chi_{27,1}, \varphi_{15,1}$
$2.G :$	4	6	35×24

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{6,0}$	$\varphi_{6,1}$	$\varphi_{7,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.	.	.	.
$52_1 = \chi_{2+}$	1	1	1	1	.	.	.	.	.	.	1	1	.
$39_1 = \chi_{4,0}$	.	.	.	.	1	.	1	.	.	.	1	.	.
$39_2 = \chi_{4,1}$	.	.	.	.	.	1	.	1	.	.	.	1	.
$52_2 = \chi_{5,0}$	1	1	.	1	.	.	.	.	.	.	.	.	.
$52_3 = \chi_{5,1}$	1	1	1	.	.	.	.	.	.	.	.	.	1
$130_1 = \chi_{6+}$	.	.	1	1	.	.	.	.	1	1	.	.	1
$90_1 = \chi_{8,0}$	.	2	.	.	.	.	.	.	.	.	1	.	.
$90_2 = \chi_{8,1}$	2	.	.	.	.	.	.	.	.	.	.	1	.
$468_1 = \chi_{9+}$	2	2	1	1	1	1	1	1	2	2	1	1	2
$520_1 = \chi_{11+}$	.	.	1	1	1	1	1	1	1	1	1	1	1
$260_1 = \chi_{13,0}$	1	2	1	1	1	.	1	.	1	1	2	.	1
$260_2 = \chi_{13,1}$	2	1	1	1	.	1	.	1	1	1	.	2	1
$351_1 = \chi_{14,0}$	.	.	.	.	.	.	.	.	2	.	.	.	.
$351_2 = \chi_{14,1}$	.	.	.	.	.	.	.	.	.	2	.	.	.
$390_1 = \chi_{15,0}$	1	.	.	.	2	.	2	.	1	.	.	.	1
$390_2 = \chi_{15,1}$	.	1	.	.	.	2	.	2	.	1	.	.	1
$416_1 = \chi_{16,0}$	1	2	1	1	.	1	.	1	1	1	1	1	1
$416_2 = \chi_{16,1}$	2	1	1	1	1	.	1	.	1	1	1	1	1
$416_3 = \chi_{17,0}$	1	1	1	2	1	.	.	1	.	.	1	1	.
$416_4 = \chi_{17,1}$	1	1	2	1	.	1	1	.	.	.	1	1	1
$416_5 = \chi_{18,0}$	.	.	.	.	.	2	.	1	1	.	.	.	1
$416_6 = \chi_{18,1}$	.	.	.	.	2	.	1	.	.	1	.	.	.
$416_7 = \chi_{19,0}$	.	.	.	.	.	1	.	2	1	.	.	.	.
$416_8 = \chi_{19,1}$	.	.	.	.	1	.	2	.	.	1	.	.	1
$468_2 = \chi_{20,0}$	.	.	.	.	2	.	.	2	.	.	.	.	.
$468_3 = \chi_{20,1}$	.	.	.	.	.	2	2	.	.	.	.	.	1
$1170_1 = \chi_{21+}$	1	1	2	2	2	2	2	2	.	.	2	2	1
$640_1 = \chi_{23,0}$	1	.	1	1	1	1	3	.	.	.	1	1	1
$640_2 = \chi_{23,1}$	.	1	1	1	1	1	.	3	.	.	1	1	.
$640_3 = \chi_{24,0}$	1	.	1	1	3	.	1	1	.	.	1	1	.
$640_4 = \chi_{24,1}$	.	1	1	1	.	3	1	1	.	.	1	1	1
$640_5 = \chi_{25,0}$	.	2	1	.	.	2	1	1	2	1	1	.	2
$640_6 = \chi_{25,1}$	2	.	.	1	2	.	1	1	1	2	.	1	1
$640_7 = \chi_{26,0}$	.	2	.	1	1	1	.	2	2	1	1	.	1
$640_8 = \chi_{26,1}$	2	.	1	.	1	1	2	.	1	2	.	1	2
$780_1 = \chi_{28,0}$	.	1	.	.	1	2	1	2	2	1	1	.	1
$780_2 = \chi_{28,1}$	1	.	.	.	2	1	2	1	1	2	.	1	1
$1040_1 = \chi_{29,0}$	1	1	1	2	3	1	1	3	1	1	1	1	1

(Block 1:)	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$
$1_1 = \chi_{1,0}$	.	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	.	.	.	.	.	.	.	.	.	.	.
$52_1 = \chi_{2+}$	.	.	.	.	.	.	.	.	.	.	.	.
$39_1 = \chi_{4,0}$	.	.	.	.	.	.	.	.	.	.	.	.
$39_2 = \chi_{4,1}$	.	.	.	.	.	.	.	.	.	.	.	.
$52_2 = \chi_{5,0}$	1	.	.	.	.	.	.	.	.	.	.	.
$52_3 = \chi_{5,1}$	.	.	.	.	.	.	.	.	.	.	.	.
$130_1 = \chi_{6+}$	1	.	.	.	.	.	.	.	.	.	.	.
$90_1 = \chi_{8,0}$	.	.	.	.	.	1	.	.	.	.	.	.
$90_2 = \chi_{8,1}$	.	.	.	.	.	.	1	.	.	.	.	.
$468_1 = \chi_{9+}$	2	.	.	.	.	1	1	.	.	.	.	.
$520_1 = \chi_{11+}$	1	.	.	.	.	.	.	.	.	.	.	1
$260_1 = \chi_{13,0}$	1	.	.	.	.	1	.	.	.	.	.	.
$260_2 = \chi_{13,1}$	1	.	.	.	.	.	1	.	.	.	.	.
$351_1 = \chi_{14,0}$	.	.	.	.	.	1	.	1	.	1	.	.
$351_2 = \chi_{14,1}$	.	.	.	.	.	.	1	.	1	.	1	.
$390_1 = \chi_{15,0}$	1	1	.	1	.	.	.	.	.	.	.	1
$390_2 = \chi_{15,1}$	1	.	1	.	1	.	.	.	.	.	.	.
$416_1 = \chi_{16,0}$	1	.	.	.	.	1	.	.	.	.	.	.
$416_2 = \chi_{16,1}$	1	.	.	.	.	.	1	.	.	.	.	1
$416_3 = \chi_{17,0}$	1	.	.	.	.	.	.	.	.	.	.	.
$416_4 = \chi_{17,1}$	.	.	.	.	.	.	.	.	.	.	.	.
$416_5 = \chi_{18,0}$	.	.	1	.	.	.	.	.	.	1	.	.
$416_6 = \chi_{18,1}$	1	1	.	.	.	.	.	.	.	.	1	1
$416_7 = \chi_{19,0}$	1	.	.	.	1	.	.	1	.	.	.	.
$416_8 = \chi_{19,1}$	.	.	.	1	.	.	.	.	1	.	.	1
$468_2 = \chi_{20,0}$	1	1	.	.	1	.	.	.	.	.	.	.
$468_3 = \chi_{20,1}$	.	.	1	1	.	.	.	.	.	.	.	.
$1170_1 = \chi_{21+}$	1	.	.	.	.	.	.	.	.	.	.	1
$640_1 = \chi_{23,0}$	.	.	.	1	.	.	.	.	.	.	.	1
$640_2 = \chi_{23,1}$	1	.	.	.	1	.	.	.	.	.	.	.
$640_3 = \chi_{24,0}$	1	1	.	.	.	.	.	.	.	.	.	1
$640_4 = \chi_{24,1}$	.	.	1	.	.	.	.	.	.	.	.	.
$640_5 = \chi_{25,0}$	1	.	1	.	.	1	.	.	.	1	.	.
$640_6 = \chi_{25,1}$	2	1	.	.	.	.	1	.	.	.	1	1
$640_7 = \chi_{26,0}$	2	.	.	.	1	1	.	1	.	.	.	.
$640_8 = \chi_{26,1}$	1	.	.	1	.	.	1	.	1	.	.	1
$780_1 = \chi_{28,0}$	1	.	1	.	1	1	.	1	.	1	.	.
$780_2 = \chi_{28,1}$	1	1	.	1	.	.	1	.	1	.	1	1
$1040_1 = \chi_{29,0}$	3	1	.	.	1	.	.	.	.	.	.	1

(Block 1:)	$\varphi_{13,1}$	$\varphi_{14,0}$	$\varphi_{14,1}$
$1_1 = \chi_{1,0}$	.	.	.
$1_2 = \chi_{1,1}$	.	.	.
$52_1 = \chi_{2,+}$	.	.	.
$39_1 = \chi_{4,0}$	.	.	.
$39_2 = \chi_{4,1}$	.	.	.
$52_2 = \chi_{5,0}$	.	.	.
$52_3 = \chi_{5,1}$	.	.	.
$130_1 = \chi_{6,+}$	.	.	.
$90_1 = \chi_{8,0}$	.	.	.
$90_2 = \chi_{8,1}$	.	.	.
$468_1 = \chi_{9,+}$	.	.	.
$520_1 = \chi_{11,+}$	1	.	.
$260_1 = \chi_{13,0}$	.	.	.
$260_2 = \chi_{13,1}$	.	.	.
$351_1 = \chi_{14,0}$	.	.	.
$351_2 = \chi_{14,1}$	.	.	.
$390_1 = \chi_{15,0}$	.	.	.
$390_2 = \chi_{15,1}$	1	.	.
$416_1 = \chi_{16,0}$	1	.	.
$416_2 = \chi_{16,1}$	.	.	.
$416_3 = \chi_{17,0}$	.	.	1
$416_4 = \chi_{17,1}$	.	1	.
$416_5 = \chi_{18,0}$	1	.	.
$416_6 = \chi_{18,1}$	.	.	.
$416_7 = \chi_{19,0}$	1	.	.
$416_8 = \chi_{19,1}$	.	.	.
$468_2 = \chi_{20,0}$	.	.	1
$468_3 = \chi_{20,1}$	.	1	.
$1170_1 = \chi_{21,+}$	1	1	1
$640_1 = \chi_{23,0}$	.	1	.
$640_2 = \chi_{23,1}$	1	.	1
$640_3 = \chi_{24,0}$	.	.	1
$640_4 = \chi_{24,1}$	1	1	.
$640_5 = \chi_{25,0}$	1	.	.
$640_6 = \chi_{25,1}$	.	.	.
$640_7 = \chi_{26,0}$	1	.	.
$640_8 = \chi_{26,1}$	.	.	.
$780_1 = \chi_{28,0}$	1	.	.
$780_2 = \chi_{28,1}$	.	.	.
$1040_1 = \chi_{29,0}$	1	.	1

(Block 1:)	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{6,0}$	$\varphi_{6,1}$	$\varphi_{7,0}$
$1040_2 = \chi_{29,1}$	1	1	2	1	1	3	3	1	1	1	1	1	3

(Block 1:)	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$
$1040_2 = \chi_{29,1}$	1	.	1	1	.	.	.	.	.	.	.	1

(Block 1:)	$\varphi_{13,1}$	$\varphi_{14,0}$	$\varphi_{14,1}$
$1040_2 = \chi_{29,1}$	1	1	.

- $\varphi_{1,0} = 1_1$
- $\varphi_{1,1} = 1_2$
- $\varphi_{2,0} = 6_1$
- $\varphi_{2,1} = 6_2$
- $\varphi_{3,0} = 10_1$
- $\varphi_{3,1} = 10_2$
- $\varphi_{4,0} = 10_3$
- $\varphi_{4,1} = 10_4$
- $\varphi_{5,0} = 15_1$
- $\varphi_{5,1} = 15_2$
- $\varphi_{6,0} = 19_1$
- $\varphi_{6,1} = 19_2$
- $\varphi_{7,0} = 44_1$
- $\varphi_{7,1} = 44_2$
- $\varphi_{8,0} = 45_1$
- $\varphi_{8,1} = 45_2$
- $\varphi_{9,0} = 45_3$
- $\varphi_{9,1} = 45_4$
- $\varphi_{10,0} = 69_1$
- $\varphi_{10,1} = 69_2$
- $\varphi_{11,0} = 126_1$
- $\varphi_{11,1} = 126_2$
- $\varphi_{12,0} = 126_3$
- $\varphi_{12,1} = 126_4$
- $\varphi_{13,0} = 156_1$
- $\varphi_{13,1} = 156_2$
- $\varphi_{14,0} = 294_1$
- $\varphi_{14,1} = 294_2$

Block 4:	$\varphi_{16,0}$	$\varphi_{16,1}$	$\varphi_{17,0}$	$\varphi_{17,1}$	$\varphi_{18,0}$	$\varphi_{18,1}$	$\varphi_{19,0}$	$\varphi_{19,1}$	$\varphi_{20,0}$	$\varphi_{20,1}$	$\varphi_{21,0}$
$40_1 = \chi_{30,0}$	1	.	1	.	1	.	1	.	.	.	.
$40_2 = \chi_{30,1}$	.	1	.	1	.	1	.	1	.	.	.
$416_9 = \chi_{31+}$	3	3	1	1	.	.	1	1	.	.	.
$416_{10} = \chi_{32+}$	1	1	3	3	1	1	.	.	.	.	.
$260_3 = \chi_{35,0}$	1	1	1	1	1	.	1	.	1	.	.
$260_4 = \chi_{35,1}$	1	1	1	1	.	1	.	1	.	1	.
$260_5 = \chi_{36,0}$	1	1	1	1	1	.	1	.	.	.	1
$260_6 = \chi_{36,1}$	1	1	1	1	.	1	.	1	.	.	.
$416_{11} = \chi_{37,0}$	1	2	1	1	1	.	1	.	.	1	1
$416_{12} = \chi_{37,1}$	2	1	1	1	.	1	.	1	1	.	.
$416_{13} = \chi_{38,0}$	1	1	1	2	1	.	1	.	1	.	.
$416_{14} = \chi_{38,1}$	1	1	2	1	.	1	.	1	.	1	1
$416_{15} = \chi_{39,0}$	.	1	1	.	.	2	.	1	.	.	.
$416_{16} = \chi_{39,1}$	1	.	.	1	2	.	1	.	.	.	.
$416_{17} = \chi_{40,0}$	1	.	.	1	.	1	.	2	.	.	.
$416_{18} = \chi_{40,1}$	.	1	1	.	1	.	2	.	.	.	.
$480_1 = \chi_{41,0}$	1	2	1	2	1	.	1	.	1	.	1
$480_2 = \chi_{41,1}$	2	1	2	1	.	1	.	1	.	1	.
$520_2 = \chi_{42,0}$	2	2	2	2	1	1	1	1	.	1	1
$520_3 = \chi_{42,1}$	2	2	2	2	1	1	1	1	1	.	.
$1040_3 = \chi_{43+}$	4	4	4	4	2	2	2	2	1	1	1
$640_9 = \chi_{45,0}$	1	2	1	1	.	2	.	1	1	.	.
$640_{10} = \chi_{45,1}$	2	1	1	1	2	.	1	.	.	1	.
$640_{11} = \chi_{46,0}$	1	1	1	2	.	1	.	2	.	.	1
$640_{12} = \chi_{46,1}$	1	1	2	1	1	.	2	.	.	.	.
$640_{13} = \chi_{47,0}$	3	3	2	1	1	.	2	1	1	.	.
$640_{14} = \chi_{47,1}$	3	3	1	2	.	1	1	2	.	1	1
$640_{15} = \chi_{48,0}$	2	1	3	3	2	1	1	.	.	1	1
$640_{16} = \chi_{48,1}$	1	2	3	3	1	2	.	1	1	.	.
$780_3 = \chi_{49,0}$	1	2	3	1	1	1	2	.	.	.	.
$780_4 = \chi_{49,1}$	2	1	1	3	1	1	.	2	.	.	1
$780_5 = \chi_{50,0}$	3	1	1	2	2	.	1	1	.	1	.
$780_6 = \chi_{50,1}$	1	3	2	1	.	2	1	1	1	.	.
$1080_1 = \chi_{51,0}$	2	2	2	2	.	3	.	3	.	.	.
$1080_2 = \chi_{51,1}$	2	2	2	2	3	.	3	.	.	.	.

(Block 4:)	$\varphi_{21,1}$	$\varphi_{22,0}$	$\varphi_{22,1}$	$\varphi_{23,0}$	$\varphi_{23,1}$	$\varphi_{24,0}$	$\varphi_{24,1}$	$\varphi_{25,0}$	$\varphi_{25,1}$	$\varphi_{26,0}$	$\varphi_{26,1}$
$40_1 = \chi_{30,0}$	.	.	.	.	.	.	.	.	.	.	.
$40_2 = \chi_{30,1}$	.	.	.	.	.	.	.	.	.	.	.
$416_9 = \chi_{31+}$	.	.	.	1	1	.	.	1	1	.	.
$416_{10} = \chi_{32+}$	.	1	1	.	.	1	1	.	.	.	.
$260_3 = \chi_{35,0}$	.	.	.	1	.	1	.	.	.	.	.
$260_4 = \chi_{35,1}$	.	.	.	.	1	.	1	.	.	.	.
$260_5 = \chi_{36,0}$	.	1	.	.	.	.	.	1	.	.	.
$260_6 = \chi_{36,1}$	1	.	1	.	.	.	.	.	1	.	.
$416_{11} = \chi_{37,0}$	.	.	.	.	1	.	1	1	.	.	.
$416_{12} = \chi_{37,1}$	1	.	.	1	.	1	.	.	1	.	.
$416_{13} = \chi_{38,0}$	1	.	1	.	.	1	.	.	1	.	.
$416_{14} = \chi_{38,1}$	.	1	.	.	.	.	1	1	.	.	.
$416_{15} = \chi_{39,0}$	.	.	.	.	.	.	.	.	.	1	.
$416_{16} = \chi_{39,1}$	.	.	.	.	.	.	.	.	.	.	1
$416_{17} = \chi_{40,0}$	.	.	.	.	.	.	.	.	.	.	.
$416_{18} = \chi_{40,1}$	.	.	.	.	.	.	.	.	.	.	.
$480_1 = \chi_{41,0}$	.	1	.	1	.	1	.	1	.	.	.
$480_2 = \chi_{41,1}$	1	.	1	.	1	.	1	.	1	.	.
$520_2 = \chi_{42,0}$	.	1	.	.	1	.	1	1	.	.	.
$520_3 = \chi_{42,1}$	1	.	1	1	.	1	.	.	1	.	.
$1040_3 = \chi_{43+}$	1	1	1	1	1	1	1	1	1	.	.
$640_9 = \chi_{45,0}$	.	.	.	1	.	1	.	.	.	1	.
$640_{10} = \chi_{45,1}$	.	.	.	.	1	.	1	.	.	.	1
$640_{11} = \chi_{46,0}$	.	1	.	.	.	.	.	1	.	.	.
$640_{12} = \chi_{46,1}$	1	.	1	.	.	.	.	.	1	.	.
$640_{13} = \chi_{47,0}$	1	.	.	1	1	1	.	1	1	.	.
$640_{14} = \chi_{47,1}$	.	.	.	1	1	.	1	1	1	.	.
$640_{15} = \chi_{48,0}$	.	1	1	.	.	1	1	1	.	.	.
$640_{16} = \chi_{48,1}$	1	1	1	.	.	1	1	.	1	.	.
$780_3 = \chi_{49,0}$	1	.	1	.	.	.	1	.	1	.	.
$780_4 = \chi_{49,1}$	.	1	.	.	.	1	.	1	.	.	.
$780_5 = \chi_{50,0}$	.	.	.	.	1	.	1	.	1	.	1
$780_6 = \chi_{50,1}$	.	.	.	1	.	1	.	1	.	1	.
$1080_1 = \chi_{51,0}$	.	.	.	.	.	1	.	1	.	1	.
$1080_2 = \chi_{51,1}$	.	.	.	.	.	.	1	.	1	.	1

(Block 4:)	$\varphi_{27,0}$	$\varphi_{27,1}$		
$40_1 = \chi_{30,0}$.	.		
$40_2 = \chi_{30,1}$.	.		
$416_9 = \chi_{31+}$.	.		
$416_{10} = \chi_{32+}$.	.		
$260_3 = \chi_{35,0}$.	.		
$260_4 = \chi_{35,1}$.	.	$\varphi_{16,0} = 4_1$	
$260_5 = \chi_{36,0}$.	.	$\varphi_{16,1} = 4_2$	
$260_6 = \chi_{36,1}$.	.	$\varphi_{17,0} = 4_3$	
$416_{11} = \chi_{37,0}$.	.	$\varphi_{17,1} = 4_4$	
$416_{12} = \chi_{37,1}$.	.	$\varphi_{18,0} = 16_1$	
$416_{13} = \chi_{38,0}$.	.	$\varphi_{18,1} = 16_2$	
$416_{14} = \chi_{38,1}$.	.	$\varphi_{19,0} = 16_3$	
$416_{15} = \chi_{39,0}$.	.	$\varphi_{19,1} = 16_4$	
$416_{16} = \chi_{39,1}$.	.	$\varphi_{20,0} = 36_1$	
$416_{17} = \chi_{40,0}$	1	.	$\varphi_{20,1} = 36_2$	
$416_{18} = \chi_{40,1}$.	1	$\varphi_{21,0} = 36_3$	
$480_1 = \chi_{41,0}$.	.	$\varphi_{21,1} = 36_4$	
$480_2 = \chi_{41,1}$.	.	$\varphi_{22,0} = 60_1$	
$520_2 = \chi_{42,0}$.	.	$\varphi_{22,1} = 60_2$	
$520_3 = \chi_{42,1}$.	.	$\varphi_{23,0} = 60_3$	
$1040_3 = \chi_{43+}$.	.	$\varphi_{23,1} = 60_4$	
$640_9 = \chi_{45,0}$.	.	$\varphi_{24,0} = 116_1$	
$640_{10} = \chi_{45,1}$.	.	$\varphi_{24,1} = 116_2$	
$640_{11} = \chi_{46,0}$	1	.	$\varphi_{25,0} = 116_3$	
$640_{12} = \chi_{46,1}$.	1	$\varphi_{25,1} = 116_4$	
$640_{13} = \chi_{47,0}$.	.	$\varphi_{26,0} = 360_1$	
$640_{14} = \chi_{47,1}$.	.	$\varphi_{26,1} = 360_2$	
$640_{15} = \chi_{48,0}$.	.	$\varphi_{27,0} = 360_3$	
$640_{16} = \chi_{48,1}$.	.	$\varphi_{27,1} = 360_4$	
$780_3 = \chi_{49,0}$.	1		
$780_4 = \chi_{49,1}$	1	.		
$780_5 = \chi_{50,0}$.	.		
$780_6 = \chi_{50,1}$.	.		
$1080_1 = \chi_{51,0}$	1	.		
$1080_2 = \chi_{51,1}$.	1		