$L_2(25).2_1$ (mod 5)

	blocks	defect	matrix
$G:$	1	2	25×24
	2	0	$25_1 = \chi_{10,0}, \varphi_{13,0}$
	3	0	$25_2 = \chi_{10,1}, \varphi_{13,1}$
$2.G:$	4	2	25×24

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	.	.	.	.	.	.	.	.	.	.	.
$26_1 = \chi_{2+}$	.	.	.	.	.	.	1	1	.	.	.	.	.
$24_1 = \chi_{4,0}$	.	.	.	1	.	.	.	.	.	.	1	.	.
$24_2 = \chi_{4,1}$	.	.	1	.	.	.	.	.	.	.	.	1	.
$24_3 = \chi_{5,0}$	.	.	.	.	.	1	.	.	1	.	.	.	.
$24_4 = \chi_{5,1}$	.	.	.	.	1	.	.	.	.	1	.	.	.
$24_5 = \chi_{6,0}$	.	.	.	.	.	1	1	.	.	.	.	.	.
$24_6 = \chi_{6,1}$	.	.	.	.	1	.	.	1	.	.	.	.	1
$24_7 = \chi_{7,0}$	.	.	.	1	.	.	.	1	.	.	.	.	.
$24_8 = \chi_{7,1}$	.	.	1	.	.	.	1	.	.	.	.	.	.
$24_9 = \chi_{8,0}$	1	.	.	.	.	.	.	.	.	.	.	.	1
$24_{10} = \chi_{8,1}$	.	1	.	.	.	.	.	.	.	.	.	.	.
$24_{11} = \chi_{9,0}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$24_{12} = \chi_{9,1}$	.	1	.	.	.	.	.	.	.	.	.	.	.
$26_2 = \chi_{11,0}$	.	1	.	.	.	.	.	.	.	.	.	.	.
$26_3 = \chi_{11,1}$	1	.	.	.	.	.	.	.	.	.	.	.	1
$26_4 = \chi_{12,0}$	.	.	1	.	.	1	1	.	.	.	.	.	.
$26_5 = \chi_{12,1}$	.	.	.	1	1	.	.	1	.	.	.	.	.
$26_6 = \chi_{13,0}$	.	.	.	.	.	.	.	.	1	.	.	1	.
$26_7 = \chi_{13,1}$	.	.	.	.	.	.	.	.	.	1	1	.	.
$26_8 = \chi_{14,0}$	.	.	1	.	.	.	.	.	.	.	.	.	.
$26_9 = \chi_{14,1}$	.	.	.	1	.	.	.	.	.	.	.	.	.
$26_{10} = \chi_{15,0}$	.	.	.	.	1	.	.	.	.	.	.	.	1
$26_{11} = \chi_{15,1}$	.	.	.	.	.	1	.	.	.	.	.	.	.

(**Block 1:**)	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$
$1_1 = \chi_{1,0}$	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	.	.	.	.	.	.	.	.	.	.
$26_1 = \chi_{2+}$	.	.	.	1	1	.	.	.	.	.	.
$24_1 = \chi_{4,0}$	.	.	.	.	.	.	.	.	.	1	.
$24_2 = \chi_{4,1}$	.	.	.	.	.	.	.	.	.	.	1
$24_3 = \chi_{5,0}$	.	.	.	.	.	.	.	.	.	.	1
$24_4 = \chi_{5,1}$	.	.	.	.	.	.	.	.	.	1	.
$24_5 = \chi_{6,0}$	1	.	.	1	.	.	.	.	.	.	.
$24_6 = \chi_{6,1}$	.	.	.	.	1	.	.	.	.	.	.
$24_7 = \chi_{7,0}$	.	.	1	1	.	.	.	.	.	.	.
$24_8 = \chi_{7,1}$	.	1	.	.	1	.	.	.	.	.	.
$24_9 = \chi_{8,0}$	.	.	.	.	.	.	1	.	.	.	.
$24_{10} = \chi_{8,1}$	1	.	.	.	.	1	.	.	.	.	.
$24_{11} = \chi_{9,0}$	.	1	.	.	.	.	.	.	1	.	.
$24_{12} = \chi_{9,1}$	.	.	1	.	.	.	.	1	.	.	.
$26_2 = \chi_{11,0}$	1	.	1	1	.	.	.	.	.	.	.
$26_3 = \chi_{11,1}$	.	1	.	.	1	.	.	.	.	.	.
$26_4 = \chi_{12,0}$	.	.	.	.	.	.	.	.	.	.	1
$26_5 = \chi_{12,1}$	.	.	.	.	.	.	.	.	.	1	.
$26_6 = \chi_{13,0}$	.	.	.	.	.	.	.	.	.	.	1
$26_7 = \chi_{13,1}$	.	.	.	.	.	.	.	.	.	1	.
$26_8 = \chi_{14,0}$	.	1	.	.	.	.	.	.	1	.	.
$26_9 = \chi_{14,1}$	.	.	1	.	.	.	.	1	.	.	.
$26_{10} = \chi_{15,0}$	.	.	.	.	.	.	1	.	.	.	.
$26_{11} = \chi_{15,1}$	1	.	.	.	.	1	.	.	.	.	.

$$
\begin{array}{rclcrcl}
\varphi_{1,0} & = & 1_1 & \qquad & \varphi_{7,0} & = & 8_1 \\
\varphi_{1,1} & = & 1_2 & & \varphi_{7,1} & = & 8_2 \\
\varphi_{2,0} & = & 3_1 & & \varphi_{8,0} & = & 8_3 \\
\varphi_{2,1} & = & 3_2 & & \varphi_{8,1} & = & 8_4 \\
\varphi_{3,0} & = & 3_3 & & \varphi_{9,0} & = & 9_1 \\
\varphi_{3,1} & = & 3_4 & & \varphi_{9,1} & = & 9_2 \\
\varphi_{4,0} & = & 4_1 & & \varphi_{10,0} & = & 15_1 \\
\varphi_{4,1} & = & 4_2 & & \varphi_{10,1} & = & 15_2 \\
\varphi_{5,0} & = & 5_1 & & \varphi_{11,0} & = & 15_3 \\
\varphi_{5,1} & = & 5_2 & & \varphi_{11,1} & = & 15_4 \\
\varphi_{6,0} & = & 5_3 & & \varphi_{12,0} & = & 16_1 \\
\varphi_{6,1} & = & 5_4 & & \varphi_{12,1} & = & 16_2 \\
\end{array}
$$

Block 4:	$\varphi_{14,0}$	$\varphi_{14,1}$	$\varphi_{15,0}$	$\varphi_{15,1}$	$\varphi_{16,0}$	$\varphi_{16,1}$	$\varphi_{17,0}$	$\varphi_{17,1}$	$\varphi_{18,0}$	$\varphi_{18,1}$	$\varphi_{19,0}$
$24_{13} = \chi_{16+}$	.	.	.	.	.	.	.	.	1	1	1
$24_{14} = \chi_{18,0}$	.	1	.	.	.	.	1	.	.	.	.
$24_{15} = \chi_{18,1}$	1	.	.	.	.	.	.	1	.	.	1
$24_{16} = \chi_{19,0}$	.	.	1	.	1	.	.	.	1	.	.
$24_{17} = \chi_{19,1}$	.	.	.	1	.	1	.	.	.	1	.
$24_{18} = \chi_{20,0}$	.	.	.	.	.	.	1	.	.	.	.
$24_{19} = \chi_{20,1}$	.	.	.	.	.	.	.	1	.	.	.
$24_{20} = \chi_{21,0}$	.	.	.	.	1	.	.	.	.	.	.
$24_{21} = \chi_{21,1}$	.	.	.	.	.	1	.	.	.	.	.
$24_{22} = \chi_{22,0}$	1	.	.	.	.	.	.	.	.	.	.
$24_{23} = \chi_{22,1}$	.	1	.	.	.	.	.	.	.	.	.
$24_{24} = \chi_{23,0}$	.	.	.	1	.	.	.	.	.	.	.
$24_{25} = \chi_{23,1}$	.	.	1	.	.	.	.	.	.	.	.
$26_{12} = \chi_{24,0}$	.	.	.	.	1	.	.	.	.	.	.
$26_{13} = \chi_{24,1}$	.	.	.	.	.	1	.	.	.	.	.
$26_{14} = \chi_{25,0}$	.	.	.	.	.	.	.	1	.	.	.
$26_{15} = \chi_{25,1}$	.	.	.	.	.	.	1	.	.	.	.
$26_{16} = \chi_{26,0}$	.	.	.	1	.	1	.	.	.	.	.
$26_{17} = \chi_{26,1}$	.	.	1	.	1	.	.	.	.	.	.
$26_{18} = \chi_{27,0}$	1	.	.	.	.	.	.	1	.	.	.
$26_{19} = \chi_{27,1}$	.	1	.	.	.	.	1	.	.	.	.
$26_{20} = \chi_{28,0}$	.	1	.	.	.	.	.	.	.	1	.
$26_{21} = \chi_{28,1}$	1	.	.	.	.	.	.	.	1	.	1
$26_{22} = \chi_{29,0}$	.	.	1	.	.	.	.	.	1	.	.
$26_{23} = \chi_{29,1}$	.	.	.	1	.	.	.	.	.	1	1

(Block 4:)	$\varphi_{19,1}$	$\varphi_{20,0}$	$\varphi_{20,1}$	$\varphi_{21,0}$	$\varphi_{21,1}$	$\varphi_{22,0}$	$\varphi_{22,1}$	$\varphi_{23,0}$	$\varphi_{23,1}$	$\varphi_{24,0}$	$\varphi_{24,1}$
$24_{13} = \chi_{16+}$	1	.	.	.	.	.	.	.	.	.	.
$24_{14} = \chi_{18,0}$	1	.	.	.	.	.	.	1	.	.	.
$24_{15} = \chi_{18,1}$	.	.	.	.	.	.	.	.	1	.	.
$24_{16} = \chi_{19,0}$	.	.	.	.	.	.	1	.	.	.	.
$24_{17} = \chi_{19,1}$	.	.	.	.	.	1	.	.	.	.	.
$24_{18} = \chi_{20,0}$	.	.	.	.	.	.	.	.	.	.	1
$24_{19} = \chi_{20,1}$	.	.	.	.	.	.	.	.	.	1	.
$24_{20} = \chi_{21,0}$	.	.	.	.	.	.	.	.	.	.	.
$24_{21} = \chi_{21,1}$	.	.	.	.	.	.	.	.	.	.	.
$24_{22} = \chi_{22,0}$	.	1	.	.	.	.	1	.	.	.	.
$24_{23} = \chi_{22,1}$	.	.	1	.	.	1	.	.	.	.	.
$24_{24} = \chi_{23,0}$	.	.	.	1	.	.	.	.	1	.	.
$24_{25} = \chi_{23,1}$	.	.	.	.	1	.	.	1	.	.	.
$26_{12} = \chi_{24,0}$	.	1	.	.	.	.	1	.	.	.	.
$26_{13} = \chi_{24,1}$	.	.	1	.	.	1	.	.	.	.	.
$26_{14} = \chi_{25,0}$	.	.	.	1	.	.	.	.	1	.	.
$26_{15} = \chi_{25,1}$	.	.	.	.	1	.	.	1	.	.	.
$26_{16} = \chi_{26,0}$	.	.	.	.	.	.	.	.	.	.	.
$26_{17} = \chi_{26,1}$	.	.	.	.	.	.	.	.	.	.	.
$26_{18} = \chi_{27,0}$	.	.	.	.	.	.	.	.	.	1	.
$26_{19} = \chi_{27,1}$	.	.	.	.	.	.	.	.	.	.	1
$26_{20} = \chi_{28,0}$	1	.	.	.	.	1	.	.	.	.	.
$26_{21} = \chi_{28,1}$	.	.	.	.	.	.	1	.	.	.	.
$26_{22} = \chi_{29,0}$	1	.	.	.	.	.	.	1	.	.	.
$26_{23} = \chi_{29,1}$	.	.	.	.	.	.	.	.	1	.	.

(Block 4:)

	$\varphi_{25,0}$	$\varphi_{25,1}$
$24_{13} = \chi_{16+}$	.	.
$24_{14} = \chi_{18,0}$	.	.
$24_{15} = \chi_{18,1}$	.	.
$24_{16} = \chi_{19,0}$	.	.
$24_{17} = \chi_{19,1}$	.	.
$24_{18} = \chi_{20,0}$	.	.
$24_{19} = \chi_{20,1}$	.	.
$24_{20} = \chi_{21,0}$	.	1
$24_{21} = \chi_{21,1}$	1	.
$24_{22} = \chi_{22,0}$	.	.
$24_{23} = \chi_{22,1}$	.	.
$24_{24} = \chi_{23,0}$	.	.
$24_{25} = \chi_{23,1}$	.	.
$26_{12} = \chi_{24,0}$	.	.
$26_{13} = \chi_{24,1}$	.	.
$26_{14} = \chi_{25,0}$	.	.
$26_{15} = \chi_{25,1}$	.	.
$26_{16} = \chi_{26,0}$	1	.
$26_{17} = \chi_{26,1}$	.	1
$26_{18} = \chi_{27,0}$	.	.
$26_{19} = \chi_{27,1}$	.	.
$26_{20} = \chi_{28,0}$	.	.
$26_{21} = \chi_{28,1}$	.	.
$26_{22} = \chi_{29,0}$	.	.
$26_{23} = \chi_{29,1}$	.	.

$$\varphi_{14,0} = 2_1$$
$$\varphi_{14,1} = 2_2$$
$$\varphi_{15,0} = 2_3$$
$$\varphi_{15,1} = 2_4$$
$$\varphi_{16,0} = 4_3$$
$$\varphi_{16,1} = 4_4$$
$$\varphi_{17,0} = 4_5$$
$$\varphi_{17,1} = 4_6$$
$$\varphi_{18,0} = 6_1$$
$$\varphi_{18,1} = 6_2$$
$$\varphi_{19,0} = 6_3$$
$$\varphi_{19,1} = 6_4$$
$$\varphi_{20,0} = 10_1$$
$$\varphi_{20,1} = 10_2$$
$$\varphi_{21,0} = 10_3$$
$$\varphi_{21,1} = 10_4$$
$$\varphi_{22,0} = 12_1$$
$$\varphi_{22,1} = 12_2$$
$$\varphi_{23,0} = 12_3$$
$$\varphi_{23,1} = 12_4$$
$$\varphi_{24,0} = 20_1$$
$$\varphi_{24,1} = 20_2$$
$$\varphi_{25,0} = 20_3$$
$$\varphi_{25,1} = 20_4$$