

$L_2(25).2_1 \pmod{5}$

	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	.	.	.	.	.

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

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:)	$\varphi_{25,0}$	$\varphi_{25,1}$		
$24_{13} = \chi_{16,+}$.	.	$\varphi_{14,0} =$	2_1
$24_{14} = \chi_{18,0}$.	.	$\varphi_{14,1} =$	2_2
$24_{15} = \chi_{18,1}$.	.	$\varphi_{15,0} =$	2_3
$24_{16} = \chi_{19,0}$.	.	$\varphi_{15,1} =$	2_4
$24_{17} = \chi_{19,1}$.	.	$\varphi_{16,0} =$	4_3
$24_{18} = \chi_{20,0}$.	.	$\varphi_{16,1} =$	4_4
$24_{19} = \chi_{20,1}$.	.	$\varphi_{17,0} =$	4_5
$24_{20} = \chi_{21,0}$.	1	$\varphi_{17,1} =$	4_6
$24_{21} = \chi_{21,1}$	1	.	$\varphi_{18,0} =$	6_1
$24_{22} = \chi_{22,0}$.	.	$\varphi_{18,1} =$	6_2
$24_{23} = \chi_{22,1}$.	.	$\varphi_{19,0} =$	6_3
$24_{24} = \chi_{23,0}$.	.	$\varphi_{19,1} =$	6_4
$24_{25} = \chi_{23,1}$.	.	$\varphi_{20,0} =$	10_1
$26_{12} = \chi_{24,0}$.	.	$\varphi_{20,1} =$	10_2
$26_{13} = \chi_{24,1}$.	.	$\varphi_{21,0} =$	10_3
$26_{14} = \chi_{25,0}$.	.	$\varphi_{21,1} =$	10_4
$26_{15} = \chi_{25,1}$.	.	$\varphi_{22,0} =$	12_1
$26_{16} = \chi_{26,0}$	1	.	$\varphi_{22,1} =$	12_2
$26_{17} = \chi_{26,1}$.	1	$\varphi_{23,0} =$	12_3
$26_{18} = \chi_{27,0}$.	.	$\varphi_{23,1} =$	12_4
$26_{19} = \chi_{27,1}$.	.	$\varphi_{24,0} =$	20_1
$26_{20} = \chi_{28,0}$.	.	$\varphi_{24,1} =$	20_2
$26_{21} = \chi_{28,1}$.	.	$\varphi_{25,0} =$	20_3
$26_{22} = \chi_{29,0}$.	.	$\varphi_{25,1} =$	20_4
$26_{23} = \chi_{29,1}$.	.		