

# $L_2(25) \pmod{5}$

	blocks	defect	matrix
$G :$	1 2	2 0	$14 \times 12$ $25_1 = \chi_{10}, \varphi_{13}$
$2.G :$	3	2	$14 \times 12$

<b>Block 1:</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.
$13_1 = \chi_2$	.	.	.	1	.	.	.	.	1	.	.	.
$13_2 = \chi_3$	.	.	.	1	.	.	.	.	1	.	.	.
$24_1 = \chi_4$	.	1	.	.	.	1	.	.	.	.	.	1
$24_2 = \chi_5$	.	.	1	.	1	.	.	.	.	.	.	1
$24_3 = \chi_6$	.	.	1	1	.	.	1	.	1	.	.	.
$24_4 = \chi_7$	.	1	.	1	.	.	.	1	1	.	.	.
$24_5 = \chi_8$	1	.	.	.	.	.	1	.	.	1	.	.
$24_6 = \chi_9$	1	.	.	.	.	.	.	1	.	.	1	.
$26_1 = \chi_{11}$	1	.	.	.	.	.	1	1	1	.	.	.
$26_2 = \chi_{12}$	.	1	1	1	.	.	.	.	.	.	.	1
$26_3 = \chi_{13}$	.	.	.	.	1	1	.	.	.	.	.	1
$26_4 = \chi_{14}$	.	1	.	.	.	.	.	1	.	.	1	.
$26_5 = \chi_{15}$	.	.	1	.	.	.	1	.	.	1	.	.

$$\begin{aligned}
 \varphi_1 &= 1_1 & \varphi_7 &= 8_1 \\
 \varphi_2 &= 3_1 & \varphi_8 &= 8_2 \\
 \varphi_3 &= 3_2 & \varphi_9 &= 9_1 \\
 \varphi_4 &= 4_1 & \varphi_{10} &= 15_1 \\
 \varphi_5 &= 5_1 & \varphi_{11} &= 15_2 \\
 \varphi_6 &= 5_2 & \varphi_{12} &= 16_1
 \end{aligned}$$

<b>Block 3:</b>	$\varphi_{14}$	$\varphi_{15}$	$\varphi_{16}$	$\varphi_{17}$	$\varphi_{18}$	$\varphi_{19}$	$\varphi_{20}$	$\varphi_{21}$	$\varphi_{22}$	$\varphi_{23}$	$\varphi_{24}$	$\varphi_{25}$
$12_1 = \chi_{16}$	.	.	.	.	1	1	.	.	.	.	.	.
$12_2 = \chi_{17}$	.	.	.	.	1	1	.	.	.	.	.	.
$24_7 = \chi_{18}$	1	.	.	1	.	1	.	.	.	1	.	.
$24_8 = \chi_{19}$	.	1	1	.	1	.	.	.	1	.	.	.
$24_9 = \chi_{20}$	.	.	.	1	.	.	.	.	.	.	1	.
$24_{10} = \chi_{21}$	.	.	1	.	.	.	.	.	.	.	.	1
$24_{11} = \chi_{22}$	1	.	.	.	.	.	1	.	1	.	.	.
$24_{12} = \chi_{23}$	.	1	.	.	.	.	.	1	.	1	.	.
$26_6 = \chi_{24}$	.	.	1	.	.	.	1	.	1	.	.	.
$26_7 = \chi_{25}$	.	.	.	1	.	.	.	1	.	1	.	.
$26_8 = \chi_{26}$	.	1	1	.	.	.	.	.	.	.	.	1
$26_9 = \chi_{27}$	1	.	.	1	.	.	.	.	.	.	1	.
$26_{10} = \chi_{28}$	1	.	.	.	1	1	.	.	1	.	.	.
$26_{11} = \chi_{29}$	.	1	.	.	1	1	.	.	.	1	.	.

$$\begin{array}{ll}
\varphi_{14} = 2_1 & \varphi_{20} = 10_1 \\
\varphi_{15} = 2_2 & \varphi_{21} = 10_2 \\
\varphi_{16} = 4_2 & \varphi_{22} = 12_1 \\
\varphi_{17} = 4_3 & \varphi_{23} = 12_2 \\
\varphi_{18} = 6_1 & \varphi_{24} = 20_1 \\
\varphi_{19} = 6_2 & \varphi_{25} = 20_2
\end{array}$$