$L_2(23)$ (mod 23)

	blocks	defect	matrix
$G:$	1 2	1 0	13×11 $23_1 = \chi_9, \varphi_{12}$
$2.G:$	3	1	13×11

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.
$11_1 = \chi_2$	.	.	.	.	.	1	.	.	.	.	.
$11_2 = \chi_3$	.	.	.	.	.	1	.	.	.	.	.
$22_1 = \chi_4$	.	.	.	1	.	.	.	1	.	.	.
$22_2 = \chi_5$	.	.	1	.	.	.	.	.	1	.	.
$22_3 = \chi_6$	.	1	.	.	.	.	.	.	.	1	.
$22_4 = \chi_7$	.	.	.	.	1	.	1	.	.	.	.
$22_5 = \chi_8$	1	.	.	.	.	.	.	.	.	.	1
$24_1 = \chi_{10}$	.	.	.	.	.	1	1	.	.	.	.
$24_2 = \chi_{11}$	.	.	1	.	.	.	.	.	.	1	.
$24_3 = \chi_{12}$	.	.	.	1	.	.	.	.	1	.	.
$24_4 = \chi_{13}$	.	1	.	.	.	.	.	.	.	.	1
$24_5 = \chi_{14}$	.	.	.	.	1	.	.	1	.	.	.

$\varphi_1 = 1_1$
$\varphi_2 = 3_1$
$\varphi_3 = 5_1$
$\varphi_4 = 7_1$
$\varphi_5 = 9_1$
$\varphi_6 = 11_1$
$\varphi_7 = 13_1$
$\varphi_8 = 15_1$
$\varphi_9 = 17_1$
$\varphi_{10} = 19_1$
$\varphi_{11} = 21_1$

Block 3:	φ_{13}	φ_{14}	φ_{15}	φ_{16}	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}
$12_1 = \chi_{15}$	.	.	.	.	.	1	.	.	.	.	.
$12_2 = \chi_{16}$	.	.	.	.	.	1	.	.	.	.	.
$22_6 = \chi_{17}$	1	.	.	.	.	.	.	.	.	1	.
$22_7 = \chi_{18}$	.	.	.	1	.	.	1	.	.	.	.
$22_8 = \chi_{19}$	.	.	.	.	.	.	.	.	.	.	1
$22_9 = \chi_{20}$	.	.	1	.	.	.	.	1	.	.	.
$22_{10} = \chi_{21}$	.	.	.	.	1	1	.	.	.	.	.
$22_{11} = \chi_{22}$	.	1	.	.	.	.	.	.	1	.	.
$24_6 = \chi_{23}$	1	.	.	.	.	.	.	.	.	.	1
$24_7 = \chi_{24}$	.	.	.	1	.	.	.	1	.	.	.
$24_8 = \chi_{25}$	.	.	1	.	.	.	.	.	1	.	.
$24_9 = \chi_{26}$	.	.	.	.	1	.	1	.	.	.	.
$24_{10} = \chi_{27}$	.	1	.	.	.	.	.	.	.	1	.

$$
\begin{aligned}
\varphi_{13} &= 2_1 \\
\varphi_{14} &= 4_1 \\
\varphi_{15} &= 6_1 \\
\varphi_{16} &= 8_1 \\
\varphi_{17} &= 10_1 \\
\varphi_{18} &= 12_1
\end{aligned}
\qquad
\begin{aligned}
\varphi_{19} &= 14_1 \\
\varphi_{20} &= 16_1 \\
\varphi_{21} &= 18_1 \\
\varphi_{22} &= 20_1 \\
\varphi_{23} &= 22_1
\end{aligned}
$$