

$L_2(81).2_3 \pmod{41}$

| | blocks | defect | matrix |
|-------|----------------|--------|--|
| $G :$ | 1 | 1 | 14×4 |
| | 2 | 0 | $82_1 = \chi_{2+}, \varphi_{2+}$ |
| | 3 | 0 | $82_2 = \chi_{25,0}, \varphi_{5,0}$ |
| | 4 | 0 | $82_3 = \chi_{25,1}, \varphi_{5,1}$ |
| | 5 | 0 | $82_4 = \chi_{26,0}, \varphi_{6,0}$ |
| | 6 | 0 | $82_5 = \chi_{26,1}, \varphi_{6,1}$ |
| | 7 | 0 | $82_6 = \chi_{27,0}, \varphi_{7,0}$ |
| | 8 | 0 | $82_7 = \chi_{27,1}, \varphi_{7,1}$ |
| | 9 | 0 | $82_8 = \chi_{28,0}, \varphi_{8,0}$ |
| | $10 = \bar{9}$ | 0 | $82_9 = \chi_{28,1}, \varphi_{8,1}$ |
| | 11 | 0 | $82_{10} = \chi_{29,0}, \varphi_{9,0}$ |

| | blocks | defect | matrix |
|--|-----------------|--------|---|
| | $12 = \bar{11}$ | 0 | $82_{11} = \chi_{29,1}, \varphi_{9,1}$ |
| | 13 | 0 | $82_{12} = \chi_{30,0}, \varphi_{10,0}$ |
| | $14 = \bar{13}$ | 0 | $82_{13} = \chi_{30,1}, \varphi_{10,1}$ |
| | 15 | 0 | $82_{14} = \chi_{31,0}, \varphi_{11,0}$ |
| | $16 = \bar{15}$ | 0 | $82_{15} = \chi_{31,1}, \varphi_{11,1}$ |
| | 17 | 0 | $164_1 = \chi_{32+}, \varphi_{12+}$ |
| | 18 | 0 | $164_2 = \chi_{34+}, \varphi_{14+}$ |
| | 19 | 0 | $164_3 = \chi_{36+}, \varphi_{16+}$ |
| | 20 | 0 | $164_4 = \chi_{38+}, \varphi_{18+}$ |
| | 21 | 0 | $164_5 = \chi_{40+}, \varphi_{20+}$ |
| | 22 | 0 | $164_6 = \chi_{42+}, \varphi_{22+}$ |

| Block 1: | $\varphi_{1,0}$ | $\varphi_{1,1}$ | $\varphi_{4,0}$ | $\varphi_{4,1}$ |
|-------------------------|-----------------|-----------------|-----------------|-----------------|
| $1_1 = \chi_{1,0}$ | 1 | . | . | . |
| $1_2 = \chi_{1,1}$ | . | 1 | . | . |
| $160_1 = \chi_{4+}$ | . | . | 1 | 1 |
| $160_2 = \chi_{6+}$ | . | . | 1 | 1 |
| $160_3 = \chi_{8+}$ | . | . | 1 | 1 |
| $160_4 = \chi_{10+}$ | . | . | 1 | 1 |
| $160_5 = \chi_{12+}$ | . | . | 1 | 1 |
| $160_6 = \chi_{14+}$ | . | . | 1 | 1 |
| $160_7 = \chi_{16+}$ | . | . | 1 | 1 |
| $160_8 = \chi_{18+}$ | . | . | 1 | 1 |
| $160_9 = \chi_{20+}$ | . | . | 1 | 1 |
| $160_{10} = \chi_{22+}$ | . | . | 1 | 1 |
| $81_1 = \chi_{24,0}$ | . | 1 | 1 | . |
| $81_2 = \chi_{24,1}$ | 1 | . | . | 1 |

$\varphi_{1,0} = 1_1$
 $\varphi_{1,1} = 1_2$
 $\varphi_{4,0} = 80_1$
 $\varphi_{4,1} = 80_2$