

$L_2(81).2_3 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	4×2
	2	1	4×2
	3	1	5×1
	4	0	$160_1 = \chi_{4+}, \varphi_{4+}$
	5	0	$160_2 = \chi_{6+}, \varphi_{6+}$
	6	0	$160_3 = \chi_{8+}, \varphi_{8+}$
	7	0	$160_4 = \chi_{10+}, \varphi_{10+}$
	8	0	$160_5 = \chi_{12+}, \varphi_{12+}$

	blocks	defect	matrix
	9	0	$160_6 = \chi_{14+}, \varphi_{14+}$
	10	0	$160_7 = \chi_{16+}, \varphi_{16+}$
	11	0	$160_8 = \chi_{18+}, \varphi_{18+}$
	12	0	$160_9 = \chi_{20+}, \varphi_{20+}$
	13	0	$160_{10} = \chi_{22+}, \varphi_{22+}$
	14	1	4×2
	15	1	4×2
	16	1	4×2

Block 1:	$\varphi_{1,0}$	$\varphi_{24,0}$
$1_1 = \chi_{1,0}$	1	.
$81_1 = \chi_{24,0}$	.	1
$82_5 = \chi_{26,1}$	1	1
$82_7 = \chi_{27,1}$	1	1

$$\begin{aligned} \varphi_{1,0} &= 1_1 \\ \varphi_{24,0} &= 81_1 \end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{24,1}$
$1_2 = \chi_{1,1}$	1	.
$81_2 = \chi_{24,1}$	.	1
$82_4 = \chi_{26,0}$	1	1
$82_6 = \chi_{27,0}$	1	1

$$\begin{aligned} \varphi_{1,1} &= 1_2 \\ \varphi_{24,1} &= 81_2 \end{aligned}$$

Block 3:	φ_{2+}
$82_1 = \chi_{2+}$	1
$82_{12} = \chi_{30,0}$	1
$82_{13} = \chi_{30,1}$	1
$82_{14} = \chi_{31,0}$	1
$82_{15} = \chi_{31,1}$	1

$$\varphi_{2+} = 82_1$$

Block 14:	$\varphi_{25,0}$	$\varphi_{25,1}$
$82_2 = \chi_{25,0}$	1	.
$82_3 = \chi_{25,1}$	.	1
$164_1 = \chi_{32+}$	1	1
$164_2 = \chi_{34+}$	1	1

$$\begin{aligned} \varphi_{25,0} &= 82_2 \\ \varphi_{25,1} &= 82_3 \end{aligned}$$

Block 15:	$\varphi_{26,0}$	$\varphi_{26,1}$	
$82_8 = \chi_{28,0}$	1	.	$\varphi_{26,0} = 82_4$
$82_9 = \chi_{28,1}$	.	1	$\varphi_{26,1} = 82_5$
$164_3 = \chi_{36+}$	1	1	
$164_6 = \chi_{42+}$	1	1	

Block 16:	$\varphi_{27,0}$	$\varphi_{27,1}$	
$82_{10} = \chi_{29,0}$	1	.	$\varphi_{27,0} = 82_6$
$82_{11} = \chi_{29,1}$	.	1	$\varphi_{27,1} = 82_7$
$164_4 = \chi_{38+}$	1	1	
$164_5 = \chi_{40+}$	1	1	