

$L_2(81).2_3 \pmod{3}$

	blocks	defect	matrix
$G :$	1	4	33×32
	2	0	$81_1 = \chi_{24,0}, \varphi_{41,0}$
	3	0	$81_2 = \chi_{24,1}, \varphi_{41,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	φ_{2+}	φ_{4+}	$\varphi_{6,0}$	$\varphi_{6,1}$	$\varphi_{7,0}$	$\varphi_{7,1}$	φ_{8+}	φ_{10+}	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.	.	.	.
$82_1 = \chi_{2+}$	1	1	.	.	1	1	1	1	2	2	.	.	.
$160_1 = \chi_{4+}$	1	1	1	.	1	1	1	1	2	2	.	.	.
$160_2 = \chi_{6+}$	1	1	.	1	1	1	1	1	2	2	.	.	.
$160_3 = \chi_{8+}$	.	.	.	1	.	.	1	1	.	1	.	.	.
$160_4 = \chi_{10+}$	.	.	1	.	1	1	.	.	1	.	.	.	.
$160_5 = \chi_{12+}$	1	1	.	.	.	.	.	.	1	.	.	.	.
$160_6 = \chi_{14+}$	1	1	.	.	.	.	.	.	.	1	.	.	.
$160_7 = \chi_{16+}$	.	.	1	.	.	.	.	.	1	.	.	.	1
$160_8 = \chi_{18+}$	.	.	.	1	.	.	.	.	.	1	1	1	.
$160_9 = \chi_{20+}$	.	.	1	.	.	.	1	1	1	.	.	.	.
$160_{10} = \chi_{22+}$	.	.	.	1	1	1	.	.	.	1	.	.	.
$82_2 = \chi_{25,0}$	.	.	.	.	.	.	.	.	.	.	1	.	.
$82_3 = \chi_{25,1}$	.	.	.	.	.	.	.	.	.	.	.	1	1
$82_4 = \chi_{26,0}$	.	1	.	.	.	.	.	.	1	.	.	.	.
$82_5 = \chi_{26,1}$	1	.	.	.	.	.	.	.	1	.	.	.	1
$82_6 = \chi_{27,0}$	.	1	.	.	.	.	.	.	.	1	.	1	.
$82_7 = \chi_{27,1}$	1	.	.	.	.	.	.	.	.	1	1	.	.
$82_8 = \chi_{28,0}$	.	.	.	1	1	.	1	.	.	1	.	.	.
$82_9 = \chi_{28,1}$	.	.	.	1	.	1	.	1	.	1	.	.	.
$82_{10} = \chi_{29,0}$	.	.	1	.	1	.	.	1	1	.	.	.	.
$82_{11} = \chi_{29,1}$	.	.	1	.	.	1	1	.	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	.	.	.	.	.
$164_1 = \chi_{32+}$	1	1	.	.	.	.	1	1	1	1	.	.	.
$164_2 = \chi_{34+}$	1	1	.	.	1	1	.	.	1	1	.	.	.
$164_3 = \chi_{36+}$	.	.	.	1	.	.	.	.	.	1	.	.	.
$164_4 = \chi_{38+}$	.	.	1	.	.	.	.	.	1	.	.	.	.
$164_5 = \chi_{40+}$	.	.	1	1	.	.	1	1	1	1	.	.	.
$164_6 = \chi_{42+}$	.	.	1	1	1	1	.	.	1	1	.	.	.

(Block 1:)	$\varphi_{13,1}$	φ_{14+}	φ_{16+}	φ_{18+}	φ_{20+}	φ_{22+}	φ_{24+}	φ_{26+}	φ_{28+}	$\varphi_{30,0}$	$\varphi_{30,1}$
$1_1 = \chi_{1,0}$
$1_2 = \chi_{1,1}$
$82_1 = \chi_{2+}$	1	1
$160_1 = \chi_{4+}$.	.	.	1	.	1	.	.	1	1	1
$160_2 = \chi_{6+}$	1	.	1	1	.	1	1
$160_3 = \chi_{8+}$.	.	1	.	2	.	.	.	.	.	.
$160_4 = \chi_{10+}$.	1	.	2	.	.	.	.	.	.	.
$160_5 = \chi_{12+}$	1	.	.	.
$160_6 = \chi_{14+}$	1	.	.
$160_7 = \chi_{16+}$	1	.	.	.	.	1	2	1	.	1	1
$160_8 = \chi_{18+}$	2	1	.	1	1	1
$160_9 = \chi_{20+}$.	.	1	.	1	.	.	1	.	.	.
$160_{10} = \chi_{22+}$.	1	.	1	.	.	.	.	1	.	.
$82_2 = \chi_{25,0}$	1	.	.	.	.	1	1	.	.	.	1
$82_3 = \chi_{25,1}$	1	1	.	.	1	.
$82_4 = \chi_{26,0}$	1	.	.	.	.	.	1	1	.	.	1
$82_5 = \chi_{26,1}$	1	1	.	1	.
$82_6 = \chi_{27,0}$	1	.	.	1	1	.
$82_7 = \chi_{27,1}$	1	.	.	1	.	1
$82_8 = \chi_{28,0}$	1	.	.	.	.	.	.
$82_9 = \chi_{28,1}$	1	.	.	.	.	.	.
$82_{10} = \chi_{29,0}$.	.	.	1	.	.	.	.	.	.	.
$82_{11} = \chi_{29,1}$.	.	.	1	.	.	.	.	.	.	.
$82_{12} = \chi_{30,0}$.	1	.	1	.	.	.	.	.	.	.
$82_{13} = \chi_{30,1}$.	1	.	1	.	.	.	.	.	.	.
$82_{14} = \chi_{31,0}$.	.	1	.	1	.	.	.	.	.	.
$82_{15} = \chi_{31,1}$.	.	1	.	1	.	.	.	.	.	.
$164_1 = \chi_{32+}$.	.	1	.	1	.	.	1	.	.	.
$164_2 = \chi_{34+}$.	1	.	1	.	.	.	.	1	.	.
$164_3 = \chi_{36+}$	1	.	.
$164_4 = \chi_{38+}$	1	.	.	.
$164_5 = \chi_{40+}$	1	1	1	1	.	1	1
$164_6 = \chi_{42+}$.	.	.	1	.	1	1	.	1	1	1

$\varphi_{1,0}$	=	1_1	φ_{18+}	=	24_1
$\varphi_{1,1}$	=	1_2	φ_{20+}	=	24_2
φ_{2+}	=	6_1	φ_{22+}	=	24_3
φ_{4+}	=	6_2	φ_{24+}	=	24_4
$\varphi_{6,0}$	=	4_1	φ_{26+}	=	24_5
$\varphi_{6,1}$	=	4_2	φ_{28+}	=	24_6
$\varphi_{7,0}$	=	4_3	$\varphi_{30,0}$	=	16_1
$\varphi_{7,1}$	=	4_4	$\varphi_{30,1}$	=	16_2
φ_{8+}	=	8_1	φ_{31+}	=	54_1
φ_{10+}	=	8_2	φ_{33+}	=	54_2
$\varphi_{12,0}$	=	9_1	φ_{35+}	=	72_1
$\varphi_{12,1}$	=	9_2	φ_{37+}	=	72_2
$\varphi_{13,0}$	=	9_3	$\varphi_{39,0}$	=	36_1
$\varphi_{13,1}$	=	9_4	$\varphi_{39,1}$	=	36_2
φ_{14+}	=	18_1	$\varphi_{40,0}$	=	36_3
φ_{16+}	=	18_2	$\varphi_{40,1}$	=	36_4