$L_2(81) \pmod 5$

	blocks	defect	matrix
$G:$	1	1	4×2
	2	1	4×2
	3	0	$80_1 = \chi_4, \varphi_4$
	4	0	$80_2 = \chi_5, \varphi_5$
	5	0	$80_3 = \chi_6, \varphi_6$
	6	0	$80_4 = \chi_7, \varphi_7$
	7	0	$80_5 = \chi_8, \varphi_8$
	8	0	$80_6 = \chi_9, \varphi_9$
	9	0	$80_7 = \chi_{10}, \varphi_{10}$
	10	0	$80_8 = \chi_{11}, \varphi_{11}$
	11	0	$80_9 = \chi_{12}, \varphi_{12}$
	12	0	$80_{10} = \chi_{13}, \varphi_{13}$
	13	0	$80_{11} = \chi_{14}, \varphi_{14}$
	14	0	$80_{12} = \chi_{15}, \varphi_{15}$
	15	0	$80_{13} = \chi_{16}, \varphi_{16}$
	16	0	$80_{14} = \chi_{17}, \varphi_{17}$
	17	0	$80_{15} = \chi_{18}, \varphi_{18}$
	18	0	$80_{16} = \chi_{19}, \varphi_{19}$
	19	0	$80_{17} = \chi_{20}, \varphi_{20}$
	20	0	$80_{18} = \chi_{21}, \varphi_{21}$
	21	0	$80_{19} = \chi_{22}, \varphi_{22}$
	22	0	$80_{20} = \chi_{23}, \varphi_{23}$
	23	1	5×1
	24	1	5×1
	25	1	5×1
$2.G:$	26	0	$40_1 = \chi_{44}, \varphi_{28}$

	blocks	defect	matrix
	27	0	$40_2 = \chi_{45}, \varphi_{29}$
	28	0	$80_{21} = \chi_{46}, \varphi_{30}$
	29	0	$80_{22} = \chi_{47}, \varphi_{31}$
	30	0	$80_{23} = \chi_{48}, \varphi_{32}$
	31	0	$80_{24} = \chi_{49}, \varphi_{33}$
	32	0	$80_{25} = \chi_{50}, \varphi_{34}$
	33	0	$80_{26} = \chi_{51}, \varphi_{35}$
	34	0	$80_{27} = \chi_{52}, \varphi_{36}$
	35	0	$80_{28} = \chi_{53}, \varphi_{37}$
	36	0	$80_{29} = \chi_{54}, \varphi_{38}$
	37	0	$80_{30} = \chi_{55}, \varphi_{39}$
	38	0	$80_{31} = \chi_{56}, \varphi_{40}$
	39	0	$80_{32} = \chi_{57}, \varphi_{41}$
	40	0	$80_{33} = \chi_{58}, \varphi_{42}$
	41	0	$80_{34} = \chi_{59}, \varphi_{43}$
	42	0	$80_{35} = \chi_{60}, \varphi_{44}$
	43	0	$80_{36} = \chi_{61}, \varphi_{45}$
	44	0	$80_{37} = \chi_{62}, \varphi_{46}$
	45	0	$80_{38} = \chi_{63}, \varphi_{47}$
	46	0	$80_{39} = \chi_{64}, \varphi_{48}$
	47	0	$80_{40} = \chi_{65}, \varphi_{49}$
	48	1	5×1
	49	1	5×1
	50	1	5×1
	51	1	5×1

Block 1:	φ_1	φ_{24}
$1_1 = \chi_1$	1	.
$81_1 = \chi_{24}$	.	1
$82_2 = \chi_{26}$	1	1
$82_3 = \chi_{27}$	1	1

$\varphi_1 = 1_1$

$\varphi_{24} = 81_1$

Block 2:	φ_2	φ_3
$41_1 = \chi_2$	1	.
$41_2 = \chi_3$	.	1
$82_6 = \chi_{30}$	1	1
$82_7 = \chi_{31}$	1	1

$\varphi_2 = 41_1$
$\varphi_3 = 41_2$

Block 23:	φ_{25}
$82_1 = \chi_{25}$	1
$82_8 = \chi_{32}$	1
$82_9 = \chi_{33}$	1
$82_{10} = \chi_{34}$	1
$82_{11} = \chi_{35}$	1

$\varphi_{25} = 82_1$

Block 24:	φ_{26}
$82_4 = \chi_{28}$	1
$82_{12} = \chi_{36}$	1
$82_{13} = \chi_{37}$	1
$82_{18} = \chi_{42}$	1
$82_{19} = \chi_{43}$	1

$\varphi_{26} = 82_2$

Block 25:	φ_{27}
$82_5 = \chi_{29}$	1
$82_{14} = \chi_{38}$	1
$82_{15} = \chi_{39}$	1
$82_{16} = \chi_{40}$	1
$82_{17} = \chi_{41}$	1

$\varphi_{27} = 82_3$

Block 48:	φ_{50}
$82_{20} = \chi_{66}$	1
$82_{24} = \chi_{70}$	1
$82_{31} = \chi_{77}$	1
$82_{33} = \chi_{79}$	1
$82_{38} = \chi_{84}$	1

$\varphi_{50} = 82_4$

Block 49:	φ_{51}
$82_{21} = \chi_{67}$	1
$82_{25} = \chi_{71}$	1
$82_{30} = \chi_{76}$	1
$82_{32} = \chi_{78}$	1
$82_{39} = \chi_{85}$	1

$$\varphi_{51} = 82_5$$

Block 50:	φ_{52}
$82_{22} = \chi_{68}$	1
$82_{26} = \chi_{72}$	1
$82_{28} = \chi_{74}$	1
$82_{35} = \chi_{81}$	1
$82_{37} = \chi_{83}$	1

$$\varphi_{52} = 82_6$$

Block 51:	φ_{53}
$82_{23} = \chi_{69}$	1
$82_{27} = \chi_{73}$	1
$82_{29} = \chi_{75}$	1
$82_{34} = \chi_{80}$	1
$82_{36} = \chi_{82}$	1

$$\varphi_{53} = 82_7$$