

$L_4(4) \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	14×5
	2	2	16×4
	3	1	4×2
	4	1	5×1
	5	1	5×1
	6	1	5×1
	7	1	5×1
	8	0	$3825_1 = \chi_{12}, \varphi_{19}$
	9	0	$3825_2 = \chi_{13}, \varphi_{20}$
	10	0	$3825_3 = \chi_{14}, \varphi_{21}$
	$11 = \overline{8}$	0	$3825_4 = \chi_{15}, \varphi_{22}$
	$12 = \overline{10}$	0	$3825_5 = \chi_{16}, \varphi_{23}$
	$13 = \overline{9}$	0	$3825_6 = \chi_{17}, \varphi_{24}$
	14	0	$3825_7 = \chi_{18}, \varphi_{25}$
	15	0	$3825_8 = \chi_{19}, \varphi_{26}$
	16	0	$3825_9 = \chi_{20}, \varphi_{27}$
	17	0	$3825_{10} = \chi_{21}, \varphi_{28}$
	18	0	$3825_{11} = \chi_{22}, \varphi_{29}$
	19	0	$3825_{12} = \chi_{23}, \varphi_{30}$
	20	0	$3825_{13} = \chi_{24}, \varphi_{31}$
	$21 = \overline{14}$	0	$3825_{14} = \chi_{25}, \varphi_{32}$
	$22 = \overline{20}$	0	$3825_{15} = \chi_{26}, \varphi_{33}$
	$23 = \overline{19}$	0	$3825_{16} = \chi_{27}, \varphi_{34}$
	$24 = \overline{18}$	0	$3825_{17} = \chi_{28}, \varphi_{35}$
	$25 = \overline{16}$	0	$3825_{18} = \chi_{29}, \varphi_{36}$
	$26 = \overline{17}$	0	$3825_{19} = \chi_{30}, \varphi_{37}$
	$27 = \overline{15}$	0	$3825_{20} = \chi_{31}, \varphi_{38}$
	28	1	4×2
	$29 = \overline{28}$	1	4×2
	30	0	$1700_1 = \chi_{65}, \varphi_{10}$
	$31 = \overline{30}$	0	$1700_2 = \chi_{67}, \varphi_{11}$

Block 1:	φ_1	φ_2	φ_5	φ_7	φ_{17}
$1_1 = \chi_1$	1	.	.	.	.
$84_1 = \chi_2$	1	1	.	.	.
$272_1 = \chi_3$	.	1	1	.	.
$1344_1 = \chi_5$	1	1	1	1	.
$3213_1 = \chi_{11}$	.	.	1	.	1
$4096_1 = \chi_{32}$	1	.	.	1	1
$189_1 = \chi_{52}$	.	.	1	.	.
$1071_1 = \chi_{55}$	.	.	.	1	.
$3024_1 = \chi_{61}$	.	.	.	.	1
$1071_4 = \chi_{62}$	.	.	.	1	.
$189_2 = \chi_{63}$	.	.	1	.	.
$4284_1 = \chi_{64}$	.	.	1	1	1
$3024_2 = \chi_{70}$	.	.	.	.	1
$4284_2 = \chi_{73}$	.	.	1	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_2 &= 83_1 \\ \varphi_5 &= 189_1 \\ \varphi_7 &= 1071_1 \\ \varphi_{17} &= 3024_1 \end{aligned}$$

Block 2:	φ_6	φ_8	φ_9	φ_{18}
$357_1 = \chi_4$	1	.	.	.
$5712_1 = \chi_{33}$	1	1	1	1
$3213_2 = \chi_{53}$	.	.	.	1
$3213_3 = \chi_{54}$	.	.	.	1
$1071_2 = \chi_{56}$	.	1	.	.
$1071_3 = \chi_{57}$	.	1	.	.
$1428_1 = \chi_{66}$	1	.	1	.
$1428_2 = \chi_{68}$	1	1	.	.
$4284_3 = \chi_{74}$	.	1	.	1
$1071_5 = \chi_{76}$	.	.	1	.
$3213_4 = \chi_{78}$	.	.	.	1
$4284_4 = \chi_{79}$	.	.	1	1
$1071_6 = \chi_{80}$	.	.	1	.
$4284_5 = \chi_{81}$	.	1	.	1
$3213_5 = \chi_{82}$	.	.	.	1
$4284_6 = \chi_{84}$	.	.	1	1

$$\begin{aligned} \varphi_6 &= 357_1 \\ \varphi_8 &= 1071_2 \\ \varphi_9 &= 1071_3 \\ \varphi_{18} &= 3213_1 \end{aligned}$$

Block 3:	φ_{12}	φ_{39}
$1785_1 = \chi_6$	1	.
$7140_1 = \chi_{34}$	1	1
$5355_3 = \chi_{71}$	.	1
$5355_4 = \chi_{72}$	.	1

$$\begin{aligned} \varphi_{12} &= 1785_1 \\ \varphi_{39} &= 5355_1 \end{aligned}$$

Block 4:	φ_{13}
$2835_1 = \chi_7$	1
$2835_{16} = \chi_{46}$	1
$2835_{17} = \chi_{47}$	1
$2835_{19} = \chi_{49}$	1
$2835_{20} = \chi_{50}$	1

$$\varphi_{13} = 2835_1$$

Block 5:	φ_{14}
$2835_2 = \chi_8$	1
$2835_{12} = \chi_{42}$	1
$2835_{13} = \chi_{43}$	1
$2835_{15} = \chi_{45}$	1
$2835_{18} = \chi_{48}$	1

$$\varphi_{14} = 2835_2$$

Block 6:	φ_{15}
$2835_3 = \chi_9$	1
$2835_8 = \chi_{38}$	1
$2835_{10} = \chi_{40}$	1
$2835_{11} = \chi_{41}$	1
$2835_{14} = \chi_{44}$	1

$$\varphi_{15} = 2835_3$$

Block 7:	φ_{16}
$2835_4 = \chi_{10}$	1
$2835_5 = \chi_{35}$	1
$2835_6 = \chi_{36}$	1
$2835_7 = \chi_{37}$	1
$2835_9 = \chi_{39}$	1

$$\varphi_{16} = 2835_4$$

Block 28:	φ_3	φ_{40}
$85_1 = \chi_{51}$	1	.
$5355_1 = \chi_{58}$	.	1
$5355_2 = \chi_{59}$	.	1
$5440_1 = \chi_{69}$	1	1

$$\begin{aligned} \varphi_3 &= 85_1 \\ \varphi_{40} &= 5355_2 \end{aligned}$$

Block 29:	φ_4	φ_{41}
$85_2 = \chi_{60}$	1	.
$5355_5 = \chi_{75}$	.	1
$5355_6 = \chi_{77}$	.	1
$5440_2 = \chi_{83}$	1	1

$$\begin{aligned} \varphi_4 &= 85_2 \\ \varphi_{41} &= 5355_3 \end{aligned}$$