

$L_4(4) \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	5×3
	2	0	$84_1 = \chi_2, \varphi_2$
	3	0	$357_1 = \chi_4, \varphi_8$
	4	0	$1344_1 = \chi_5, \varphi_{15}$
	5	0	$1785_1 = \chi_6, \varphi_{20}$
	6	0	$2835_1 = \chi_7, \varphi_{21}$
	7	0	$2835_2 = \chi_8, \varphi_{22}$
	8	0	$2835_3 = \chi_9, \varphi_{23}$
	9	0	$2835_4 = \chi_{10}, \varphi_{24}$
	10	0	$3213_1 = \chi_{11}, \varphi_{43}$
	11	1	5×3
	$12 = \overline{11}$	1	5×3
	13	1	7×1
	$14 = \overline{13}$	1	7×1
	15	0	$5712_1 = \chi_{33}, \varphi_{65}$
	16	0	$7140_1 = \chi_{34}, \varphi_{66}$
	17	0	$2835_5 = \chi_{35}, \varphi_{25}$
	18	0	$2835_6 = \chi_{36}, \varphi_{26}$
	$19 = \overline{17}$	0	$2835_7 = \chi_{37}, \varphi_{27}$
	20	0	$2835_8 = \chi_{38}, \varphi_{28}$
	$21 = \overline{18}$	0	$2835_9 = \chi_{39}, \varphi_{29}$
	22	0	$2835_{10} = \chi_{40}, \varphi_{30}$
	$23 = \overline{22}$	0	$2835_{11} = \chi_{41}, \varphi_{31}$
	24	0	$2835_{12} = \chi_{42}, \varphi_{32}$
	25	0	$2835_{13} = \chi_{43}, \varphi_{33}$
	$26 = \overline{20}$	0	$2835_{14} = \chi_{44}, \varphi_{34}$
	$27 = \overline{25}$	0	$2835_{15} = \chi_{45}, \varphi_{35}$
	28	0	$2835_{16} = \chi_{46}, \varphi_{36}$
	$29 = \overline{28}$	0	$2835_{17} = \chi_{47}, \varphi_{37}$
	$30 = \overline{24}$	0	$2835_{18} = \chi_{48}, \varphi_{38}$
	31	0	$2835_{19} = \chi_{49}, \varphi_{39}$
	$32 = \overline{31}$	0	$2835_{20} = \chi_{50}, \varphi_{40}$
	33	0	$189_1 = \chi_{52}, \varphi_5$
	34	0	$3213_2 = \chi_{53}, \varphi_{44}$
	35	0	$3213_3 = \chi_{54}, \varphi_{45}$
	36	0	$1071_1 = \chi_{55}, \varphi_9$
	37	0	$1071_2 = \chi_{56}, \varphi_{10}$
	38	0	$1071_3 = \chi_{57}, \varphi_{11}$
	39	0	$5355_1 = \chi_{58}, \varphi_{59}$
	40	0	$5355_2 = \chi_{59}, \varphi_{60}$

	blocks	defect	matrix
	41	0	$3024_1 = \chi_{61}, \varphi_{41}$
	42	0	$1071_4 = \chi_{62}, \varphi_{12}$
	43	0	$189_2 = \chi_{63}, \varphi_6$
	44	0	$4284_1 = \chi_{64}, \varphi_{53}$
	45	0	$1428_1 = \chi_{66}, \varphi_{16}$
	$46 = \overline{45}$	0	$1428_2 = \chi_{68}, \varphi_{17}$
	47	0	$3024_2 = \chi_{70}, \varphi_{42}$
	48	0	$5355_3 = \chi_{71}, \varphi_{61}$
	49	0	$5355_4 = \chi_{72}, \varphi_{62}$
	50	0	$4284_2 = \chi_{73}, \varphi_{54}$
	51	0	$4284_3 = \chi_{74}, \varphi_{55}$
	$52 = \overline{39}$	0	$5355_5 = \chi_{75}, \varphi_{63}$
	$53 = \overline{37}$	0	$1071_5 = \chi_{76}, \varphi_{13}$
	$54 = \overline{40}$	0	$5355_6 = \chi_{77}, \varphi_{64}$
	55	0	$3213_4 = \chi_{78}, \varphi_{46}$
	$56 = \overline{51}$	0	$4284_4 = \chi_{79}, \varphi_{56}$
	$57 = \overline{38}$	0	$1071_6 = \chi_{80}, \varphi_{14}$
	58	0	$4284_5 = \chi_{81}, \varphi_{57}$
	$59 = \overline{34}$	0	$3213_5 = \chi_{82}, \varphi_{47}$
	$60 = \overline{58}$	0	$4284_6 = \chi_{84}, \varphi_{58}$

Block 1:	φ_1	φ_7	φ_{48}	
$1_1 = \chi_1$	1	.	.	$\varphi_1 = 1_1$
$272_1 = \chi_3$	1	1	.	$\varphi_7 = 271_1$
$3825_1 = \chi_{12}$	.	.	1	$\varphi_{48} = 3825_1$
$3825_4 = \chi_{15}$	.	.	1	
$4096_1 = \chi_{32}$	.	1	1	

Block 11:	φ_4	φ_{18}	φ_{49}	
$3825_2 = \chi_{13}$	.	.	1	$\varphi_4 = 85_2$
$3825_5 = \chi_{16}$	.	.	1	$\varphi_{18} = 1615_1$
$85_2 = \chi_{60}$	1	.	.	$\varphi_{49} = 3825_2$
$1700_1 = \chi_{65}$	1	1	.	
$5440_2 = \chi_{83}$	.	1	1	

Block 12:	φ_3	φ_{19}	φ_{50}	
$3825_3 = \chi_{14}$	.	.	1	$\varphi_3 = 85_1$
$3825_6 = \chi_{17}$	.	.	1	$\varphi_{19} = 1615_2$
$85_1 = \chi_{51}$	1	.	.	$\varphi_{50} = 3825_3$
$1700_2 = \chi_{67}$	1	1	.	
$5440_1 = \chi_{69}$	.	1	1	

Block 13:	φ_{51}	
$3825_7 = \chi_{18}$	1	
$3825_8 = \chi_{19}$	1	
$3825_9 = \chi_{20}$	1	$\varphi_{51} = 3825_4$
$3825_{10} = \chi_{21}$	1	
$3825_{11} = \chi_{22}$	1	
$3825_{12} = \chi_{23}$	1	
$3825_{13} = \chi_{24}$	1	

Block 14:	φ_{52}	
$3825_{14} = \chi_{25}$	1	
$3825_{15} = \chi_{26}$	1	
$3825_{16} = \chi_{27}$	1	$\varphi_{52} = 3825_5$
$3825_{17} = \chi_{28}$	1	
$3825_{18} = \chi_{29}$	1	
$3825_{19} = \chi_{30}$	1	
$3825_{20} = \chi_{31}$	1	