

$L_3(8) \pmod{7}$

	blocks	defect	matrix
$G :$	1	2	20×3
	2	0	$441_1 = \chi_9, \varphi_3$
	$3 = \overline{2}$	0	$441_2 = \chi_{10}, \varphi_4$
	4	0	$441_3 = \chi_{11}, \varphi_5$
	$5 = \overline{4}$	0	$441_4 = \chi_{12}, \varphi_6$
	6	0	$441_5 = \chi_{13}, \varphi_7$
	$7 = \overline{6}$	0	$441_6 = \chi_{14}, \varphi_8$
	8	0	$441_7 = \chi_{15}, \varphi_9$
	$9 = \overline{8}$	0	$441_8 = \chi_{16}, \varphi_{10}$
	10	0	$441_9 = \chi_{17}, \varphi_{11}$
	$11 = \overline{10}$	0	$441_{10} = \chi_{18}, \varphi_{12}$
	12	0	$441_{11} = \chi_{19}, \varphi_{13}$
	$13 = \overline{12}$	0	$441_{12} = \chi_{20}, \varphi_{14}$
	14	0	$441_{13} = \chi_{21}, \varphi_{15}$
	$15 = \overline{14}$	0	$441_{14} = \chi_{22}, \varphi_{16}$

	blocks	defect	matrix
	16	0	$441_{15} = \chi_{23}, \varphi_{17}$
	$17 = \overline{16}$	0	$441_{16} = \chi_{24}, \varphi_{18}$
	18	0	$441_{17} = \chi_{25}, \varphi_{19}$
	$19 = \overline{18}$	0	$441_{18} = \chi_{26}, \varphi_{20}$
	20	0	$441_{19} = \chi_{27}, \varphi_{21}$
	$21 = \overline{20}$	0	$441_{20} = \chi_{28}, \varphi_{22}$
	22	0	$441_{21} = \chi_{29}, \varphi_{23}$
	$23 = \overline{22}$	0	$441_{22} = \chi_{30}, \varphi_{24}$
	24	0	$441_{23} = \chi_{31}, \varphi_{25}$
	$25 = \overline{24}$	0	$441_{24} = \chi_{32}, \varphi_{26}$
	26	1	7×1
	27	1	7×1
	28	1	7×1
	29	1	7×1

Block 1:	φ_1	φ_2	φ_{31}
$1_1 = \chi_1$	1	.	.
$72_1 = \chi_2$	.	1	.
$73_1 = \chi_3$	1	1	.
$73_2 = \chi_4$	1	1	.
$73_3 = \chi_5$	1	1	.
$73_4 = \chi_6$	1	1	.
$73_5 = \chi_7$	1	1	.
$73_6 = \chi_8$	1	1	.
$512_1 = \chi_{61}$	.	.	1
$584_1 = \chi_{62}$	.	1	1
$584_2 = \chi_{63}$	.	1	1
$584_3 = \chi_{64}$	.	1	1
$584_4 = \chi_{65}$	.	1	1
$584_5 = \chi_{66}$	.	1	1
$584_6 = \chi_{67}$	.	1	1
$657_1 = \chi_{68}$	1	2	1
$657_2 = \chi_{69}$	1	2	1
$657_3 = \chi_{70}$	1	2	1
$657_4 = \chi_{71}$	1	2	1
$657_5 = \chi_{72}$	1	2	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_2 &= 72_1 \\ \varphi_{31} &= 512_1 \end{aligned}$$

Block 26:	φ_{27}
$511_1 = \chi_{33}$	1
$511_5 = \chi_{37}$	1
$511_6 = \chi_{38}$	1
$511_7 = \chi_{39}$	1
$511_8 = \chi_{40}$	1
$511_9 = \chi_{41}$	1
$511_{10} = \chi_{42}$	1

$$\varphi_{27} = 511_1$$

Block 27:	φ_{28}
$511_2 = \chi_{34}$	1
$511_{11} = \chi_{43}$	1
$511_{12} = \chi_{44}$	1
$511_{19} = \chi_{51}$	1
$511_{20} = \chi_{52}$	1
$511_{27} = \chi_{59}$	1
$511_{28} = \chi_{60}$	1

$$\varphi_{28} = 511_2$$

Block 28:	φ_{29}
$511_3 = \chi_{35}$	1
$511_{13} = \chi_{45}$	1
$511_{14} = \chi_{46}$	1
$511_{21} = \chi_{53}$	1
$511_{22} = \chi_{54}$	1
$511_{23} = \chi_{55}$	1
$511_{24} = \chi_{56}$	1

$$\varphi_{29} = 511_3$$

Block 29:	φ_{30}
$511_4 = \chi_{36}$	1
$511_{15} = \chi_{47}$	1
$511_{16} = \chi_{48}$	1
$511_{17} = \chi_{49}$	1
$511_{18} = \chi_{50}$	1
$511_{25} = \chi_{57}$	1
$511_{26} = \chi_{58}$	1

$$\varphi_{30} = 511_4$$