

$L_6(2) \pmod{31}$

	blocks	defect	matrix
$G :$	1	1	11×5
	2	0	$62_1 = \chi_2, \varphi_2$
	3	0	$217_1 = \chi_3, \varphi_3$
	4	0	$651_1 = \chi_5, \varphi_5$
	5	0	$744_1 = \chi_6, \varphi_6$
	6	0	$1240_1 = \chi_7, \varphi_7$
	7	0	$1395_1 = \chi_8, \varphi_8$
	$8 = \overline{7}$	0	$1395_2 = \chi_9, \varphi_9$
	9	0	$4185_1 = \chi_{10}, \varphi_{10}$
	$10 = \overline{9}$	0	$4185_2 = \chi_{11}, \varphi_{11}$
	11	0	$4340_1 = \chi_{12}, \varphi_{12}$
	12	0	$4557_1 = \chi_{13}, \varphi_{13}$
	13	0	$5952_1 = \chi_{14}, \varphi_{15}$
	14	0	$9114_1 = \chi_{16}, \varphi_{16}$
	15	0	$9114_2 = \chi_{17}, \varphi_{17}$
	16	0	$9765_1 = \chi_{18}, \varphi_{18}$
	17	0	$9765_2 = \chi_{19}, \varphi_{19}$
	$18 = \overline{17}$	0	$9765_3 = \chi_{20}, \varphi_{20}$
	19	0	$9765_4 = \chi_{21}, \varphi_{21}$
	$20 = \overline{19}$	0	$9765_5 = \chi_{22}, \varphi_{22}$
	21	0	$9765_6 = \chi_{23}, \varphi_{23}$
	$22 = \overline{21}$	0	$9765_7 = \chi_{24}, \varphi_{24}$
	23	0	$9765_8 = \chi_{25}, \varphi_{25}$
	$24 = \overline{23}$	0	$9765_9 = \chi_{26}, \varphi_{26}$
	25	0	$9920_1 = \chi_{27}, \varphi_{27}$
	26	0	$11160_1 = \chi_{28}, \varphi_{28}$
	$27 = \overline{26}$	0	$11160_2 = \chi_{29}, \varphi_{29}$
	28	0	$12555_1 = \chi_{30}, \varphi_{30}$
	29	0	$13020_1 = \chi_{31}, \varphi_{32}$
	30	0	$13671_1 = \chi_{32}, \varphi_{33}$
	31	0	$13671_2 = \chi_{33}, \varphi_{34}$
	32	0	$13671_3 = \chi_{34}, \varphi_{35}$
	$33 = \overline{32}$	0	$13671_4 = \chi_{35}, \varphi_{36}$
	34	0	$13671_5 = \chi_{36}, \varphi_{37}$
	$35 = \overline{34}$	0	$13671_6 = \chi_{37}, \varphi_{38}$
	36	0	$13888_1 = \chi_{38}, \varphi_{39}$
	37	0	$18228_1 = \chi_{39}, \varphi_{40}$
	38	0	$25110_1 = \chi_{47}, \varphi_{42}$
	$39 = \overline{38}$	0	$25110_2 = \chi_{48}, \varphi_{43}$
	40	0	$27342_1 = \chi_{49}, \varphi_{44}$

	blocks	defect	matrix
	41	0	$27342_2 = \chi_{50}, \varphi_{45}$
	$42 = \overline{41}$	0	$27342_3 = \chi_{51}, \varphi_{46}$
	43	0	$29295_1 = \chi_{52}, \varphi_{47}$
	$44 = \overline{43}$	0	$29295_2 = \chi_{53}, \varphi_{48}$
	45	0	$31744_1 = \chi_{54}, \varphi_{49}$
	46	0	$33480_1 = \chi_{56}, \varphi_{50}$
	$47 = \overline{46}$	0	$33480_2 = \chi_{57}, \varphi_{51}$
	48	0	$36456_1 = \chi_{58}, \varphi_{52}$
	49	0	$36456_2 = \chi_{59}, \varphi_{53}$
	50	0	$41664_1 = \chi_{60}, \varphi_{54}$

Block 1:	φ_1	φ_4	φ_{14}	φ_{31}	φ_{41}
$1_1 = \chi_1$	1
$588_1 = \chi_4$	1	1	.	.	.
$6480_1 = \chi_{15}$.	1	1	.	.
$18816_1 = \chi_{40}$.	.	1	1	.
$19845_1 = \chi_{41}$	1
$19845_2 = \chi_{42}$	1
$19845_3 = \chi_{43}$	1
$19845_4 = \chi_{44}$	1
$19845_5 = \chi_{45}$	1
$19845_6 = \chi_{46}$	1
$32768_1 = \chi_{55}$.	.	.	1	1

$$\begin{aligned}
\varphi_1 &= 1_1 \\
\varphi_4 &= 587_1 \\
\varphi_{14} &= 5893_1 \\
\varphi_{31} &= 12923_1 \\
\varphi_{41} &= 19845_1
\end{aligned}$$