$L_6(2) \pmod 2$

	blocks	defect	matrix
$G:$	1	15	59×31
	2	0	$32768_1 = \chi_{55}, \varphi_{32}$

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}	φ_{16}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$62_1 = \chi_2$	.	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.
$217_1 = \chi_3$	1	1	1	1	1	1	.	.	.	.	.	.	.	1	.	.
$588_1 = \chi_4$	2	.	.	1	1	1	1	.	.	1	1	1	1	1	.	.
$651_1 = \chi_5$	3	1	1	2	2	2	1	.	.	1	1	1	1	1	.	.
$744_1 = \chi_6$	2	.	.	.	.	1	.	.	.	1	1	.	.	1	.	.
$1240_1 = \chi_7$	4	2	2	2	2	.	3	1	1	1	1	1	1	1	1	1
$1395_1 = \chi_8$	3	1	.	1	1	.	1	1	.	1	.	1	.	1	.	.
$1395_2 = \chi_9$	3	.	1	1	1	.	1	.	1	.	1	.	1	1	.	.
$4185_1 = \chi_{10}$	6	3	4	3	4	1	4	1	2	2	1	2	1	2	1	1
$4185_2 = \chi_{11}$	6	4	3	4	3	1	4	2	1	1	2	1	2	2	1	1
$4340_1 = \chi_{12}$	8	4	4	4	4	2	5	1	1	2	2	2	2	3	1	1
$4557_1 = \chi_{13}$	9	5	5	5	5	3	5	1	1	2	2	2	2	4	1	1
$5952_1 = \chi_{14}$	4	2	2	2	2	.	2	2	2	.	.	.	.	1	.	.
$6480_1 = \chi_{15}$	6	4	4	3	3	.	4	2	2	1	1	1	1	2	1	1
$9114_1 = \chi_{16}$	14	7	7	7	7	3	8	3	3	4	4	3	3	5	2	2
$9114_2 = \chi_{17}$	12	7	7	9	9	4	7	2	2	3	3	4	4	3	2	2
$9765_1 = \chi_{18}$	9	4	4	5	5	2	5	2	2	2	2	3	3	3	1	1
$9765_2 = \chi_{19}$	8	3	4	5	4	2	4	.	2	3	2	3	3	2	1	1
$9765_3 = \chi_{20}$	8	4	3	4	5	2	4	2	.	2	3	3	3	2	1	1
$9765_4 = \chi_{21}$	8	4	3	5	4	1	4	3	3	2	1	2	1	2	.	1
$9765_5 = \chi_{22}$	8	3	4	4	5	1	4	3	3	1	2	1	2	2	1	.
$9765_6 = \chi_{23}$	8	3	3	3	4	2	4	2	1	4	1	2	1	2	.	.
$9765_7 = \chi_{24}$	8	3	3	4	3	2	4	1	2	1	4	1	2	2	.	.
$9765_8 = \chi_{25}$	4	2	5	1	4	1	3	1	.	1	.	2	.	2	3	1
$9765_9 = \chi_{26}$	4	5	2	4	1	1	3	.	1	.	1	.	2	2	1	3
$9920_1 = \chi_{27}$	8	2	2	6	6	2	4	2	2	3	3	3	3	.	.	.
$11160_1 = \chi_{28}$	9	3	4	4	5	2	5	2	2	1	5	1	2	1	1	.
$11160_2 = \chi_{29}$	9	4	3	5	4	2	5	2	2	5	1	2	1	1	.	1
$12555_1 = \chi_{30}$	9	5	5	6	6	2	5	3	3	2	2	3	3	3	1	1
$13020_1 = \chi_{31}$	12	6	6	6	6	1	7	4	4	2	2	2	2	4	1	1
$13671_1 = \chi_{32}$	15	7	7	8	8	3	8	4	4	3	3	3	3	5	1	1
$13671_2 = \chi_{33}$	15	7	7	8	8	3	8	4	4	3	3	3	3	5	1	1
$13671_3 = \chi_{34}$	11	5	5	7	7	3	6	2	2	2	5	3	4	2	1	1
$13671_4 = \chi_{35}$	11	5	5	7	7	3	6	2	2	5	2	4	3	2	1	1
$13671_5 = \chi_{36}$	11	5	5	7	7	3	6	2	2	2	5	3	4	2	1	1
$13671_6 = \chi_{37}$	11	5	5	7	7	3	6	2	2	5	2	4	3	2	1	1
$13888_1 = \chi_{38}$	12	5	5	6	6	1	6	5	5	3	3	2	2	3	1	1
$18228_1 = \chi_{39}$	20	9	9	10	10	3	11	6	6	5	5	4	4	6	2	2
$18816_1 = \chi_{40}$	10	4	4	6	6	4	4	2	2	3	3	3	3	2	.	.

(**Block 1:**)	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$1_1 = \chi_1$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$62_1 = \chi_2$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$217_1 = \chi_3$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$588_1 = \chi_4$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$651_1 = \chi_5$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$744_1 = \chi_6$	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$1240_1 = \chi_7$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$1395_1 = \chi_8$	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
$1395_2 = \chi_9$	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
$4185_1 = \chi_{10}$	1	.	1	1	.	.	.	.	1	.	.	.	.	.	.
$4185_2 = \chi_{11}$	.	1	1	.	1	.	.	1	.	.	.	.	.	.	.
$4340_1 = \chi_{12}$	.	.	1	.	.	.	.	1	1	.	.	.	.	.	.
$4557_1 = \chi_{13}$	.	.	1	.	.	.	.	1	1	.	.	.	.	.	.
$5952_1 = \chi_{14}$	.	.	1	.	.	.	.	1	1	.	1	.	.	.	.
$6480_1 = \chi_{15}$	1	1	2	1	1	.	.	1	1	.	.	.	.	.	.
$9114_1 = \chi_{16}$	1	1	3	1	1	.	.	1	1	.	.	.	.	.	.
$9114_2 = \chi_{17}$	.	.	1	1	1	.	.	1	1	1	.	.	.	.	.
$9765_1 = \chi_{18}$	.	.	1	.	.	.	.	1	1	1	1	.	.	.	.
$9765_2 = \chi_{19}$	.	.	.	.	1	.	.	.	1	1	.	.	1	.	.
$9765_3 = \chi_{20}$	.	.	.	1	.	.	.	1	.	1	.	1	.	.	.
$9765_4 = \chi_{21}$	1	1	2	1	1	.	.	1	1	.	1	.	.	.	.
$9765_5 = \chi_{22}$	1	1	2	1	1	.	.	1	1	.	1	.	.	.	.
$9765_6 = \chi_{23}$	.	1	1	.	1	.	1	1	1	.	.	.	1	.	.
$9765_7 = \chi_{24}$	1	.	1	1	.	1	.	1	1	.	.	1	.	.	.
$9765_8 = \chi_{25}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$9765_9 = \chi_{26}$	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
$9920_1 = \chi_{27}$	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.
$11160_1 = \chi_{28}$	1	.	2	2	.	1	.	1	1	.	.	1	.	.	.
$11160_2 = \chi_{29}$	.	1	2	.	2	.	1	1	1	.	.	.	1	.	.
$12555_1 = \chi_{30}$	1	1	2	1	1	.	.	1	1	1	1	.	.	.	.
$13020_1 = \chi_{31}$	1	1	3	1	1	.	.	2	2	.	1	.	.	.	.
$13671_1 = \chi_{32}$	1	1	3	1	1	.	.	2	2	.	1	.	.	.	.
$13671_2 = \chi_{33}$	1	1	3	1	1	.	.	2	2	.	1	.	.	.	.
$13671_3 = \chi_{34}$	1	.	1	2	.	1	.	1	1	1	.	1	.	.	.
$13671_4 = \chi_{35}$	.	1	1	.	2	.	1	1	1	1	.	.	1	.	.
$13671_5 = \chi_{36}$	1	.	1	2	.	1	.	1	1	1	.	1	.	.	.
$13671_6 = \chi_{37}$	.	1	1	.	2	.	1	1	1	1	.	.	1	.	.
$13888_1 = \chi_{38}$	2	2	4	2	2	.	.	1	1	.	1	.	.	.	.
$18228_1 = \chi_{39}$	2	2	5	2	2	.	.	2	2	.	1	.	.	.	.
$18816_1 = \chi_{40}$	.	.	1	1	1	.	.	1	1	1	1	1	1	.	.

(**Block 1:**)	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}	φ_{16}
$19845_1 = \chi_{41}$	15	4	8	6	8	2	7	4	6	2	6	2	3	3	1	.
$19845_2 = \chi_{42}$	15	8	4	8	6	2	7	6	4	6	2	3	2	3	.	1
$19845_3 = \chi_{43}$	11	5	6	6	8	4	6	2	.	2	5	4	4	3	3	1
$19845_4 = \chi_{44}$	11	6	5	8	6	4	6	.	2	5	2	4	4	3	1	3
$19845_5 = \chi_{45}$	17	8	9	10	10	4	10	4	4	4	4	4	5	5	2	2
$19845_6 = \chi_{46}$	17	9	8	10	10	4	10	4	4	4	4	5	4	5	2	2
$25110_1 = \chi_{47}$	21	9	9	11	12	4	11	6	5	4	7	5	5	5	2	1
$25110_2 = \chi_{48}$	21	9	9	12	11	4	11	5	6	7	4	5	5	5	1	2
$27342_1 = \chi_{49}$	22	11	11	12	12	6	11	5	5	6	6	5	5	6	2	2
$27342_2 = \chi_{50}$	16	7	10	8	12	4	9	4	3	2	5	5	4	4	4	1
$27342_3 = \chi_{51}$	16	10	7	12	8	4	9	3	4	5	2	4	5	4	1	4
$29295_1 = \chi_{52}$	27	12	13	14	16	5	15	7	7	6	8	7	6	7	3	2
$29295_2 = \chi_{53}$	27	13	12	16	14	5	15	7	7	8	6	6	7	7	2	3
$31744_1 = \chi_{54}$	14	9	9	6	6	4	8	2	2	3	3	3	3	6	4	4
$33480_1 = \chi_{56}$	19	8	11	9	12	5	10	5	3	4	6	6	4	5	4	1
$33480_2 = \chi_{57}$	19	11	8	12	9	5	10	3	5	6	4	4	6	5	1	4
$36456_1 = \chi_{58}$	28	12	12	17	17	6	15	7	7	8	8	8	8	5	2	2
$36456_2 = \chi_{59}$	30	12	12	15	15	5	16	8	8	9	9	7	7	7	2	2
$41664_1 = \chi_{60}$	22	11	11	12	12	6	12	4	4	6	6	6	6	6	4	4

(**Block 1:**)	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$19845_1 = \chi_{41}$	3	1	4	3	1	1	.	1	2	.	1	1	.	.	.
$19845_2 = \chi_{42}$	1	3	4	1	3	.	1	2	1	.	1	.	1	.	.
$19845_3 = \chi_{43}$	.	.	.	1	.	1	.	1	.	1	.	1	.	.	1
$19845_4 = \chi_{44}$	.	.	.	.	1	.	1	.	1	1	.	.	1	1	.
$19845_5 = \chi_{45}$	.	1	2	.	2	.	.	2	2	1	1	.	1	.	.
$19845_6 = \chi_{46}$	1	.	2	2	.	.	.	2	2	1	1	1	.	.	.
$25110_1 = \chi_{47}$	2	1	4	3	1	1	.	3	2	1	1	1	.	.	.
$25110_2 = \chi_{48}$	1	2	4	1	3	.	1	2	3	1	1	.	1	.	.
$27342_1 = \chi_{49}$	1	1	4	2	2	.	.	2	2	1	1	1	1	.	.
$27342_2 = \chi_{50}$	1	.	1	2	.	1	.	2	1	1	1	1	.	.	1
$27342_3 = \chi_{51}$	.	1	1	.	2	.	1	1	2	1	1	.	1	1	.
$29295_1 = \chi_{52}$	3	1	5	4	1	1	.	3	3	1	1	1	.	.	.
$29295_2 = \chi_{53}$	1	3	5	1	4	.	1	3	3	1	1	.	1	.	.
$31744_1 = \chi_{54}$	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1
$33480_1 = \chi_{56}$	1	1	2	2	1	1	.	2	1	1	1	1	1	.	1
$33480_2 = \chi_{57}$	1	1	2	1	2	.	1	1	2	1	1	1	1	1	.
$36456_1 = \chi_{58}$	2	2	4	3	3	1	1	3	3	2	1	1	1	.	.
$36456_2 = \chi_{59}$	3	3	6	3	3	1	1	3	3	1	1	1	1	.	.
$41664_1 = \chi_{60}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

$$
\begin{aligned}
\varphi_{1} &= 1_{1} \\
\varphi_{2} &= 6_{1} \\
\varphi_{3} &= 6_{2} \\
\varphi_{4} &= 15_{1} \\
\varphi_{5} &= 15_{2} \\
\varphi_{6} &= 20_{1} \\
\varphi_{7} &= 34_{1} \\
\varphi_{8} &= 70_{1} \\
\varphi_{9} &= 70_{2} \\
\varphi_{10} &= 84_{1} \\
\varphi_{11} &= 84_{2} \\
\varphi_{12} &= 90_{1} \\
\varphi_{13} &= 90_{2} \\
\varphi_{14} &= 154_{1} \\
\varphi_{15} &= 204_{1} \\
\varphi_{16} &= 204_{2}
\end{aligned}
\qquad
\begin{aligned}
\varphi_{17} &= 384_{1} \\
\varphi_{18} &= 384_{2} \\
\varphi_{19} &= 400_{1} \\
\varphi_{20} &= 720_{1} \\
\varphi_{21} &= 720_{2} \\
\varphi_{22} &= 896_{1} \\
\varphi_{23} &= 896_{2} \\
\varphi_{24} &= 924_{1} \\
\varphi_{25} &= 924_{2} \\
\varphi_{26} &= 1960_{1} \\
\varphi_{27} &= 3114_{1} \\
\varphi_{28} &= 3984_{1} \\
\varphi_{29} &= 3984_{2} \\
\varphi_{30} &= 8064_{1} \\
\varphi_{31} &= 8064_{2}
\end{aligned}
$$