

$$HN \pmod{2}$$

	blocks	defect	matrix
$G :$	1	14	45×17
	2	4	8×3
	3	0	$3424256_1 = \chi_{46}, \varphi_{21}$

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}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$133_1 = \chi_2$	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$133_2 = \chi_3$	1	.	1	.	.	.	.	.	.	.	.	.	.	.
$760_1 = \chi_4$	.	.	.	1	.	.	.	.	.	.	.	.	.	.
$3344_1 = \chi_5$	.	.	.	.	.	.	1	.	.	.	.	.	.	.
$8778_1 = \chi_6$	2	1	.	.	1	1	1	.	.	.	.	.	.	.
$8778_2 = \chi_7$	2	.	1	.	1	1	1	.	.	.	.	.	.	.
$8910_1 = \chi_8$	2	1	1	.	1	1	1	.	.	.	.	.	.	.
$9405_1 = \chi_9$	1	.	.	1	1	1	1	.	.	.	.	.	.	.
$16929_1 = \chi_{10}$	1	1	1	1	.	.	.	1	.	.	.	.	.	.
$35112_1 = \chi_{11}$	.	.	.	1	.	.	.	.	.	.	.	1	.	.
$35112_2 = \chi_{12}$	.	.	.	1	.	.	.	.	.	.	1	.	.	.
$65835_1 = \chi_{13}$	1	1	2	.	.	.	.	.	.	1	.	1	.	.
$65835_2 = \chi_{14}$	1	2	1	.	.	.	.	.	1	.	1	.	.	.
$69255_1 = \chi_{15}$	3	2	2	1	1	1	1	1	.	.	.	.	1	.
$69255_2 = \chi_{16}$	3	2	2	1	1	1	1	1	.	.	.	.	.	1
$267520_1 = \chi_{18}$	6	2	2	1	2	2	2	2	.	.	.	.	.	.
$270864_1 = \chi_{19}$	6	2	2	1	2	2	3	2	.	.	.	.	.	.
$365750_1 = \chi_{20}$	8	3	3	3	2	2	1	1	.	.	1	1	1	1
$374528_1 = \chi_{21}$	6	2	2	2	1	1	.	.	.	.	2	1	1	1
$374528_2 = \chi_{22}$	6	2	2	2	1	1	.	.	.	.	1	2	1	1
$406296_1 = \chi_{23}$	6	4	4	1	.	.	.	2	.	.	1	1	1	1
$653125_1 = \chi_{24}$	13	7	7	3	2	2	2	4	.	.	.	.	2	2
$656250_1 = \chi_{25}$	12	6	6	3	2	1	1	3	.	.	1	1	1	2
$656250_2 = \chi_{26}$	12	6	6	3	1	2	1	3	.	.	1	1	2	1
$718200_1 = \chi_{27}$	14	9	8	2	2	2	2	4	1	.	1	.	2	2
$718200_2 = \chi_{28}$	14	8	9	2	2	2	2	4	.	1	.	1	2	2
$1053360_1 = \chi_{29}$	26	12	12	7	6	6	5	6	.	.	1	1	3	3
$1066527_1 = \chi_{30}$	19	11	11	5	2	2	1	5	.	1	1	2	3	3
$1066527_2 = \chi_{31}$	19	11	11	5	2	2	1	5	1	.	2	1	3	3
$1185030_1 = \chi_{32}$	20	12	12	5	2	2	1	4	1	1	3	3	3	3
$1354320_1 = \chi_{33}$	24	14	14	6	2	2	1	8	.	.	1	1	4	4
$1625184_1 = \chi_{38}$	30	16	16	7	4	4	4	10	.	.	1	1	4	4
$2031480_1 = \chi_{39}$	14	8	8	2	2	2	2	4	.	.	.	.	2	2
$2375000_1 = \chi_{40}$	20	8	8	6	4	4	2	2	.	.	2	2	3	3
$2407680_1 = \chi_{41}$	50	26	26	13	8	8	6	14	.	.	2	2	7	7
$2661120_1 = \chi_{42}$	48	28	28	8	5	5	4	14	1	1	2	2	7	7
$2784375_1 = \chi_{43}$	25	14	14	5	3	3	2	5	1	1	2	2	4	4
$3878280_1 = \chi_{47}$	48	27	27	10	7	7	6	12	1	1	3	3	7	7
$4156250_1 = \chi_{48}$	52	29	29	11	7	7	5	13	1	1	3	3	8	8

(Block 1:)	φ_{15}	φ_{17}	φ_{19}
$1_1 = \chi_1$	.	.	.
$133_1 = \chi_2$	.	.	.
$133_2 = \chi_3$	.	.	.
$760_1 = \chi_4$	.	.	.
$3344_1 = \chi_5$	.	.	.
$8778_1 = \chi_6$	.	.	.
$8778_2 = \chi_7$	.	.	.
$8910_1 = \chi_8$	.	.	.
$9405_1 = \chi_9$	.	.	.
$16929_1 = \chi_{10}$	.	.	.
$35112_1 = \chi_{11}$	.	.	.
$35112_2 = \chi_{12}$	.	.	.
$65835_1 = \chi_{13}$	.	.	.
$65835_2 = \chi_{14}$	.	.	.
$69255_1 = \chi_{15}$	.	.	.
$69255_2 = \chi_{16}$	.	.	.
$267520_1 = \chi_{18}$	.	1	.
$270864_1 = \chi_{19}$	.	1	.
$365750_1 = \chi_{20}$	1	.	.
$374528_1 = \chi_{21}$	1	.	.
$374528_2 = \chi_{22}$	1	.	.
$406296_1 = \chi_{23}$	.	1	.
$653125_1 = \chi_{24}$	1	1	.
$656250_1 = \chi_{25}$	1	1	.
$656250_2 = \chi_{26}$	1	1	.
$718200_1 = \chi_{27}$	1	1	.
$718200_2 = \chi_{28}$	1	1	.
$1053360_1 = \chi_{29}$	2	1	.
$1066527_1 = \chi_{30}$	2	1	.
$1066527_2 = \chi_{31}$	2	1	.
$1185030_1 = \chi_{32}$	2	1	.
$1354320_1 = \chi_{33}$	2	2	.
$1625184_1 = \chi_{38}$	2	3	.
$2031480_1 = \chi_{39}$	.	1	1
$2375000_1 = \chi_{40}$	2	.	1
$2407680_1 = \chi_{41}$	4	3	.
$2661120_1 = \chi_{42}$	4	4	.
$2784375_1 = \chi_{43}$	2	1	1
$3878280_1 = \chi_{47}$	3	3	1
$4156250_1 = \chi_{48}$	4	3	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}
$4809375_1 = \chi_{50}$	65	36	36	14	9	9	7	17	1	1	3	3	10	10
$5103000_1 = \chi_{51}$	68	38	38	14	8	8	6	18	1	1	4	4	10	10
$5103000_2 = \chi_{52}$	68	38	38	14	8	8	6	18	1	1	4	4	10	10
$5332635_1 = \chi_{53}$	71	41	41	16	8	8	5	17	2	2	6	6	11	11
$5878125_1 = \chi_{54}$	81	47	47	16	9	9	7	22	2	2	5	5	12	12

(Block 1:)	φ_{15}	φ_{17}	φ_{19}
$4809375_1 = \chi_{50}$	5	4	1
$5103000_1 = \chi_{51}$	5	5	1
$5103000_2 = \chi_{52}$	5	5	1
$5332635_1 = \chi_{53}$	6	4	1
$5878125_1 = \chi_{54}$	6	6	1

$$\begin{aligned}
\varphi_1 &= 1_1 \\
\varphi_2 &= 132_1 \\
\varphi_3 &= 132_2 \\
\varphi_4 &= 760_1 \\
\varphi_5 &= 2650_1 \\
\varphi_6 &= 2650_2 \\
\varphi_7 &= 3344_1 \\
\varphi_8 &= 15904_1 \\
\varphi_9 &= 31086_1 \\
\varphi_{10} &= 31086_2 \\
\varphi_{11} &= 34352_1 \\
\varphi_{12} &= 34352_2 \\
\varphi_{13} &= 43416_1 \\
\varphi_{14} &= 43416_2 \\
\varphi_{15} &= 177286_1 \\
\varphi_{17} &= 217130_1 \\
\varphi_{19} &= 1556136_1
\end{aligned}$$

Block 2:	φ_{16}	φ_{18}	φ_{20}
$214016_1 = \chi_{17}$	1	.	.
$1361920_1 = \chi_{34}$	.	1	.
$1361920_2 = \chi_{35}$	.	1	.
$1361920_3 = \chi_{36}$	.	1	.
$1575936_1 = \chi_{37}$	1	1	.
$2985984_1 = \chi_{44}$	.	.	1
$3200000_1 = \chi_{45}$	1	.	1
$4561920_1 = \chi_{49}$	1	1	1

$$\begin{aligned}
\varphi_{16} &= 214016_1 \\
\varphi_{18} &= 1361920_1 \\
\varphi_{20} &= 2985984_1
\end{aligned}$$