

$$HN \pmod{11}$$

	blocks	defect	matrix
$G :$	1	1	11×10
	2	1	11×10
	3	0	$3344_1 = \chi_5, \varphi_5$
	4	0	$8778_1 = \chi_6, \varphi_6$
	5	0	$8778_2 = \chi_7, \varphi_7$
	6	0	$8910_1 = \chi_8, \varphi_8$
	7	0	$9405_1 = \chi_9, \varphi_9$
	8	0	$16929_1 = \chi_{10}, \varphi_{10}$
	9	0	$35112_1 = \chi_{11}, \varphi_{11}$
	10	0	$35112_2 = \chi_{12}, \varphi_{12}$
	11	0	$65835_1 = \chi_{13}, \varphi_{13}$
	12	0	$65835_2 = \chi_{14}, \varphi_{14}$
	13	0	$214016_1 = \chi_{17}, \varphi_{17}$
	14	0	$267520_1 = \chi_{18}, \varphi_{18}$
	15	0	$270864_1 = \chi_{19}, \varphi_{19}$
	16	0	$365750_1 = \chi_{20}, \varphi_{20}$
	17	0	$374528_1 = \chi_{21}, \varphi_{21}$
	18	0	$374528_2 = \chi_{22}, \varphi_{22}$
	19	0	$406296_1 = \chi_{23}, \varphi_{23}$
	20	0	$653125_1 = \chi_{24}, \varphi_{27}$
	21	0	$1053360_1 = \chi_{29}, \varphi_{32}$
	22	0	$1066527_1 = \chi_{30}, \varphi_{33}$
	23	0	$1066527_2 = \chi_{31}, \varphi_{34}$
	24	0	$1185030_1 = \chi_{32}, \varphi_{36}$
	25	0	$1354320_1 = \chi_{33}, \varphi_{38}$
	26	0	$1625184_1 = \chi_{38}, \varphi_{41}$
	27	0	$2031480_1 = \chi_{39}, \varphi_{42}$
	28	0	$2407680_1 = \chi_{41}, \varphi_{43}$
	29	0	$2661120_1 = \chi_{42}, \varphi_{45}$
	30	0	$2784375_1 = \chi_{43}, \varphi_{46}$
	31	0	$3424256_1 = \chi_{46}, \varphi_{47}$
	32	0	$4561920_1 = \chi_{49}, \varphi_{50}$
	33	0	$5332635_1 = \chi_{53}, \varphi_{51}$
	34	0	$5878125_1 = \chi_{54}, \varphi_{52}$

Block 1:	φ_1	φ_4	φ_{26}	φ_{35}	φ_{37}	φ_{39}	φ_{40}	φ_{44}	φ_{48}	φ_{49}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.
$760_1 = \chi_4$	.	1	.	.	.	.	.	.	.	.
$1361920_1 = \chi_{34}$	1	.	.	.	.	1	.	.	.	.
$1575936_1 = \chi_{37}$	.	1	.	.	.	.	1	.	.	.
$2375000_1 = \chi_{40}$	.	.	.	1	1	.	.	.	.	.
$3200000_1 = \chi_{45}$	.	.	1	.	.	.	.	1	.	.
$3878280_1 = \chi_{47}$	.	.	.	.	1	.	.	1	.	.
$4156250_1 = \chi_{48}$	.	.	1	.	.	.	.	.	1	.
$4809375_1 = \chi_{50}$	.	.	.	1	.	.	.	.	.	1
$5103000_1 = \chi_{51}$	.	.	.	.	.	.	1	.	1	.
$5103000_2 = \chi_{52}$	.	.	.	.	.	1	.	.	.	1

$$\begin{aligned}
\varphi_1 &= 1_1 & \varphi_{39} &= 1361919_1 \\
\varphi_4 &= 760_1 & \varphi_{40} &= 1575176_1 \\
\varphi_{26} &= 628426_1 & \varphi_{44} &= 2571574_1 \\
\varphi_{35} &= 1068294_1 & \varphi_{48} &= 3527824_1 \\
\varphi_{37} &= 1306706_1 & \varphi_{49} &= 3741081_1
\end{aligned}$$

Block 2:	φ_2	φ_3	φ_{15}	φ_{16}	φ_{24}	φ_{25}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$133_1 = \chi_2$	1	.	.	.	.	.	.	.	.	.
$133_2 = \chi_3$	.	1	.	.	.	.	.	.	.	.
$69255_1 = \chi_{15}$	.	.	1	.	.	.	.	.	.	.
$69255_2 = \chi_{16}$	.	.	.	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	.	.
$1361920_2 = \chi_{35}$	.	.	.	.	1	.	.	.	1	.
$1361920_3 = \chi_{36}$	.	.	.	.	.	1	.	.	.	1
$2985984_1 = \chi_{44}$	.	.	.	.	.	.	1	1	1	1

$$\begin{aligned}
\varphi_2 &= 133_1 & \varphi_{25} &= 586995_2 \\
\varphi_3 &= 133_2 & \varphi_{28} &= 718067_1 \\
\varphi_{15} &= 69255_1 & \varphi_{29} &= 718067_2 \\
\varphi_{16} &= 69255_2 & \varphi_{30} &= 774925_1 \\
\varphi_{24} &= 586995_1 & \varphi_{31} &= 774925_2
\end{aligned}$$