

$Fi_{23} \pmod{23}$

	blocks	defect	matrix
$G :$	1	1	13×11
	2	0	$782_1 = \chi_2, \varphi_2$
	3	0	$3588_1 = \chi_3, \varphi_3$
	4	0	$5083_1 = \chi_4, \varphi_4$
	5	0	$25806_1 = \chi_5, \varphi_5$
	6	0	$60996_1 = \chi_7, \varphi_7$
	7	0	$106743_1 = \chi_8, \varphi_8$
	8	0	$111826_1 = \chi_9, \varphi_9$
	9	0	$274482_1 = \chi_{10}, \varphi_{10}$
	10	0	$279565_1 = \chi_{11}, \varphi_{11}$
	11	0	$752675_1 = \chi_{12}, \varphi_{12}$
	12	0	$789360_1 = \chi_{13}, \varphi_{13}$
	13	0	$812889_1 = \chi_{14}, \varphi_{14}$
	14	0	$837200_1 = \chi_{15}, \varphi_{15}$
	$15 = \overline{14}$	0	$837200_2 = \chi_{16}, \varphi_{16}$
	16	0	$1677390_1 = \chi_{19}, \varphi_{18}$
	17	0	$1951872_1 = \chi_{20}, \varphi_{19}$
	18	0	$2236520_1 = \chi_{21}, \varphi_{20}$
	19	0	$2322540_1 = \chi_{22}, \varphi_{21}$
	20	0	$3913910_1 = \chi_{23}, \varphi_{22}$
	21	0	$5533110_1 = \chi_{24}, \varphi_{23}$
	22	0	$6709560_1 = \chi_{25}, \varphi_{24}$
	23	0	$8783424_1 = \chi_{27}, \varphi_{26}$
	24	0	$9108736_1 = \chi_{28}, \varphi_{27}$
	$25 = \overline{24}$	0	$9108736_2 = \chi_{29}, \varphi_{28}$
	26	0	$10567557_1 = \chi_{30}, \varphi_{29}$
	27	0	$10674300_1 = \chi_{31}, \varphi_{30}$
	28	0	$12077208_1 = \chi_{32}, \varphi_{31}$
	29	0	$15096510_1 = \chi_{33}, \varphi_{32}$
	30	0	$17892160_1 = \chi_{34}, \varphi_{34}$
	31	0	$18812574_1 = \chi_{35}, \varphi_{35}$
	32	0	$20322225_1 = \chi_{36}, \varphi_{36}$
	33	0	$21135114_1 = \chi_{37}, \varphi_{37}$
	34	0	$21348600_1 = \chi_{38}, \varphi_{38}$
	35	0	$22644765_1 = \chi_{39}, \varphi_{39}$
	36	0	$26838240_1 = \chi_{40}, \varphi_{41}$
	37	0	$28464800_1 = \chi_{41}, \varphi_{42}$
	38	0	$29354325_1 = \chi_{42}, \varphi_{43}$
	39	0	$35225190_1 = \chi_{43}, \varphi_{44}$
	40	0	$37573536_1 = \chi_{44}, \varphi_{45}$

	blocks	defect	matrix
	41	0	$42270228_1 = \chi_{46}, \varphi_{46}$
	42	0	$48034350_1 = \chi_{47}, \varphi_{48}$
	43	0	$48308832_1 = \chi_{48}, \varphi_{49}$
	44	0	$55740960_1 = \chi_{49}, \varphi_{50}$
	45	0	$56360304_1 = \chi_{50}, \varphi_{51}$
	46	0	$56360304_2 = \chi_{51}, \varphi_{52}$
	47	0	$57254912_1 = \chi_{52}, \varphi_{53}$
	48	0	$58708650_1 = \chi_{53}, \varphi_{54}$
	49	0	$58708650_2 = \chi_{54}, \varphi_{55}$
	50	0	$65875680_1 = \chi_{55}, \varphi_{56}$
	51	0	$78278200_1 = \chi_{58}, \varphi_{58}$
	52	0	$93933840_1 = \chi_{59}, \varphi_{59}$
	53	0	$97976320_1 = \chi_{60}, \varphi_{60}$
	54	0	$133398252_1 = \chi_{61}, \varphi_{61}$
	55	0	$153014400_1 = \chi_{62}, \varphi_{62}$
	56	0	$153014400_2 = \chi_{63}, \varphi_{63}$
	57	0	$166559744_1 = \chi_{64}, \varphi_{64}$
	58	0	$166559744_2 = \chi_{65}, \varphi_{65}$
	59	0	$176125950_1 = \chi_{66}, \varphi_{66}$
	60	0	$176125950_2 = \chi_{67}, \varphi_{67}$
	61	0	$203802885_1 = \chi_{68}, \varphi_{68}$
	62	0	$207793431_1 = \chi_{69}, \varphi_{69}$
	63	0	$211351140_1 = \chi_{70}, \varphi_{70}$
	64	0	$216154575_1 = \chi_{71}, \varphi_{71}$
	65	0	$216770400_1 = \chi_{72}, \varphi_{73}$
	66	0	$244563462_1 = \chi_{73}, \varphi_{74}$
	67	0	$263376036_1 = \chi_{74}, \varphi_{75}$
	68	0	$264188925_1 = \chi_{75}, \varphi_{76}$
	69	0	$264536064_1 = \chi_{76}, \varphi_{77}$
	70	0	$264536064_2 = \chi_{77}, \varphi_{78}$
	71	0	$286274560_1 = \chi_{78}, \varphi_{79}$
	72	0	$287721720_1 = \chi_{79}, \varphi_{80}$
	73	0	$289027200_1 = \chi_{80}, \varphi_{82}$
	74	0	$289027200_2 = \chi_{81}, \varphi_{83}$
	75	0	$313112800_1 = \chi_{83}, \varphi_{84}$
	76	0	$313112800_2 = \chi_{84}, \varphi_{85}$
	77	0	$313112800_3 = \chi_{85}, \varphi_{86}$
	78	0	$322058880_1 = \chi_{86}, \varphi_{87}$
	79	0	$341577600_1 = \chi_{88}, \varphi_{88}$
	80	0	$343529472_1 = \chi_{89}, \varphi_{89}$

	blocks	defect	matrix
	81	0	$352251900_1 = \chi_{90}, \varphi_{90}$
	82	0	$362316240_1 = \chi_{91}, \varphi_{91}$
	83	0	$476702577_1 = \chi_{92}, \varphi_{92}$
	84	0	$526752072_1 = \chi_{96}, \varphi_{94}$
	85	0	$528377850_1 = \chi_{97}, \varphi_{95}$
	86	0	$559458900_1 = \chi_{98}, \varphi_{96}$

Block 1:	φ_1	φ_6	φ_{17}	φ_{25}	φ_{33}	φ_{40}	φ_{47}	φ_{57}	φ_{72}	φ_{81}	φ_{93}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.
$30888_1 = \chi_6$	1	1	.	.	.	.	.	.	.	.	.
$850850_1 = \chi_{17}$.	.	1	.	.	.	.	.	.	.	.
$850850_2 = \chi_{18}$.	.	1	.	.	.	.	.	.	.	.
$7468032_1 = \chi_{26}$.	1	.	1	.	.	.	.	.	.	.
$40840800_1 = \chi_{45}$	1	1	.	.	.	.	.
$73531392_1 = \chi_{56}$.	.	1	.	.	.	.	1	.	.	.
$73531392_2 = \chi_{57}$	1	1	.	.	.	.
$289103904_1 = \chi_{82}$	1	1	.	.
$336061440_1 = \chi_{87}$	1	.	.	1	.
$496897335_1 = \chi_{93}$.	.	.	1	.	.	.	.	.	.	1
$504627200_1 = \chi_{94}$	1	.	.	.	.	.	1
$504627200_2 = \chi_{95}$	1	1	.

$$\begin{array}{ll}
\varphi_1 & = 1_1 \\
\varphi_6 & = 30887_1 \\
\varphi_{17} & = 850850_1 \\
\varphi_{25} & = 7437145_1 \\
\varphi_{33} & = 15167010_1 \\
\varphi_{40} & = 25673790_1 \\
\varphi_{47} & = 47857602_1 \\
\varphi_{57} & = 72680542_1 \\
\varphi_{72} & = 216423362_1 \\
\varphi_{81} & = 288203838_1 \\
\varphi_{93} & = 489460190_1
\end{array}$$