

$${}^2E_6(2) \pmod{11}$$

	blocks	defect	matrix
$G :$	1	1	7×5
	2	1	7×5
	3	0	$48620_1 = \chi_3, \varphi_3$
	4	0	$554268_1 = \chi_4, \varphi_4$
	5	0	$815100_1 = \chi_5, \varphi_5$
	6	1	7×5
	7	0	$1828332_1 = \chi_7, \varphi_7$
	8	0	$2089164_1 = \chi_8, \varphi_8$
	9	0	$2909907_1 = \chi_9, \varphi_9$
	10	0	$2909907_2 = \chi_{10}, \varphi_{10}$
	11	0	$2909907_3 = \chi_{11}, \varphi_{11}$
	12	0	$2956096_1 = \chi_{12}, \varphi_{12}$
	13	0	$22170720_1 = \chi_{15}, \varphi_{15}$
	14	0	$29099070_1 = \chi_{16}, \varphi_{16}$
	15	0	$56581525_1 = \chi_{17}, \varphi_{17}$
	16	0	$56581525_2 = \chi_{18}, \varphi_{18}$
	17	0	$56581525_3 = \chi_{19}, \varphi_{19}$
	18	0	$81477396_1 = \chi_{21}, \varphi_{21}$
	19	0	$81477396_2 = \chi_{22}, \varphi_{22}$
	20	0	$81477396_3 = \chi_{23}, \varphi_{23}$
	21	0	$137225088_1 = \chi_{24}, \varphi_{24}$
	22	0	$145411200_1 = \chi_{25}, \varphi_{25}$
	$23 = \overline{22}$	0	$145411200_2 = \chi_{26}, \varphi_{26}$
	24	0	$145495350_1 = \chi_{27}, \varphi_{27}$
	25	0	$145495350_2 = \chi_{28}, \varphi_{28}$
	26	0	$145495350_3 = \chi_{29}, \varphi_{29}$
	27	0	$221707200_1 = \chi_{30}, \varphi_{30}$
	28	0	$278555200_1 = \chi_{31}, \varphi_{31}$
	29	0	$289697408_1 = \chi_{32}, \varphi_{32}$
	30	0	$339489150_1 = \chi_{34}, \varphi_{34}$
	31	0	$452652200_1 = \chi_{35}, \varphi_{35}$
	32	0	$452652200_2 = \chi_{36}, \varphi_{36}$
	33	0	$452652200_3 = \chi_{37}, \varphi_{37}$
	34	0	$497306304_1 = \chi_{38}, \varphi_{38}$
	35	0	$505076715_1 = \chi_{39}, \varphi_{39}$
	36	0	$581981400_1 = \chi_{40}, \varphi_{40}$
	37	0	$678978300_1 = \chi_{41}, \varphi_{41}$
	38	0	$707107401_1 = \chi_{42}, \varphi_{42}$
	39	0	$733296564_1 = \chi_{43}, \varphi_{43}$
	40	0	$814773960_1 = \chi_{45}, \varphi_{45}$

	blocks	defect	matrix
	41	0	$872972100_1 = \chi_{46}, \varphi_{46}$
	42	0	$872972100_2 = \chi_{47}, \varphi_{47}$
	43	0	$872972100_3 = \chi_{48}, \varphi_{48}$
	44	0	$1357956600_1 = \chi_{51}, \varphi_{51}$
	45	0	$1418926080_1 = \chi_{52}, \varphi_{52}$
	46	0	$2036934900_1 = \chi_{53}, \varphi_{53}$
	47	0	$2036934900_2 = \chi_{54}, \varphi_{54}$
	48	0	$2036934900_3 = \chi_{55}, \varphi_{55}$
	49	0	$2270281728_1 = \chi_{57}, \varphi_{57}$
	50	0	$2715913200_1 = \chi_{58}, \varphi_{58}$
	51 = $\overline{50}$	0	$2715913200_2 = \chi_{59}, \varphi_{59}$
	52	0	$2828429604_1 = \chi_{60}, \varphi_{60}$
	53	0	$2828429604_2 = \chi_{61}, \varphi_{61}$
	54	0	$2828429604_3 = \chi_{62}, \varphi_{62}$
	55	0	$3338649600_1 = \chi_{63}, \varphi_{63}$
	56	0	$4655851200_1 = \chi_{64}, \varphi_{64}$
	57	0	$4949751807_1 = \chi_{65}, \varphi_{65}$
	58	0	$5431826400_1 = \chi_{66}, \varphi_{66}$
	59	0	$6518191680_1 = \chi_{67}, \varphi_{67}$
	60	0	$7488847872_1 = \chi_{68}, \varphi_{68}$
	61	0	$7576150725_1 = \chi_{69}, \varphi_{69}$
	62	0	$8557215744_1 = \chi_{70}, \varphi_{70}$
	63	0	$9311702400_1 = \chi_{71}, \varphi_{71}$
	64	0	$9311702400_2 = \chi_{72}, \varphi_{72}$
	65	0	$9311702400_3 = \chi_{73}, \varphi_{73}$
	66	0	$9899503614_1 = \chi_{74}, \varphi_{74}$
	67	0	$10101534300_1 = \chi_{75}, \varphi_{75}$
	68	0	$10863652800_1 = \chi_{77}, \varphi_{77}$
	69	0	$11732745024_1 = \chi_{78}, \varphi_{78}$
	70	0	$11918979072_1 = \chi_{79}, \varphi_{79}$
	71	0	$11918979072_2 = \chi_{80}, \varphi_{80}$
	72	0	$11918979072_3 = \chi_{81}, \varphi_{81}$
	73	0	$12745441280_1 = \chi_{82}, \varphi_{82}$
	74	0	$13749310575_1 = \chi_{83}, \varphi_{83}$
	75	0	$13749310575_2 = \chi_{84}, \varphi_{84}$
	76	0	$13749310575_3 = \chi_{85}, \varphi_{85}$
	77	0	$13749310575_4 = \chi_{86}, \varphi_{86}$
	78	0	$14142148020_1 = \chi_{87}, \varphi_{87}$
	79	0	$14898723840_1 = \chi_{88}, \varphi_{88}$
	80	0	$17677685025_1 = \chi_{89}, \varphi_{89}$

	blocks	defect	matrix
	81	0	$17677685025_2 = \chi_{90}, \varphi_{90}$
	82	0	$17677685025_3 = \chi_{91}, \varphi_{91}$
	83	0	$19799007228_1 = \chi_{92}, \varphi_{92}$
	84	0	$21727305600_1 = \chi_{93}, \varphi_{93}$
	85	0	$24748759035_1 = \chi_{94}, \varphi_{94}$
	86	0	$27498621150_1 = \chi_{95}, \varphi_{95}$
	$87 = \overline{86}$	0	$27498621150_2 = \chi_{96}, \varphi_{96}$
	88	0	$27498621150_3 = \chi_{97}, \varphi_{97}$
	89	0	$27498621150_4 = \chi_{98}, \varphi_{98}$
	90	0	$27498621150_5 = \chi_{99}, \varphi_{99}$
	91	0	$28969740800_1 = \chi_{100}, \varphi_{100}$
	92	0	$28969740800_2 = \chi_{101}, \varphi_{101}$
	93	0	$28969740800_3 = \chi_{102}, \varphi_{102}$
	94	0	$31819833045_1 = \chi_{103}, \varphi_{104}$
	$95 = \overline{94}$	0	$31819833045_2 = \chi_{104}, \varphi_{105}$
	96	0	$32324909760_1 = \chi_{105}, \varphi_{106}$
	97	0	$39598014456_1 = \chi_{111}, \varphi_{108}$
	98	0	$45254873664_1 = \chi_{113}, \varphi_{109}$
	99	0	$45456904350_1 = \chi_{114}, \varphi_{110}$
	100	0	$49497518070_1 = \chi_{115}, \varphi_{111}$
	101	0	$53033055075_1 = \chi_{116}, \varphi_{112}$
	102	0	$54997242300_1 = \chi_{117}, \varphi_{113}$
	103	0	$58615481925_1 = \chi_{118}, \varphi_{114}$
	$104 = \overline{103}$	0	$58615481925_2 = \chi_{119}, \varphi_{115}$
	105	0	$60609205800_1 = \chi_{120}, \varphi_{116}$
	106	0	$65511420975_1 = \chi_{121}, \varphi_{117}$
	107	0	$65511420975_2 = \chi_{122}, \varphi_{118}$
	108	0	$85668781275_1 = \chi_{126}, \varphi_{120}$
$2.G :$	109	1	7×5
	110	1	7×5
	111	1	7×5
	112	0	$4667520_1 = \chi_{130}, \varphi_{124}$
	113	0	$17736576_1 = \chi_{132}, \varphi_{126}$
	114	0	$21909888_1 = \chi_{133}, \varphi_{127}$
	115	0	$61395840_1 = \chi_{134}, \varphi_{128}$
	116	0	$106419456_1 = \chi_{136}, \varphi_{130}$
	117	0	$289697408_2 = \chi_{137}, \varphi_{131}$
	118	0	$443414400_1 = \chi_{138}, \varphi_{132}$
	119	0	$662165504_1 = \chi_{140}, \varphi_{134}$
	120	0	$662165504_2 = \chi_{141}, \varphi_{135}$

	blocks	defect	matrix
	121	0	$869092224_1 = \chi_{142}, \varphi_{136}$
	122	0	$886828800_1 = \chi_{143}, \varphi_{137}$
	123	0	$1361048832_1 = \chi_{145}, \varphi_{139}$
	124	0	$1521172224_1 = \chi_{146}, \varphi_{140}$
	125	0	$1862340480_1 = \chi_{147}, \varphi_{141}$
	126	0	$2128389120_1 = \chi_{149}, \varphi_{144}$
	127	0	$3342662400_1 = \chi_{151}, \varphi_{145}$
	128	0	$3352212864_1 = \chi_{152}, \varphi_{146}$
	129	0	$3476368896_1 = \chi_{153}, \varphi_{147}$
	130	0	$5348259840_1 = \chi_{158}, \varphi_{148}$
	131	0	$6962288256_1 = \chi_{160}, \varphi_{151}$
	132	0	$7662200832_1 = \chi_{161}, \varphi_{152}$
	133	0	$8690922240_1 = \chi_{162}, \varphi_{153}$
	134	0	$10906255360_1 = \chi_{163}, \varphi_{154}$
	135	0	$12929963904_1 = \chi_{164}, \varphi_{156}$
	136	0	$12929963904_2 = \chi_{165}, \varphi_{157}$
	137	0	$15135211520_1 = \chi_{167}, \varphi_{158}$
	138	0	$17381844480_1 = \chi_{168}, \varphi_{159}$
	139	0	$19155502080_1 = \chi_{169}, \varphi_{160}$
	140	0	$21727305600_2 = \chi_{170}, \varphi_{161}$
	141	0	$21727305600_3 = \chi_{171}, \varphi_{162}$
	142	0	$21727305600_4 = \chi_{172}, \varphi_{163}$
	143	0	$22583328768_1 = \chi_{173}, \varphi_{164}$
	144	0	$23465490048_1 = \chi_{174}, \varphi_{165}$
	145	0	$24831206400_1 = \chi_{175}, \varphi_{166}$
	$146 = \overline{145}$	0	$24831206400_2 = \chi_{176}, \varphi_{167}$
	147	0	$27880652800_1 = \chi_{179}, \varphi_{169}$
	148	0	$28969740800_4 = \chi_{180}, \varphi_{170}$
	149	0	$33949238400_1 = \chi_{182}, \varphi_{172}$
	150	0	$33949238400_2 = \chi_{183}, \varphi_{173}$
	151	0	$35916566400_1 = \chi_{184}, \varphi_{174}$
	152	0	$37838028800_1 = \chi_{185}, \varphi_{175}$
	153	0	$38109367296_1 = \chi_{186}, \varphi_{176}$
	$154 = \overline{153}$	0	$38109367296_2 = \chi_{187}, \varphi_{177}$
	155	0	$44696171520_1 = \chi_{188}, \varphi_{178}$
	$156 = \overline{155}$	0	$44696171520_2 = \chi_{189}, \varphi_{179}$
	157	0	$44757567360_1 = \chi_{190}, \varphi_{180}$
	158	0	$47675916288_1 = \chi_{191}, \varphi_{181}$
	159	0	$49401031680_1 = \chi_{192}, \varphi_{182}$
	160	0	$49662412800_1 = \chi_{193}, \varphi_{183}$

	blocks	defect	matrix
	161	0	$55621902336_1 = \chi_{194}, \varphi_{184}$
	162	0	$57939481600_1 = \chi_{196}, \varphi_{186}$
	163	0	$64649819520_1 = \chi_{198}, \varphi_{187}$
	164	0	$65181916800_1 = \chi_{199}, \varphi_{188}$
	165	0	$90509747328_1 = \chi_{201}, \varphi_{189}$
	166	0	$103524220800_1 = \chi_{202}, \varphi_{190}$

Block 1:	φ_1	φ_{14}	φ_{49}	φ_{56}	φ_{103}	
$1_1 = \chi_1$	1	.	.	.	.	$\varphi_1 = 1_1$
$20155200_1 = \chi_{14}$	1	1	.	.	.	$\varphi_{14} = 20155199_1$
$1003871232_1 = \chi_{49}$	.	1	1	.	.	$\varphi_{49} = 983716033_1$
$2217779200_1 = \chi_{56}$	.	.	.	1	.	$\varphi_{56} = 2217779200_1$
$32514244608_1 = \chi_{106}$	.	.	1	.	1	$\varphi_{103} = 31530528575_1$
$33748307775_1 = \chi_{107}$	.	.	.	1	1	
$33748307775_2 = \chi_{108}$	.	.	.	1	1	

Block 2:	φ_2	φ_{13}	φ_{20}	φ_{50}	φ_{119}	
$1938_1 = \chi_2$	1	.	.	.	.	$\varphi_2 = 1938_1$
$4331600_1 = \chi_{13}$	.	1	.	.	.	$\varphi_{13} = 4331600_1$
$62741952_1 = \chi_{20}$	1	.	1	.	.	$\varphi_{20} = 62740014_1$
$1289932800_1 = \chi_{50}$	.	.	1	1	.	$\varphi_{50} = 1227192786_1$
$67496615550_1 = \chi_{123}$	.	1	.	.	1	$\varphi_{119} = 67492283950_1$
$67496615550_2 = \chi_{124}$	.	1	.	.	1	
$68719476736_1 = \chi_{125}$	.	.	.	1	1	

Block 6:	φ_6	φ_{33}	φ_{44}	φ_{76}	φ_{107}	
$1322685_1 = \chi_6$	1	.	.	.	.	$\varphi_6 = 1322685_1$
$333316620_1 = \chi_{33}$	1	1	.	.	.	$\varphi_{33} = 331993935_1$
$740703600_1 = \chi_{44}$	.	.	1	.	.	$\varphi_{44} = 740703600_1$
$10666131840_1 = \chi_{76}$	.	1	.	1	.	$\varphi_{76} = 10334137905_1$
$33748307775_3 = \chi_{109}$	.	.	1	.	1	$\varphi_{107} = 33007604175_1$
$33748307775_4 = \chi_{110}$	.	.	1	.	1	
$43341742080_1 = \chi_{112}$	.	.	.	1	1	

Block 109:	φ_{121}	φ_{125}	φ_{133}	φ_{143}	φ_{149}
$2432_1 = \chi_{127}$	1	.	.	.	.
$5374720_1 = \chi_{131}$	1	1	.	.	.
$526722560_1 = \chi_{139}$	.	1	1	.	.
$2606204160_1 = \chi_{150}$	.	.	1	1	.
$3792402432_1 = \chi_{154}$	.	.	.	.	1
$3792402432_2 = \chi_{155}$	.	.	.	.	1
$5877256320_1 = \chi_{159}$	.	.	.	1	1

$$\begin{aligned}
\varphi_{121} &= 2432_1 \\
\varphi_{125} &= 5372288_1 \\
\varphi_{133} &= 521350272_1 \\
\varphi_{143} &= 2084853888_1 \\
\varphi_{149} &= 3792402432_1
\end{aligned}$$

Block 110:	φ_{122}	φ_{138}	φ_{150}	φ_{155}	φ_{185}
$45696_1 = \chi_{128}$	1	.	.	.	.
$1175451264_1 = \chi_{144}$	1	1	.	.	.
$5267225600_1 = \chi_{156}$	.	.	1	.	.
$5267225600_2 = \chi_{157}$	.	.	1	.	.
$13208911872_1 = \chi_{166}$	.	1	.	1	.
$61953196032_1 = \chi_{197}$	.	.	1	.	1
$68719476736_2 = \chi_{200}$	.	.	.	1	1

$$\begin{aligned}
\varphi_{122} &= 45696_1 \\
\varphi_{138} &= 1175405568_1 \\
\varphi_{150} &= 5267225600_1 \\
\varphi_{155} &= 12033506304_1 \\
\varphi_{185} &= 56685970432_1
\end{aligned}$$

Block 111:	φ_{123}	φ_{129}	φ_{142}	φ_{168}	φ_{171}
$537472_1 = \chi_{129}$	1	.	.	.	.
$90419328_1 = \chi_{135}$	1	1	.	.	.
$1975209600_1 = \chi_{148}$	.	1	1	.	.
$26968195072_1 = \chi_{177}$	.	.	.	1	.
$26968195072_2 = \chi_{178}$	.	.	.	1	.
$32514244608_2 = \chi_{181}$	.	.	1	.	1
$57597111936_1 = \chi_{195}$	.	.	.	1	1

$$\begin{aligned}
\varphi_{123} &= 537472_1 \\
\varphi_{129} &= 89881856_1 \\
\varphi_{142} &= 1885327744_1 \\
\varphi_{168} &= 26968195072_1 \\
\varphi_{171} &= 30628916864_1
\end{aligned}$$