

$$O_{10}^-(2) \pmod{5}$$

	blocks	defect	matrix
$G :$	1	2	20×14
	2	2	16×10
	3	1	5×4
	4	1	5×4
	$5 = \overline{4}$	1	5×4
	6	0	$5950_1 = \chi_{11}, \varphi_{11}$
	$7 = \overline{6}$	0	$5950_2 = \chi_{12}, \varphi_{12}$
	8	1	5×4
	9	1	5×4
	10	0	$7700_1 = \chi_{15}, \varphi_{15}$
	11	0	$9350_1 = \chi_{16}, \varphi_{16}$
	12	1	5×4
	13	0	$32725_1 = \chi_{27}, \varphi_{28}$
	14	0	$56100_1 = \chi_{32}, \varphi_{31}$
	15	0	$65450_1 = \chi_{34}, \varphi_{33}$
	16	0	$65450_2 = \chi_{35}, \varphi_{34}$
	$17 = \overline{16}$	0	$65450_3 = \chi_{36}, \varphi_{35}$
	18	0	$71400_1 = \chi_{37}, \varphi_{36}$
	$19 = \overline{18}$	0	$71400_2 = \chi_{38}, \varphi_{37}$
	20	0	$123200_1 = \chi_{47}, \varphi_{47}$
	21	0	$130900_1 = \chi_{48}, \varphi_{48}$
	22	0	$130900_2 = \chi_{49}, \varphi_{49}$
	23	0	$130900_3 = \chi_{50}, \varphi_{50}$
	24	0	$130900_4 = \chi_{51}, \varphi_{51}$
	25	0	$130900_5 = \chi_{52}, \varphi_{52}$
	$26 = \overline{25}$	0	$130900_6 = \chi_{53}, \varphi_{53}$
	27	0	$190400_1 = \chi_{58}, \varphi_{57}$
	$28 = \overline{27}$	0	$190400_2 = \chi_{59}, \varphi_{58}$
	29	1	4×2
	30	0	$261800_1 = \chi_{66}, \varphi_{60}$
	31	0	$261800_2 = \chi_{67}, \varphi_{61}$
	32	0	$261800_3 = \chi_{68}, \varphi_{62}$
	33	0	$294525_1 = \chi_{69}, \varphi_{64}$
	34	0	$294525_2 = \chi_{70}, \varphi_{65}$
	35	0	$294525_3 = \chi_{71}, \varphi_{66}$
	$36 = \overline{35}$	0	$294525_4 = \chi_{72}, \varphi_{67}$
	37	0	$523600_1 = \chi_{82}, \varphi_{75}$
	$38 = \overline{37}$	0	$523600_2 = \chi_{83}, \varphi_{76}$
	39	0	$589050_1 = \chi_{88}, \varphi_{78}$
	$40 = \overline{39}$	0	$589050_2 = \chi_{89}, \varphi_{79}$

	blocks	defect	matrix
	41	0	$589050_3 = \chi_{90}, \varphi_{80}$
	$42 = \overline{41}$	0	$589050_4 = \chi_{91}, \varphi_{81}$
	43	0	$598400_1 = \chi_{92}, \varphi_{82}$
	44	0	$722925_1 = \chi_{98}, \varphi_{84}$
	$45 = \overline{44}$	0	$722925_2 = \chi_{99}, \varphi_{85}$
	46	0	$722925_3 = \chi_{100}, \varphi_{86}$
	$47 = \overline{46}$	0	$722925_4 = \chi_{101}, \varphi_{87}$
	48	0	$722925_5 = \chi_{102}, \varphi_{88}$
	$49 = \overline{48}$	0	$722925_6 = \chi_{103}, \varphi_{89}$
	50	0	$1047200_1 = \chi_{109}, \varphi_{91}$
	51	0	$1136025_1 = \chi_{112}, \varphi_{92}$
	52	0	$1178100_1 = \chi_{113}, \varphi_{93}$
	53	0	$1403325_1 = \chi_{114}, \varphi_{94}$
	54	0	$1403325_2 = \chi_{115}, \varphi_{95}$

Block 1:	φ_1	φ_2	φ_7	φ_8	φ_9	φ_{17}	φ_{18}	φ_{26}	φ_{27}	φ_{38}	φ_{40}	φ_{46}	φ_{72}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.
$154_1 = \chi_2$	1	1	.	.	.	.	.	.	.	.	.	.	.
$748_1 = \chi_7$	.	.	1	.	.	.	.	.	.	.	.	.	.
$2244_1 = \chi_8$	1	.	.	1	.	.	.	.	.	.	.	.	.
$5236_1 = \chi_9$	.	1	.	.	1	.	.	.	.	.	.	.	.
$10692_1 = \chi_{17}$	.	.	1	.	.	1	.	.	.	.	.	.	.
$15147_1 = \chi_{20}$	.	.	.	1	.	.	1	.	.	.	.	.	.
$22848_1 = \chi_{24}$	.	.	.	.	.	1	1	.	.	.	.	.	.
$35904_1 = \chi_{28}$	.	.	.	.	1	.	.	1	.	.	.	.	.
$41888_1 = \chi_{31}$	.	.	.	.	.	1	.	.	1	.	.	.	.
$83776_1 = \chi_{40}$	1	1	.	1	.	.	.	.	.	.	1	.	.
$106029_2 = \chi_{44}$	.	.	.	.	.	.	.	1	.	1	.	.	.
$171072_1 = \chi_{56}$	.	.	1	.	.	1	1	.	1	.	.	1	.
$191488_1 = \chi_{60}$	.	.	1	.	.	.	.	.	.	1	.	1	.
$212058_1 = \chi_{61}$	.	.	.	1	.	.	1	.	.	.	1	1	.
$424116_2 = \chi_{79}$	.	.	.	.	.	.	.	1	.	.	.	.	1
$630784_1 = \chi_{95}$	.	1	.	.	1	.	.	.	.	.	1	.	.
$848232_1 = \chi_{106}$	.	.	.	.	.	.	.	.	1	1	1	1	.
$969408_1 = \chi_{108}$	.	.	.	.	.	.	.	.	1	.	.	.	1
$1048576_1 = \chi_{110}$	.	.	.	.	1	.	.	1	.	1	.	.	1

(Block 1:)	φ_{77}		
$1_1 = \chi_1$	.		
$154_1 = \chi_2$	.		
$748_1 = \chi_7$	.	$\varphi_1 =$	1_1
$2244_1 = \chi_8$	.	$\varphi_2 =$	153_1
$5236_1 = \chi_9$	.	$\varphi_7 =$	748_1
$10692_1 = \chi_{17}$	.	$\varphi_8 =$	2243_1
$15147_1 = \chi_{20}$	.	$\varphi_9 =$	5083_1
$22848_1 = \chi_{24}$	.	$\varphi_{17} =$	9944_1
$35904_1 = \chi_{28}$	.	$\varphi_{18} =$	12904_1
$41888_1 = \chi_{31}$	.	$\varphi_{26} =$	30821_1
$83776_1 = \chi_{40}$	.	$\varphi_{27} =$	31944_1
$106029_2 = \chi_{44}$	.	$\varphi_{38} =$	75208_1
$171072_1 = \chi_{56}$	.	$\varphi_{40} =$	81379_1
$191488_1 = \chi_{60}$	.	$\varphi_{46} =$	115532_1
$212058_1 = \chi_{61}$	.	$\varphi_{72} =$	393295_1
$424116_2 = \chi_{79}$	.	$\varphi_{77} =$	544169_1
$630784_1 = \chi_{95}$	1		
$848232_1 = \chi_{106}$	1		
$969408_1 = \chi_{108}$	1		
$1048576_1 = \chi_{110}$	1		

Block 2:	φ_3	φ_{10}	φ_{21}	φ_{22}	φ_{23}	φ_{41}	φ_{42}	φ_{43}	φ_{54}	φ_{69}
$187_1 = \chi_3$	1	.	.	.	.	.	.	.	.	.
$5236_2 = \chi_{10}$	.	1	.	.	.	.	.	.	.	.
$15708_1 = \chi_{21}$	1	.	.	.	1	.	.	.	.	.
$15708_2 = \chi_{22}$	1	.	.	1	.	.	.	.	.	.
$15708_3 = \chi_{23}$	1	.	1	.	.	.	.	.	.	.
$106029_1 = \chi_{43}$	.	1	.	.	.	.	.	1	.	.
$106029_3 = \chi_{45}$	.	1	.	.	.	.	1	.	.	.
$106029_4 = \chi_{46}$	.	1	.	.	.	1	.	.	.	.
$181764_1 = \chi_{57}$	1	.	1	1	1	.	.	.	1	.
$251328_1 = \chi_{63}$	.	.	.	.	1	.	.	1	1	.
$251328_2 = \chi_{64}$	.	.	.	1	.	.	1	.	1	.
$251328_3 = \chi_{65}$	.	.	1	.	.	1	.	.	1	.
$424116_1 = \chi_{78}$	.	.	.	.	.	.	.	1	.	1
$424116_3 = \chi_{80}$	.	.	.	.	.	.	1	.	.	1
$424116_4 = \chi_{81}$	.	.	.	.	.	1	.	.	.	1
$765952_1 = \chi_{104}$	.	1	.	.	.	1	1	1	1	1

$$\begin{array}{ll}
\varphi_3 = 187_1 & \varphi_{41} = 100793_1 \\
\varphi_{10} = 5236_1 & \varphi_{42} = 100793_2 \\
\varphi_{21} = 15521_1 & \varphi_{43} = 100793_3 \\
\varphi_{22} = 15521_2 & \varphi_{54} = 135014_1 \\
\varphi_{23} = 15521_3 & \varphi_{69} = 323323_1
\end{array}$$

Block 3:	φ_4	φ_{20}	φ_{32}	φ_{63}
$340_1 = \chi_4$	1	.	.	.
$14960_1 = \chi_{19}$	1	1	.	.
$59840_1 = \chi_{33}$	.	.	1	.
$302940_1 = \chi_{73}$	.	1	.	1
$348160_1 = \chi_{75}$	.	.	1	1

$$\begin{array}{ll}
\varphi_4 = 340_1 \\
\varphi_{20} = 14620_1 \\
\varphi_{32} = 59840_1 \\
\varphi_{63} = 288320_1
\end{array}$$

Block 4:	φ_6	φ_{24}	φ_{45}	φ_{73}
$595_1 = \chi_5$	1	.	.	.
$26180_1 = \chi_{25}$	1	1	.	.
$104720_1 = \chi_{41}$	.	.	1	.
$530145_3 = \chi_{86}$	.	1	.	1
$609280_1 = \chi_{93}$	.	.	1	1

$$\begin{array}{ll}
\varphi_6 = 595_2 \\
\varphi_{24} = 25585_1 \\
\varphi_{45} = 104720_2 \\
\varphi_{73} = 504560_1
\end{array}$$

Block 5:	φ_5	φ_{25}	φ_{44}	φ_{74}
$595_2 = \chi_6$	1	.	.	.
$26180_2 = \chi_{26}$	1	1	.	.
$104720_2 = \chi_{42}$	.	.	1	.
$530145_4 = \chi_{87}$	.	1	.	1
$609280_2 = \chi_{94}$	.	.	1	1

$$\begin{array}{ll}
\varphi_5 = 595_1 \\
\varphi_{25} = 25585_2 \\
\varphi_{44} = 104720_1 \\
\varphi_{74} = 504560_2
\end{array}$$

Block 8:	φ_{13}	φ_{29}	φ_{55}	φ_{70}
$6545_1 = \chi_{13}$	1	.	.	.
$39270_2 = \chi_{30}$	.	1	.	.
$157080_1 = \chi_{54}$	1	.	1	.
$418880_1 = \chi_{76}$	.	1	.	1
$530145_2 = \chi_{85}$	.	.	1	1

$$\begin{array}{ll}
\varphi_{13} = 6545_1 \\
\varphi_{29} = 39270_1 \\
\varphi_{55} = 150535_1 \\
\varphi_{70} = 379610_1
\end{array}$$

Block 9:	φ_{14}	φ_{30}	φ_{56}	φ_{71}	
$6545_2 = \chi_{14}$	1	.	.	.	$\varphi_{14} = 6545_2$
$39270_1 = \chi_{29}$	.	1	.	.	$\varphi_{30} = 39270_2$
$157080_2 = \chi_{55}$	1	.	1	.	$\varphi_{56} = 150535_2$
$418880_2 = \chi_{77}$	.	1	.	1	$\varphi_{71} = 379610_2$
$530145_1 = \chi_{84}$	.	.	1	1	

Block 12:	φ_{19}	φ_{39}	φ_{68}	φ_{90}	
$13090_1 = \chi_{18}$	1	.	.	.	$\varphi_{19} = 13090_1$
$78540_1 = \chi_{39}$	.	1	.	.	$\varphi_{39} = 78540_1$
$314160_1 = \chi_{74}$	1	.	1	.	$\varphi_{68} = 301070_1$
$837760_1 = \chi_{105}$	.	1	.	1	$\varphi_{90} = 759220_1$
$1060290_1 = \chi_{111}$	.	.	1	1	

Block 29:	φ_{59}	φ_{83}	
$227205_1 = \chi_{62}$	1	.	$\varphi_{59} = 227205_1$
$681615_1 = \chi_{96}$	.	1	$\varphi_{83} = 681615_1$
$681615_2 = \chi_{97}$	.	1	
$908820_1 = \chi_{107}$	1	1	