

$A_{13.2} \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	20×14
	2	2	20×14
	3	2	20×14
	4	1	5×4
	5	1	5×4
	6	1	5×4
	7	1	5×4
	8	1	5×4
	9	1	5×4
	10	1	5×4
	11	0	$3575_1 = \chi_{26,0}, \varphi_{27,0}$

	blocks	defect	matrix
$2.G :$	12	0	$3575_2 = \chi_{26,1}, \varphi_{27,1}$
	13	0	$7800_1 = \chi_{40,0}, \varphi_{38,0}$
	14	0	$7800_2 = \chi_{40,1}, \varphi_{38,1}$
	15	0	$21450_1 = \chi_{55,0}, \varphi_{41,0}$
	16	0	$21450_2 = \chi_{55,1}, \varphi_{41,1}$
	17	2	11×5
	18	2	13×10
	19	0	$8800_1 = \chi_{65,0}, \varphi_{57,0}$
	$20 = \overline{19}$	0	$8800_2 = \chi_{65,1}, \varphi_{57,1}$
	21	0	$41600_1 = \chi_{81+}, \varphi_{58+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{4,1}$	$\varphi_{5,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{14,1}$	$\varphi_{15,0}$	$\varphi_{16,1}$	$\varphi_{20,0}$	$\varphi_{21,0}$	$\varphi_{23,0}$	$\varphi_{24,1}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.	.
$66_2 = \chi_{4,1}$	.	1	.	.	.	.	.	.	.	.	.	.
$429_2 = \chi_{7,1}$	.	1	.	1	.	.	.	.	.	.	.	.
$429_3 = \chi_{8,0}$	1	.	.	.	1	.	.	.	.	.	.	.
$572_1 = \chi_{13,0}$	.	.	1	.	1	.	.	.	.	.	.	.
$792_1 = \chi_{14,0}$	.	.	.	.	.	.	1	.	.	.	.	.
$936_2 = \chi_{15,1}$	.	.	.	1	.	1	.	.	.	.	.	.
$1287_2 = \chi_{16,1}$	.	.	.	1	.	.	.	1	.	.	.	.
$2574_1 = \chi_{19,0}$	1	.	1	.	1	.	.	.	1	.	.	.
$3003_1 = \chi_{22,0}$	.	.	.	.	.	.	1	.	.	1	.	.
$3432_4 = \chi_{24,1}$	.	1	1	.	.	.	.	.	.	.	.	1
$3432_5 = \chi_{25,0}$	1	.	.	.	.	.	.	1	.	.	1	.
$4004_2 = \chi_{28,1}$	.	.	.	.	.	1	.	.	.	.	.	.
$4212_1 = \chi_{29,0}$	.	.	.	.	.	.	.	.	1	1	.	.
$5148_2 = \chi_{34,1}$	.	1	.	1	.	1	.	1	.	.	.	1
$6864_1 = \chi_{38,0}$	1	.	1	.	.	.	.	.	1	1	1	.
$9009_2 = \chi_{44,1}$	.	.	.	.	.	.	1	.	.	.	.	.
$10296_1 = \chi_{46,0}$	.	.	.	.	.	.	1	.	.	1	1	.
$11583_2 = \chi_{48,1}$	.	.	1	.	.	.	.	1	.	.	1	1
$12012_4 = \chi_{50,1}$	.	.	.	.	.	1	.	.	.	.	.	1

(Block 1:)	$\varphi_{26,1}$	$\varphi_{32,0}$		
$1_1 = \chi_{1,0}$	.	.	$\varphi_{1,0} =$	1_1
$66_2 = \chi_{4,1}$	.	.	$\varphi_{4,1} =$	66_2
$429_2 = \chi_{7,1}$	.	.	$\varphi_{5,0} =$	144_1
$429_3 = \chi_{8,0}$	.	.	$\varphi_{9,1} =$	363_2
$572_1 = \chi_{13,0}$	.	.	$\varphi_{10,0} =$	428_1
$792_1 = \chi_{14,0}$	.	.	$\varphi_{14,1} =$	573_2
$936_2 = \chi_{15,1}$	.	.	$\varphi_{15,0} =$	792_1
$1287_2 = \chi_{16,1}$	.	.	$\varphi_{16,1} =$	924_3
$2574_1 = \chi_{19,0}$	.	.	$\varphi_{20,0} =$	2001_1
$3003_1 = \chi_{22,0}$	.	.	$\varphi_{21,0} =$	2211_1
$3432_4 = \chi_{24,1}$	.	.	$\varphi_{23,0} =$	2507_1
$3432_5 = \chi_{25,0}$	.	.	$\varphi_{24,1} =$	3222_2
$4004_2 = \chi_{28,1}$	1	.	$\varphi_{26,1} =$	3431_2
$4212_1 = \chi_{29,0}$	.	.	$\varphi_{32,0} =$	4786_1
$5148_2 = \chi_{34,1}$	.	.		
$6864_1 = \chi_{38,0}$	.	.		
$9009_2 = \chi_{44,1}$	1	1		
$10296_1 = \chi_{46,0}$	.	1		
$11583_2 = \chi_{48,1}$	.	1		
$12012_4 = \chi_{50,1}$	1	1		

Block 2:	$\varphi_{1,1}$	$\varphi_{4,0}$	$\varphi_{5,1}$	$\varphi_{9,0}$	$\varphi_{10,1}$	$\varphi_{14,0}$	$\varphi_{15,1}$	$\varphi_{16,0}$	$\varphi_{20,1}$	$\varphi_{21,1}$	$\varphi_{23,1}$	$\varphi_{24,0}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.	.	.
$66_1 = \chi_{4,0}$	.	1	.	.	.	.	.	.	.	.	.	.
$429_1 = \chi_{7,0}$	.	1	.	1	.	.	.	.	.	.	.	.
$429_4 = \chi_{8,1}$	1	.	.	.	1	.	.	.	.	.	.	.
$572_2 = \chi_{13,1}$	.	.	1	.	1	.	.	.	.	.	.	.
$792_2 = \chi_{14,1}$	.	.	.	.	.	.	1	.	.	.	.	.
$936_1 = \chi_{15,0}$	.	.	.	1	.	1	.	.	.	.	.	.
$1287_1 = \chi_{16,0}$	.	.	.	1	.	.	.	1	.	.	.	.
$2574_2 = \chi_{19,1}$	1	.	1	.	1	.	.	.	1	.	.	.
$3003_2 = \chi_{22,1}$	.	.	.	.	.	.	1	.	.	1	.	.
$3432_3 = \chi_{24,0}$	.	1	1	.	.	.	.	.	.	.	.	1
$3432_6 = \chi_{25,1}$	1	.	.	.	.	.	.	1	.	.	1	.
$4004_1 = \chi_{28,0}$	.	.	.	.	.	1	.	.	.	.	.	.
$4212_2 = \chi_{29,1}$	.	.	.	.	.	.	.	.	1	1	.	.
$5148_1 = \chi_{34,0}$	.	1	.	1	.	1	.	1	.	.	.	1
$6864_2 = \chi_{38,1}$	1	.	1	.	.	.	.	.	1	1	1	.
$9009_1 = \chi_{44,0}$	.	.	.	.	.	.	1	.	.	.	.	.
$10296_2 = \chi_{46,1}$	.	.	.	.	.	.	1	.	.	1	1	.
$11583_1 = \chi_{48,0}$	.	.	1	.	.	.	.	1	.	.	1	1
$12012_3 = \chi_{50,0}$	.	.	.	.	.	1	.	.	.	.	.	1

(Block 2:)	$\varphi_{26,0}$	$\varphi_{32,1}$		
$1_2 = \chi_{1,1}$	.	.	$\varphi_{1,1} =$	1_2
$66_1 = \chi_{4,0}$	.	.	$\varphi_{4,0} =$	66_1
$429_1 = \chi_{7,0}$	.	.	$\varphi_{5,1} =$	144_2
$429_4 = \chi_{8,1}$	.	.	$\varphi_{9,0} =$	363_1
$572_2 = \chi_{13,1}$	.	.	$\varphi_{10,1} =$	428_2
$792_2 = \chi_{14,1}$	.	.	$\varphi_{14,0} =$	573_1
$936_1 = \chi_{15,0}$	.	.	$\varphi_{15,1} =$	792_2
$1287_1 = \chi_{16,0}$	.	.	$\varphi_{16,0} =$	924_2
$2574_2 = \chi_{19,1}$	.	.	$\varphi_{20,1} =$	2001_2
$3003_2 = \chi_{22,1}$	.	.	$\varphi_{21,1} =$	2211_2
$3432_3 = \chi_{24,0}$	.	.	$\varphi_{23,1} =$	2507_2
$3432_6 = \chi_{25,1}$	.	.	$\varphi_{24,0} =$	3222_1
$4004_1 = \chi_{28,0}$	1	.	$\varphi_{26,0} =$	3431_1
$4212_2 = \chi_{29,1}$	.	.	$\varphi_{32,1} =$	4786_2
$5148_1 = \chi_{34,0}$	.	.		
$6864_2 = \chi_{38,1}$	.	.		
$9009_1 = \chi_{44,0}$	1	1		
$10296_2 = \chi_{46,1}$	.	1		
$11583_1 = \chi_{48,0}$	.	1		
$12012_3 = \chi_{50,0}$	1	1		

Block 3:	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{6,0}$	$\varphi_{6,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	φ_{11+}	$\varphi_{22,0}$	$\varphi_{22,1}$	$\varphi_{25,0}$	$\varphi_{25,1}$	φ_{34+}
$12_1 = \chi_{2,0}$	1	.	.	.	.	.	.	.	.	.	.	.
$12_2 = \chi_{2,1}$	.	1	.	.	.	.	.	.	.	.	.	.
$208_1 = \chi_{5,0}$	1	.	1	.	.	.	.	.	.	.	.	.
$208_2 = \chi_{5,1}$	.	1	.	1	.	.	.	.	.	.	.	.
$429_5 = \chi_{9,0}$	.	.	1	.	1	.	.	.	.	.	.	.
$429_6 = \chi_{9,1}$	.	.	.	1	.	1	.	.	.	.	.	.
$924_1 = \chi_{10+}$	.	.	.	.	.	.	1	.	.	.	.	.
$2574_3 = \chi_{20,0}$	1	.	.	.	.	1	.	1	.	.	.	.
$2574_4 = \chi_{20,1}$	.	1	.	.	1	.	.	.	1	.	.	.
$3432_1 = \chi_{23,0}$	.	.	1	.	.	.	.	.	.	1	.	.
$3432_2 = \chi_{23,1}$	.	.	.	1	.	.	.	.	.	.	1	.
$6006_1 = \chi_{36,0}$	1	.	1	.	1	.	.	1	.	1	.	.
$6006_2 = \chi_{36,1}$	.	1	.	1	.	1	.	.	1	.	1	.
$7371_1 = \chi_{39,0}$	.	.	.	.	.	.	1	.	.	.	.	.
$7371_2 = \chi_{39,1}$	.	.	.	.	.	.	1	.	.	.	.	.
$16016_1 = \chi_{41+}$	.	.	.	.	1	1	.	1	1	.	.	1
$12012_1 = \chi_{49,0}$	.	.	.	.	.	.	.	1	.	1	.	.
$12012_2 = \chi_{49,1}$	.	.	.	.	.	.	.	.	1	.	1	.
$20592_1 = \chi_{54,0}$	.	.	.	.	.	.	1	1	.	.	.	1
$20592_2 = \chi_{54,1}$	.	.	.	.	.	.	1	.	1	.	.	1

(Block 3:)	$\varphi_{37,0}$	$\varphi_{37,1}$		
$12_1 = \chi_{2,0}$	.	.		
$12_2 = \chi_{2,1}$	.	.		
$208_1 = \chi_{5,0}$	.	.	$\varphi_{2,0} =$	12_1
$208_2 = \chi_{5,1}$	.	.	$\varphi_{2,1} =$	12_2
$429_5 = \chi_{9,0}$	.	.	$\varphi_{6,0} =$	196_1
$429_6 = \chi_{9,1}$	.	.	$\varphi_{6,1} =$	196_2
$924_1 = \chi_{10+}$	.	.	$\varphi_{8,0} =$	233_1
$2574_3 = \chi_{20,0}$	.	.	$\varphi_{8,1} =$	233_2
$2574_4 = \chi_{20,1}$	.	.	$\varphi_{11+} =$	924_1
$3432_1 = \chi_{23,0}$	.	.	$\varphi_{22,0} =$	2329_1
$3432_2 = \chi_{23,1}$	.	.	$\varphi_{22,1} =$	2329_2
$6006_1 = \chi_{36,0}$	.	.	$\varphi_{25,0} =$	3236_1
$6006_2 = \chi_{36,1}$	.	.	$\varphi_{25,1} =$	3236_2
$7371_1 = \chi_{39,0}$	1	.	$\varphi_{34+} =$	10892_1
$7371_2 = \chi_{39,1}$	.	1	$\varphi_{37,0} =$	6447_1
$16016_1 = \chi_{41+}$	.	.	$\varphi_{37,1} =$	6447_2
$12012_1 = \chi_{49,0}$	1	.		
$12012_2 = \chi_{49,1}$	.	1		
$20592_1 = \chi_{54,0}$	1	.		
$20592_2 = \chi_{54,1}$	.	1		

Block 4:	$\varphi_{3,0}$	$\varphi_{30,1}$	$\varphi_{33,0}$	$\varphi_{36,0}$		
$65_1 = \chi_{3,0}$	1	.	.	.	$\varphi_{3,0} =$	65_1
$4290_2 = \chi_{30,1}$	.	1	.	.	$\varphi_{30,1} =$	4290_4
$6435_1 = \chi_{37,0}$	1	.	.	1	$\varphi_{33,0} =$	5070_1
$9360_2 = \chi_{45,1}$	.	1	1	.	$\varphi_{36,0} =$	6370_1
$11440_1 = \chi_{47,0}$	.	.	1	1		

Block 5:	$\varphi_{3,1}$	$\varphi_{30,0}$	$\varphi_{33,1}$	$\varphi_{36,1}$		
$65_2 = \chi_{3,1}$	1	.	.	.	$\varphi_{3,1} =$	65_2
$4290_1 = \chi_{30,0}$	.	1	.	.	$\varphi_{30,0} =$	4290_3
$6435_2 = \chi_{37,1}$	1	.	.	1	$\varphi_{33,1} =$	5070_2
$9360_1 = \chi_{45,0}$	.	1	1	.	$\varphi_{36,1} =$	6370_2
$11440_2 = \chi_{47,1}$	.	.	1	1		

Block 6:	$\varphi_{7,0}$	$\varphi_{13,1}$	$\varphi_{31,1}$	$\varphi_{39,0}$
$220_1 = \chi_{6,0}$	1	.	.	.
$495_2 = \chi_{12,1}$	.	1	.	.
$5005_2 = \chi_{33,1}$	.	1	1	.
$8580_2 = \chi_{43,0}$	1	.	.	1
$12870_1 = \chi_{51,0}$	.	.	1	1

$$\begin{aligned}\varphi_{7,0} &= 220_1 \\ \varphi_{13,1} &= 495_2 \\ \varphi_{31,1} &= 4510_2 \\ \varphi_{39,0} &= 8360_1\end{aligned}$$

Block 7:	$\varphi_{7,1}$	$\varphi_{13,0}$	$\varphi_{31,0}$	$\varphi_{39,1}$
$220_2 = \chi_{6,1}$	1	.	.	.
$495_1 = \chi_{12,0}$	.	1	.	.
$5005_1 = \chi_{33,0}$	.	1	1	.
$8580_3 = \chi_{43,1}$	1	.	.	1
$12870_2 = \chi_{51,1}$	.	.	1	1

$$\begin{aligned}\varphi_{7,1} &= 220_2 \\ \varphi_{13,0} &= 495_1 \\ \varphi_{31,0} &= 4510_1 \\ \varphi_{39,1} &= 8360_2\end{aligned}$$

Block 8:	$\varphi_{17,0}$	$\varphi_{19,0}$	$\varphi_{28,1}$	$\varphi_{40,1}$
$1365_1 = \chi_{17,0}$	1	.	.	.
$2860_1 = \chi_{21,0}$	1	1	.	.
$3640_2 = \chi_{27,1}$	.	.	1	.
$15015_2 = \chi_{52,1}$	.	1	.	1
$17160_2 = \chi_{53,1}$	.	.	1	1

$$\begin{aligned}\varphi_{17,0} &= 1365_1 \\ \varphi_{19,0} &= 1495_1 \\ \varphi_{28,1} &= 3640_2 \\ \varphi_{40,1} &= 13520_2\end{aligned}$$

Block 9:	$\varphi_{17,1}$	$\varphi_{19,1}$	$\varphi_{28,0}$	$\varphi_{40,0}$
$1365_2 = \chi_{17,1}$	1	.	.	.
$2860_2 = \chi_{21,1}$	1	1	.	.
$3640_1 = \chi_{27,0}$	.	.	1	.
$15015_1 = \chi_{52,0}$	.	1	.	1
$17160_1 = \chi_{53,0}$	.	.	1	1

$$\begin{aligned}\varphi_{17,1} &= 1365_2 \\ \varphi_{19,1} &= 1495_2 \\ \varphi_{28,0} &= 3640_1 \\ \varphi_{40,0} &= 13520_1\end{aligned}$$

Block 10:	$\varphi_{18,0}$	$\varphi_{18,1}$	$\varphi_{29,0}$	$\varphi_{29,1}$
$1430_1 = \chi_{18,0}$	1	.	.	.
$1430_2 = \chi_{18,1}$	.	1	.	.
$8580_1 = \chi_{31+}$	.	.	1	1
$5720_1 = \chi_{35,0}$	1	.	1	.
$5720_2 = \chi_{35,1}$	.	1	.	1

$$\begin{aligned}\varphi_{18,0} &= 1430_1 \\ \varphi_{18,1} &= 1430_2 \\ \varphi_{29,0} &= 4290_1 \\ \varphi_{29,1} &= 4290_2\end{aligned}$$

Block 17:	φ_{42+}	φ_{47+}	φ_{49+}	φ_{52+}	φ_{54+}	
$64_1 = \chi_{56+}$	1	.	.	.	.	
$4576_1 = \chi_{63,0}$	.	1	.	.	.	
$4576_2 = \chi_{63,1}$	.	1	.	.	.	$\varphi_{42+} = 64_1$
$4928_1 = \chi_{64,0}$	1	.	1	.	.	$\varphi_{47+} = 4576_1$
$4928_2 = \chi_{64,1}$	1	.	1	.	.	$\varphi_{49+} = 4864_1$
$18304_1 = \chi_{67+}$	.	.	1	.	1	$\varphi_{52+} = 9024_1$
$18304_2 = \chi_{69+}$	2	2	.	1	.	$\varphi_{54+} = 13440_1$
$9504_1 = \chi_{71,0}$	1	1	1	.	.	
$9504_2 = \chi_{71,1}$	1	1	1	.	.	
$22464_1 = \chi_{72+}$	.	.	.	1	1	
$32032_1 = \chi_{79+}$	2	1	1	1	1	

Block 18:	$\varphi_{44,0}$	$\varphi_{44,1}$	$\varphi_{45,0}$	$\varphi_{45,1}$	$\varphi_{46,0}$	$\varphi_{46,1}$	$\varphi_{51,0}$	$\varphi_{51,1}$	$\varphi_{56,0}$	$\varphi_{56,1}$
$352_1 = \chi_{58,0}$	1	.	.	.	.	.	.	.	.	.
$352_2 = \chi_{58,1}$	.	1	.	.	.	.	.	.	.	.
$1728_1 = \chi_{59,0}$	1	.	.	.	1	.	.	.	.	.
$1728_2 = \chi_{59,1}$	.	1	.	.	.	1	.	.	.	.
$4992_1 = \chi_{60+}$	.	.	1	1	1	1	.	.	.	.
$4224_1 = \chi_{62,0}$	.	.	.	.	1	.	1	.	.	.
$4224_2 = \chi_{62,1}$	.	.	.	.	.	1	.	1	.	.
$9152_1 = \chi_{66,0}$	.	.	1	.	.	.	.	.	1	.
$9152_2 = \chi_{66,1}$	.	.	.	1	.	.	.	.	.	1
$22464_2 = \chi_{74+}$	1	1	.	.	.	.	1	1	1	1
$13728_1 = \chi_{76,0}$	.	.	.	.	.	.	1	1	1	.
$13728_2 = \chi_{76,1}$	.	.	.	.	.	.	1	1	.	1
$27456_1 = \chi_{77+}$	1	1	1	1	1	1	1	1	1	1

$$\begin{array}{ll}
\varphi_{44,0} = 352_1 & \varphi_{46,1} = 1376_2 \\
\varphi_{44,1} = 352_2 & \varphi_{51,0} = 2848_1 \\
\varphi_{45,0} = 1120_1 & \varphi_{51,1} = 2848_2 \\
\varphi_{45,1} = 1120_2 & \varphi_{56,0} = 8032_1 \\
\varphi_{46,0} = 1376_1 & \varphi_{56,1} = 8032_2
\end{array}$$