

$$O_8^+(3).4 \pmod{5}$$

	blocks	defect	matrix
$G :$	1	2	20×14
	2	2	20×14
	3	1	5×4
	4	1	5×4
	5	1	5×4
	6	0	$300_1 = \chi_{8,0}, \varphi_{8,0}$
	7	0	$300_2 = \chi_{8,1}, \varphi_{8,1}$
	8	0	$300_3 = \chi_{8,2}, \varphi_{8,2}$
	$9 = \overline{7}$	0	$300_4 = \chi_{8,3}, \varphi_{8,3}$
	10	0	$9100_1 = \chi_{12+}, \varphi_{12+}$
	11	0	$9450_1 = \chi_{23,0}, \varphi_{23,0}$
	12	0	$9450_2 = \chi_{23,1}, \varphi_{23,1}$
	13	0	$9450_3 = \chi_{23,2}, \varphi_{23,2}$
	$14 = \overline{12}$	0	$9450_4 = \chi_{23,3}, \varphi_{23,3}$
	15	0	$17550_1 = \chi_{24,0}, \varphi_{24,0}$
	16	0	$17550_2 = \chi_{24,1}, \varphi_{24,1}$
	17	0	$17550_3 = \chi_{24,2}, \varphi_{24,2}$
	$18 = \overline{16}$	0	$17550_4 = \chi_{24,3}, \varphi_{24,3}$
	19	0	$18200_1 = \chi_{25,0}, \varphi_{25,0}$
	20	0	$18200_2 = \chi_{25,1}, \varphi_{25,1}$
	21	0	$18200_3 = \chi_{25,2}, \varphi_{25,2}$
	$22 = \overline{20}$	0	$18200_4 = \chi_{25,3}, \varphi_{25,3}$
	23	0	$72800_1 = \chi_{26+}, \varphi_{26+}$
	24	0	$46800_1 = \chi_{30,0+}, \varphi_{31,0+}$
	25	0	$46800_2 = \chi_{30,1+}, \varphi_{31,1+}$
	26	0	$93600_1 = \chi_{31+}, \varphi_{32+}$
	27	0	$27300_1 = \chi_{37,0}, \varphi_{37,0}$
	28	0	$27300_2 = \chi_{37,1}, \varphi_{37,1}$
	29	0	$27300_3 = \chi_{37,2}, \varphi_{37,2}$
	$30 = \overline{28}$	0	$27300_4 = \chi_{37,3}, \varphi_{37,3}$
	31	1	4×2
	32	1	4×2
	33	1	4×2
	34	0	$81900_1 = \chi_{44,0+}, \varphi_{44,0+}$
	35	0	$81900_2 = \chi_{44,1+}, \varphi_{44,1+}$
	36	0	$163800_1 = \chi_{45+}, \varphi_{45+}$
	37	0	$218400_1 = \chi_{59+}, \varphi_{59+}$
	38	0	$54600_1 = \chi_{63,0}, \varphi_{63,0}$
	39	0	$54600_2 = \chi_{63,1}, \varphi_{63,1}$
	40	0	$54600_3 = \chi_{63,2}, \varphi_{63,2}$

	blocks	defect	matrix
	41 = $\overline{39}$	0	54600 ₄ = $\chi_{63,3}, \varphi_{63,3}$
	42	0	109200 ₁ = $\chi_{64,0+}, \varphi_{64,0+}$
	43	0	109200 ₂ = $\chi_{64,1+}, \varphi_{64,1+}$
	44	0	163800 ₂ = $\chi_{69,0}, \varphi_{66,0}$
	45	0	163800 ₃ = $\chi_{69,1}, \varphi_{66,1}$
	46	0	163800 ₄ = $\chi_{69,2}, \varphi_{66,2}$
	47 = $\overline{45}$	0	163800 ₅ = $\chi_{69,3}, \varphi_{66,3}$
	48	0	327600 ₁ = $\chi_{70,0+}, \varphi_{67,0+}$
	49	0	327600 ₂ = $\chi_{70,1+}, \varphi_{67,1+}$
	50	0	737100 ₁ = $\chi_{72+}, \varphi_{75+}$
	51	0	218700 ₁ = $\chi_{82,0}, \varphi_{79,0}$
	52	0	218700 ₂ = $\chi_{82,1}, \varphi_{79,1}$
	53	0	218700 ₃ = $\chi_{82,2}, \varphi_{79,2}$
	54 = $\overline{52}$	0	218700 ₄ = $\chi_{82,3}, \varphi_{79,3}$
	55	0	245700 ₁ = $\chi_{89,0}, \varphi_{86,0}$
	56	0	245700 ₂ = $\chi_{89,1}, \varphi_{86,1}$
	57	0	245700 ₃ = $\chi_{89,2}, \varphi_{86,2}$
	58 = $\overline{56}$	0	245700 ₄ = $\chi_{89,3}, \varphi_{86,3}$
	59	0	291200 ₁ = $\chi_{96,0}, \varphi_{87,0}$
	60	0	291200 ₂ = $\chi_{96,1}, \varphi_{87,1}$
	61	0	291200 ₃ = $\chi_{96,2}, \varphi_{87,2}$
	62 = $\overline{60}$	0	291200 ₄ = $\chi_{96,3}, \varphi_{87,3}$
	63	0	1164800 ₁ = $\chi_{97+}, \varphi_{88+}$
	64	0	332800 ₁ = $\chi_{101,0}, \varphi_{92,0}$
	65	0	332800 ₂ = $\chi_{101,1}, \varphi_{92,1}$
	66	0	332800 ₃ = $\chi_{101,2}, \varphi_{92,2}$
	67 = $\overline{65}$	0	332800 ₄ = $\chi_{101,3}, \varphi_{92,3}$
	68	0	332800 ₅ = $\chi_{102,0}, \varphi_{93,0}$
	69	0	332800 ₆ = $\chi_{102,1}, \varphi_{93,1}$
	70	0	332800 ₇ = $\chi_{102,2}, \varphi_{93,2}$
	71 = $\overline{69}$	0	332800 ₈ = $\chi_{102,3}, \varphi_{93,3}$
	72	0	665600 ₁ = $\chi_{103,0+}, \varphi_{94,0+}$
	73	0	665600 ₂ = $\chi_{103,1+}, \varphi_{94,1+}$
	74	0	491400 ₁ = $\chi_{111,0}, \varphi_{97,0}$
	75	0	491400 ₂ = $\chi_{111,1}, \varphi_{97,1}$
	76	0	491400 ₃ = $\chi_{111,2}, \varphi_{97,2}$
	77 = $\overline{75}$	0	491400 ₄ = $\chi_{111,3}, \varphi_{97,3}$
	78	0	716800 ₁ = $\chi_{113,0}, \varphi_{98,0}$
	79	0	716800 ₂ = $\chi_{113,1}, \varphi_{98,1}$
	80	0	716800 ₃ = $\chi_{113,2}, \varphi_{98,2}$

	blocks	defect	matrix
	$81 = \overline{79}$	0	$716800_4 = \chi_{113,3}, \varphi_{98,3}$
	82	0	$716800_5 = \chi_{114,0}, \varphi_{99,0}$
	83	0	$716800_6 = \chi_{114,1}, \varphi_{99,1}$
	84	0	$716800_7 = \chi_{114,2}, \varphi_{99,2}$
	$85 = \overline{83}$	0	$716800_8 = \chi_{114,3}, \varphi_{99,3}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,2}$	$\varphi_{9,0}$	$\varphi_{9,2}$	$\varphi_{10,0+}$	$\varphi_{16,0}$	$\varphi_{16,2}$	$\varphi_{30,0}$	$\varphi_{30,2}$	$\varphi_{50,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$1_3 = \chi_{1,2}$	.	1	.	.	.	.	.	.	.	.
$819_1 = \chi_{9,0}$	1	.	1	.	.	.	.	.	.	.
$819_3 = \chi_{9,2}$	.	1	.	1	.	.	.	.	.	.
$1638_1 = \chi_{10,0+}$	1	1	.	.	1	.	.	.	.	.
$2808_1 = \chi_{16,0}$	.	.	.	.	.	1	.	.	.	.
$2808_3 = \chi_{16,2}$	.	.	.	.	.	.	1	.	.	.
$24192_1 = \chi_{36,0}$	1	.	1	.	1	.	.	1	.	.
$24192_3 = \chi_{36,2}$	.	1	.	1	1	.	.	.	1	.
$46592_1 = \chi_{50,0}$	.	.	.	.	.	.	1	.	.	1
$46592_3 = \chi_{50,2}$	.	.	.	.	.	1	.	.	.	.
$93184_2 = \chi_{51,1+}$	.	.	.	.	.	1	1	.	.	.
$66339_1 = \chi_{66,0}$	.	.	1	.	.	.	.	1	.	.
$66339_3 = \chi_{66,2}$	.	.	.	1	.	.	.	.	1	1
$132678_1 = \chi_{67,0+}$	.	.	.	.	1	.	.	1	1	.
$419328_1 = \chi_{105,0}$	.	.	.	.	.	.	.	.	.	1
$419328_3 = \chi_{105,2}$	.	.	.	.	.	.	.	.	.	.
$838656_1 = \chi_{106,0+}$	.	.	.	.	.	.	.	.	.	.
$531441_1 = \chi_{112,0}$	.	.	.	.	.	1	.	1	.	.
$531441_3 = \chi_{112,2}$	.	.	.	.	.	.	1	.	1	1

(Block 1:)	$\varphi_{50,2}$	$\varphi_{51,1+}$	$\varphi_{96,0}$	$\varphi_{96,2}$	
$1_1 = \chi_{1,0}$	.	.	.	.	
$1_3 = \chi_{1,2}$	.	.	.	.	
$819_1 = \chi_{9,0}$	.	.	.	.	$\varphi_{1,0} = 1_1$
$819_3 = \chi_{9,2}$	.	.	.	.	$\varphi_{1,2} = 1_3$
$1638_1 = \chi_{10,0+}$	.	.	.	.	$\varphi_{9,0} = 818_1$
$2808_1 = \chi_{16,0}$	.	.	.	.	$\varphi_{9,2} = 818_3$
$2808_3 = \chi_{16,2}$	.	.	.	.	$\varphi_{10,0+} = 1636_1$
$24192_1 = \chi_{36,0}$	.	.	.	.	$\varphi_{16,0} = 2808_1$
$24192_3 = \chi_{36,2}$	.	.	.	.	$\varphi_{16,2} = 2808_3$
$46592_1 = \chi_{50,0}$	.	.	.	.	$\varphi_{30,0} = 21737_1$
$46592_3 = \chi_{50,2}$	1	.	.	.	$\varphi_{30,2} = 21737_3$
$93184_2 = \chi_{51,1+}$	.	1	.	.	$\varphi_{50,0} = 43784_1$
$66339_1 = \chi_{66,0}$	1	.	.	.	$\varphi_{50,2} = 43784_3$
$66339_3 = \chi_{66,2}$	.	.	.	.	$\varphi_{51,1+} = 87568_2$
$132678_1 = \chi_{67,0+}$	.	1	.	.	$\varphi_{96,0} = 375544_1$
$419328_1 = \chi_{105,0}$	.	.	1	.	$\varphi_{96,2} = 375544_3$
$419328_3 = \chi_{105,2}$	1	.	.	1	
$838656_1 = \chi_{106,0+}$	.	1	1	1	
$531441_1 = \chi_{112,0}$	1	1	.	1	
$531441_3 = \chi_{112,2}$	.	1	1	.	

Block 2:	$\varphi_{1,1}$	$\varphi_{1,3}$	$\varphi_{9,1}$	$\varphi_{9,3}$	$\varphi_{10,1+}$	$\varphi_{16,1}$	$\varphi_{16,3}$	$\varphi_{30,1}$	$\varphi_{30,3}$	$\varphi_{50,1}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.
$1_4 = \chi_{1,3}$	.	1	.	.	.	.	.	.	.	.
$819_2 = \chi_{9,1}$	1	.	1	.	.	.	.	.	.	.
$819_4 = \chi_{9,3}$	.	1	.	1	.	.	.	.	.	.
$1638_2 = \chi_{10,1+}$	1	1	.	.	1	.	.	.	.	.
$2808_2 = \chi_{16,1}$	.	.	.	.	.	1	.	.	.	.
$2808_4 = \chi_{16,3}$	.	.	.	.	.	.	1	.	.	.
$24192_2 = \chi_{36,1}$	1	.	1	.	1	.	.	1	.	.
$24192_4 = \chi_{36,3}$	.	1	.	1	1	.	.	.	1	.
$46592_2 = \chi_{50,1}$	.	.	.	.	.	.	1	.	.	1
$46592_4 = \chi_{50,3}$	.	.	.	.	.	1	.	.	.	.
$93184_1 = \chi_{51,0+}$	.	.	.	.	.	1	1	.	.	.
$66339_2 = \chi_{66,1}$	.	.	1	.	.	.	.	1	.	.
$66339_4 = \chi_{66,3}$	.	.	.	1	.	.	.	.	1	1
$132678_2 = \chi_{67,1+}$	.	.	.	.	1	.	.	1	1	.
$419328_2 = \chi_{105,1}$	.	.	.	.	.	.	.	.	.	1
$419328_4 = \chi_{105,3}$	.	.	.	.	.	.	.	.	.	.
$838656_2 = \chi_{106,1+}$	.	.	.	.	.	.	.	.	.	.
$531441_2 = \chi_{112,1}$	.	.	.	.	.	1	.	1	.	.
$531441_4 = \chi_{112,3}$	.	.	.	.	.	.	1	.	1	1

(Block 2:)	$\varphi_{50,3}$	$\varphi_{51,0+}$	$\varphi_{96,1}$	$\varphi_{96,3}$	
$1_2 = \chi_{1,1}$	.	.	.	.	$\varphi_{1,1} = 1_2$
$1_4 = \chi_{1,3}$	.	.	.	.	$\varphi_{1,3} = 1_4$
$819_2 = \chi_{9,1}$	.	.	.	.	$\varphi_{9,1} = 818_2$
$819_4 = \chi_{9,3}$	.	.	.	.	$\varphi_{9,3} = 818_4$
$1638_2 = \chi_{10,1+}$	.	.	.	.	$\varphi_{10,1+} = 1636_2$
$2808_2 = \chi_{16,1}$	.	.	.	.	$\varphi_{16,1} = 2808_2$
$2808_4 = \chi_{16,3}$	.	.	.	.	$\varphi_{16,3} = 2808_4$
$24192_2 = \chi_{36,1}$	.	.	.	.	$\varphi_{36,1} = 21737_2$
$24192_4 = \chi_{36,3}$	.	.	.	.	$\varphi_{36,3} = 21737_4$
$46592_2 = \chi_{50,1}$	.	.	.	.	$\varphi_{50,1} = 43784_2$
$46592_4 = \chi_{50,3}$	1	.	.	.	$\varphi_{50,3} = 43784_4$
$93184_1 = \chi_{51,0+}$	.	1	.	.	$\varphi_{51,0+} = 87568_1$
$66339_2 = \chi_{66,1}$	1	.	.	.	$\varphi_{66,1} = 375544_2$
$66339_4 = \chi_{66,3}$	.	.	.	.	$\varphi_{66,3} = 375544_4$
$132678_2 = \chi_{67,1+}$	.	1	.	.	
$419328_2 = \chi_{105,1}$	.	.	1	.	
$419328_4 = \chi_{105,3}$	1	.	.	1	
$838656_2 = \chi_{106,1+}$	.	1	1	1	
$531441_2 = \chi_{112,1}$	1	1	.	1	
$531441_4 = \chi_{112,3}$	.	1	1	.	

Block 3:	$\varphi_{2,0+}$	$\varphi_{17,0+}$	$\varphi_{53,0+}$	$\varphi_{69,0+}$	
$520_1 = \chi_{2,0+}$	1	.	.	.	$\varphi_{2,0+} = 520_1$
$10920_1 = \chi_{17,0+}$	.	1	.	.	$\varphi_{17,0+} = 10920_1$
$98280_2 = \chi_{53,1+}$	1	.	1	.	$\varphi_{53,0+} = 97760_1$
$379080_2 = \chi_{76,1+}$	.	1	.	1	$\varphi_{69,0+} = 368160_1$
$465920_2 = \chi_{83,1+}$	.	.	1	1	

Block 4:	$\varphi_{2,1+}$	$\varphi_{17,1+}$	$\varphi_{53,1+}$	$\varphi_{69,1+}$	
$520_2 = \chi_{2,1+}$	1	.	.	.	$\varphi_{2,1+} = 520_2$
$10920_2 = \chi_{17,1+}$	.	1	.	.	$\varphi_{17,1+} = 10920_2$
$98280_1 = \chi_{53,0+}$	1	.	1	.	$\varphi_{53,1+} = 97760_2$
$379080_1 = \chi_{76,0+}$	.	1	.	1	$\varphi_{69,1+} = 368160_2$
$465920_1 = \chi_{83,0+}$	.	.	1	1	

Block 5:	φ_{3+}	φ_{18+}	φ_{54+}	φ_{70+}	
$1040_1 = \chi_{3+}$	1	.	.	.	$\varphi_{3+} = 1040_1$
$21840_1 = \chi_{18+}$	.	1	.	.	$\varphi_{18+} = 21840_1$
$196560_1 = \chi_{54+}$	1	.	1	.	$\varphi_{54+} = 195520_1$
$758160_1 = \chi_{77+}$	.	1	.	1	$\varphi_{70+} = 736320_1$
$931840_1 = \chi_{84+}$	.	.	1	1	

Block 31:	$\varphi_{38,0+}$	$\varphi_{80,1+}$	
$58240_1 = \chi_{38,0+}$	1	.	$\varphi_{38,0+} = 58240_1$
$524160_1 = \chi_{90,0+}$	1	1	$\varphi_{80,1+} = 465920_2$
$465920_4 = \chi_{108,1}$	.	1	
$465920_6 = \chi_{108,3}$	.	1	

Block 32:	$\varphi_{38,1+}$	$\varphi_{80,0+}$	
$58240_2 = \chi_{38,1+}$	1	.	$\varphi_{38,1+} = 58240_2$
$524160_2 = \chi_{90,1+}$	1	1	$\varphi_{80,0+} = 465920_1$
$465920_3 = \chi_{108,0}$	.	1	
$465920_5 = \chi_{108,2}$	.	1	

Block 33:	φ_{39+}	φ_{81+}	
$116480_1 = \chi_{39+}$	1	.	$\varphi_{39+} = 116480_1$
$1048320_1 = \chi_{91+}$	1	1	$\varphi_{81+} = 931840_1$
$931840_2 = \chi_{109,0+}$	.	1	
$931840_3 = \chi_{109,1+}$	.	1	