

$O_8^+(3).2_2 \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	20×14
	2	1	5×4
	3	1	5×4
	4	1	5×4
	5	1	5×4
	6	1	5×4
	7	1	5×4
	8	0	$300_1 = \chi_{8,0}, \varphi_{8,0}$
	9	0	$300_2 = \chi_{8,1}, \varphi_{8,1}$
	10	0	$2275_1 = \chi_{12,0}, \varphi_{12,0}$
	11	0	$2275_2 = \chi_{12,1}, \varphi_{12,1}$
	12	0	$2275_3 = \chi_{13,0}, \varphi_{13,0}$
	13	0	$2275_4 = \chi_{13,1}, \varphi_{13,1}$
	14	0	$4550_1 = \chi_{14+}, \varphi_{14+}$
	15	0	$9450_1 = \chi_{23,0}, \varphi_{23,0}$
	16	0	$9450_2 = \chi_{23,1}, \varphi_{23,1}$
	17	0	$17550_1 = \chi_{24,0}, \varphi_{24,0}$
	18	0	$17550_2 = \chi_{24,1}, \varphi_{24,1}$
	19	0	$18200_1 = \chi_{25,0}, \varphi_{25,0}$
	20	0	$18200_2 = \chi_{25,1}, \varphi_{25,1}$
	21	0	$18200_3 = \chi_{26,0}, \varphi_{26,0}$
	22	0	$18200_4 = \chi_{26,1}, \varphi_{26,1}$
	23	0	$18200_5 = \chi_{27,0}, \varphi_{27,0}$
	24	0	$18200_6 = \chi_{27,1}, \varphi_{27,1}$
	25	0	$36400_1 = \chi_{28+}, \varphi_{28+}$
	26	0	$23400_1 = \chi_{30,0}, \varphi_{31,0}$
	27	0	$23400_2 = \chi_{30,1}, \varphi_{31,1}$
	28	0	$46800_1 = \chi_{31+}, \varphi_{32+}$
	29	0	$23400_3 = \chi_{33,0}, \varphi_{34,0}$
	30	0	$23400_4 = \chi_{33,1}, \varphi_{34,1}$
	31	0	$46800_2 = \chi_{34+}, \varphi_{35+}$
	32	0	$27300_1 = \chi_{37,0}, \varphi_{37,0}$
	33	0	$27300_2 = \chi_{37,1}, \varphi_{37,1}$
	34	1	5×4
	35	1	5×4
	36	1	5×4
	37	0	$40950_1 = \chi_{44,0}, \varphi_{44,0}$
	38	0	$40950_2 = \chi_{44,1}, \varphi_{44,1}$
	39	0	$81900_1 = \chi_{45+}, \varphi_{45+}$
	40	0	$40950_3 = \chi_{47,0}, \varphi_{47,0}$

	blocks	defect	matrix
	41	0	$40950_4 = \chi_{47,1}, \varphi_{47,1}$
	42	0	$81900_2 = \chi_{48+}, \varphi_{48+}$
	43	0	$54600_1 = \chi_{59,0}, \varphi_{59,0}$
	44	0	$54600_2 = \chi_{59,1}, \varphi_{59,1}$
	45	0	$54600_3 = \chi_{60,0}, \varphi_{60,0}$
	46	0	$54600_4 = \chi_{60,1}, \varphi_{60,1}$
	47	0	$109200_1 = \chi_{61+}, \varphi_{61+}$
	48	0	$54600_5 = \chi_{63,0}, \varphi_{63,0}$
	49	0	$54600_6 = \chi_{63,1}, \varphi_{63,1}$
	50	0	$109200_2 = \chi_{64+}, \varphi_{64+}$
	51	0	$163800_1 = \chi_{69,0}, \varphi_{66,0}$
	52	0	$163800_2 = \chi_{69,1}, \varphi_{66,1}$
	53	0	$327600_1 = \chi_{70+}, \varphi_{67+}$
	54	0	$184275_1 = \chi_{72,0}, \varphi_{75,0}$
	55	0	$184275_2 = \chi_{72,1}, \varphi_{75,1}$
	56	0	$184275_3 = \chi_{73,0}, \varphi_{76,0}$
	57	0	$184275_4 = \chi_{73,1}, \varphi_{76,1}$
	58	0	$368550_1 = \chi_{74+}, \varphi_{77+}$
	59	0	$218700_1 = \chi_{82,0}, \varphi_{79,0}$
	60	0	$218700_2 = \chi_{82,1}, \varphi_{79,1}$
	61	0	$245700_1 = \chi_{89,0}, \varphi_{86,0}$
	62	0	$245700_2 = \chi_{89,1}, \varphi_{86,1}$
	63	0	$291200_1 = \chi_{96,0}, \varphi_{87,0}$
	64	0	$291200_2 = \chi_{96,1}, \varphi_{87,1}$
	65	0	$291200_3 = \chi_{97,0}, \varphi_{88,0}$
	66	0	$291200_4 = \chi_{97,1}, \varphi_{88,1}$
	67	0	$291200_5 = \chi_{98,0}, \varphi_{89,0}$
	68	0	$291200_6 = \chi_{98,1}, \varphi_{89,1}$
	69	0	$582400_1 = \chi_{99+}, \varphi_{90+}$
	70	0	$332800_1 = \chi_{101,0}, \varphi_{92,0}$
	71	0	$332800_2 = \chi_{101,1}, \varphi_{92,1}$
	72	0	$332800_3 = \chi_{102,0}, \varphi_{93,0}$
	73	0	$332800_4 = \chi_{102,1}, \varphi_{93,1}$
	74	0	$665600_1 = \chi_{103+}, \varphi_{94+}$
	75	0	$491400_1 = \chi_{111,0}, \varphi_{97,0}$
	76	0	$491400_2 = \chi_{111,1}, \varphi_{97,1}$
	77	0	$716800_1 = \chi_{113,0}, \varphi_{98,0}$
	78	0	$716800_2 = \chi_{113,1}, \varphi_{98,1}$
	79	0	$716800_3 = \chi_{114,0}, \varphi_{99,0}$
	80	0	$716800_4 = \chi_{114,1}, \varphi_{99,1}$

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

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

Block 2:	$\varphi_{2,0}$	$\varphi_{20,1}$	$\varphi_{53,1}$	$\varphi_{72,1}$	
$260_1 = \chi_{2,0}$	1	.	.	.	$\varphi_{2,0} = 260_1$
$5460_4 = \chi_{20,1}$	.	1	.	.	$\varphi_{20,1} = 5460_4$
$49140_2 = \chi_{53,1}$	1	.	1	.	$\varphi_{53,1} = 48880_2$
$189540_4 = \chi_{79,1}$	.	1	.	1	$\varphi_{72,1} = 184080_4$
$232960_4 = \chi_{86,1}$	.	.	1	1	

Block 3:	$\varphi_{2,1}$	$\varphi_{20,0}$	$\varphi_{53,0}$	$\varphi_{72,0}$	
$260_2 = \chi_{2,1}$	1	.	.	.	$\varphi_{2,1} = 260_2$
$5460_3 = \chi_{20,0}$	.	1	.	.	$\varphi_{20,0} = 5460_3$
$49140_1 = \chi_{53,0}$	1	.	1	.	$\varphi_{53,0} = 48880_1$
$189540_3 = \chi_{79,0}$	.	1	.	1	$\varphi_{72,0} = 184080_3$
$232960_3 = \chi_{86,0}$	.	.	1	1	

Block 4:	φ_{3+}	φ_{21+}	φ_{54+}	φ_{73+}
$520_1 = \chi_{3+}$	1	.	.	.
$10920_2 = \chi_{21+}$	.	1	.	.
$98280_1 = \chi_{54+}$	1	.	1	.
$379080_2 = \chi_{80+}$	.	1	.	1
$465920_2 = \chi_{87+}$	.	.	1	1

$$\begin{aligned}
\varphi_{3+} &= 520_1 \\
\varphi_{21+} &= 10920_2 \\
\varphi_{54+} &= 97760_1 \\
\varphi_{73+} &= 368160_2
\end{aligned}$$

Block 5:	$\varphi_{5,0}$	$\varphi_{17,1}$	$\varphi_{56,0}$	$\varphi_{69,0}$
$260_3 = \chi_{5,0}$	1	.	.	.
$5460_2 = \chi_{17,1}$	.	1	.	.
$49140_3 = \chi_{56,0}$	1	.	1	.
$189540_1 = \chi_{76,0}$	.	1	.	1
$232960_1 = \chi_{83,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{5,0} &= 260_3 \\
\varphi_{17,1} &= 5460_2 \\
\varphi_{56,0} &= 48880_3 \\
\varphi_{69,0} &= 184080_1
\end{aligned}$$

Block 6:	$\varphi_{5,1}$	$\varphi_{17,0}$	$\varphi_{56,1}$	$\varphi_{69,1}$
$260_4 = \chi_{5,1}$	1	.	.	.
$5460_1 = \chi_{17,0}$	.	1	.	.
$49140_4 = \chi_{56,1}$	1	.	1	.
$189540_2 = \chi_{76,1}$	.	1	.	1
$232960_2 = \chi_{83,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{5,1} &= 260_4 \\
\varphi_{17,0} &= 5460_1 \\
\varphi_{56,1} &= 48880_4 \\
\varphi_{69,1} &= 184080_2
\end{aligned}$$

Block 7:	φ_{6+}	φ_{18+}	φ_{57+}	φ_{70+}
$520_2 = \chi_{6+}$	1	.	.	.
$10920_1 = \chi_{18+}$	.	1	.	.
$98280_2 = \chi_{57+}$	1	.	1	.
$379080_1 = \chi_{77+}$	.	1	.	1
$465920_1 = \chi_{84+}$	.	.	1	1

$$\begin{aligned}
\varphi_{6+} &= 520_2 \\
\varphi_{18+} &= 10920_1 \\
\varphi_{57+} &= 97760_2 \\
\varphi_{70+} &= 368160_1
\end{aligned}$$

Block 34:	$\varphi_{38,0}$	$\varphi_{41,1}$	$\varphi_{80,0}$	$\varphi_{83,1}$
$29120_1 = \chi_{38,0}$	1	.	.	.
$29120_4 = \chi_{41,1}$	.	1	.	.
$262080_1 = \chi_{90,0}$	1	.	1	.
$262080_4 = \chi_{93,1}$	.	1	.	1
$465920_4 = \chi_{108,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{38,0} &= 29120_1 \\
\varphi_{41,1} &= 29120_4 \\
\varphi_{80,0} &= 232960_1 \\
\varphi_{83,1} &= 232960_4
\end{aligned}$$

Block 35:	$\varphi_{38,1}$	$\varphi_{41,0}$	$\varphi_{80,1}$	$\varphi_{83,0}$	
$29120_2 = \chi_{38,1}$	1	.	.	.	$\varphi_{38,1} = 29120_2$
$29120_3 = \chi_{41,0}$	.	1	.	.	$\varphi_{41,0} = 29120_3$
$262080_2 = \chi_{90,1}$	1	.	1	.	$\varphi_{80,1} = 232960_2$
$262080_3 = \chi_{93,0}$	.	1	.	1	$\varphi_{83,0} = 232960_3$
$465920_3 = \chi_{108,0}$	.	.	1	1	

Block 36:	φ_{39+}	φ_{42+}	φ_{81+}	φ_{84+}	
$58240_1 = \chi_{39+}$	1	.	.	.	$\varphi_{39+} = 58240_1$
$58240_2 = \chi_{42+}$	.	1	.	.	$\varphi_{42+} = 58240_2$
$524160_1 = \chi_{91+}$	1	.	1	.	$\varphi_{81+} = 465920_1$
$524160_2 = \chi_{94+}$	.	1	.	1	$\varphi_{84+} = 465920_2$
$931840_1 = \chi_{109+}$	.	.	1	1	