

$O_8^+(3).2_1 \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	16×10
	2	2	16×10
	3	1	5×4
	4	1	5×4
	5	1	5×4
	6	1	5×4
	7	1	5×4
	8	1	5×4
	9	0	$300_1 = \chi_{8,0}, \varphi_{8,0}$
	10	0	$300_2 = \chi_{8,1}, \varphi_{8,1}$
	11	0	$4550_1 = \chi_{12+}, \varphi_{12+}$
	12	0	$4550_2 = \chi_{14+}, \varphi_{14+}$
	13	0	$9450_1 = \chi_{23,0}, \varphi_{23,0}$
	14	0	$9450_2 = \chi_{23,1}, \varphi_{23,1}$
	15	0	$17550_1 = \chi_{24,0}, \varphi_{24,0}$
	16	0	$17550_2 = \chi_{24,1}, \varphi_{24,1}$
	17	0	$18200_1 = \chi_{25,0}, \varphi_{25,0}$
	18	0	$18200_2 = \chi_{25,1}, \varphi_{25,1}$
	19	0	$36400_1 = \chi_{26+}, \varphi_{26+}$
	20	0	$36400_2 = \chi_{28+}, \varphi_{28+}$
	21	0	$23400_1 = \chi_{30,0}, \varphi_{31,0}$
	22	0	$23400_2 = \chi_{30,1}, \varphi_{31,1}$
	23	0	$46800_1 = \chi_{31+}, \varphi_{32+}$
	24	0	$46800_2 = \chi_{32+}, \varphi_{33+}$
	25	0	$23400_3 = \chi_{33,0}, \varphi_{34,0}$
	26	0	$23400_4 = \chi_{33,1}, \varphi_{34,1}$
	27	0	$27300_1 = \chi_{37,0}, \varphi_{37,0}$
	28	0	$27300_2 = \chi_{37,1}, \varphi_{37,1}$
	29	1	5×4
	30	1	5×4
	31	1	4×2
	32	1	4×2
	33	0	$40950_1 = \chi_{44,0}, \varphi_{44,0}$
	34	0	$40950_2 = \chi_{44,1}, \varphi_{44,1}$
	35	0	$81900_1 = \chi_{45+}, \varphi_{45+}$
	36	0	$81900_2 = \chi_{46+}, \varphi_{46+}$
	37	0	$40950_3 = \chi_{47,0}, \varphi_{47,0}$
	38	0	$40950_4 = \chi_{47,1}, \varphi_{47,1}$

	blocks	defect	matrix
	39	0	$109200_1 = \chi_{59+}, \varphi_{59+}$
	40	0	$109200_2 = \chi_{61+}, \varphi_{61+}$
	41	0	$54600_1 = \chi_{63,0}, \varphi_{63,0}$
	42	0	$54600_2 = \chi_{63,1}, \varphi_{63,1}$
	43	0	$54600_3 = \chi_{64,0}, \varphi_{64,0}$
	44	0	$54600_4 = \chi_{64,1}, \varphi_{64,1}$
	45	0	$54600_5 = \chi_{65,0}, \varphi_{65,0}$
	46	0	$54600_6 = \chi_{65,1}, \varphi_{65,1}$
	47	0	$163800_1 = \chi_{69,0}, \varphi_{66,0}$
	48	0	$163800_2 = \chi_{69,1}, \varphi_{66,1}$
	49	0	$163800_3 = \chi_{70,0}, \varphi_{67,0}$
	50	0	$163800_4 = \chi_{70,1}, \varphi_{67,1}$
	51	0	$163800_5 = \chi_{71,0}, \varphi_{68,0}$
	52	0	$163800_6 = \chi_{71,1}, \varphi_{68,1}$
	53	0	$368550_1 = \chi_{72+}, \varphi_{75+}$
	54	0	$368550_2 = \chi_{74+}, \varphi_{77+}$
	55	0	$218700_1 = \chi_{82,0}, \varphi_{79,0}$
	56	0	$218700_2 = \chi_{82,1}, \varphi_{79,1}$
	57	0	$245700_1 = \chi_{89,0}, \varphi_{86,0}$
	58	0	$245700_2 = \chi_{89,1}, \varphi_{86,1}$
	59	0	$291200_1 = \chi_{96,0}, \varphi_{87,0}$
	60	0	$291200_2 = \chi_{96,1}, \varphi_{87,1}$
	61	0	$582400_1 = \chi_{97+}, \varphi_{88+}$
	62	0	$582400_2 = \chi_{99+}, \varphi_{90+}$
	63	0	$332800_1 = \chi_{101,0}, \varphi_{92,0}$
	64	0	$332800_2 = \chi_{101,1}, \varphi_{92,1}$
	65	0	$332800_3 = \chi_{102,0}, \varphi_{93,0}$
	66	0	$332800_4 = \chi_{102,1}, \varphi_{93,1}$
	67	0	$332800_5 = \chi_{103,0}, \varphi_{94,0}$
	68	0	$332800_6 = \chi_{103,1}, \varphi_{94,1}$
	69	0	$332800_7 = \chi_{104,0}, \varphi_{95,1}$
	70	0	$332800_8 = \chi_{104,1}, \varphi_{95,0}$
	71	0	$491400_1 = \chi_{111,0}, \varphi_{97,0}$
	72	0	$491400_2 = \chi_{111,1}, \varphi_{97,1}$
	73	0	$716800_1 = \chi_{113,0}, \varphi_{98,0}$
	74	0	$716800_2 = \chi_{113,1}, \varphi_{98,1}$
	75	0	$716800_3 = \chi_{114,0}, \varphi_{99,0}$
	76	0	$716800_4 = \chi_{114,1}, \varphi_{99,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{9,0}$	$\varphi_{10,0}$	$\varphi_{11,0}$	$\varphi_{16,0}$	$\varphi_{30,0}$	$\varphi_{50,0}$	$\varphi_{51,1}$	$\varphi_{52,1}$	$\varphi_{96,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$819_1 = \chi_{9,0}$	1	1	.	.	.	.	.	.	.	.
$819_3 = \chi_{10,0}$	1	.	1	.	.	.	.	.	.	.
$819_5 = \chi_{11,0}$	1	.	.	1	.	.	.	.	.	.
$2808_1 = \chi_{16,0}$	.	.	.	.	1	.	.	.	.	.
$24192_1 = \chi_{36,0}$	1	1	1	1	.	1	.	.	.	.
$46592_1 = \chi_{50,0}$	.	.	.	.	1	.	1	.	.	.
$46592_4 = \chi_{51,1}$	.	.	.	.	1	.	.	1	.	.
$46592_6 = \chi_{52,1}$	.	.	.	.	1	.	.	.	1	.
$66339_1 = \chi_{66,0}$	.	1	.	.	.	1	1	.	.	.
$66339_3 = \chi_{67,0}$	.	.	1	.	.	1	.	1	.	.
$66339_5 = \chi_{68,0}$	.	.	.	1	.	1	.	.	1	.
$419328_1 = \chi_{105,0}$	.	.	.	.	.	.	1	.	.	1
$419328_3 = \chi_{106,0}$	.	.	.	.	.	.	.	1	.	1
$419328_5 = \chi_{107,0}$	.	.	.	.	.	.	.	.	1	1
$531441_1 = \chi_{112,0}$	.	.	.	.	1	1	1	1	1	1

$$\begin{aligned}
\varphi_{1,0} &= 1_1 & \varphi_{30,0} &= 21737_1 \\
\varphi_{9,0} &= 818_1 & \varphi_{50,0} &= 43784_1 \\
\varphi_{10,0} &= 818_3 & \varphi_{51,1} &= 43784_4 \\
\varphi_{11,0} &= 818_5 & \varphi_{52,1} &= 43784_6 \\
\varphi_{16,0} &= 2808_1 & \varphi_{96,0} &= 375544_1
\end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{9,1}$	$\varphi_{10,1}$	$\varphi_{11,1}$	$\varphi_{16,1}$	$\varphi_{30,1}$	$\varphi_{50,1}$	$\varphi_{51,0}$	$\varphi_{52,0}$	$\varphi_{96,1}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.
$819_2 = \chi_{9,1}$	1	1	.	.	.	.	.	.	.	.
$819_4 = \chi_{10,1}$	1	.	1	.	.	.	.	.	.	.
$819_6 = \chi_{11,1}$	1	.	.	1	.	.	.	.	.	.
$2808_2 = \chi_{16,1}$	.	.	.	.	1	.	.	.	.	.
$24192_2 = \chi_{36,1}$	1	1	1	1	.	1	.	.	.	.
$46592_2 = \chi_{50,1}$	.	.	.	.	1	.	1	.	.	.
$46592_3 = \chi_{51,0}$	.	.	.	.	1	.	.	1	.	.
$46592_5 = \chi_{52,0}$	.	.	.	.	1	.	.	.	1	.
$66339_2 = \chi_{66,1}$	.	1	.	.	.	1	1	.	.	.
$66339_4 = \chi_{67,1}$	.	.	1	.	.	1	.	1	.	.
$66339_6 = \chi_{68,1}$	.	.	.	1	.	1	.	.	1	.
$419328_2 = \chi_{105,1}$	.	.	.	.	.	.	1	.	.	1
$419328_4 = \chi_{106,1}$	.	.	.	.	.	.	.	1	.	1
$419328_6 = \chi_{107,1}$	.	.	.	.	.	.	.	.	1	1
$531441_2 = \chi_{112,1}$	.	.	.	.	1	1	1	1	1	1

$$\begin{array}{ll}
\varphi_{1,1} = 1_2 & \varphi_{30,1} = 21737_2 \\
\varphi_{9,1} = 818_2 & \varphi_{50,1} = 43784_2 \\
\varphi_{10,1} = 818_4 & \varphi_{51,0} = 43784_3 \\
\varphi_{11,1} = 818_6 & \varphi_{52,0} = 43784_5 \\
\varphi_{16,1} = 2808_2 & \varphi_{96,1} = 375544_2
\end{array}$$

Block 3:	$\varphi_{2,0}$	$\varphi_{20,0}$	$\varphi_{53,0}$	$\varphi_{72,0}$
$260_1 = \chi_{2,0}$	1	.	.	.
$5460_3 = \chi_{20,0}$	.	1	.	.
$49140_2 = \chi_{53,1}$	1	.	1	.
$189540_4 = \chi_{79,1}$	.	1	.	1
$232960_4 = \chi_{86,1}$	.	.	1	1

$$\begin{array}{ll}
\varphi_{2,0} = 260_1 \\
\varphi_{20,0} = 5460_3 \\
\varphi_{53,0} = 48880_1 \\
\varphi_{72,0} = 184080_3
\end{array}$$

Block 4:	$\varphi_{2,1}$	$\varphi_{20,1}$	$\varphi_{53,1}$	$\varphi_{72,1}$
$260_2 = \chi_{2,1}$	1	.	.	.
$5460_4 = \chi_{20,1}$	.	1	.	.
$49140_1 = \chi_{53,0}$	1	.	1	.
$189540_3 = \chi_{79,0}$	.	1	.	1
$232960_3 = \chi_{86,0}$	.	.	1	1

$$\begin{array}{ll}
\varphi_{2,1} = 260_2 \\
\varphi_{20,1} = 5460_4 \\
\varphi_{53,1} = 48880_2 \\
\varphi_{72,1} = 184080_4
\end{array}$$

Block 5:	φ_{3+}	φ_{18+}	φ_{54+}	φ_{70+}
$520_1 = \chi_{3+}$	1	.	.	.
$10920_1 = \chi_{18+}$	.	1	.	.
$98280_1 = \chi_{54+}$	1	.	1	.
$379080_1 = \chi_{77+}$	.	1	.	1
$465920_1 = \chi_{84+}$	.	.	1	1

$$\begin{array}{ll}
\varphi_{3+} = 520_1 \\
\varphi_{18+} = 10920_1 \\
\varphi_{54+} = 97760_1 \\
\varphi_{70+} = 368160_1
\end{array}$$

Block 6:	φ_{4+}	φ_{19+}	φ_{55+}	φ_{71+}
$520_2 = \chi_{4+}$	1	.	.	.
$10920_2 = \chi_{19+}$	.	1	.	.
$98280_2 = \chi_{55+}$	1	.	1	.
$379080_2 = \chi_{78+}$	.	1	.	1
$465920_2 = \chi_{85+}$	.	.	1	1

$$\begin{array}{ll}
\varphi_{4+} = 520_2 \\
\varphi_{19+} = 10920_2 \\
\varphi_{55+} = 97760_2 \\
\varphi_{71+} = 368160_2
\end{array}$$

Block 7:	$\varphi_{5,0}$	$\varphi_{17,0}$	$\varphi_{56,0}$	$\varphi_{69,0}$
$260_3 = \chi_{5,0}$	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

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

Block 8:	$\varphi_{5,1}$	$\varphi_{17,1}$	$\varphi_{56,1}$	$\varphi_{69,1}$
$260_4 = \chi_{5,1}$	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

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

Block 29:	$\varphi_{38,0}$	$\varphi_{41,0}$	$\varphi_{80,1}$	$\varphi_{83,1}$
$29120_1 = \chi_{38,0}$	1	.	.	.
$29120_3 = \chi_{41,0}$	.	1	.	.
$262080_1 = \chi_{90,0}$	1	.	1	.
$262080_3 = \chi_{93,0}$	.	1	.	1
$465920_4 = \chi_{108,1}$	.	.	1	1

$$\begin{aligned} \varphi_{38,0} &= 29120_1 \\ \varphi_{41,0} &= 29120_3 \\ \varphi_{80,1} &= 232960_2 \\ \varphi_{83,1} &= 232960_4 \end{aligned}$$

Block 30:	$\varphi_{38,1}$	$\varphi_{41,1}$	$\varphi_{80,0}$	$\varphi_{83,0}$
$29120_2 = \chi_{38,1}$	1	.	.	.
$29120_4 = \chi_{41,1}$	.	1	.	.
$262080_2 = \chi_{90,1}$	1	.	1	.
$262080_4 = \chi_{93,1}$	.	1	.	1
$465920_3 = \chi_{108,0}$	.	.	1	1

$$\begin{aligned} \varphi_{38,1} &= 29120_2 \\ \varphi_{41,1} &= 29120_4 \\ \varphi_{80,0} &= 232960_1 \\ \varphi_{83,0} &= 232960_3 \end{aligned}$$

Block 31:	φ_{39+}	φ_{81+}
$58240_1 = \chi_{39+}$	1	.
$524160_1 = \chi_{91+}$	1	1
$465920_5 = \chi_{109,0}$	.	1
$465920_6 = \chi_{109,1}$	.	1

$$\begin{aligned} \varphi_{39+} &= 58240_1 \\ \varphi_{81+} &= 465920_1 \end{aligned}$$

Block 32:	φ_{40+}	φ_{82+}
$58240_2 = \chi_{40+}$	1	.
$524160_2 = \chi_{92+}$	1	1
$465920_7 = \chi_{110,0}$	.	1
$465920_8 = \chi_{110,1}$	.	1

$$\varphi_{40+} = 58240_2$$

$$\varphi_{82+} = 465920_2$$