

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

	blocks	defect	matrix
$G :$	1	11	$77 \times 9$
	2	7	$34 \times 4$
	3	3	$8 \times 1$
	4	3	$8 \times 1$
	5	1	$2 \times 1$
	6	1	$2 \times 1$
	7	1	$2 \times 1$
	8	1	$2 \times 1$

	blocks	defect	matrix
	9	1	$2 \times 1$
	10	1	$2 \times 1$
	11	1	$2 \times 1$
	12	1	$2 \times 1$
	13	1	$2 \times 1$
	14	1	$2 \times 1$
	15	3	$8 \times 1$

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3+}$	$\varphi_{5+}$	$\varphi_{7,0}$	$\varphi_{8,0}$	$\varphi_{9+}$	$\varphi_{11+}$	$\varphi_{18+}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.
$246_1 = \chi_{2,0}$	.	1	.	.	.	.	.	.	.
$246_2 = \chi_{2,1}$	.	1	.	.	.	.	.	.	.
$574_1 = \chi_{3+}$	2	.	1	.	.	.	.	.	.
$1066_1 = \chi_{5+}$	2	2	1	.	.	.	.	.	.
$574_2 = \chi_{7,0}$	2	.	1	.	.	.	.	.	.
$574_3 = \chi_{7,1}$	2	.	1	.	.	.	.	.	.
$819_1 = \chi_{8,0}$	1	1	1	.	.	.	.	.	.
$819_2 = \chi_{8,1}$	1	1	1	.	.	.	.	.	.
$7462_1 = \chi_{9+}$	2	2	2	1	.	.	.	.	.
$7749_1 = \chi_{11,0}$	1	.	.	.	.	1	.	.	.
$7749_2 = \chi_{11,1}$	1	.	.	.	.	1	.	.	.
$7749_3 = \chi_{12,0}$	1	.	1	.	1	.	.	.	.
$7749_4 = \chi_{12,1}$	1	.	1	.	1	.	.	.	.
$22386_1 = \chi_{13+}$	2	2	1	1	.	2	.	.	.
$22386_2 = \chi_{15+}$	2	2	3	1	2	.	.	.	.
$14391_1 = \chi_{17,0}$	1	1	1	1	.	1	.	.	.
$14391_2 = \chi_{17,1}$	1	1	1	1	.	1	.	.	.
$14391_3 = \chi_{18,0}$	1	1	2	1	1	.	.	.	.
$14391_4 = \chi_{18,1}$	1	1	2	1	1	.	.	.	.
$14924_1 = \chi_{19,0}$	.	.	.	.	1	1	.	.	.
$14924_2 = \chi_{19,1}$	.	.	.	.	1	1	.	.	.
$29848_1 = \chi_{20+}$	.	.	.	.	.	.	1	.	.
$21320_1 = \chi_{22,0}$	.	.	.	1	.	2	.	.	.
$21320_2 = \chi_{22,1}$	.	.	.	1	.	2	.	.	.
$22386_3 = \chi_{23,0}$	2	2	2	1	1	1	.	.	.
$22386_4 = \chi_{23,1}$	2	2	2	1	1	1	.	.	.
$22386_5 = \chi_{24,0}$	2	2	3	1	2	.	.	.	.
$22386_6 = \chi_{24,1}$	2	2	3	1	2	.	.	.	.
$51660_1 = \chi_{25+}$	.	2	2	1	2	.	1	.	.
$67158_1 = \chi_{27+}$	2	2	2	1	2	2	1	.	.
$67158_2 = \chi_{29+}$	2	2	4	1	4	.	1	.	.
$74620_1 = \chi_{31+}$	4	4	6	2	4	.	1	.	.
$44772_1 = \chi_{33,0}$	.	.	.	.	1	1	1	.	.
$44772_2 = \chi_{33,1}$	.	.	.	.	1	1	1	.	.
$95940_1 = \chi_{34+}$	4	4	6	3	4	2	1	.	.
$51660_2 = \chi_{36,0}$	.	2	2	1	2	.	1	.	.
$51660_3 = \chi_{36,1}$	.	2	2	1	2	.	1	.	.
$59696_1 = \chi_{37,0}$	.	.	.	.	2	2	1	.	.

(Block 1:)	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{3+}$	$\varphi_{5+}$	$\varphi_{7,0}$	$\varphi_{8,0}$	$\varphi_{9+}$	$\varphi_{11+}$	$\varphi_{18+}$
$59696_2 = \chi_{37,1}$	.	.	.	.	2	2	1	.	.
$66339_1 = \chi_{40,0}$	1	1	2	1	3	1	1	.	.
$66339_2 = \chi_{40,1}$	1	1	2	1	3	1	1	.	.
$149240_1 = \chi_{41+}$	.	.	.	1	2	2	.	1	.
$201474_1 = \chi_{43+}$	2	2	3	2	4	2	1	1	.
$201474_2 = \chi_{45+}$	2	2	5	2	6	.	1	1	.
$127920_1 = \chi_{51,0}$	.	.	.	.	2	.	.	1	.
$127920_2 = \chi_{51,1}$	.	.	.	.	2	.	.	1	.
$134316_1 = \chi_{52,0}$	.	.	.	1	1	1	.	1	.
$134316_2 = \chi_{52,1}$	.	.	.	1	1	1	.	1	.
$268632_1 = \chi_{53+}$	.	.	.	.	.	.	1	.	1
$179334_1 = \chi_{59,0}$	.	1	2	1	4	.	1	1	.
$179334_2 = \chi_{59,1}$	.	1	2	1	4	.	1	1	.
$201474_3 = \chi_{60,0}$	2	2	4	2	5	1	1	1	.
$201474_4 = \chi_{60,1}$	2	2	4	2	5	1	1	1	.
$201474_5 = \chi_{61,0}$	2	2	3	2	4	2	1	1	.
$201474_6 = \chi_{61,1}$	2	2	3	2	4	2	1	1	.
$418446_1 = \chi_{62+}$	2	.	1	1	2	2	1	1	1
$223860_1 = \chi_{64,0}$	4	4	6	3	6	2	1	1	.
$223860_2 = \chi_{64,1}$	4	4	6	3	6	2	1	1	.
$447720_1 = \chi_{65+}$	.	.	.	1	2	2	2	1	1
$596960_1 = \chi_{69+}$	.	.	.	2	4	4	2	2	1
$604422_1 = \chi_{71+}$	2	2	4	3	6	2	2	2	1
$671580_1 = \chi_{73+}$	4	4	6	4	8	4	3	2	1
$777114_1 = \chi_{85+}$	2	2	5	3	10	2	3	3	1
$402948_1 = \chi_{87,0}$	.	.	.	1	1	1	1	1	1
$402948_2 = \chi_{87,1}$	.	.	.	1	1	1	1	1	1
$418446_2 = \chi_{88,0}$	2	.	1	1	2	2	1	1	1
$418446_3 = \chi_{88,1}$	2	.	1	1	2	2	1	1	1
$531441_1 = \chi_{103,0}$	1	.	1	1	3	1	1	2	1
$531441_2 = \chi_{103,1}$	1	.	1	1	3	1	1	2	1
$537264_1 = \chi_{104,0}$	.	.	.	2	2	2	1	2	1
$537264_2 = \chi_{104,1}$	.	.	.	2	2	2	1	2	1
$575640_1 = \chi_{107,0}$	.	.	.	1	4	2	2	2	1
$575640_2 = \chi_{107,1}$	.	.	.	1	4	2	2	2	1
$596960_2 = \chi_{108,0}$	.	.	.	2	4	4	2	2	1
$596960_3 = \chi_{108,1}$	.	.	.	2	4	4	2	2	1

$$\begin{aligned}
\varphi_{1,0} &= 1_1 & \varphi_{8,0} &= 7748_1 \\
\varphi_{2,0} &= 246_1 & \varphi_{9+} &= 29848_1 \\
\varphi_{3+} &= 572_1 & \varphi_{11+} &= 113568_1 \\
\varphi_{5+} &= 5824_1 & \varphi_{18+} &= 238784_2 \\
\varphi_{7,0} &= 7176_1 & &
\end{aligned}$$

<b>Block 2:</b>	$\varphi_{13,0}$	$\varphi_{14+}$	$\varphi_{16,0}$	$\varphi_{17,0}$
$59696_3 = \chi_{38,0}$	1	.	.	.
$59696_4 = \chi_{38,1}$	1	.	.	.
$59696_5 = \chi_{39,0}$	1	.	.	.
$59696_6 = \chi_{39,1}$	1	.	.	.
$238784_1 = \chi_{47+}$	.	1	.	.
$119392_1 = \chi_{49,0}$	.	.	1	.
$119392_2 = \chi_{49,1}$	.	.	1	.
$119392_3 = \chi_{50,0}$	.	.	.	1
$119392_4 = \chi_{50,1}$	.	.	.	1
$179088_1 = \chi_{55,0}$	1	.	.	1
$179088_2 = \chi_{55,1}$	1	.	.	1
$179088_3 = \chi_{56,0}$	1	.	1	.
$179088_4 = \chi_{56,1}$	1	.	1	.
$179088_5 = \chi_{57,0}$	1	.	.	1
$179088_6 = \chi_{57,1}$	1	.	.	1
$179088_7 = \chi_{58,0}$	1	.	1	.
$179088_8 = \chi_{58,1}$	1	.	1	.
$238784_2 = \chi_{67,0}$	.	1	.	.
$238784_3 = \chi_{67,1}$	.	1	.	.
$238784_4 = \chi_{68,0}$	.	1	.	.
$238784_5 = \chi_{68,1}$	.	1	.	.
$358176_1 = \chi_{75,0}$	.	1	1	.
$358176_2 = \chi_{75,1}$	.	1	1	.
$358176_3 = \chi_{76,0}$	.	1	.	1
$358176_4 = \chi_{76,1}$	.	1	.	1
$955136_1 = \chi_{99+}$	4	1	2	2
$477568_1 = \chi_{101,0}$	.	1	2	.
$477568_2 = \chi_{101,1}$	.	1	2	.
$477568_3 = \chi_{102,0}$	.	1	.	2
$477568_4 = \chi_{102,1}$	.	1	.	2
$537264_3 = \chi_{105,0}$	1	1	1	1
$537264_4 = \chi_{105,1}$	1	1	1	1
$537264_5 = \chi_{106,0}$	1	1	1	1
$537264_6 = \chi_{106,1}$	1	1	1	1

$$\begin{aligned} \varphi_{13,0} &= 59696_1 \\ \varphi_{14+} &= 238784_1 \\ \varphi_{16,0} &= 119392_1 \\ \varphi_{17,0} &= 119392_2 \end{aligned}$$

<b>Block 3:</b>	$\varphi_{20,0}$
$367360_1 = \chi_{77,0}$	1
$367360_2 = \chi_{77,1}$	1
$367360_5 = \chi_{79,0}$	1
$367360_6 = \chi_{79,1}$	1
$367360_9 = \chi_{81,0}$	1
$367360_{10} = \chi_{81,1}$	1
$367360_{13} = \chi_{83,0}$	1
$367360_{14} = \chi_{83,1}$	1

$$\varphi_{20,0} = 367360_1$$

<b>Block 4:</b>	$\varphi_{21,0}$
$367360_3 = \chi_{78,0}$	1
$367360_4 = \chi_{78,1}$	1
$367360_7 = \chi_{80,0}$	1
$367360_8 = \chi_{80,1}$	1
$367360_{11} = \chi_{82,0}$	1
$367360_{12} = \chi_{82,1}$	1
$367360_{15} = \chi_{84,0}$	1
$367360_{16} = \chi_{84,1}$	1

$$\varphi_{21,0} = 367360_2$$

<b>Block 5:</b>	$\varphi_{22,0}$
$465920_1 = \chi_{89,0}$	1
$465920_2 = \chi_{89,1}$	1

$$\varphi_{22,0} = 465920_1$$

<b>Block 6:</b>	$\varphi_{23,0}$
$465920_3 = \chi_{90,0}$	1
$465920_4 = \chi_{90,1}$	1

$$\varphi_{23,0} = 465920_2$$

<b>Block 7:</b>	$\varphi_{24,0}$
$465920_5 = \chi_{91,0}$	1
$465920_6 = \chi_{91,1}$	1

$$\varphi_{24,0} = 465920_3$$

<b>Block 8:</b>	$\varphi_{25,0}$
$465920_7 = \chi_{92,0}$	1
$465920_8 = \chi_{92,1}$	1

$$\varphi_{25,0} = 465920_4$$

<b>Block 9:</b>	$\varphi_{26,0}$
$465920_9 = \chi_{93,0}$	1
$465920_{10} = \chi_{93,1}$	1

$$\varphi_{26,0} = 465920_5$$

<b>Block 10:</b>	$\varphi_{27,0}$
$465920_{11} = \chi_{94,0}$	1
$465920_{12} = \chi_{94,1}$	1

$$\varphi_{27,0} = 465920_6$$

<b>Block 11:</b>	$\varphi_{28,0}$
$465920_{13} = \chi_{95,0}$	1
$465920_{14} = \chi_{95,1}$	1

$$\varphi_{28,0} = 465920_7$$

<b>Block 12:</b>	$\varphi_{29,0}$
$465920_{15} = \chi_{96,0}$	1
$465920_{16} = \chi_{96,1}$	1

$$\varphi_{29,0} = 465920_8$$

<b>Block 13:</b>	$\varphi_{30,0}$
$465920_{17} = \chi_{97,0}$	1
$465920_{18} = \chi_{97,1}$	1

$$\varphi_{30,0} = 465920_9$$

<b>Block 14:</b>	$\varphi_{31,0}$
$465920_{19} = \chi_{98,0}$	1
$465920_{20} = \chi_{98,1}$	1

$$\varphi_{31,0} = 465920_{10}$$

<b>Block 15:</b>	$\varphi_{32,0}$
$682240_1 = \chi_{109,0}$	1
$682240_2 = \chi_{109,1}$	1
$682240_3 = \chi_{110,0}$	1
$682240_4 = \chi_{110,1}$	1
$682240_5 = \chi_{111,0}$	1
$682240_6 = \chi_{111,1}$	1
$682240_7 = \chi_{112,0}$	1
$682240_8 = \chi_{112,1}$	1

$$\varphi_{32,0} = 682240_1$$