

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

	blocks	defect	matrix
$G :$	1	5	$42 \times 13$
	2	1	$3 \times 2$
	3	1	$3 \times 2$
	4	1	$3 \times 2$
	5	0	$972_1 = \chi_{27}, \varphi_{16}$
	6	0	$6075_1 = \chi_{53}, \varphi_{21}$
$2.G :$	7	5	$27 \times 8$
	8	1	$3 \times 2$

<b>Block 1:</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{17}$
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.
$28_1 = \chi_2$	.	1	.	.	.	.	.	.	.	.	.	.	.
$35_1 = \chi_3$	.	.	1	.	.	.	.	.	.	.	.	.	.
$35_2 = \chi_4$	.	.	.	1	.	.	.	.	.	.	.	.	.
$35_3 = \chi_5$	.	.	.	.	1	.	.	.	.	.	.	.	.
$50_1 = \chi_6$	2	.	.	.	.	1	.	.	.	.	.	.	.
$84_1 = \chi_7$	1	.	1	.	.	1	.	.	.	.	.	.	.
$84_2 = \chi_8$	1	.	.	1	.	1	.	.	.	.	.	.	.
$84_3 = \chi_9$	1	.	.	.	1	1	.	.	.	.	.	.	.
$175_1 = \chi_{10}$	.	1	.	.	.	.	1	.	.	.	.	.	.
$210_1 = \chi_{11}$	.	1	1	.	.	.	1	.	.	.	.	.	.
$210_2 = \chi_{12}$	.	1	.	1	.	.	1	.	.	.	.	.	.
$210_3 = \chi_{13}$	.	1	.	.	1	.	1	.	.	.	.	.	.
$300_1 = \chi_{14}$	.	.	1	1	1	1	1	.	.	.	.	.	.
$350_1 = \chi_{15}$	.	1	.	.	.	.	.	1	.	.	.	.	.
$525_1 = \chi_{16}$	.	1	.	.	.	.	.	.	1	.	.	.	.
$700_1 = \chi_{20}$	2	.	1	1	1	2	.	.	1	.	.	.	.
$700_2 = \chi_{21}$	.	.	1	.	.	.	1	.	.	1	.	.	.
$700_3 = \chi_{22}$	.	.	.	1	.	.	1	.	.	.	1	.	.
$700_4 = \chi_{23}$	.	.	.	.	1	.	1	.	.	.	.	1	.
$840_1 = \chi_{24}$	.	.	.	.	.	.	.	1	.	1	.	.	.
$840_2 = \chi_{25}$	.	.	.	.	.	.	.	1	.	.	1	.	.
$840_3 = \chi_{26}$	.	.	.	.	.	.	.	1	.	.	.	1	.
$1050_1 = \chi_{28}$	.	.	1	.	.	.	.	.	1	1	.	.	.
$1050_2 = \chi_{29}$	.	.	.	1	.	.	.	.	1	.	1	.	.
$1050_3 = \chi_{30}$	.	.	.	.	1	.	.	.	1	.	.	1	.
$1344_1 = \chi_{31}$	1	1	1	1	1	1	1	.	1	1	.	.	.
$1344_2 = \chi_{32}$	1	1	1	1	1	1	1	.	1	.	1	.	.
$1344_3 = \chi_{33}$	1	1	1	1	1	1	1	.	1	.	.	1	.
$1400_1 = \chi_{34}$	.	2	.	.	.	.	1	.	.	.	.	.	1
$1575_1 = \chi_{35}$	.	2	.	.	.	.	.	1	.	.	.	.	1
$1575_2 = \chi_{36}$	.	2	.	.	.	.	.	1	.	.	.	.	1
$1575_3 = \chi_{37}$	.	2	.	.	.	.	.	1	.	.	.	.	1
$2100_1 = \chi_{38}$	.	1	.	1	1	.	1	1	1	.	1	1	.
$2100_2 = \chi_{39}$	.	1	1	.	1	.	1	1	1	1	.	1	.
$2100_3 = \chi_{40}$	.	1	1	1	.	.	1	1	1	1	1	.	.
$2240_1 = \chi_{41}$	.	2	.	.	.	.	1	1	.	1	.	.	1
$2240_2 = \chi_{42}$	.	2	.	.	.	.	1	1	.	.	1	.	1
$2240_3 = \chi_{43}$	.	2	.	.	.	.	1	1	.	.	.	1	1
$3200_1 = \chi_{50}$	2	1	1	1	1	1	1	1	2	1	1	1	.

<b>(Block 1:)</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{17}$
$4096_1 = \chi_{51}$	1	2	.	.	.	.	1	2	1	1	1	1	1
$4200_1 = \chi_{52}$	.	3	1	1	1	.	3	1	1	1	1	1	1

$$\begin{aligned}
\varphi_1 &= 1_1 & \varphi_8 &= 322_1 \\
\varphi_2 &= 28_1 & \varphi_9 &= 497_1 \\
\varphi_3 &= 35_1 & \varphi_{10} &= 518_1 \\
\varphi_4 &= 35_2 & \varphi_{11} &= 518_2 \\
\varphi_5 &= 35_3 & \varphi_{12} &= 518_3 \\
\varphi_6 &= 48_1 & \varphi_{17} &= 1197_1 \\
\varphi_7 &= 147_1 & &
\end{aligned}$$

<b>Block 2:</b>	$\varphi_{13}$	$\varphi_{18}$
$567_1 = \chi_{17}$	1	.
$2268_1 = \chi_{44}$	.	1
$2835_1 = \chi_{47}$	1	1

$$\begin{aligned}
\varphi_{13} &= 567_1 \\
\varphi_{18} &= 2268_1
\end{aligned}$$

<b>Block 3:</b>	$\varphi_{14}$	$\varphi_{19}$
$567_2 = \chi_{18}$	1	.
$2268_2 = \chi_{45}$	.	1
$2835_2 = \chi_{48}$	1	1

$$\begin{aligned}
\varphi_{14} &= 567_2 \\
\varphi_{19} &= 2268_2
\end{aligned}$$

<b>Block 4:</b>	$\varphi_{15}$	$\varphi_{20}$
$567_3 = \chi_{19}$	1	.
$2268_3 = \chi_{46}$	.	1
$2835_3 = \chi_{49}$	1	1

$$\begin{aligned}
\varphi_{15} &= 567_3 \\
\varphi_{20} &= 2268_3
\end{aligned}$$

<b>Block 7:</b>	$\varphi_{22}$	$\varphi_{23}$	$\varphi_{24}$	$\varphi_{25}$	$\varphi_{26}$	$\varphi_{27}$	$\varphi_{28}$	$\varphi_{30}$	
$8_1 = \chi_{54}$	1	.	.	.	.	.	.	.	
$56_1 = \chi_{55}$	.	1	.	.	.	.	.	.	
$112_1 = \chi_{56}$	1	.	1	.	.	.	.	.	
$160_1 = \chi_{57}$	.	1	1	.	.	.	.	.	
$224_1 = \chi_{58}$	.	.	.	1	.	.	.	.	
$224_2 = \chi_{59}$	.	.	.	.	1	.	.	.	
$400_1 = \chi_{60}$	2	.	.	.	.	1	.	.	
$448_1 = \chi_{61}$	1	1	.	.	.	1	.	.	
$560_1 = \chi_{62}$	2	1	1	.	.	1	.	.	
$672_1 = \chi_{63}$	1	1	.	1	.	1	.	.	$\varphi_{22} = 8_1$
$672_2 = \chi_{64}$	1	1	.	.	1	1	.	.	$\varphi_{23} = 56_1$
$840_4 = \chi_{65}$	1	.	.	1	1	1	.	.	$\varphi_{24} = 104_1$
$1008_1 = \chi_{66}$	.	2	1	.	.	.	1	.	$\varphi_{25} = 224_1$
$1008_2 = \chi_{67}$	.	2	1	.	.	.	1	.	$\varphi_{26} = 224_2$
$1008_3 = \chi_{68}$	.	2	1	.	.	.	1	.	$\varphi_{27} = 384_1$
$1400_2 = \chi_{70}$	1	2	1	.	.	1	1	.	$\varphi_{28} = 792_1$
$1400_3 = \chi_{71}$	1	2	1	.	.	1	1	.	$\varphi_{30} = 1896_1$
$2400_1 = \chi_{72}$	.	1	.	1	1	.	.	1	
$2800_1 = \chi_{73}$	.	2	.	.	.	.	1	1	
$2800_2 = \chi_{74}$	2	1	.	1	1	1	.	1	
$2800_3 = \chi_{75}$	2	1	.	1	1	1	.	1	
$3360_1 = \chi_{77}$	2	3	1	.	.	1	1	1	
$3584_1 = \chi_{78}$	2	3	1	1	.	1	1	1	
$3584_2 = \chi_{79}$	2	3	1	.	1	1	1	1	
$4096_2 = \chi_{80}$	3	3	.	1	1	2	1	1	
$4200_2 = \chi_{81}$	3	3	1	1	1	2	1	1	
$5600_1 = \chi_{83}$	2	3	.	1	1	1	1	2	

<b>Block 8:</b>	$\varphi_{29}$	$\varphi_{31}$	
$1296_1 = \chi_{69}$	1	.	$\varphi_{29} = 1296_1$
$3240_1 = \chi_{76}$	.	1	$\varphi_{31} = 3240_1$
$4536_1 = \chi_{82}$	1	1	