

$$U_3(8) \pmod{3}$$

	blocks	defect	matrix
3.G :	1	5	37×5
	2	2	9×1
	3	2	9×1
	4	2	9×1
	5	1	3×1

	blocks	defect	matrix
	$6 = \overline{5}$	1	3×1
	7	1	3×1
	$8 = \overline{7}$	1	3×1
	9	1	3×1
	$10 = \overline{9}$	1	3×1

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5
$1_1 = \chi_1$	1	.	.	.	.
$56_1 = \chi_2$	.	1	.	.	.
$57_1 = \chi_3$	1	1	.	.	.
$57_2 = \chi_4$	1	1	.	.	.
$133_1 = \chi_5$	.	.	1	.	.
$133_2 = \chi_6$	.	.	.	1	.
$133_3 = \chi_7$	.	.	.	.	1
$399_1 = \chi_8$	.	.	1	1	1
$399_2 = \chi_9$	.	.	1	1	1
$399_3 = \chi_{10}$	.	.	1	1	1
$456_1 = \chi_{11}$	1	1	1	1	1
$456_2 = \chi_{12}$	1	1	1	1	1
$512_1 = \chi_{13}$	1	2	1	1	1
$57_3 = \chi_{29}$	1	1	.	.	.
$57_4 = \chi_{29}^{*8}$	1	1	.	.	.
$57_5 = \chi_{30}$	1	1	.	.	.
$57_6 = \chi_{30}^{*8}$	1	1	.	.	.
$57_7 = \chi_{31}$	1	1	.	.	.
$57_8 = \chi_{31}^{*8}$	1	1	.	.	.
$189_1 = \chi_{32}$	.	1	1	.	.
$189_2 = \chi_{32}^{*2}$	.	1	1	.	.
$189_3 = \chi_{33}$	.	1	.	1	.
$189_4 = \chi_{33}^{*2}$	.	1	.	1	.
$189_5 = \chi_{34}$	.	1	.	.	1
$189_6 = \chi_{34}^{*2}$	.	1	.	.	1
$399_4 = \chi_{35}$	.	.	1	1	1
$399_5 = \chi_{35}^{*8}$	.	.	1	1	1
$399_6 = \chi_{36}$	.	.	1	1	1
$399_7 = \chi_{36}^{*8}$	.	.	1	1	1
$399_8 = \chi_{37}$	.	.	1	1	1
$399_9 = \chi_{37}^{*8}$	.	.	1	1	1
$456_3 = \chi_{38}$	1	1	1	1	1
$456_4 = \chi_{38}^{*8}$	1	1	1	1	1
$456_5 = \chi_{39}$	1	1	1	1	1
$456_6 = \chi_{39}^{*8}$	1	1	1	1	1
$456_7 = \chi_{40}$	1	1	1	1	1
$456_8 = \chi_{40}^{*8}$	1	1	1	1	1

$$\begin{aligned}
\varphi_1 &= 1_1 \\
\varphi_2 &= 56_1 \\
\varphi_3 &= 133_1 \\
\varphi_4 &= 133_2 \\
\varphi_5 &= 133_3
\end{aligned}$$

Block 2:	φ_6
$513_1 = \chi_{14}$	1
$513_4 = \chi_{17}$	1
$513_5 = \chi_{18}$	1
$513_{10} = \chi_{41}$	1
$513_{11} = \chi_{41}^{*8}$	1
$513_{20} = \chi_{46}$	1
$513_{21} = \chi_{46}^{*8}$	1
$513_{24} = \chi_{48}$	1
$513_{25} = \chi_{48}^{*8}$	1

$$\varphi_6 = 513_1$$

Block 3:	φ_7
$513_2 = \chi_{15}$	1
$513_6 = \chi_{19}$	1
$513_7 = \chi_{20}$	1
$513_{12} = \chi_{42}$	1
$513_{13} = \chi_{42}^{*8}$	1
$513_{16} = \chi_{44}$	1
$513_{17} = \chi_{44}^{*8}$	1
$513_{26} = \chi_{49}$	1
$513_{27} = \chi_{49}^{*8}$	1

$$\varphi_7 = 513_2$$

Block 4:	φ_8
$513_3 = \chi_{16}$	1
$513_8 = \chi_{21}$	1
$513_9 = \chi_{22}$	1
$513_{14} = \chi_{43}$	1
$513_{15} = \chi_{43}^{*8}$	1
$513_{18} = \chi_{45}$	1
$513_{19} = \chi_{45}^{*8}$	1
$513_{22} = \chi_{47}$	1
$513_{23} = \chi_{47}^{*8}$	1

$$\varphi_8 = 513_3$$

Block 5:	φ_9
$567_1 = \chi_{23}$	1
$567_7 = \chi_{50}$ $567_8 = \chi_{50}^{*20}$	1 1

$$\varphi_9 = 567_1$$

Block 6:	φ_{10}
$567_2 = \chi_{24}$	1
$567_9 = \chi_{51}$ $567_{10} = \chi_{51}^{*20}$	1 1

$$\varphi_{10} = 567_2$$

Block 7:	φ_{11}
$567_3 = \chi_{25}$	1
$567_{11} = \chi_{52}$ $567_{12} = \chi_{52}^{*20}$	1 1

$$\varphi_{11} = 567_3$$

Block 8:	φ_{12}
$567_4 = \chi_{26}$	1
$567_{13} = \chi_{53}$ $567_{14} = \chi_{53}^{*20}$	1 1

$$\varphi_{12} = 567_4$$

Block 9:	φ_{13}
$567_5 = \chi_{27}$	1
$567_{15} = \chi_{54}$ $567_{16} = \chi_{54}^{*20}$	1 1

$$\varphi_{13} = 567_5$$

Block 10:	φ_{14}
$567_6 = \chi_{28}$	1
$567_{17} = \chi_{55}$	1
$567_{18} = \chi_{55}^{*20}$	1

$$\varphi_{14} \quad = \quad 567_6$$