

$U_3(11) \pmod{3}$

	blocks	defect	matrix
$3.G :$	1	3	16×5
	2	2	9×2
	3	2	9×2
	$4 = \overline{3}$	2	9×2
	5	2	9×1
	6	1	3×1
	$7 = \overline{6}$	1	3×1
	8	1	3×1
	9	1	3×1
	10	1	3×1
	11	1	3×1
	12	1	3×1
	$13 = \overline{12}$	1	3×1
	14	1	3×1
	$15 = \overline{14}$	1	3×1
	16	1	3×1
	$17 = \overline{16}$	1	3×1
	18	1	3×1

	blocks	defect	matrix
	$19 = \overline{18}$	1	3×1
	20	1	3×1
	$21 = \overline{20}$	1	3×1
	22	1	3×1
	$23 = \overline{22}$	1	3×1
	24	1	3×1
	$25 = \overline{24}$	1	3×1
	26	1	3×1
	$27 = \overline{26}$	1	3×1
	28	1	3×1
	$29 = \overline{28}$	1	3×1
	30	1	3×1
	$31 = \overline{30}$	1	3×1
	32	1	3×1
	$33 = \overline{32}$	1	3×1
	34	1	3×1
	$35 = \overline{34}$	1	3×1

Block 1:	φ_1	φ_2	φ_6	φ_7	φ_8
$1_1 = \chi_1$	1	.	.	.	.
$110_1 = \chi_2$	.	1	.	.	.
$370_1 = \chi_6$	.	.	1	.	.
$370_2 = \chi_7$	.	.	.	1	.
$370_3 = \chi_8$	.	.	.	.	1
$1331_1 = \chi_{18}$	1	2	1	1	1
$111_4 = \chi_{49}$	1	1	.	.	.
$111_5 = \chi_{49}^{*2}$	1	1	.	.	.
$480_1 = \chi_{53}$	.	1	1	.	.
$480_2 = \chi_{53}^{*2}$	.	1	1	.	.
$480_3 = \chi_{54}$	.	1	.	1	.
$480_4 = \chi_{54}^{*2}$	.	1	.	1	.
$480_5 = \chi_{55}$	.	1	.	.	1
$480_6 = \chi_{55}^{*2}$	.	1	.	.	1
$1221_4 = \chi_{62}$	1	1	1	1	1
$1221_5 = \chi_{62}^{*2}$	1	1	1	1	1

$$\begin{aligned}
 \varphi_1 &= 1_1 \\
 \varphi_2 &= 110_1 \\
 \varphi_6 &= 370_1 \\
 \varphi_7 &= 370_2 \\
 \varphi_8 &= 370_3
 \end{aligned}$$

Block 2:	φ_3	φ_9
$111_1 = \chi_3$	1	.
$1110_1 = \chi_9$	.	1
$1221_1 = \chi_{15}$	1	1
$111_6 = \chi_{50}$	1	.
$111_7 = \chi_{50}^{*2}$	1	.
$1110_7 = \chi_{56}$	.	1
$1110_8 = \chi_{56}^{*2}$	.	1
$1221_6 = \chi_{63}$	1	1
$1221_7 = \chi_{63}^{*2}$	1	1

$$\begin{aligned}\varphi_3 &= 111_1 \\ \varphi_9 &= 1110_1\end{aligned}$$

Block 3:	φ_4	φ_{12}
$111_2 = \chi_4$	1	.
$1110_6 = \chi_{14}$	.	1
$1221_3 = \chi_{17}$	1	1
$111_8 = \chi_{51}$	1	.
$111_9 = \chi_{51}^{*5}$	1	.
$1110_{17} = \chi_{61}$	.	1
$1110_{18} = \chi_{61}^{*5}$	.	1
$1221_{10} = \chi_{65}$	1	1
$1221_{11} = \chi_{65}^{*5}$	1	1

$$\begin{aligned}\varphi_4 &= 111_2 \\ \varphi_{12} &= 1110_4\end{aligned}$$

Block 4:	φ_5	φ_{11}
$111_3 = \chi_5$	1	.
$1110_5 = \chi_{13}$	.	1
$1221_2 = \chi_{16}$	1	1
$111_{10} = \chi_{52}$	1	.
$111_{11} = \chi_{52}^{*5}$	1	.
$1110_{15} = \chi_{60}$	.	1
$1110_{16} = \chi_{60}^{*5}$	.	1
$1221_8 = \chi_{64}$	1	1
$1221_9 = \chi_{64}^{*5}$	1	1

$$\begin{aligned}\varphi_5 &= 111_3 \\ \varphi_{11} &= 1110_3\end{aligned}$$

Block 5:	φ_{10}
$1110_2 = \chi_{10}$	1
$1110_3 = \chi_{11}$	1
$1110_4 = \chi_{12}$	1
$1110_9 = \chi_{57}$	1
$1110_{10} = \chi_{57}^{*2}$	1
$1110_{11} = \chi_{58}$	1
$1110_{12} = \chi_{58}^{*5}$	1
$1110_{13} = \chi_{59}$	1
$1110_{14} = \chi_{59}^{*5}$	1

$$\varphi_{10} = 1110_2$$

Block 6:	φ_{13}
$1332_1 = \chi_{19}$	1
$1332_{19} = \chi_{66}$	1
$1332_{20} = \chi_{66}^{*5}$	1

$$\varphi_{13} = 1332_1$$

Block 7:	φ_{14}
$1332_2 = \chi_{20}$	1
$1332_{21} = \chi_{67}$	1
$1332_{22} = \chi_{67}^{*5}$	1

$$\varphi_{14} = 1332_2$$

Block 8:	φ_{15}
$1332_3 = \chi_{21}$	1
$1332_{23} = \chi_{68}$	1
$1332_{24} = \chi_{68}^{*11}$	1

$$\varphi_{15} = 1332_3$$

Block 9:	φ_{16}
$1332_4 = \chi_{22}$	1
$1332_{25} = \chi_{69}$	1
$1332_{26} = \chi_{69}^{*11}$	1

$$\varphi_{16} = 1332_4$$

Block 10:	φ_{17}
$1332_5 = \chi_{23}$	1
$1332_{27} = \chi_{70}$ $1332_{28} = \chi_{70}^{*11}$	1 1

$$\varphi_{17} = 1332_5$$

Block 11:	φ_{18}
$1332_6 = \chi_{24}$	1
$1332_{29} = \chi_{71}$ $1332_{30} = \chi_{71}^{*11}$	1 1

$$\varphi_{18} = 1332_6$$

Block 12:	φ_{19}
$1332_7 = \chi_{25}$	1
$1332_{31} = \chi_{72}$ $1332_{32} = \chi_{72}^{*41}$	1 1

$$\varphi_{19} = 1332_7$$

Block 13:	φ_{20}
$1332_8 = \chi_{26}$	1
$1332_{33} = \chi_{73}$ $1332_{34} = \chi_{73}^{*41}$	1 1

$$\varphi_{20} = 1332_8$$

Block 14:	φ_{21}
$1332_9 = \chi_{27}$	1
$1332_{35} = \chi_{74}$ $1332_{36} = \chi_{74}^{*41}$	1 1

$$\varphi_{21} = 1332_9$$

Block 15:	φ_{22}
$1332_{10} = \chi_{28}$	1
$1332_{37} = \chi_{75}$	1
$1332_{38} = \chi_{75}^{*41}$	1

$$\varphi_{22} = 1332_{10}$$

Block 16:	φ_{23}
$1332_{11} = \chi_{29}$	1
$1332_{39} = \chi_{76}$	1
$1332_{40} = \chi_{76}^{*41}$	1

$$\varphi_{23} = 1332_{11}$$

Block 17:	φ_{24}
$1332_{12} = \chi_{30}$	1
$1332_{41} = \chi_{77}$	1
$1332_{42} = \chi_{77}^{*41}$	1

$$\varphi_{24} = 1332_{12}$$

Block 18:	φ_{25}
$1332_{13} = \chi_{31}$	1
$1332_{43} = \chi_{78}$	1
$1332_{44} = \chi_{78}^{*41}$	1

$$\varphi_{25} = 1332_{13}$$

Block 19:	φ_{26}
$1332_{14} = \chi_{32}$	1
$1332_{45} = \chi_{79}$	1
$1332_{46} = \chi_{79}^{*41}$	1

$$\varphi_{26} = 1332_{14}$$

Block 20:	φ_{27}
$1332_{15} = \chi_{33}$	1
$1332_{47} = \chi_{80}$	1
$1332_{48} = \chi_{80}^{*41}$	1

$$\varphi_{27} = 1332_{15}$$

Block 21:	φ_{28}
$1332_{16} = \chi_{34}$	1
$1332_{49} = \chi_{81}$	1
$1332_{50} = \chi_{81}^{*41}$	1

$$\varphi_{28} = 1332_{16}$$

Block 22:	φ_{29}
$1332_{17} = \chi_{35}$	1
$1332_{51} = \chi_{82}$	1
$1332_{52} = \chi_{82}^{*41}$	1

$$\varphi_{29} = 1332_{17}$$

Block 23:	φ_{30}
$1332_{18} = \chi_{36}$	1
$1332_{53} = \chi_{83}$	1
$1332_{54} = \chi_{83}^{*41}$	1

$$\varphi_{30} = 1332_{18}$$

Block 24:	φ_{31}
$1440_1 = \chi_{37}$	1
$1440_{13} = \chi_{84}$	1
$1440_{14} = \chi_{84}^{*38}$	1

$$\varphi_{31} = 1440_1$$

Block 25:	φ_{32}
$1440_2 = \chi_{38}$	1
$1440_{15} = \chi_{85}$ $1440_{16} = \chi_{85}^{*38}$	1 1

$$\varphi_{32} = 1440_2$$

Block 26:	φ_{33}
$1440_3 = \chi_{39}$	1
$1440_{17} = \chi_{86}$ $1440_{18} = \chi_{86}^{*38}$	1 1

$$\varphi_{33} = 1440_3$$

Block 27:	φ_{34}
$1440_4 = \chi_{40}$	1
$1440_{19} = \chi_{87}$ $1440_{20} = \chi_{87}^{*38}$	1 1

$$\varphi_{34} = 1440_4$$

Block 28:	φ_{35}
$1440_5 = \chi_{41}$	1
$1440_{21} = \chi_{88}$ $1440_{22} = \chi_{88}^{*38}$	1 1

$$\varphi_{35} = 1440_5$$

Block 29:	φ_{36}
$1440_6 = \chi_{42}$	1
$1440_{23} = \chi_{89}$ $1440_{24} = \chi_{89}^{*38}$	1 1

$$\varphi_{36} = 1440_6$$

Block 30:	φ_{37}
$1440_7 = \chi_{43}$	1
$1440_{25} = \chi_{90}$	1
$1440_{26} = \chi_{90}^{*38}$	1

$$\varphi_{37} = 1440_7$$

Block 31:	φ_{38}
$1440_8 = \chi_{44}$	1
$1440_{27} = \chi_{91}$	1
$1440_{28} = \chi_{91}^{*38}$	1

$$\varphi_{38} = 1440_8$$

Block 32:	φ_{39}
$1440_9 = \chi_{45}$	1
$1440_{29} = \chi_{92}$	1
$1440_{30} = \chi_{92}^{*38}$	1

$$\varphi_{39} = 1440_9$$

Block 33:	φ_{40}
$1440_{10} = \chi_{46}$	1
$1440_{31} = \chi_{93}$	1
$1440_{32} = \chi_{93}^{*38}$	1

$$\varphi_{40} = 1440_{10}$$

Block 34:	φ_{41}
$1440_{11} = \chi_{47}$	1
$1440_{33} = \chi_{94}$	1
$1440_{34} = \chi_{94}^{*38}$	1

$$\varphi_{41} = 1440_{11}$$

Block 35:	φ_{42}
$1440_{12} = \chi_{48}$	1
$1440_{35} = \chi_{95}$	1
$1440_{36} = \chi_{95}^{*38}$	1

$$\varphi_{42} = 1440_{12}$$