

$L_3(7).3 \pmod{3}$

	blocks	defect	matrix		blocks	defect	matrix
3.G :	1	4	24×3		9	2	9×1
	2	3	27×2		10	2	9×1
	3	2	9×1		11	2	9×1
	$4 = \overline{3}$	2	9×1		12	2	9×1
	5	2	9×1		$13 = \overline{12}$	2	9×1
	$6 = \overline{5}$	2	9×1		14	2	9×1
	7	2	9×1		$15 = \overline{14}$	2	9×1
	$8 = \overline{7}$	2	9×1				

Block 1:	$\varphi_{1,0}$	$\varphi_{2,0}$	φ_{4+}	
$1_1 = \chi_{1,0}$	1	.	.	
$1_2 = \chi_{1,1}$	1	.	.	
$1_3 = \chi_{1,2}$	1	.	.	
$56_1 = \chi_{2,0}$	1	1	.	
$56_2 = \chi_{2,1}$	1	1	.	
$56_3 = \chi_{2,2}$	1	1	.	
$456_1 = \chi_{4+}$	3	3	1	
$343_1 = \chi_{20,0}$	.	1	1	
$343_2 = \chi_{20,1}$	.	1	1	
$343_3 = \chi_{20,2}$	.	1	1	
$57_4 = \chi_{23,0}$	2	1	.	$\varphi_{1,0} = 1_1$
$57_5 = \chi_{23,1}$	2	1	.	$\varphi_{2,0} = 55_1$
$57_6 = \chi_{23,2}$	2	1	.	$\varphi_{4+} = 288_1$
$57_7 = \chi_{23,0}^{*2}$	2	1	.	
$57_8 = \chi_{23,1}^{*2}$	2	1	.	
$57_9 = \chi_{23,2}^{*2}$	2	1	.	
$288_{19} = \chi_{25+}$	.	.	1	
$288_{20} = \chi_{25*2+}$	.	.	1	
$399_4 = \chi_{41,0}$	1	2	1	
$399_5 = \chi_{41,1}$	1	2	1	
$399_6 = \chi_{41,2}$	1	2	1	
$399_7 = \chi_{41,0}^{*2}$	1	2	1	
$399_8 = \chi_{41,1}^{*2}$	1	2	1	
$399_9 = \chi_{41,2}^{*2}$	1	2	1	

Block 2:	$\varphi_{3,0}$	$\varphi_{20,0}$
$57_1 = \chi_{3,0}$	1	.
$57_2 = \chi_{3,1}$	1	.
$57_3 = \chi_{3,2}$	1	.
$399_1 = \chi_{21,0}$	.	1
$399_2 = \chi_{21,1}$	.	1
$399_3 = \chi_{21,2}$	.	1
$456_2 = \chi_{22,0}$	1	1
$456_3 = \chi_{22,1}$	1	1
$456_4 = \chi_{22,2}$	1	1
$57_{10} = \chi_{24,0}$	1	.
$57_{11} = \chi_{24,1}$	1	.
$57_{12} = \chi_{24,2}$	1	.
$57_{13} = \chi_{24,0}^{*2}$	1	.
$57_{14} = \chi_{24,1}^{*2}$	1	.
$57_{15} = \chi_{24,2}^{*2}$	1	.
$399_{10} = \chi_{42,0}$	.	1
$399_{11} = \chi_{42,1}$	.	1
$399_{12} = \chi_{42,2}$	.	1
$399_{13} = \chi_{42,0}^{*2}$	.	1
$399_{14} = \chi_{42,1}^{*2}$	.	1
$399_{15} = \chi_{42,2}^{*2}$	.	1
$456_5 = \chi_{43,0}$	1	1
$456_6 = \chi_{43,1}$	1	1
$456_7 = \chi_{43,2}$	1	1
$456_8 = \chi_{43,0}^{*2}$	1	1
$456_9 = \chi_{43,1}^{*2}$	1	1
$456_{10} = \chi_{43,2}^{*2}$	1	1

$$\begin{aligned}\varphi_{3,0} &= 57_1 \\ \varphi_{20,0} &= 399_1\end{aligned}$$

Block 3:	$\varphi_{7,0}$
$288_1 = \chi_{7,0}$	1
$288_2 = \chi_{7,1}$	1
$288_3 = \chi_{7,2}$	1
$288_{21} = \chi_{28,0}$	1
$288_{22} = \chi_{28,1}$	1
$288_{23} = \chi_{28,2}$	1
$288_{24} = \chi_{28,0}^{*20}$	1
$288_{25} = \chi_{28,1}^{*20}$	1
$288_{26} = \chi_{28,2}^{*20}$	1

$$\varphi_{7,0} = 288_2$$

Block 4:	$\varphi_{8,0}$
$288_4 = \chi_{8,0}$	1
$288_5 = \chi_{8,1}$	1
$288_6 = \chi_{8,2}$	1
$288_{27} = \chi_{29,0}$	1
$288_{28} = \chi_{29,1}$	1
$288_{29} = \chi_{29,2}$	1
$288_{30} = \chi_{29,0}^{*20}$	1
$288_{31} = \chi_{29,1}^{*20}$	1
$288_{32} = \chi_{29,2}^{*20}$	1

$$\varphi_{8,0} = 288_3$$

Block 5:	$\varphi_{9,0}$
$288_7 = \chi_{9,0}$	1
$288_8 = \chi_{9,1}$	1
$288_9 = \chi_{9,2}$	1
$288_{33} = \chi_{30,0}$	1
$288_{34} = \chi_{30,1}$	1
$288_{35} = \chi_{30,2}$	1
$288_{36} = \chi_{30,0}^{*20}$	1
$288_{37} = \chi_{30,1}^{*20}$	1
$288_{38} = \chi_{30,2}^{*20}$	1

$$\varphi_{9,0} = 288_4$$

Block 6:	$\varphi_{10,0}$
$288_{10} = \chi_{10,0}$	1
$288_{11} = \chi_{10,1}$	1
$288_{12} = \chi_{10,2}$	1
$288_{39} = \chi_{31,0}$	1
$288_{40} = \chi_{31,1}$	1
$288_{41} = \chi_{31,2}$	1
$288_{42} = \chi_{31,0}^{*20}$	1
$288_{43} = \chi_{31,1}^{*20}$	1
$288_{44} = \chi_{31,2}^{*20}$	1

$$\varphi_{10,0} = 288_5$$

Block 7:	$\varphi_{11,0}$
$288_{13} = \chi_{11,0}$	1
$288_{14} = \chi_{11,1}$	1
$288_{15} = \chi_{11,2}$	1
$288_{45} = \chi_{32,0}$	1
$288_{46} = \chi_{32,1}$	1
$288_{47} = \chi_{32,2}$	1
$288_{48} = \chi_{32,0}^{*20}$	1
$288_{49} = \chi_{32,1}^{*20}$	1
$288_{50} = \chi_{32,2}^{*20}$	1

$$\varphi_{11,0} = 288_6$$

Block 8:	$\varphi_{12,0}$
$288_{16} = \chi_{12,0}$	1
$288_{17} = \chi_{12,1}$	1
$288_{18} = \chi_{12,2}$	1
$288_{51} = \chi_{33,0}$	1
$288_{52} = \chi_{33,1}$	1
$288_{53} = \chi_{33,2}$	1
$288_{54} = \chi_{33,0}^{*20}$	1
$288_{55} = \chi_{33,1}^{*20}$	1
$288_{56} = \chi_{33,2}^{*20}$	1

$$\varphi_{12,0} = 288_7$$

Block 9:	$\varphi_{13,0}$
$342_1 = \chi_{13,0}$	1
$342_2 = \chi_{13,1}$	1
$342_3 = \chi_{13,2}$	1
$342_{22} = \chi_{34,0}$	1
$342_{23} = \chi_{34,1}$	1
$342_{24} = \chi_{34,2}$	1
$342_{25} = \chi_{34,0}^{*2}$	1
$342_{26} = \chi_{34,1}^{*2}$	1
$342_{27} = \chi_{34,2}^{*2}$	1

$$\varphi_{13,0} = 342_1$$

Block 10:	$\varphi_{14,0}$
$342_4 = \chi_{14,0}$	1
$342_5 = \chi_{14,1}$	1
$342_6 = \chi_{14,2}$	1
$342_{28} = \chi_{35,0}$	1
$342_{29} = \chi_{35,1}$	1
$342_{30} = \chi_{35,2}$	1
$342_{31} = \chi_{35,0}^{*17}$	1
$342_{32} = \chi_{35,1}^{*17}$	1
$342_{33} = \chi_{35,2}^{*17}$	1

$$\varphi_{14,0} = 342_2$$

Block 11:	$\varphi_{15,0}$
$342_7 = \chi_{15,0}$	1
$342_8 = \chi_{15,1}$	1
$342_9 = \chi_{15,2}$	1
$342_{34} = \chi_{36,0}$	1
$342_{35} = \chi_{36,1}$	1
$342_{36} = \chi_{36,2}$	1
$342_{37} = \chi_{36,0}^{*17}$	1
$342_{38} = \chi_{36,1}^{*17}$	1
$342_{39} = \chi_{36,2}^{*17}$	1

$$\varphi_{15,0} = 342_3$$

Block 12:	$\varphi_{16,0}$
$342_{10} = \chi_{16,0}$	1
$342_{11} = \chi_{16,1}$	1
$342_{12} = \chi_{16,2}$	1
$342_{40} = \chi_{37,0}$	1
$342_{41} = \chi_{37,1}$	1
$342_{42} = \chi_{37,2}$	1
$342_{43} = \chi_{37,0}^{*17}$	1
$342_{44} = \chi_{37,1}^{*17}$	1
$342_{45} = \chi_{37,2}^{*17}$	1

$$\varphi_{16,0} = 342_4$$

Block 13:	$\varphi_{17,0}$
$342_{13} = \chi_{17,0}$	1
$342_{14} = \chi_{17,1}$	1
$342_{15} = \chi_{17,2}$	1
$342_{46} = \chi_{38,0}$	1
$342_{47} = \chi_{38,1}$	1
$342_{48} = \chi_{38,2}$	1
$342_{49} = \chi_{38,0}^{*17}$	1
$342_{50} = \chi_{38,1}^{*17}$	1
$342_{51} = \chi_{38,2}^{*17}$	1

$$\varphi_{17,0} = 342_5$$

Block 14:	$\varphi_{18,0}$
$342_{16} = \chi_{18,0}$	1
$342_{17} = \chi_{18,1}$	1
$342_{18} = \chi_{18,2}$	1
$342_{52} = \chi_{39,0}$	1
$342_{53} = \chi_{39,1}$	1
$342_{54} = \chi_{39,2}$	1
$342_{55} = \chi_{39,0}^{*17}$	1
$342_{56} = \chi_{39,1}^{*17}$	1
$342_{57} = \chi_{39,2}^{*17}$	1

$$\varphi_{18,0} = 342_6$$

Block 15:	$\varphi_{19,0}$
$342_{19} = \chi_{19,0}$	1
$342_{20} = \chi_{19,1}$	1
$342_{21} = \chi_{19,2}$	1
$342_{58} = \chi_{40,0}$	1
$342_{59} = \chi_{40,1}$	1
$342_{60} = \chi_{40,2}$	1
$342_{61} = \chi_{40,0}^{*17}$	1
$342_{62} = \chi_{40,1}^{*17}$	1
$342_{63} = \chi_{40,2}^{*17}$	1

$$\varphi_{19,0} = 342_7$$