## $L_2(27).2 \pmod{3}$

	blocks	defect	matrix
G:	1 2 3	3 0 0	$27 \times 26$ $27_1 = \chi_{10,0}, \varphi_{14,0}$ $27_2 = \chi_{10,1}, \varphi_{14,1}$
2.G:	4	3	$27 \times 26$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{6,0}$	$\varphi_{6,1}$	$\varphi_{7,0}$
$1_1 = \chi_{1,0}$	1												
$1_2 = \chi_{1,1}$		1											
$26_1 = \chi_{2+}$	1	1							1	1	1	1	1
$26_2 = \chi_{4,0}$						1	1			1			1
$26_3 = \chi_{4,1}$		•			1			1	1	•			
$26_4 = \chi_{5,0}$		•		1	1					•	1		
$26_5 = \chi_{5,1}$		•	1		•	1		•	•	•		1	1
$26_6 = \chi_{6,0}$		•	1		•			1	1	•		1	
$26_7 = \chi_{6,1}$				1			1			1	1		
$26_8 = \chi_{7,0}$		1											1
$26_9 = \chi_{7,1}$	1												
$26_{10} = \chi_{8,0}$		1									1		
$26_{11} = \chi_{8,1}$	1											1	
$26_{12} = \chi_{9,0}$		1							1				
$26_{13} = \chi_{9,1}$	1									1			
$28_1 = \chi_{11,0}$	1			1						1	1		
$28_2 = \chi_{11,1}$		1	1	•				•	1	•	•	1	1
$28_3 = \chi_{12,0}$	1				•			1	1			1	•
$28_4 = \chi_{12,1}$		1		•			1	•		1	1		1
$28_5 = \chi_{13,0}$	1	•		•		1		•		1	•	1	1
$28_6 = \chi_{13,1}$		1		•	1			•	1	•	1		•
$28_7 = \chi_{14,0}$		•	•		•	•		1	1	•			•
$28_8 = \chi_{14,1}$		•	•	•	•	•	1	•	•	1			
$28_9 = \chi_{15,0}$		•	•	•	•	1	•	•	•	•		•	1
$28_{10} = \chi_{15,1}$		•	•	•	1	•		•	•	•			•
$28_{11} = \chi_{16,0}$		•	•	1	•	•	•	•	•	•	1		•
$28_{12} = \chi_{16,1}$			1					•				1	

(Block 1:)	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$
$1_1 = \chi_{1,0}$												
$1_2 = \chi_{1,1}$												
$26_1 = \chi_{2+}$	1											
$26_2 = \chi_{4,0}$										1		
$26_3 = \chi_{4,1}$	1										1	
$26_4 = \chi_{5,0}$	1					•		1		•		•
$26_5 = \chi_{5,1}$				•		•		•	1	•		
$26_6 = \chi_{6,0}$				•		•		•			•	1
$26_7 = \chi_{6,1}$		•		•	•	•	•	•	•	•	•	•
$26_8 = \chi_{7,0}$		•		1	•	•	•	•	1	•	•	•
$26_9 = \chi_{7,1}$	1				1	•	•	1	•			•
$26_{10} = \chi_{8,0}$		1		•	•	•	•	•	•	•	•	•
$26_{11} = \chi_{8,1}$		•	1	•	•	•	•	•	•	•	•	1
$26_{12} = \chi_{9,0}$						1	•		•		1	•
$26_{13} = \chi_{9,1}$						•	1		•	1		•
$28_1 = \chi_{11,0}$	1					•	•	1	•			•
$28_2 = \chi_{11,1}$				•		•			1	•		•
$28_3 = \chi_{12,0}$	1			•		•						1
$28_4 = \chi_{12,1}$				•		•				•		•
$28_5 = \chi_{13,0}$				•		•				1		•
$28_6 = \chi_{13,1}$	1	•	•	•	•			•	•	•	1	•
$28_7 = \chi_{14,0}$		•	•	•	•	1	•			•	1	
$28_8 = \chi_{14,1}$		•	•		•		1			1		
$28_9 = \chi_{15,0}$		•	•	1		•			1	•	•	ė
$28_{10} = \chi_{15,1}$	1		•	•	1			1				
$28_{11} = \chi_{16,0}$		1		•	•	•	•	•	•	•	•	
$28_{12} = \chi_{16,1}$		•	1	•	•	•		•	•	•	•	1

(Block 1:)	$\varphi_{13,1}$
1 2	, -,
$1_1 = \chi_{1,0}$	
$1_2 = \chi_{1,1}$	
$26_1 = \chi_{2+}$	•
$26_2 = \chi_{4,0}$	•
$26_3 = \chi_{4,1}$	•
$26_4 = \chi_{5,0}$	
$26_5 = \chi_{5,1}$	
$26_6 = \chi_{6,0}$	
$26_7 = \chi_{6,1}$	1
$26_8 = \chi_{7,0}$	
$26_9 = \chi_{7,1}$	
$26_{10} = \chi_{8,0}$	1
$26_{11} = \chi_{8,1}$	
$26_{12} = \chi_{9,0}$	
$26_{13} = \chi_{9,1}$	
$28_1 = \chi_{11,0}$	
$28_2 = \chi_{11,1}$	
$28_3 = \chi_{12,0}$	
$28_4 = \chi_{12,1}$	1
$28_5 = \chi_{13,0}$	
$28_6 = \chi_{13,1}$	
$28_7 = \chi_{14,0}$	
$28_8 = \chi_{14,1}$	
$28_9 = \chi_{15,0}$	
$28_{10} = \chi_{15,1}$	
$28_{11} = \chi_{16,0}$	1
$28_{12} = \chi_{16,1}$	
12 A10,1	<u> </u>

Block 4:	$\varphi_{15,0}$	$arphi_{15,1}$	$\varphi_{16,0}$	$\varphi_{16,1}$	$\varphi_{17,0}$	$\varphi_{17,1}$	$\varphi_{18,0}$	$\varphi_{18,1}$	$\varphi_{19,0}$	$\varphi_{19,1}$	$\varphi_{20,0}$
$28_{13} = \chi_{17+}$	1	1	1	1	1	1					
$26_{14} = \chi_{19,0}$		•		•			•	•		•	
$26_{15} = \chi_{19,1}$		•		•			•	•		•	
$26_{16} = \chi_{20,0}$		•		•	1		•	•		1	
$26_{17} = \chi_{20,1}$		•	•	•	•	1	•	•	1	•	•
$26_{18} = \chi_{21,0}$		•	1	•	•	•	•	1	•	•	•
$26_{19} = \chi_{21,1}$		•	•	1	•	•	1	•	•	•	•
$26_{20} = \chi_{22,0}$	1	•	•	•	•	•	•	•	•	•	•
$26_{21} = \chi_{22,1}$		1	•	•	•	•	•	•	•	•	1
$26_{22} = \chi_{23,0}$		1	1	•	•	1	•	•	•	•	1
$26_{23} = \chi_{23,1}$	1	•	•	1	1	•	•	•	•	•	•
$26_{24} = \chi_{24,0}$	1	•	•	1	•	1	•	•	1	•	•
$26_{25} = \chi_{24,1}$		1	1	•	1	•	•	•	•	1	•
$26_{26} = \chi_{25,0}$		1		1	1		1		•		
$26_{27} = \chi_{25,1}$	1		1			1		1	•		
$28_{14} = \chi_{26,0}$	1					1			1		
$28_{15} = \chi_{26,1}$		1			1				•	1	
$28_{16} = \chi_{27,0}$				1	1		1		•		
$28_{17} = \chi_{27,1}$			1			1		1	•		
$28_{18} = \chi_{28,0}$		1	1						•		1
$28_{19} = \chi_{28,1}$	1			1					•		
$28_{20} = \chi_{29,0}$					1					1	
$28_{21} = \chi_{29,1}$						1			1		
$28_{22} = \chi_{30,0}$			1					1			
$28_{23} = \chi_{30,1}$		•	•	1	•	•	1	•	•	•	•
$28_{24} = \chi_{31,0}$	1	•	•	•	•	•	•	•	•	•	•
$28_{25} = \chi_{31,1}$		1	•	•	•	•	•	•	•	•	1

(Block 4:)	$\varphi_{20,1}$	$\varphi_{21,0}$	$\varphi_{21,1}$	$\varphi_{22,0}$	$\varphi_{22,1}$	$\varphi_{23,0}$	$\varphi_{23,1}$	$\varphi_{24,0}$	$\varphi_{24,1}$	$\varphi_{25,0}$	$\varphi_{25,1}$
$28_{13} = \chi_{17+}$								1	1		
$26_{14} = \chi_{19,0}$		1		1		1			1		
$26_{15} = \chi_{19,1}$			1		1		1	1			
$26_{16} = \chi_{20,0}$		•		•	•	•	•	•		1	•
$26_{17} = \chi_{20,1}$											1
$26_{18} = \chi_{21,0}$			•	•	•		•	•	•	•	•
$26_{19} = \chi_{21,1}$			•	•	•		•	•	•	•	•
$26_{20} = \chi_{22,0}$	1				•			•			
$26_{21} = \chi_{22,1}$											
$26_{22} = \chi_{23,0}$					1			1			
$26_{23} = \chi_{23,1}$	1			1					1		
$26_{24} = \chi_{24,0}$			1					1			
$26_{25} = \chi_{24,1}$		1		•	•	•	•	•	1	•	•
$26_{26} = \chi_{25,0}$							1	1			
$26_{27} = \chi_{25,1}$		•		•	•	1	•	•	1	•	•
$28_{14} = \chi_{26,0}$		•		•	•	•	•	•		•	1
$28_{15} = \chi_{26,1}$		•	•	•	•		•	•	•	1	•
$28_{16} = \chi_{27,0}$		•	•	•	•		•	•	•	•	•
$28_{17} = \chi_{27,1}$		•	•	•	•		•	•	•	•	•
$28_{18} = \chi_{28,0}$		•	•	•	•	•	•	•	•	•	•
$28_{19} = \chi_{28,1}$	1	•	•	•	•		•	•	•	•	•
$28_{20} = \chi_{29,0}$		1	•	1	•		•	•	1	•	•
$28_{21} = \chi_{29,1}$		•	1	•	1	•	•	1	•	•	•
$28_{22} = \chi_{30,0}$		1			•	1		•	1	•	
$28_{23} = \chi_{30,1}$		•	1	•	•		1	1	•	•	
$28_{24} = \chi_{31,0}$	1			1		1		•	1		
$28_{25} = \chi_{31,1}$					1		1	1			

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(Block 4:)	$\varphi_{26,0}$	$\varphi_{26,1}$	$\varphi_{27,0}$	$\varphi_{27,1}$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$28_{13} = \gamma_{17+}$		_	_	_	$\varphi_{15,0}$	=	$2_1$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{14} = \gamma_{10,0}$					$\varphi_{15,1}$	=	$2_2$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{15} = \gamma_{10,1}$					$\varphi_{16,0}$	=	$2\varepsilon$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{16} = \chi_{20.0}$					$arphi_{16,1}$	=	2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{17} = \chi_{20,1}$					$\varphi_{17,0}$	=	2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{18} = \gamma_{21.0}$			1		$arphi_{17,1}$	=	$2\epsilon$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{10} = \chi_{21,1}$				1	$arphi_{18,0}$	=	6:
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{20} = \chi_{22,0}$			-		$\varphi_{18,1}$	=	$6_2$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{21} = \chi_{22,1}$		1			$\varphi_{19,0}$	=	6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{22} = \chi_{23,0}$		_	-		$\varphi_{19,1}$	=	64
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{23} = \chi_{23,1}$			-		$arphi_{20,0}$	=	6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{24} = \gamma_{24,0}$					$arphi_{20,1}$	=	6e
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{25} = \chi_{24,1}$					$\varphi_{21,0}$	=	67
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{26} = \gamma_{25,0}$					$arphi_{21,1}$	=	68
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$26_{27} = \chi_{25,1}$					$arphi_{22,0}$	=	69
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$28_{14} = \chi_{26,0}$					$arphi_{22,1}$	=	6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$28_{15} = \chi_{26,1}$					$\varphi_{23,0}$	=	6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$28_{16} = \chi_{27,0}$				1	$\varphi_{23,1}$	=	6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$28_{17} = \chi_{27,1}$				_	$\varphi_{24,0}$	=	8:
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$28_{19} = v_{29,0}$		1	_		$arphi_{24,1}$	=	$8_{2}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$28_{10} = \chi_{28,0}$	1				$\varphi_{25,0}$	=	18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$28_{20} = \chi_{20,0}$					$arphi_{25,1}$	=	18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$28_{21} = v_{20,1}$					$\varphi_{26,0}$	=	18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$28_{22} = v_{20,0}$		•	•	•	$\varphi_{26,1}$	=	18
$28_{24} = \chi_{31,0}$ $\varphi_{27,1} = 1$	$28_{22} = \chi_{20,1}$		•	•	•	$\varphi_{27,0}$	=	18
$28_{25} = v_{21,1}$	$28_{24} = \chi_{31,0}$		•	•	•	$\varphi_{27,1}$	=	18
	$28_{25} = \chi_{31,1}$		•	•	•			