$L_2(49).2_1 \pmod{2}$

	blocks	defect	matrix
2.G:	1	6	20×2
	2	2	4×1
	3	2	4×1
	4	2	4×1
	5	2	4×1
	6	2	4×1
	7	2	4×1

blocks	defect	matrix
8 9 10 11 12 13 14	2 2 2 2 2 2 2 5	$\begin{array}{c} 4 \times 1 \\ 32 \times 1 \end{array}$

Block 1:	$\varphi_{1,0}$	φ_{2+}
$1_1 = \chi_{1,0}$	1	
$1_2 = \chi_{1,1}$	1	
$50_1 = \chi_{2+}$	2	1
$49_1 = \chi_{16,0}$	1	1
$49_2 = \chi_{16,1}$	1	1
$50_4 = \chi_{18,0}$	2	1
$50_5 = \chi_{18,1}$	2	1
$50_8 = \chi_{20,0}$	2	1
$50_9 = \chi_{20,1}$	2	1
$50_{10} = \chi_{21,0}$	2	1
$50_{11} = \chi_{21,1}$	2	1
$48_{25} = \chi_{28+}$		1
$50_{24} = \chi_{42,0}$	2	1
$50_{25} = \chi_{42,1}$	2	1
$50_{26} = \chi_{43,0}$	2	1
$50_{27} = \chi_{43,1}$	2	1
$50_{28} = \chi_{44,0}$	2	1
$50_{29} = \chi_{44,1}$	2	1
$50_{30} = \chi_{45,0}$	2	1
$50_{31} = \chi_{45,1}$	2	1

$$\begin{array}{rcl} \varphi_{1,0} & = & 1_1 \\ \varphi_{2+} & = & 48_1 \end{array}$$

Block 2:
$$\varphi_{4,0}$$

$$48_1 = \chi_{4,0} \qquad 1$$

$$48_2 = \chi_{4,1} \qquad 1$$

$$48_{26} = \chi_{30,0} \qquad 1$$

$$48_{27} = \chi_{30,1} \qquad 1$$

$$\varphi_{4,0} = 48_2$$

Block 3:	$\varphi_{5,0}$			
$48_3 = \chi_{5,0} $ $48_4 = \chi_{5,1}$	1 1	$arphi_{5,0}$	=	483
$48_{28} = \chi_{31,0} 48_{29} = \chi_{31,1}$	1 1			

Block 4:	$arphi_{6,0}$			
$48_5 = \chi_{6,0} $ $48_6 = \chi_{6,1}$	1 1	$arphi_{6,0}$	=	48_{4}
$48_{30} = \chi_{32,0}$ $48_{31} = \chi_{32,1}$	1 1			

Block 5:	$\varphi_{7,0}$			
$48_7 = \chi_{7,0} \\ 48_8 = \chi_{7,1}$	1 1	$arphi_{7,0}$	=	48_{5}
$48_{32} = \chi_{33,0} 48_{33} = \chi_{33,1}$	1 1			

Block 6:	$arphi_{8,0}$	
$48_9 = \chi_{8,0} $ $48_{10} = \chi_{8,1}$	1 1	$\varphi_{8,0} = 48_6$
$48_{34} = \chi_{34,0}$ $48_{35} = \chi_{34,1}$	1 1	

Block 7:
$$\varphi_{9,0}$$

$$48_{11} = \chi_{9,0} \qquad 1$$

$$48_{12} = \chi_{9,1} \qquad 1$$

$$48_{36} = \chi_{35,0} \qquad 1$$

$$48_{37} = \chi_{35,1} \qquad 1$$

Block 8:	$\varphi_{10,0}$			
$48_{13} = \chi_{10,0} $ $48_{14} = \chi_{10,1}$	1 1	$arphi_{10,0}$	=	488
$48_{38} = \chi_{36,0}$ $48_{39} = \chi_{36,1}$	1 1			

Block 9:	$\varphi_{11,0}$			
$48_{15} = \chi_{11,0} $ $48_{16} = \chi_{11,1}$	1 1	$arphi_{11,0}$	=	489
$48_{40} = \chi_{37,0} 48_{41} = \chi_{37,1}$	1 1			

	=		
$\varphi_{12,0}$	_		
1 1	$arphi_{12,0}$	=	4810
1 1	-		
	1 1	$\begin{array}{c c} 1 \\ 1 \\ 1 \end{array} \qquad \varphi_{12,0}$	$\begin{array}{c c} 1 \\ 1 \\ 1 \end{array} \qquad \varphi_{12,0} \ = \\$

Block 11:	$\varphi_{13,0}$			
$48_{19} = \chi_{13,0} 48_{20} = \chi_{13,1}$	1 1	$arphi_{13,0}$	=	4811
$48_{44} = \chi_{39,0}$ $48_{45} = \chi_{39,1}$	1 1			

Block 12:	$\varphi_{14,0}$			
$48_{21} = \chi_{14,0}$ $48_{22} = \chi_{14,1}$	1 1	$arphi_{14,0}$	=	48
$48_{46} = \chi_{40,0}$ $48_{47} = \chi_{40,1}$	1 1	,		

Block 13:	$\varphi_{15,0}$
$48_{23} = \chi_{15,0} 48_{24} = \chi_{15,1}$	1 1
$48_{48} = \chi_{41,0}$ $48_{49} = \chi_{41,1}$	1 1

$$\varphi_{15,0} = 48_{13}$$

Block 14: $\varphi_{16,0}$ $50_2 = \chi_{17,0}$ 1 $50_3 = \chi_{17,1}$ 1 $50_6 = \chi_{19,0}$ 1 $50_7 = \chi_{19,1}$ 1 $50_{12} = \chi_{22,0}$ 1 $50_{13} = \chi_{22,1}$ 1 $50_{14} = \chi_{23,0}$ 1 $50_{15} = \chi_{23,1}$ 1 $50_{16} = \chi_{24,0}$ 1 $50_{17} = \chi_{24,1}$ 1 $50_{18} = \chi_{25,0}$ 1 $50_{19} = \chi_{25,1}$ 1 $50_{20} = \chi_{26,0}$ 1 $50_{21} = \chi_{26,1}$ 1 $50_{22} = \chi_{27,0}$ 1 $50_{23} = \chi_{27,1}$ 1 $50_{32} = \chi_{46,0}$ 1 $50_{33} = \chi_{46,1}$ 1 $50_{34} = \chi_{47,0}$ 1		
$\begin{array}{ccccc} 50_3 = \chi_{17,1} & 1 \\ 50_6 = \chi_{19,0} & 1 \\ 50_7 = \chi_{19,1} & 1 \\ 50_{12} = \chi_{22,0} & 1 \\ 50_{13} = \chi_{22,1} & 1 \\ 50_{14} = \chi_{23,0} & 1 \\ 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$	Block 14:	$\varphi_{16,0}$
$\begin{array}{ccccc} 50_3 = \chi_{17,1} & 1 \\ 50_6 = \chi_{19,0} & 1 \\ 50_7 = \chi_{19,1} & 1 \\ 50_{12} = \chi_{22,0} & 1 \\ 50_{13} = \chi_{22,1} & 1 \\ 50_{14} = \chi_{23,0} & 1 \\ 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$	$50_2 = \chi_{17,0}$	1
$\begin{array}{ccccc} 50_6 = \chi_{19,0} & 1 \\ 50_7 = \chi_{19,1} & 1 \\ 50_{12} = \chi_{22,0} & 1 \\ 50_{13} = \chi_{22,1} & 1 \\ 50_{14} = \chi_{23,0} & 1 \\ 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$50_7 = \chi_{19,1} $ $50_{12} = \chi_{22,0} $ 1 $50_{13} = \chi_{22,1} $ 1 $50_{14} = \chi_{23,0} $ 1 $50_{15} = \chi_{23,1} $ 1 $50_{16} = \chi_{24,0} $ 1 $50_{17} = \chi_{24,1} $ 1 $50_{18} = \chi_{25,0} $ 1 $50_{19} = \chi_{25,1} $ 1 $50_{20} = \chi_{26,0} $ 1 $50_{21} = \chi_{26,1} $ 1 $50_{22} = \chi_{27,0} $ 1 $50_{23} = \chi_{27,1} $ 1 $50_{32} = \chi_{46,0} $ 1 $50_{33} = \chi_{46,1} $ 1		1
$\begin{array}{c cccc} 50_{12} = \chi_{22,0} & 1 \\ 50_{13} = \chi_{22,1} & 1 \\ 50_{14} = \chi_{23,0} & 1 \\ 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$\begin{array}{ccccc} 50_{13} = \chi_{22,1} & 1 \\ 50_{14} = \chi_{23,0} & 1 \\ 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$\begin{array}{c cccc} 50_{14} = \chi_{23,0} & 1 \\ 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$\begin{array}{c cccc} 50_{15} = \chi_{23,1} & 1 \\ 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$\begin{array}{c cccc} 50_{16} = \chi_{24,0} & 1 \\ 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline \\ 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$\begin{array}{c cccc} 50_{17} = \chi_{24,1} & 1 \\ 50_{18} = \chi_{25,0} & 1 \\ 50_{19} = \chi_{25,1} & 1 \\ 50_{20} = \chi_{26,0} & 1 \\ 50_{21} = \chi_{26,1} & 1 \\ 50_{22} = \chi_{27,0} & 1 \\ 50_{23} = \chi_{27,1} & 1 \\ \hline 50_{32} = \chi_{46,0} & 1 \\ 50_{33} = \chi_{46,1} & 1 \\ \end{array}$		1
$50_{18} = \chi_{25,0} $ $50_{19} = \chi_{25,1} $ $50_{20} = \chi_{26,0} $ $50_{21} = \chi_{26,1} $ $50_{22} = \chi_{27,0} $ 1 $50_{23} = \chi_{27,1} $ 1 $50_{32} = \chi_{46,0} $ $50_{33} = \chi_{46,1} $ 1		1
$50_{19} = \chi_{25,1} $ 1 $50_{20} = \chi_{26,0} $ 1 $50_{21} = \chi_{26,1} $ 1 $50_{22} = \chi_{27,0} $ 1 $50_{23} = \chi_{27,1} $ 1 $50_{32} = \chi_{46,0} $ 1 $50_{33} = \chi_{46,1} $ 1		1
$50_{20} = \chi_{26,0} $ $50_{21} = \chi_{26,1} $ $50_{22} = \chi_{27,0} $ $50_{23} = \chi_{27,1} $ 1 $50_{32} = \chi_{46,0} $ $50_{33} = \chi_{46,1} $ 1		1
$50_{21} = \chi_{26,1} \qquad 1$ $50_{22} = \chi_{27,0} \qquad 1$ $50_{23} = \chi_{27,1} \qquad 1$ $50_{32} = \chi_{46,0} \qquad 1$ $50_{33} = \chi_{46,1} \qquad 1$		1
$50_{22} = \chi_{27,0} \qquad 1$ $50_{23} = \chi_{27,1} \qquad 1$ $50_{32} = \chi_{46,0} \qquad 1$ $50_{33} = \chi_{46,1} \qquad 1$		1
$50_{23} = \chi_{27,1} \qquad 1$ $50_{32} = \chi_{46,0} \qquad 1$ $50_{33} = \chi_{46,1} \qquad 1$		1
$50_{33} = \chi_{46,1} $ 1		1
$50_{33} = \chi_{46,1} \qquad 1$	$50_{32} = \chi_{46.0}$	1
		1
	$50_{34} = \chi_{47,0}$	1

$$\varphi_{16,0} \quad = \quad 50_1$$