$L_2(23).2\pmod{2}$

	blocks	defect	matrix
2.G:	1 2 3 4 5 6 7	5 4 2 2 2 2 2 2	$ \begin{array}{c} 12 \times 2 \\ 16 \times 1 \\ 4 \times 1 \end{array} $

Block 1:	$\varphi_{1,0}$	φ_{2+}
$1_1 = \chi_{1,0}$	1	
$1_2 = \chi_{1,1}$	1	
$22_1 = \chi_{2+}$		1
$22_4 = \chi_{5,0}$		1
$22_5 = \chi_{5,1}$		1
$23_1 = \chi_{9,0}$	1	1
$23_2 = \chi_{9,1}$	1	1
$24_{11} = \chi_{15+}$	2	1
$22_{12} = \chi_{17,0}$		1
$22_{13} = \chi_{17,1}$		1
$22_{14} = \chi_{18,0}$		1
$22_{15} = \chi_{18,1}$		1

Block 2:	$\varphi_{4,0}$	
$22_2 = \chi_{4,0}$	1	
$22_3 = \chi_{4,1}$	1	
$22_6 = \chi_{6,0}$	1	
$22_7 = \chi_{6,1}$	1	
$22_8 = \chi_{7,0}$	1	
$22_9 = \chi_{7,1}$	1	
$22_{10} = \chi_{8,0}$	1	
$22_{11} = \chi_{8,1}$	1	$\varphi_{4,0} = 22_2$
$22_{16} = \chi_{19,0}$	1	
$22_{17} = \chi_{19,1}$	1	
$22_{18} = \chi_{20,0}$	1	
$22_{19} = \chi_{20,1}$	1	
$22_{20} = \chi_{21,0}$	1	
$22_{21} = \chi_{21,1}$	1	
$22_{22} = \chi_{22,0}$	1	
$22_{23} = \chi_{22,1}$	1	

Block 3:	$arphi_{5,0}$			
$24_1 = \chi_{10,0}$ $24_2 = \chi_{10,1}$	1 1	$arphi_{5,0}$	=	24_{1}
$24_{12} = \chi_{23,0} \\ 24_{13} = \chi_{23,1}$	1 1			

Block 4:	$\varphi_{6,0}$	
$24_3 = \chi_{11,0} \\ 24_4 = \chi_{11,1}$	1 1	$\varphi_{6,0} = 24_2$
$24_{14} = \chi_{24,0}$ $24_{15} = \chi_{24,1}$	1 1	

Block 5:	$\varphi_{7,0}$			
$24_5 = \chi_{12,0} 24_6 = \chi_{12,1}$	1 1	$arphi_{7,0}$	=	243
$24_{16} = \chi_{25,0}$ $24_{17} = \chi_{25,1}$	1 1			

Block 6:	$\varphi_{8,0}$			
$24_7 = \chi_{13,0} $ $24_8 = \chi_{13,1}$	1 1	$arphi_{8,0}$	=	24_{4}
$24_{18} = \chi_{26,0}$ $24_{19} = \chi_{26,1}$	1 1			

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

$$24_9 = \chi_{14,0} \qquad 1$$

$$24_{10} = \chi_{14,1} \qquad 1$$

$$24_{20} = \chi_{27,0} \qquad 1$$

$$24_{21} = \chi_{27,1} \qquad 1$$