

$L_3(4).2_2 \pmod{3}$

	blocks	defect	matrix
$3.G :$	1	3	14×7
	2	1	3×2
	$3 = \bar{2}$	1	3×2
	4	1	3×1
$6.G :$	5	3	14×7
	6	1	3×2

	blocks	defect	matrix
	7	1	3×2
$12_1.G :$	8	3	16×5
$12_2.G :$	9	3	14×7
	$10 = 9 * 7$		
	11	1	3×2
	$12 = 11 * 7$		

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	φ_{3+}	$\varphi_{5,0}$	$\varphi_{5,1}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	
$20_1 = \chi_{2,0}$	1	.	.	.	.	1	.	
$20_2 = \chi_{2,1}$	.	1	.	.	.	.	1	$\varphi_{1,0} = 1_1$
$35_1 = \chi_{3,0}$	.	1	1	.	.	1	.	$\varphi_{1,1} = 1_2$
$35_2 = \chi_{3,1}$	1	.	.	1	.	.	1	$\varphi_{2,0} = 15_1$
$70_1 = \chi_{4+}$	1	1	.	.	1	1	1	$\varphi_{2,1} = 15_2$
$64_1 = \chi_{10,0}$	.	.	1	.	1	1	.	$\varphi_{3+} = 30_1$
$64_2 = \chi_{10,1}$	.	.	.	1	1	.	1	$\varphi_{5,0} = 19_1$
								$\varphi_{5,1} = 19_2$
$30_1 = \chi_{32+}$	.	.	1	1	.	.	.	
$30_2 = \chi_{33+}$	.	.	.	.	1	.	.	
$30_3 = \chi_{34+}$	.	.	.	.	1	.	.	
$42_1 = \chi_{35+}$	2	2	.	.	.	1	1	
$168_1 = \chi_{40+}$	1	1	1	1	2	2	2	

Block 2 ₁ , 2 ₂ :	$\varphi_{6,0}$	$\varphi_{6,1}$	
$45_1 = \chi_{6,0}$	1	.	$\varphi_{6,0} = 45_1$
$45_2 = \chi_{6,1}$	.	1	$\varphi_{6,1} = 45_2$
$90_3 = \chi_{36+}$	1	1	

Block 3 ₁ , 3 ₂ :	$\varphi_{7,0}$	$\varphi_{7,1}$	
$45_3 = \chi_{7,0}$	1	.	$\varphi_{7,0} = 45_3$
$45_4 = \chi_{7,1}$	.	1	$\varphi_{7,1} = 45_4$
$90_4 = \chi_{37+}$	1	1	

Block 4:	φ_{8+}	
$126_1 = \chi_{8+}$	1	$\varphi_{8+} = 126_1$
$126_2 = \chi_{38+}$	1	
$126_3 = \chi_{39+}$	1	

Block 5:	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	φ_{13+}	
$10_1 = \chi_{11,0}$	.	.	1	.	.	.	.	
$10_2 = \chi_{11,1}$	.	.	.	1	.	.	.	
$10_3 = \chi_{12,0}$	.	.	.	.	1	.	.	
$10_4 = \chi_{12,1}$	.	.	.	.	.	1	.	$\varphi_{10,0} = 6_1$
$56_1 = \chi_{13+}$	1	1	.	.	.	.	1	$\varphi_{10,1} = 6_2$
$64_3 = \chi_{16,0}$	.	.	1	.	1	.	1	$\varphi_{11,0} = 10_1$
$64_4 = \chi_{16,1}$	.	.	.	1	.	1	1	$\varphi_{11,1} = 10_2$
$70_2 = \chi_{17,0}$	1	.	1	.	.	1	1	$\varphi_{12,0} = 10_3$
$70_3 = \chi_{17,1}$	.	1	.	1	1	.	1	$\varphi_{12,1} = 10_4$
								$\varphi_{13+} = 44_1$
$12_1 = \chi_{41+}$	1	1	.	.	.	.	.	
$84_1 = \chi_{43+}$	.	.	1	1	1	1	1	
$84_2 = \chi_{44+}$	.	.	1	1	1	1	1	
$120_1 = \chi_{45+}$	1	1	.	.	1	1	2	
$120_2 = \chi_{46+}$	1	1	1	1	.	.	2	

Block 6₁, 6₂:	$\varphi_{15,0}$	$\varphi_{15,1}$	
$36_1 = \chi_{15,0}$	1	.	$\varphi_{15,0} = 36_1$ $\varphi_{15,1} = 36_2$
$36_2 = \chi_{15,1}$	.	1	
$72_1 = \chi_{42+}$	1	1	

Block 7₁, 7₂:	$\varphi_{16,0}$	$\varphi_{16,1}$	
$90_1 = \chi_{18,0}$	1	.	$\varphi_{16,0} = 90_1$ $\varphi_{16,1} = 90_2$
$90_2 = \chi_{18,1}$	.	1	
$180_1 = \chi_{47+}$	1	1	

Block 8:	φ_{17+}	φ_{18+}	φ_{19+}	φ_{20+}	φ_{21+}		
$16_1 = \chi_{19+}$	1	.	.	.	.		
$16_2 = \chi_{20+}$	.	1	.	.	.		
$112_1 = \chi_{21+}$	1	1	.	.	1		
$128_1 = \chi_{22+}$	1	1	1	1	.		
$160_1 = \chi_{23+}$	1	1	1	.	1		
$160_2 = \chi_{24+}$	1	1	.	1	1	$\varphi_{17+} = 16_1$	
$48_1 = \chi_{48+}$	.	.	1	.	.	$\varphi_{18+} = 16_2$	
$48_2 = \chi_{48*29+}$	.	.	1	.	.	$\varphi_{19+} = 48_1$	
$48_3 = \chi_{49+}$	.	.	.	1	.	$\varphi_{20+} = 48_2$	
$48_4 = \chi_{49*29+}$	.	.	.	1	.	$\varphi_{21+} = 80_1$	
$96_1 = \chi_{50+}$	1	.	.	.	1		
$96_2 = \chi_{50*41+}$	1	.	.	.	1		
$96_3 = \chi_{50*31+}$	.	1	.	.	1		
$96_4 = \chi_{51+}$	.	1	.	.	1		
$240_1 = \chi_{52+}$	2	2	1	1	1		
$240_2 = \chi_{52*5+}$	2	2	1	1	1		

Block 9:	$\varphi_{22,0}$	$\varphi_{22,1}$	$\varphi_{23,0}$	$\varphi_{23,1}$	φ_{24+}	$\varphi_{27,0}$	$\varphi_{27,1}$		
$20_3 = \chi_{25,0}$	1	.	1	.	.	.	.		
$20_4 = \chi_{25,1}$	.	1	.	1	.	.	.		
$56_2 = \chi_{26+}$	.	.	.	.	1	.	.		
$64_5 = \chi_{29,0}$	1	.	.	.	.	1	.	$\varphi_{22,0} = 4_1$	
$64_6 = \chi_{29,1}$	.	1	.	.	.	.	1	$\varphi_{22,1} = 4_2$	
$80_1 = \chi_{30,0}$	1	.	.	1	.	1	.	$\varphi_{23,0} = 16_1$	
$80_2 = \chi_{30,1}$	.	1	1	.	.	.	1	$\varphi_{23,1} = 16_2$	
$80_5 = \chi_{31,0}$	1	1	1	.	1	.	.	$\varphi_{24+} = 56_1$	
$80_6 = \chi_{31,1}$	1	1	.	1	1	.	.	$\varphi_{27,0} = 60_1$	
$96_1 = \chi_{54+}$	1	1	1	1	1	.	.	$\varphi_{27,1} = 60_2$	
$96_2 = \chi_{55+}$	1	1	1	1	1	.	.		
$120_3 = \chi_{56+}$	1	1	.	.	2	.	.		
$120_5 = \chi_{57+}$	.	.	.	.	.	1	1		
$168_2 = \chi_{58+}$	2	2	1	1	.	1	1		

Block 11 ₁ , 11 ₂ :	$\varphi_{26,0}$	$\varphi_{26,1}$
$36_3 = \chi_{28,0}$	1	.
$36_4 = \chi_{28,1}$	.	1
$72_2 = \chi_{53+}$	1	1

$$\begin{aligned}\varphi_{26,0} &= 36_3 \\ \varphi_{26,1} &= 36_4\end{aligned}$$