

$L_3(4).2_3 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	4×2
	2	1	4×2
	3	0	$20_1 = \chi_{2,0}, \varphi_{2,0}$
	4	0	$20_2 = \chi_{2,1}, \varphi_{2,1}$
	5	0	$35_1 = \chi_{3,0}, \varphi_{3,0}$
	6	0	$35_2 = \chi_{3,1}, \varphi_{3,1}$
	7	0	$70_1 = \chi_{4+}, \varphi_{4+}$
	8	0	$90_1 = \chi_{6+}, \varphi_{6+}$
$2.G :$	9	0	$20_3 = \chi_{11+}, \varphi_{9+}$
	10	1	4×2
	11	1	4×2
	12	0	$70_2 = \chi_{17,0}, \varphi_{13,0}$
	13	0	$70_3 = \chi_{17,1}, \varphi_{13,1}$
	14	0	$90_2 = \chi_{18,0}, \varphi_{14,0}$
	15	0	$90_3 = \chi_{18,1}, \varphi_{14,1}$
$4_1.G :$	16	1	4×2
	17	1	4×2
	18 = 16*		
	19 = 17*		
	20	0	$160_1 = \chi_{23+}, \varphi_{17+}$
$4_2.G :$	22	0	$40_1 = \chi_{25+}, \varphi_{19+}$
	23	1	4×2

	blocks	defect	matrix
	24	0	$160_1 = \chi_{30+}, \varphi_{22+}$
	25	0	$160_2 = \chi_{31+}, \varphi_{23+}$
$3.G :$	26	0	$30_1 = \chi_{32+}, \varphi_{24+}$
	27	0	$30_2 = \chi_{33+}, \varphi_{25+}$
	$28 = \overline{27}$	0	$30_3 = \chi_{34+}, \varphi_{26+}$
	29	1	4×2
	30	0	$90_4 = \chi_{36+}, \varphi_{28+}$
	31	0	$90_5 = \chi_{37+}, \varphi_{29+}$
$6.G :$	32	1	4×2
	33	0	$120_1 = \chi_{45+}, \varphi_{33+}$
	34	0	$120_2 = \chi_{46+}, \varphi_{34+}$
	35	0	$180_1 = \chi_{47+}, \varphi_{35+}$
$12_1.G :$	36	1	4×2
	$37 = 36 * 7$		
	38	0	$240_1 = \chi_{52+}, \varphi_{38+}$
$12_2.G :$	$39 = 38 * 7$		
	40	1	4×2
	41	1	4×2
	42	0	$120_3 = \chi_{56+}, \varphi_{41+}$
	43	0	$120_4 = \chi_{56*29+}, \varphi_{41*29+}$
	44	0	$120_5 = \chi_{56*43+}, \varphi_{41*43+}$
	45	0	$120_6 = \chi_{57+}, \varphi_{42+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{8,0}$
$1_1 = \chi_{1,0}$	1	.
$63_1 = \chi_{8,0}$	.	1
$63_3 = \chi_{9,0}$	.	1
$64_1 = \chi_{10,0}$	1	1

$$\begin{aligned} \varphi_{1,0} &= 1_1 \\ \varphi_{8,0} &= 63_1 \end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{8,1}$
$1_2 = \chi_{1,1}$	1	.
$63_2 = \chi_{8,1}$	.	1
$63_4 = \chi_{9,1}$	.	1
$64_2 = \chi_{10,1}$	1	1

$$\begin{aligned} \varphi_{1,1} &= 1_2 \\ \varphi_{8,1} &= 63_2 \end{aligned}$$

Block 10:	$\varphi_{11,0}$	$\varphi_{12,1}$	
$28_1 = \chi_{13,0}$	1	.	$\varphi_{11,0} = 28_1$
$28_3 = \chi_{14,0}$	1	.	$\varphi_{12,1} = 36_2$
$36_2 = \chi_{15,1}$	.	1	
$64_4 = \chi_{16,1}$	1	1	

Block 11:	$\varphi_{11,1}$	$\varphi_{12,0}$	
$28_2 = \chi_{13,1}$	1	.	$\varphi_{11,1} = 28_2$
$28_4 = \chi_{14,1}$	1	.	$\varphi_{12,0} = 36_1$
$36_1 = \chi_{15,0}$	.	1	
$64_3 = \chi_{16,0}$	1	1	

Blocks 16, 18:	$\varphi_{15,0}$	$\varphi_{16,1}$	
$8_1 = \chi_{19,0}$	1	.	$\varphi_{15,0} = 8_1$
$8_5 = \chi_{20,0}$	1	.	$\varphi_{16,1} = 56_2$
$56_2 = \chi_{21,1}$	.	1	
$64_6 = \chi_{22,1}$	1	1	

Blocks 17, 19:	$\varphi_{15,1}$	$\varphi_{16,0}$	
$8_2 = \chi_{19,1}$	1	.	$\varphi_{15,1} = 8_2$
$8_6 = \chi_{20,1}$	1	.	$\varphi_{16,0} = 56_1$
$56_1 = \chi_{21,0}$	.	1	
$64_5 = \chi_{22,0}$	1	1	

Block 23:	φ_{20+}	φ_{21+}	
$56_1 = \chi_{26+}$	1	.	$\varphi_{20+} = 56_1$
$56_2 = \chi_{27+}$	1	.	$\varphi_{21+} = 72_1$
$72_1 = \chi_{28+}$	.	1	
$128_1 = \chi_{29+}$	1	1	

Block 29:	φ_{27+}	φ_{30+}	
$42_1 = \chi_{35+}$	1	.	$\varphi_{27+} = 42_1$
$126_1 = \chi_{38+}$	.	1	$\varphi_{30+} = 126_1$
$126_2 = \chi_{39+}$	.	1	
$168_1 = \chi_{40+}$	1	1	

Block 32:	φ_{31+}	φ_{32+}	
$12_1 = \chi_{41+}$	1	.	$\varphi_{31+} = 12_1$
$72_1 = \chi_{42+}$	.	1	$\varphi_{32+} = 72_1$
$84_1 = \chi_{43+}$	1	1	
$84_2 = \chi_{44+}$	1	1	

Block 36:	φ_{36+}	φ_{37+}	
$48_1 = \chi_{48+}$	1	.	$\varphi_{36+} = 48_1$
$48_2 = \chi_{49+}$	.	1	$\varphi_{37+} = 48_2$
$96_1 = \chi_{50+}$	1	1	
$96_3 = \chi_{51+}$	1	1	

Block 40:	φ_{39+}	φ_{40+}	
$72_3 = \chi_{53+}$	1	.	$\varphi_{39+} = 72_3$
$96_1 = \chi_{54+}$	.	1	$\varphi_{40+} = 96_1$
$96_3 = \chi_{55+}$	.	1	
$168_2 = \chi_{58+}$	1	1	

Block 41:	φ_{39*5+}	φ_{40*5+}	
$72_4 = \chi_{53*5+}$	1	.	$\varphi_{39*5+} = 72_4$
$96_2 = \chi_{54*41+}$	.	1	$\varphi_{40*5+} = 96_2$
$96_4 = \chi_{55*41+}$	.	1	
$168_3 = \chi_{58*5+}$	1	1	