

$U_3(9).2 \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	14×6
	2	2	16×4
	3	1	4×2
	4	1	4×2
	5	1	4×2
	6	1	5×1
	7	1	5×1
	8	0	$1600_1 = \chi_{69+}, \varphi_{13+}$
	9	0	$1600_2 = \chi_{71+}, \varphi_{15+}$
	10	0	$1600_3 = \chi_{73+}, \varphi_{17+}$

	blocks	defect	matrix
	11	0	$1600_4 = \chi_{75+}, \varphi_{19+}$
	12	0	$1600_5 = \chi_{77+}, \varphi_{21+}$
	13	0	$1600_6 = \chi_{79+}, \varphi_{23+}$
	14	0	$1600_7 = \chi_{81+}, \varphi_{25+}$
	15	0	$1600_8 = \chi_{83+}, \varphi_{27+}$
	16	0	$1600_9 = \chi_{85+}, \varphi_{29+}$
	17	0	$1600_{10} = \chi_{87+}, \varphi_{31+}$
	18	0	$1600_{11} = \chi_{89+}, \varphi_{33+}$
	19	0	$1600_{12} = \chi_{91+}, \varphi_{35+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.
$72_1 = \chi_{2,0}$	.	.	1	.	.	.
$72_2 = \chi_{2,1}$	.	.	.	1	.	.
$146_1 = \chi_{4+}$	1	1	1	1	.	.
$146_2 = \chi_{6+}$	1	1	1	1	.	.
$584_5 = \chi_{14,0}$	.	.	.	.	1	.
$584_6 = \chi_{14,1}$	.	.	.	.	.	1
$584_7 = \chi_{15,0}$	.	.	.	.	1	.
$584_8 = \chi_{15,1}$	.	.	.	.	.	1
$1314_1 = \chi_{25+}$	1	1	1	1	1	1
$1314_2 = \chi_{27+}$	1	1	1	1	1	1
$729_1 = \chi_{33,0}$	1	.	1	1	1	.
$729_2 = \chi_{33,1}$	.	1	1	1	.	1

$$\begin{aligned}
 \varphi_{1,0} &= 1_1 \\
 \varphi_{1,1} &= 1_2 \\
 \varphi_{2,0} &= 72_1 \\
 \varphi_{2,1} &= 72_2 \\
 \varphi_{5,0} &= 584_3 \\
 \varphi_{5,1} &= 584_4
 \end{aligned}$$

Block 2:	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	
$73_1 = \chi_{3,0}$	1	.	.	.	
$73_2 = \chi_{3,1}$	.	1	.	.	
$146_3 = \chi_{8+}$	1	1	.	.	
$146_4 = \chi_{10+}$	1	1	.	.	
$584_1 = \chi_{12,0}$	.	.	1	.	
$584_2 = \chi_{12,1}$	.	.	.	1	$\varphi_{3,0} = 73_1$
$584_3 = \chi_{13,0}$	.	.	1	.	$\varphi_{3,1} = 73_2$
$584_4 = \chi_{13,1}$	.	.	.	1	$\varphi_{4,0} = 584_1$
$1168_1 = \chi_{16+}$	.	.	1	1	$\varphi_{4,1} = 584_2$
$1168_2 = \chi_{18+}$	.	.	1	1	
$1168_3 = \chi_{20+}$	.	.	1	1	
$1168_4 = \chi_{22+}$	.	.	1	1	
$657_1 = \chi_{24,0}$	1	.	1	.	
$657_2 = \chi_{24,1}$	.	1	.	1	
$1314_3 = \chi_{29+}$	1	1	1	1	
$1314_4 = \chi_{31+}$	1	1	1	1	

Block 3:	$\varphi_{6,0}$	$\varphi_{6,1}$	
$730_1 = \chi_{34,0}$	1	.	$\varphi_{6,0} = 730_1$
$730_2 = \chi_{34,1}$	.	1	$\varphi_{6,1} = 730_2$
$1460_1 = \chi_{37+}$	1	1	
$1460_2 = \chi_{39+}$	1	1	

Block 4:	$\varphi_{7,0}$	$\varphi_{7,1}$	
$730_3 = \chi_{35,0}$	1	.	$\varphi_{7,0} = 730_3$
$730_4 = \chi_{35,1}$	.	1	$\varphi_{7,1} = 730_4$
$1460_5 = \chi_{45+}$	1	1	
$1460_8 = \chi_{51+}$	1	1	

Block 5:	$\varphi_{8,0}$	$\varphi_{8,1}$	
$730_5 = \chi_{36,0}$	1	.	$\varphi_{8,0} = 730_5$
$730_6 = \chi_{36,1}$	.	1	$\varphi_{8,1} = 730_6$
$1460_6 = \chi_{47+}$	1	1	
$1460_7 = \chi_{49+}$	1	1	

Block 6:	φ_{9+}
$1460_3 = \chi_{41+}$	1
$1460_9 = \chi_{53+}$	1
$1460_{12} = \chi_{59+}$	1
$1460_{13} = \chi_{61+}$	1
$1460_{16} = \chi_{67+}$	1

$$\varphi_{9+} = 1460_1$$

Block 7:	φ_{11+}
$1460_4 = \chi_{43+}$	1
$1460_{10} = \chi_{55+}$	1
$1460_{11} = \chi_{57+}$	1
$1460_{14} = \chi_{63+}$	1
$1460_{15} = \chi_{65+}$	1

$$\varphi_{11+} = 1460_2$$