

## $U_5(2).2 \pmod{5}$

	blocks	defect	matrix
$G :$	1	1	$5 \times 4$
	2	1	$5 \times 4$
	3	0	$10_1 = \chi_{2,0}, \varphi_{2,0}$
	$4 = \bar{3}$	0	$10_2 = \chi_{2,1}, \varphi_{2,1}$
	5	1	$5 \times 4$
	6	0	$55_1 = \chi_{6,0}, \varphi_{6,0}$
	7	0	$55_2 = \chi_{6,1}, \varphi_{6,1}$
	8	0	$110_1 = \chi_{7+}, \varphi_{7+}$
	9	0	$110_2 = \chi_{11,0}, \varphi_{11,0}$
	$10 = \bar{9}$	0	$110_3 = \chi_{11,1}, \varphi_{11,1}$
	11	0	$220_1 = \chi_{12+}, \varphi_{12+}$
	12	0	$220_2 = \chi_{14+}, \varphi_{14+}$
	13	0	$120_1 = \chi_{16,0}, \varphi_{16,0}$
	14	0	$120_2 = \chi_{16,1}, \varphi_{16,1}$
	15	0	$165_1 = \chi_{17,0}, \varphi_{17,0}$
	16	0	$165_2 = \chi_{17,1}, \varphi_{17,1}$

	blocks	defect	matrix
	17	0	$440_1 = \chi_{19+}, \varphi_{19+}$
	18	0	$440_2 = \chi_{21+}, \varphi_{21+}$
	19	0	$320_1 = \chi_{25,0}, \varphi_{25,0}$
	$20 = \bar{19}$	0	$320_2 = \chi_{25,1}, \varphi_{25,1}$
	21	0	$660_1 = \chi_{26+}, \varphi_{26+}$
	22	0	$440_3 = \chi_{28,0}, \varphi_{28,0}$
	23	0	$440_4 = \chi_{28,1}, \varphi_{28,1}$
	24	0	$880_1 = \chi_{29+}, \varphi_{29+}$
	25	0	$990_1 = \chi_{31+}, \varphi_{31+}$
	26	0	$990_2 = \chi_{33+}, \varphi_{33+}$
	27	0	$660_2 = \chi_{35,0}, \varphi_{37,0}$
	28	0	$660_3 = \chi_{35,1}, \varphi_{37,1}$
	29	0	$1760_1 = \chi_{38+}, \varphi_{39+}$
	30	0	$1980_1 = \chi_{43+}, \varphi_{41+}$
	31	0	$2430_1 = \chi_{46+}, \varphi_{43+}$

<b>Block 1:</b>	$\varphi_{1,0}$	$\varphi_{5,0}$	$\varphi_{18,1}$	$\varphi_{38,1}$	
$1_1 = \chi_{1,0}$	1	.	.	.	$\varphi_{1,0} = 1_1$
$44_1 = \chi_{5,0}$	1	1	.	.	$\varphi_{5,0} = 43_1$
$176_2 = \chi_{18,1}$	.	.	1	.	$\varphi_{18,1} = 176_2$
$891_2 = \chi_{40,1}$	.	1	.	1	$\varphi_{38,1} = 848_2$
$1024_2 = \chi_{45,1}$	.	.	1	1	

<b>Block 2:</b>	$\varphi_{1,1}$	$\varphi_{5,1}$	$\varphi_{18,0}$	$\varphi_{38,0}$	
$1_2 = \chi_{1,1}$	1	.	.	.	$\varphi_{1,1} = 1_2$
$44_2 = \chi_{5,1}$	1	1	.	.	$\varphi_{5,1} = 43_2$
$176_1 = \chi_{18,0}$	.	.	1	.	$\varphi_{18,0} = 176_1$
$891_1 = \chi_{40,0}$	.	1	.	1	$\varphi_{38,0} = 848_1$
$1024_1 = \chi_{45,0}$	.	.	1	1	

<b>Block 5:</b>	$\varphi_{3+}$	$\varphi_{9+}$	$\varphi_{23+}$	$\varphi_{35+}$
$22_1 = \chi_{3+}$	1	.	.	.
$132_1 = \chi_{9+}$	.	1	.	.
$528_1 = \chi_{23+}$	1	.	1	.
$1408_1 = \chi_{36+}$	.	1	.	1
$1782_1 = \chi_{41+}$	.	.	1	1

$$\begin{aligned} \varphi_{3+} &= 22_1 \\ \varphi_{9+} &= 132_1 \\ \varphi_{23+} &= 506_1 \\ \varphi_{35+} &= 1276_1 \end{aligned}$$