

$$U_5(\mathbf{2}).\mathbf{2} \pmod{2}$$

	blocks	defect	matrix
$G:$	1	11	41×9
	2	1	2×1

Block 1:	$\varphi_{1,0}$	φ_{2+}	φ_{4+}	$\varphi_{6,0}$	φ_{7+}	φ_{9+}	$\varphi_{11,0}$	φ_{12+}	φ_{14+}
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.
$10_1 = \chi_{2,0}$	.	1	.	.	.	.	.	.	.
$10_2 = \chi_{2,1}$	.	1	.	.	.	.	.	.	.
$22_1 = \chi_{3+}$	2	.	1	.	.	.	.	.	.
$44_1 = \chi_{5,0}$	.	.	1	1	.	.	.	.	.
$44_2 = \chi_{5,1}$	.	.	1	1	.	.	.	.	.
$55_1 = \chi_{6,0}$	1	1	1	1	.	.	.	.	.
$55_2 = \chi_{6,1}$	1	1	1	1	.	.	.	.	.
$110_1 = \chi_{7+}$	.	1	1	.	.	1	.	.	.
$132_1 = \chi_{9+}$	2	1	2	.	.	1	.	.	.
$110_2 = \chi_{11,0}$	.	1	1	.	.	1	.	.	.
$110_3 = \chi_{11,1}$	.	1	1	.	.	1	.	.	.
$220_1 = \chi_{12+}$	.	4	1	.	1	1	.	.	.
$220_2 = \chi_{14+}$	2	3	3	2	.	1	.	.	.
$120_1 = \chi_{16,0}$	2	.	1	1	.	.	1	.	.
$120_2 = \chi_{16,1}$	2	.	1	1	.	.	1	.	.
$165_1 = \chi_{17,0}$	1	1	.	.	1	.	1	.	.
$165_2 = \chi_{17,1}$	1	1	.	.	1	.	1	.	.
$176_1 = \chi_{18,0}$	2	.	1	.	.	1	1	.	.
$176_2 = \chi_{18,1}$	2	.	1	.	.	1	1	.	.
$440_1 = \chi_{19+}$	4	2	3	2	1	1	2	.	.
$440_2 = \chi_{21+}$	.	.	2	.	.	1	.	1	.
$528_1 = \chi_{23+}$	.	2	3	2	.	1	.	1	.
$320_1 = \chi_{25,0}$	.	4	2	.	1	2	.	.	.
$320_2 = \chi_{25,1}$	.	4	2	.	1	2	.	.	.
$660_1 = \chi_{26+}$	2	1	1	.	2	.	2	1	.
$440_3 = \chi_{28,0}$	2	4	3	1	1	2	1	.	.
$440_4 = \chi_{28,1}$	2	4	3	1	1	2	1	.	.
$880_1 = \chi_{29+}$	.	4	2	.	.	3	.	.	1
$990_1 = \chi_{31+}$	4	5	5	2	2	2	2	1	.
$990_2 = \chi_{33+}$	4	5	5	2	2	2	2	1	.
$660_2 = \chi_{35,0}$	2	2	3	1	1	1	1	1	.
$660_3 = \chi_{35,1}$	2	2	3	1	1	1	1	1	.
$1408_1 = \chi_{36+}$	.	6	5	2	.	4	.	1	1
$1760_1 = \chi_{38+}$	4	4	3	.	3	3	4	1	1
$891_1 = \chi_{40,0}$	5	2	3	1	2	1	3	1	.
$891_2 = \chi_{40,1}$	5	2	3	1	2	1	3	1	.
$1782_1 = \chi_{41+}$	4	7	6	.	2	5	2	1	1
$1980_1 = \chi_{43+}$	2	5	5	.	2	4	2	2	1

(Block 1:)	$\varphi_{1,0}$	φ_{2+}	φ_{4+}	$\varphi_{6,0}$	φ_{7+}	φ_{9+}	$\varphi_{11,0}$	φ_{12+}	φ_{14+}
$2430_1 = \chi_{46+}$	6	8	8	2	3	5	4	2	1

$$\begin{array}{ll}
 \varphi_{1,0} & = 1_1 \\
 \varphi_{2+} & = 10_1 \\
 \varphi_{4+} & = 20_1 \\
 \varphi_{6,0} & = 24_1 \\
 \varphi_{7+} & = 80_1
 \end{array}
 \qquad
 \begin{array}{ll}
 \varphi_{9+} & = 80_2 \\
 \varphi_{11,0} & = 74_1 \\
 \varphi_{12+} & = 320_1 \\
 \varphi_{14+} & = 560_1
 \end{array}$$

Block 2:	$\varphi_{16,0}$
$1024_1 = \chi_{45,0}$	1
$1024_2 = \chi_{45,1}$	1

$$\varphi_{16,0} \quad = \quad 1024_1$$