

$J_2.2 \pmod{7}$

	blocks	defect	matrix		blocks	defect	matrix
$G :$	1	1	7×6	$2.G :$	16	1	5×3
	2	1	7×6		17	0	$14_1 = \chi_{24,0}, \varphi_{23,0}$
	3	0	$28_1 = \chi_{2+}, \varphi_{2+}$		18	0	$14_2 = \chi_{24,1}, \varphi_{23,1}$
	4	0	$42_1 = \chi_{4+}, \varphi_{4+}$		19	0	$112_1 = \chi_{27+}, \varphi_{26+}$
	5	0	$63_1 = \chi_{7,0}, \varphi_{7,0}$		20	0	$84_1 = \chi_{31,0}, \varphi_{30,0}$
	6	0	$63_2 = \chi_{7,1}, \varphi_{7,1}$		21	0	$84_2 = \chi_{31,1}, \varphi_{30,1}$
	7	0	$140_1 = \chi_{8+}, \varphi_{8+}$		22	0	$252_1 = \chi_{32+}, \varphi_{31+}$
	8	0	$126_1 = \chi_{11,0}, \varphi_{13,0}$		23	0	$252_2 = \chi_{35,0}, \varphi_{33,0}$
	9	0	$126_2 = \chi_{11,1}, \varphi_{13,1}$		24	0	$252_3 = \chi_{35,1}, \varphi_{33,1}$
	10	0	$175_1 = \chi_{13,0}, \varphi_{14,0}$		25	0	$336_3 = \chi_{36,0}, \varphi_{34,0}$
	11	0	$175_2 = \chi_{13,1}, \varphi_{14,1}$		26	0	$336_4 = \chi_{36,1}, \varphi_{34,1}$
	12	0	$378_1 = \chi_{14+}, \varphi_{15+}$		27	0	$350_1 = \chi_{37,0}, \varphi_{35,0}$
	13	0	$448_1 = \chi_{16+}, \varphi_{18+}$		28	0	$350_2 = \chi_{37,1}, \varphi_{35,1}$
	14	0	$336_1 = \chi_{21,0}, \varphi_{20,0}$		29	0	$448_2 = \chi_{38,0}, \varphi_{36,0}$
	15	0	$336_2 = \chi_{21,1}, \varphi_{20,1}$		30	0	$448_3 = \chi_{38,1}, \varphi_{36,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{6,1}$	$\varphi_{10,0}$	$\varphi_{11,0}$	$\varphi_{12,1}$	$\varphi_{17,0}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	$\varphi_{1,0} = 1_1$
$36_2 = \chi_{6,1}$	.	1	.	.	.	.	$\varphi_{6,1} = 36_2$
$90_1 = \chi_{10,0}$	1	.	1	.	.	.	$\varphi_{10,0} = 89_1$
$160_2 = \chi_{12,1}$	.	1	.	.	1	.	$\varphi_{11,0} = 101_1$
$225_1 = \chi_{18,0}$	.	.	.	1	1	.	$\varphi_{12,1} = 124_2$
$288_1 = \chi_{19,0}$	.	.	1	.	.	1	$\varphi_{17,0} = 199_1$
$300_1 = \chi_{20,0}$	.	.	.	1	.	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{6,0}$	$\varphi_{10,1}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{17,1}$	
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	$\varphi_{1,1} = 1_2$
$36_1 = \chi_{6,0}$	.	1	.	.	.	.	$\varphi_{6,0} = 36_1$
$90_2 = \chi_{10,1}$	1	.	1	.	.	.	$\varphi_{10,1} = 89_2$
$160_1 = \chi_{12,0}$	.	1	.	.	1	.	$\varphi_{11,1} = 101_2$
$225_2 = \chi_{18,1}$	.	.	.	1	1	.	$\varphi_{12,0} = 124_1$
$288_2 = \chi_{19,1}$	.	.	1	.	.	1	$\varphi_{17,1} = 199_2$
$300_2 = \chi_{20,1}$	.	.	.	1	.	1	

Block 16:	φ_{21+}	φ_{24+}	φ_{28+}	
$12_1 = \chi_{22+}$	1	.	.	$\varphi_{21+} = 12_1$
$100_1 = \chi_{25+}$	.	1	.	$\varphi_{24+} = 100_1$
$128_1 = \chi_{29+}$	1	.	1	$\varphi_{28+} = 116_1$
$216_1 = \chi_{34,0}$	.	1	1	
$216_2 = \chi_{34,1}$	.	1	1	