

## $G_2(5) \pmod{2}$

	blocks	defect	matrix
$G :$	1	6	$18 \times 7$
	2	4	$8 \times 3$
	3	0	$960_1 = \chi_6, \varphi_5$
	$4 = \bar{3}$	0	$960_2 = \chi_7, \varphi_6$
	5	4	$8 \times 2$
	6	0	$12096_1 = \chi_{21}, \varphi_{13}$
	7	0	$12096_2 = \chi_{22}, \varphi_{14}$

	blocks	defect	matrix
	8	0	$12096_3 = \chi_{23}, \varphi_{15}$
	9	0	$12096_4 = \chi_{24}, \varphi_{16}$
	10	0	$12096_5 = \chi_{25}, \varphi_{17}$
	11	0	$17856_1 = \chi_{40}, \varphi_{20}$
	12	0	$17856_2 = \chi_{41}, \varphi_{21}$
	13	0	$17856_3 = \chi_{42}, \varphi_{22}$

<b>Block 1:</b>	$\varphi_1$	$\varphi_3$	$\varphi_4$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{18}$
$1_1 = \chi_1$	1	.	.	.	.	.	.
$280_1 = \chi_3$	.	1	.	.	.	.	.
$651_1 = \chi_4$	1	.	1	.	.	.	.
$930_1 = \chi_5$	.	1	1	.	.	.	.
$1085_1 = \chi_8$	1	.	.	1	.	.	.
$1085_2 = \chi_9$	1	.	.	.	1	.	.
$1240_1 = \chi_{10}$	.	.	.	.	.	1	.
$1890_1 = \chi_{11}$	.	.	1	.	.	1	.
$3255_1 = \chi_{16}$	1	1	1	.	1	1	.
$3255_2 = \chi_{17}$	1	1	1	1	.	1	.
$3906_1 = \chi_{18}$	2	1	2	1	.	1	.
$3906_2 = \chi_{19}$	2	1	2	.	1	1	.
$15624_1 = \chi_{30}$	.	.	.	.	2	1	1
$15624_5 = \chi_{34}$	.	.	.	2	.	1	1
$15625_1 = \chi_{38}$	1	.	.	1	1	1	1
$16275_1 = \chi_{39}$	1	.	1	1	1	1	1
$19530_1 = \chi_{43}$	2	1	2	1	2	2	1
$19530_2 = \chi_{44}$	2	1	2	2	1	2	1

$\varphi_1 = 1_1$   
 $\varphi_3 = 280_1$   
 $\varphi_4 = 650_1$   
 $\varphi_7 = 1084_1$   
 $\varphi_8 = 1084_2$   
 $\varphi_9 = 1240_1$   
 $\varphi_{18} = 12216_1$

<b>Block 2:</b>	$\varphi_2$	$\varphi_{10}$	$\varphi_{19}$
$124_1 = \chi_2$	1	.	.
$2480_1 = \chi_{12}$	.	1	.
$2604_1 = \chi_{13}$	1	1	.
$13020_1 = \chi_{26}$	1	.	1
$15500_1 = \chi_{29}$	1	1	1
$15624_6 = \chi_{35}$	2	1	1
$15624_7 = \chi_{36}$	2	1	1
$15624_8 = \chi_{37}$	2	1	1

$\varphi_2 = 124_1$   
 $\varphi_{10} = 2480_1$   
 $\varphi_{19} = 12896_1$

<b>Block 5:</b>	$\varphi_{11}$	$\varphi_{12}$
$2604_2 = \chi_{14}$	1	.
$2604_3 = \chi_{15}$	1	.
$10416_1 = \chi_{20}$	.	1
$13020_2 = \chi_{27}$	1	1
$13020_3 = \chi_{28}$	1	1
$15624_2 = \chi_{31}$	2	1
$15624_3 = \chi_{32}$	2	1
$15624_4 = \chi_{33}$	2	1

$$\begin{aligned} \varphi_{11} &= 2604_1 \\ \varphi_{12} &= 10416_1 \end{aligned}$$