

$G_2(5) \pmod{31}$

	blocks	defect	matrix
$G :$	1	1	11×6
	2	0	$124_1 = \chi_2, \varphi_2$
	3	0	$651_1 = \chi_4, \varphi_4$
	4	0	$930_1 = \chi_5, \varphi_5$
	5	0	$1085_1 = \chi_8, \varphi_8$
	6	0	$1085_2 = \chi_9, \varphi_9$
	7	0	$1240_1 = \chi_{10}, \varphi_{10}$
	8	0	$2480_1 = \chi_{12}, \varphi_{12}$
	9	0	$2604_1 = \chi_{13}, \varphi_{13}$
	10	0	$2604_2 = \chi_{14}, \varphi_{14}$
	11	0	$2604_3 = \chi_{15}, \varphi_{15}$
	12	0	$3255_1 = \chi_{16}, \varphi_{16}$
	13	0	$3255_2 = \chi_{17}, \varphi_{17}$
	14	0	$3906_1 = \chi_{18}, \varphi_{18}$
	15	0	$3906_2 = \chi_{19}, \varphi_{19}$
	16	0	$10416_1 = \chi_{20}, \varphi_{20}$
	17	0	$13020_1 = \chi_{26}, \varphi_{22}$

	blocks	defect	matrix
	18	0	$13020_2 = \chi_{27}, \varphi_{23}$
	19	0	$13020_3 = \chi_{28}, \varphi_{24}$
	20	0	$15500_1 = \chi_{29}, \varphi_{25}$
	21	0	$15624_1 = \chi_{30}, \varphi_{26}$
	22	0	$15624_2 = \chi_{31}, \varphi_{27}$
	23	0	$15624_3 = \chi_{32}, \varphi_{28}$
	24	0	$15624_4 = \chi_{33}, \varphi_{29}$
	25	0	$15624_5 = \chi_{34}, \varphi_{30}$
	26	0	$15624_6 = \chi_{35}, \varphi_{31}$
	27	0	$15624_7 = \chi_{36}, \varphi_{32}$
	28	0	$15624_8 = \chi_{37}, \varphi_{33}$
	29	0	$16275_1 = \chi_{39}, \varphi_{34}$
	30	0	$17856_1 = \chi_{40}, \varphi_{35}$
	31	0	$17856_2 = \chi_{41}, \varphi_{36}$
	32	0	$17856_3 = \chi_{42}, \varphi_{37}$
	33	0	$19530_1 = \chi_{43}, \varphi_{38}$
	34	0	$19530_2 = \chi_{44}, \varphi_{39}$

Block 1:	φ_1	φ_3	φ_6	φ_7	φ_{11}	φ_{21}
$1_1 = \chi_1$	1
$280_1 = \chi_3$.	1
$960_1 = \chi_6$.	.	1	.	.	.
$960_2 = \chi_7$.	.	.	1	.	.
$1890_1 = \chi_{11}$	1	.	.	.	1	.
$12096_1 = \chi_{21}$.	1	.	.	.	1
$12096_2 = \chi_{22}$.	1	.	.	.	1
$12096_3 = \chi_{23}$.	1	.	.	.	1
$12096_4 = \chi_{24}$.	1	.	.	.	1
$12096_5 = \chi_{25}$.	1	.	.	.	1
$15625_1 = \chi_{38}$.	.	1	1	1	1

$$\begin{aligned}
 \varphi_1 &= 1_1 \\
 \varphi_3 &= 280_1 \\
 \varphi_6 &= 960_1 \\
 \varphi_7 &= 960_2 \\
 \varphi_{11} &= 1889_1 \\
 \varphi_{21} &= 11816_1
 \end{aligned}$$