$S_4(5)$ (mod 5)

	blocks	defect	matrix
$G:$	1	4	33×14
	2	0	$625_1 = \chi_{33}, \varphi_{15}$
$2.G:$	3	4	26×10

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$13_1 = \chi_2$	.	.	.	1	.	.	.	.	.	.	.	.	.	.
$13_2 = \chi_3$	.	.	.	1	.	.	.	.	.	.	.	.	.	.
$40_1 = \chi_4$	.	.	1	.	1	.	.	.	.	.	.	.	.	.
$65_1 = \chi_5$	.	.	1	.	.	.	.	1	.	.	.	.	.	.
$65_2 = \chi_6$	.	.	.	.	1	.	1	.	.	.	.	.	.	.
$78_1 = \chi_7$	.	.	1	.	.	.	.	.	1	.	.	.	.	.
$78_2 = \chi_8$	.	.	1	.	.	.	.	.	1	.	.	.	.	.
$90_1 = \chi_9$	.	.	.	.	.	.	1	1	.	.	.	.	.	.
$104_1 = \chi_{10}$	1	.	.	.	.	.	1	.	1	.	.	.	.	.
$104_2 = \chi_{11}$	1	.	.	1	.	1	.	1	.	.	.	.	.	.
$104_3 = \chi_{12}$	.	1	.	1	.	.	.	.	.	1	.	.	.	.
$130_1 = \chi_{13}$	2	.	.	1	.	.	.	.	.	.	.	1	.	.
$156_1 = \chi_{14}$	.	1	.	.	1	1	.	.	.	1	.	.	.	.
$208_1 = \chi_{15}$	1	1	.	1	.	1	.	.	1	1	.	.	.	.
$208_2 = \chi_{16}$	1	1	.	1	.	1	.	.	1	1	.	.	.	.
$312_1 = \chi_{17}$	1	.	1	1	.	.	.	.	1	.	1	1	.	.
$312_2 = \chi_{18}$	1	.	1	1	.	.	.	.	1	.	1	1	.	.
$312_3 = \chi_{19}$	.	1	.	1	.	1	.	.	1	1	1	.	.	.
$312_4 = \chi_{20}$	.	1	.	1	.	1	.	.	1	1	1	.	.	.
$325_1 = \chi_{21}$	.	.	.	.	.	.	.	.	.	.	2	1	.	.
$325_2 = \chi_{22}$	.	.	.	.	.	.	.	.	.	.	2	1	.	.
$390_1 = \chi_{23}$	1	.	.	2	.	1	.	.	1	.	.	.	1	.
$390_2 = \chi_{24}$	1	.	.	2	.	1	.	.	1	.	.	.	1	.
$520_1 = \chi_{25}$	1	.	1	2	1	1	1	1	1	.	.	.	1	.
$520_2 = \chi_{26}$	2	1	1	2	.	.	1	.	2	1	1	1	.	.
$520_3 = \chi_{27}$	.	.	1	.	1	1	1	1	.	.	.	.	.	1
$576_1 = \chi_{28}$	1	1	1	1	.	.	.	.	2	1	2	1	.	.
$576_2 = \chi_{29}$	.	1	1	1	.	1	1	1	1	.	.	.	.	1
$576_3 = \chi_{30}$	1	.	.	2	1	2	1	.	1	1	.	.	1	.
$624_1 = \chi_{31}$	1	1	1	2	1	2	.	.	2	1	.	.	1	.
$624_2 = \chi_{32}$	.	1	1	.	1	1	1	.	1	1	.	.	.	1
$780_1 = \chi_{34}$	.	1	1	1	.	1	1	.	2	1	1	.	.	1

$\varphi_1 = 1_1$
$\varphi_2 = 5_1$
$\varphi_3 = 10_1$
$\varphi_4 = 13_1$
$\varphi_5 = 30_1$
$\varphi_6 = 35_1$
$\varphi_7 = 35_2$
$\varphi_8 = 55_1$
$\varphi_9 = 68_1$
$\varphi_{10} = 86_1$
$\varphi_{11} = 105_1$
$\varphi_{12} = 115_1$
$\varphi_{13} = 260_1$
$\varphi_{14} = 355_1$

Block 3:	φ_{16}	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}
$12_1 = \chi_{35}$	.	1	.	.	.	.	.	.	.	.
$12_2 = \chi_{36}$	.	1	.	.	.	.	.	.	.	.
$52_1 = \chi_{37}$	.	.	.	.	1	.	.	.	.	.
$52_2 = \chi_{38}$	.	.	.	.	1	.	.	.	.	.
$104_4 = \chi_{39}$	1	.	1	.	.	1	.	.	.	.
$156_2 = \chi_{40}$	1	.	1	.	1	1	.	.	.	.
$208_3 = \chi_{41}$	1	1	.	.	1	.	1	.	.	.
$208_4 = \chi_{42}$	1	1	.	.	1	.	1	.	.	.
$260_1 = \chi_{43}$	1	2	.	1	1	.	.	1	.	.
$260_2 = \chi_{44}$	1	2	.	1	1	.	.	1	.	.
$300_1 = \chi_{45}$	2	1	.	.	.	.	2	.	.	.
$300_2 = \chi_{46}$	2	1	.	.	.	.	2	.	.	.
$312_5 = \chi_{47}$	1	1	.	1	1	.	.	.	1	.
$312_6 = \chi_{48}$	1	1	.	1	1	.	.	.	1	.
$416_1 = \chi_{49}$	2	1	1	1	1	1	.	.	1	.
$468_1 = \chi_{50}$	2	2	.	1	1	.	1	.	1	.
$468_2 = \chi_{51}$	2	2	.	1	1	.	1	.	1	.
$520_4 = \chi_{52}$	.	.	1	.	.	1	.	.	.	1
$576_4 = \chi_{53}$	1	1	1	1	.	1	.	.	.	1
$576_5 = \chi_{54}$	3	3	.	.	2	1	1	.	1	.
$576_6 = \chi_{55}$	1	2	1	2	2	.	.	1	1	.
$624_3 = \chi_{56}$	3	2	1	1	2	1	1	.	1	.
$624_4 = \chi_{57}$	3	3	1	2	1	1	.	1	1	.
$624_5 = \chi_{58}$	3	2	.	.	2	.	2	.	1	.
$624_6 = \chi_{59}$	.	1	1	1	1	1	.	.	.	1
$780_2 = \chi_{60}$	1	2	1	1	1	1	.	1	.	1

$\varphi_{16} = 4_1$
$\varphi_{17} = 12_1$
$\varphi_{18} = 20_1$
$\varphi_{19} = 40_1$
$\varphi_{20} = 52_1$
$\varphi_{21} = 80_1$
$\varphi_{22} = 140_1$
$\varphi_{23} = 140_2$
$\varphi_{24} = 204_1$
$\varphi_{25} = 420_1$