

$$S_8(2) \pmod{3}$$

	blocks	defect	matrix
$G :$	1	5	54×20
	2	2	9×5
	3	2	9×5
	4	1	3×2
	5	0	$28917_1 = \chi_{62}, \varphi_{32}$
	6	1	3×2
	7	0	$42525_1 = \chi_{72}, \varphi_{36}$
	8	0	$42525_2 = \chi_{73}, \varphi_{37}$

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_6	φ_7	φ_8	φ_{10}	φ_{11}	φ_{13}	φ_{14}	φ_{15}	φ_{16}	φ_{17}	φ_{20}	φ_{21}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$35_1 = \chi_2$	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$51_1 = \chi_3$	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$85_1 = \chi_4$	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$119_1 = \chi_5$	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$238_1 = \chi_7$	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.
$510_1 = \chi_8$	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.
$595_1 = \chi_9$	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$595_2 = \chi_{10}$	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.
$1190_1 = \chi_{12}$	1	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.
$1275_1 = \chi_{13}$	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.
$1785_1 = \chi_{15}$	.	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.
$1785_2 = \chi_{16}$	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.
$2856_1 = \chi_{18}$	1	.	.	1	.	1	1	.	.	.	1	.	.	.	.	.
$2856_2 = \chi_{19}$	1	.	1	1	.	.	.	.	.	.	.	1	.	.	.	.
$2975_1 = \chi_{20}$	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.
$2975_2 = \chi_{21}$	.	1	1	.	1	.	.	.	.	.	.	1	.	.	.	.
$3400_1 = \chi_{24}$	1	.	.	1	.	1	.	1	.	.	1	.	.	.	.	.
$3570_1 = \chi_{25}$	.	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.
$3570_2 = \chi_{26}$	.	.	.	.	.	.	1	.	1	.	1	.	.	.	.	.
$3570_3 = \chi_{27}$	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.
$3808_1 = \chi_{28}$	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$4200_1 = \chi_{29}$	1	1	1	.	.	.	.	1	1	.	1	.	.	.	.	.
$4760_1 = \chi_{30}$	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$5712_1 = \chi_{31}$	1	.	1	.	.	.	.	1	.	.	1	.	1	.	.	.
$5950_1 = \chi_{32}$	.	.	.	.	.	.	1	.	.	1	.	.	.	.	.	1
$5950_2 = \chi_{33}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.
$7140_1 = \chi_{34}$	.	.	1	.	.	.	.	.	1	.	.	1	.	1	.	.
$8160_1 = \chi_{35}$	.	.	.	1	1	1	.	.	.	1	.	1	.	1	.	.
$8925_1 = \chi_{36}$	.	1	.	.	1	1	.	.	.	.	1	.	.	.	.	.
$8925_2 = \chi_{37}$	.	1	.	.	.	.	1	.	.	.	1	.	1	.	.	1
$8960_1 = \chi_{38}$	.	1	.	.	1	.	.	.	.	1	.	.	.	.	1	1
$10200_1 = \chi_{40}$	.	1	1	.	1	.	.	.	.	.	.	.	1	.	1	1
$11900_1 = \chi_{41}$	.	.	.	.	1	1	.	.	.	1	.	.	.	1	.	.
$11900_2 = \chi_{42}$	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1	1
$13056_1 = \chi_{43}$	1	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.
$13600_1 = \chi_{44}$	1	1	2	1	1	1	.	1	1	.	1	1	1	1	.	.
$14280_1 = \chi_{45}$	.	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.
$14280_2 = \chi_{46}$	.	1	1	.	1	.	.	.	.	1	.	1	1	1	.	1
$17850_1 = \chi_{53}$	.	.	.	.	.	1	1	.	1	.	1	.	.	1	.	.

(Block 1:)	φ_{22}	φ_{23}	φ_{25}	φ_{31}
$1_1 = \chi_1$	.	.	.	.
$35_1 = \chi_2$	.	.	.	.
$51_1 = \chi_3$	.	.	.	.
$85_1 = \chi_4$	.	.	.	.
$119_1 = \chi_5$	.	.	.	.
$238_1 = \chi_7$	.	.	.	.
$510_1 = \chi_8$	.	.	.	.
$595_1 = \chi_9$	.	.	.	.
$595_2 = \chi_{10}$	.	.	.	.
$1190_1 = \chi_{12}$	.	.	.	.
$1275_1 = \chi_{13}$	.	.	.	.
$1785_1 = \chi_{15}$	.	.	.	.
$1785_2 = \chi_{16}$	.	.	.	.
$2856_1 = \chi_{18}$	.	.	.	.
$2856_2 = \chi_{19}$	.	.	.	.
$2975_1 = \chi_{20}$	.	.	.	.
$2975_2 = \chi_{21}$	.	.	.	.
$3400_1 = \chi_{24}$	.	.	.	.
$3570_1 = \chi_{25}$	.	.	.	.
$3570_2 = \chi_{26}$	.	.	.	.
$3570_3 = \chi_{27}$	.	.	.	.
$3808_1 = \chi_{28}$	.	.	.	.
$4200_1 = \chi_{29}$	.	.	.	.
$4760_1 = \chi_{30}$	1	.	.	.
$5712_1 = \chi_{31}$	.	.	.	.
$5950_1 = \chi_{32}$	.	.	.	.
$5950_2 = \chi_{33}$	.	.	.	.
$7140_1 = \chi_{34}$	.	.	.	.
$8160_1 = \chi_{35}$	.	.	.	.
$8925_1 = \chi_{36}$	.	1	.	.
$8925_2 = \chi_{37}$	.	.	.	.
$8960_1 = \chi_{38}$	.	.	.	.
$10200_1 = \chi_{40}$	.	.	.	.
$11900_1 = \chi_{41}$	.	1	.	.
$11900_2 = \chi_{42}$	1	.	.	.
$13056_1 = \chi_{43}$	1	1	.	.
$13600_1 = \chi_{44}$	.	.	.	.
$14280_1 = \chi_{45}$	1	1	.	.
$14280_2 = \chi_{46}$	.	.	.	.
$17850_1 = \chi_{53}$	1	1	.	.

(Block 1:)	φ_1	φ_2	φ_3	φ_4	φ_6	φ_7	φ_8	φ_{10}	φ_{11}	φ_{13}	φ_{14}	φ_{15}	φ_{16}	φ_{17}	φ_{20}	φ_{21}
$17850_2 = \chi_{54}$	.	.	.	.	.	.	.	.	1	.	1	.	1	.	.	.
$19040_1 = \chi_{56}$	1	1	1	.	1	1	.	1	1	.	2	.	1	1	.	.
$23800_1 = \chi_{57}$	.	.	1	.	1	.	.	.	1	1	.	1	1	1	.	.
$23800_2 = \chi_{58}$	.	.	.	.	1	.	.	.	.	1	.	.	1	.	1	1
$26775_1 = \chi_{59}$	.	.	.	.	.	.	1	.	.	2	.	.	.	.	1	2
$26775_2 = \chi_{60}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$28560_1 = \chi_{61}$	.	1	.	.	2	1	1	.	.	1	1	.	1	1	1	1
$30464_1 = \chi_{63}$	1	1	1	1	1	1	1	.	1	1	1	1	1	1	.	1
$38080_1 = \chi_{70}$	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.
$43520_1 = \chi_{74}$	.	.	1	.	.	.	.	.	1	1	.	.	1	1	.	.
$47600_1 = \chi_{75}$	.	.	.	.	.	.	.	.	.	2	.	.	1	1	.	1
$53550_1 = \chi_{78}$	.	.	.	.	.	.	1	.	.	2	.	.	.	.	1	2
$57120_1 = \chi_{79}$	.	.	.	.	1	1	.	.	1	2	1	.	1	2	.	.
$65536_1 = \chi_{80}$	1	1	1	.	1	.	1	.	1	2	1	.	1	1	1	1

(Block 1:)	φ_{22}	φ_{23}	φ_{25}	φ_{31}
$17850_2 = \chi_{54}$	.	.	1	.
$19040_1 = \chi_{56}$	.	1	.	.
$23800_1 = \chi_{57}$	.	.	1	.
$23800_2 = \chi_{58}$	.	.	1	.
$26775_1 = \chi_{59}$	.	.	1	.
$26775_2 = \chi_{60}$	1	.	.	1
$28560_1 = \chi_{61}$	1	1	.	.
$30464_1 = \chi_{63}$	.	.	1	.
$38080_1 = \chi_{70}$	1	1	.	1
$43520_1 = \chi_{74}$	.	.	1	1
$47600_1 = \chi_{75}$	.	.	1	1
$53550_1 = \chi_{78}$	1	.	1	1
$57120_1 = \chi_{79}$	.	1	1	1
$65536_1 = \chi_{80}$	1	1	1	1

φ_1	$=$	1_1
φ_2	$=$	35_1
φ_3	$=$	50_1
φ_4	$=$	118_1
φ_6	$=$	203_1
φ_7	$=$	392_1
φ_8	$=$	595_1
φ_{10}	$=$	1139_1
φ_{11}	$=$	1225_1
φ_{13}	$=$	1582_1
φ_{14}	$=$	1750_1
φ_{15}	$=$	2687_1
φ_{16}	$=$	2772_1
φ_{17}	$=$	3178_1
φ_{20}	$=$	3367_1
φ_{21}	$=$	3773_1
φ_{22}	$=$	4165_1
φ_{23}	$=$	6545_1
φ_{25}	$=$	12103_1
φ_{31}	$=$	22610_1

Block 2:	φ_5	φ_9	φ_{12}	φ_{28}	φ_{29}	
$135_1 = \chi_6$	1	.	.	.	.	
$918_1 = \chi_{11}$	1	1	.	.	.	$\varphi_5 = 135_1$
$1512_1 = \chi_{14}$	.	.	1	.	.	$\varphi_9 = 783_1$
$2295_1 = \chi_{17}$	.	1	1	.	.	$\varphi_{12} = 1512_1$
$14688_1 = \chi_{47}$	1	.	.	1	.	$\varphi_{28} = 14553_1$
$16065_2 = \chi_{49}$	.	.	1	1	.	$\varphi_{29} = 17577_1$
$18360_1 = \chi_{55}$	.	1	.	.	1	
$32130_1 = \chi_{64}$	.	.	.	1	1	
$34560_1 = \chi_{69}$	1	1	1	1	1	

Block 3:	φ_{18}	φ_{19}	φ_{26}	φ_{27}	φ_{30}	
$3213_1 = \chi_{22}$	1	.	.	.	.	
$3213_2 = \chi_{23}$	.	1	.	.	.	$\varphi_{18} = 3213_1$
$16065_1 = \chi_{48}$	1	.	1	.	.	$\varphi_{19} = 3213_2$
$16065_3 = \chi_{50}$	.	1	1	.	.	$\varphi_{26} = 12852_1$
$16065_4 = \chi_{51}$	.	1	.	1	.	$\varphi_{27} = 12852_2$
$16065_5 = \chi_{52}$	1	.	.	1	.	$\varphi_{30} = 19278_1$
$32130_2 = \chi_{65}$	.	.	1	.	1	
$32130_3 = \chi_{66}$	.	.	.	1	1	
$51408_1 = \chi_{77}$	1	1	1	1	1	

Block 4:	φ_{24}	φ_{35}	
$9639_1 = \chi_{39}$	1	.	$\varphi_{24} = 9639_1$
$38556_1 = \chi_{71}$	.	1	$\varphi_{35} = 38556_1$
$48195_1 = \chi_{76}$	1	1	

Block 6:	φ_{33}	φ_{34}	
$34425_1 = \chi_{67}$	1	.	$\varphi_{33} = 34425_1$
$34425_2 = \chi_{68}$	.	1	$\varphi_{34} = 34425_2$
$68850_1 = \chi_{81}$	1	1	