

$A_{15} \pmod{2}$

	blocks	defect	matrix
$G :$	1	10	55×15
	2	9	37×14
	3	0	$146432_1 = \chi_{84}, \varphi_{30}$
	4	0	$146432_2 = \chi_{85}, \varphi_{31}$

Block 1:	φ_1	φ_5	φ_7	φ_8	φ_9	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}	φ_{16}	φ_{20}	φ_{23}	φ_{28}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$90_1 = \chi_3$	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$91_1 = \chi_4$	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$715_1 = \chi_7$	1	1	1	.	.	.	.	.	.	.	.	.	.	.
$910_1 = \chi_8$	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$1001_1 = \chi_9$	1	1	.	.	1	.	.	.	.	.	.	.	.	.
$1925_1 = \chi_{14}$	1	.	1	.	.	1	.	.	.	.	.	.	.	.
$2002_1 = \chi_{15}$	.	1	.	.	.	.	1	.	.	.	.	.	.	.
$2835_1 = \chi_{17}$	1	.	1	.	1	1	.	.	.	.	.	.	.	.
$2925_1 = \chi_{18}$	1	1	1	.	1	1	.	.	.	.	.	.	.	.
$3003_1 = \chi_{19}$	1	2	.	.	1	.	1	.	.	.	.	.	.	.
$5005_1 = \chi_{20}$	1	.	.	1	.	.	.	.	1	.	.	.	.	.
$6006_1 = \chi_{21}$	2	.	.	.	.	1	.	.	.	.	1	.	.	.
$7007_1 = \chi_{22}$	1	.	1	.	1	1	.	.	1	.	.	.	.	.
$7722_1 = \chi_{23}$	2	1	2	.	1	1	.	.	1	.	.	.	.	.
$11375_1 = \chi_{27}$	1	1	1	.	.	.	1	.	1	1	.	.	.	.
$11583_1 = \chi_{28}$	1	1	.	1	.	.	1	.	1	1	.	.	.	.
$12740_1 = \chi_{31}$	2	2	.	.	.	1	1	.	.	.	.	1	.	.
$13650_1 = \chi_{32}$	2	2	.	.	1	1	1	.	.	.	.	1	.	.
$14300_1 = \chi_{33}$	2	2	2	.	1	1	1	.	1	1	.	.	.	.
$19305_1 = \chi_{34}$	3	2	2	1	1	1	1	.	2	1	.	.	.	.
$21450_1 = \chi_{35}$	2	1	.	.	.	1	1	1	.	.	1	1	.	.
$22113_1 = \chi_{36}$	3	2	1	.	.	1	1	.	1	1	.	1	.	.
$24948_1 = \chi_{37}$	4	2	2	.	1	2	1	.	1	1	.	1	.	.
$25025_1 = \chi_{38}$	3	3	1	.	1	1	2	.	1	1	.	1	.	.
$25025_2 = \chi_{39}$	1	1	.	1	.	.	1	1	1	1	.	1	.	.
$25025_3 = \chi_{40}$	3	.	1	1	.	1	.	.	1	.	1	.	1	.
$26950_1 = \chi_{41}$	4	3	2	.	1	2	2	.	1	1	.	1	.	.
$27027_1 = \chi_{42}$	1	2	.	1	.	.	2	1	1	1	.	1	.	.
$28028_1 = \chi_{43}$	2	2	.	.	.	1	2	1	.	1	1	1	.	.
$34398_1 = \chi_{46}$	4	.	2	1	.	1	.	.	2	1	1	.	1	.
$35035_1 = \chi_{47}$	3	2	1	1	.	.	1	.	1	1	.	1	1	.
$42042_2 = \chi_{50}$	4	2	2	1	1	1	1	.	2	1	.	1	1	.
$45045_1 = \chi_{53}$	3	1	1	1	.	1	1	1	1	1	1	1	1	.
$51975_1 = \chi_{56}$	5	4	2	1	1	2	3	1	2	2	.	2	.	.
$53625_1 = \chi_{57}$	5	3	2	2	1	1	2	.	3	2	.	1	1	.
$61425_1 = \chi_{61}$	5	2	2	2	.	1	2	1	3	2	1	1	1	.
$70070_1 = \chi_{63}$	6	4	2	1	1	2	3	1	2	2	1	2	1	.
$75075_1 = \chi_{64}$	3	2	1	1	1	.	.	.	.	.	.	.	1	1
$75075_2 = \chi_{65}$	7	4	2	2	1	2	3	1	3	2	1	2	1	.

(Block 1:)	φ_{29}
$1_1 = \chi_1$.
$90_1 = \chi_3$.
$91_1 = \chi_4$.
$715_1 = \chi_7$.
$910_1 = \chi_8$.
$1001_1 = \chi_9$.
$1925_1 = \chi_{14}$.
$2002_1 = \chi_{15}$.
$2835_1 = \chi_{17}$.
$2925_1 = \chi_{18}$.
$3003_1 = \chi_{19}$.
$5005_1 = \chi_{20}$.
$6006_1 = \chi_{21}$.
$7007_1 = \chi_{22}$.
$7722_1 = \chi_{23}$.
$11375_1 = \chi_{27}$.
$11583_1 = \chi_{28}$.
$12740_1 = \chi_{31}$.
$13650_1 = \chi_{32}$.
$14300_1 = \chi_{33}$.
$19305_1 = \chi_{34}$.
$21450_1 = \chi_{35}$.
$22113_1 = \chi_{36}$.
$24948_1 = \chi_{37}$.
$25025_1 = \chi_{38}$.
$25025_2 = \chi_{39}$.
$25025_3 = \chi_{40}$.
$26950_1 = \chi_{41}$.
$27027_1 = \chi_{42}$.
$28028_1 = \chi_{43}$.
$34398_1 = \chi_{46}$.
$35035_1 = \chi_{47}$.
$42042_2 = \chi_{50}$.
$45045_1 = \chi_{53}$.
$51975_1 = \chi_{56}$.
$53625_1 = \chi_{57}$.
$61425_1 = \chi_{61}$.
$70070_1 = \chi_{63}$.
$75075_1 = \chi_{64}$.
$75075_2 = \chi_{65}$.

(Block 1:)	φ_1	φ_5	φ_7	φ_8	φ_9	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}	φ_{16}	φ_{20}	φ_{23}	φ_{28}
$81081_1 = \chi_{69}$	5	2	1	1	1	1	.	.	.	.	1	.	1	1
$90090_1 = \chi_{70}$	2	2	.	.	2	.	1	.	.	.	.	1	.	.
$96525_1 = \chi_{72}$	5	3	1	1	1	1	1	1	.	.	1	1	1	1
$100100_3 = \chi_{75}$	6	2	2	2	1	1	.	.	1	.	1	.	2	1
$112112_1 = \chi_{77}$	2	4	.	.	2	.	3	1	.	1	.	2	.	.
$122850_1 = \chi_{79}$	4	5	.	.	2	1	3	1	.	1	.	3	.	.
$125125_1 = \chi_{80}$	7	3	2	3	1	1	1	1	2	1	1	1	2	1
$126126_1 = \chi_{81}$	8	3	2	2	1	2	1	1	1	1	2	1	2	1
$135135_1 = \chi_{83}$	5	3	1	1	2	1	2	1	1	1	1	2	1	.
$159250_1 = \chi_{87}$	8	6	2	1	2	2	4	1	2	2	1	3	1	.
$175175_1 = \chi_{89}$	5	3	1	1	3	1	1	1	.	.	1	1	1	1
$184275_1 = \chi_{90}$	9	7	2	2	2	2	5	2	3	3	1	4	1	.
$210210_1 = \chi_{91}$	8	5	2	2	3	1	2	1	1	1	1	2	2	1
$231660_1 = \chi_{93}$	10	6	2	2	3	2	3	2	1	1	2	3	2	1
$243243_1 = \chi_{94}$	11	7	2	3	3	2	4	2	2	2	2	3	2	1

(Block 1:)	φ_{29}	
$81081_1 = \chi_{69}$	.	$\varphi_1 = 1_1$
$90090_1 = \chi_{70}$	1	$\varphi_5 = 90_1$
$96525_1 = \chi_{72}$	.	$\varphi_7 = 624_1$
$100100_3 = \chi_{75}$	.	$\varphi_8 = 832_1$
$112112_1 = \chi_{77}$	1	$\varphi_9 = 910_1$
$122850_1 = \chi_{79}$	1	$\varphi_{11} = 1300_1$
$125125_1 = \chi_{80}$	.	$\varphi_{12} = 1912_1$
$126126_1 = \chi_{81}$	.	$\varphi_{13} = 4096_1$
$135135_1 = \chi_{83}$	1	$\varphi_{14} = 4172_1$
$159250_1 = \chi_{87}$	1	$\varphi_{15} = 4576_1$
$175175_1 = \chi_{89}$	1	$\varphi_{16} = 4704_1$
$184275_1 = \chi_{90}$	1	$\varphi_{20} = 9346_1$
$210210_1 = \chi_{91}$	1	$\varphi_{23} = 13390_1$
$231660_1 = \chi_{93}$	1	$\varphi_{28} = 59136_1$
$243243_1 = \chi_{94}$	1	$\varphi_{29} = 76830_1$

Block 2:	φ_2	φ_3	φ_4	φ_6	φ_{10}	φ_{17}	φ_{18}	φ_{19}	φ_{21}	φ_{22}	φ_{24}	φ_{25}	φ_{26}	φ_{27}
$14_1 = \chi_2$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$350_1 = \chi_5$	1	.	.	1	.	.	.	.	.	.	.	.	.	.
$364_1 = \chi_6$	2	.	.	1	.	.	.	.	.	.	.	.	.	.
$1430_1 = \chi_{10}$	1	1	1	.	1	.	.	.	.	.	.	.	.	.
$1638_1 = \chi_{11}$	1	.	.	1	1	.	.	.	.	.	.	.	.	.
$1716_1 = \chi_{12}$	2	1	.	1	1	.	.	.	.	.	.	.	.	.
$1716_2 = \chi_{13}$	2	.	1	1	1	.	.	.	.	.	.	.	.	.
$2002_2 = \chi_{16}$	3	.	.	2	1	.	.	.	.	.	.	.	.	.
$9100_1 = \chi_{24}$	2	.	.	1	1	1	.	.	.	.	.	.	.	.
$9450_1 = \chi_{25}$	3	.	.	2	1	1	.	.	.	.	.	.	.	.
$11088_1 = \chi_{26}$	4	.	.	3	2	1	.	.	.	.	.	.	.	.
$12012_1 = \chi_{29}$	2	.	.	1	.	.	.	.	1	.	.	.	.	.
$12012_2 = \chi_{30}$	2	.	.	1	.	.	.	.	.	1	.	.	.	.
$30030_1 = \chi_{44}$	1	1	1	.	1	1	.	.	.	.	1	.	.	.
$32032_1 = \chi_{45}$	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$35100_1 = \chi_{48}$	2	1	1	1	2	.	.	.	.	.	.	.	.	1
$42042_1 = \chi_{49}$	5	.	.	2	2	1	.	.	.	.	.	.	1	.
$43120_1 = \chi_{51}$	4	.	.	3	2	1	.	.	.	.	.	.	.	1
$44550_1 = \chi_{52}$	5	1	1	3	3	1	.	.	.	.	.	.	.	1
$50050_1 = \chi_{54}$	1	1	1	.	1	.	1	1	.	.	.	.	1	.
$50050_2 = \chi_{55}$	5	1	1	3	1	.	.	.	1	1	.	1	.	.
$54054_1 = \chi_{58}$	5	1	1	2	1	1	.	.	1	1	1	.	.	.
$57330_1 = \chi_{59}$	3	1	1	1	1	.	.	.	.	.	.	1	1	.
$58968_1 = \chi_{60}$	4	1	1	2	2	.	.	.	.	.	.	1	1	.
$63700_1 = \chi_{62}$	2	1	1	1	2	1	.	.	.	.	1	.	.	1
$78000_1 = \chi_{66}$	4	1	1	2	1	.	1	.	1	.	.	1	1	.
$78000_2 = \chi_{67}$	4	1	1	2	1	.	.	1	.	1	.	1	1	.
$80080_1 = \chi_{68}$	6	2	2	3	2	1	.	.	1	1	1	1	.	.
$91000_1 = \chi_{71}$	4	1	1	2	2	.	.	.	.	.	.	1	1	1
$100100_1 = \chi_{73}$	6	2	2	3	2	.	1	1	1	1	.	1	1	.
$100100_2 = \chi_{74}$	6	1	1	3	3	1	.	.	.	.	.	1	1	1
$108108_1 = \chi_{76}$	2	2	2	1	2	.	1	1	.	.	.	1	1	1
$112112_2 = \chi_{78}$	6	2	2	3	2	1	.	.	1	1	1	1	.	1
$128700_1 = \chi_{82}$	6	2	2	3	2	1	1	1	1	1	1	1	1	.
$150150_1 = \chi_{86}$	7	2	2	3	4	1	1	1	.	.	.	1	2	1
$162162_1 = \chi_{88}$	7	3	3	3	3	1	1	1	1	1	1	1	1	1
$221130_1 = \chi_{92}$	11	4	4	5	5	1	1	1	1	1	1	2	2	1

$$\begin{array}{ll} \varphi_2 = 14_1 & \varphi_{19} = 8672_2 \\ \varphi_3 = 64_1 & \varphi_{21} = 11648_1 \\ \varphi_4 = 64_2 & \varphi_{22} = 11648_2 \\ \varphi_6 = 336_1 & \varphi_{24} = 21152_1 \\ \varphi_{10} = 1288_1 & \varphi_{25} = 24260_1 \\ \varphi_{17} = 7448_1 & \varphi_{26} = 31276_1 \\ \varphi_{18} = 8672_1 & \varphi_{27} = 32032_1 \end{array}$$