

$$L_4(4) \pmod{2}$$

	blocks	defect	matrix
$G :$	1 2	12 0	83×63 $4096_1 = \chi_{32}, \varphi_{64}$

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}	φ_{15}	φ_{16}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$84_1 = \chi_2$	.	1	1	1	1	.	.	.	.	1	1	.	.	.	.	.
$272_1 = \chi_3$	.	1	1	1	1	2	2	.	.	.	.	.	.	.	.	.
$357_1 = \chi_4$	1	.	.	.	.	1	1	1	1	.	.	1	1	1	1	1
$1344_1 = \chi_5$	4	1	1	1	1	4	4	2	2	.	.	1	1	.	.	.
$1785_1 = \chi_6$	5	2	2	2	2	3	3	3	3	1	1	.	.	1	1	1
$2835_1 = \chi_7$	7	2	2	2	2	4	6	4	6	2	2	.	.	.	1	1
$2835_2 = \chi_8$	7	2	2	2	2	6	4	6	4	2	2	.	.	1	.	.
$2835_3 = \chi_9$	7	3	3	1	1	6	4	4	2	.	.	3	3	1	4	4
$2835_4 = \chi_{10}$	7	1	1	3	3	4	6	2	4	.	.	3	3	4	1	1
$3213_1 = \chi_{11}$	5	4	4	4	4	5	5	3	3	2	2	1	1	2	2	2
$3825_1 = \chi_{12}$	5	3	5	3	5	4	4	3	3	3	2	1	1	2	2	2
$3825_2 = \chi_{13}$	7	1	3	5	2	6	6	2	5	.	1	2	4	4	1	.
$3825_3 = \chi_{14}$	7	5	2	1	3	6	6	5	2	.	1	4	2	.	4	4
$3825_4 = \chi_{15}$	5	5	3	5	3	4	4	3	3	2	3	1	1	2	2	2
$3825_5 = \chi_{16}$	7	2	5	3	1	6	6	5	2	1	.	2	4	1	4	4
$3825_6 = \chi_{17}$	7	3	1	2	5	6	6	2	5	1	.	4	2	4	.	1
$3825_7 = \chi_{18}$	9	4	4	4	4	6	6	4	4	1	1	3	2	3	3	3
$3825_8 = \chi_{19}$	9	3	2	4	4	4	8	4	6	2	2	.	.	.	1	1
$3825_9 = \chi_{20}$	5	2	3	2	3	4	4	3	1	1	.	4	3	1	4	4
$3825_{10} = \chi_{21}$	7	4	4	3	1	4	2	1	4	.	1	1	2	3	3	2
$3825_{11} = \chi_{22}$	7	1	3	4	4	2	4	4	1	1	.	1	2	3	3	2
$3825_{12} = \chi_{23}$	5	3	2	3	2	4	4	1	3	.	1	4	3	4	1	2
$3825_{13} = \chi_{24}$	9	4	4	2	3	8	4	6	4	2	2	.	.	1	.	1
$3825_{14} = \chi_{25}$	9	4	4	4	4	6	6	4	4	1	1	2	3	3	3	3
$3825_{15} = \chi_{26}$	9	4	4	3	2	8	4	6	4	2	2	.	.	1	1	.
$3825_{16} = \chi_{27}$	5	2	3	2	3	4	4	1	3	1	.	3	4	4	2	1
$3825_{17} = \chi_{28}$	7	3	1	4	4	2	4	4	1	.	1	2	1	2	2	3
$3825_{18} = \chi_{29}$	5	3	2	3	2	4	4	3	1	.	1	3	4	2	4	4
$3825_{19} = \chi_{30}$	7	4	4	1	3	4	2	1	4	1	.	2	1	2	2	3
$3825_{20} = \chi_{31}$	9	2	3	4	4	4	8	4	6	2	2	.	.	1	1	1
$5712_1 = \chi_{33}$	12	4	4	4	4	8	8	7	7	3	3	.	.	1	1	1
$7140_1 = \chi_{34}$	8	4	4	4	4	7	7	4	4	1	1	5	5	4	4	4
$2835_5 = \chi_{35}$	5	3	2	1	2	2	1	.	2	.	.	1	.	1	.	2
$2835_6 = \chi_{36}$	3	2	4	1	4	3	2	1	2	2	.	2	1	1	2	2
$2835_7 = \chi_{37}$	5	2	3	2	1	2	1	.	2	.	.	.	1	2	2	.
$2835_8 = \chi_{38}$	3	4	1	4	2	2	3	2	1	.	2	2	1	2	1	2
$2835_9 = \chi_{39}$	3	4	2	4	1	3	2	1	2	.	2	1	2	2	2	2
$2835_{10} = \chi_{40}$	5	2	1	2	3	1	2	2	.	.	.	1	.	.	1	2
$2835_{11} = \chi_{41}$	5	1	2	3	2	1	2	2	.	.	.	.	1	2	2	1

(Block 1:)	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$1_1 = \chi_1$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$84_1 = \chi_2$	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$272_1 = \chi_3$	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$357_1 = \chi_4$	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$1344_1 = \chi_5$	.	2	2	2	2	.	.	.	.	.	.	.	.	.	.
$1785_1 = \chi_6$	1	1	1	1	1	2	1	1	1	1	1	1	.	.	1
$2835_1 = \chi_7$	.	2	.	.	2	1	1	.	.	1	2	1	.	.	1
$2835_2 = \chi_8$	1	.	2	2	.	1	.	1	1	.	1	2	.	.	.
$2835_3 = \chi_9$	1	1	3	3	1	1	.	1	1	.	.	1	.	1	.
$2835_4 = \chi_{10}$	4	3	1	1	3	1	1	.	.	1	1	.	1	.	1
$3213_1 = \chi_{11}$	2	1	1	1	1	3	2	2	2	2	1	1	.	.	1
$3825_1 = \chi_{12}$	2	1	1	1	1	3	2	2	.	.	1	1	2	2	1
$3825_2 = \chi_{13}$	4	3	.	3	4	1	1	.	.	2	1	.	1	.	1
$3825_3 = \chi_{14}$	1	3	4	3	.	1	.	1	2	.	.	1	.	1	.
$3825_4 = \chi_{15}$	2	1	1	1	1	3	.	.	2	2	1	1	.	.	.
$3825_5 = \chi_{16}$	.	.	3	4	3	1	.	2	1	.	.	1	.	2	.
$3825_6 = \chi_{17}$	4	4	3	.	3	1	2	.	.	1	1	.	2	.	2
$3825_7 = \chi_{18}$	3	2	2	2	2	3	1	2	1	2	1	1	1	.	1
$3825_8 = \chi_{19}$	1	4	1	.	2	1	3	.	2	1	2	1	.	.	2
$3825_9 = \chi_{20}$	2	1	3	2	2	1	1	1	.	.	.	.	2	2	.
$3825_{10} = \chi_{21}$	2	.	.	5	1	3	.	3	1	2	.	.	.	.	.
$3825_{11} = \chi_{22}$	2	.	.	1	5	3	1	2	.	3	.	.	2	.	.
$3825_{12} = \chi_{23}$	4	3	1	2	2	1	.	.	1	1	.	.	1	.	.
$3825_{13} = \chi_{24}$	1	1	4	2	.	1	2	1	3	.	1	2	.	1	1
$3825_{14} = \chi_{25}$	3	2	2	2	2	3	2	1	2	1	1	1	.	1	1
$3825_{15} = \chi_{26}$	1	.	2	4	1	1	.	3	1	2	1	2	.	.	.
$3825_{16} = \chi_{27}$	4	2	2	1	3	1	1	1	.	.	.	.	2	2	1
$3825_{17} = \chi_{28}$	3	5	1	.	.	3	3	.	2	1	.	.	.	.	3
$3825_{18} = \chi_{29}$	1	2	2	3	1	1	.	.	1	1	.	.	.	1	.
$3825_{19} = \chi_{30}$	3	1	5	.	.	3	2	1	3	.	.	.	.	2	1
$3825_{20} = \chi_{31}$	.	2	.	1	4	1	1	2	.	3	2	1	1	.	1
$5712_1 = \chi_{33}$	1	2	2	2	2	1	2	2	2	2	2	2	.	.	1
$7140_1 = \chi_{34}$	4	3	3	3	3	1	1	1	1	1	1	1	2	2	1
$2835_5 = \chi_{35}$	2	1	4	.	.	2	2	.	3	.	.	.	.	1	1
$2835_6 = \chi_{36}$	2	1	2	.	1	2	2	1	.	.	.	.	2	2	1
$2835_7 = \chi_{37}$	1	.	.	4	1	2	.	3	.	2	.	.	.	.	.
$2835_8 = \chi_{38}$	2	2	1	1	.	2	.	.	2	1	.	.	.	.	.
$2835_9 = \chi_{39}$	1	1	.	2	1	2	.	.	1	2	.	.	.	.	.
$2835_{10} = \chi_{40}$	2	4	1	.	.	2	3	.	2	.	.	.	.	.	3
$2835_{11} = \chi_{41}$	.	.	.	1	4	2	.	2	.	3	.	.	1	.	.

(Block 1:)	φ_{32}	φ_{33}	φ_{34}	φ_{35}	φ_{36}	φ_{37}	φ_{38}	φ_{39}	φ_{40}	φ_{41}	φ_{42}	φ_{43}	φ_{44}	φ_{45}	φ_{46}
$1_1 = \chi_1$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$84_1 = \chi_2$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$272_1 = \chi_3$	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
$357_1 = \chi_4$	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
$1344_1 = \chi_5$	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
$1785_1 = \chi_6$	1	.	1	.	1	.	.	1	1	1	1	1	.	.	.
$2835_1 = \chi_7$	.	.	1	.	.	1	.	1	2	1	2	1	.	.	.
$2835_2 = \chi_8$	1	.	.	.	1	.	1	2	1	2	1	1	.	.	.
$2835_3 = \chi_9$	1	.	.	1	1	2	1	1	.	1	.	1	.	.	.
$2835_4 = \chi_{10}$	.	1	1	.	.	1	2	.	1	.	1	1	.	.	.
$3213_1 = \chi_{11}$	1	.	1	.	1	1	1	1	1	1	1	1	.	.	.
$3825_1 = \chi_{12}$	.	.	.	.	1	1	1	1	1	1	1	1	1	1	.
$3825_2 = \chi_{13}$	.	2	2	.	.	.	2	.	1	.	2	1	.	.	.
$3825_3 = \chi_{14}$	2	.	.	2	1	2	.	2	.	1	.	1	.	.	1
$3825_4 = \chi_{15}$	1	2	1	2	.	1	1	1	1	1	1	1	.	.	1
$3825_5 = \chi_{16}$	1	.	.	1	2	2	.	1	.	2	.	1	.	1	.
$3825_6 = \chi_{17}$	.	1	1	.	.	.	2	.	2	.	1	1	1	.	.
$3825_7 = \chi_{18}$	1	.	1	1	1	2	2	1	1	1	1	1	.	.	.
$3825_8 = \chi_{19}$	1	1	1	.	.	1	.	1	2	1	2	1	.	.	.
$3825_9 = \chi_{20}$	.	.	.	1	1	2	1	.	.	1	.	.	1	1	.
$3825_{10} = \chi_{21}$	.	.	1	2	3	1	2	.	.	.	1	.	.	.	.
$3825_{11} = \chi_{22}$	.	.	3	.	1	2	1	.	.	1	.	.	.	.	.
$3825_{12} = \chi_{23}$	.	2	1	2	.	1	2	.	.	.	1	.	.	.	1
$3825_{13} = \chi_{24}$	2	.	.	.	1	.	1	2	1	2	1	1	.	.	.
$3825_{14} = \chi_{25}$	1	1	1	.	1	2	2	1	1	1	1	1	.	.	.
$3825_{15} = \chi_{26}$	1	.	1	1	2	.	1	2	1	2	1	1	.	.	.
$3825_{16} = \chi_{27}$	.	1	.	.	.	1	2	.	1	.	.	.	1	1	.
$3825_{17} = \chi_{28}$	1	2	.	.	.	2	1	1	.	.	.	.	.	.	.
$3825_{18} = \chi_{29}$	1	2	.	2	.	2	1	1	.	.	.	.	.	.	1
$3825_{19} = \chi_{30}$	3	.	.	.	.	1	2	.	1	.	.	.	.	.	.
$3825_{20} = \chi_{31}$	.	.	2	.	1	1	.	1	2	1	2	1	.	.	.
$5712_1 = \chi_{33}$	1	.	1	.	1	1	1	2	2	2	2	1	.	.	.
$7140_1 = \chi_{34}$	1	2	1	2	1	2	2	1	1	1	1	1	1	1	1
$2835_5 = \chi_{35}$	3	.	.	.	.	.	1	.	.	.	.	.	.	.	.
$2835_6 = \chi_{36}$	.	.	.	.	.	1	1	.	1	.	.	.	1	1	.
$2835_7 = \chi_{37}$	.	.	1	1	3	.	1	.	.	.	.	.	.	.	.
$2835_8 = \chi_{38}$	1	2	.	2	.	1	1	1	.	.	.	.	.	.	1
$2835_9 = \chi_{39}$	.	2	1	2	.	1	1	.	.	.	1	.	.	.	1
$2835_{10} = \chi_{40}$	1	1	.	.	.	1	.	.	.	.	.	.	.	.	.
$2835_{11} = \chi_{41}$	.	.	3	.	1	1	.	.	.	.	.	.	.	.	.

(Block 1:)	φ_{47}	φ_{48}	φ_{49}	φ_{50}	φ_{51}	φ_{52}	φ_{53}	φ_{54}	φ_{55}	φ_{56}	φ_{57}	φ_{58}	φ_{59}	φ_{60}	φ_{61}
$1_1 = \chi_1$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$84_1 = \chi_2$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$272_1 = \chi_3$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$357_1 = \chi_4$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$1344_1 = \chi_5$	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
$1785_1 = \chi_6$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$2835_1 = \chi_7$	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
$2835_2 = \chi_8$	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
$2835_3 = \chi_9$	.	.	.	1	1	1	.	.	.	.	.	.	.	.	.
$2835_4 = \chi_{10}$	.	1	1	.	.	.	1	.	.	.	.	.	.	.	.
$3213_1 = \chi_{11}$	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.
$3825_1 = \chi_{12}$	.	1	.	.	1	.	.	1	.	.	.	.	.	.	.
$3825_2 = \chi_{13}$	1	1	1	.	.	.	1	.	.	1	.	.	.	.	.
$3825_3 = \chi_{14}$	.	.	.	1	1	1	.	.	.	1	.	.	.	.	.
$3825_4 = \chi_{15}$	1	.	1	1	.	.	.	.	.	1	.	.	.	.	.
$3825_5 = \chi_{16}$	.	.	.	1	1	1	.	1	.	.	.	.	.	.	.
$3825_6 = \chi_{17}$	.	1	1	.	.	.	1	1	.	.	.	.	.	.	.
$3825_7 = \chi_{18}$	.	1	.	1	.	.	.	.	.	.	1	.	.	.	.
$3825_8 = \chi_{19}$	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.
$3825_9 = \chi_{20}$	.	1	.	1	1	1	.	1	.	.	.	.	.	.	.
$3825_{10} = \chi_{21}$	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.
$3825_{11} = \chi_{22}$	.	1	.	.	.	.	.	.	.	.	1	.	.	1	.
$3825_{12} = \chi_{23}$	1	1	1	1	.	.	1	.	.	1	.	.	.	.	.
$3825_{13} = \chi_{24}$	.	.	.	.	.	.	.	.	1	.	.	1	.	.	.
$3825_{14} = \chi_{25}$	.	.	1	.	1	.	.	.	1	.	.	.	.	.	.
$3825_{15} = \chi_{26}$	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
$3825_{16} = \chi_{27}$	.	1	1	.	1	.	1	1	.	.	.	.	.	.	.
$3825_{17} = \chi_{28}$	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.
$3825_{18} = \chi_{29}$	1	.	1	1	1	1	.	.	.	1	.	.	.	.	.
$3825_{19} = \chi_{30}$	.	.	.	.	1	.	.	.	1	.	.	.	.	.	1
$3825_{20} = \chi_{31}$	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.
$5712_1 = \chi_{33}$	.	.	.	.	.	.	.	.	1	.	1	1	1	.	.
$7140_1 = \chi_{34}$	1	1	1	1	1	1	1	1	.	1	.	.	.	.	.
$2835_5 = \chi_{35}$	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
$2835_6 = \chi_{36}$	.	1	.	.	1	.	.	1	.	.	.	.	.	.	.
$2835_7 = \chi_{37}$	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
$2835_8 = \chi_{38}$	1	.	1	1	.	.	.	.	.	1	.	.	.	.	.
$2835_9 = \chi_{39}$	1	.	1	1	.	.	.	.	.	1	.	.	.	.	.
$2835_{10} = \chi_{40}$	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
$2835_{11} = \chi_{41}$	.	.	.	.	.	.	.	.	.	.	1	.	.	1	.

(Block 1:)	φ_{62}	φ_{63}
$1_1 = \chi_1$	.	.
$84_1 = \chi_2$	.	.
$272_1 = \chi_3$	.	.
$357_1 = \chi_4$	.	.
$1344_1 = \chi_5$	.	.
$1785_1 = \chi_6$	.	.
$2835_1 = \chi_7$	.	.
$2835_2 = \chi_8$	.	.
$2835_3 = \chi_9$	.	.
$2835_4 = \chi_{10}$	.	.
$3213_1 = \chi_{11}$	.	.
$3825_1 = \chi_{12}$	.	.
$3825_2 = \chi_{13}$	.	.
$3825_3 = \chi_{14}$	.	.
$3825_4 = \chi_{15}$	.	.
$3825_5 = \chi_{16}$	.	.
$3825_6 = \chi_{17}$	.	.
$3825_7 = \chi_{18}$	.	.
$3825_8 = \chi_{19}$	.	.
$3825_9 = \chi_{20}$	.	.
$3825_{10} = \chi_{21}$	.	1
$3825_{11} = \chi_{22}$	.	.
$3825_{12} = \chi_{23}$	.	.
$3825_{13} = \chi_{24}$	.	.
$3825_{14} = \chi_{25}$	.	.
$3825_{15} = \chi_{26}$	.	.
$3825_{16} = \chi_{27}$	.	.
$3825_{17} = \chi_{28}$	1	.
$3825_{18} = \chi_{29}$	.	.
$3825_{19} = \chi_{30}$	.	.
$3825_{20} = \chi_{31}$	.	.
$5712_1 = \chi_{33}$	.	.
$7140_1 = \chi_{34}$	.	.
$2835_5 = \chi_{35}$	.	.
$2835_6 = \chi_{36}$	.	.
$2835_7 = \chi_{37}$	.	1
$2835_8 = \chi_{38}$	.	.
$2835_9 = \chi_{39}$	.	.
$2835_{10} = \chi_{40}$	1	.
$2835_{11} = \chi_{41}$	.	.

(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}	φ_{15}	φ_{16}
$2835_{12} = \chi_{42}$	5	2	.	1	2	4	3	1	3	.	.	4	2	4	.	.
$2835_{13} = \chi_{43}$	5	4	3	3	3	5	4	3	3	1	2	1	1	1	2	2
$2835_{14} = \chi_{44}$	3	1	4	2	4	2	3	2	1	2	.	1	2	2	2	1
$2835_{15} = \chi_{45}$	5	3	4	3	3	5	4	3	3	2	1	1	1	2	2	2
$2835_{16} = \chi_{46}$	5	2	1	.	2	3	4	3	1	.	.	4	2	.	4	4
$2835_{17} = \chi_{47}$	5	1	2	2	.	3	4	3	1	.	.	2	4	.	4	4
$2835_{18} = \chi_{48}$	5	.	2	2	1	4	3	1	3	.	.	2	4	4	.	.
$2835_{19} = \chi_{49}$	5	3	3	3	4	4	5	3	3	2	1	1	1	2	1	2
$2835_{20} = \chi_{50}$	5	3	3	4	3	4	5	3	3	1	2	1	1	2	2	1
$85_1 = \chi_{51}$	1	1	.	.	1	1	1	.	.	.	.	1	.	.	.	.
$189_1 = \chi_{52}$	1	1	1	.	.	1	.	1	.	.	.	.	.	.	1	1
$3213_2 = \chi_{53}$	5	2	4	2	4	4	4	2	2	2	.	2	2	2	2	2
$3213_3 = \chi_{54}$	7	2	2	3	3	5	6	4	4	1	1	3	3	4	1	1
$1071_1 = \chi_{55}$	3	2	2	2	2	2	3	1	2	1	1	.	.	.	1	1
$1071_2 = \chi_{56}$	3	2	1	1	1	3	2	1	2	.	1	2	1	1	1	2
$1071_3 = \chi_{57}$	3	1	1	1	2	2	3	2	1	1	.	2	1	1	1	1
$5355_1 = \chi_{58}$	9	4	5	3	5	7	7	5	4	2	1	4	3	2	4	5
$5355_2 = \chi_{59}$	9	5	3	5	4	7	7	4	5	1	2	4	3	4	2	2
$85_2 = \chi_{60}$	1	.	1	1	.	1	1	.	.	.	.	.	1	.	.	.
$3024_1 = \chi_{61}$	10	1	1	4	4	2	8	3	6	1	1	.	.	.	1	1
$1071_4 = \chi_{62}$	3	2	2	2	2	3	2	2	1	1	1	.	.	1	.	.
$189_2 = \chi_{63}$	1	.	.	1	1	.	1	.	1	.	.	.	.	1	.	.
$4284_1 = \chi_{64}$	6	4	4	2	2	5	6	4	2	1	1	3	3	.	4	4
$1700_1 = \chi_{65}$	4	2	2	2	2	3	3	2	2	1	1	1	2	2	2	1
$1428_1 = \chi_{66}$	4	2	2	2	2	2	2	1	1	.	.	1	.	1	1	1
$1700_2 = \chi_{67}$	4	2	2	2	2	3	3	2	2	1	1	2	1	1	1	2
$1428_2 = \chi_{68}$	4	2	2	2	2	2	2	1	1	.	.	.	1	1	1	1
$5440_1 = \chi_{69}$	8	2	4	4	2	2	2	2	2	.	.	1	3	4	4	2
$3024_2 = \chi_{70}$	10	4	4	1	1	8	2	6	3	1	1	.	.	1	.	.
$5355_3 = \chi_{71}$	13	4	4	6	6	6	10	6	7	2	2	1	1	2	3	3
$5355_4 = \chi_{72}$	13	6	6	4	4	10	6	7	6	2	2	1	1	3	2	2
$4284_2 = \chi_{73}$	6	2	2	4	4	6	5	2	4	1	1	3	3	4	.	.
$4284_3 = \chi_{74}$	8	4	5	3	2	4	3	1	4	.	1	2	2	3	3	2
$5355_5 = \chi_{75}$	9	5	4	5	3	7	7	5	4	1	2	3	4	2	5	4
$1071_5 = \chi_{76}$	3	1	2	1	1	3	2	1	2	1	.	1	2	1	2	1
$5355_6 = \chi_{77}$	9	3	5	4	5	7	7	4	5	2	1	3	4	5	2	2
$3213_4 = \chi_{78}$	7	3	3	2	2	6	5	4	4	1	1	3	3	1	4	4
$4284_4 = \chi_{79}$	8	5	4	2	3	4	3	1	4	1	.	2	2	3	2	3
$1071_6 = \chi_{80}$	3	1	1	2	1	2	3	2	1	.	1	1	2	2	1	1
$4284_5 = \chi_{81}$	8	2	3	5	4	3	4	4	1	1	.	2	2	3	3	3

(Block 1:)	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$2835_{12} = \chi_{42}$	4	3	3	.	2	.	1	.	.	.	.	.	2	.	1
$2835_{13} = \chi_{43}$	2	1	2	1	.	2	2	1	2	.	1	1	.	1	1
$2835_{14} = \chi_{44}$	2	.	1	1	2	2	1	2	.	.	.	.	2	2	.
$2835_{15} = \chi_{45}$	1	.	1	2	1	2	.	2	1	2	1	1	.	.	.
$2835_{16} = \chi_{46}$	.	3	3	2	.	.	.	.	1	.	.	.	.	1	.
$2835_{17} = \chi_{47}$	.	.	2	3	3	.	.	1	.	.	.	.	.	2	.
$2835_{18} = \chi_{48}$	4	2	.	3	3	.	.	.	.	1	.	.	1	.	.
$2835_{19} = \chi_{49}$	2	2	1	.	1	2	2	.	2	1	1	1	.	.	1
$2835_{20} = \chi_{50}$	2	1	.	1	2	2	1	2	.	2	1	1	1	.	1
$85_1 = \chi_{51}$	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$189_1 = \chi_{52}$	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$3213_2 = \chi_{53}$	2	1	2	1	2	2	2	2	.	.	.	.	2	2	1
$3213_3 = \chi_{54}$	4	3	1	1	3	1	1	.	.	1	1	1	1	.	1
$1071_1 = \chi_{55}$	.	1	.	.	1	2	1	.	.	1	1	.	.	.	1
$1071_2 = \chi_{56}$	1	1	1	1	.	1	.	.	1	.	.	.	.	.	.
$1071_3 = \chi_{57}$	2	1	1	.	1	1	1	.	.	.	.	.	1	.	.
$5355_1 = \chi_{58}$	2	2	4	3	2	2	2	2	1	.	1	1	2	2	1
$5355_2 = \chi_{59}$	5	4	2	2	3	2	1	.	2	2	1	1	1	.	1
$85_2 = \chi_{60}$	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.
$3024_1 = \chi_{61}$	.	4	.	.	4	1	2	.	.	2	2	.	1	.	2
$1071_4 = \chi_{62}$	1	.	1	1	.	2	.	1	1	.	.	1	.	.	.
$189_2 = \chi_{63}$	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$4284_1 = \chi_{64}$	.	2	3	3	2	1	.	1	1	.	.	1	.	2	.
$1700_1 = \chi_{65}$	1	1	1	1	1	1	.	1	.	1	.	.	.	1	.
$1428_1 = \chi_{66}$	1	.	.	2	2	1	.	2	.	2	.	.	1	.	.
$1700_2 = \chi_{67}$	2	1	1	1	1	1	1	.	1	.	.	.	1	.	.
$1428_2 = \chi_{68}$	1	2	2	.	.	1	2	.	2	.	.	.	.	1	1
$5440_1 = \chi_{69}$	2	.	.	4	4	4	.	3	.	3	.	.	1	.	.
$3024_2 = \chi_{70}$	1	.	4	4	.	1	.	2	2	.	.	2	.	1	.
$5355_3 = \chi_{71}$	2	4	1	1	4	3	3	2	2	3	2	1	1	.	2
$5355_4 = \chi_{72}$	3	1	4	4	1	3	2	3	3	2	1	2	.	1	1
$4284_2 = \chi_{73}$	4	3	2	2	3	1	1	.	.	1	1	.	2	.	1
$4284_3 = \chi_{74}$	3	1	.	5	2	3	.	3	1	2	.	.	1	.	.
$5355_5 = \chi_{75}$	2	2	3	4	2	2	.	1	2	2	1	1	.	1	.
$1071_5 = \chi_{76}$	1	.	1	1	1	1	.	1	.	.	.	.	.	1	.
$5355_6 = \chi_{77}$	4	3	2	2	4	2	2	2	.	1	1	1	2	2	2
$3213_4 = \chi_{78}$	1	1	3	3	1	1	.	1	1	.	1	1	.	1	.
$4284_4 = \chi_{79}$	3	2	5	.	1	3	2	1	3	.	.	.	.	2	1
$1071_6 = \chi_{80}$	1	1	.	1	1	1	.	.	.	1	.	.	.	.	.
$4284_5 = \chi_{81}$	2	.	1	2	5	3	1	2	.	3	.	.	2	.	.

(Block 1:)	φ_{32}	φ_{33}	φ_{34}	φ_{35}	φ_{36}	φ_{37}	φ_{38}	φ_{39}	φ_{40}	φ_{41}	φ_{42}	φ_{43}	φ_{44}	φ_{45}	φ_{46}
$2835_{12} = \chi_{42}$	.	1	.	.	.	.	2	.	1	.	.	.	1	.	.
$2835_{13} = \chi_{43}$	1	.	.	.	1	1	1	1	1	1	1	1	.	.	.
$2835_{14} = \chi_{44}$	.	.	.	.	1	1	1	.	.	1	.	.	1	1	.
$2835_{15} = \chi_{45}$	1	.	1	1	1	1	1	1	1	1	1	1	.	.	.
$2835_{16} = \chi_{46}$	1	.	.	2	.	2	.	1	.	.	.	.	.	.	1
$2835_{17} = \chi_{47}$	.	.	.	1	1	2	.	.	.	1	.	.	.	1	.
$2835_{18} = \chi_{48}$	.	2	1	.	.	.	2	.	.	.	1	.	.	.	.
$2835_{19} = \chi_{49}$	1	1	1	.	.	1	1	1	1	1	1	1	.	.	.
$2835_{20} = \chi_{50}$	.	.	1	.	1	1	1	1	1	1	1	1	.	.	.
$85_1 = \chi_{51}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$189_1 = \chi_{52}$	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$3213_2 = \chi_{53}$	.	.	.	.	1	1	1	.	1	1	.	.	1	1	.
$3213_3 = \chi_{54}$	.	1	1	.	.	1	2	1	1	1	1	1	.	.	.
$1071_1 = \chi_{55}$	.	.	1	.	.	.	.	.	1	.	1	1	.	.	.
$1071_2 = \chi_{56}$	.	.	.	1	.	1	1	.	.	.	1	.	.	.	.
$1071_3 = \chi_{57}$	.	.	.	.	.	1	1	.	.	1	.	.	.	.	.
$5355_1 = \chi_{58}$	1	.	.	1	2	2	1	1	1	2	1	1	1	1	.
$5355_2 = \chi_{59}$	1	2	2	2	.	1	2	1	1	1	2	1	.	.	1
$85_2 = \chi_{60}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$3024_1 = \chi_{61}$	.	1	2	.	.	1	.	.	2	.	2	1	.	.	.
$1071_4 = \chi_{62}$	1	.	.	.	1	.	.	1	.	1	.	1	.	.	.
$189_2 = \chi_{63}$	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
$4284_1 = \chi_{64}$	1	.	.	2	1	2	.	1	.	1	.	1	.	1	1
$1700_1 = \chi_{65}$	.	1	.	.	.	1	1	1	1	.	.	.	.	.	.
$1428_1 = \chi_{66}$	.	.	1	1	1	1	1	.	.	.	.	.	.	.	.
$1700_2 = \chi_{67}$	.	.	.	1	.	1	1	.	.	1	1	.	.	.	.
$1428_2 = \chi_{68}$	1	1	.	.	.	1	1	.	.	.	.	.	.	.	.
$5440_1 = \chi_{69}$	.	.	3	1	3	1	1	.	.	.	.	.	.	.	.
$3024_2 = \chi_{70}$	2	.	.	1	2	.	1	2	.	2	.	1	.	.	.
$5355_3 = \chi_{71}$	1	1	2	.	1	3	1	1	2	1	2	1	.	.	.
$5355_4 = \chi_{72}$	2	.	1	1	2	1	3	2	1	2	1	1	.	.	.
$4284_2 = \chi_{73}$	.	2	1	.	.	.	2	.	1	.	1	1	1	.	.
$4284_3 = \chi_{74}$	.	.	1	2	3	1	2	.	.	.	1	.	.	.	.
$5355_5 = \chi_{75}$	2	2	1	2	1	2	1	2	1	1	1	1	.	.	1
$1071_5 = \chi_{76}$	.	.	.	.	.	1	1	.	1	.	.	.	.	.	.
$5355_6 = \chi_{77}$	.	1	1	.	1	1	2	1	2	1	1	1	1	1	.
$3213_4 = \chi_{78}$	1	.	.	1	1	2	1	1	1	1	1	1	.	.	.
$4284_4 = \chi_{79}$	3	1	.	.	.	1	2	.	1	.	.	.	.	.	.
$1071_6 = \chi_{80}$	.	1	.	.	.	1	1	1	.	.	.	.	.	.	.
$4284_5 = \chi_{81}$	.	.	3	1	1	2	1	.	.	1	.	.	.	.	.

(Block 1:)	φ_{47}	φ_{48}	φ_{49}	φ_{50}	φ_{51}	φ_{52}	φ_{53}	φ_{54}	φ_{55}	φ_{56}	φ_{57}	φ_{58}	φ_{59}	φ_{60}	φ_{61}
$2835_{12} = \chi_{42}$	.	1	1	.	.	.	1	1	.	.	.	.	.	.	.
$2835_{13} = \chi_{43}$	.	.	.	.	1	.	.	.	1	.	.	.	.	.	.
$2835_{14} = \chi_{44}$	.	1	.	.	1	.	.	1	.	.	.	.	.	.	.
$2835_{15} = \chi_{45}$	.	.	.	1	.	.	.	.	.	.	1	.	.	.	.
$2835_{16} = \chi_{46}$	.	.	.	1	1	1	.	.	.	1	.	.	.	.	.
$2835_{17} = \chi_{47}$	.	.	.	1	1	1	.	1	.	.	.	.	.	.	.
$2835_{18} = \chi_{48}$	1	1	1	.	.	.	1	.	.	1	.	.	.	.	.
$2835_{19} = \chi_{49}$	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.
$2835_{20} = \chi_{50}$	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.
$85_1 = \chi_{51}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$189_1 = \chi_{52}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$3213_2 = \chi_{53}$	.	1	.	.	1	.	.	1	.	.	.	.	.	.	.
$3213_3 = \chi_{54}$	.	1	1	.	.	.	1	.	.	.	.	.	.	.	.
$1071_1 = \chi_{55}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$1071_2 = \chi_{56}$	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
$1071_3 = \chi_{57}$	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$5355_1 = \chi_{58}$	.	1	.	1	1	1	.	1	.	.	.	.	.	.	.
$5355_2 = \chi_{59}$	1	1	1	1	.	.	1	.	.	1	.	.	.	.	.
$85_2 = \chi_{60}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$3024_1 = \chi_{61}$	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
$1071_4 = \chi_{62}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$189_2 = \chi_{63}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$4284_1 = \chi_{64}$	.	.	.	1	1	1	.	1	.	1	.	.	.	.	.
$1700_1 = \chi_{65}$	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.
$1428_1 = \chi_{66}$	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
$1700_2 = \chi_{67}$	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.
$1428_2 = \chi_{68}$	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
$5440_1 = \chi_{69}$	.	1	.	1	.	.	.	.	.	.	1	.	.	1	.
$3024_2 = \chi_{70}$	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
$5355_3 = \chi_{71}$	.	.	.	.	.	.	.	.	1	.	1	.	1	.	.
$5355_4 = \chi_{72}$	.	.	.	.	.	.	.	.	1	.	1	1	.	.	.
$4284_2 = \chi_{73}$	1	1	1	.	.	.	1	1	.	1	.	.	.	.	.
$4284_3 = \chi_{74}$	.	1	.	1	.	.	.	.	.	.	1	.	.	.	.
$5355_5 = \chi_{75}$	1	.	1	1	1	1	.	.	.	1	.	.	.	.	.
$1071_5 = \chi_{76}$	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
$5355_6 = \chi_{77}$	.	1	1	.	1	.	1	1	.	.	.	.	.	.	.
$3213_4 = \chi_{78}$	.	.	.	1	1	1	.	.	.	.	.	.	.	.	.
$4284_4 = \chi_{79}$	.	.	1	.	1	.	.	.	1	.	.	.	.	.	1
$1071_6 = \chi_{80}$	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$4284_5 = \chi_{81}$	.	1	.	1	.	.	.	.	.	.	1	.	.	1	.

(Block 1:)	φ_{62}	φ_{63}
$2835_{12} = \chi_{42}$	.	.
$2835_{13} = \chi_{43}$	.	.
$2835_{14} = \chi_{44}$	.	.
$2835_{15} = \chi_{45}$	.	.
$2835_{16} = \chi_{46}$	.	.
$2835_{17} = \chi_{47}$	.	.
$2835_{18} = \chi_{48}$	.	.
$2835_{19} = \chi_{49}$	.	.
$2835_{20} = \chi_{50}$	.	.
$85_1 = \chi_{51}$	.	.
$189_1 = \chi_{52}$	.	.
$3213_2 = \chi_{53}$	.	.
$3213_3 = \chi_{54}$	.	.
$1071_1 = \chi_{55}$	.	.
$1071_2 = \chi_{56}$	.	.
$1071_3 = \chi_{57}$	.	.
$5355_1 = \chi_{58}$	.	.
$5355_2 = \chi_{59}$	.	.
$85_2 = \chi_{60}$	.	.
$3024_1 = \chi_{61}$	.	.
$1071_4 = \chi_{62}$	.	.
$189_2 = \chi_{63}$	.	.
$4284_1 = \chi_{64}$	.	.
$1700_1 = \chi_{65}$	.	.
$1428_1 = \chi_{66}$	.	.
$1700_2 = \chi_{67}$	.	.
$1428_2 = \chi_{68}$	.	.
$5440_1 = \chi_{69}$	.	1
$3024_2 = \chi_{70}$	.	.
$5355_3 = \chi_{71}$	.	.
$5355_4 = \chi_{72}$	.	.
$4284_2 = \chi_{73}$	.	.
$4284_3 = \chi_{74}$	.	1
$5355_5 = \chi_{75}$	.	.
$1071_5 = \chi_{76}$	.	.
$5355_6 = \chi_{77}$	.	.
$3213_4 = \chi_{78}$	.	.
$4284_4 = \chi_{79}$	.	.
$1071_6 = \chi_{80}$	.	.
$4284_5 = \chi_{81}$	.	.

(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}	φ_{15}	φ_{16}
$3213_5 = \chi_{82}$	5	4	2	4	2	4	4	2	2	.	2	2	2	2	2	2
$5440_2 = \chi_{83}$	8	4	2	2	4	2	2	2	2	.	.	3	1	2	2	4
$4284_6 = \chi_{84}$	8	3	2	4	5	3	4	4	1	.	1	2	2	2	3	3

(Block 1:)	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$3213_5 = \chi_{82}$	2	2	1	2	1	2	.	.	2	2	.	.	.	.	.
$5440_2 = \chi_{83}$	4	4	4	.	.	4	3	.	3	.	.	.	.	1	3
$4284_6 = \chi_{84}$	3	5	2	1	.	3	3	.	2	1	.	.	.	1	3

(Block 1:)	φ_{32}	φ_{33}	φ_{34}	φ_{35}	φ_{36}	φ_{37}	φ_{38}	φ_{39}	φ_{40}	φ_{41}	φ_{42}	φ_{43}	φ_{44}	φ_{45}	φ_{46}
$3213_5 = \chi_{82}$	1	2	1	2	.	1	1	1	.	.	1	.	.	.	1
$5440_2 = \chi_{83}$	3	1	.	.	.	1	1	.	.	.	.	.	.	.	.
$4284_6 = \chi_{84}$	1	2	.	.	.	2	1	1	.	.	.	.	.	.	.

(Block 1:)	φ_{47}	φ_{48}	φ_{49}	φ_{50}	φ_{51}	φ_{52}	φ_{53}	φ_{54}	φ_{55}	φ_{56}	φ_{57}	φ_{58}	φ_{59}	φ_{60}	φ_{61}
$3213_5 = \chi_{82}$	1	.	1	1	.	.	.	.	.	1	.	.	.	.	.
$5440_2 = \chi_{83}$	.	.	1	.	1	.	.	.	1	.	.	.	.	.	1
$4284_6 = \chi_{84}$	.	.	1	.	1	.	.	.	1	.	.	.	.	.	.

(Block 1:)	φ_{62}	φ_{63}
$3213_5 = \chi_{82}$	.	.
$5440_2 = \chi_{83}$	1	.
$4284_6 = \chi_{84}$	1	.

φ_1	=	1_1
φ_2	=	4_1
φ_3	=	4_2
φ_4	=	4_3
φ_5	=	4_4
φ_6	=	6_1
φ_7	=	6_2
φ_8	=	14_1
φ_9	=	14_2
φ_{10}	=	16_1
φ_{11}	=	16_2
φ_{12}	=	16_3
φ_{13}	=	16_4
φ_{14}	=	20_1
φ_{15}	=	20_2
φ_{16}	=	20_3
φ_{17}	=	20_4
φ_{18}	=	24_1
φ_{19}	=	24_2
φ_{20}	=	24_3
φ_{21}	=	24_4
φ_{22}	=	36_1
φ_{23}	=	56_1
φ_{24}	=	56_2
φ_{25}	=	56_3
φ_{26}	=	56_4
φ_{27}	=	64_1
φ_{28}	=	64_2
φ_{29}	=	80_1
φ_{30}	=	80_2
φ_{31}	=	80_3
φ_{32}	=	80_4
φ_{33}	=	80_5
φ_{34}	=	80_6
φ_{35}	=	80_7
φ_{36}	=	80_8
φ_{37}	=	84_1
φ_{38}	=	84_2
φ_{39}	=	120_1
φ_{40}	=	120_2

φ_{41}	$=$	120_3	φ_{53}	$=$	384_2
φ_{42}	$=$	120_4	φ_{54}	$=$	400_1
φ_{43}	$=$	196_1	φ_{55}	$=$	400_2
φ_{44}	$=$	256_1	φ_{56}	$=$	400_3
φ_{45}	$=$	256_2	φ_{57}	$=$	400_4
φ_{46}	$=$	256_3	φ_{58}	$=$	896_1
φ_{47}	$=$	256_4	φ_{59}	$=$	896_2
φ_{48}	$=$	280_1	φ_{60}	$=$	1280_1
φ_{49}	$=$	280_2	φ_{61}	$=$	1280_2
φ_{50}	$=$	280_3	φ_{62}	$=$	1280_3
φ_{51}	$=$	280_4	φ_{63}	$=$	1280_4
φ_{52}	$=$	384_1			