

$O_{10}^+(2) \pmod{31}$

	blocks	defect	matrix
$G :$	1	1	11×5
	2	0	$155_1 = \chi_2, \varphi_2$
	3	0	$186_1 = \chi_3, \varphi_3$
	4	0	$868_1 = \chi_5, \varphi_5$
	5	0	$2108_1 = \chi_6, \varphi_6$
	6	0	$5270_1 = \chi_7, \varphi_7$
	7	0	$6324_1 = \chi_8, \varphi_8$
	8	0	$7905_1 = \chi_9, \varphi_9$
	9	0	$9300_1 = \chi_{10}, \varphi_{10}$
	10	0	$11067_1 = \chi_{11}, \varphi_{11}$
	11	0	$13020_1 = \chi_{12}, \varphi_{12}$
	12	0	$13888_1 = \chi_{13}, \varphi_{13}$
	13	0	$14756_1 = \chi_{14}, \varphi_{14}$
	14	0	$15810_1 = \chi_{15}, \varphi_{15}$
	15	0	$18445_1 = \chi_{16}, \varphi_{16}$
	16	0	$18445_2 = \chi_{17}, \varphi_{17}$
	17	0	$31620_1 = \chi_{19}, \varphi_{19}$
	18	0	$31620_2 = \chi_{20}, \varphi_{20}$
	19	0	$36890_1 = \chi_{21}, \varphi_{21}$
	20	0	$42160_1 = \chi_{22}, \varphi_{22}$
	21	0	$50592_1 = \chi_{23}, \varphi_{23}$
	22	0	$55335_1 = \chi_{24}, \varphi_{24}$
	$23 = \overline{22}$	0	$55335_2 = \chi_{25}, \varphi_{25}$
	24	0	$66402_1 = \chi_{26}, \varphi_{26}$
	25	0	$73780_1 = \chi_{27}, \varphi_{27}$
	26	0	$73780_2 = \chi_{28}, \varphi_{28}$
	27	0	$73780_3 = \chi_{29}, \varphi_{29}$
	28	0	$101184_1 = \chi_{30}, \varphi_{30}$
	29	0	$110670_1 = \chi_{31}, \varphi_{31}$
	30	0	$110670_2 = \chi_{32}, \varphi_{32}$
	31	0	$110670_3 = \chi_{33}, \varphi_{33}$
	$32 = \overline{31}$	0	$110670_4 = \chi_{34}, \varphi_{34}$
	33	0	$147560_1 = \chi_{35}, \varphi_{35}$
	34	0	$147560_2 = \chi_{36}, \varphi_{36}$
	35	0	$148800_1 = \chi_{37}, \varphi_{37}$
	36	0	$158100_1 = \chi_{38}, \varphi_{38}$
	37	0	$166005_1 = \chi_{39}, \varphi_{39}$
	38	0	$166005_2 = \chi_{40}, \varphi_{40}$
	39	0	$166005_3 = \chi_{41}, \varphi_{41}$
	40	0	$168640_1 = \chi_{42}, \varphi_{42}$

	blocks	defect	matrix
	41	0	$208320_1 = \chi_{43}, \varphi_{43}$
	42	0	$221340_1 = \chi_{44}, \varphi_{44}$
	43	0	$221340_2 = \chi_{45}, \varphi_{45}$
	44	0	$236096_1 = \chi_{46}, \varphi_{46}$
	45	0	$265608_1 = \chi_{47}, \varphi_{47}$
	46	0	$298809_1 = \chi_{48}, \varphi_{48}$
	47	0	$316200_1 = \chi_{49}, \varphi_{49}$
	48	0	$332010_1 = \chi_{50}, \varphi_{51}$
	49	0	$332010_2 = \chi_{51}, \varphi_{52}$
	$50 = \overline{49}$	0	$332010_3 = \chi_{52}, \varphi_{53}$
	51	0	$337280_1 = \chi_{53}, \varphi_{54}$
	52	0	$355725_1 = \chi_{55}, \varphi_{55}$
	53	0	$355725_2 = \chi_{56}, \varphi_{56}$
	54	0	$355725_3 = \chi_{57}, \varphi_{57}$
	$55 = \overline{54}$	0	$355725_4 = \chi_{58}, \varphi_{58}$
	56	0	$368900_1 = \chi_{59}, \varphi_{59}$
	57	0	$439425_1 = \chi_{60}, \varphi_{60}$
	58	0	$439425_2 = \chi_{61}, \varphi_{61}$
	59	0	$439425_3 = \chi_{62}, \varphi_{62}$
	$60 = \overline{59}$	0	$439425_4 = \chi_{63}, \varphi_{63}$
	61	0	$439425_5 = \chi_{64}, \varphi_{64}$
	$62 = \overline{61}$	0	$439425_6 = \chi_{65}, \varphi_{65}$
	63	0	$442680_1 = \chi_{66}, \varphi_{66}$
	64	0	$442680_2 = \chi_{67}, \varphi_{67}$
	65	0	$442680_3 = \chi_{68}, \varphi_{68}$
	$66 = \overline{65}$	0	$442680_4 = \chi_{69}, \varphi_{69}$
	67	0	$498015_1 = \chi_{70}, \varphi_{70}$
	$68 = \overline{67}$	0	$498015_2 = \chi_{71}, \varphi_{71}$
	69	0	$505920_1 = \chi_{72}, \varphi_{72}$
	70	0	$539648_1 = \chi_{73}, \varphi_{73}$
	71	0	$590240_1 = \chi_{74}, \varphi_{74}$
	72	0	$634880_1 = \chi_{75}, \varphi_{75}$
	73	0	$664020_1 = \chi_{76}, \varphi_{76}$
	74	0	$664020_2 = \chi_{77}, \varphi_{77}$
	75	0	$708288_1 = \chi_{78}, \varphi_{78}$
	76	0	$711450_1 = \chi_{79}, \varphi_{79}$
	$77 = \overline{76}$	0	$711450_2 = \chi_{80}, \varphi_{80}$
	78	0	$711450_3 = \chi_{81}, \varphi_{81}$
	$79 = \overline{78}$	0	$711450_4 = \chi_{82}, \varphi_{82}$
	80	0	$761856_1 = \chi_{89}, \varphi_{84}$

	blocks	defect	matrix
	81	0	$830025_1 = \chi_{90}, \varphi_{85}$
	82	0	$885360_1 = \chi_{91}, \varphi_{86}$
	83	0	$1011840_1 = \chi_{92}, \varphi_{87}$
	84	0	$1180480_1 = \chi_{94}, \varphi_{88}$
	85	0	$1195236_1 = \chi_{95}, \varphi_{89}$
	86	0	$1422900_1 = \chi_{96}, \varphi_{90}$
	87	0	$1494045_1 = \chi_{97}, \varphi_{91}$

Block 1:	φ_1	φ_4	φ_{18}	φ_{50}	φ_{83}	
$1_1 = \chi_1$	1	$\varphi_1 = 1_1$
$340_1 = \chi_4$	1	1	.	.	.	$\varphi_4 = 339_1$
$22848_1 = \chi_{18}$.	1	1	.	.	$\varphi_{18} = 22509_1$
$348160_1 = \chi_{54}$.	.	1	1	.	$\varphi_{50} = 325651_1$
$722925_1 = \chi_{83}$	1	$\varphi_{83} = 722925_1$
$722925_2 = \chi_{84}$	1	
$722925_3 = \chi_{85}$	1	
$722925_4 = \chi_{86}$	1	
$722925_5 = \chi_{87}$	1	
$722925_6 = \chi_{88}$	1	
$1048576_1 = \chi_{93}$.	.	.	1	1	