

$F_4(2) \pmod{2}$

	blocks	defect	matrix
$2.G :$	1	25	$168 \times 15$
	2	1	$2 \times 1$

<b>Block 1:</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{13}$	$\varphi_{14}$
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$833_1 = \chi_2$	1	3	3	.	.	1	.	.	.	.	.	.	.	.
$1105_1 = \chi_3$	1	4	3	1	.	1	.	.	.	.	.	.	.	.
$1105_2 = \chi_4$	1	3	4	.	1	1	.	.	.	.	.	.	.	.
$1326_1 = \chi_5$	2	3	3	1	1	1	.	.	.	.	.	.	.	.
$1377_1 = \chi_6$	1	4	4	1	1	1	.	.	.	.	.	.	.	.
$21658_1 = \chi_7$	10	19	19	5	5	8	.	.	1	1	.	.	.	.
$22932_1 = \chi_8$	12	21	21	6	6	9	.	.	1	1	.	.	.	.
$23205_1 = \chi_9$	13	22	21	7	6	9	.	.	1	1	.	.	.	.
$23205_2 = \chi_{10}$	13	21	22	6	7	9	.	.	1	1	.	.	.	.
$44200_1 = \chi_{11}$	16	31	28	10	7	13	1	.	3	1	.	.	.	.
$44200_2 = \chi_{12}$	16	28	31	7	10	13	.	1	1	3	.	.	.	.
$63700_1 = \chi_{13}$	16	36	36	9	9	16	1	1	3	3	.	.	.	.
$99450_1 = \chi_{14}$	30	62	61	17	16	27	2	1	5	4	.	.	.	.
$99450_2 = \chi_{15}$	30	61	62	16	17	27	1	2	4	5	.	.	.	.
$142884_1 = \chi_{16}$	24	46	46	13	13	21	1	1	4	4	1	.	.	.
$142884_2 = \chi_{17}$	24	46	46	13	13	21	1	1	4	4	1	.	.	.
$162435_1 = \chi_{18}$	31	60	60	17	17	27	1	1	5	5	1	.	.	.
$162435_2 = \chi_{19}$	31	60	60	17	17	27	1	1	5	5	1	.	.	.
$183600_1 = \chi_{20}$	28	60	60	16	16	28	2	2	6	6	1	.	.	.
$183600_2 = \chi_{21}$	28	60	60	16	16	28	2	2	6	6	1	.	.	.
$216580_1 = \chi_{22}$	44	89	88	25	24	40	2	2	8	7	1	.	.	.
$216580_2 = \chi_{23}$	44	88	89	24	25	40	2	2	7	8	1	.	.	.
$249900_1 = \chi_{24}$	48	101	101	27	27	46	3	3	9	9	1	.	.	.
$269892_1 = \chi_{25}$	68	133	133	37	37	59	2	2	10	10	1	.	.	.
$270725_1 = \chi_{26}$	57	117	117	32	32	53	3	3	10	10	1	.	.	.
$322218_1 = \chi_{27}$	58	114	114	32	32	52	2	2	10	10	2	.	.	.
$348075_1 = \chi_{28}$	61	115	110	36	30	50	3	1	10	7	1	.	1	.
$348075_2 = \chi_{29}$	61	110	115	30	36	50	1	3	7	10	1	1	.	.
$358020_1 = \chi_{30}$	58	113	110	34	30	50	3	2	10	8	1	.	1	.
$358020_2 = \chi_{31}$	58	110	113	30	34	50	2	3	8	10	1	1	.	.
$519792_1 = \chi_{32}$	60	106	106	33	33	48	2	2	9	9	2	1	1	.
$541450_1 = \chi_{33}$	92	181	178	53	49	81	5	3	16	14	2	.	1	.
$541450_2 = \chi_{34}$	92	178	181	49	53	81	3	5	14	16	2	1	.	.
$541450_3 = \chi_{35}$	70	125	125	38	38	56	2	2	10	10	2	1	1	.
$541450_4 = \chi_{36}$	70	125	125	38	38	56	2	2	10	10	2	1	1	.
$584766_1 = \chi_{37}$	78	144	144	43	43	65	3	3	12	12	2	1	1	.
$626535_1 = \chi_{38}$	97	187	192	51	57	86	3	5	15	18	3	1	.	.
$626535_2 = \chi_{39}$	97	192	187	57	51	86	5	3	18	15	3	.	1	.
$812175_1 = \chi_{40}$	127	242	242	70	70	109	5	5	20	20	3	1	1	.

<b>(Block 1:)</b>	$\varphi_{15}$
$1_1 = \chi_1$	.
$833_1 = \chi_2$	.
$1105_1 = \chi_3$	.
$1105_2 = \chi_4$	.
$1326_1 = \chi_5$	.
$1377_1 = \chi_6$	.
$21658_1 = \chi_7$	.
$22932_1 = \chi_8$	.
$23205_1 = \chi_9$	.
$23205_2 = \chi_{10}$	.
$44200_1 = \chi_{11}$	.
$44200_2 = \chi_{12}$	.
$63700_1 = \chi_{13}$	.
$99450_1 = \chi_{14}$	.
$99450_2 = \chi_{15}$	.
$142884_1 = \chi_{16}$	.
$142884_2 = \chi_{17}$	.
$162435_1 = \chi_{18}$	.
$162435_2 = \chi_{19}$	.
$183600_1 = \chi_{20}$	.
$183600_2 = \chi_{21}$	.
$216580_1 = \chi_{22}$	.
$216580_2 = \chi_{23}$	.
$249900_1 = \chi_{24}$	.
$269892_1 = \chi_{25}$	.
$270725_1 = \chi_{26}$	.
$322218_1 = \chi_{27}$	.
$348075_1 = \chi_{28}$	.
$348075_2 = \chi_{29}$	.
$358020_1 = \chi_{30}$	.
$358020_2 = \chi_{31}$	.
$519792_1 = \chi_{32}$	.
$541450_1 = \chi_{33}$	.
$541450_2 = \chi_{34}$	.
$541450_3 = \chi_{35}$	.
$541450_4 = \chi_{36}$	.
$584766_1 = \chi_{37}$	.
$626535_1 = \chi_{38}$	.
$626535_2 = \chi_{39}$	.
$812175_1 = \chi_{40}$	.

(Block 1:)	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{13}$	$\varphi_{14}$
812175 <sub>2</sub> = $\chi_{41}$	127	242	242	70	70	109	5	5	20	20	3	1	1	.
877149 <sub>1</sub> = $\chi_{42}$	145	280	280	80	80	126	6	6	23	23	3	1	1	.
877149 <sub>2</sub> = $\chi_{43}$	145	280	280	80	80	126	6	6	23	23	3	1	1	.
947700 <sub>1</sub> = $\chi_{44}$	140	272	272	78	78	124	6	6	24	24	4	1	1	.
1082900 <sub>1</sub> = $\chi_{45}$	184	359	359	102	102	162	8	8	30	30	4	1	1	.
1299480 <sub>1</sub> = $\chi_{46}$	206	395	391	116	111	177	9	7	34	31	5	1	2	.
1299480 <sub>2</sub> = $\chi_{47}$	206	391	395	111	116	177	7	9	31	34	5	2	1	.
1342575 <sub>1</sub> = $\chi_{48}$	213	415	410	121	115	186	10	8	36	33	5	1	2	.
1342575 <sub>2</sub> = $\chi_{49}$	213	410	415	115	121	186	8	10	33	36	5	2	1	.
1949220 <sub>1</sub> = $\chi_{50}$	302	577	573	169	164	259	13	11	49	46	7	2	3	.
1949220 <sub>2</sub> = $\chi_{51}$	302	573	577	164	169	259	11	13	46	49	7	3	2	.
2165800 <sub>1</sub> = $\chi_{52}$	346	665	662	193	189	299	15	13	56	54	8	2	3	.
2165800 <sub>2</sub> = $\chi_{53}$	346	662	665	189	193	299	13	15	54	56	8	3	2	.
2784600 <sub>1</sub> = $\chi_{54}$	260	497	505	139	149	226	9	14	39	45	6	4	1	1
2784600 <sub>2</sub> = $\chi_{55}$	260	505	497	149	139	226	14	9	45	39	6	1	4	.
2828800 <sub>1</sub> = $\chi_{56}$	268	528	520	154	144	236	15	10	47	41	6	1	4	.
2828800 <sub>2</sub> = $\chi_{57}$	268	520	528	144	154	236	10	15	41	47	6	4	1	1
3411968 <sub>1</sub> = $\chi_{58}$	528	1012	1012	292	292	457	22	22	85	85	13	4	4	.
3898440 <sub>1</sub> = $\chi_{59}$	422	806	819	226	242	367	15	22	64	73	10	6	2	1
3898440 <sub>2</sub> = $\chi_{60}$	422	819	806	242	226	367	22	15	73	64	10	2	6	.
4331600 <sub>1</sub> = $\chi_{61}$	488	930	940	264	276	422	18	23	75	82	12	6	3	1
4331600 <sub>2</sub> = $\chi_{62}$	488	940	930	276	264	422	23	18	82	75	12	3	6	.
4385745 <sub>1</sub> = $\chi_{63}$	501	968	959	283	272	435	24	19	84	78	12	3	6	.
4385745 <sub>2</sub> = $\chi_{64}$	501	959	968	272	283	435	19	24	78	84	12	6	3	1
4385745 <sub>3</sub> = $\chi_{65}$	501	959	968	272	283	435	19	24	78	84	12	6	3	1
4385745 <sub>4</sub> = $\chi_{66}$	501	968	959	283	272	435	24	19	84	78	12	3	6	.
4526080 <sub>1</sub> = $\chi_{67}$	528	1012	1012	292	292	457	22	22	85	85	13	4	5	.
4526080 <sub>2</sub> = $\chi_{68}$	528	1012	1012	292	292	457	22	22	85	85	13	5	4	1
5012280 <sub>1</sub> = $\chi_{69}$	598	1155	1151	334	329	521	27	24	99	96	15	4	6	.
5012280 <sub>2</sub> = $\chi_{70}$	598	1151	1155	329	334	521	24	27	96	99	15	6	4	1
5640192 <sub>1</sub> = $\chi_{71}$	528	1012	1012	292	292	457	22	22	85	85	13	5	5	1
5870592 <sub>1</sub> = $\chi_{72}$	512	972	972	284	284	440	22	22	83	83	14	6	6	1
6497400 <sub>1</sub> = $\chi_{73}$	652	1261	1261	362	362	570	29	29	107	107	16	6	6	1
6497400 <sub>2</sub> = $\chi_{74}$	652	1261	1261	362	362	570	29	29	107	107	16	6	6	1
7309575 <sub>1</sub> = $\chi_{75}$	779	1503	1503	432	432	679	34	34	127	127	19	7	7	1
7309575 <sub>2</sub> = $\chi_{76}$	779	1503	1503	432	432	679	34	34	127	127	19	7	7	1
7894341 <sub>1</sub> = $\chi_{77}$	857	1647	1647	475	475	744	37	37	139	139	21	8	8	1
8055450 <sub>1</sub> = $\chi_{78}$	886	1704	1704	491	491	770	38	38	144	144	22	8	8	1
8055450 <sub>2</sub> = $\chi_{79}$	886	1704	1704	491	491	770	38	38	144	144	22	8	8	1
8771490 <sub>1</sub> = $\chi_{80}$	1002	1927	1927	555	555	870	43	43	162	162	24	9	9	1

(Block 1:)	$\varphi_{15}$
812175 <sub>2</sub> = $\chi_{41}$	.
877149 <sub>1</sub> = $\chi_{42}$	.
877149 <sub>2</sub> = $\chi_{43}$	.
947700 <sub>1</sub> = $\chi_{44}$	.
1082900 <sub>1</sub> = $\chi_{45}$	.
1299480 <sub>1</sub> = $\chi_{46}$	.
1299480 <sub>2</sub> = $\chi_{47}$	.
1342575 <sub>1</sub> = $\chi_{48}$	.
1342575 <sub>2</sub> = $\chi_{49}$	.
1949220 <sub>1</sub> = $\chi_{50}$	.
1949220 <sub>2</sub> = $\chi_{51}$	.
2165800 <sub>1</sub> = $\chi_{52}$	.
2165800 <sub>2</sub> = $\chi_{53}$	.
2784600 <sub>1</sub> = $\chi_{54}$	.
2784600 <sub>2</sub> = $\chi_{55}$	1
2828800 <sub>1</sub> = $\chi_{56}$	1
2828800 <sub>2</sub> = $\chi_{57}$	.
3411968 <sub>1</sub> = $\chi_{58}$	.
3898440 <sub>1</sub> = $\chi_{59}$	.
3898440 <sub>2</sub> = $\chi_{60}$	1
4331600 <sub>1</sub> = $\chi_{61}$	.
4331600 <sub>2</sub> = $\chi_{62}$	1
4385745 <sub>1</sub> = $\chi_{63}$	1
4385745 <sub>2</sub> = $\chi_{64}$	.
4385745 <sub>3</sub> = $\chi_{65}$	.
4385745 <sub>4</sub> = $\chi_{66}$	1
4526080 <sub>1</sub> = $\chi_{67}$	1
4526080 <sub>2</sub> = $\chi_{68}$	.
5012280 <sub>1</sub> = $\chi_{69}$	1
5012280 <sub>2</sub> = $\chi_{70}$	.
5640192 <sub>1</sub> = $\chi_{71}$	1
5870592 <sub>1</sub> = $\chi_{72}$	1
6497400 <sub>1</sub> = $\chi_{73}$	1
6497400 <sub>2</sub> = $\chi_{74}$	1
7309575 <sub>1</sub> = $\chi_{75}$	1
7309575 <sub>2</sub> = $\chi_{76}$	1
7894341 <sub>1</sub> = $\chi_{77}$	1
8055450 <sub>1</sub> = $\chi_{78}$	1
8055450 <sub>2</sub> = $\chi_{79}$	1
8771490 <sub>1</sub> = $\chi_{80}$	1

(Block 1:)	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{13}$	$\varphi_{14}$
$8771490_2 = \chi_{81}$	1002	1927	1927	555	555	870	43	43	162	162	24	9	9	1
$9398025_1 = \chi_{82}$	1099	2119	2114	612	606	956	48	46	180	177	27	9	10	1
$9398025_2 = \chi_{83}$	1099	2114	2119	606	612	956	46	48	177	180	27	10	9	1
$10740600_1 = \chi_{84}$	1116	2140	2147	614	623	969	46	50	179	184	28	12	9	2
$10740600_2 = \chi_{85}$	1116	2147	2140	623	614	969	50	46	184	179	28	9	12	1
$11609325_1 = \chi_{86}$	1259	2419	2421	696	699	1093	53	55	203	205	31	12	11	2
$11609325_2 = \chi_{87}$	1259	2421	2419	699	696	1093	55	53	205	203	31	11	12	1
$11880960_1 = \chi_{88}$	1324	2552	2544	738	728	1150	59	54	217	211	32	10	13	1
$11880960_2 = \chi_{89}$	1324	2544	2552	728	738	1150	54	59	211	217	32	13	10	2
$14034384_1 = \chi_{90}$	1424	2734	2734	790	790	1236	62	62	232	232	36	14	14	2
$14619150_1 = \chi_{91}$	1558	3006	3006	864	864	1358	68	68	254	254	38	14	14	2
$14619150_2 = \chi_{92}$	1558	3006	3006	864	864	1358	68	68	254	254	38	14	14	2
$15181425_1 = \chi_{93}$	1637	3147	3147	907	907	1421	70	70	265	265	40	15	15	2
$17326400_1 = \chi_{95}$	1952	3740	3740	1080	1080	1688	82	82	314	314	48	18	18	2
$52_1 = \chi_{96}$	.	1	1	.	.	.	.	.	.	.	.	.	.	.
$2380_1 = \chi_{97}$	4	6	5	2	1	2	.	.	.	.	.	.	.	.
$2380_2 = \chi_{98}$	4	5	6	1	2	2	.	.	.	.	.	.	.	.
$12376_1 = \chi_{99}$	8	13	11	5	3	5	.	.	1	.	.	.	.	.
$12376_2 = \chi_{100}$	8	11	13	3	5	5	.	.	.	1	.	.	.	.
$22100_1 = \chi_{101}$	12	18	18	6	6	8	.	.	1	1	.	.	.	.
$43316_1 = \chi_{102}$	20	38	38	10	10	16	.	.	2	2	.	.	.	.
$46800_1 = \chi_{103}$	12	28	28	7	7	12	1	1	2	2	.	.	.	.
$55080_1 = \chi_{104}$	20	41	39	12	10	17	1	.	3	2	.	.	.	.
$55080_2 = \chi_{105}$	20	39	41	10	12	17	.	1	2	3	.	.	.	.
$424320_1 = \chi_{106}$	78	155	150	46	40	68	5	2	14	10	1	.	1	.
$424320_2 = \chi_{107}$	78	150	155	40	46	68	2	5	10	14	1	1	.	.
$433160_1 = \chi_{108}$	88	177	177	49	49	80	4	4	15	15	2	.	.	.
$433160_2 = \chi_{109}$	88	177	177	49	49	80	4	4	15	15	2	.	.	.
$565760_1 = \chi_{110}$	84	150	150	45	45	66	2	2	11	11	2	1	1	.
$572832_1 = \chi_{111}$	106	207	202	61	55	92	5	3	18	15	2	.	1	.
$572832_2 = \chi_{112}$	106	202	207	55	61	92	3	5	15	18	2	1	.	.
$716040_1 = \chi_{113}$	116	223	223	64	64	100	5	5	18	18	2	1	1	.
$716040_2 = \chi_{114}$	116	223	223	64	64	100	5	5	18	18	2	1	1	.
$1082900_2 = \chi_{115}$	184	359	359	102	102	162	8	8	30	30	4	1	1	.
$1082900_3 = \chi_{116}$	162	306	303	91	87	137	7	5	26	24	4	1	2	.
$1082900_4 = \chi_{117}$	162	303	306	87	91	137	5	7	24	26	4	2	1	.
$1146600_1 = \chi_{118}$	200	395	395	111	111	178	9	9	33	33	4	1	1	.
$1233792_1 = \chi_{119}$	174	339	334	100	94	153	9	7	31	28	5	1	2	.
$1233792_2 = \chi_{120}$	174	334	339	94	100	153	7	9	28	31	5	2	1	.
$1299480_3 = \chi_{121}$	206	395	391	116	111	177	9	7	34	31	5	1	2	.

(Block 1:)	$\varphi_{15}$
$8771490_2 = \chi_{81}$	1
$9398025_1 = \chi_{82}$	1
$9398025_2 = \chi_{83}$	1
$10740600_1 = \chi_{84}$	1
$10740600_2 = \chi_{85}$	2
$11609325_1 = \chi_{86}$	1
$11609325_2 = \chi_{87}$	2
$11880960_1 = \chi_{88}$	2
$11880960_2 = \chi_{89}$	1
$14034384_1 = \chi_{90}$	2
$14619150_1 = \chi_{91}$	2
$14619150_2 = \chi_{92}$	2
$15181425_1 = \chi_{93}$	2
$17326400_1 = \chi_{95}$	2
$52_1 = \chi_{96}$	.
$2380_1 = \chi_{97}$	.
$2380_2 = \chi_{98}$	.
$12376_1 = \chi_{99}$	.
$12376_2 = \chi_{100}$	.
$22100_1 = \chi_{101}$	.
$43316_1 = \chi_{102}$	.
$46800_1 = \chi_{103}$	.
$55080_1 = \chi_{104}$	.
$55080_2 = \chi_{105}$	.
$424320_1 = \chi_{106}$	.
$424320_2 = \chi_{107}$	.
$433160_1 = \chi_{108}$	.
$433160_2 = \chi_{109}$	.
$565760_1 = \chi_{110}$	.
$572832_1 = \chi_{111}$	.
$572832_2 = \chi_{112}$	.
$716040_1 = \chi_{113}$	.
$716040_2 = \chi_{114}$	.
$1082900_2 = \chi_{115}$	.
$1082900_3 = \chi_{116}$	.
$1082900_4 = \chi_{117}$	.
$1146600_1 = \chi_{118}$	.
$1233792_1 = \chi_{119}$	.
$1233792_2 = \chi_{120}$	.
$1299480_3 = \chi_{121}$	.

(Block 1:)	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{13}$	$\varphi_{14}$
1299480 <sub>4</sub> = $\chi_{122}$	206	391	395	111	116	177	7	9	31	34	5	2	1	.
1503684 <sub>1</sub> = $\chi_{123}$	242	467	472	131	137	212	9	11	38	41	6	2	1	.
1503684 <sub>2</sub> = $\chi_{124}$	242	472	467	137	131	212	11	9	41	38	6	1	2	.
1591200 <sub>1</sub> = $\chi_{125}$	244	463	464	134	135	209	9	10	38	39	6	2	2	.
1591200 <sub>2</sub> = $\chi_{126}$	244	464	463	135	134	209	10	9	39	38	6	2	2	.
1949220 <sub>3</sub> = $\chi_{127}$	302	577	573	169	164	259	13	11	49	46	7	2	3	.
1949220 <sub>4</sub> = $\chi_{128}$	302	573	577	164	169	259	11	13	46	49	7	3	2	.
2165800 <sub>3</sub> = $\chi_{129}$	324	609	609	178	178	274	12	12	50	50	8	3	3	.
2772224 <sub>1</sub> = $\chi_{130}$	252	484	494	134	146	221	9	14	38	45	6	4	1	1
2772224 <sub>2</sub> = $\chi_{131}$	252	494	484	146	134	221	14	9	45	38	6	1	4	.
2784600 <sub>3</sub> = $\chi_{132}$	260	505	497	149	139	226	14	9	45	39	6	1	4	.
2784600 <sub>4</sub> = $\chi_{133}$	260	497	505	139	149	226	9	14	39	45	6	4	1	1
3572100 <sub>1</sub> = $\chi_{134}$	378	728	726	211	208	328	17	15	62	60	9	3	4	.
3572100 <sub>2</sub> = $\chi_{135}$	378	726	728	208	211	328	15	17	60	62	9	4	3	1
4798080 <sub>1</sub> = $\chi_{136}$	580	1129	1120	327	316	508	28	23	98	92	14	3	6	.
4798080 <sub>2</sub> = $\chi_{137}$	580	1120	1129	316	327	508	23	28	92	98	14	6	3	1
4950400 <sub>1</sub> = $\chi_{138}$	606	1167	1162	338	332	525	27	24	99	95	14	4	6	.
4950400 <sub>2</sub> = $\chi_{139}$	606	1162	1167	332	338	525	24	27	95	99	14	6	4	1
5012280 <sub>3</sub> = $\chi_{140}$	598	1151	1155	329	334	521	24	27	96	99	15	6	4	1
5012280 <sub>4</sub> = $\chi_{141}$	598	1155	1151	334	329	521	27	24	99	96	15	4	6	.
5370300 <sub>1</sub> = $\chi_{142}$	656	1268	1261	368	359	571	30	26	109	104	16	4	7	.
5370300 <sub>2</sub> = $\chi_{143}$	656	1261	1268	359	368	571	26	30	104	109	16	7	4	1
5728320 <sub>1</sub> = $\chi_{144}$	714	1374	1378	393	398	621	29	32	114	117	17	7	5	1
5728320 <sub>2</sub> = $\chi_{145}$	714	1378	1374	398	393	621	32	29	117	114	17	5	7	.
6497400 <sub>3</sub> = $\chi_{146}$	652	1261	1261	362	362	570	29	29	107	107	16	6	6	1
6497400 <sub>4</sub> = $\chi_{147}$	652	1261	1261	362	362	570	29	29	107	107	16	6	6	1
6873984 <sub>1</sub> = $\chi_{148}$	702	1346	1351	386	392	610	29	31	113	116	18	7	6	1
6873984 <sub>2</sub> = $\chi_{149}$	702	1351	1346	392	386	610	31	29	116	113	18	6	7	1
6930560 <sub>1</sub> = $\chi_{150}$	718	1382	1385	396	400	625	30	32	116	118	18	7	6	1
6930560 <sub>2</sub> = $\chi_{151}$	718	1385	1382	400	396	625	32	30	118	116	18	6	7	1
7017192 <sub>1</sub> = $\chi_{152}$	712	1367	1367	395	395	618	31	31	116	116	18	7	7	1
7017192 <sub>2</sub> = $\chi_{153}$	712	1367	1367	395	395	618	31	31	116	116	18	7	7	1
7429968 <sub>1</sub> = $\chi_{154}$	804	1546	1546	445	445	698	34	34	130	130	20	7	7	1
8663200 <sub>1</sub> = $\chi_{155}$	998	1926	1923	555	551	869	44	42	163	161	24	8	9	1
8663200 <sub>2</sub> = $\chi_{156}$	998	1923	1926	551	555	869	42	44	161	163	24	9	8	1
9052160 <sub>1</sub> = $\chi_{157}$	1056	2024	2024	584	584	914	44	44	170	170	26	9	9	1
9547200 <sub>1</sub> = $\chi_{158}$	1100	2106	2106	609	609	952	46	46	178	178	28	10	10	1
10795680 <sub>1</sub> = $\chi_{159}$	1136	2188	2179	635	624	986	51	46	187	181	28	9	12	1
10795680 <sub>2</sub> = $\chi_{160}$	1136	2179	2188	624	635	986	46	51	181	187	28	12	9	2
11456640 <sub>1</sub> = $\chi_{161}$	1232	2363	2370	678	687	1069	51	55	197	202	30	13	10	2



(Block 1:)	$\varphi_{15}$
1299480 <sub>4</sub> = $\chi_{122}$	.
1503684 <sub>1</sub> = $\chi_{123}$	.
1503684 <sub>2</sub> = $\chi_{124}$	.
1591200 <sub>1</sub> = $\chi_{125}$	.
1591200 <sub>2</sub> = $\chi_{126}$	.
1949220 <sub>3</sub> = $\chi_{127}$	.
1949220 <sub>4</sub> = $\chi_{128}$	.
2165800 <sub>3</sub> = $\chi_{129}$	.
2772224 <sub>1</sub> = $\chi_{130}$	.
2772224 <sub>2</sub> = $\chi_{131}$	1
2784600 <sub>3</sub> = $\chi_{132}$	1
2784600 <sub>4</sub> = $\chi_{133}$	.
3572100 <sub>1</sub> = $\chi_{134}$	1
3572100 <sub>2</sub> = $\chi_{135}$	.
4798080 <sub>1</sub> = $\chi_{136}$	1
4798080 <sub>2</sub> = $\chi_{137}$	.
4950400 <sub>1</sub> = $\chi_{138}$	1
4950400 <sub>2</sub> = $\chi_{139}$	.
5012280 <sub>3</sub> = $\chi_{140}$	.
5012280 <sub>4</sub> = $\chi_{141}$	1
5370300 <sub>1</sub> = $\chi_{142}$	1
5370300 <sub>2</sub> = $\chi_{143}$	.
5728320 <sub>1</sub> = $\chi_{144}$	.
5728320 <sub>2</sub> = $\chi_{145}$	1
6497400 <sub>3</sub> = $\chi_{146}$	1
6497400 <sub>4</sub> = $\chi_{147}$	1
6873984 <sub>1</sub> = $\chi_{148}$	1
6873984 <sub>2</sub> = $\chi_{149}$	1
6930560 <sub>1</sub> = $\chi_{150}$	1
6930560 <sub>2</sub> = $\chi_{151}$	1
7017192 <sub>1</sub> = $\chi_{152}$	1
7017192 <sub>2</sub> = $\chi_{153}$	1
7429968 <sub>1</sub> = $\chi_{154}$	1
8663200 <sub>1</sub> = $\chi_{155}$	1
8663200 <sub>2</sub> = $\chi_{156}$	1
9052160 <sub>1</sub> = $\chi_{157}$	1
9547200 <sub>1</sub> = $\chi_{158}$	1
10795680 <sub>1</sub> = $\chi_{159}$	2
10795680 <sub>2</sub> = $\chi_{160}$	1
11456640 <sub>1</sub> = $\chi_{161}$	1

<b>(Block 1:)</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{13}$	$\varphi_{14}$
11456640 <sub>2</sub> = $\chi_{162}$	1232	2370	2363	687	678	1069	55	51	202	197	30	10	13	1
12475008 <sub>1</sub> = $\chi_{163}$	1370	2619	2632	751	767	1186	55	62	217	226	34	15	11	2
12475008 <sub>2</sub> = $\chi_{164}$	1370	2632	2619	767	751	1186	62	55	226	217	34	11	15	1
13861120 <sub>1</sub> = $\chi_{165}$	1422	2736	2740	786	791	1237	61	63	230	233	35	14	13	2
13861120 <sub>2</sub> = $\chi_{166}$	1422	2740	2736	791	786	1237	63	61	233	230	35	13	14	2
15163200 <sub>1</sub> = $\chi_{167}$	1632	3136	3136	904	904	1416	70	70	264	264	40	15	15	2
15163200 <sub>2</sub> = $\chi_{168}$	1632	3136	3136	904	904	1416	70	70	264	264	40	15	15	2
16307200 <sub>1</sub> = $\chi_{169}$	1828	3526	3526	1013	1013	1592	79	79	297	297	44	16	16	2

<b>(Block 1:)</b>	$\varphi_{15}$
11456640 <sub>2</sub> = $\chi_{162}$	2
12475008 <sub>1</sub> = $\chi_{163}$	1
12475008 <sub>2</sub> = $\chi_{164}$	2
13861120 <sub>1</sub> = $\chi_{165}$	2
13861120 <sub>2</sub> = $\chi_{166}$	2
15163200 <sub>1</sub> = $\chi_{167}$	2
15163200 <sub>2</sub> = $\chi_{168}$	2
16307200 <sub>1</sub> = $\chi_{169}$	2

$$\begin{aligned}
\varphi_1 &= 1_1 \\
\varphi_2 &= 26_1 \\
\varphi_3 &= 26_2 \\
\varphi_4 &= 246_1 \\
\varphi_5 &= 246_2 \\
\varphi_6 &= 676_1 \\
\varphi_7 &= 4096_1 \\
\varphi_8 &= 4096_2 \\
\varphi_9 &= 6396_1 \\
\varphi_{10} &= 6396_2 \\
\varphi_{11} &= 60516_1 \\
\varphi_{12} &= 106496_1 \\
\varphi_{13} &= 106496_2 \\
\varphi_{14} &= 1007616_1 \\
\varphi_{15} &= 1007616_2
\end{aligned}$$

<b>Block 2:</b>	$\varphi_{16}$
16777216 <sub>1</sub> = $\chi_{94}$	1
16777216 <sub>2</sub> = $\chi_{170}$	1

$$\varphi_{16} = 16777216_1$$