



APPENDIX 5-4

COMPARATIVE SHADOW FLICKER REPORT

House ID	ITM Coordinates (Easting)	ITM Coordinates (Northing)	Distance to Nearest Turbine (metres)	Nearest Proposed Turbine No.	Max. Daily Shadow Flicker: Pre-Mitigation (hrs:min:sec)			Max. Annual Shadow Flicker Adjusted for Average Regional Sunshine (hrs:min:sec)			Max. Daily Shadow Flicker: Pre-Mitigation (hrs:min:sec)			Max. Annual Shadow Flicker Adjusted for Average Regional Sunshine (hrs:min:sec)		
					Scenario 1 (Maximum)	Scenario 2 (Median)	Scenario 3 (Minimum)	Scenario 1 (Maximum)	Scenario 2 (Median)	Scenario 3 (Minimum)	Scenario 1 (Maximum)	Scenario 2 (Median)	Scenario 3 (Minimum)	Scenario 1 (Maximum)	Scenario 2 (Median)	Scenario 3 (Minimum)
					TH: 180 RD: 162 HH:99	TH: 180 RD: 155 HH:102.5	TH: 180 RD: 150 HH:105	TH: 180 RD: 162 HH:99	TH: 180 RD: 155 HH:102.5	TH: 180 RD: 150 HH:105	Mitigation Required	Mitigation Required	Mitigation Required	Mitigation Required	Mitigation Required	Mitigation Required
1	557118	748640	720	T8	00:46:00	00:46:00	00:45:00	17:59:57	17:33:04	17:17:25	yes	yes	yes	no	no	no
2	557082	750528	725	T9	00:52:00	00:50:00	00:49:00	13:47:41	13:21:03	12:59:47	yes	yes	yes	no	no	no
3	554940	749857	725	T6	00:52:00	00:50:00	00:49:00	15:15:12	14:34:52	14:00:24	yes	yes	yes	no	no	no
4	554571	747565	728	T1	00:51:00	00:50:00	00:47:00	21:22:36	20:22:13	19:37:59	yes	yes	yes	no	no	no
5	554829	748694	736	T3	00:51:00	00:48:00	00:47:00	19:00:35	18:01:40	17:17:11	yes	yes	yes	no	no	no
6	557538	749999	739	T9	00:54:00	00:54:00	00:47:00	27:22:55	25:43:11	24:09:33	yes	yes	yes	no	no	no
7	556884	750597	746	T9	00:27:00	00:25:00	00:25:00	6:36:15	6:24:01	6:15:13	no	no	no	no	no	no
8	557132	748609	753	T8	00:42:00	00:42:00	00:42:00	16:11:55	15:47:13	15:28:24	yes	yes	yes	no	no	no
9	556611	750583	756	T9	00:39:00	00:38:00	00:37:00	13:48:11	13:17:37	12:54:39	yes	yes	yes	no	no	no
10	556020	747382	759	T1	00:51:00	00:49:00	00:48:00	14:19:13	13:34:29	13:00:01	yes	yes	yes	no	no	no
11	554786	748627	777	T3	00:48:00	00:46:00	00:44:00	18:30:45	17:39:40	17:03:59	yes	yes	yes	no	no	no
12	556943	750627	783	T9	00:25:00	00:24:00	00:24:00	5:29:31	5:18:45	5:10:12	no	no	no	no	no	no
13	556701	750634	787	T9	00:31:00	00:31:00	00:30:00	7:15:21	6:58:00	6:45:17	yes	yes	no	no	no	no
14	556763	750641	788	T9	00:30:00	00:29:00	00:28:00	5:41:29	5:26:49	5:17:17	no	no	no	no	no	no
15	556385	747820	802	T4	00:48:00	00:46:00	00:44:00	14:03:05	13:23:15	12:55:08	yes	yes	yes	no	no	no
16	556368	750618	808	T7	01:20:00	01:17:00	01:15:00	24:34:15	23:37:32	22:54:16	yes	yes	yes	no	no	no
17	555149	751226	831	T7	00:49:00	00:47:00	00:45:00	11:51:35	11:26:39	11:07:20	yes	yes	yes	no	no	no
18	554838	749907	836	T6	00:45:00	00:43:00	00:41:00	11:49:52	11:06:36	9:57:11	yes	yes	yes	no	no	no
19	556934	750684	838	T9	00:25:00	00:25:00	00:24:00	3:57:51	3:49:32	3:42:41	no	no	no	no	no	no
20	557108	748515	842	T8	00:39:00	00:38:00	00:37:00	11:36:40	10:26:31	10:06:57	yes	yes	yes	no	no	no
21	554819	749877	848	T6	00:44:00	00:42:00	00:41:00	10:55:21	10:23:05	9:27:51	yes	yes	yes	no	no	no
22	556483	747792	860	T4	00:42:00	00:41:00	00:39:00	10:38:44	10:10:08	9:49:51	yes	yes	yes	no	no	no
23	554717	748407	878	T3	00:44:00	00:42:00	00:41:00	30:09:52	28:50:55	27:51:45	yes	yes	yes	yes	no	no
24	555050	751217	878	T7	00:46:00	00:44:00	00:43:00	13:37:40	13:02:13	12:35:49	yes	yes	yes	no	no	no
25	555270	751347	890	T7	00:26:00	00:26:00	00:25:00	2:37:25	2:32:17	2:28:08	no	no	no	no	no	no
26	557827	749006	908	T8	00:43:00	00:42:00	00:40:00	12:52:27	12:13:35	11:44:44	yes	yes	yes	no	no	no
27	557731	749892	919	T9	00:42:00	00:41:00	00:40:00	14:23:37	13:32:17	13:03:27	yes	yes	yes	no	no	no
28	557306	748474	931	T8	00:32:00	00:31:00	00:30:00	10:59:45	10:38:00	10:21:52	yes	yes	no	no	no	no
29	556322	751064	937	T7	00:42:00	00:39:00	00:38:00	7:24:39	7:01:25	6:44:33	yes	yes	yes	no	no	no
30	554626	748663	938	T3	00:40:00	00:38:00	00:37:00	14:54:25	14:18:29	13:53:19	yes	yes	yes	no	no	no
31	554906	746753	945	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
32	554990	746711	953	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no

33	554626	748450	956	T3	00:40:00	00:38:00	00:37:00	24:26:11	23:31:40	22:45:57	yes	yes	yes	no	no	no
34	556905	750813	963	T9	00:26:00	00:25:00	00:25:00	4:24:15	4:15:41	4:07:37	no	no	no	no	no	no
35	556544	747703	965	T4	00:39:00	00:38:00	00:37:00	9:37:08	9:12:56	8:55:05	yes	yes	yes	no	no	no
36	554594	748665	970	T3	00:38:00	00:37:00	00:36:00	14:40:00	14:04:33	13:39:37	yes	yes	yes	no	no	no
37	557234	748410	970	T8	00:35:00	00:34:00	00:33:00	8:19:09	7:59:07	7:42:59	yes	yes	yes	no	no	no
38	554608	748447	975	T3	00:39:00	00:38:00	00:37:00	23:47:04	22:53:17	22:13:12	yes	yes	yes	no	no	no
39	555172	751399	975	T7	00:27:00	00:26:00	00:26:00	2:53:04	2:47:41	2:44:01	no	no	no	no	no	no
40	557331	748431	980	T8	00:31:00	00:30:00	00:30:00	9:55:43	9:37:08	9:23:12	yes	no	no	no	no	no
41	554880	746721	985	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
42	556396	751065	998	T7	00:39:00	00:37:00	00:36:00	6:05:12	5:46:52	5:34:53	yes	yes	yes	no	no	no
43	556511	747605	999	T2	00:40:00	00:38:00	00:37:00	13:49:09	13:13:13	12:43:24	yes	yes	yes	no	no	no
44	554847	746711	1008	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
45	555225	751472	1023	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
46	555163	751449	1024	T7	00:16:00	00:16:00	00:15:00	1:01:51	1:00:08	0:58:11	no	no	no	no	no	no
47	557152	748275	1034	T4	00:38:00	00:36:00	00:35:00	8:59:59	8:42:08	7:49:20	yes	yes	yes	no	no	no
48	556729	750888	1037	T9	00:30:00	00:30:00	00:29:00	7:29:32	7:13:24	7:04:36	no	no	no	no	no	no
49	554540	748329	1042	T1	00:38:00	00:36:00	00:35:00	20:32:00	19:34:19	18:50:04	yes	yes	yes	no	no	no
50	554522	748671	1042	T3	00:36:00	00:34:00	00:33:00	14:10:55	13:38:09	13:14:12	yes	yes	yes	no	no	no
51	556103	746936	1053	T1	00:05:00	00:02:00	00:00:00	0:15:39	0:03:55	0:00:00	no	no	no	no	no	no
52	555044	751422	1054	T7	00:34:00	00:33:00	00:32:00	5:08:44	4:58:13	4:50:09	yes	yes	yes	no	no	no
53	556599	747630	1054	T4	00:36:00	00:35:00	00:34:00	8:48:44	8:25:31	8:10:21	yes	yes	yes	no	no	no
54	554953	751367	1056	T7	00:39:00	00:37:00	00:36:00	8:53:52	8:33:05	8:19:53	yes	yes	yes	no	no	no
55	555089	746574	1060	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
56	557933	748868	1062	T8	00:37:00	00:36:00	00:35:00	12:15:47	11:48:09	11:26:39	yes	yes	yes	no	no	no
57	555163	751490	1062	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
58	556680	750910	1064	T9	00:32:00	00:30:00	00:30:00	7:43:57	7:30:31	7:19:01	yes	no	no	no	no	no
59	556527	750977	1068	T7	00:36:00	00:34:00	00:33:00	5:34:39	5:20:43	5:08:15	yes	yes	yes	no	no	no
60	554833	751284	1069	T7	00:38:00	00:36:00	00:35:00	9:10:29	8:44:35	8:23:48	yes	yes	yes	no	no	no
61	556269	751319	1072	T7	00:38:00	00:36:00	00:35:00	10:03:47	9:43:00	9:27:36	yes	yes	yes	no	no	no
62	554818	751279	1076	T7	00:37:00	00:36:00	00:34:00	8:35:47	8:08:09	7:45:40	yes	yes	yes	no	no	no
63	556320	751281	1078	T7	00:37:00	00:36:00	00:35:00	9:05:07	8:41:24	8:22:35	yes	yes	yes	no	no	no
64	556647	750922	1080	T9	00:33:00	00:31:00	00:30:00	7:31:44	7:14:37	7:00:41	yes	yes	no	no	no	no
65	554481	748624	1082	T3	00:35:00	00:34:00	00:32:00	15:20:35	14:47:49	14:21:25	yes	yes	yes	no	no	no
66	554771	751241	1083	T7	00:37:00	00:35:00	00:34:00	6:37:13	6:16:27	6:03:00	yes	yes	yes	no	no	no
67	557171	748182	1084	T4	00:36:00	00:35:00	00:34:00	9:55:57	9:35:40	8:38:43	yes	yes	yes	no	no	no
68	554736	751211	1089	T7	00:36:00	00:35:00	00:33:00	5:52:44	5:36:21	5:23:09	yes	yes	yes	no	no	no
69	554826	746614	1105	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
70	555261	751576	1111	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
71	557312	748286	1111	T8	00:32:00	00:31:00	00:30:00	6:01:17	5:46:52	5:34:53	yes	yes	no	no	no	no
72	555149	746510	1113	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
73	554683	751186	1115	T7	00:35:00	00:34:00	00:33:00	5:06:47	4:52:36	4:41:51	yes	yes	yes	no	no	no
74	554737	751270	1128	T7	00:35:00	00:34:00	00:33:00	6:02:45	5:45:09	5:31:57	yes	yes	yes	no	no	no
75	556417	747244	1129	T2	00:33:00	00:31:00	00:31:00	4:33:17	4:20:35	4:12:16	yes	yes	yes	no	no	no
76	556967	747794	1130	T4	00:26:00	00:25:00	00:25:00	7:59:07	7:42:00	7:28:33	no	no	no	no	no	no
77	554429	748634	1134	T3	00:33:00	00:32:00	00:31:00	14:12:23	13:43:03	13:22:31	yes	yes	yes	no	no	no
78	556559	747410	1136	T2	00:36:00	00:35:00	00:33:00	10:23:20	9:59:23	9:40:19	yes	yes	yes	no	no	no

79	555488	746493	1137	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
80	554706	751258	1143	T7	00:35:00	00:33:00	00:32:00	5:27:19	5:12:24	5:01:39	yes	yes	yes	no	no	no
81	554715	746624	1148	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
82	556574	747406	1151	T2	00:35:00	00:34:00	00:33:00	10:27:00	10:04:16	9:43:59	yes	yes	yes	no	no	no
83	554854	746551	1151	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
84	557952	750022	1151	T9	00:33:00	00:32:00	00:31:00	8:12:33	7:51:47	6:55:04	yes	yes	yes	no	no	no
85	555293	751628	1153	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
86	554684	746633	1156	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
87	554904	746512	1169	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
88	555242	751634	1172	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
89	556509	751232	1188	T7	00:33:00	00:32:00	00:31:00	4:30:21	4:19:07	4:09:49	yes	yes	yes	no	no	no
90	554634	751242	1188	T7	00:33:00	00:32:00	00:30:00	4:29:37	4:17:09	4:07:52	yes	yes	no	no	no	no
91	557292	748200	1188	T8	00:32:00	00:31:00	00:30:00	6:21:49	6:09:36	6:00:48	yes	yes	no	no	no	no
92	555505	746429	1203	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
93	555247	751670	1205	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
94	556693	747503	1207	T2	00:33:00	00:31:00	00:31:00	8:08:09	7:48:36	7:35:09	yes	yes	yes	no	no	no
95	554534	746675	1209	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
96	558027	749965	1210	T8	00:31:00	00:30:00	00:29:00	6:55:04	6:37:57	5:50:47	yes	no	no	no	no	no
97	554684	746567	1213	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
98	554605	751250	1216	T7	00:32:00	00:31:00	00:30:00	4:09:20	4:00:32	3:52:28	yes	yes	no	no	no	no
99	554270	746961	1217	T1	00:34:00	00:33:00	00:31:00	6:42:21	6:27:27	6:16:12	yes	yes	yes	no	no	no
100	554343	748643	1220	T3	00:30:00	00:29:00	00:29:00	11:49:23	11:23:13	10:15:45	no	no	no	no	no	no
101	556291	746904	1221	T1	00:28:00	00:27:00	00:27:00	4:18:37	4:05:55	3:56:23	no	no	no	no	no	no
102	555319	751709	1226	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
103	555254	751698	1231	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
104	554415	749581	1239	T6	00:30:00	00:28:00	00:28:00	8:15:44	7:10:57	6:02:01	no	no	no	no	no	no
105	554455	746694	1247	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
106	554437	749372	1254	T6	00:30:00	00:29:00	00:28:00	11:17:36	10:54:37	10:37:31	no	no	no	no	no	no
107	556401	747017	1255	T1	00:32:00	00:31:00	00:30:00	8:19:53	8:01:48	7:48:07	yes	yes	no	no	no	no
108	555568	746387	1256	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
109	554570	751290	1268	T7	00:31:00	00:30:00	00:29:00	3:51:15	3:41:13	3:33:09	yes	no	no	no	no	no
110	554288	748649	1275	T3	00:29:00	00:28:00	00:27:00	10:36:17	10:08:25	9:00:28	no	no	no	no	no	no
111	556387	746934	1285	T1	00:32:00	00:30:00	00:30:00	7:27:49	7:09:00	6:56:47	yes	no	no	no	no	no
112	555559	746355	1286	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
113	554390	749406	1292	T6	00:29:00	00:28:00	00:27:00	10:08:25	9:48:37	8:48:44	no	no	no	no	no	no
114	554268	748608	1296	T3	00:28:00	00:28:00	00:27:00	9:34:12	8:23:19	8:09:23	no	no	no	no	no	no
115	554355	749558	1301	T6	00:28:00	00:27:00	00:27:00	8:11:20	7:48:07	5:33:55	no	no	no	no	no	no
116	556225	751644	1312	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
117	554481	751253	1318	T7	00:29:00	00:28:00	00:27:00	4:11:03	4:01:01	2:53:33	no	no	no	no	no	no
118	554298	750869	1320	T7	00:28:00	00:27:00	00:26:00	4:17:09	4:07:08	4:00:17	no	no	no	no	no	no
119	554325	749614	1326	T6	00:27:00	00:26:00	00:26:00	8:54:07	7:01:11	6:11:04	no	no	no	no	no	no
120	556600	747138	1335	T2	00:27:00	00:27:00	00:26:00	3:05:32	2:59:11	2:54:03	no	no	no	no	no	no
121	556480	746996	1335	T1	00:30:00	00:28:00	00:28:00	5:48:49	5:33:55	5:21:56	no	no	no	no	no	no
122	556503	747024	1343	T1	00:29:00	00:28:00	00:28:00	4:47:13	4:35:00	4:24:44	no	no	no	no	no	no
123	555955	746441	1345	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
124	555905	746401	1357	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no

125	556655	747166	1358	T2	00:26:00	00:26:00	00:25:00	2:58:27	2:47:27	2:38:09	no	no	no	no	no	no
126	555938	746411	1363	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
127	557582	748117	1368	T8	00:24:00	00:24:00	00:24:00	4:06:53	3:56:08	3:08:28	no	no	no	no	no	no
128	556041	746461	1372	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
129	554217	746762	1375	T1	00:07:00	00:05:00	00:04:00	0:26:53	0:19:04	0:14:11	no	no	no	no	no	no
130	556607	747079	1380	T2	00:27:00	00:26:00	00:26:00	3:10:55	3:04:04	2:56:29	no	no	no	no	no	no
131	556225	751723	1381	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
132	556171	751752	1382	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
133	554442	751310	1383	T7	00:27:00	00:26:00	00:26:00	3:31:27	2:45:44	2:40:07	no	no	no	no	no	no
134	554182	748702	1383	T3	00:26:00	00:25:00	00:25:00	9:49:36	9:28:20	9:14:09	no	no	no	no	no	no
135	554414	751275	1386	T7	00:28:00	00:27:00	00:26:00	4:15:12	4:06:24	2:30:49	no	no	no	no	no	no
136	556641	747106	1387	T2	00:26:00	00:26:00	00:25:00	2:51:21	2:43:47	2:39:52	no	no	no	no	no	no
137	555257	751860	1387	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
138	554171	748614	1393	T3	00:26:00	00:25:00	00:25:00	7:58:52	7:40:17	7:22:27	no	no	no	no	no	no
139	556753	747227	1399	T2	00:26:00	00:25:00	00:25:00	6:19:52	6:06:40	5:57:52	no	no	no	no	no	no
140	557287	747749	1401	T4	00:20:00	00:19:00	00:19:00	5:44:40	5:28:32	3:16:17	no	no	no	no	no	no
141	554383	751263	1405	T7	00:27:00	00:26:00	00:25:00	4:39:39	2:27:09	2:22:31	no	no	no	no	no	no
142	558297	748839	1407	T8	00:27:00	00:26:00	00:25:00	6:22:19	6:10:05	6:01:32	no	no	no	no	no	no
143	554030	748225	1407	T1	00:26:00	00:26:00	00:25:00	5:41:44	5:29:16	5:18:45	no	no	no	no	no	no
144	556075	746432	1415	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
145	557880	748249	1417	T8	00:18:00	00:18:00	00:18:00	2:34:15	2:29:07	1:05:31	no	no	no	no	no	no
146	558399	749246	1417	T8	00:24:00	00:23:00	00:23:00	3:11:39	3:04:04	2:59:55	no	no	no	no	no	no
147	554238	749554	1417	T6	00:25:00	00:25:00	00:24:00	6:20:21	6:07:24	5:24:37	no	no	no	no	no	no
148	556154	746484	1418	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
149	554200	750896	1422	T7	00:25:00	00:24:00	00:24:00	3:29:29	3:21:40	3:16:32	no	no	no	no	no	no
150	558209	748623	1422	T8	00:27:00	00:27:00	00:26:00	6:59:43	6:09:07	5:59:49	no	no	no	no	no	no
151	556807	747263	1424	T2	00:28:00	00:27:00	00:26:00	8:00:20	7:42:59	7:31:15	no	no	no	no	no	no
152	558393	749114	1427	T8	00:24:00	00:24:00	00:23:00	3:29:29	3:23:52	3:16:47	no	no	no	no	no	no
153	554355	751260	1428	T7	00:26:00	00:26:00	00:25:00	4:49:55	2:19:20	2:14:56	no	no	no	no	no	no
154	557991	748328	1432	T8	00:17:00	00:16:00	00:16:00	1:57:05	1:53:40	0:53:32	no	no	no	no	no	no
155	558422	749300	1437	T8	00:23:00	00:23:00	00:23:00	2:58:12	2:52:35	2:47:41	no	no	no	no	no	no
156	557271	747671	1437	T4	00:20:00	00:20:00	00:19:00	3:53:41	3:39:16	1:17:44	no	no	no	no	no	no
157	557735	748119	1440	T8	00:21:00	00:21:00	00:21:00	4:39:09	4:32:19	4:26:41	no	no	no	no	no	no
158	555213	751904	1440	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
159	557293	747687	1444	T4	00:20:00	00:19:00	00:19:00	4:12:16	3:59:33	1:42:55	no	no	no	no	no	no
160	554157	746726	1445	T1	00:08:00	00:07:00	00:06:00	0:37:09	0:28:51	0:23:28	no	no	no	no	no	no
161	558344	748850	1447	T8	00:25:00	00:25:00	00:25:00	6:14:15	5:58:51	5:52:29	no	no	no	no	no	no
162	556235	746512	1447	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
163	554324	751249	1448	T7	00:25:00	00:25:00	00:24:00	4:50:24	2:11:16	2:07:51	no	no	no	no	no	no
164	557321	747712	1451	T4	00:19:00	00:19:00	00:19:00	5:07:45	4:11:32	2:46:43	no	no	no	no	no	no
165	556003	746341	1455	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
166	554206	749481	1458	T6	00:24:00	00:23:00	00:23:00	6:46:16	4:17:53	4:09:05	no	no	no	no	no	no
167	554105	748608	1459	T3	00:24:00	00:24:00	00:23:00	7:38:20	7:21:28	7:10:28	no	no	no	no	no	no
168	556632	751519	1468	T7	00:26:00	00:25:00	00:24:00	3:26:48	3:18:00	3:13:07	no	no	no	no	no	no
169	557981	748268	1469	T8	00:17:00	00:17:00	00:16:00	2:02:28	1:57:49	0:55:00	no	no	no	no	no	no
170	557962	748250	1469	T8	00:17:00	00:17:00	00:17:00	2:08:35	2:03:56	0:56:43	no	no	no	no	no	no

171	556115	746392	1470	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
172	558181	748490	1472	T8	00:22:00	00:22:00	00:21:00	3:57:21	3:09:41	3:04:48	no	no	no	no	no	no
173	557444	747860	1472	T4	00:27:00	00:26:00	00:25:00	7:34:55	6:21:05	6:08:37	no	no	no	no	no	no
174	554166	750956	1472	T7	00:24:00	00:23:00	00:23:00	3:13:21	3:05:47	1:43:53	no	no	no	no	no	no
175	557427	747827	1474	T4	00:26:00	00:25:00	00:25:00	8:04:15	6:51:53	6:40:39	no	no	no	no	no	no
176	554187	749504	1474	T6	00:24:00	00:23:00	00:23:00	5:32:56	4:49:11	4:40:23	no	no	no	no	no	no
177	558204	748515	1476	T8	00:26:00	00:26:00	00:26:00	5:11:55	4:26:41	4:20:49	no	no	no	no	no	no
178	558010	748281	1479	T8	00:16:00	00:16:00	00:16:00	1:55:08	0:53:47	0:52:19	no	no	no	no	no	no
179	558030	748299	1480	T8	00:16:00	00:16:00	00:16:00	1:50:44	0:52:19	0:51:20	no	no	no	no	no	no
180	557449	747849	1481	T4	00:27:00	00:26:00	00:25:00	6:39:40	6:26:13	6:15:13	no	no	no	no	no	no
181	557970	748239	1483	T8	00:17:00	00:17:00	00:16:00	2:05:53	2:01:44	0:55:59	no	no	no	no	no	no
182	556311	746531	1483	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
183	558103	748371	1484	T8	00:15:00	00:15:00	00:00:00	0:47:55	0:44:59	0:00:00	no	no	no	no	no	no
184	558122	748388	1488	T8	00:15:00	00:15:00	00:00:00	0:45:57	0:44:00	0:00:00	no	no	no	no	no	no
185	554304	751293	1488	T7	00:25:00	00:24:00	00:24:00	2:09:04	2:04:11	2:01:29	no	no	no	no	no	no
186	558472	749448	1490	T8	00:21:00	00:21:00	00:21:00	2:36:12	2:30:35	2:28:37	no	no	no	no	no	no
187	558309	750036	1492	T8	00:24:00	00:24:00	00:23:00	3:36:05	3:28:16	3:21:25	no	no	no	no	no	no
188	558481	749294	1496	T8	00:22:00	00:21:00	00:21:00	2:40:21	2:35:28	2:31:19	no	no	no	no	no	no
189	558092	748331	1503	T8	00:16:00	00:15:00	00:00:00	0:48:53	0:46:41	0:00:00	no	no	no	no	no	no
190	556700	751497	1503	T7	00:25:00	00:24:00	00:24:00	2:43:32	2:38:39	2:33:16	no	no	no	no	no	no
191	558169	748421	1503	T8	00:15:00	00:11:00	00:10:00	1:48:17	1:00:37	0:55:15	no	no	no	no	no	no
192	557503	747900	1504	T4	00:25:00	00:25:00	00:24:00	4:25:28	4:16:25	4:09:49	no	no	no	no	no	no
193	558488	749275	1504	T8	00:21:00	00:21:00	00:21:00	2:38:53	2:34:29	2:30:35	no	no	no	no	no	no
194	558192	748444	1508	T8	00:17:00	00:16:00	00:16:00	2:47:41	1:59:32	1:54:53	no	no	no	no	no	no
195	556035	746289	1516	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
196	557530	747926	1517	T4	00:25:00	00:24:00	00:24:00	3:58:49	3:49:32	2:54:03	no	no	no	no	no	no
197	556094	746312	1526	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
198	557773	748038	1529	T8	00:21:00	00:20:00	00:20:00	3:26:48	3:21:11	1:28:59	no	no	no	no	no	no
199	554123	749510	1537	T6	00:22:00	00:22:00	00:22:00	5:30:15	5:20:13	5:13:23	no	no	no	no	no	no
200	557745	748012	1537	T8	00:21:00	00:21:00	00:20:00	2:52:35	2:45:00	1:35:35	no	no	no	no	no	no
201	558251	748458	1547	T8	00:23:00	00:23:00	00:22:00	3:35:36	3:30:43	3:25:20	no	no	no	no	no	no
202	554011	748659	1553	T3	00:22:00	00:22:00	00:21:00	7:43:57	7:29:32	4:22:32	no	no	no	no	no	no
203	555993	746222	1556	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
204	557647	747939	1557	T8	00:23:00	00:22:00	00:22:00	2:55:01	2:11:16	2:06:08	no	no	no	no	no	no
205	554272	751380	1562	T7	00:24:00	00:23:00	00:22:00	2:00:45	1:56:07	1:52:12	no	no	no	no	no	no
206	553906	746898	1564	T1	00:25:00	00:24:00	00:24:00	3:41:43	3:33:09	3:26:33	no	no	no	no	no	no
207	555127	752011	1567	T7	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
208	557619	747913	1569	T8	00:23:00	00:23:00	00:22:00	3:11:24	2:24:13	2:18:51	no	no	no	no	no	no
209	556425	746519	1572	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
210	553983	748663	1581	T3	00:22:00	00:21:00	00:20:00	7:01:40	6:44:19	4:07:37	no	no	no	no	no	no
211	557600	747890	1582	T8	00:23:00	00:23:00	00:22:00	3:23:37	3:17:01	2:29:36	no	no	no	no	no	no
212	553989	746717	1586	T1	00:22:00	00:21:00	00:21:00	3:17:01	3:11:09	3:06:31	no	no	no	no	no	no
213	554079	749435	1591	T6	00:21:00	00:21:00	00:21:00	4:20:05	4:12:01	4:06:53	no	no	no	no	no	no
214	553931	748436	1595	T1	00:23:00	00:22:00	00:22:00	4:15:41	4:07:52	4:00:47	no	no	no	no	no	no
215	554744	746117	1595	T1	00:00:00	00:00:00	00:00:00	0:00:00	0:00:00	0:00:00	no	no	no	no	no	no
216	553942	746764	1599	T1	00:25:00	00:24:00	00:23:00	5:05:19	4:54:19	4:46:59	no	no	no	no	no	no

217	558277	748403	1600	T8	00:18:00	00:18:00	00:18:00	2:28:52	2:23:44	2:19:20	no	no	no	no	no	no
218	554039	749486	1623	T6	00:21:00	00:20:00	00:20:00	5:30:44	5:21:27	5:17:03	no	no	no	no	no	no