

ABB FIA Formula E World Championship

Round 03 - 2026 Miami E-Prix

Rookie Free Practice

Analysis

A Attack Mode ■ 350KW ■ Invalidated Lap ■ Personal Best ■ Session Best ■ B Crossing the finish line in pit lane

Lap	Time	Sector 1	Sector 2	Sector 3	Kph	Elapsed	Lap	Time	Sector 1	Sector 2	Sector 3	Kph	Elapsed	
1 Gabriele MINI ITA														
Nissan Formula E Team							NISSAN e-4ORCE 05							
1	1:29.263	A	43.608	27.207	18.448	93.6	1:29.263	3	1:09.098	27.910	23.631	17.557	120.9	3:56.873
2	1:19.459	B A	28.672	24.394	26.393	105.1	2:48.722	4	1:10.603	27.978	25.340	17.285	118.3	5:07.476
3	2:03.327	A	1:22.473	24.067	16.787	67.7	4:52.049	5	1:04.599	24.634	21.275	18.690	129.3	6:12.075
4	1:00.586		24.381	21.222	14.983	137.9	5:52.635	6	59.430	23.921	20.701	14.808	140.5	7:11.505
5	1:11.760		31.939	23.559	16.262	116.4	7:04.395	7	1:14.762	25.895	29.109	19.758	111.7	8:26.267
6	58.614		23.646	20.318	14.650	142.5	8:03.009	8	58.509	23.527	20.332	14.650	142.7	9:24.776
7	1:09.538		26.638	24.624	18.276	120.1	9:12.547	9	57.879	23.241	20.046	14.592	144.3	10:22.655
8	57.960		23.156	20.226	14.578	144.1	10:10.507	10	1:16.525	29.722	28.668	18.135	109.1	11:39.180
9	1:12.256	B	25.229	22.120	24.907	115.6	11:22.763	11	58.796	23.159	20.017	15.620	142.1	12:37.976
10	9:57.953	A	9:21.082	21.379	15.492	14.0	21:20.716	12	59.286	23.596	20.903	14.787	140.9	13:37.262
11	1:01.644	A	24.332	21.021	16.291	135.5	22:22.360	13	1:09.985	24.188	21.321	24.476	119.3	14:47.247
12	57.417	A	22.970	20.051	14.396	145.5	23:19.777	14	11:42.199	...	23.992	17.058	11.9	26:29.446
13	57.445	A	22.726	20.047	14.672	145.4	24:17.222	15	1:02.765	25.675	22.055	15.035	133.1	27:32.211
14	1:01.512	A	24.787	21.389	15.336	135.8	25:18.734	16	57.426	23.105	19.929	14.392	145.4	28:29.637
15	1:00.686		24.362	21.061	15.263	137.6	26:19.420	17	56.245	22.543	19.602	14.100	148.5	29:25.882
16	59.970		23.966	20.837	15.167	139.3	27:19.390	18	1:12.154	28.678	27.008	16.468	115.8	30:38.036
17	1:08.546	B	23.867	20.754	23.925	121.8	28:27.936	19	56.268	22.530	19.736	14.002	148.4	31:34.304
18	1:54.354		1:18.077	21.255	15.022	73.0	30:22.290	20	1:02.070	25.309	21.233	15.528	134.6	32:36.374
19	1:08.429	B	23.846	20.937	23.646	122.1	31:30.719	21	1:01.577	24.740	21.260	15.577	135.6	33:37.951
20	5:42.705		5:05.367	21.543	15.795	24.4	37:13.424	22	1:00.511	24.455	20.857	15.199	138.0	34:38.462
21	56.291	A	22.736	19.584	13.971	148.4	38:09.715	23	1:00.319	24.120	20.854	15.345	138.5	35:38.781
22	1:08.536	A	27.858	23.570	17.108	121.9	39:18.251	24	59.766	23.908	20.736	15.122	139.7	36:38.547
23	55.921	A	22.397	19.620	13.904	149.4	40:14.172	25	1:00.013	24.012	20.672	15.329	139.2	37:38.560
24								26	1:00.079	24.089	20.708	15.282	139.0	38:38.639
25								27	59.679	23.951	20.642	15.086	139.9	39:38.318
26								28	59.827	23.994	20.612	15.221	139.6	40:38.145
3 Josep Maria MARTÍ ESP														
CUPRA KIRO							Porsche 99X Electric WCG3							
1	1:42.045		54.848	27.952	19.245	81.8	1:42.045	11	1:06.481	24.328	20.942	15.211	138.1	12:36.835
2	1:12.244		29.157	25.513	17.574	115.6	2:54.289	12	58.803	23.734	20.357	14.712	142.0	13:51.498
3	1:05.616		26.177	22.885	16.554	127.3	3:59.905	13	1:05.820	23.387	20.145	22.288	126.9	14:57.318
4	1:05.126		25.593	22.915	16.618	128.2	5:05.031	14	14:23.246	...	22.909	16.825	9.7	29:20.564
5	1:03.552		25.739	21.495	16.318	131.4	6:08.583	15	57.655	23.249	19.977	14.429	144.9	30:18.219
6	59.521		23.555	20.313	15.653	140.3	7:08.104	16	1:16.505	32.301	27.885	16.349	109.2	31:34.724
7	1:29.373		37.016	34.979	17.378	93.5	8:37.477	17	56.499	23.070	19.535	13.894	147.8	32:31.223
8	57.671		23.076	20.079	14.516	144.8	9:35.148	18	1:01.836	24.655	21.248	15.933	135.1	33:33.059
9	1:18.926	A	32.313	30.304	16.309	105.8	10:54.074	19	58.415	23.573	20.122	14.720	143.0	34:31.474
10	56.133	A	22.485	19.564	14.084	148.8	11:50.207	20	1:06.317	23.329	20.061	22.927	125.9	35:37.791
11	1:02.488	A	24.449	21.875	16.164	133.7	12:52.695	21	2:26.950	1:34.151	32.792	20.007	56.8	38:04.741
12	58.803	A	23.734	20.357	14.712	142.0	13:51.498	22	1:08.762	27.574	24.155	17.033	121.5	39:13.503
13	1:05.820	B A	23.387	20.145	22.288	126.9	14:57.318	23	1:07.155	27.422	23.247	16.486	124.4	40:20.658
14	14:23.246		...	22.909	16.825	9.7	29:20.564	24						
15	57.655		23.249	19.977	14.429	144.9	30:18.219							
16	1:16.505		32.301	27.885	16.349	109.2	31:34.724							
17	56.499		23.070	19.535	13.894	147.8	32:31.223							
18	1:01.836		24.655	21.248	15.933	135.1	33:33.059							
19	58.415		23.573	20.122	14.720	143.0	34:31.474							
20	1:06.317	B	23.329	20.061	22.927	125.9	35:37.791							
21	2:26.950		1:34.151	32.792	20.007	56.8	38:04.741							
22	1:08.762		27.574	24.155	17.033	121.5	39:13.503							
23	1:07.155		27.422	23.247	16.486	124.4	40:20.658							
7 Nikita BEDRIN FRA														
DS PENSKE							DS E-TENSE FE25							
1	1:35.934		48.402	28.211	19.321	87.1	1:35.934	13	1:27.364	38.911	28.769	19.684	95.6	1:27.364
2	1:11.841		29.180	25.000	17.661	116.3	2:47.775							
11 Hugh BARTER AUS														
LOLA YAMAHA ABT FORMULA E TEAM							Lola T001							
1	1:46.280		56.529	28.721	21.030	78.6	1:46.280	1	1:46.280	56.529	28.721	21.030	78.6	1:46.280
2	1:14.636		31.256	24.929	18.451	111.9	3:00.916	2	1:14.636	31.256	24.929	18.451	111.9	3:00.916
3	1:07.670		27.166	24.012	16.492	123.4	4:08.586	3	1:07.670	27.166	24.012	16.492	123.4	4:08.586
4	1:08.508		26.575	23.743	18.190	121.9	5:17.094	4	1:08.508	26.575	23.743	18.190	121.9	5:17.094
5	1:04.570		25.550	22.832	16.188	129.3	6:21.664	5	1:04.570	25.550	22.832	16.188	129.3	6:21.664
6	59.796		24.029	20.897	14.870	139.7	7:21.460	6	59.796	24.029	20.897	14.870	139.7	7:21.460
7	59.202		23.696	20.509	14.997	141.1	8:20.662	7	59.202	23.696	20.509	14.997	141.1	8:20.662
8	1:16.121		31.157	27.383	17.581	109.7	9:36.783	8	1:16.121	31.157	27.383	17.581	109.7	9:36.783
9	58.425		23.542	20.266	14.617	143.0	10:35.208	9	58.425	23.542	20.266	14.617	143.0	10:35.208
10	1:01.146		24.761	21.115	15.270	136.6	11:36.354	10	1:01.146	24.761	21.115	15.270	136.6	11:36.354
11	1:00.481		24.328	20.942	15.211	138.1	12:36.835	11	1:00.481	24.328	20.942	15.211	138.1	12:36.835
12	1:01.233		24.303	20.957	15.973	136.4	13:38.068	12	1:01.233	24.303	20.957	15.973	136.4	13:38.068
13	1:15.595	B	25.513	21.849	28.233	110.5	14:53.663	13	1:15.595	25.513	21.849	28.233	110.5	14:53.663
14	9:29.221		8:46.625	25.993	16.603	14.7	24:22.884	14	9:29.221	8:46.625	25.993	16.603	14.7	24:22.884
15	58.978		23.973	20.269	14.736	141.6	25:21.862	15	58.978	23.973	20.269	14.736	141.6	25:21.862
16	1:12.731		28.065	26.538	18.128	114.8	26:34.593	16	1:12.731	28.065	26.538	18.128	114.8	26:34.593
17	58.251		23.378	20.291	14.582	143.4	27:32.844	17	58.251	23.378	20.291	14.582	143.4	27:32.844
18	1:09.708	A	29.599	24.574	15.535	119.8	28:42.552	18	1:09.708	29.599	24.574	15.535	119.8	28:42.552
19	56.834	A	22.752	19.910	14.172	147.0	29:39.386	19	56.834	22.752	19.910	14.172	147.0	29:39.386
20	1:16.642	B A	26.083	23.754	26.805	109.0	30:56.028	20	1:16.642	26.083	23.754	26.805	109.0	30:56.028
21	5:51.788	A	5:11.371	24.093	16.324	23.7	36:47.816	21	5:51.788	5:11.371	24.093	16.324	23.7	36:47.816
22	58.368		23.588	20.239	14.541	143.1	37:46.184	22	58.368	23.588	20.239	14.541	143.1	37:46.184
23	1:18.982		29.069	26.757	23.156	105.7	39:05.166	23	1:18.982	29.069	26.757	23.156	105.7	39:05.166
24	57.164		22.994	19.712	14.458	146.1	40:02.330	24	57.164	22.994	19.712	14.458	146.1	40:02.330
13 Alessandro GIUSTI FRA														
Jaguar TCS Racing							Jaguar I-Type 7							
1	1:27.364		38.911	28.769	19.684	95.6	1:27.364	1	1:					

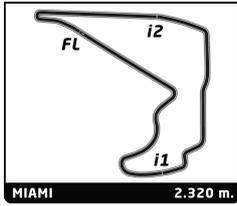


ABB FIA Formula E World Championship

Round 03 - 2026 Miami E-Prix

Rookie Free Practice

Analysis

A Attack Mode ■ 350KW ■ Invalidated Lap ■ Personal Best ■ Session Best ■ B Crossing the finish line in pit lane

Lap	Time	Sector 1	Sector 2	Sector 3	Kph	Elapsed	Lap	Time	Sector 1	Sector 2	Sector 3	Kph	Elapsed
2	1:11.844	29.499	25.013	17.332	116.3	2:39.208	3	1:11.272	A 30.223	23.433	17.616	117.2	4:54.162
3	1:09.374	27.686	25.279	16.409	120.4	3:48.582	4	1:01.172	A 24.492	21.179	15.501	136.5	5:55.334
4	1:10.815	28.119	25.384	17.312	117.9	4:59.397	5	1:14.141	A 30.723	24.150	19.268	112.7	7:09.475
5	1:06.162	25.788	21.625	18.749	126.2	6:05.559	6	59.228	A 23.878	20.548	14.802	141.0	8:08.703
6	59.331	23.835	20.557	14.939	140.8	7:04.890	7	1:10.193	A 25.427	23.457	21.309	119.0	9:18.896
7	58.923	23.543	20.585	14.795	141.7	8:03.813	8	58.185	23.265	20.260	14.660	143.5	10:17.081
8	1:05.402	26.673	22.797	15.932	127.7	9:09.215	9	1:09.746	B 24.678	21.332	23.736	119.7	11:26.827
9	58.183	23.305	20.200	14.678	143.5	10:07.398	10	10:25.875	9:46.325	23.182	16.368	13.3	21:52.702
10	1:10.978	B 23.942	21.027	26.009	117.7	11:18.376	11	58.336	23.397	20.275	14.664	143.2	22:51.038
11	2:08.486	B 1:20.368	21.086	27.032	65.0	13:26.862	12	1:07.777	26.131	25.083	16.563	123.2	23:58.815
12	3:35.426	2:57.053	22.534	15.839	38.8	17:02.288	13	57.818	23.025	20.142	14.651	144.5	24:56.633
13	57.959	23.244	20.088	14.627	144.1	18:00.247	14	1:00.632	24.542	20.742	15.348	137.7	25:57.265
14	1:06.379	A 28.193	22.912	15.274	125.8	19:06.626	15	1:00.086	23.989	20.795	15.302	139.0	26:57.351
15	56.278	A 22.538	19.652	14.088	148.4	20:02.904	16	1:00.293	24.056	21.020	15.217	138.5	27:57.644
16	1:09.144	B A 23.881	20.881	24.382	120.8	21:12.048	17	1:17.493	B 24.094	25.353	28.046	107.8	29:15.137
17	11:37.303	A ...	22.297	15.813	12.0	32:49.351	18	1:56.138	1:18.917	21.658	15.563	71.9	31:11.275
18	1:01.974	24.603	21.573	15.798	134.8	33:51.325	19	1:08.443	B 24.170	21.217	23.056	122.0	32:19.718
19	57.843	23.284	19.963	14.596	144.4	34:49.168	20	4:34.353	3:50.670	23.318	20.365	30.4	36:54.071
20	57.687	23.091	20.037	14.559	144.8	35:46.855	21	57.230	A 23.099	20.032	14.099	145.9	37:51.301
21	1:12.677	27.776	24.834	20.067	114.9	36:59.532	22	1:10.913	A 24.605	22.755	23.553	117.8	39:02.214
22	56.356	22.612	19.629	14.115	148.2	37:55.888	23	1:09.771	A 23.027	22.239	23.505	121.4	40:10.985
23	1:03.225	25.869	21.029	16.327	132.1	38:59.113							
24	1:02.875	25.103	21.686	16.086	132.8	40:01.988							

16 Zak O'SULLIVAN		GBR					
Envision Racing		Jaguar I-Type 7					
1	1:38.112	51.297	27.612	19.203	85.1	1:38.112	
2	1:10.246	29.548	23.372	17.326	118.9	2:48.358	
3	1:05.738	26.107	22.933	16.698	127.0	3:54.096	
4	1:01.911	24.736	21.629	15.546	134.9	4:56.007	
5	1:00.531	23.954	21.079	15.498	138.0	5:56.538	
6	1:02.691	25.154	20.789	16.748	133.2	6:59.229	
7	58.633	23.571	20.040	15.022	142.4	7:57.862	
8	58.099	23.232	20.024	14.843	143.8	8:55.961	
9	1:10.007	27.714	24.808	17.485	119.3	10:05.968	
10	57.913	23.076	20.056	14.781	144.2	11:03.881	
11	1:05.758	26.075	23.465	16.218	127.0	12:09.639	
12	1:07.086	B 22.978	19.945	24.163	124.5	13:16.725	
13	3:20.566	2:40.291	23.737	16.538	41.6	16:37.291	
14	57.579	23.132	19.969	14.478	145.1	17:34.870	
15	57.238	22.917	19.862	14.459	145.9	18:32.108	
16	1:09.923	27.564	25.287	17.072	119.4	19:42.031	
17	57.239	22.919	19.852	14.468	145.9	20:39.270	
18	1:00.696	23.994	20.813	15.889	137.6	21:39.966	
19	1:09.511	B 24.627	20.828	24.056	120.2	22:49.477	
20	10:55.091	...	21.767	17.617	12.7	33:44.568	
21	58.809	23.081	20.120	15.608	142.0	34:43.377	
22	56.622	22.662	19.805	14.155	147.5	35:39.999	
23	1:12.135	28.513	23.825	19.797	115.8	36:52.134	
24	55.810	22.393	19.451	13.966	149.7	37:47.944	
25	1:13.141	23.584	24.887	24.670	114.2	39:01.085	
26	1:13.449	B 24.300	25.074	24.075	113.7	40:14.534	

23 Abbi PULLING		GBR					
Nissan Formula E Team		NISSAN e-4ORCE 05					
1	1:35.033	B 39.333	28.861	26.839	87.9	1:35.033	
2	2:07.857	1:21.473	27.187	19.197	65.3	3:42.890	

25 Théo POURCHAIRE		FRA					
Citroën Racing		Citroën Racing ë-CX					
1	1:37.327	50.232	27.734	19.361	85.8	1:37.327	
2	1:09.662	28.699	24.100	16.863	119.9	2:46.989	
3	1:06.537	26.680	23.120	16.737	125.5	3:53.526	
4	1:10.021	27.651	26.019	16.351	119.3	5:03.547	
5	58.815	23.663	20.596	14.556	142.0	6:02.362	
6	1:08.156	27.379	22.600	18.177	122.5	7:10.518	
7	58.628	23.357	20.615	14.656	142.5	8:09.146	
8	1:11.128	28.589	25.407	17.132	117.4	9:20.274	
9	57.503	23.056	19.984	14.463	145.2	10:17.777	
10	1:01.613	24.476	21.264	15.873	135.6	11:19.390	
11	1:01.749	24.694	21.301	15.754	135.3	12:21.139	
12	1:09.691	B 24.643	21.484	23.564	119.8	13:30.830	
13	6:22.911	A 5:42.144	23.754	17.013	21.8	19:53.741	
14	1:03.114	A 24.953	21.749	16.412	132.3	20:56.855	
15	57.425	A 22.946	20.120	14.359	145.4	21:54.280	
16	1:10.713	A 27.816	26.930	15.967	118.1	23:04.993	
17	55.903	A 22.352	19.557	13.994	149.4	24:00.896	
18	1:05.536	B 23.232	20.326	21.978	127.4	25:06.432	
19	12:12.878	...	21.586	15.527	11.4	37:19.310	
20	57.321	22.870	19.999	14.452	145.7	38:16.631	
21	1:10.408	A 28.335	25.640	16.433	118.6	39:27.039	
22	56.039	A 22.567	19.479	13.993	149.0	40:23.078	

28 Dennis HAUGER		NOR					
Andretti Formula E		Porsche 99X Electric					
1	1:36.687	49.486	27.962	19.239	86.4	1:36.687	
2	1:09.529	28.826	24.042	16.661	120.1	2:46.216	
3	1:05.827	26.437	23.604	15.786	126.9	3:52.043	
4	1:05.770	24.890	22.103	18.777	127.0	4:57.813	
5	1:00.408	24.357	21.155	14.896	138.3	5:58.221	
6	1:09.456	26.950	23.774	18.732	120.2	7:07.677	
7	58.653	23.497	20.427	14.729	142.4	8:06.330	
8	1:09.669	25.548	24.604	19.517	119.9	9:15.999	

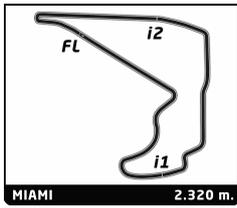


ABB FIA Formula E World Championship

Round 03 - 2026 Miami E-Prix

Rookie Free Practice

Analysis

A Attack Mode ■ 350KW ■ Invalidated Lap ■ Personal Best ■ Session Best ■ B Crossing the finish line in pit lane

Lap	Time	Sector 1	Sector 2	Sector 3	Kph	Elapsed	Lap	Time	Sector 1	Sector 2	Sector 3	Kph	Elapsed
9	58.085	23.239	20.238	14.608	143.8	10:14.084	14	1:03.470	25.219	21.971	16.280	131.6	26:49.698
10	1:11.557	25.664	28.328	17.565	116.7	11:25.641	15	1:02.541	24.899	21.502	16.140	133.5	27:52.239
11	57.771	23.189	20.012	14.570	144.6	12:23.412	16	1:02.664	24.813	21.686	16.165	133.3	28:54.903
12	1:13.195 B	26.228	22.393	24.574	114.1	13:36.607	17	1:02.734	24.857	21.780	16.097	133.1	29:57.637
13	9:19.152	8:37.032	24.111	18.009	14.9	22:55.759	18	1:02.423	24.776	21.673	15.974	133.8	31:00.060
14	58.711	23.559	20.484	14.668	142.3	23:54.470	19	59.376	23.544	20.647	15.185	140.7	31:59.436
15	1:11.833	25.650	28.092	18.091	116.3	25:06.303	20	59.536	23.905	20.695	14.936	140.3	32:58.972
16	58.201	23.319	20.231	14.651	143.5	26:04.504	21	59.146	23.642	20.658	14.846	141.2	33:58.118
17	1:05.947 A	27.074	23.037	15.836	126.6	27:10.451	22	1:00.496	24.977	20.743	14.776	138.1	34:58.614
18	56.577 A	22.852	19.651	14.074	147.6	28:07.028	23	58.266	23.359	20.284	14.623	143.3	35:56.880
19	1:14.412 B A	26.094	23.701	24.617	112.2	29:21.440	24	59.064	23.623	20.591	14.850	141.4	36:55.944
20	7:43.892 A	6:57.280	27.175	19.437	18.0	37:05.332	25	59.626 A	24.366	20.788	14.472	140.1	37:55.570
21	56.771	22.895	19.669	14.207	147.1	38:02.103	26	57.106 A	22.770	19.991	14.345	146.3	38:52.676
22	1:08.097	26.756	24.072	17.269	122.6	39:10.200	27	59.677 A	23.778	20.802	15.097	140.0	39:52.353
23	57.677	23.189	20.059	14.429	144.8	40:07.877	28	1:00.009 A	23.855	20.898	15.256	139.2	40:52.362

48	Chloe CHAMBERS	USA				
	MAHINDRA RACING	M12Electro				
1	1:29.777 A	44.144	27.355	18.278	93.0	1:29.777
2	1:11.364 A	29.102	24.133	18.129	117.0	2:41.141
3	1:10.247 A	27.544	25.700	17.003	118.9	3:51.388
4	1:01.974 A	25.007	21.655	15.312	134.8	4:53.362
5	1:00.585	24.286	21.346	14.953	137.9	5:53.947
6	1:25.509	31.834	32.477	21.198	97.7	7:19.456
7	1:00.786	24.615	21.307	14.864	137.4	8:20.242
8	1:00.664	23.990	21.118	15.556	137.7	9:20.906
9	1:17.475 B	28.313	25.373	23.789	107.8	10:38.381
10	2:34.413	1:56.763	22.259	15.391	54.1	13:12.794
11	58.947	23.656	20.578	14.713	141.7	14:11.741
12	1:04.657	26.695	22.028	15.934	129.2	15:16.398
13	1:02.889	24.975	21.748	16.166	132.8	16:19.287
14	1:11.089 B	24.970	22.151	23.968	117.5	17:30.376
15	7:09.553	6:30.080	23.032	16.441	19.4	24:39.929
16	58.683	23.451	20.601	14.631	142.3	25:38.612
17	1:06.364	28.494	22.436	15.434	125.9	26:44.976
18	58.250	23.274	20.372	14.604	143.4	27:43.226
19	1:08.911 B	24.925	21.110	22.876	121.2	28:52.137
20	8:40.293	8:02.084	22.501	15.708	16.1	37:32.430
21	57.341 A	23.131	20.053	14.157	145.7	38:29.771
22	1:05.246 A	27.410	22.696	15.140	128.0	39:35.017
23	56.857 A	22.741	19.925	14.191	146.9	40:31.874

94	Ayhancan GÜVEN	TUR				
	Porsche Formula E Team	Porsche 99X Electric				
1	1:38.280	47.463	29.379	21.438	85.0	1:38.280
2	1:20.021	32.388	28.435	19.198	104.4	2:58.301
3	1:05.397	26.079	23.108	16.210	127.7	4:03.698
4	1:09.922	26.270	25.681	17.971	119.4	5:13.620
5	59.933	24.321	20.802	14.810	139.4	6:13.553
6	1:16.542	29.418	27.882	19.242	109.1	7:30.095
7	58.942	23.683	20.600	14.659	141.7	8:29.037
8	1:15.555	28.891	28.622	18.042	110.5	9:44.592
9	58.035	23.386	20.213	14.436	143.9	10:42.627
10	1:19.522	29.551	29.650	20.321	105.0	12:02.149
11	56.600	22.826	19.773	14.001	147.6	12:58.749
12	1:13.196 B	24.995	23.598	24.603	114.1	14:11.945
13	11:34.283	...	22.620	15.743	12.0	25:46.228