

Racingline Software Release

Stage 1

EA888 Gen4

2.0 TFSi [Continental Turbo]

300-320ps/400-420Nm

Siemens Simos19.3/19.6

DNFB/DNFC/DNFE/DNFG

Contents

List of ECU IDs covered on OEM+

- 5H0906259_0005
- 5H0906259A_0001
- 5H0906259B_0002
- 5H0906259D_0002
- 5H0906259H_0001
- 8Y0906259_0004
- 8Y0906259C_S004
- 8Y0906259K_0001
- 5FF906259_0005
- 3G0906259L_0003
- 3G0906259M_0003 Note : Runs DQ500
- 5NA906259F_0003 Note : Runs DQ500
- 81A906259B_0003

Notes

You need to be on the latest version of OEM+ software. This should update automatically however if you need to re-download please see click to see the [Racingline Server](#) page.

Each Stage1 tune will have the following features enabled within each Stage1:

- Speed Limit Removed
- Start/Stop inversion
- Left Foot Braking enabled
- Gauges rescaled (where applicable):
 - - charge pressure (boost)
 - - torque
 - - power (in kw)

Stage 1 tunes are for cars that are either 100% stock, or stock with a Racingline R600 intake. No other parts are necessary.

Certain codes, where applicable*, will have a 102ron option. This has been tested on the Aral102ron pump fuel in Germany although if you're running the 98ron timing tables and pulling 0 degrees you can run the 102ron file, it will raise timing by ~2degrees throughout. Please be sure to check knock pullback after flashing.

*These files are only available for cars with a TCU flash.

Logs of Stock Vehicle (click on hyperlink to view graph)

- [Lambda](#)
- [Intake Air Temperature](#)

- [Ignition Timing](#)
- [Boost](#)
- [Engine Torque](#)
- [Air Flow](#)
- [All logging values smaller sample](#)

Logs of Stage1 Vehicle (click on hyperlink to view graph)

- [Lambda](#)
- [Ignition Timing](#)
- [Boost](#)
- [Engine Torque](#)
- [Air Flow](#)
- [All logging values small sample 98ron](#)
- [All logging values small sample 95ron](#)
- [All logging values small sample 102ron](#)

Power and Torque figures

- [Table of dyno results Stock vs Stage1](#)
- Racingline Dyno of Racingline 8R Stock
- [Racingline Dyno of Racingline 8R Stage1 95ron](#)
- [Racingline Dyno of Racingline 8R Stage1 98ron](#)

Stock Vehicle information

Here follows screen shots of certain measuring blocks from the bFlash logging tool of Racinglines 8R on our dyno on a 4th gear pull of a stock car fitted with RL600 intake. These are to be used as an example of a healthy car as a guide:

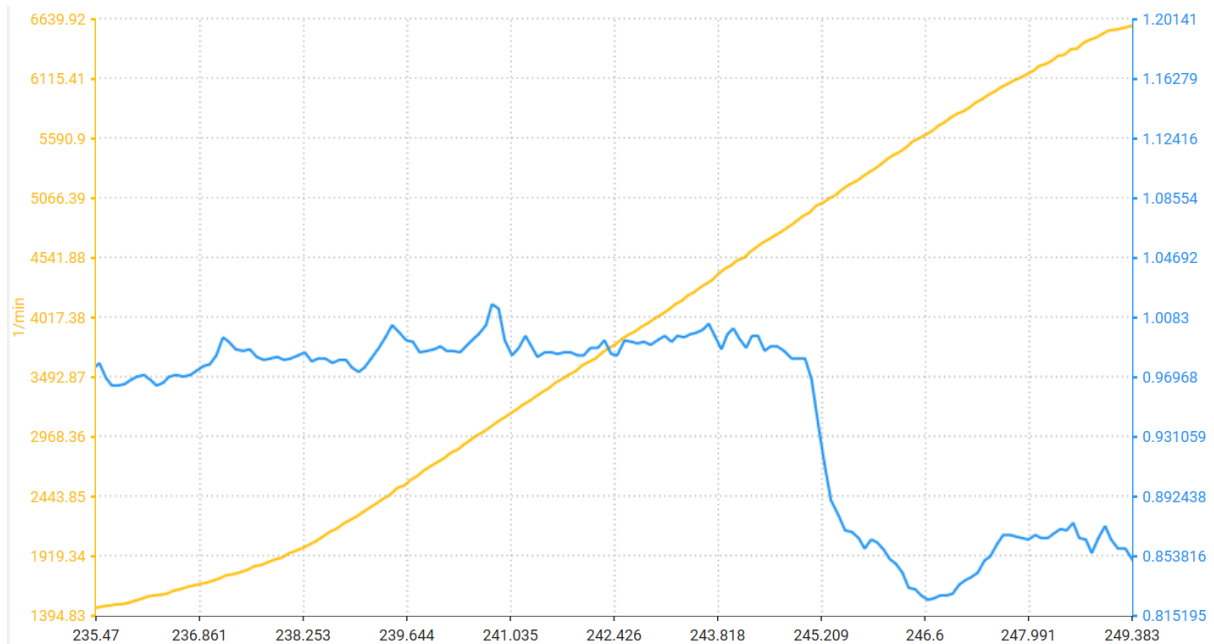


Figure 1 Lambda

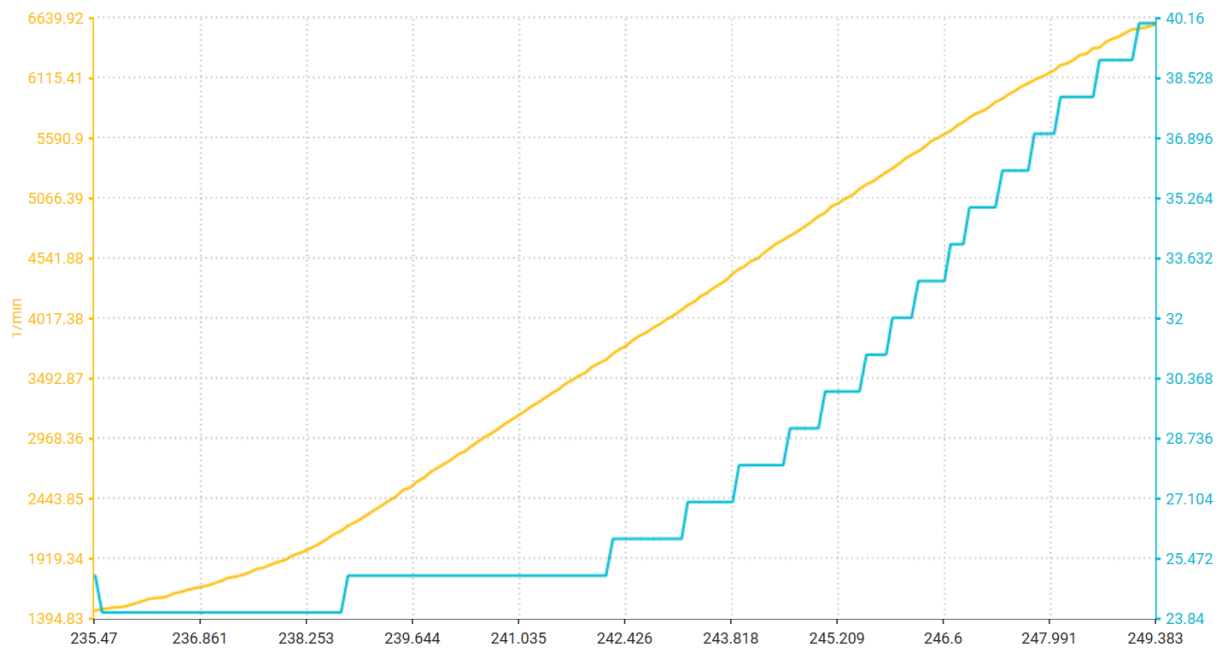


Figure 2 Intake Air Temperature [DegC]

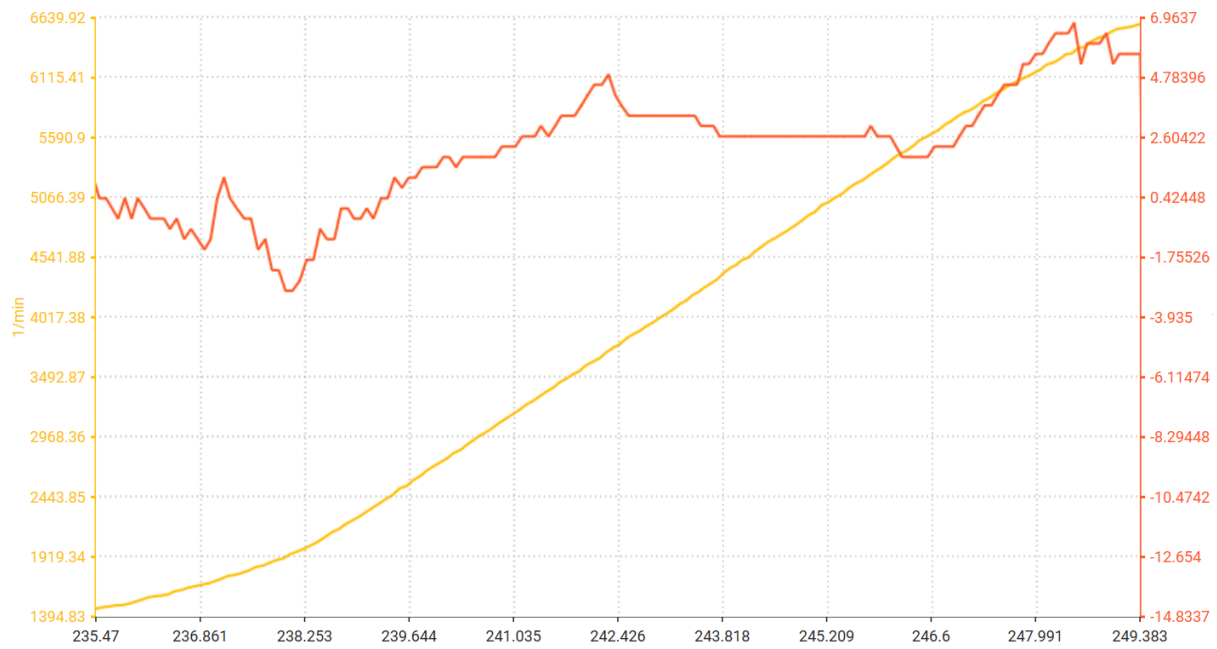


Figure 3 Ignition Timing [Degrees]

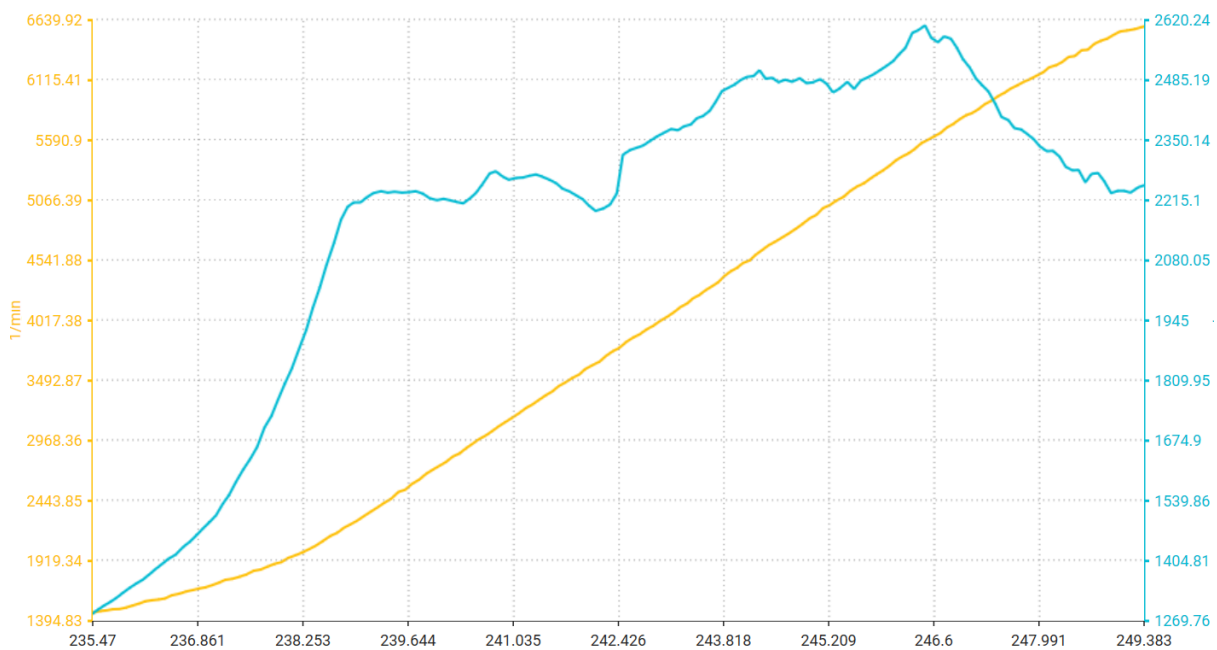


Figure 4 Boost Pressure [mBar]

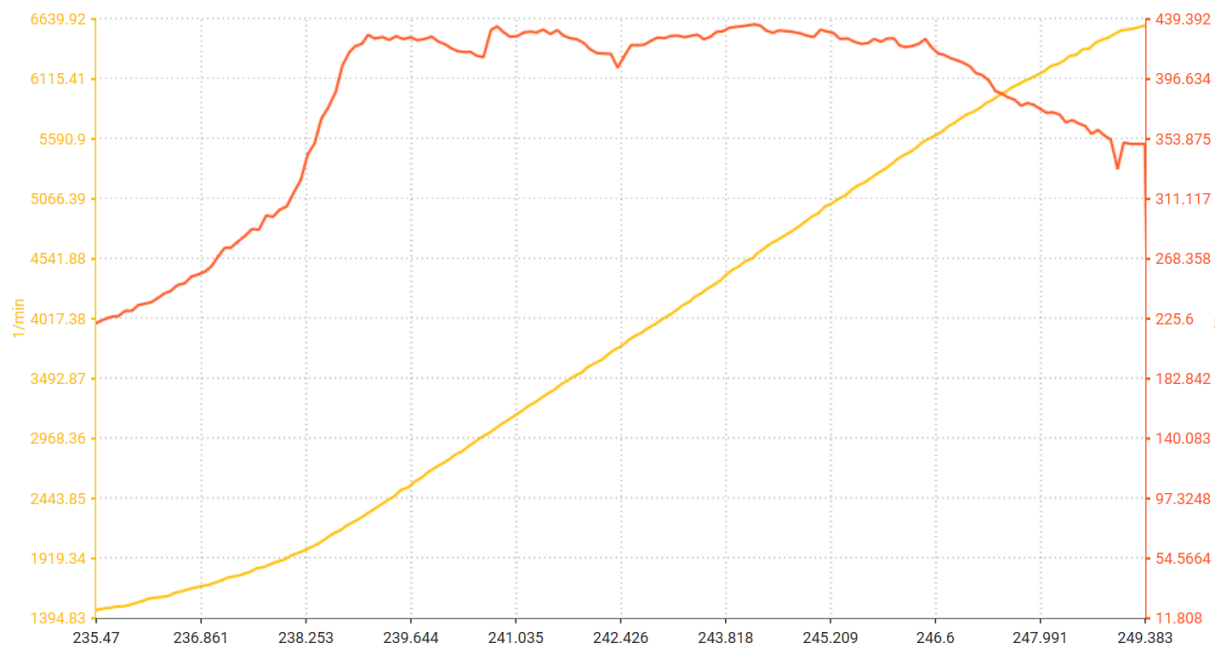


Figure 5 Engine Torque [Nm]

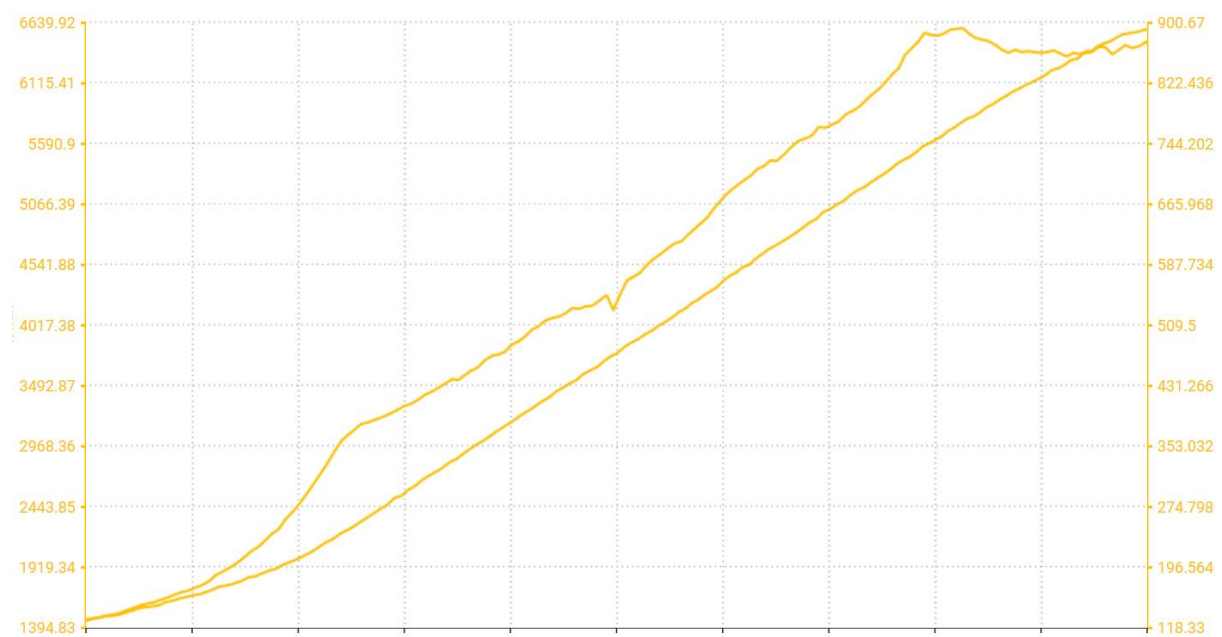


Figure 6 Mass air flow at intake valve [kg/h]

If we take a smaller sample and group together for simplicity you get the following spreadsheet:

Engine speed	IAT	Knock Cyl1	Knock Cyl2	Knock Cyl3	Knock Cyl4	Throttle	Ignition angle	Lambda	HPFP	Engine Torque	Mass air flow	Boost Setpoint	Boost Actual	Wastegate
1/min	Deg C	Grad KW	Grad KW	Grad KW	Grad KW	Grad TPS	Grad KW	-	bar	Nm	kg/h	mbar	mbar	%WG
1743.25	27	0	0	0	0	57.937504	1.12	0.9960938	299	269.3	182	1843	1511	0.16
1996.25	27	0	0	0	0	68.382739	-2.25	0.9814453	300.7	338.1	280	2130	1917	0.18
2486.25	27	0	0	0	0	73.758534	0.37	0.9990234	324.4	426.1	397	2238	2249	10.73
2988.5	27	0	0	0	0	77.733851	1.87	1	328.3	414.1	459	2304	2283	13.18
3504.5	27	0	0	0	0	78.879034	3.37	0.984375	331.1	423.9	530	2252	2234	23.58
3989.5	28	0	0	0	0	79.812686	3.37	0.9921875	346.3	429.1	601	2365	2378	23.07
4492.5	30	0	0	0	0	79.863745	2.62	0.9960938	348	435.4	695	2453	2484	29.67
4992.25	32	0	0	0	0	79.805392	2.25	0.9267578	348	427.6	769	2487	2484	32.29
5497.5	35	0	0	0	0	79.81998	1.87	0.8300781	348	425.3	879	2561	2614	30.32
6015.5	39	0	0	0	0	79.725156	4.12	0.8583984	348	380	866	2417	2402	37.29
6499.25	42	0	0	0	0	79.571979	7.12	0.8759766	348	354	868	2254	2258	40.52

Figure 7 Stock logging data - simplified

Stage1

Here follows screen shots of certain measuring blocks from the bFlash logging tool of Racinglines 8R on our dyno on a 4th gear pull on the Stage1 software. These are to be used as an example of a healthy car as a guide:

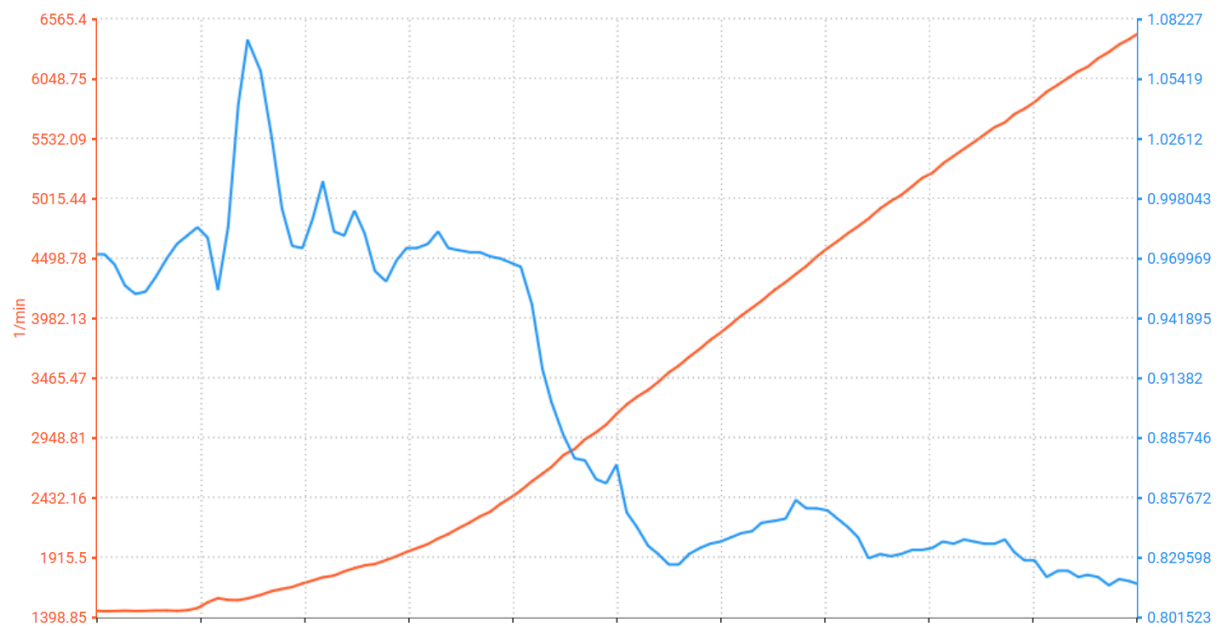


Figure 8 Stage1 Lambda

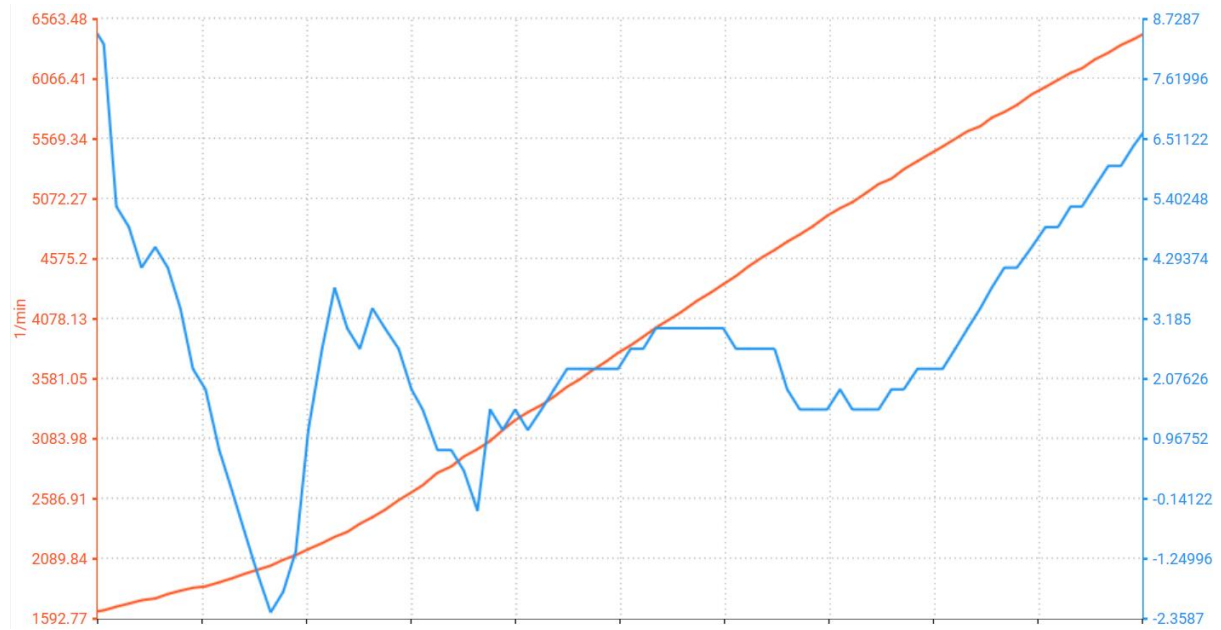


Figure 9 Ignition Timing [Degrees]

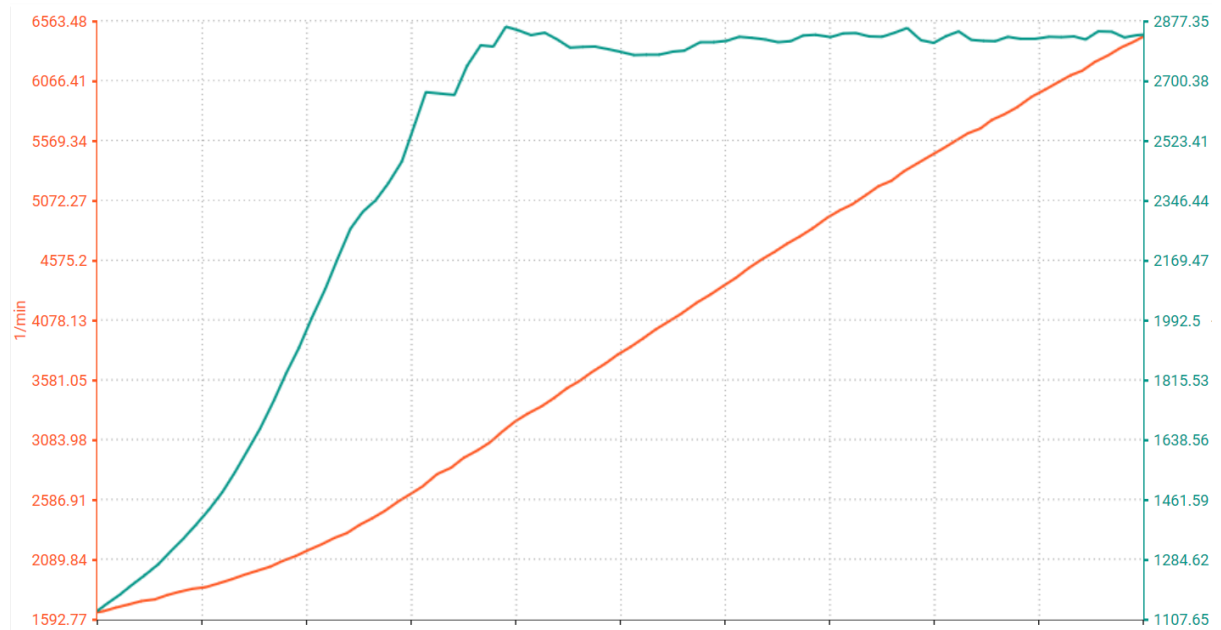


Figure 10 Boost Pressure [mBar]

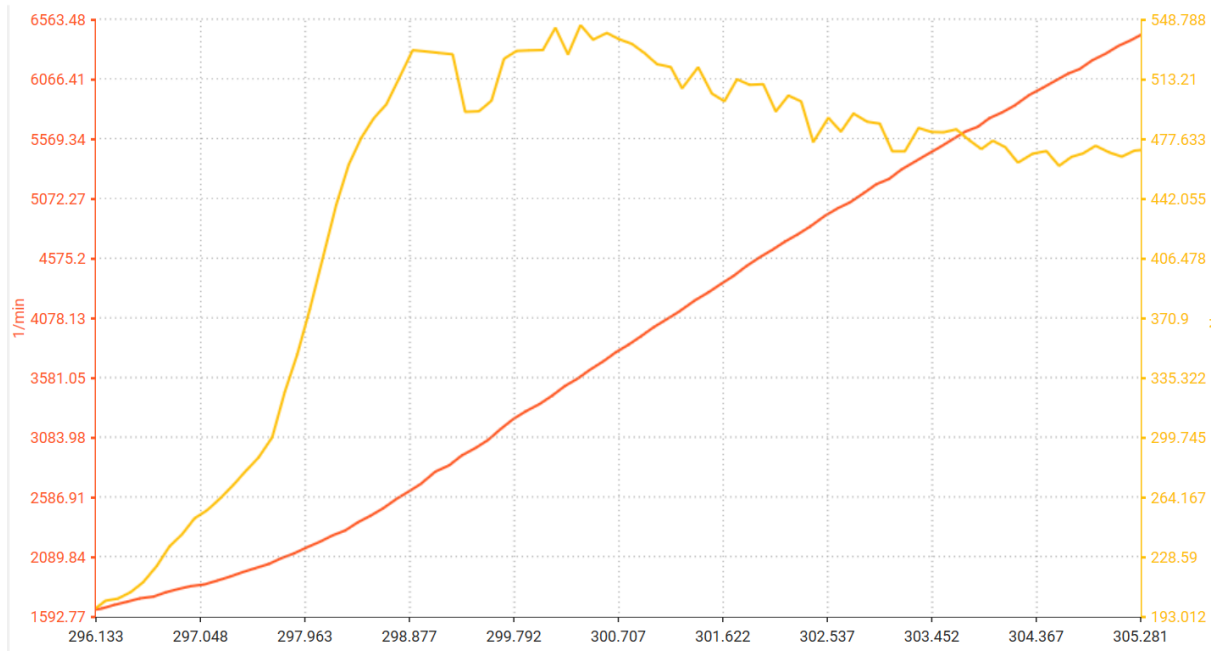


Figure 11 Engine Torque [Nm]

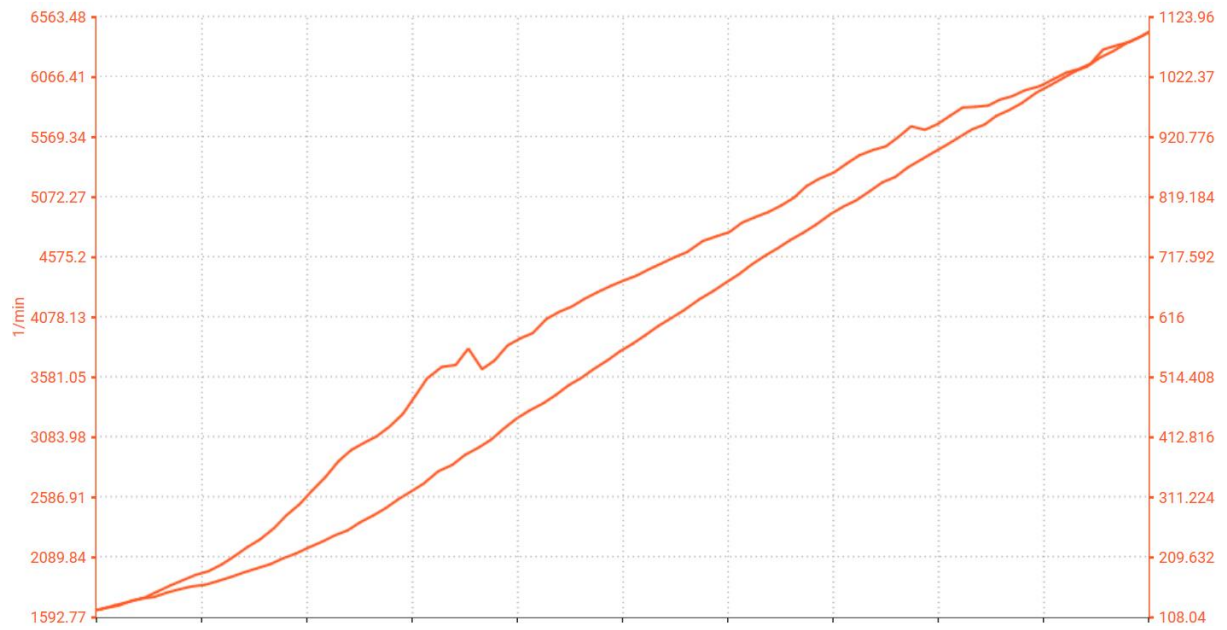


Figure 12 Mass air flow at intake valve [kg/h]

If we take a smaller sample and group together for simplicity you get the following spreadsheet:

Engine speed 1/min	IAT Deg C	Knock Cyl1 Grad KW	Knock Cyl2 Grad KW	Knock Cyl3 Grad KW	Knock Cyl4 Grad KW	Throttle Grad TPS	Ignition angle Grad KW	Lambda -	HPFP bar	Engine Torque Nm	Boost Actual mbar	Wastegate %WG
1998.75	32	-1.875	0	0	0	69.3455681	4.5	0.97460938	299.2	273.7	1592	0.04
2513.75	32	-1.125	0	0	0	74.4368909	-1.87	0.9609375	323.5	470.3	2447	8.27
3022	31	-0.75	0	0	0	79.0249168	-0.37	0.84375	324.1	454.3	2580	9.95
3478.75	31	0	0	0	0	79.4625664	-1.12	0.8125	331.3	485.4	2788	11.98
4018.75	32	0	0	0	0	78.9519753	0.37	0.8203125	348	475.7	2780	17.85
4479.25	33	0	0	0	0	61.8471728	0.75	0.83007813	348	469	2828	21.47
4994.5	35	0	0	0	0	64.4949524	1.12	0.80859375	348	456.6	2841	26.21
5524.75	39	0	0	0	0	78.9738577	1.5	0.81738281	347	442.6	2802	26.25
5986.75	42	0	-3	0	0	76.7053743	1.87	0.81152344	348	419.6	2826	28.53
6491.75	46	-2.625	-2.25	0	0	65.1660151	3	0.80175781	347	404.6	2865	30.08

Figure 13 Stage1 95ron logging data – simplified

Engine speed 1/min	IAT Deg C	Knock Cyl1 Grad KW	Knock Cyl2 Grad KW	Knock Cyl3 Grad KW	Knock Cyl4 Grad KW	Throttle Grad TPS	Ignition angle Grad KW	Lambda -	HPFP bar	Engine Torque Nm	Mass air flow kg/h	Boost Setpoint mbar	Boost Actual mbar	Wastegate %WG
1746.25	29	0	0	0	0	49.695104	8.62	0.9619141	297.8	226	151	1987	1293	0.04
2020.75	28	0	0	0	0	68.295209	3.75	0.9775391	298.4	296.1	256	2074	1730	0.07
2472	27	0	0	0	0	73.853358	2.62	0.9658203	320.6	492.8	418	2399	2349	5.69
2983.25	27	-2.25	-2.25	0	0	79.127035	1.12	0.8691406	329.9	507	573	2787	2769	8.75
3477.25	27	-1.125	-1.125	0	0	79.462566	3	0.8291016	331.6	545.9	629	2797	2794	12.21
3571	27	-1.125	-1.125	0	0	79.426096	3.37	0.8261719	329.9	539	648	2798	2820	13.62
4000	27	-0.75	-0.75	0	0	79.914804	3.75	0.8369141	345.4	526.8	710	2798	2799	18.61
4479.5	28	-0.375	-0.375	-2.625	0	79.841863	3.37	0.8525391	348	507.1	780	2798	2829	22.96
5014	30	0	0	-1.875	0	79.922098	3	0.828125	348	493.3	873	2797	2826	26.7
5520.75	33	0	0	-1.5	0	79.892922	3.37	0.8378906	348	483.2	960	2798	2831	28.67
6019.5	36	0	0	-1.125	0	79.878333	5.62	0.8408203	346.1	471.4	1025	2798	2834	27.81
6476.25	39	0	0	-0.75	0	79.90751	7.5	0.8134766	348	470.4	1114	2798	2846	29.93

Figure 14 Stage1 98ron logging data – simplified

Engine speed 1/min	IAT Deg C	Knock Cyl1 Grad KW	Knock Cyl2 Grad KW	Knock Cyl3 Grad KW	Knock Cyl4 Grad KW	Throttle Grad TPS	Ignition angle Grad KW	Lambda -	HPFP bar	Engine Torque Nm	Mass air flow kg/h	Boost Setpoint mbar	Boost Actual mbar	Wastegate %WG
2472	40	0	0	0	0	73.853358	2.62	0.965	320.6	500.8	418	2399	2396	5.69
2983.25	40	0	0	-3	0	79.127035	6	0.869	329.9	515	573	2787	2799	8.75
3477.25	40	0	0	-1.875	-2.625	79.462566	6.5	0.833	331.6	553.9	629	2797	2772	12.21
4000	41	0	0	-1.875	-2.25	79.914804	7	0.838	345.4	535.5	710	2798	2771	18.61
4479.5	41	0	0	-1.5	-1.875	79.841863	7	0.838	348	516	780	2798	2813	22.96
5014	42	0	0	-1.125	-1.5	79.922098	6	0.838	348	501.4	873	2797	2812	26.7
5520.75	44	0	0	-0.75	-4.125	79.892922	7	0.834	348	492.2	960	2798	2831	28.67
6019.5	46	0	0	-0.375	-3	79.878333	8.5	0.837	346.1	481.4	1025	2798	2823	27.81
6476.25	48	0	0	-0.375	-2.625	79.90751	10	0.837	348	478.7	1114	2798	2804	29.93

Figure 155 Stage1 102ron logging data – simplified

Power / Torque figures

All figures as tested on Racinglines Superflow 4wd dynamometer (DIN corrected) with Racinglines VW Golf8R running Shell vPower unless otherwise stated.

	Stock (as quoted)	Stock (as measured)	Stage1 98ron
Power (ps)	320	310-330	405
Power (bhp)	316	306-325	400
Power (kw)	235	228-242	298
Torque (Nm)	420	415-437	520
Torque (lb ft)	310	306-322	384

Examples of Dyno Charts

[Stock 8Y S3 at Racingline HQ on Racingline Dyno](#)

[8Y S3 at Racingline Canada](#)

[8R at Harding Performance in Australia on Dynapack Hub Dyno 37deg ambient Stock KW-Nm Figures](#)

[8R at Harding Performance in Australia on Dynapack Hub Dyno 37deg ambient Stage1 KW Figures](#)

[8R at Harding Performance in Australia on Dynapack Hub Dyno 37deg ambient Stage1 Nm Figures](#)

[Cupra Leon at Awesome GTi](#)

[Racingline 8R on Racingline Dyno Stock](#)

[Racingline 8R on Racingline Dyno Stage1 98ron](#)

[Tiguan R at Awesome GTi – Stock RUN](#)

[Tiguan R at Awesome GTi – Stage 1 98 RON](#)

[Tiguan R at Awesome GTi – Stock RUN vs Stage 1 98 RON](#)