

	(a)	Ω^* (rpm)					(b)	Ω^* (rpm)				
		600	750	900	1500	1800		600	750	900	1500	1800
x	150	3.27	3.59	3.46	3.41	3.54		2.325	2.230	1.979	1.509	1.437
	200	3.12	3.27	3.24	3.25	3.28		2.214	2.032	1.853	1.438	1.332
	220	3.10	3.22	3.22	3.29	3.37		2.199	1.997	1.841	1.455	1.366
	240	3.09	3.23	3.29	3.47	3.54		2.191	2.007	1.882	1.537	1.437
	260	3.13	3.35	3.55	3.66	3.93		2.224	2.080	2.029	1.621	1.594
	280	3.26	3.52	3.46	3.93	4.53		2.310	2.186	1.983	1.739	1.837
	300	3.49	3.93	3.94	4.22	5.02		2.478	2.439	2.257	1.871	2.034
	320	3.89	4.34	4.47	4.86	5.77		2.758	2.693	2.560	2.154	2.339
	340	5.00	5.64	5.92	5.92	7.27		3.542	3.503	3.388	2.622	2.948
	360	7.91	7.48	8.22	6.96	8.43		5.613	4.647	4.703	3.084	3.422
	380	10.00	9.65	9.90	8.64	9.61		7.088	5.991	5.665	3.827	3.901
	400	11.20	10.67	11.06	9.82	10.80		7.942	6.623	6.328	4.351	4.389
	440	12.34	11.65	12.14	10.98	12.00		8.745	7.231	6.942	4.869	4.875
	(c)	Ω^* (rpm)					(d)	Ω^* (rpm)				
		600	750	900	1500	1800		600	750	900	1500	1800
x	150	0.882	0.794	0.710	0.561	0.502		0.390	0.367	0.327	0.250	0.235
	200	0.879	0.775	0.709	0.559	0.498		0.369	0.340	0.309	0.240	0.223
	220	0.881	0.773	0.714	0.566	0.501		0.366	0.334	0.307	0.242	0.228
	240	0.891	0.775	0.726	0.578	0.514		0.363	0.336	0.310	0.251	0.237
	260	0.901	0.790	0.745	0.590	0.537		0.367	0.343	0.329	0.262	0.258
	280	0.926	0.803	0.743	0.606	0.571		0.376	0.356	0.325	0.278	0.290
	300	0.961	0.833	0.777	0.624	0.603		0.396	0.388	0.358	0.297	0.319
	320	1.002	0.866	0.820	0.661	0.649		0.434	0.419	0.403	0.333	0.359
	340	1.116	0.970	0.993	0.715	0.737		0.528	0.519	0.509	0.390	0.432
	360	1.410	1.124	1.118	0.781	0.804		0.793	0.666	0.675	0.453	0.499
	380	1.643	1.338	1.278	0.883	0.888		1.009	0.854	0.815	0.549	0.572
	400	1.807	1.448	1.407	0.975	0.979		1.144	0.948	0.920	0.631	0.649
	440	1.998	1.576	1.550	1.083	1.083		1.286	1.049	1.025	0.716	0.731

Table 1: (a) 90% boundary layer thickness δ_{90} normalised by the viscous length scale δ_ν^* , (b) δ_{90}^* , (c) displacement thickness δ_1^* and (d) momentum thickness δ_2^* for different rotational rates Ω^* . The dimensional quantities with * in (b-d) are shown in millimetre.

We report the data corresponding to figure 2 in the paper as well as further quantities characterising the boundary layer in table 1. The displacement thickness δ_1 and momentum thickness δ_2^* were calculated as

$$\delta_1(x; \Omega^*) = \int_0^{\delta_{90}} V(x, z; \Omega^*) dz,$$

$$\delta_2(x; \Omega^*) = \int_0^{\delta_{90}} [1 - V(x, z; \Omega^*)] V(x, z; \Omega^*) dz,$$

where V is the measured mean azimuthal velocity component normalised by the local wall velocity V_w^* and δ_{90} is the z -position (normalised by δ_ν^*) where V becomes 0.1.