

Table 7: CF20JAPAN performance at sea-level air density; 1.225 kg/m³							
Presentation of data in the measured power curve (database A)							
Reference air density: 1.225 kg/m³							
Bin	Bin Average Wind Speed	Power output	Cp	Number of 1-Minute Data Sets	Category A Standard Uncertainty	Category B Standard Uncertainty	Combined Standard Uncertainty
(m/s)	(m/s)	(W)			(W)	(W)	(W)
1	0.65	-0.100	-4.31	17	0.000	0.038	0.038
2	0.97	-0.099	-1.32	85	0.000	0.038	0.038
3	1.53	-0.099	-0.33	134	0.000	0.038	0.038
4	1.99	-0.100	-0.15	122	0.000	0.038	0.038
5	2.52	-0.038	-0.03	159	0.011	0.040	0.042
6	2.98	0.481	0.22	246	0.010	0.150	0.151
7	3.53	1.276	0.35	214	0.010	0.201	0.202
8	4.04	1.768	0.32	414	0.004	0.138	0.138
9	4.51	2.575	0.34	504	0.009	0.251	0.251
10	5.01	3.389	0.32	526	0.009	0.241	0.241
11	5.51	4.681	0.34	522	0.013	0.398	0.398
12	6.02	6.144	0.34	774	0.017	0.459	0.460
13	6.52	7.356	0.32	951	0.011	0.404	0.404
14	7.00	9.569	0.34	1009	0.024	0.782	0.782
15	7.52	11.995	0.34	823	0.025	0.815	0.815
16	8.00	14.415	0.34	1072	0.024	0.922	0.922
17	8.50	16.608	0.33	1258	0.015	0.829	0.829
18	8.99	18.460	0.31	1201	0.015	0.760	0.760
19	9.51	19.110	0.27	1136	0.017	0.318	0.318
20	9.99	19.266	0.23	1110	0.016	0.215	0.215
21	10.51	19.334	0.20	1017	0.016	0.206	0.207
22	11.00	19.330	0.18	868	0.017	0.204	0.205
23	11.50	19.225	0.15	886	0.029	0.209	0.211
24	12.00	19.191	0.13	853	0.037	0.204	0.207
25	12.51	19.258	0.12	836	0.030	0.206	0.208
26	13.01	19.377	0.11	959	0.020	0.213	0.214
27	13.50	19.353	0.10	928	0.026	0.205	0.207
28	14.00	19.393	0.09	756	0.016	0.206	0.207
29	14.49	19.371	0.08	687	0.025	0.205	0.207
30	14.99	19.407	0.07	588	0.021	0.206	0.207
31	15.50	19.397	0.06	548	0.030	0.205	0.207
32	16.01	19.468	0.06	461	0.023	0.210	0.211
33	16.50	19.494	0.05	465	0.021	0.207	0.208
34	17.00	19.523	0.05	492	0.016	0.207	0.208
35	17.51	19.526	0.04	467	0.020	0.206	0.207
36	18.00	19.548	0.04	459	0.019	0.207	0.208
37	18.49	19.563	0.04	432	0.011	0.207	0.207
38	18.99	19.538	0.03	353	0.026	0.207	0.209
39	19.49	19.557	0.03	271	0.033	0.207	0.210
40	19.99	19.585	0.03	253	0.017	0.208	0.209
41	20.49	19.573	0.03	168	0.025	0.207	0.209
42	21.01	19.581	0.03	152	0.027	0.207	0.209
43	21.50	19.588	0.02	125	0.026	0.207	0.209
44	21.99	19.572	0.02	111	0.062	0.207	0.216
45	22.50	19.597	0.02	130	0.018	0.208	0.209
46	22.99	19.589	0.02	113	0.052	0.207	0.214
47	23.52	19.610	0.02	86	0.008	0.208	0.208
48	23.97	19.597	0.02	79	0.047	0.208	0.213
49	24.51	19.588	0.02	60	0.090	0.207	0.226
50	25.03	19.579	0.02	41	0.122	0.207	0.241

Table 8 below summarizes the estimation of expected annual energy production (AEP) at sea-level air density.

Table 8: Estimated annual energy production of the CF20JAPAN at sea-level air density					
Estimated annual energy production (database A) Reference air density: 1.225 kg/m ³ Cut-out wind speed: 25 m/s (extrapolation by constant power from last bin)					
Hub height annual average wind speed (Rayleigh)	<i>AEP</i> -measured (measured power curve) [note 1]	Standard uncertainty in <i>AEP</i> [note 4]	Standard uncertainty in <i>AEP</i> [note 4]	<i>AEP</i> - extrapolated (extrapolated power curve) [note 2]	Complete if <i>AEP</i> -measured is at least 95% of <i>AEP</i> -extrapolated [note 3]
m/s	kWh	kWh	%	kWh	
4	27220	2080	8	27220	Complete
5	46924	2737	6	46924	Complete
6	66299	3080	5	66300	Complete
7	83249	3187	4	83266	Complete
8	97255	3163	3	97353	Complete
9	108387	3077	3	108703	Complete
10	116794	2966	3	117496	Complete
11	122622	2849	2	123849	Complete
Note 1: <i>AEP</i> -measured takes into account the parasitic losses of the power conversion system below cut-in (2.5 m/s). Note 2: <i>AEP</i> -extrapolated takes into account the parasitic losses of the power conversion system below cut-in (2.5 m/s). Note 3: "Incomplete" means that <i>AEP</i> -measured is not within 95% of <i>AEP</i> -extrapolated. This does not imply that the database is incomplete. Note 4: The uncertainty figures in the above table are based on a coverage factor of 1.					

BWEA Reference Annual Energy: 46,924 kWh @ 5m/s