

3.0 Power Performance Test Summary

Table 2 below shows the normalized and averaged results of the power performance test for the CF12 turbine based on the analysis of 19,674 1-minute data sets (total 328 hours) collected between 01-May2013 00:00 and 31-May-2013 23:59.

Table 2: CF12 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	0.57	-41	-3.67	40	0	6	6
2	0.99	-41	-0.70	87	0	6	6
3	1.50	-41	-0.20	95	0	6	6
4	2.03	-41	-0.08	116	0	6	6
5	2.54	-41	-0.04	233	0	6	6
6	2.99	-20	-0.01	288	3	8	9
7	3.50	145	0.06	281	9	41	42
8	4.02	558	0.14	429	11	104	105
9	4.51	1048	0.19	682	10	137	138
10	5.01	1637	0.22	876	10	167	168
11	5.50	2312	0.23	828	14	203	203
12	6.00	3146	0.24	850	15	255	255
13	6.50	4042	0.25	890	17	288	288
14	7.01	5096	0.25	988	17	346	346
15	7.50	6230	0.25	970	19	397	397
16	7.99	7505	0.25	865	26	467	468
17	8.50	9100	0.25	969	28	579	579
18	9.00	10616	0.24	1059	26	594	594
19	9.49	11714	0.23	1029	21	466	466
20	9.99	12246	0.21	874	14	283	284
21	10.50	12431	0.18	803	7	204	204
22	11.00	12479	0.16	698	6	191	192
23	11.49	12510	0.14	710	4	191	191
24	12.00	12519	0.12	670	2	191	191
25	12.50	12502	0.11	693	15	191	191
26	12.99	12517	0.10	634	3	191	191
27	13.51	12503	0.08	602	4	191	191
28	13.99	12469	0.08	567	17	191	192
29	14.49	12470	0.07	440	3	190	190
30	15.00	12425	0.06	403	19	191	192
31	15.48	12430	0.06	314	4	190	190
32	15.98	12431	0.05	276	4	190	190
33	16.49	12425	0.05	219	4	189	190
34	17.00	12426	0.04	196	4	189	189