

6 Power Performance Test Summary

Details of Power Performance testing can be found in Intertek Report no. 101129165LHD-005c.

Table 5 below shows the normalized and averaged results of the power performance test for the CF12 turbine, modified to show the effect of the inverter power capping for the CF11. This data is 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 5: 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					Category A Standard Uncertainty	Category B Standard Uncertainty	Combined Standard Uncertainty
Bin	Bin Average Wind Speed	Power output	Cp	Number of 1- Minute Data Sets			
(m/s)	(m/s)	(W)					
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	11000	0.22	1029	21	225	226
20	9.99	11000	0.18	874	14	168	168
21	10.50	11000	0.16	803	7	168	168
22	11.00	11000	0.14	698	6	168	168
23	11.49	11000	0.12	710	4	168	168
24	12.00	11000	0.11	670	2	168	168
25	12.50	11000	0.09	693	15	168	168
26	12.99	11000	0.08	634	3	168	168
27	13.51	11000	0.07	602	4	168	168
28	13.99	11000	0.07	567	17	168	168
29	14.49	11000	0.06	440	3	168	168
30	15.00	11000	0.05	403	19	168	168
31	15.48	11000	0.05	314	4	168	168
32	15.98	11000	0.05	276	4	168	168
33	16.49	11000	0.04	219	4	168	168
34	17.00	11000	0.04	196	4	168	168